REGULAR MEETING OF THE MILPITAS CITY COUNCIL

For assistance in the following languages, you may call:
Đối với Việt Nam, gọi 408-586-3122
Para sa Tagalog, tumawag sa 408-586-3051
Para español, llame 408-586-3232

City Council meeting will be held via TELECONFERENCE (no physical meeting space)
Submit any Public Forum or agenda item comments in writing submitted online, to be read aloud.

Meeting shall be livestreamed - Go to:
Facebook: https://www.facebook.com/CityofMilpitas/
YouTube: https://www.ci.milpitas.ca.gov/youtube
Web Streaming: https://www.ci.milpitas.ca.gov/webstreaming

Virtual public comments may be submitted on a form from the City website:
http://www.ci.milpitas.ca.gov/publiccomment

For Public Hearing Item No. 10 only, voicemail message comments may be submitted to telephone number 408-586-3010 until 3:00 PM on May 5.

AGENDA

TUESDAY, MAY 5, 2020
MILPITAS, CA
6:00 PM (CLOSED SESSION)
7:00 PM (PUBLIC BUSINESS)

CALL MEETING TO ORDER by Mayor and ROLL CALL by City Clerk

ADJOURN TO CLOSED SESSION

(a) CONFERENCE WITH LABOR NEGOTIATORS
Pursuant to California Government Code §54957.6
Agency designated representative: Rick Bolanos of Liebert Cassidy Whitmore
Employee Group: Milpitas Employees Association

(b) CONFERENCE WITH LABOR NEGOTIATORS
Pursuant to California Government Code §54957.6
Agency designated representative: Mayor Rich Tran
Unrepresented Employee: City Manager

CLOSED SESSION ANNOUNCEMENT: Report on action taken in Closed Session, if required per Government Code Section 54957.1, including the vote or abstention of each member present

PLEDGE OF ALLEGIANCE (7:00 PM)

INVOCATION

PRESENTATIONS (7:10 – 7:20 PM)

- Proclaim May as *Asian Pacific American Heritage Month*
- Proclaim May as *National Mental Health Awareness Month*
- Proclaim May as *Older American Month*

PUBLIC FORUM (7:20 – 7:40 PM)
Those interested may address City Council in writing on any subject not on tonight's agenda. Commenters may type their name and city of residence for the Clerk's record, and remarks read aloud will be limited to three minutes, or less. Comments submitted via online form will be read aloud by the City Clerk. As an item not listed on the agenda, no response is required from City staff or the Council and no action can be taken. City Council may instruct the City Manager to place the item on a future meeting agenda.

Virtual public comments may be submitted on a form from the City website: http://www.ci.milpitas.ca.gov/publiccomment

ANNOUNCEMENTS AND FUTURE AGENDA ITEMS (7:40 – 8:00 PM)
Members of the City Council may make brief announcements or suggest future agenda items at this time. For future agenda items, the City Council shall not debate the topic or engage in discussion, but shall simply state a "yes" or "no" as to whether to direct the City Manager to place the item on a future meeting agenda. If a majority of the City Council agrees to place an item on a future meeting agenda, the City Manager shall place the item on a subsequent agenda for City Council discussion.

ANNOUNCEMENT OF CONFLICT OF INTEREST AND CAMPAIGN CONTRIBUTIONS

APPROVAL OF AGENDA

CONSENT CALENDAR (8:00 – 8:10 PM)
Consent calendar items are considered to be routine and will be considered for adoption by one motion. There will be no separate discussion of these items unless a City Councilmember, member of the public or staff requests the Council to remove an item from (or be added to) the consent calendar. Any person desiring to comment on any item on the consent calendar should ask to have that item removed from the consent calendar.

C1. Receive City Council Calendar of Meetings for May 2020 (Staff Contact: Mary Lavelle, 408-586-3001)

C2. Approve City Council meeting minutes for April 14 and April 21, 2020 Special and Regular Meetings (Staff Contact: Mary Lavelle, 408-586-3001)

Recommendation: approve draft City Council meeting minutes of the special meeting on April 14 (CIP study session), special meeting at 5:00 PM on April 21, and regular meeting on April 21, 2020.

C3. Adopt a Resolution to Award Construction Contract to CVE Contracting Group, Inc. doing business as Central Valley Environmental for Demolition of Fire Station No. 2 for the Reconstruction, Project No. 3447 (Staff Contact: Steve Erickson, 408-586-3301)

Recommendations:
1. Adopt a resolution to award a construction contract and authorize the Interim City Manager to execute the contract with the lowest responsible bidder submitting a bid, CVE Contracting Group Inc. doing business as Central Valley Environmental, in the amount of $245,400 for demolition of Fire Station No. 2 as part of the Fire Station No. 2 Reconstruction Project No. 2447.

2. Authorize the Engineering Director/City Engineer to negotiate and execute contract change orders in an aggregate amount not to exceed $60,000.

C4. **Adopt a Resolution Approving the Annual Engineer's Report, and Adopt a Resolution Declaring the Intention to Levy and Collect Assessments for Fiscal Year 2020-21 for Landscaping and Lighting Maintenance Assessment District (LLMD) No. 95-1 (McCarthy Ranch), and Provide Notice of Public Hearing to be held on May 19, 2020 for LLMD No. 95-1 McCarthy Ranch (Staff Contact: Steve Erickson, 408-586-3301)**

Recommendation: Adopt a resolution approving the Annual Engineer's Report, and adopt a resolution declaring intention to levy and collect assessments for Fiscal Year 2020-21 for Landscaping and Lighting Maintenance Assessment District (LLMD) No. 95-1 (McCarthy Ranch), and provide Notice of Public Hearing to be held on May 19, 2020 for LLMD No. 95-1 McCarthy Ranch.

C5. **Adopt a Resolution Approving the Annual Engineer's Report, and Adopt a Resolution Declaring the Intention to Levy and Collect Assessments for Fiscal Year 2020-21 for Landscaping and Lighting Maintenance Assessment District (LLMD) No. 98-1 (Sinclair Horizon), and Provide Notice of Public Hearing to be held on May 19, 2020 for LLMD 98-1 Sinclair Horizon (Staff Contact: Steve Erickson, 408-586-3301)**

Recommendation: Adopt a Resolution approving the Annual Engineer's Report, and adopt a Resolution declaring intention to levy and collect assessments for Fiscal Year 2020-21 for Landscaping and Lighting Maintenance Assessment District (LLMD) No. 98-1 (Sinclair Horizon), and provide Notice of Public Hearing to be held on May 19, 2020 for LLMD No. 98-1 Sinclair Horizon.

C6. **Adopt a Resolution to Confirm the Order of the Director of Emergency Services Imposing Regulations to Protect Essential Workers And Consumers Through Use of Face Coverings (Staff Contact: Christopher Diaz, 408-586-3040)**

Recommendation: Adopt a Resolution to confirm the Order of the Director of Emergency Services imposing regulations to protect essential workers and consumers through the use of face coverings.

PUBLIC HEARING (8:10 – 8:30 PM)

Comments for the public hearing item may be submitted prior to the City Council meeting **by leaving a voicemail** by telephone at 408-586-3010. Messages will be played aloud for the City Council once the public hearing is opened by the Mayor. Virtual **written public comments** for the public hearing may be submitted on a form from the City website: http://www.ci.milpitas.ca.gov/publiccomment .

Written comments submitted on the form online for the public hearing will be read aloud by the City Clerk and shall be limited to three minutes or less, at the direction of the Mayor.

7. **Conduct a Public Hearing and Adopt a Resolution Approving the Fiscal Year 2020-21 Master Fee Schedule (Staff Contact: Walter Rossmann, 408-586-3111)**

Recommendations:

1. Move to close the public hearing following any comments.
2. Adopt a Resolution approving the Fiscal Year 2020-21 Master Fee Schedule.

COMMUNITY DEVELOPMENT (8:30 – 9:30 PM)

8. **Adopt the City of Milpitas Economic Development Strategy and Implementation Actions (Staff Contact: Alex Andrade, 408-586-3046)**

Recommendation**:** Adopt City of Milpitas Economic Development Strategy and implementation actions.

9. **Receive report on the Community Identification and Brand Study (Phase I) and provide direction to staff on scope and implementation of the Study (Phase II) (Staff Contact: Ashwini Kantak, 408-586-3053)**

Recommendations:

1. Receive report on the Community Identification and Brand Study (Phase I).
2. Provide direction to staff on scope and implementation of the Community Identification and Brand Study (Phase II).

LEADERSHIP AND SUPPORT SERVICES (9:30 – 10:30 PM)

10. **Review Fiscal Year 2019-20 Third Quarter Financial Status Report and Related Budget Amendments due to COVID-19 Pandemic Anticipated Revenue Losses (Staff Contact: Walter Rossmann, 408-586-3111)**

Recommendation: Review the FY 2019-20 Quarterly Financial Status Report for the quarter ending March 31, 2020 and approval budget amendments to rebalance the FY 2019-20 Amended General Fund Budget due to COVID-19 Pandemic anticipated revenue losses.

11. **Receive Report and Provide Direction on next steps regarding Potential Revenue Tax Measures to be placed on the Ballot for the November 3, 2020 General Election (Staff Contacts: Ashwini Kantak, 408-586-3053 and Walter Rossmann, 408-586-3111)**

Recommendation: Receive report and provide direction on next steps regarding potential revenue tax measures to be placed on the ballot for the November 3, 2020 General Election.

REPORTS OF MAYOR & COUNCILMEMBERS - from assigned Commissions, Committees and Agencies (10:30 – 11:00 PM)

12. **Receive and Direct Staff on Scheduling Agenda Items Requested by City Councilmembers (Contact: Mayor Tran, 408-586-3029)**

Recommendation: Review list of items presented (list in agenda packet) that have been requested by Mayor or City Councilmembers on a form, at a Council meeting, or through the City Manager. Direct items to Rules or other Council Subcommittee, to be placed onto a specific meeting date, or specify alternate direction to staff. No substantive discussion about any specific item shall occur and the City Council shall hold all debate about the item until the item is scheduled as a full agenda item.

13. **Hear Request of Councilmember Phan and Mayor Tran in Support of "Laura's Law" (Contacts: Councilmember Phan, 408-586-3032 and Mayor Tran, 408-586-3029)**

Recommendation**:** Hear request of Councilmember Phan and Mayor Tran in support of "Laura's Law" and consider directing staff to send a letter of support to the County.

14. **Adopt a Resolution in Support of the Principles of the Convention on the Elimination of All Forms of Discrimination Against Women (Contacts: Councilmembers Dominguez, 408-586-3031 and Phan, 408-586-3032)**

Recommendation: Adopt a Resolution in support of the principles of the United Nations Convention on the Elimination of All Forms of Discrimination Against Women.

15. **Receive Request of Councilmembers Dominguez and Montano to Adopt a Resolution to Condemn Xenophobia and Discrimination against all communities (Contact: Councilmember Dominguez, 408-586-3031)**

Recommendation: Review memo submitted by Councilmember Karina Dominguez, discuss her request supported by Councilmember Montano, and consider adopting a Resolution to condemn xenophobia and discrimination directed toward all communities, during the time of the coronavirus pandemic.

NEXT AGENDA PREVIEW

16. Receive Preview List of Anticipated Items for the Regular City Council meeting scheduled on May 19, 2020 (Staff Contact: Mary Lavelle, 408-586-3001)

ADJOURNMENT

MILPITAS CITY COUNCIL CODE OF CONDUCT

- Be respectful and courteous (words, tone, and body language).
- Model civility.
- Avoid surprises.
- Praise publicly and criticize privately.
- Focus on the issue, not the person.
- Refrain from using electronic devices while on the Council dais.
- Share information with all Councilmembers in advance of Council meetings.
- Disclose conflicts of interest and affiliations related to agenda items.
- Separate governing from campaigning.
- The Council speaks with one voice after making policy on issues.
- Respect the line between policy and administration.
- Council will hold one another accountable to comply with this Code of Conduct.

KNOW YOUR RIGHTS UNDER THE OPEN GOVERNMENT ORDINANCE

Government's duty is to serve the public, reaching its decisions in full view of the public. Commissions and other City agencies exist to conduct the people's business. This ordinance assures that deliberations are conducted before the people and City operations are open to the people's review. For more information on your rights under the Open Government Ordinance or to report a violation, contact the City Attorney's office at Milpitas City Hall, 455 E. Calaveras Blvd., Milpitas, CA 95035
e-mail:cdiaz@ci.milpitas.ca.gov / Phone: 408-586-3040

The Open Government Ordinance is codified in the Milpitas Municipal Code as Title I Chapter 310 and is available online at the City's website www.ci.milpitas.ca.gov by selecting the Milpitas Municipal Code link.

Materials related to an item on this agenda submitted to the City Council after initial distribution of the agenda packet are available for public inspection ~~at the City Clerk's office at Milpitas City Hall, 3rd floor 455 E. Calaveras Blvd., Milpitas and~~ on City website. City Council agendas and related materials can be viewed online: www.ci.milpitas.ca.gov/government/council/agenda_minutes.asp (select meeting date)

APPLY TO SERVE ON A CITY COMMISSION

Commission application forms are available online at www.ci.milpitas.ca.gov or at Milpitas City Hall. Contact the City Clerk's office at 408-586-3003 for more information.

If you need assistance, per the Americans with Disabilities Act, for any City of Milpitas public meeting, please call the City Clerk at 408-586-3001 or send an e-mail to mlavelle@ci.milpitas.ca.gov prior to the meeting. You may request a larger font agenda or arrange for mobility assistance.

April 2020

S	M	T	W	T	F	S
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June 2020

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Milpitas City Council Calendar
May 2020

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	**2**
3	**4** ~~***7:00 PM*** *~~Parks, Recreation & Cultural Resources Commission (AP)~~*	**5** **5:00 PM-**Special City Council **6:00 PM**-Closed Session **7:00 PM**-City Council	**6** ~~**12:00 PM** Santa Clara Valley Water District - Water Commission (CM)~~ **2:00 PM**-Santa Clara VTA Monthly Briefing - Northeast Group (BN) ~~***7:00 PM*** *Community Advisory Commission (BN)~~	**7** **5:30 PM**-Santa Clara VTA Board of Directors (BN) **5:30 PM**-Milpitas Chamber of Commerce Board (CM) (?)	**8**	**9**
10	**11** ***4:30 PM****-Economic Development and Trade Commission (KD)* ***7:00 PM-****Arts Commission (CM)*	**12** **5:30 PM-**City Council Budget Study Session	**13** ***7:00 PM****-Planning Commission* **7:00 PM**-Silicon Valley Clean Energy Board of Directors (CM)	**14** **4:00 PM**-Santa Clara VTA Policy Advisory Committee (KD) (?) **4:00 PM**-Treatment Plant Advisory Committee (CM) (San Jose) (?) **7:00 PM**-Cities Assoc of SCC (CM) ***7:00 PM****-Youth Advisory Commission (AP)*	**15**	**16**
17	**18** ***7:00 PM****-Science, Technology, and Innovation Commission (BN)* ***7:00 PM****-Library and Education Commission* (CM)	**19** **?:00 PM**-Closed Session **7:00 PM**-City Council	**20** **11:30 AM-** Santa Clara VTA Safety, Security, Transit Planning & Operations Committee (BN) (?) ***6:00 PM****-Energy and Environmental Sustainability Commission (BN)*	**21** ***7:00 PM****-Public Safety and Emergency Preparedness Commission (KD)*	**22**	**23**
24	**25** **City Hall Closed** 	**26**	**27** ***7:00 PM****-Planning Commission*	**28**	**29**	**30**
31						

Updated 5/1/2020

***Draft* MEETING MINUTES**
CITY OF MILPITAS

Minutes of:	**Special Meeting of the Milpitas City Council**
Date:	**Tuesday, April 14, 2020**
Time:	**5:30 PM Study Session**
Location:	**Meeting was held online only** **Milpitas, CA**

CALL TO ORDER

Mayor Tran called the virtual special City Council meeting to order at 5:35 PM. City Clerk called the roll.

PRESENT: Mayor Tran, Vice Mayor Nuñez, Councilmembers Dominguez, Montano, and Phan

ABSENT: None

Meeting was held via teleconference/webinar only, and made available for viewing on Facebook live, on YouTube and livestreamed from the City of Milpitas website.

PLEDGE

Mayor Tran led the pledge of allegiance.

APPROVE AGENDA

Agenda for the study session was approved by unanimous vote of the City Council.

ANNOUNCEMENT OF CONFLICT OF INTEREST

City Attorney Diaz asked Councilmembers if they had any personal conflicts of interest or reportable campaign contributions. By roll call, no conflicts were reported.

Councilmember Dominguez asked the City Attorney to check if she had any conflict related to the location of her residence and an upcoming CIP project for road surface improvements on Abbott. City Attorney Chris Diaz agreed and would get back to her.

PUBLIC FORUM

None

DISCUSSION

Draft Capital Improvement Program FY 2020-2025

City Engineer Steve Erickson presented the plan for the next Capital Improvement Program (CIP) for Fiscal Years 2020-2025. He displayed projects accomplished in the past year's 2019-20 CIP, as highlighted, and described the health of the CIP for the near future along with projects proposed to be deferred or defunded next year.

The CIP consists of six project categories, with identified projects included within each. Mr. Erickson reviewed progress made on the projects during the current fiscal year 2019-20, while noting that delays would be expected for next year in response to the coronavirus pandemic. The City Engineer listed unidentified funding amounts in the CIP, across all funds and projects, totaling $186.5 million and discussed the need for a long-term funding strategy to fund critical City infrastructure such as the Police and Public Works building, Fire Stations, Parks and Storm Infrastructure.

Proposed projects (19) to be defunded and deferred in FY 2020-21 included Police Department communications equipment, Fire Station improvements, Community Center building assessment, Mobile EOC, Performing Arts Center, Security Cameras, Parks rehabilitation, Sports Fields turf rehabilitation, The Pines Pilot Parking Permit Program, Dempsey Road Storm Drain improvements, and others.

Recreation Services Director Renee Lorentzen reported on the Performing Arts Center study conducted upon Council's direction last year. Consultant ArtsMarket conducted the study in the spring of 2020. Three types of potential facilities and possible funding sources were identified. City Councilmembers expressed interest in the outdoor amphitheater concept to be placed into the CIP for the future, with recognition that securing or purchasing any land for a site would need to occur first. Council asked staff to bring back information on a potential amphitheater.

Finance Director Walter Rossmann spoke on the status of the General Fund reserves ($115.6 million in FY 2019-20), annual budget surplus allocation to reserves and potential tax measures to send to the voters. He described details on potential debt issuance, and/or ballot measures such as sales tax, parcel tax, or general obligation bonds. These were defined as possible funding sources for future CIP projects.

Mayor Tran expressed interest in a special sales tax measure for funds toward public safety infrastructure. He felt the voters would support that.

Councilmembers asked staff to provide past polling data that was conducted several years ago, on possible sales tax measure, and at that time, on a cannabis tax.

Mr. Erickson provided additional details about the projects proposed in the 2020-25 CIP draft document and next steps. $39.7 million was the amount estimated for proposed FY 2020-21 CIP project costs. City Council would be asked to adopt the annual CIP along with the new FY 2019-20 Budget on June 2.

ADJOURNMENT

Mayor Tran adjourned the special City Council meeting at 8:47 PM.

Draft Minutes submitted by
Mary Lavelle, City Clerk

Draft **MEETING MINUTES**
CITY OF MILPITAS

Minutes of:	**Special Meeting of the Milpitas City Council**
Date:	**Tuesday, April 21, 2020**
Time:	**5:00 PM**
Location:	**Meeting held via teleconference** **Milpitas, CA**

CALL TO ORDER

Vice Mayor Nuñez called the special meeting to order at 5:20 PM. City Clerk called the roll. The meeting took place via teleconference and webinar.

PRESENT: Vice Mayor Nuñez, Councilmembers Dominguez and Montano

ABSENT: Mayor Tran was absent at roll and arrived in the meeting at 6:00 PM. Councilmember Phan was absent at roll call and arrived at 5:28 PM.

PLEDGE

City Attorney Chris Diaz led the pledge of allegiance.

APPROVE AGENDA

On a motion by Councilmember Dominguez and seconded by Councilmember Montano, by a vote of three in favor, with two members absent (Mayor Tran and Councilmember Phan), the special meeting agenda was approved.

ANNOUNCEMENT OF CONFLICT OF INTEREST

The City Attorney asked Councilmembers if they had any personal conflicts of interest or reportable campaign contributions. By roll call, no conflicts were reported.

PUBLIC FORUM

City Clerk Mary Lavelle read aloud one comment from resident Yolie Garcia concerning the permit parking program for The Pines neighborhood.

AGENDA ITEMS

1. Report from Assistant City Manager

Assistant City Manager Ashwini Kantak reported on Covid-19 pandemic response activities in the City of Milpitas. Councilmembers provided feedback to staff and requested staff to return with additional information about costs related to a ramp up of COVID-19 testing at the testing site at the Sports Center. A directive for use of face coverings (including masks) in Milpitas was supported by all members of the City Council.

Motion: to consider the County executive order and direct staff to research and implement a City Manager's regulation with a plan for a requirement to wear masks or face coverings in the City of Milpitas, similar to other cities such as Fremont and San Francisco, effective at the end of the week

Councilmember Dominguez asked the City Manager and City Attorney if staff could explore alternate methods besides fines, if issued, for not wearing face coverings, possibly community service in lieu of paying a fine. The City Attorney responded these citations would be handled through an administrative process first, then fines.

Motion/Second: Councilmember Montano/Councilmember Dominguez

Motion carried by a vote of: AYES: 5
NOES: 0

Motion: to direct staff to form partnerships with community groups and work with Milpitas Unified School District to make face coverings available to community

members; help the community adhere to the regulation to use face coverings; and to explore costs for funding this effort, and report back to Council

Motion/Second: Councilmember Dominguez/Vice Mayor Nuñez

Motion carried by a vote of: AYES: 5
NOES: 0

Councilmember Dominguez made a motion for staff to work with the City Council Housing Subcommittee to ensure the unhoused get housed, and be placed on the County's wait list, to ensure they can isolate themselves, get tested for coronavirus, and conduct social distancing. No second was offered, so no vote was taken.

Councilmember Montano stated her concern about landlords raising rents during this time of coronavirus, and asked the City Attorney to look into methods for preventing that in Milpitas, per the Council's Housing Subcommittee.

2. Report from Recreation Director

Recreation Director Renee Lorentzen described the change in current Recreation Services and events in response to Covid-19 in the community, which included the cancelation of major events and classes through August.

Mayor Tran asked about the possibility of hosting the City's annual 4th of July fireworks, without an event at Cardoza Park/Sports Center. Councilmembers commented on his idea, with concerns on costs, public safety, community celebration and available staff. The Mayor's recommendation was to keep an option alive for the fireworks part of the celebration, with an emphasis on safety.

Motion: to accept the report from the Recreation Director and to direct staff to find a way to celebrate the 4th of July safely in Milpitas in 2020; to check with the County of Santa Clara, to ask the City Attorney to review the current contract with the City's fireworks vendor, to consider showing a display on highway electronic billboard signs, and to investigate different ways to celebrate Independence Day and to return with a report, for possible action, to the City Council in two weeks

Motion/Second: Vice Mayor Nuñez/Mayor Tran

Motion carried by a vote of: AYES: 3
NOES: 2 (Dominguez, Montano)

ADJOURNMENT

Mayor Tran adjourned the special City Council meeting at 8:15 PM.

Meeting minutes submitted by
Mary Lavelle, City Clerk

Draft **MEETING MINUTES**
CITY OF MILPITAS

Minutes of:	**Regular Meeting of the Milpitas City Council**
Date:	**Tuesday, April 21, 2020**
Time:	**6:00 PM Closed Session** **7:00 PM Open Session**
Location:	**Meeting held via teleconference/zoom meeting** **Milpitas, CA**

CALL TO ORDER

Mayor Tran called the regular meeting to order at 8:23 PM. City Clerk called the roll. The meeting took place via teleconference and webinar.

PRESENT: Mayor Tran, Vice Mayor Nuñez and Councilmembers Dominguez

ABSENT: Councilmembers Montano and Phan were absent at roll call. Both arrived in the phone-in Closed Session.

CLOSED SESSION

City Council convened into Closed Session (by telephone) to discuss two items listed on the agenda, one labor negotiation item and one anticipated litigation.

By phone conference, Mayor Tran called to order the open session/regular meeting at 9:41 PM.

ANNOUNCEMENT

City Attorney Chris Diaz reported no action out of Closed Session.

Councilmember Dominguez announced she wanted to move forward a memo she had distributed earlier (via email) for a resolution condemning xenophobia especially towards the Asian Pacific Islander community,

PLEDGE

Mayor Tran led the pledge of allegiance.

INVOCATION

Councilmember Dominguez introduced Ms. Isabelle Morrisson, a Milpitas High School junior, who read aloud positive letters to start the meeting.

PRESENTATION

Mayor Tran proclaimed *National Public Safety Telecommunications Week* for April 12 – 18, 2020. He also proclaimed April 22, 2020 as *Earth Day*.

PUBLIC FORUM

City Clerk Mary Lavelle read aloud comments from three residents: Madison M, Yolie Garcia and Mikaila P.

ANNOUNCEMENTS

Councilmember Dominguez repeated her request for a May 5 City Council meeting agenda item to adopt a resolution against any type of hatred in the community, during this crisis time. Mayor Tran did not want to single out one minority group and to expand a resolution to include all people from all backgrounds, and Vice Mayor Nuñez agreed.

Ms. Dominguez offered to amend the language in her proposed resolution, and then made a motion for her request, seconded by Vice Mayor Nuñez.

City Attorney Chris Diaz asked the Council not to vote on the request, while there was consensus on bringing back her proposal. Mr. Diaz would work with Councilmember Dominguez on the resolution language, with recogition that the City can change the final wording in that document.

Upon Mayor's suggestion to ask Vice Mayor Nuñez to help her with outreach, Councilmember Dominguez asked if Councilmember Montano would be a co-partner with her on bringing the resolution, reaching out to diverse groups and Ms. Montano agreed.

Vice Mayor Nuñez referred to a recent presentation by the City Manager on what the City was doing in response to the coronavirus emergency and providing clear information online. He asked the City Manager (or staff) to come back once per month to describe updates on the City's website, with valuable service information.

Mayor Tran asked for consideration of having a cannabis sales tax go to voters in the November election, to let residents decide that issue.

Councilmember Phan supported Mayor Tran. He also wanted to consider having a sales tax for public safety infrastructure on the ballot. The Mayor wanted staff exploration of these two potential tax measures on the next agenda.

ANNOUNCEMENT OF CONFLICT OF INTEREST AND CAMPAIGN CONTRIBUTIONS

City Attorney Diaz asked Councilmembers if they had any personal conflicts of interest or reportable campaign contributions. By roll call, no conflicts or contributions were reported.

APPROVAL OF AGENDA

Motion: to approve the City Council agenda, as amended

Mayor Tran requested to move item no. 16 (Subcommittee) to be heard after no. 12.

Councilmember Dominguez asked to remove item no. 15 (Resolution on CEDAW) and move it to the next meeting agenda.

Motion/Second: Vice Mayor Nuñez/Councilmember Montano

Motion carried by a vote of: AYES: 5
NOES: 0

CONSENT CALENDAR

Motion: to approve the consent calendar, items no. C1 – C8, C10, C11

Vice Mayor Nuñez asked to remove item no. C9 (purchasing report) from consent.

Motion/Second: Vice Mayor Nuñez/Councilmember Montano

Motion carried by a vote of: AYES: 5
NOES: 0

C1. Council Calendars	Received the calendars of upcoming meetings for months of April and May 2020.
C2. Meeting Minutes	Approved City Council meeting minutes of April 7 (2) and 10, 2020.
C3. Resolution – The Edge	Adopted Resolution No. 8957 to (1) grant acceptance of public improvements for The Edge Subdivision at 765 Montague Expressway, Tract 10305, Public Improvement Plan No. 2-1214; (2) approve reduction in the faithful performance bond to $40,000, which shall be subject to and in effect for the duration of a one-year warranty period; and (3) grant authorization to the City Engineer to release the performance bond after the one-year warranty period, without further City Council action provided all required warranty work is completed to the satisfaction of the City Engineer.
C4. Resolution – SB1 funds	Adopted Resolution No. 8958 listing the projects for Fiscal Year 2020-21 to be funded by SB 1: The Road Repair and Accountability Act of 2017.
C5. OES Resolution	Adopted Resolution No. 8959 (Cal OES Form 130) designating the City Manager, Assistant City Manager, and Director of Finance as authorized agents to submit reimbursement requests to Cal OES and FEMA.

C6. Resolution – unclaimed checks less than $15.00	Adopted Resolution No. 8960 to transfer a total of $909.77 in unclaimed checks and credits, per the list generated by the City's Finance Department, to the General Fund in accordance with City of Milpitas Standard Operating Procedure No. 26-1.
C7. Resolution – La Quinta	Adopted Resolution No. 8961 denying the appeal and Upholding the Planning Commission's decision to deny Site Development Permit and Conditional Use Permit to allow development of a hotel (La Quinta Hotel proposal) with up to 105 rooms and up to five stories at 1000 Jacklin Road.
C8. Agreement with Maze	Approved and authorized the City Manager to execute an Agreement with Maze & Associates Accountancy Corporation for Professional Auditing Services for a five-year period for an amount not to exceed $479,175, subject to annual appropriation of funds.
9. Purchasing Report	Item was removed from consent. Vice Mayor Nuñez asked the Finance Director about terms of contracts over $20,000 and when those were reported to City Council. Mayor Tran noted the City Council accepted the report from the Purchasing Agent regarding emergency purchases over $20,000 related to the novel coronavirus (COVID-19) outbreak for the period of April 1 to 14, 2020 for the purchase of Personal Protective Equipment (PPE) for Milpitas Firefighters.
C10. Report AB3005	Received a summary report on Assembly Bill 3005 and authorized a letter of support.
C11. Purchase of Motorcycles from BMW	Awarded Invitation for Bid No. 2425 to Long Beach BMW Motorcycles and authorized the City Manager to purchase five new BMW R 1250 RT-P motorcycles for the Milpitas Police Department for an amount not to exceed $135,055.80.

LEADERSHIP

12. Resolution to Amend Classification Plan	Employee Relations Officer Francine Hunt presented her report explaining the process that led up to the recommendation for the resolution to improve an issue of salary compaction for one classification. Motion: to adopt Resolution No. 8962 amending the Classification Plan Salary Range and salaries for the Senior Public Works Lead classification by 6.67% retroactive to March 1, 2020 Motion/Second: Vice Mayor Nuñez/Councilmember Montano Motion carried by a vote of: AYES: 5 NOES: 0

REPORTS

13. Agenda Item requests	Item was not heard.
14. Support for Laura's Law	Item was not heard.
15. Resolution (CEDAW)	This item was removed from the agenda, to be rescheduled to the May 5 meeting.
16. Economic Development Subcommittee	Councilmember Montano, Chair of the Subcommittee, reported on meetings held to date with ideas to help the business community during the coronavirus pandemic. Upon request of Ms. Montano, Economic Development Director Alex Andrade provided an update on what his office had been working on. He responded to various questions from Councilmembers on the program and recommendation in the motion. Mayor Tran outlined various eligibility criteria he desired in the loan program. He did not support the use of reserve funds for loans.

Councilmembers discussed terms and criteria for the city loan program proposed. Councilmember Montano specifically requested to consider the loan program in the amount of $250,000 for small businesses.

Motion: to re-name the City Council Subcommittee as the Small Business Assistance Subcommittee; and, as recommended by the two Subcommittee members, to develop a $200,000 (or other amount) Small Business Loan Program using the contracted services of Silicon Valley Community Foundation and Opportunity Fund as fiscal agent and administrator of the loan program, respectively, and to bring back - as soon as possible - the details of the loan program including final eligibility criteria, for approval by the City Council (at a Special meeting, if needed)

Motion/Second: Vice Mayor Nuñez/Councilmember Phan

Motion carried by a vote of: AYES: 5
NOES: 0

AGENDA PREVIEW

17. Preview next Agenda — City Council received the preview list of anticipated agenda items for May 5, 2020.

ADJOURNMENT — Mayor Tran adjourned the regular meeting at 12:57 AM on Wednesday, April 22, 2020.

Meeting minutes submitted by
Mary Lavelle, City Clerk

CITY OF MILPITAS
AGENDA REPORT
(AR)

Item Title:	**Adopt a Resolution to Award Construction Contract to CVE Contracting Group, Inc. doing business as Central Valley Environmental for Demolition of Fire Station No. 2 for the Reconstruction, Project No. 3447**
Category:	Consent Calendar-Community Services and Sustainable Infrastructure
Meeting Date:	5/5/2020
Staff Contact:	**Steve Erickson, 408-586-3301**
Recommendations:	1. Adopt a Resolution to award a construction contract and authorize the Interim City Manager to execute the contract with the lowest responsible bidder submitting a responsive bid, CVE Contracting Group, Inc. doing business as Central Valley Environmental, in the amount of $245,400 for the demolition of Fire Station No. 2 as part of the Fire Station No. 2 Reconstruction Project No. 3447; and 2. Authorize the Engineering Director/City Engineer to negotiate and execute contract change order(s) in an aggregate amount not to exceed $60,000.

Background:
The 2019-2024 Capital Improvement Program includes Project No. 3447 for the reconstruction and replacement of Fire Station No. 2 ("Project") located at 1263 Yosemite Drive. New Station No. 2 will be constructed at the same location as the current station, and demolition of the existing building and site clearing is the initial phase of new station construction. Prior to the start of demolition, Fire staff will move into the new temporary station no. 2 facility to be located at 1126 Yosemite Drive. The move into the newly constructed temporary station facility is anticipated to occur in June 2020, however this is dependent on the lifting of the current shelter-in-place order. The demolition of the existing station two facility would commence late June or July after fire staff have vacated the building.

The City's design consultant completed plans and specifications for the Project **(Attachment 2)**, and the plans and specifications were advertised in the Milpitas Post for bid proposals on February 7 and 14, 2020. Bid opening was held on March 10, 2020, and eight contractors submitted bid proposals.

Analysis:
The Engineer's Estimate for the Project is $508,000 for the base bid work. The bid included one Add Alternate Bid Item for Monthly Maintenance for the Storm Water Pollution Prevention Plan (SWPPP) with an estimated cost of $20,000.

Bid opening was held on March 10, 2020 and eight bids were received ranging in price from $238,200 to $849,900 for the base bid work, which is the basis to award the Project. The lowest responsible bidder submitting a responsive base bid is Central Valley Environmental in the amount of $238,200. The apparent low bid is lower than the Engineer's Estimate by $269,800 (53%). No bid protests were filed with the City.

The Summary of Bid Results is shown as follows and is included in the agenda as **Attachment 3**. The Base Bid is designated in the contract documents as the basis for award.

Bidder	Location	Base Bid Basis for Award	Alternate Bid Item No. 1	Total Bid (Base plus Alternate No. 1)
Engineer's Estimate		**$508,000**	**$20,000**	**$528,000**
CVE Contracting Group, Inc.	Fresno, CA	$238,200	$7,200	$245,400
AMPCO North, Inc.	Anaheim, CA	$258,600	$18,000	$276,600
Asbestos Management Group, Inc.	Oakland, CA	$286,450	$27,600	$314,050
Demolition Services and Grading, Inc.	Manteca, CA	$394,200	$20,670	$414,870
Done Right Demolition, Inc.	Antelope, CA	$465,268	$18,000	$483,268
Evans Brothers, Inc.	Livermore, CA	$484,000	$30,000	$514,000
Silverado Contractors, Inc.	Oakland, CA	$495,000	$30,000	$525,000
Galeb Paving, Inc.	Saratoga, CA	$849,900	$18,000	$867,900

Staff recommends the City Council adopt a Resolution **(Attachment 1)** to award a construction contract for the Base Bid and Alternate Bid Item No. 1 to Central Valley Environmental for a total price not to exceed $245,400. There is enough funding available within the Fire Station No. 2 Replacement Project, Project No. 3447 budget to award this contract for site demolition work, and no additional funding appropriation is required.

The construction contingency established for the Demolition Project is $60,000, which is approximately 25% of the total contract value to address unforeseen conditions found during the demolition process. Staff is requesting the use of this change order policy **(Attachment 4)**, which allows for the timely completion of the Project, while addressing the need to respond swiftly to construction conditions and approve necessary change orders in order to limit potential claims or risks to the City.

Policy Alternative:
Alternative: Do not adopt a resolution to award a construction contract for completion of the Project.

Pros: Will result in General Fund cost savings

Cons: Not approving a contract for Project work will delay the start of construction of the new Fire Station No. 2 facility.

Reason not recommended: The completion of the demolition work for the Fire Station No. 2 replacement project is required to start construction of the new station building. Staff recommends the award of the contract for completion of the Project to Central Valley Environmental to allow the Fire Station No. 2 project to proceed on schedule.

Fiscal Impact:
There is sufficient funding available in the Fire Station No. 2 Reconstruction Project, Project No. 3447 to award the contract for the Project to Central Valley Environmental. As of February 29, 2020, the available Project funding is as follows:

Available Project Budget	**$ 2,357,291.00**

Summary of Estimated Demolition Cost

Construction Contract	$238,200
Alternate Bid Item No. 1	$7,200
25% Construction Contingency	$60,000
Administration and Inspection	$80,000

Total Estimated Cost	**$ 385,400**

California Environmental Quality Act:
The proposed Project qualifies for categorical exemption under Class 2 “Replacement or Reconstruction” as defined in CEQA Guidelines Section 15302.

Recommendations:
1. Adopt a Resolution to award a construction contract and authorize the Interim City Manager to execute the contract with the lowest responsible bidder submitting a responsive bid, CVE Contracting Group, Inc., dba Central Valley Environmental, in the amount of $245,400 for the demolition of Fire Station No. 2 as part of the Fire Station No. 2 Reconstruction Project No. 3447; and
2. Authorize the Engineering Director/City Engineer to negotiate and execute contract change order(s) in an aggregate amount not to exceed $60,000 for the Project.

Attachments:
1: Resolution
2: Constructions Plans & Specifications
3: Bid Results
4: Change Order Policy

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MILPITAS AWARDING A CONSTRUCTION CONTRACT TO AND AUTHORIZING THE INTERIM CITY MANAGER TO EXECUTE THE CONTRACT WITH THE LOWEST RESPONSIBLE BIDDER SUBMITTING A RESPONSIVE BID, CVE CONTRACTING GROUP, INC., DOING BUSINESS AS CENTRAL VALLEY ENVIRONMENTAL, IN THE AMOUNT OF $245,400 FOR THE DEMOLITION OF FIRE STATION NO. 2 AS PART OF THE FIRE STATION NO. 2 RECONSTRUCTION PROJECT NO. 3447, AND AUTHORIZING THE ENGINEERING DIRECTOR/CITY ENGINEER TO NEGOTIATE AND EXECUTE CONTRACT CHANGE ORDER(S) IN AN AGGREGATE AMOUNT NOT TO EXCEED $60,000 FOR THE PROJECT

WHEREAS, the demolition of Fire Station No. 2 as part of the Fire Station No. 2 Reconstruction Project No. 3447, provides for the removal and disposal of an existing building and selective site features located at 1263 Yosemite Drive (the "Project"); and

WHEREAS, prior to the start of demolition, Fire staff will move into the new temporary station no. 2 facility to be located at 1126 Yosemite Drive; and

WHEREAS, the Project was advertised for bid in The Milpitas Post newspaper on February 7 and 14, 2020; and

WHEREAS, the Engineer's Estimate for the demolition work is $508,000 for the base bid work. The bid included one Add Alternate Bid Item for Monthly Maintenance for SWPPP with an estimated cost of $20,000; and

WHEREAS, the bid opening on March 10, 2020, resulted in the City receiving eight sealed bid proposals, which ranged in pricing from $238,000 to $849,900 for the base bid; and

WHEREAS, the lowest responsible bidder submitting a responsive bid is CVE Contracting Group, Inc., dba Central Valley Environmental, with a total bid amount of $245,400, and

WHEREAS, no bid protest was filed with the City within five (5) days of the bid opening as set forth in the Project specifications; and

WHEREAS, staff recommends the City Council award a construction contract to CVE Contracting Group, Inc., dba Central Valley Environmental, the lowest responsible bidder submitting a responsive bid for the Project, and authorize the Interim City Manager to execute a contract for the Total Bid in the amount of $245,400 in accordance with State law; and

WHEREAS, sufficient funds are available in the Project budget to award a construction contract in the amount of $245,400; and

WHEREAS, staff recommends the City Council authorize the Engineering Director/City Engineer to negotiate and execute change order(s) in an amount not to exceed $60,000, 25% percent of the total contract value, due to the Project's tight completion schedule and staff's capability to respond swiftly to unanticipated construction conditions to limit potential claims or risk to the City.

NOW, THEREFORE, the City Council of the City of Milpitas hereby finds, determines, and resolves as follows:

1. The City Council has considered the full record before it, which may include but is not limited to such things as the staff report, testimony by staff and the public, and other materials and evidence submitted or provided to it. Furthermore, the recitals set forth above are found to be true and correct and are incorporated herein by reference.

2. The City Council hereby awards the construction contract to and authorizes the City Manager to execute the contract and related documents with the lowest responsible bidder submitting a responsive bid, CVE Contracting Group, Inc. doing business as Central Valley Environmental, in the amount of $245,400 for the demolition of Fire Station No. 2 as part of the Fire Station No. 2 Reconstruction Project No. 3447; and

3. The Engineering Director/City Engineer is hereby authorized to negotiate and execute contract change order(s) in an aggregate amount not to exceed $60,000 for the Project.

PASSED AND ADOPTED this _____ day of _____, 2020, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

Mary Lavelle, City Clerk

APPROVED:

Rich Tran, Mayor

APPROVED AS TO FORM:

Christopher J. Diaz, City Attorney

CITY OF MILPITAS

FIRE STATION NO. 2 DEMOLITION

1263 YOSEMITE DR. MILPITAS, CA 95035 (CITY PROJECT NO. 3447)

SITE INFORMATION

ASSESSOR'S PARCEL NUMBER (APS): 088-02-026

AREA ACRES: 1.00891

PROPERTY IS CURRENTLY DESIGNATED FOR ZONING: (I) INSTITUTIONAL

PER TABLE 10.03-1, INSTITUTIONAL ZONE DEVELOPMENT STANDARDS FROM MILPITAS CODE OF ORDINANCES

SETBACK REQUIREMENTS: NONE REQUIRED FOR INSTITUTIONALLY ZONED PARCEL
BLDG. HEIGHT REQUIREMENTS: NONE REQUIRED FOR INSTITUTIONALLY ZONED PARCEL
FAR REQUIREMENTS: NONE REQUIRED FOR INSTITUTIONALLY ZONED PARCEL

PROJECT DESCRIPTION

WORK INCLUDES DEMOLITION OF APPROX. 6,300 SQ.FT. EXISTING FIRE STATION NO. 2 AND ASSOCIATED SELECTIVE SITE DEMOLITION, LOCATED AT THE CORNER OF YOSEMITE DRIVE AND S. PARK VICTORIA DRIVE IN MILPITAS, CA. 1

PROJECT TEAM

OWNER:
CITY OF MILPITAS
455 E. CALAVERAS BLVD.
MILPITAS, CA 95035

ARCHITECT:
SHAH KAWASAKI ARCHITECTS
570 10TH STREET, SUITE 201
OAKLAND, CA 94607

STRUCTURAL ENGINEER:
ZFA STRUCTURAL ENGINEERS
1212 FORTH STREET, SUITE Z
SANTA ROSA CA, 95404

ELEC. ENGINEER:
THOMA ENGINEERING
3562 EMPLEO ST.
SAN LUIS OBISPO, CA 93406

CIVIL ENGINEER AND LANDSCAPE ARCHITECT:
SIGFRIED ENGINEERING
3244 BROKSIDE ROAD, SUITE 100
STOCKTON, CA 95219

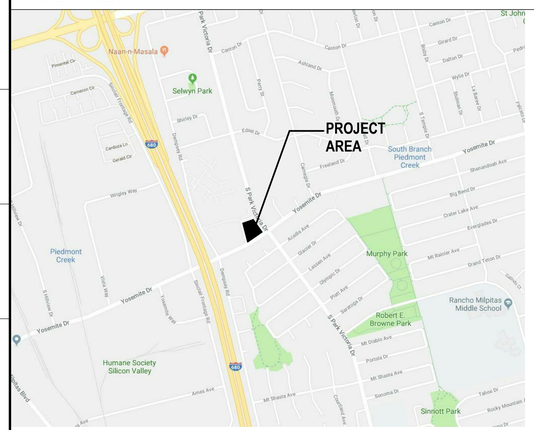
SPECIFICATIONS:
JOHN A. RAEBER
443 GOLD MINE DRIVE
SAN FRANCISCO, CA 94131

MECH/PLUMB ENGINEER:
3C ENGINEERING
1500 PALM STREET
SAN LUIS OBISPO, CA 93401

COST ESTIMATOR:
CUMMING CORPORATION
475 SANSOME STREET, SUITE 520
SAN FRANCISCO, CA 94111

ENVIRONMENTAL & GEOTECH ENGINEER:
TERRACON
5075 COMMERCIAL CIRCLE, SUITE E
CONCORD, CA 94520

PROJECT AREA



SHEET LIST

ARCHITECTURAL	
AD-001	MILPITAS DEMO. COVER SHEET
CIVIL	
CD-001	TOPOGRAPHIC AND DEMOLITION PLAN
CD-002	EROSION CONTROL PLAN
CD-003	BEST MANAGEMENT PRACTICES
ELECTRICAL	
ED-001	ELECTRICAL DEMOLITION SITE PLAN

DEFERRED APPROVAL ITEMS

CONTRACTOR IS RESPONSIBLE COMPLETING THE FOLLOWING FORMS PRIOR TO THE ISSUANCE OF DEMOLITION PERMIT

1. CONSTRUCTION WASTE MANAGEMENT PLAN WORKSHEET

2. BAY AREA AIR QUALITY DECLARATION

3. GENERATOR CLOSURE PERMIT APPLICATION 1

GENERAL NOTES - CITY OF MILPITAS

1. ALL MATERIAL AND WORKMANSHIP SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS, SPECIFICATIONS, LATEST EDITION OF STANDARDS AND ORDINANCES OF THE CITY OF MILPITAS AND THE LATEST STATE STANDARD SPECIFICATIONS. STANDARD DRAWINGS AND DETAILS ARE AVAILABLE AT THE ENGINEERING DEPARTMENT, 408-586-3300. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN PERMITS NECESSARY TO PERFORM THE IMPROVEMENTS IN THESE PLANS FROM THE APPROPRIATE AGENCIES AND TO COMPLY WITH THE AGENCIES' REQUIREMENTS. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL LAWS.

2. CONTRACTOR MUST NOTIFY THE CITY PROJECT MANAGER 48 HOURS IN ADVANCE BEFORE STARTING ANY WORK FOR THIS PROJECT.

3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL NOTIFY UTILITY COMPANIES 48 HOURS IN ADVANCE OF CONSTRUCTION TO FIELD LOCATE UTILITIES, CONTACT UNDERGROUND SERVICE ALERT (USA) AT (800)-642-2444 AND OBTAIN A REFERENCE NUMBER. ANY ADDED COST ON THE PART OF THE CONTRACTOR AS A RESULT OF THE ACTUAL LOCATIONS OF EXISTING UTILITIES BEING DIFFERENT FROM THOSE SHOWN ON THE PLANS SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED IN THE CONTRACT UNIT PRICE.

4. ALL QUANTITIES AND PAY ITEMS ARE AND WILL BE BASED ON ACTUAL FIELD MEASUREMENTS. ALL LOCATIONS OF IRON, MONUMENTS, AND TRAFFIC LOOPS ON PLANS ARE APPROXIMATE AND SHALL BE FIELD LOCATED PRIOR TO RESURFACING.

5. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO STARTING CONSTRUCTION. ANY CONFLICT WITH THE DRAWINGS OR SPECIFICATIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE PROJECT ENGINEER.

6. CONTRACTOR SHALL MEET WITH PROJECT INSPECTOR AND SIGN OFF ON QUANTITIES WITHIN 48 HOURS OF COMPLETING EACH SEGMENT.

7. CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITIES AND SHALL OBTAIN AN APPROVED CHANGE ORDER PRIOR TO EXCEEDING ESTIMATED QUANTITIES.

8. ALL RESPONSIBLE CONTRACTOR REPRESENTATIVES (CONRACTOR'S SUPERINTENDENT AND SUBCONTRACTOR'S SUPERINTENDENT WILL BE REQUIRED TO ATTEND A PRE-CONSTRUCTION MEETING WHICH WILL BE SCHEDULED BY THE CITY PRIOR TO THE COMMENCEMENT OF ANY WORK.

9. CONTRACTOR SHALL SUBMIT A CONSTRUCTION SCHEDULE TO THE CITY ENGINEER (AND UPDATE AS REQUIRED PER SPECIFICATIONS) FOR APPROVAL AT LEAST 15 CALENDAR DAYS PRIOR TO THE BEGINNING OF ANY WORK WITHIN THE CONSTRUCTION SITE.

10. DETOUR OF THROUGH TRAFFIC TO NEARBY STREETS WILL NOT BE PERMITTED. CONTRACTOR MUST MAINTAIN AT LEAST ONE THROUGH TRAFFIC LANE, PER TRAVEL DIRECTION, AT ALL TIMES OR MAKE SPECIAL PROVISION TO ALLOW THROUGH TRAFFIC.

11. ALL EXISTING UTILITIES, IMPROVEMENTS, LANDSCAPING AND PROPERTY THAT BECOME DAMAGED DURING CONSTRUCTION SHALL BE COMPLETELY RESTORED TO THE SATISFACTION OF THE CITY ENGINEER, AT CONTRACTOR'S SOLE EXPENSE.

12. SAFETY MEASURES: AT ALL TIMES THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE INCLUDING PUBLIC SAFETY, WORKER SAFETY AND PROPERTY, INCLUDING COMPLIANCE WITH REQUIREMENTS AND PERMIT CONDITIONS OF THE STATE OF CALIFORNIA DIVISION OF INDUSTRIAL SAFETY, (THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT JUST DURING WORKING HOURS) AND FOR ALL NECESSARY INDEPENDENT ENGINEERING REVIEWS OF THE CONDITIONS, THE ENGINEER'S JOB SITE REVIEW IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES. WHENEVER THE CONTRACTOR'S OPERATIONS CREATE A CONDITION HAZARDOUS TO TRAFFIC OR PUBLIC, CONTRACTOR SHALL FURNISH, INSTALL AND MAINTAIN APPROPRIATE TRAFFIC SAFETY DEVICES AND SIGNAGE TO PREVENT ACCIDENTS OR DAMAGE OR INJURY TO THE PUBLIC.

13. CONTRACTOR SHALL CONFORM TO ALL APPLICABLE OCCUPATIONAL SAFTEY AND HEALTH STANDARDS AND REGUALTIONS BY THE CITY, STATE AND FEDERAL.

14. HAUL ROUTES SHALL BE ONLY ON THOSE STREETS AS PRE-APPROVED BY THE CITY ENGINEER. THE CONTRACTOR SHALL NOT ALLOW MATERIAL TO BLOW OR SPILL OVER AND UPON SAID ADJACENT, PUBLIC OR PRIVATE PROPERTY WHEN HAULING EARTH, SAND, GRAVEL, STONE, DEBRIS, PAPER, OR ANY SUBSTANCE OVER ANY PUBLIC STREET, ALLEY OR PUBLIC PLACE.

15. ALL SURVEY MONUMENTATIONS SHALL BE PROTECTED AND PERPETUATED IN PLACE. ANY DISTURBED OR COVERED MONUMENTS SHALL BE RESET BY A CALIFORNIA LICENSED LAND SURVEYOR AT THE DIRECTION OF THE CITY ENGINEER, AT THE CONTRACTOR'S SOLE EXPENSE.

16. NO CONSTRUCTION IS PERMITTED ON THE FOLLOWING HOLIDAYS: NEW YEARS DAY, MARTIN LUTHER KING BIRTHDAY, PRESIDENT'S DAY, MEMORIAL DAY, INDEPENDENCE DAY, LABOR DAY, VETERANS DAY, THANKSGIVING DAY, DAY AFTER THANKSGIVING, DAY BEFORE CHRISTMAS, AND CHRISTMAS DAY.

17. CONTRACTOR SHALL COMPLY WITH THE CITY'S NON-POINT SOURCE POLLUTION PREVENTION ORDINANCE AND THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND USE/INSTALLATION OF BEST MANAGEMENT PRACTICES (BMP) FOR THIS PROJECT.

18. CONTRACTOR SHALL MAINTAIN THE PROJECT SITES IN A NEAT AND PROFESSIONAL CONDITION AT ALL TIMES. CONTRACTOR SHALL NOT STORE MATERIALS ON PUBLIC ROADWAYS. CONTRACTOR SHALL REMOVE ALL DEBRIS AND EQUIPMENT AT THE END OF EACH WORKING DAY.

19. THE CONTRACTOR SHALL PROVIDE TEMPORARY PEDESTRIAN WALKWAYS/PATHS THAT ARE ADA COMPLIANT TO TRAVERSE AROUND WORK AND FOR EVERY PEDESTRIAN RAMP/SIDEWALK SECTION REMOVED.

20. ANY OPERATION THAT CREATES DUST SHALL BE STOPPED IMMEDIATELY IF DUST AFFECTS ADJACENT PROPERTIES. SUFFICIENT WATERING TO CONTROL DUST IS REQUIRED AT ALL TIMES AND A DUST PALLIATIVE MAY BE REQUIRED BY THE CITY ENGINEER. MUD TRACKED ONTO STREETS OR ADJACENT PROPERTIES SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR. STREETS SHALL BE SWEPT AT CONTRACTOR'S EXPENSE AS REQUIRED BY THE PROJECT SPECIFICATIONS AND AS DIRECTED BY THE CITY ENGINEER.

21. CONTRACTOR SHALL COMPLY WITH THE CITY OF MILPITAS ORDINANCE, THE CONTRACTOR SHALL NOT ENGAGE OR PERMIT OTHERS TO ENGAGE IN ANY CONSTRUCTION RELATED OPERATIONS INCLUDING DELIVERY OF MATERIALS AND/OR EQUIPMENT TO OR FROM THE CONSTRUCTION SITE EXCEPT WITHIN THE HOURS OF 7:00 AM TO 7:00 PM ON WEEKDAYS AND WEEKENDS. 1

22. CONTRACTOR SHALL PROVIDE ADEQUATE TRAFFIC CONTROLS INCLUDING FLAG PERSONS PER SPECIFICATIONS AND SHALL SUBMIT A TRAFFIC CONTROL PLAN SUBJECT TO THE APPROVAL OF THE CITY ENGINEER, PRIOR TO THE START OF WORK WITHIN THE PUBLIC RIGHT OF WAY. THE CITY RESERVES THE RIGHT TO REQUIRE MODIFICATIONS TO THE APPROVED PLAN IN THE FIELD.

23. AT ALL TIMES, THE CONTRACTOR SHALL HAVE A SUFFICIENT NUMBER OF CONES, TEMPORARY SIGNAGE, BARRICADES, AND OTHER TRAFFIC CONTROL AND SAFETY DEVICES AT HAND IN ORDER TO SAFELY PROSECUTE THE WORK AND TO DIRECT TRAFFIC INCLUDING BICYCLIST AND PEDESTRIANS AS DETERMINED BY THE CITY ENGINEER.

24. SIDEWALKS AND DRIVEWAYS SHALL NOT BE BLOCKED WITHOUT PRIOR APPROVAL FROM THE CITY ENGINEER.

25. CONTRACTOR'S LICENSE REQUIREMENTS ARE NOTED IN THE CONTRACT SPECIFICATIONS AND NOTICE INVITING BIDS.

26. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER, THE CITY OF MILPITAS AND ITS AUTHORIZED REPRESENTATIVES AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF THE WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLEGENCE OF THE OWNER OR THE ENGINEER.

27. OPEN TRENCHES SHALL BE COVERED (PLATED) DURING NON-WORKING HOURS. 1

28. IF ARCHAEOLOGICAL MATERIALS ARE UNCOVERED DURING GRADING, TRENCHING OR OTHER EXCAVATION, EARTHWORK WITHIN 100' FOR THIS AREA SHALL BE STOPPED UNTIL A PROFESSIONAL ARCHAEOLOGIST WHO IS CERTIFIED BY THE SOCIETY OF CALIFORNIA ARCHAEOLOGIST (SCA) OR THE SOCIETY OF PROFESSIONAL ARCHAEOLOGIST (SOFA) HAS HAD AN OPPORTUNITY TO EVALUATE THE SIGNIFICANCE OF THE FIND AND SUGGEST APPROPRIATE MITIGATION MEASURES, IF THEY ARE DEEMED NECESSARY. ALSO SEE SPECIFICATIONS SECTION D-08.

29. ALL ASBESTOS CEMENT PIPE (ACP) ENCOUNTERED AND/OR REMOVED AS PART OF THE WORK SHOWN ON THESE DRAWINGS SHALL BE HANDLED AND/OR DISPOSED OF IN ACCORDANCE WITH ALL LAWS AND REGULATIONS.

30. THE CITY OF MILPITAS ORDINANCE NO. 240.2, PROHIBITS POTABLE WATER USE FOR CONSTRUCTION ACTIVITIES SUCH AS DUST CONTROL, COMPACTION, AND BUILDING PAD TREATMENT. REFER TO THE LATEST "SOUTH BAY WATER RECYCLING RECYCLED WATER ACCESS POINTS PROGRAM IMPLEMENTATION PLAN" FOR PERMITTING REQUIREMENTS, GUIDELINES, AND RESPONSIBLE PERSON TRAINING AND EQUIPMENT CERTIFICATION.

ISSUED FOR CONSTRUCTION

Architect of Record
SHAH KAWASAKI ARCHITECTS
570 10th Street, Suite 201
Oakland, CA 94607

Consultant

DESIGNER STAMP:
LICENSED ARCHITECT PHILIP SHENG-YI C 29075 REN. 12-31-21 STATE OF CALIFORNIA

RECORD DRAWINGS:

DESIGNER: _____ DATE: _____
PUBLIC WORKS INSPECTOR: _____ DATE: _____
UTILITY/ FACILITY DEPT. HEAD: _____ DATE: _____
PROJECT ENGINEER: _____ DATE: _____
PUBLIC IMPROVEMENTS INITIALLY ACCEPTED BY THE CITY COUNCIL ON: _____ RES. NO. _____

DRAWN BY: ____ DATE: ____
CHECKED BY: ____ DATE: ____
DESIGNED BY: ____ DATE: ____

REVISIONS

NO.	ISSUE DESCRIPTION	ENGR. APR.	DATE
	95% CONSTRUCTION DOCUMENTS / PERMIT SET		12/10/2019
1	PERMIT COMMENTS - REVISION 1		01/28/2020
	ISSUED FOR BID		02/11/2020

CITY OF MILPITAS ENGINEERING DIVISION

CITY OF MILPITAS FIRE STATION NO. 2 DEMOLITION 1
1263 YOSEMITE DR. MILPITAS, CA 95035

Drawing Title
MILPITAS DEMO. COVER SHEET

NOTE: If this drawing is not 36"x24" it has been revised from its original size and the scales noted on drawing/details are no longer applicable.

RECOMMENDED FOR BIDDING BY: _____ DATE: _____
MICHAEL SILVEIRA, P.E., CIP MANAGER

APPROVED FOR BIDDING BY: _____ DATE: _____ 1
STEVE P. ERICKSON, P.E. CITY ENGINEER

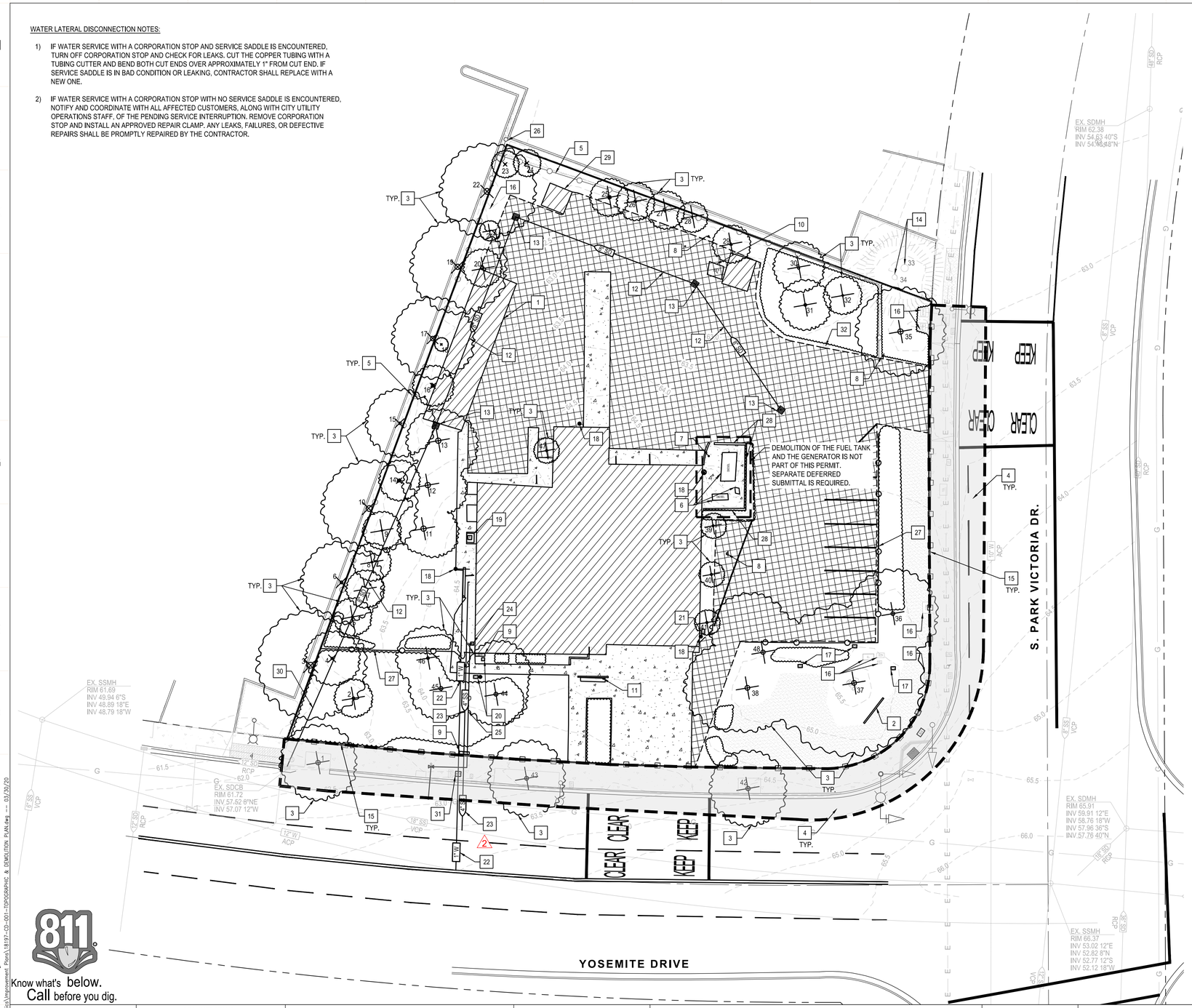
City Project Number: 3447 1
REC. DWG NO.
SCALE: AS NOTED
Drawing No. AD-001
Sheet No. 1 of 5

G:\18725.00\Dwgs\CITY OF MILPITAS FIRE STATION 2

WATER LATERAL DISCONNECTION NOTES:

1) IF WATER SERVICE WITH A CORPORATION STOP AND SERVICE SADDLE IS ENCOUNTERED, TURN OFF CORPORATION STOP AND CHECK FOR LEAKS. CUT THE COPPER TUBING WITH A TUBING CUTTER AND BEND BOTH CUT ENDS OVER APPROXIMATELY 1" FROM CUT END. IF SERVICE SADDLE IS IN BAD CONDITION OR LEAKING, CONTRACTOR SHALL REPLACE WITH A NEW ONE.

2) IF WATER SERVICE WITH A CORPORATION STOP WITH NO SERVICE SADDLE IS ENCOUNTERED, NOTIFY AND COORDINATE WITH ALL AFFECTED CUSTOMERS, ALONG WITH CITY UTILITY OPERATIONS STAFF, OF THE PENDING SERVICE INTERRUPTION. REMOVE CORPORATION STOP AND INSTALL AN APPROVED REPAIR CLAMP. ANY LEAKS, FAILURES, OR DEFECTIVE REPAIRS SHALL BE PROMPTLY REPAIRED BY THE CONTRACTOR.



Know what's below. Call before you dig.

LEGEND

- EXISTING CONCRETE TO REMAIN PROTECT IN PLACE
- REMOVE AND DISPOSE OF EXISTING ASPHALT PAVING AND BASE MATERIAL.
- REMOVE AND DISPOSE OF EXISTING CONCRETE WALKWAY AND BASE MATERIAL.
- REMOVE AND DISPOSE OF EXISTING SOD LAWN
- REMOVE AND DISPOSE OF EXISTING BUILDING, FOUNDATION AND BASE MATERIAL
- EXISTING CHAIN LINK FENCE TO BE REMOVED
- TEMPORARY CONSTRUCTION FENCING
- SD — EXISTING STORM DRAIN LINE
- SS — EXISTING SANITARY SEWER LINE
- W — EXISTING WATER LINE
- G — EXISTING GAS LINE
- TREE TO BE REMOVED, REMOVE STUMP AND ROOTS 1" AND LARGER
- EXISTING TREES TO REMAIN AND BE PROTECTED DURING CONSTRUCTION
- EXISTING SHRUBS TO BE REMOVED
- 95 — TREE IDENTIFICATION NUMBER
- 50.0 — EXISTING CONTOUR

TREE LEGEND

TREE NO.	TO BE REMOVED	TRUNK DIA.	TREE TYPE
1	X	21.4	LIQUIDAMBAR
2	X	12	UNK
3	X	14.4	EUCALYPTUS
4	X	10.8	UNK
5	X	8.4	UNK
6	X	13.2	EUCALYPTUS
7	X	8.4	UNK
8	X	8.4	UNK
9	X	7.2	UNK
10	X	26.4	EUCALYPTUS
11	X	24	SEQUOIA
12	X	24	SEQUOIA
13	X	24	SEQUOIA
14	X	MULTI	UNK
15	X	12	EUCALYPTUS
16	X	MULTI	UNK
17	X	20.4	EUCALYPTUS
18	X	6	UNK
19	X	24	EUCALYPTUS
20	X	MULTI	UNK
21	X	6	UNK
22	X	26.4	EUCALYPTUS
23	X	6	TOYON
24	X	6	PEPPER
25	X	MULTI	UNK
26	X	MULTI	UNK
27	X	MULTI	UNK
28	X	MULTI	UNK
29	X	MULTI	UNK
30	X	MULTI	UNK
31	X	12	CYPRUS
32	X	8.4	UNK
33		33.6	SEQUOIA
34		24	SEQUOIA
35	X	24	CAMPHOR
36	X	16.8	UNK
37	X	21.6	CAMPHOR
38	X	21.6	CAMPHOR
39	X	10.2	CYPRUS
40	X	10.2	CYPRUS
41	X	8.4	CYPRUS
42	X	19.2	LIQUIDAMBAR
43	X	18	LIQUIDAMBAR
44	X	18	UNK
45	X	18	UNK
46	X	12	UNK
47	X	9.6	CYPRUS
48	X	19.2	UNK

KEY NOTES

1. TRAILER TO BE REMOVED BY OTHERS
2. REMOVE AND DISPOSE OF EXISTING FIRE DEPARTMENT SIGN
3. REMOVE AND DISPOSE OF EXISTING TREE, CONTRACTOR SHALL PROVIDE BIOLOGIST SURVEY PRIOR TO THE REMOVAL OF ANY TREE. SEE SPECIFICATIONS FOR MORE DETAILS ON BIOLOGICAL RESOURCES REQUIREMENTS.
4. EXISTING OFFSITE SIDEWALK AND DRIVEWAY TO BE PROTECTED IN PLACE.
5. EXISTING CHAIN LINK FENCE ALONG THE PROPERTY LINE TO BE PROTECTED IN PLACE.
6. REFER TO ELECTRICAL DRAWINGS FOR REMOVAL AND DISPOSAL
7. REMOVE AND DISPOSE OF EXISTING BOLLARD
8. REMOVE AND DISPOSE OF EXISTING SIGN
9. REMOVE EXISTING BACKFLOW PREVENTER. CONTRACTOR SHALL COORDINATE WITH CITY TO SALVAGE
10. REMOVE AND DISPOSE OF EXISTING HAZARDOUS WASTE MATERIAL CONTAINER
11. REMOVE AND DISPOSE OF EXISTING WALL AND FLAGPOLE
12. REMOVE AND DISPOSE OF EXISTING STORM DRAIN LINE
13. REMOVE AND DISPOSE OF EXISTING STORM DRAIN INLET
14. PROTECT IN PLACE EXISTING TREE
15. INSTALL TEMPORARY CONSTRUCTION FENCING
16. PROTECT IN PLACE EXISTING ELECTRICAL UTILITY BOX AND / OR UTILITY PEDESTAL. SEE SHEET ES-101 ELECTRICAL DEMOLITION SITE PLAN FOR MORE INFORMATION.
17. REMOVE AND DISPOSE OF EXISTING IRRIGATION CONTROL VALVE 2
18. REMOVE AND DISPOSE OF EXISTING WATER SPIGOT
19. REMOVE AND DISPOSE OF EXISTING AIR CONDITIONING UNIT
20. REMOVE AND DISPOSE OF EXISTING IRRIGATION CONTROL VALVE / QUICK COUPLER
21. REMOVE AND DISPOSE OF EXISTING UTILITY BOX
22. REMOVE AND DISPOSE OF EXISTING WATER LATERAL. CUT AND CAP AT PROPERTY LINE, AND REMOVE EVERYTHING BEHIND PROPERTY LINE. DISCONNECT LATERAL AT MAINLINE, AND ABANDON IN PLACE THE SEGMENT BETWEEN MAINLINE AND PROPERTY LINE. SEE WATER LATERAL DISCONNECTION NOTES ON THIS SHEET FOR MORE INFORMATION. PAVEMENT SHALL BE RESTORED TO MATCH EXISTING CONDITION PER C.O.M. STD. DWG. NO. 222.
23. REMOVE AND DISPOSE OF EXISTING SANITARY SEWER LATERAL. CUT AND CAP AT PROPERTY LINE, AND REMOVE EVERYTHING BEHIND PROPERTY LINE. DISCONNECT AND CAP WYE CONNECTION AT MAINLINE, AND SLURRY THE SEGMENT BETWEEN MAINLINE AND PROPERTY LINE. PAVEMENT SHALL BE RESTORED TO MATCH EXISTING CONDITION PER C.O.M. STD. DWG. NO. 222.
24. REMOVE AND DISPOSE OF EXISTING GAS METER. CONTRACTOR SHALL COORDINATE WITH PG&E TO DISCONNECT EXISTING GAS SERVICE
25. REMOVE AND DISPOSE OF EXISTING GAS LINE AND VALVE. CAP AT PROJECT EXTENTS. CONTRACTOR SHALL COORDINATE WITH PG&E TO DISCONNECT EXISTING GAS SERVICE. PAVEMENT SHALL BE RESTORED TO MATCH EXISTING CONDITION PER C.O.M. STD. DWG. NO. 222.
26. PROTECT IN PLACE EXISTING LIGHT POLE AND BASE
27. REMOVE AND DISPOSE OF EXISTING CHAINLINK FENCE
28. REMOVE AND DISPOSE OF EXISTING CONCRETE WALL
29. CONTRACTOR SHALL RELOCATE EXISTING STEEL CONTAINER TO FIRE STATION NO. 3, LOCATED AT 45 MIDWICK DRIVE, MILPITAS, CA, 95035
30. REMOVE AND DISPOSE OF EXISTING STORM DRAIN LATERAL. CUT AND CAP AT PROPERTY LINE, AND REMOVE EVERYTHING BEHIND PROPERTY LINE. DISCONNECT LATERAL FROM DRAIN INLET, REPAIR DRAIN INLET, AND SLURRY THE SEGMENT BETWEEN INLET AND PROPERTY LINE. PAVEMENT SHALL BE RESTORED TO MATCH EXISTING CONDITION PER C.O.M. STD. DWG. NO. 222.
31. REMOVE EXISTING WATER METER. CONTRACTOR SHALL COORDINATE WITH CITY TO SALVAGE
32. PROTECT IN PLACE EXISTING WATER VALVE. CONTRACTOR SHALL INVESTIGATE. IF UTILITY IS ABANDONED, CONTRACTOR SHALL REMOVE AND DISPOSE OF VALVE.

DEMOLITION NOTES:

1. SCOPE OF WORK FOR THIS PERMIT IS WITHIN THE PROPERTY LINE. PUBLIC SIDEWALK DEMOLITION SHALL NOT BE PART OF THIS PERMIT AS IT IS WITHIN THE PUBLIC RIGHT OF WAY, UNLESS OTHERWISE NOTED. 2
2. ALL ON-SITE WET AND DRY UTILITIES (INCLUDING BUT NOT LIMITED TO WATER, SEWER, STORM, ELECTRICAL) SHALL BE REMOVED AND DISPOSED OF.

0' 10' 20' 40'
SCALE: 1"=20'

Architect of Record
SHAH KAWASAKI ARCHITECTS
570 10th Street, Suite 201
Oakland, CA 94607

Consultant
SIEGFRIED

DESIGNER STAMP:
REGISTERED PROFESSIONAL ENGINEER PAUL J. SCHNEIDER No. 62488 Exp. 09/30/21 CIVIL STATE OF CALIFORNIA
DATE SIGNED: 03/30/20

RECORD DRAWINGS:

DESIGNER: _____ DATE: _____
PUBLIC WORKS INSPECTOR: _____ DATE: _____
UTILITY/ FACILITY DEPT. HEAD: _____ DATE: _____
PROJECT ENGINEER: _____ DATE: _____
PUBLIC IMPROVEMENTS INITIALLY ACCEPTED BY THE CITY COUNCIL ON: _____ RES. NO. _____

DRAWN BY: ____ DATE: ____
CHECKED BY: ____ DATE: ____
DESIGNED BY: ____ DATE: ____

REVISIONS

		ENGR. APR.	
	95% CONSTRUCTION DOCUMENTS / PERMIT SET		12/10/2019
	PERMIT COMMENTS - REVISION 1		01/28/2020
	ISSUED FOR BID		02/11/2020
2	ADDENDUM 1		03/30/2020

CITY OF MILPITAS ENGINEERING DIVISION

City Project Number: 3447

CITY OF MILPITAS FIRE STATION NO. 2 DEMOLITION

1263 YOSEMITE DR. MILPITAS, CA 95035

REC. DWG NO.

Drawing Title
TOPOGRAPHIC AND DEMOLITION PLAN

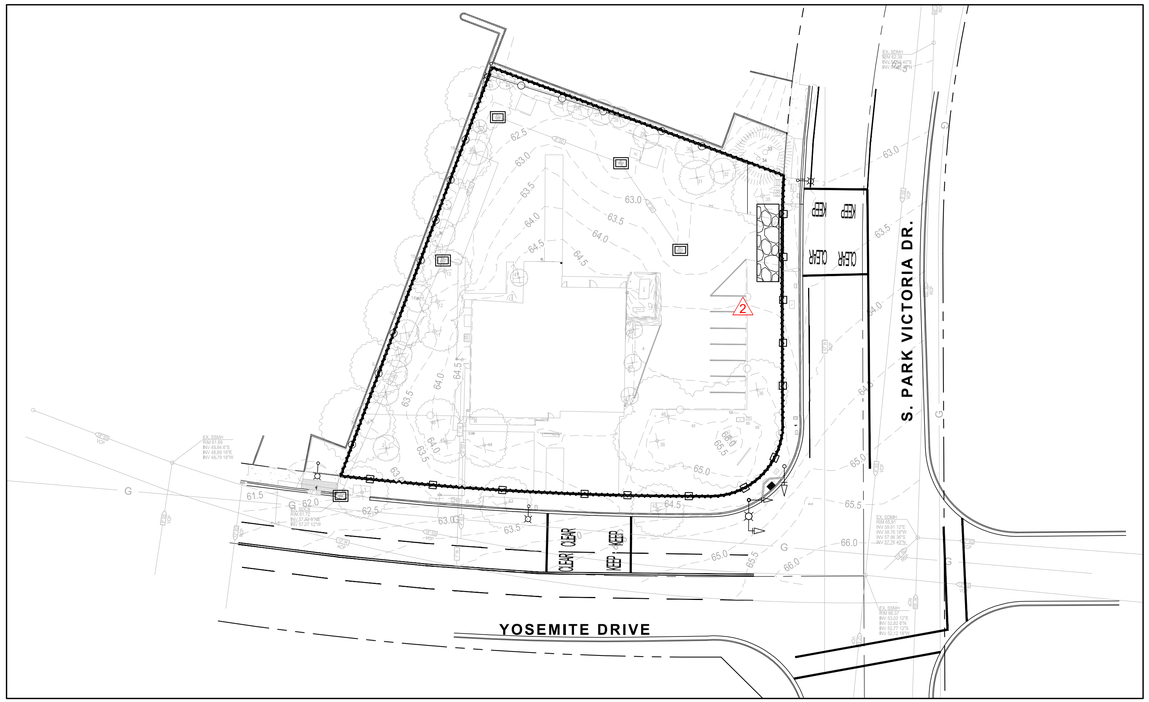
NOTE: If this drawing is not 36"x24" it has been revised from its original size and the scales noted on drawing/details are no longer applicable.

SCALE: AS NOTED

RECOMMENDED FOR BIDDING BY: _____ DATE: _____
MICHAEL SILVEIRA, P.E. CIP MANAGER

Drawing No. CD-001
Sheet No. 2 of 5

ISSUED FOR CONSTRUCTION



EROSION CONTROL PLAN
1" = 40'

0' 20' 40' 80'
SCALE: 1"=40'

EROSION CONTROL LEGEND

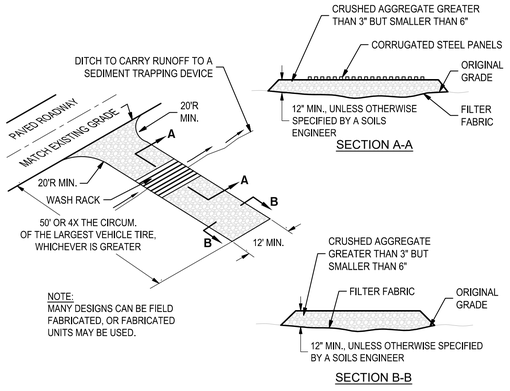
SYMBOL	DESCRIPTION
	FIBER ROLLED WATTLE, SEE DETAIL 2 THIS SHEET
	GRAVEL BAG FILTER AT DROP INLET, SEE DETAIL 3 THIS SHEET
	STABILIZED CONSTRUCTION ENTRANCE, CONTRACTOR TO DETERMINE SIZE & LOCATION, SEE DETAIL 1 THIS SHEET
2	

EROSION CONTROL GENERAL NOTES

1. PLANS ARE DIAGRAMMATIC AND ARE NOT INTENDED TO SHOW ALL OFFSETS. THE SITE IS DYNAMIC AND CHANGES ON A DAILY BASIS, CHANGES SHOULD BE MADE ACCORDING TO EXISTING CONDITIONS, BECAUSE IT IS IMPOSSIBLE TO PREDICT ALL POSSIBLE SITUATIONS, CONTRACTOR SHALL USE BEST MANAGEMENT PRACTICES TO ENSURE QUALITY CONTROL.
2. THE CONTRACTOR SHALL REVIEW THE CURRENT STORM WATER POLLUTION PREVENTION PLAN (SWPPP). IT IS THE CONTRACTORS SOLE RESPONSIBILITY FOR CONDUCTING HIS/HER OPERTATIONS IN ADHERANCE TO THE SWPPP. THE CONTRACTOR IS RESPONSIBLE FOR ANY FINES, DELAYS, AND/OR DAMAGES RESULTING FROM ANY STATE WATER QUALITY CONTROL BOARD SANCTIONS CAUSED BY THE OPERATION OF THE CONTRACTOR OF HIS/HER SUBCONTRACTORS.
3. THE FOLLOWING PLANS ARE ACCURATE FOR EROSION CONTROL PURPOSES ONLY. THE CONTRACTOR SHALL FOLLOW THESE PLANS UNLESS FIELD CONDITIONS DICTATE MODIFICATION. IF MODIFICATION IS NECESSARY, A SWPPP AMENDMENT MUST BE DONE. THIS MAY REQUIRE MODIFICATION TO THESE DRAWINGS AND ENGINEER CONCURRENCE.
4. INSPECT AND REPAIR FILTERS AFTER EACH STORM EVENT. REMOVE SEDIMENT WHEN 1/2 OF THE FILTER DEPTH HAS BEEN FILLED. REMOVED SEDIMENT SHALL BE DEPOSITED IN AN AREA TRIBUTARY TO A SEDIMENT BASIN OR OTHER FILTERING MEASURE. SEDIMENT AND GRAVEL SHALL BE IMMEDIATELY REMOVED FROM PAVEMENT OF ROAD.
5. UNFINISHED AND DISTURBED ARE TO BE PROTECTED WITH AN APPLICATION OF BLOWN STRAW AND ORGANIC BINDER.

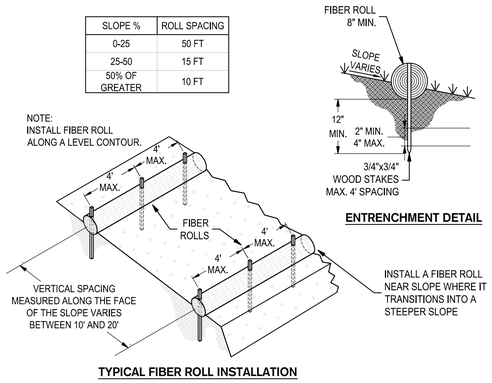
ITEM	LB/ACRE
STRAW	4,000
ORGANIC BINDER	200

6. ALTERNATE INLET PROTECTION SHALL BE USED ON ROADS OPEN TO THE PUBLIC IF ANY HAZARDOUS MATERIALS OR WASTES WHICH HAVE BEEN TREATED, STORED, DISPOSED, SPILLED, OR LEAKED IN SIGNIFICANT QUANTITIES ONTO THE CONSTRUCTION SITE, THE CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE THEM FROM THE SITE AND DISPOSE OF PROPERLY.
7. CHLORINATED OR DECHLORINATED WATER SHALL NOT BE DISCHARGED INTO THE STORM DRAIN SYSTEM. THE CONTRACTOR MAY DISPOSE THIS WATER INTO THE SANITARY SEWER SYSTEM UPON APPROVAL BY THE GOVERNING AGENCY.
8. THE CONTRACTOR SHALL KEEP MAINTENANCE, INSPECTION, AND REPAIR PROCEDURES TO ENSURE THAT ALL GRADED SURFACES, WALLS, BERMS, DRAINAGE STRUCTURES, VEGETATION, EROSION AND SEDIMENT CONTROL MEASURES, AND OTHER CONTROLS ARE MAINTAINED IN GOOD AND EFFECTIVE CONDITION AND ARE PROMPTLY REPAIRED OR RESTORED WHEN NECESSARY. ANY DEWATERING WATER SHALL NOT BE DISCHARGED DIRECTLY INTO THE STORM WATER SYSTEM, AND SHALL NOT BE DISCHARGED INTO THE SEWER SYSTEM.
9. ALL DEWATERING WATER MUST BE CHANNELED THROUGH AN APPROVED SEDIMENT BARRIER PRIOR TO THE WATER ENTERING THE STORM SYSTEM.
10. PAVEMENT CLEANING- FLUSHING OF STREETS/ PARKING LOTS TO REMOVE DIRT AND CONSTRUCTION DEBRIS IS PROHIBITED UNLESS PROPER SEDIMENT CONTROLS ARE USED. PREFERABLY, AREAS REQUIRING CLEANING SHOULD BE SWEPT.
11. ALL STOCKPILES OF MATERIALS THAT ARE NOT GOING TO BE USED FOR 14 DAYS SHALL BE COVERED.
12. CONTRACTOR TO USE BEST MANAGEMENT PRACTICES (BMPs) THROUGHOUT CONSTRUCTION. USE ALL BMPs THAT APPLY TO THE PROJECT, INCLUDING BUT NOT LIMITED TO THE FOLLOWING BMPs:
    - A. DRAIN INLET PROTECTION - CALIFORNIA STORMWATER BMP HANDBOOK SECTION SE-10
    - B. SOLID WASTE MANAGEMENT - CALIFORNIA STORMWATER BMP HANDBOOK SECTION WM-5
    - C. MATERIAL STORAGE - CALIFORNIA STORMWATER BMP HANDBOOK SECTION WM-1
    - D. PAVING - CALIFORNIA STORMWATER BMP HANDBOOK SECTION NS-3
    - E. DUST CONTROL, SEDIMENT CONTROL, EROSION CONTROL AND CONCRETE WASHOUT AREAS - SHOWN ON THIS SHEET WITH DETAILS
13. CONTRACTOR SHALL INSTALL DRAIN INLET PROTECTION FOR ALL CATCH BASINS LOCATED IN THE VICINITY OF WORK. THIS INCLUDES ANY CATCH BASINS LOCATED IN THE PUBLIC RIGHT-OF-WAY, AS WELL AS ANY ON-SITE CATCH BASINS LOCATED IN THE PARKING LOT.
14. CONTRACTOR SHALL ENSURE THAT CONSTRUCTION ACTIVITIES DO NOT DEPOSIT SEDIMENT ONTO THE PARKING LOT OR PUBLIC ROADWAY, SIDEWALK, AND GUTTERS.
15. CONTRACTOR SHALL USE STREET SWEEPING OR OTHER DRY-SWEEPING METHOD, AS NECESSARY, TO REMOVE CONSTRICTION-RELATED SEDIMENTS FROM PAVEMENT IN PROJECT AREA PARKING LOT AND PUBLIC SIDEWALKS, GUTTERS, AND ROADWAY.
16. CONTRACTOR SHALL SCHEDULE WORK FOR DRY-WEATHER DAYS WHEN NO RAIN IS IN THE IMMEDIATE FORECAST.



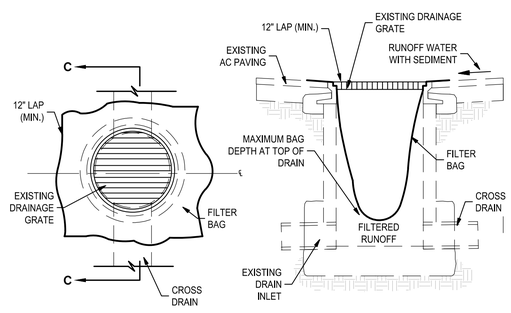
1 STABILIZED CONSTRUCTION ENTRANCE/OUTLET TIRE WASH
SCALE: NTS

SLOPE %	ROLL SPACING
0-25	50 FT
25-50	15 FT
50% OF GREATER	10 FT



TYPICAL FIBER ROLL INSTALLATION

2 FIBER ROLLS
SCALE: NTS



3 GRAVEL BAG FILTER AT DROP INLET
SCALE: NTS

Know what's below. Call before you dig.

Architect of Record
S H A H KAWASAKI ARCHITECTS
570 10th Street, Suite 201
Oakland, CA 94607

Consultant
SIEGFRIED

DESIGNER STAMP:
REGISTERED PROFESSIONAL ENGINEER PAUL J. SCHNEIDER No. 62498 Exp. 09/30/21 CIVIL STATE OF CALIFORNIA

DATE SIGNED: 03/30/20

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CITY OF MILPITAS ENGINEERING DIVISION

City Project Number: 3447

CITY OF MILPITAS FIRE STATION NO. 2 DEMOLITION

1263 YOSEMITE DR. MILPITAS, CA 95035

REC. DWG NO.

Drawing Title
EROSION CONTROL PLAN

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SCALE: AS NOTED

RECOMMENDED FOR BIDDING BY:_____ DATE:_____
MICHAEL SILVEIRA, P.E. CIP MANAGER

Drawing No. CD-002
Sheet No. 3 of 5

ISSUED FOR CONSTRUCTION

BLUEPRINT FOR A CLEAN BAY

Best Management Practices for the Construction Industry

Remember: The property owner and the contractor share ultimate responsibility for the activities that occur on a construction site. You may be held responsible for any environmental damage caused by your subcontractors or employees.

Preventing Pollution: It's Up to Us

In the Santa Clara Valley, storm drains transport water directly to local creeks and San Francisco Bay without treatment. Stormwater pollution is a serious problem for wildlife dependent on our creeks and bays and for the people who live near polluted streams or baylands. Common sources of this pollution include spilled oil, fuel, and fluids from vehicles and heavy equipment; construction debris; sediment created by erosion; landscaping runoff containing pesticides or weed killers; and materials such as used motor oil, antifreeze, and paint products that people pour or spill into a street or storm drain.

Santa Clara Valley Urban Runoff Pollution Prevention Program

Thirteen valley municipalities have joined together with Santa Clara County and the Santa Clara Valley Water District to educate local residents and businesses and fight stormwater pollution. This "blueprint" summarizes "Best Management Practices "(BMPs) for stormwater pollution prevention.

Spill Response Agencies:

1. Dial 911
2. Santa Clara County Environmental Health Services (408) 299-6930
3. Governor's Office of Emergency Services Warning Center (800) 852-7550 (24 hours).

Small Business Hazardous Waste Disposal Program

Santa Clara County businesses that generate less than 27 gallons or 220 pounds of hazardous waste per month are eligible to use Santa Clara County's Small Business Hazardous Waste Disposal Program. Call (408) 299-7300 for a quote, more information or guidance on disposal.

Local Pollution Control Agencies

Santa Clara County Office of Toxics and Solid Waste Management (408) 441-1195

Santa Clara Valley Water District (408) 265-2600

San Jose/Santa Clara Water Pollution Control Plant (408) 945-5300
Serving Milpitas, Cupertino, Los Gatos, Milpitas, Monte Sereno, San Jose, Santa Clara and Saratoga

Fresh Concrete and Mortar Application

Who should use this information?

- Masons and Bricklayers
- Sidewalk Construction Crews
- Patio Construction Workers
- Construction Inspectors
- General Contractors
- Home Builders
- Developers
- Concrete Delivery/Pumping Workers

Storm Drain Pollution from Fresh Concrete And Mortar Applications

Fresh concrete and cement-related mortars that wash into lakes, streams, or estuaries are toxic to fish and the aquatic environment. Disposing of these materials to the storm drains or creeks can block storm drains, causes serious problems, and is prohibited by law.

Doing the Job Right
General Business Practices

- ❑ Wash out concrete mixers only in designated wash-out areas in your yard, away from storm drains and waterways, where the water will flow into a temporary waste pit in a dirt area. Let water percolate through soil and dispose of settled, hardened concrete as garbage. Whenever possible, recycle washout by pumping back into mixers for reuse.
- ❑ Wash out chutes onto dirt areas at site that do not flow to streets or drains.
- ❑ Always store both dry and wet materials under cover, protected from rainfall and runoff and away from storm drains or waterways. Protect dry materials from wind.
- ❑ Secure bags of cement after they are open. Be sure to keep wind-blown cement powder away from streets, gutters, storm drains, rainfall, and runoff.
- ❑ Do not use diesel fuel as a lubricant on concrete forms, tools, or trailers.

During Construction

- ❑ Don't mix up more fresh concrete or cement than you will use in a two-hour period.
- ❑ Set up and operate small mixers on tarps or heavy plastic drop cloths.
- ❑ When cleaning up after driveway or sidewalk construction, wash fines onto dirt areas, not down the driveway or into the street or storm drain.
- ❑ Protect applications of fresh concrete and mortar from rainfall and runoff until the material has dried.
- ❑ Wash down exposed aggregate concrete only when the wash water can (1) flow onto a dirt area; (2) drain onto a bermed surface from which it can be pumped and disposed of properly; or (3) be vacuumed from a catchment created by blocking a storm drain inlet. If necessary, divert runoff with temporary berms. Make sure runoff does not reach gutters or storm drains.
- ❑ When breaking up pavement, be sure to pick up all the pieces and dispose of properly. Recycle large chunks of broken concrete at a local recycling facility.
- ❑ Never bury waste material. Dispose of small amounts of excess dry concrete, grout, and mortar in the trash.
- ❑ Never dispose of washout into the street, storm drains, drainage ditches, or streams.

Heavy Equipment Operation

Who should use this information?

- Vehicle and Equipment Operators
- Site Supervisors
- General Contractors
- Home Builders
- Developers

Stormwater Pollution from Heavy Equipment on Construction Sites

Poorly maintained vehicles and heavy equipment that leak fuel, oil, antifreeze or other fluids on the construction site are common sources of storm drain pollution. Prevent spills and leaks by isolating equipment from runoff channels, and by watching for leaks and other maintenance problems. Remove construction equipment from the site as soon as possible.

Doing the Job Right
Site Planning and Preventive Vehicle Maintenance

- ❑ Designate one area of the construction site, well away from streams or storm drain inlets, for auto and equipment parking, refueling, and routine vehicle and equipment maintenance. Contain the area with berms, sand bags, or other barriers.
- ❑ Maintain all vehicles and heavy equipment. Inspect frequently for and repair leaks.
- ❑ Perform major maintenance, repair jobs, and vehicle and equipment washing off site where cleanup is easier.
- ❑ If you must drain and replace motor oil, radiator coolant, or other fluids on site, use drip pans or drop clot hs to catch drips and spills. Collect all spent fluids, store in separate containers. Recycle them wherever possible, otherwise, dispose of them as hazardous wastes.
- ❑ Do not use diesel oil to lubricate equipment parts, or clean equipment. Use only water for any onsite cleaning.
- ❑ Cover exposed fifth-wheel hitches and other oily or greasy equipment during rain events.
- ❑ Use as little water as possible for dust control. Ensure water used doesn't leave silt or discharge to storm drains.

Spill Cleanup

- ❑ Clean up spills immediately when they happen.
- ❑ Never hose down "dirty" pavement or impermeable surfaces where fluids have spilled. Use dry cleanup methods (absorbent materials, cat litter, and/or rags) whenever possible and properly dispose of absorbent materials.
- ❑ Sweep up spilled dry materials immediately. Never attempt to "wash them away" with water, or bury them.
- ❑ Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.
- ❑ Report significant spills to the appropriate local spill response agencies immediately. In Milpitas, dial 9-1-1 if hazardous materials might enter the storm drain.

Earth-Moving and Dewatering Activities

Who should use this information?

- Bulldozer, Back Hoe, and Grading Machine Operators
- Dump Truck Drivers
- Site Supervisors
- General Contractors
- Home Builders
- Developers

Storm Drain Pollution from Earth-Moving Activities

Soil excavation and grading operations loosen large amounts of soil that can flow or blow into storm drains when handled improperly. Sediments in runoff can clog storm drains, smother aquatic life, and destroy habitats in creeks and the Bay. Effective erosion control practices reduce the amount of runoff crossing a site and slow the flow with check dams or roughened ground surfaces.

Contaminated groundwater is a common problem in the Santa Clara Valley. Depending on soil types and site history, groundwater pumped from construction sites may be contaminated with toxics (such as oil or solvents) or laden with sediments. Any of these pollutants can harm wildlife in creeks or the Bay, or interfere with wastewater treatment plant operation. Discharging sediment-laden water from a dewatering site into any water of the state without treatment is prohibited.

Doing the Job Right
General Business Practices

- ❑ Schedule excavation and grading work during dry weather.
- ❑ Perform major equipment repairs away from the job site.
- ❑ When refueling or vehicle/equipment maintenance must be done on site, designate a location away from storm drains.
- ❑ Do not use diesel oil to lubricate equipment parts, or clean equipment.

Practices During Construction

- ❑ Remove existing vegetation only when absolutely necessary. Plant temporary vegetation for erosion control on slopes or where construction is not immediately planned.
- ❑ Protect downslope drainage courses, streams, and storm drains with wattles, or temporary drainage swales. Use check dams or ditches to divert runoff around excavations. Refer to the Regional Water Quality Control Board's Erosion and Sediment Control Field Manual for proper erosion and sediment control measures, and California Stormwater Quality Association Stormwater Best Management Practice Handbook (construction, 2003)
- ❑ Cover stockpiles and excavated soil with secured tarps or plastic sheeting.

Dewatering Operations
Check for Toxic Pollutants

- ❑ Check for odors, discoloration, or an oily sheen on groundwater.
- ❑ Call your local wastewater treatment agency and ask whether the groundwater must be tested.
- ❑ If contamination is suspected, have the water tested by a certified laboratory.
- ❑ Depending on the test results, you may be allowed to discharge pumped groundwater to the storm drain (if no sediments present) or sanitary sewer. OR, you may be required to collect and haul pumped groundwater offsite for treatment and disposal at an appropriate treatment facility.

Check for Sediment Levels

- ❑ If the water is clear, the pumping time is less than 24 hours, and the flow rate is less than 20 gallons per minute, you may pump water to the street or storm drain.
- ❑ If the pumping time is more than 24 hours and the flow rate greater than 20 gpm, call your local wastewater treatment plant for guidance.
- ❑ If the water is not clear, solids must be filtered or settled out by pumping to a settling tank prior to discharge. Options for filtering include:
  - Pumping through a perforate pipe sunk part way into a small pit filled with gravel;
  - Pumping from a bucket placed below water level using a submersible pump;
  - Pumping through a filtering device such as a swimming pool filter or filter fabric wrapped around end of suction pipe.
- ❑ When discharging to a storm drain, protect the inlet using a barrier of burlap bags filled with drain rock, or cover inlet with filter fabric anchored under the grate. OR pump water through a grassy swale prior to discharge.

Detecting Contaminated Soil or Groundwater

Contaminated groundwater is a common problem in the Santa Clara Valley. It is essential that all contractors and subcontractors involved know what to look for in detecting contaminated soil or groundwater, and testing ponded groundwater before pumping. Watch for any of these conditions:

1. Unusual soil conditions, discoloration or odor.
2. Abandoned underground tanks.
3. Abandoned wells.
4. Buried barrels, debris or trash.

If any of these are found follow the procedures below.

Roadwork and Paving

Who should use this information?

- Road Crews
- Driveway/Sidewalk/Parking Lot Construction Crews
- Seal Coat Contractors
- Operators of Grading Equipment, Paving Machines, Dump Trucks, Concrete Mixers
- Construction Inspectors
- General Contractors
- Developers
- Home Builders

Storm Drain Pollution from Roadwork

Road paving, surfacing, and pavement removal happen right in the street, where there are numerous opportunities for asphalt, saw-cut slurry, or excavated material to illegally enter storm drains. Extra planning is required to store and dispose of materials properly and guard against pollution of storm drains, creeks, and the Bay.

Doing the Job Right
General Business Practices

- ❑ Develop and implement erosion/sediment control plans for roadway embankments.
- ❑ Schedule excavation and grading work during dry weather.
- ❑ Check for and repair leaking equipment.
- ❑ Perform major equipment repairs at designated areas in your maintenance yard, where cleanup is easier. Avoid performing equipment repairs at construction sites.
- ❑ When refueling or when vehicle/equipment maintenance must be done on site, designate a location away from storm drains and creeks.
- ❑ Do not use diesel oil to lubricate equipment parts or clean equipment.
- ❑ Recycle used oil, concrete, broken asphalt, etc. whenever possible, or dispose of properly.

During Construction

- ❑ Avoid paving and seal coating in wet weather, or when rain is forecast, to prevent fresh materials from contacting stormwater runoff.
- ❑ Cover and seal catch basins and manholes when applying seal coat, slurry seal, fog seal, or similar materials.
- ❑ Protect drainage ways by using earth dikes, sand bags, or other controls to divert or trap and filter runoff.
- ❑ Never wash excess material fr om exposed aggregate concrete or similar treatments into a street or storm drain. Collect and recycle, or dispose to dirt area.
- ❑ Cover stockpiles (asphalt, sand, etc.) and other construction materials with plastic tarps. Protect from rainfall and prevent runoff with temporary roofs or plastic sheets and berms.
- ❑ Park paving machines over drip pans or absorbent material (cloth, rags, etc.) to catch drips when not in use.
- ❑ Clean up all spills and leaks using "dry" methods (with absorbent materials and/or rags) Dig up, remove, and properly dispose of contaminated soil.
- ❑ Collect and recycle or appropriately dispose of excess abrasive gravel or sand.
- ❑ Avoid over-application by water trucks for dust control.

Asphalt/Concrete Removal

- ❑ Avoid creating excess dust when breaking asphalt or concrete.
- ❑ After breaking up old pave ment, be sure to remove all chunks and pieces. Make sure broken pavement does not come in contact with rainfall or runoff.
- ❑ When making saw cuts, use as little water as possible. Shovel or vacuum saw-cut slurry and remove from the site. Cover or protect storm drain inlets during saw-cutting. Sweep up, and properly dispose of, all residues.
- ❑ Sweep, never hose down streets to clean up tracked dirt. Use a street sweeper or vacuum truck. Do not dump vacuumed liquor in storm drains.

Painting and Application of Solvents and Adhesives

Who should use this information?

- Painters
- Paperhangers
- Plasterers
- Graphic Artists
- Dry Wall Crews
- Floor Covering Installers
- General Contractors
- Home Builders
- Developers
- Homeowners

Storm Drain Pollution from Paints, Solvents, and Adhesives

All paints, solvents, and adhesives contain chemicals that are ha rmful to wildlife in local creeks, San Francisco Bay, and the Pacific Ocean. Toxic chemicals may come from liquid or solid products or from cleaning residues or rags. Paint material and wastes, adhesives and cleaning fluids should be recycled when possible, or disposed of properly to prevent these materials from flowing into storm drains and watercourses.

Doing the Job Right
Handling Paint Products

- ❑ Keep all liquid paint products and wastes away from the gutter, street, and storm drains. Liquid residues from paints, thinners, solvents, glues, and cleaning fluids are hazardous wastes and must be disposed of as hazardous.
- ❑ Wash water from painted buildings constructed before 1978 can contain high amounts of lead, even if paint chips are not present. Before you begin stripping paint or cleaning pre-1978 building exteriors with water under high pressure, test paint for lead by taking paint scrapings to a local laboratory. See Yellow Pages for a state-certified laboratory.
- ❑ If there is loose paint on the building, or if the paint tests positive for lead, block storm drains. Check with the wastewater treatment plant to determine whether you may discharge water to the sanitary sewer, or if you must send it offsite for disposal as hazardous waste.

Paint Removal

- ❑ Paint chips and dust from non-hazardous dry stripping and sand blasting may be swept up or collected in plastic drop cloths and disposed of as trash.
- ❑ Chemical paint stripping residue and chips and dust from marine paints or paints containing lead, mercury or tributyl tin must be disposed of as hazardous wastes. Lead-based paint removal requires a state-certified contractor.
- ❑ When stripping or cleaning building exteriors with high-pressure water, block storm drains. Direct wash water onto a dirt area to find out if you can collect (mop or vacuum) building cleaning water and dispose to the sanitary sewer. Sampling of the water may be required to assist the wastewater treatment authority in making its decision.

Painting Cleanup

- ❑ Never clean brushes or rinse paint containers into a street, gutter, storm drain, French drain, or stream.
- ❑ For water-based paints, paint out brushes to the extent possible, and rinse into a drain that goes to the sanitary sewer. Never pour paint down a storm drain. Dispose of excess liquids and residue as hazardous waste.
- ❑ For oil-based paints, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of excess liquids and residue as hazardous waste.
- ❑ When thoroughly dry, empty paint cans, used brushes, rags, and drop cloths may be disposed of as garbage in a sanitary landfill. Leave lids off paint cans so the refuse collector can see that they are empty. Empty, dry paint cans also may be recycled as metal.
- ❑ Dispose of empty aerosol paint cans as hazardous waste or at household hazardous waste collection events.

Recycle/Reuse Leftover Paints Whenever Possible

- ❑ Donate excess water-based (latex) paint for reuse.
- ❑ Reuse leftover oil-based paint. Dispose of non-recyclable thinners, sludge and unwanted paint, as hazardous waste.
- ❑ Unopened cans of paint may be able to be returned to the paint vendor. Check with the vendor regarding its "buy-back" policy.

General Construction and Site Supervision

Who should use this information?

- General Contractors
- Site Supervisors
- Inspectors
- Home Builders
- Developers
- Homeowners

Storm Drain Pollution from Construction Activities

Construction sites are common sources of storm water pollution. Materials and wastes that blow or wash into a storm drain, gutter, or street have a direct impact on local creeks and the Bay.

As a contractor, or site supervisor, owner or operator of a site, you may be responsible for any environmental damage caused by your subcontractors or employees.

Doing the Job Right
General Principles

- ❑ Keep an orderly site and ensure good housekeeping practices are used.
- ❑ Maintain equipment properly.
- ❑ Cover materials when they are not in use.
- ❑ Keep materials away from streets, storm drains and drainage channels.
- ❑ Ensure dust control water doesn't leave site or discharge to storm drains.

Advance Planning To Prevent Pollution

- ❑ Schedule excavation and grading activities for dry weather periods. To reduce soil erosion, plant temporary vegetation or place other erosion controls before rain begins. Use the Erosion and Sediment Control Field Manual , available form the Regional Water Quality Control Board San Francisco Bay Region, as a reference.
- ❑ Control the amount of runoff crossing your site (especially during excavation!) by using berms or temporary or permanent drainage ditches to divert water flow around the site. Reduce stormwater runoff velocities by constructing temporary check dams or berms where appropriate.
- ❑ Train your employees and subcontractors. Make these brochures available to everyone who works on the construction site. Inform subcontractors about the stormwater requirements and their own responsibilities.

Good Housekeeping Practices

- ❑ Designate one area of the site for auto parking, vehicle refueling, and routine equipment maintenance. The designated area should be well away from streams or storm drain inlets, bermed if necessary. Make major repairs off site.
- ❑ Keep materials out of the rain – prevent runoff contamination at the source. Cover exposed piles of soil or construction materials with plastic sheeting or temporary roofs. Before it rains, sweep and remove materials from surfaces that drain to storm drains, creeks, or channels.
- ❑ Keep pollutants off exposed surfaces. Place trash cans and recycling receptacles around the site to minimize litter.
- ❑ Clean up leaks, drips and other spills immediately so they do not contaminate soil or groundwater or leave residue on paved surfaces.
- ❑ Never hose down "dirty" pavement or surfaces where materials have spilled.
- ❑ Use dry cleanup methods whenever possible. If you must use water, use just enough to keep the dust down.
- ❑ Cover and maintain dumpsters. Check frequently for leaks. Place dumpsters under roofs or cover with tarps or plastic sheeting secured around the outside of the dumpster. Never clean out a dumpster by hosing it down on the construction site.
- ❑ Place portable toilets away from storm drains. Make sure portable toilets are in good working order. Check frequently for leaks .

Materials/Waste Handling

- ❑ Practice Source Reduction – minimize waste when you order materials. Order only the amount you need to finish the job.
- ❑ Use recyclable materials whenever possible. Arrange for pick-up of recyclable materials such as concrete, asphalt, scrap metal, solvents, degreasers, cleared vegetation, paper, rock, and vehicle maintenance materials such as used oil, antifreeze, batteries, and tires.
- ❑ Dispose of all wastes properly. Many construction materials and wastes, including solvents, water-based paints, vehicle fluids, broken asphalt and concrete, wood, and cleared vegetation can be recycled.
  Materials that cannot be recycled must be taken to an appropriate landfill or disposed of as hazardous waste.
  Never bury waste materials or leave them in the street or near a creek or stream bed.

Permits

- ❑ In addition to local grading and building permits, you will need to obtain coverage under the State's General Construction Activity Stormwater Permit if your construction site's disturbed area totals 1 acre or more. Information on the General Permit can be obtained from the Regional Water Quality Control Board.

Landscaping,Gardening, And Pool Maintenance

Who should use this information?

- Landscapers
- Gardeners
- Swimming Pool/Spa Service and Repair Workers
- General Contractors
- Home Builders
- Developers
- Homeowners

Storm Drain Pollution from Landscaping and Swimming Pool Maintenance

Many landscaping activities expose soils and increase the likelihood that earth and garden chemicals will run off into the storm drains during irrigation or when it rains. Swimming pool water containing chlorine and copper-based algaecides should never be discharged to storm drains. These chemicals are toxic to aquatic life.

Doing the Job Right
General Business Practices

- ❑ Protect stockpiles (e.g. asphalt, sand, or soil) and landscaping materials from wind and rain by storing them under tarps or secured plastic sheeting.
- ❑ Store pesticides, fertilizers, and other chemicals indoors or in a shed or storage cabinet.
- ❑ Schedule grading and excavation projects during dry weather.
- ❑ Use temporary check dams or ditches to divert runoff away from storm drains.
- ❑ Protect storm drains with sandbags or other sediment controls.
- ❑ Revegetation is an excellent form of erosion control for any site. Replant as soon as possible with temporary vegetation such as grass seed.

Landscaping/Garden Maintenance

- ❑ Consider using Integrated Pest Management Techniques. Use pesticides sparingly, according to instructions on the label. Rinse empty containers, and use rinsewater as product. Dispose of rinsed, empty containers in the trash.
- ❑ Dispose of unused pesticides as hazardous waste.
- ❑ Collect lawn and garden clippings, pruning waste, and tree trimmings. Chip if necessary, and compost if possible.
- ❑ Do not blow or rake leaves, etc. into the street, or place yard waste in gutters or on dirt shoulders. Sweep up any leaves, litter or residue in gutters or on street.

Pool/Fountain/Spa Maintenance
Draining pools or spas

- ❑ When it's time to drain a pool, spa, or fountain, please be sure to call your local wastewater treatment plant before you start for further guidance on flow rate restrictions, backflow prevention, and handling special cleaning waste (such as acid wash). Discharge flows should be kept to the low levels typically possible through a garden hose. Higher flow rates may be prohibited by local ordinance.
- ❑ Never discharge pool or spa water to a street or storm drain; discharge to a sanitary sewer cleanout.
- ❑ If possible, when emptying a pool or spa, let chlorine dissipate for a few days and then recycle/ reuse water by draining it gradually onto a landscaped area. OR
- ❑ San Jose/Santa Clara Water Pollution Control Plant (408) 945-5300. You may be able to discharge to the sanitary sewer by running the hose to a utility sink or sewer pipe clean-out.
- ❑ Do not use copper-based algaecides Control algae with chlorine or other alternatives, such as sodium bromide.

Filter Cleaning

- ❑ Never clean a filter in the street or near a storm drain. Rinse cartridge and diatomaceous earth filters onto a dirt area, and spade filter residue into soil. Dispose of spent diatomaceous earth in the garbage.
- ❑ If there is no suitable dirt call San Jose/Santa Clara Water Pollution Control Plant (408) 945-5300 for instructions on discharging filter backwash or rinse water to the sanitary sewer.

Milpitas Municipal Code (MMC) 2014

XI-16-11 Accidental Discharge - Notification of Discharge

(a) All persons shall notify the City by telephone immediately by dialling 911 upon accidentally discharging any material other than an acceptable discharge into a storm drain or watercourse to enable countermeasures to be taken by the City to minimize damage to storm drains and the receiving waters. Prohibited discharges include but are not limited to:
(1) Sewage;
(2) Discharges of wash water resulting from the cleaning of exterior surfaces and pavement, or the equipment and other facilities of any commercial business, or any other public or private facility;
(3) Discharges of runoff from material storage areas, including containing chemicals, fuels, or other potentially polluting or hazardous materials;
(4) Discharges of pool or fountain water containing chlorine, biocides, or other chemicals; discharges of pool or fountain filter backwash water;
(5) Discharges of sediment, pet waste, vegetation clippings, or other landscape or construction-related wastes; and
(6) Discharges of food-related wastes (e.g., grease, fish processing, and restaurant kitchen mat and trash bin wash water, etc.).
The City, at its sole option, may direct the person or persons responsible for the discharge to perform cleanup activities when it is deemed by the City that the person or persons have the capability to perform such activities. All violations shall be corrected in a timely manner before the next rain event, but no longer than ten (10) business days after the violations are discovered.
(b) The person deemed by the City responsible for the discharge shall, within five (5) days of the date of occurrence, provide a detailed written statement to the City Manager or his or her designee describing the causes of the accidental discharge and the measures being taken to prevent future occurrences.
Such notification will not relieve persons of liability for violations of this Chapter or for any fines imposed on the City on account thereof under Section 13350 of the California Water Code, or for violation of Section 5650 of the California Fish and Wildlife Code, or any other applicable provisions of State or federal law.
(c) Persons deemed by the City responsible for the discharge are responsible for all expenses resulting from the discharge, including, but not limited to, damages, fines, and costs of clean-up, whether performed by their own efforts, City efforts, or the efforts of a third party. Reimbursement of City efforts shall be determined by the number of personnel required and amount of time necessary for the coordination of City efforts and actual clean-up. All personnel costs shall be charged at their current fully-burdened rate, including overtime, plus any and all other direct costs.

XI-16-14 Enforcement and Penalties

(a) Criminal Penalties. Violations of the provisions of this Chapter shall be subject to criminal penalties as provided in Section I-1-4.09-1 of this Code.

(b) Judicial Civil Penalties. Any person who intentionally or negligently violates any provision of this Chapter or any provision of any permit or certificate issued pursuant to this Chapter shall be civilly liable to the city in a sum not to exceed twenty-five thousand dollars per day for each day in which such violation occurs.

(c) Administrative Citations. When the City Manager and/or his or her designee determines that one or more violations of this Chapter have occurred an administrative citation may be issued pursuant to the procedures set forth in Sections V-500-8.00 through V-500-8.06. The schedule of fines for administrative citations issued for violations of this Chapter shall be set forth in the schedule of fines established by resolution of the City Council.

(d) Notice of Noncompliance. If the severity of the violation warrants immediate action, a Notice of Noncompliance or Stop Work Notice shall be issued, permits may be suspended or revoked, Stormwater Pollution Prevention Plans may be found in noncompliance, and corrective actions may be implemented in accordance with Section 11 of this Chapter. For all other cases, including those sites or projects where a stormwater pollution prevention plan is not required, the City Manager or his or her designee shall issue a Notice of Noncompliance that shall enumerate the violations found. The City Manager or his or her designee shall order compliance by a date or hour certain at his or her discretion. If the violations are not abated in the time period identified in the Notice of Noncompliance, the site shall be deemed to be in noncompliance with federal, State and local laws and the City Manager or his or her designee shall have the authority to issue a Stop Work Notice and/or deem the Stormwater Pollution Prevention Plan inadequate. If a Stop Work Notice is issued, corrective actions must be performed until the site has achieved compliance. Corrective actions may include revision and resubmission of any Plan, including, but not limited to, Stormwater Pollution Prevention Plan, Erosion Control Plan or Grading Plan. The City Manager or his or her designee may also require a discharger that has violated any discharge limits contained in this Chapter to install a temporary system for the capture, testing, and release of stormwater.

(e) Suspension of Utility Service. The City may, without prior notice, suspend water service, sanitary sewer service, and/or storm drain discharge access to a person discharging to the storm drain system when such suspension is necessary to stop an actual or threatened discharge which presents, or may present, imminent and substantial danger to the environment or to the health or welfare of persons; or presents, or may present, imminent and substantial danger to the storm drain system.

(f) For construction projects where a total of three or more Stop Work Notices and Notices of Noncompliance for urban runoff violations have been issued, the City Manager or his or her designee may require the contractor to hire a Qualified SWPPP Developer (QSD) or Qualified SWPPP Practitioner (QSP) within three business days. The QSD/QSP shall establish effective BMPs, provide guidance for improvement for the duration of the project, and certify compliance. A Stop Work Notice shall be issued for failure to comply.

(g) Remedies Cumulative. The remedies provided in this section are cumulative and not exclusive, and shall be in addition to any other penalty provided for in this Chapter and shall be in addition to all other remedies available to the City under State and federal law.

PROJECT ADDRESS:

PROJECT NAME:

BLUEPRINT FOR A CLEAN BAY
BUILDING & SAFETY DEPARTMENT

SHEET
CB-1

811 Know what's below. Call before you dig.

Architect of Record
S H A H K A W A S A K I
ARCHITECTS
570 10th Street, Suite 201
Oakland, CA 94607

Consultant
SIEGFRIED

DESIGNER STAMP:
REGISTERED PROFESSIONAL ENGINEER PAUL J. SCHNEIDER No. 62498 Exp. 09/30/21 CIVIL STATE OF CALIFORNIA

DATE SIGNED: 03/30/20

RECORD DRAWINGS:

DESIGNER:_____ DATE:_____
PUBLIC WORKS INSPECTOR:_____ DATE:_____
UTILITY/ FACILITY DEPT. HEAD:_____ DATE:_____
PROJECT ENGINEER:_____ DATE:_____
PUBLIC IMPROVEMENTS INITIALLY ACCEPTED BY THE CITY COUNCIL ON:_____ RES. NO._____

DRAWN BY:____ DATE:____
CHECKED BY:____ DATE:____
DESIGNED BY:____ DATE:____

REVISIONS

		ENGR. APR.	
	95% CONSTRUCTION DOCUMENTS / PERMIT SET		12/10/2019
	PERMIT COMMENTS - REVISION 1		01/28/2020
	ISSUED FOR BID		02/11/2020
2	ADDENDUM 1		03/30/2020

CITY OF MILPITAS ENGINEERING DIVISION

City Project Number: 3447

CITY OF MILPITAS FIRE STATION NO. 2 DEMOLITION

1263 YOSEMITE DR. MILPITAS, CA 95035

REC. DWG NO.

Drawing Title
BEST MANAGEMENT PRACTICES

NOTE: If this drawing is not 36"x24" it has been revised from its original size and the scales noted on drawing/details are no longer applicable.

SCALE: AS NOTED

RECOMMENDED FOR BIDDING BY:_____ DATE:_____
MICHAEL SILVEIRA, P.E. CIP MANAGER

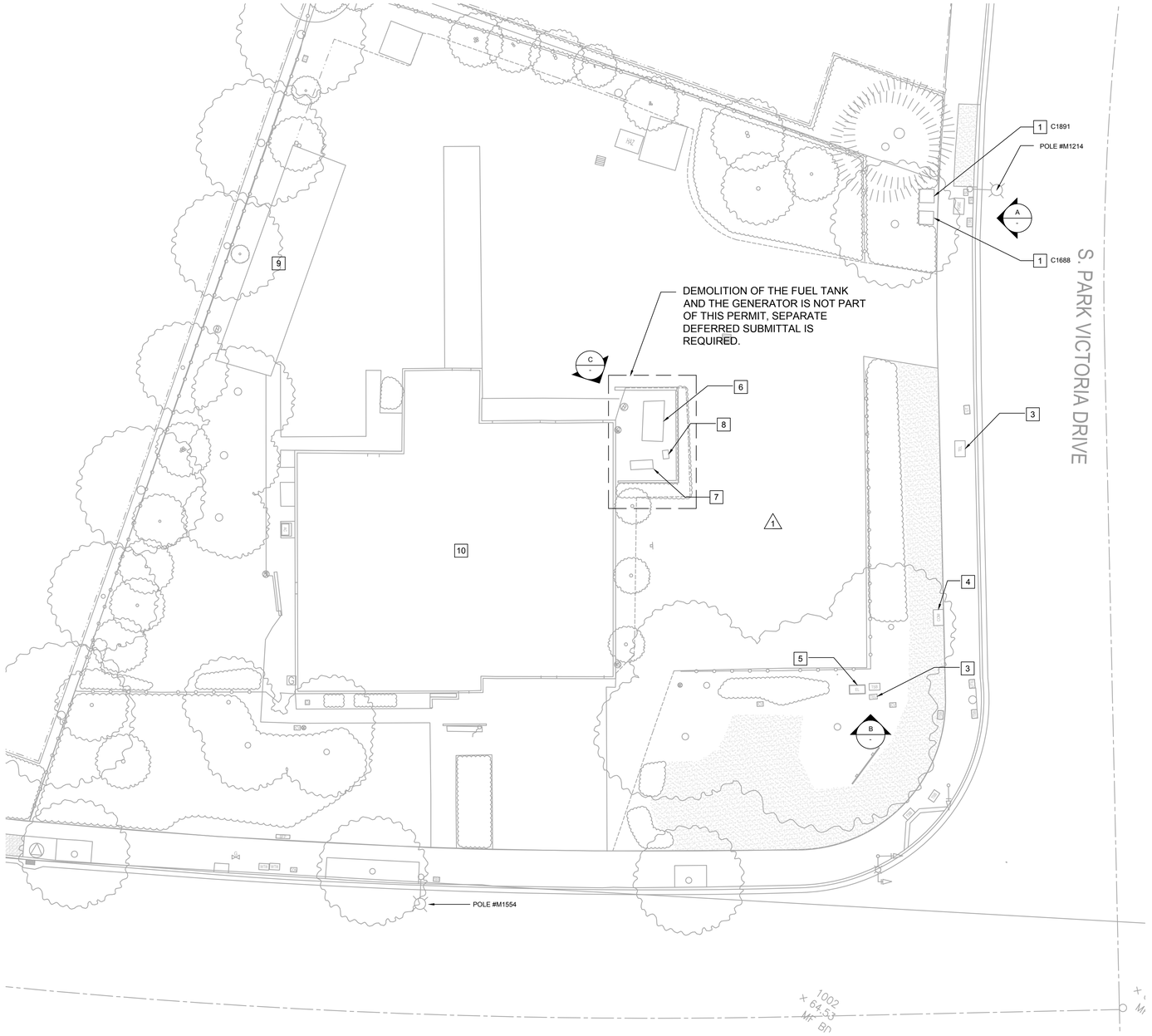
Drawing No.
CD-003
Sheet No. 4 of 5

ISSUED FOR CONSTRUCTION

A (E) TRANSFORMER PICTURES

B (E)TRAFFIC SIGNAL CABINET

C (E)GENERATOR PICTURE



ELECTRICAL DEMOLOTION SITE PLAN

SCALE: 1/16" = 1'-0"

NORTH

REFERENCE NOTES

1. EXISTING CLAM SHELL PG&E TRANSFORMER TO REMAIN AND PROTECTED IN PLACE. (1)
2. EXISTING PG&E PULL BOX TO BE PROTECTED IN PLACE.
3. EXISTING AT&T PULL BOX. TO BE PROTECTED IN PLACE. (1)
4. EXISTING FIBER PULL BOX TO BE PROTECTED IN PLACE.
5. EXISTING TRAFFIC SIGNAL CABINET WITH PG&E METER #1009312914 TO REMAIN AND PROTECTED IN PLACE.
6. EXISTING FUEL CONVAULT TO BE REMOVED.
7. EXISTING GENERATOR TO BE REMOVED.
8. EXISTING DAY TANK TO BE REMOVED. (1)
9. EXISTING MODULAR BUILDING TO BE REMOVED BY OTHERS PRIOR TO THE DEMOLITION.
10. EXISTING FIRE STATION TO BE REMOVED. COORDINATE WITH UTILITY COMPANIES FOR DEMOLITION OF EXISTING SERVICES. VERIFY EXACT LOCATION OF METER SERVICE AND TELEPHONE BACKBOARD. CONTRACTOR SHALL COORDINATE WITH THE OWNER TO OBTAIN A LIST OF THE ITEMS TO BE SALVAGED PRIOR TO STARTING THE DEMOLITION (1)

GENERAL NOTES

A. REFER TO CIVIL DEMOLITION SHEETS FOR ADDITIONAL INFORMATION.

B. EQUIPMENT SHOWN TO BE REMOVED IS SHOWN FOR REFERENCE ONLY. INFORMATION WAS OBTAINED FROM ORIGINAL BUILDING DRAWINGS AND LIMITED FIELD INVESTIGATION AND MAY NOT REPRESENT ALL ELECTRICAL DEMOLITION. FIELD VERIFY CONDITIONS AND DISCONNECT/REMOVE ALL EQUIPMENT AS REQUIRED TO MEET THE INTENT OF THAT SHOWN ON THE LIGHTING AND POWER/SIGNAL DRAWINGS.

C. ALL ELECTRICAL EQUIPMENT SHOWN ON DRAWING (OR REQUIRED) TO BE DEMOLISHED SHALL BE DISCONNECTED, REMOVED AND DISPOSED OF BY ELECTRICAL CONTRACTOR. NO EQUIPMENT (RACEWAYS, BOXES, CABLING, ETC.) SHALL BE ABANDONED IN PLACE AND COVERED BY NEW CONSTRUCTION.

D. SCHEDULE ANY OUTAGES WITH OWNER PRIOR TO DE-ENERGIZATION OF ANY BRANCH CIRCUITS OR FEEDERS.

E. DISCONNECTION/REMOVAL OF EXISTING COMMUNICATIONS SYSTEMS COMPONENTS SHALL BE SCHEDULED WITH OWNER AND COORDINATED WITH THEIR VENDORS. (1)

F. SALVAGE ALL REMOVED COMPONENTS (SPEAKERS, GRILLES, TELEPHONE INSTRUMENTS, RADIO HANDSETS, ETC.) SHALL BE SALVAGED TO THE OWNER.

G. PRIOR TO REMOVAL OF ANY HAZMAT MATERIAL AND EQUIPMENT, THE CONTRACTOR SHALL SUBMIT A FACILITY CLOSURE APPLICATION, IDENTIFYING THE DISPOSITION OF EQUIPMENT AND HAZARDOUS MATERIALS. IF THE GENERATOR IS TO BE SOLD, PROVIDE BILLING OF LADING. THE CONTRACTOR SHALL ALSO PROVIDE TRANSPORTATION OR HAZARDOUS WASTE MANIFEST FOR ALL HAZARDOUS MATERIALS TRANSPORTED OFF SITE.

H. ALL ON-SITE WET AND DRY UTILITIES (WATER, SEWER, STORM AND ELECTRICAL LINE) WILL BE REMOVED AND DISPOSAL OF.

ISSUED FOR CONSTRUCTION

Architect of Record
SHAH KAWASAKI ARCHITECTS
570 10th Street, Suite 201
Oakland, CA 94607

Consultant
THOMA ENGINEERING
THOMA ELECTRIC, INC.
P.O. Box 1167 - 3562 Empleo St.
San Luis Obispo, CA 93406
Phone: (805) 543-3850 Fax: (805) 543-3829
cac@thomaelec.com

DESIGNER STAMP:

REGISTERED PROFESSIONAL ENGINEER WILLIAM A. THOMA ELECTRICAL STATE OF CALIFORNIA 06/30/2021

EXPIRES: 06/30/21
THOMA #19-8033

RECORD DRAWINGS:

DESIGNER: _____ DATE: _____
PUBLIC WORKS INSPECTOR: _____ DATE: _____
UTILITY/ FACILITY DEPT. HEAD: _____ DATE: _____
PROJECT ENGINEER: _____ DATE: _____
PUBLIC IMPROVEMENTS INITIALLY ACCEPTED BY THE CITY COUNCIL ON: _____ RES. NO. _____

DRAWN BY: ____ DATE: ____
CHECKED BY: ____ DATE: ____
DESIGNED BY: ____ DATE: ____

REVISIONS

NO.	ISSUE DESCRIPTION	ENGR. APR.	DATE
	95% CONSTRUCTION DOCUMENTS / PERMIT SET		12/10/2019
1	PERMIT COMMENTS - REVISION 1		01/28/2020
	ISSUED FOR BID		02/11/2020

CITY OF MILPITAS ENGINEERING DIVISION

CITY OF MILPITAS FIRE STATION NO. 2 DEMOLITION (1)

1263 YOSEMITE DR. MILPITAS, CA 95035

Drawing Title: ELECTRICAL DEMOLITION SITE PLAN

NOTE: If this drawing is not 36"x24" it has been revised from its original size and the scales noted on drawing/details are no longer applicable.

RECOMMENDED FOR BIDDING BY: _____ DATE: _____
MICHAEL SILVEIRA, P.E., CIP MANAGER

APPROVED FOR BIDDING BY: _____ DATE: _____
STEVE P. ERICKSON, P.E. CITY ENGINEER

City Project Number: 3447 (1)
REC. DWG NO.
SCALE: AS NOTED
Drawing No. ED-001
Sheet No. 5 of 5

Feb 07, 2020 - 5:19pm - chris K:\ENG\2019\19-8033\1_DEMOLITION SITE PLAN\19-8033__ED-001_ELECTRICAL DEMOLITION SITE PLAN.dwg

CITY OF MILPITAS

ENGINEERING DIVISION

BID SUMMARY

Project Name: Fire Station No.2 Demolition
Project No. : 3447
Bid Date: March 10, 2020 at 2:00 PM

		Apparent Low Bidder							
	Engineer's Estimate	CVE Contracting Group Inc	AMPCO North	Asbestos Management Group of California, Inc	Demolition Services and Grading Inc	Done Right Demolition Inc	Evans Brothers, Inc	Silverado Contractor Inc	Galeb Paving Inc
DESCRIPTION	**Cost**	**Cost**	**Cost**	**Cost**	**Cost**	**Cost**	**Cost**	**Cost**	**Cost**
Mobilization and Demobilization	$24,000.00	$10,000.00	$8,000.00	$7,500.00	$16,860.00	$23,000.00	$10,000.00	$24,000.00	$20,000.00
Demolition and Off Haul	$341,000.00	$140,000.00	$186,000.00	$159,850.00	$189,490.00	$379,668.00	$350,000.00	$313,000.00	$411,000.00
SWPPP	$36,000.00	$7,200.00	$12,900.00	$4,600.00	$13,105.00	$14,000.00	$14,000.00	$30,000.00	$20,000.00
Tree Removal	$37,000.00	$30,000.00	$38,000.00	$82,500.00	$74,985.00	$44,000.00	$50,000.00	$42,000.00	$150,100.00
Traffic Control	$20,000.00	$15,000.00	$9,500.00	$20,000.00	$36,685.00	$2,300.00	$3,000.00	$25,000.00	$12,800.00
Hazardous Material Abatement	$50,000.00	$36,000.00	$4,200.00	$12,000.00	$63,075.00	$2,300.00	$57,000.00	$61,000.00	$236,000.00
Base Contract Work (Labor, material, services, equipment)	$508,000.00	$238,200.00	$258,600.00	$286,450.00	$394,200.00	$465,268.00	$484,000.00	$495,000.00	$849,900.00
Alternate 1	$20,000.00	$7,200.00	$18,000.00	$27,600.00	$20,670.00	$18,000.00	$30,000.00	$30,000.00	$18,000.00
Bsae Bid + Alt No.1	**$528,000.00**	**$245,400.00**	**$276,600.00**	**$314,050.00**	**$414,870.00**	**$483,268.00**	**$514,000.00**	**$525,000.00**	**$867,900.00**

List of Sub-Contractors

Description	CVE Contracting Group Inc	AMPCO North	Asbestos Management Group of California, Inc	Demolition Services and Grading Inc	Done Right Demolition Inc	Evans Brothers, Inc	Silverado Contractor Inc	Galeb Paving Inc
Electrical	GRC Electric						GRC Electric	
Paving	Pacifi Coast General Engineering							
Traffic Control	Traffic Management						Bats Bay area traffic solution	
SWPPP	Green Growth Industrial							
Hazmat Abatement				P.A.L.S		R.B Construction Inc	Sterling Environmental Services	Coastwide
Tree Removal			Moutain F. Enterprises	Aly's Tree Trimming		The Professional tree Care Company	Commercial Tree Care	
Temporay Fencing				National Constructino Rental			National Constructino Rental	
Trucking							Greg's Trucking Service Inc	
Utility Removal						J. Flores Construction Inc	California Utility Engineering Inc	
Cutting and Scanning				Vickers Concrete Saving				
Street Sweeping				Broom Service				

Construction Change Order Policy for Demolition of Fire Station No. 2 as part of Fire Station No.2 Reconstruction, Project No. 3447.

2007 City Council Approved Construction Change Order Policy

Construction Award Award Amount	**Individual Administrative Change Order Authority**	**Cumulative Change Order Authority**
Under $50,000	$5,000	$7,500
Over $50,000	10% of Award or $25,000 whichever is small	15% of Award or $100,000 whichever is smaller

Fire Station No.2 Demolition Project Change Order Policy

Construction Award Award Amount	**Individual Administrative Change Order Authority**	**Cumulative Change Order Authority**
$245,400	N/A	$60,000

CITY OF MILPITAS

MILPITAS, CALIFORNIA

CONTRACT DOCUMENTS AND SPECIFICATIONS FOR

FIRE STATION NO. 2

DEMOLITION

PROJECT NO. 3447

Recommended for Bidding :_____
Michael Silveira, CIP Manager

Approved for Bidding :_____
Steve P. Erickson, Engineering Director/ City Engineer

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00 11 16 – NOTICE INVITING BIDS

NOTICE IS HEREBY GIVEN that the City Council of the City of Milpitas ("City") invites and will receive sealed Bids up to but not later than 2:00 p.m. on **Tuesday, March 10, 2020** at City of Milpitas City Hall, 1st floor, Information Service Counter, 455 E. Calaveras Boulevard, Milpitas, California 95035, for the furnishing to City of all labor, equipment, materials, tools, services, transportation, permits, utilities, and all other items necessary for **FIRE STATION NO.2 DEMOLITION PROJECT** (the "Project"). At said time, Bids will be publicly opened and read aloud at the City Office. Bids received after said time shall be returned unopened. Bids shall be valid for a period of **120 calendar days** after the Bid opening date.

Bids must be submitted on the City's Bid Forms. Bidders may obtain a copy of the Contract Documents from Prints Charles Reprographics, 1643 South Main Street, Milpitas CA 95035, (408) 240-3330, www.printscharlesrepro.com or incoming@printscharlesrepro.com. To the extent required by section 20103.7 of the Public Contract Code, upon request from a contractor plan room service, the City shall provide an electronic copy of the Contract Documents at no charge to the contractor plan room.

It is the responsibility of each prospective bidder to download and print all Bid Documents for review and to verify the completeness of Bid Documents before submitting a bid. Any Addenda will be posted on www.printscharlesrepro.com. It is the responsibility of each prospective bidder to check www.printscharlesrepro.com on a daily basis through the close of bids for any applicable addenda or updates. The City does not assume any liability or responsibility based on any defective or incomplete copying, excerpting, scanning, faxing, downloading or printing of the Bid Documents. Information on www.printscharlesrepro.com may change without notice to prospective bidders. The Contract Documents shall supersede any information posted or transmitted by www.printscharlesrepro.com.

Location of Work:

The Project is more specifically defined in the Contract Documents, but generally includes: furnishing all labor, materials, tools, equipment, transportation, and services necessary to perform

the construction and installation of the following: selected demolition of existing sitework and buildings at the City of Milpitas Fire Station 2 Replacement site.

The contractor is encouraged to recycle and/or salvage 70 percent but must recycle and/or salvage a minimum of 50 percent (by weight) of construction, demolition and land clearing waste. Contractor shall use a certified recycling facilities that have been audited to verify that at least 50 percent of the material accepted is diverted from burial in landfills.

The Project is to be completed, within a total maximum of **40 Calendar Days** after the date specified in the City's Notice to Proceed. The City will assess liquidated damages in the amount of **($5,000)** for each and every calendar day of delay in finishing the work in excess of the contract time.

The Contractor will not have access to the site and start the demolition work prior to the relocation of the fire operation to the temporary station. The tenant improvement work for the temporary station is anticipated to be completed by April 15, 2020. In an event there are any delays beyond the date specified above, the City has the right to postpone the notice to proceed until the building is clear and ready for demolition. No additional time nor compensation will be added to the contract due to these constraints.

Each Bid shall be accompanied by cash, a certified or cashier's check, or Bid Bond secured from a surety company satisfactory to the City Council, the amount of which shall not be less than ten percent (10%) of the submitted Total Bid Price, made payable to City of Milpitas as bid security. The bid security shall be provided as a guarantee that within five (5) working days after the City provides the successful bidder the Notice of Award, the successful Bidder will enter into a contract and provide the necessary bonds and certificates of insurance. The bid security will be declared forfeited if the successful Bidder fails to comply within said time. No interest will be paid on funds deposited with City.

A **NON-MANDATORY** Pre-Bid Conference is scheduled for **Thursday, February 20, 2020** at **10:00 AM** and **Tuesday, February 25, 2020 at 2:00 PM** to review the Project's existing conditions at 1263 Yosemite Drive, Milpitas, CA 95035. The contractor is highly encouraged to attend this meeting. Representatives of the City and consulting engineers, if any, will be present. Bidders need only to attend one Pre-Bid Conference. Questions asked by Bidders at the Pre-Bid Conference not specifically addressed within the Contract Documents shall be answered in writing, and issued as an Addendum. The deadline for submitting questions related to this bid is **February 28, 2020 at 2:00 PM**

The successful Bidder will be required to furnish a Faithful Performance Bond and a Labor and Material Payment Bond each in an amount equal to one hundred percent (100%) of the Contract Price. Each bond shall be in the forms set forth herein, shall be secured from a surety company that meets all State of California bonding requirements, as defined in California Code of Civil Procedure Section 995.120, and that is a California admitted surety insurer.

Pursuant to Section 22300 of the Public Contract Code of the State of California, the successful Bidder may substitute certain securities for funds withheld by City to ensure its performance under the contract.

Pursuant to Labor Code Section 1773, City has obtained the prevailing rate of per diem wages and the prevailing wage rate for holiday and overtime work applicable in Santa Clara County from the Director of the Department of Industrial Relations for each craft, classification, or type of

worker needed to execute this contract. A copy of these prevailing wage rates may be obtained via the internet at: www.dir.ca.gov/dlsr/

In addition, a copy of the prevailing rate of per diem wages is available at the City's Engineering Department and shall be made available to interested parties upon request. The successful bidder shall post a copy of the prevailing wage rates at each job site. It shall be mandatory upon the Bidder to whom the Contract is awarded, and upon any subcontractors, to comply with all Labor Code provisions, which include but are not limited to the payment of not less than the said specified prevailing wage rates to all workers employed by them in the execution of the Contract, employment of apprentices, hours of labor and debarment of contractors and subcontractors.

Pursuant to Labor Code sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. No Bid will be accepted, nor any contract entered into without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations to perform public work. If awarded a contract, the Bidder and its subcontractors, of any tier, shall maintain active registration with the Department of Industrial Relations for the duration of the Project. Notwithstanding the foregoing, the contractor registration requirements mandated by Labor Code Sections 1725.5 and 1771.1 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Sections 1725.5 and 1771.1.

This Project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. In bidding on this Project, it shall be the Bidder's sole responsibility to evaluate and include the cost of complying with all labor compliance requirements under this contract and applicable law in its Bid.

Unless otherwise provided in the Instructions for Bidders, each Bidder shall be a licensed contractor pursuant to sections 7000 et seq. of the Business and Professions Code in the following classification(s) throughout the time it submits its Bid and for the duration of the contract: **Class A**, General Engineering Contractor License, or **Class B,** General Building Contractor License, or **Class C-21,** Building Moving/Demolition Contractor License. **The Engineer Estimate for the work is between $500,000 and $700,000.**

Substitution requests shall be made within 35 calendar days after the award of the contract. Pursuant to Public Contract Code Section 3400(b), the City may make findings designating that certain additional materials, methods or services by specific brand or trade name other than those listed in the Standard Specifications be used for the Project. Such findings, if any, as well as the materials, methods or services and their specific brand or trade names that must be used for the Project may be found in the Special Conditions.

City shall award the contract for the Project to the lowest responsive, responsible Bidder as determined by the City from the **BASE BID ALONE**. City reserves the right to reject any or all bids or to waive any irregularities or informalities in any bids or in the bidding process.

For further information, contact **Lyhak Eam, P.E.,** Associate Civil Engineer, at City of Milpitas City Hall, 455 E. Calaveras Boulevard, Milpitas, CA 95035 or (408) 586-3349.

END OF NOTICE INVITING BIDS

00 21 13 – INSTRUCTIONS TO BIDDERS

1. SECURING DOCUMENTS

Bids must be submitted to the City on the Bid Forms which are a part of the Bid Package for the Project. Bid and Contract Documents may be obtained from the City as specified in the Notice Inviting Bids. Prospective bidders are encouraged to telephone in advance to determine the availability of Contract Documents. Any charge for the Contract Documents is stated in the Notice Inviting Bids.

The City may also make the Contract Documents available for review at one or more plan rooms, as indicated in the Notice Inviting Bids. Please Note: Prospective Bidders who choose to review the Contract Documents at a plan room must contact the City via Prints Charles Reprographics to obtain the required Contract Documents if they decide to submit a bid for the Project.

Addenda, if any, issued during the bid period will be posted on www.printscharlesrepro.com. Failure to acknowledge addenda may make a bid nonresponsive and not eligible for award of the contract.

2. EXAMINATION OF SITE AND CONTRACT DOCUMENTS

At its own expense and prior to submitting its Bid, each Bidder shall visit the site of the proposed work and fully acquaint itself with the conditions relating to the construction and labor required so that the Bidder may fully understand the work, including but not limited to difficulties and restrictions attending the execution of the work under the contract. Each Bidder shall carefully examine the Drawings, and shall read the Specifications, Contract, and all other documents referenced herein. Each Bidder shall also determine the local conditions which may in any way affect the performance of the work, including local tax structure, contractors' licensing requirements, availability of required insurance, the prevailing wages and other relevant cost factors, shall familiarize itself with all federal, state and local laws, ordinances, rules, regulations and codes affecting the performance of the work, including the cost of permits and licenses required for the work, and shall make such surveys and investigations, including investigations of subsurface or latent physical conditions at the site or where work is to be performed as may be required. Bidders are responsible for consulting the standards referenced in the Contract. The failure or omission of any Bidder to receive or examine any contract documents, forms, instruments, addenda, or other documents, or to visit the site and acquaint itself with conditions there existing shall in no way relieve any Bidder from any obligation with respect to its Bid or to the contract and no relief for error or omission will be given except as required under State law. The submission of a Bid shall be taken as conclusive evidence of compliance with this Article.

Storm, surface, nuisance, or other waters may be encountered at various times during construction of the Project. Federal and State laws require the City and its contractors to appropriately manage such waters pursuant to the requirements of California State Water Resources Control Board Order Number 2009-0009-DWQ and any amendment or renewal thereof, the Federal Clean Water Act, and the California Porter Cologne Water Quality Control Act. By submitting a Bid, each Bidder acknowledges that it has investigated the risk arising from such waters, has prepared its Bid accordingly, and assumes any and all risks and liabilities arising therefrom.

3. INTERPRETATION OF DRAWINGS AND DOCUMENTS

Prospective Bidders unclear as to the true meaning of any part of the Drawings, Specifications or other proposed contract documents may submit to the Engineer of the City a written request for interpretation. The prospective Bidder submitting the request is responsible for prompt delivery. Interpretation of the Drawings, Specifications or other proposed contract documents will be made only by a written addendum duly issued and a copy of such addenda will be mailed or delivered to each prospective Bidder who has purchased a set of Drawings and Specifications. The City will not be responsible for any other explanation or interpretations of the proposed documents. If a Prospective Bidders becomes aware of any errors or omissions in any part of the Contract Documents, it is the obligation of the Prospective Bidder to promptly bring it to the attention of the City.

4. INSPECTION OF SITE; PRE-BID CONFERENCE

Each prospective bidder is responsible for fully acquainting itself with the conditions of the Project Site (which may include more than one site), as well as those relating to the construction and labor of the Project, to fully understand the facilities, difficulties and restrictions which may impact the cost or effort required to complete the Project. To this end, a Pre-Bid Meeting and Site Walk will be held on the date(s) and time(s) indicated in the Notice Inviting Bids.

5. ADDENDA

The City reserves the right to revise the Contract Documents prior to the Bid opening date. Revisions, if any, shall be made by written Addenda. All Addenda issued by the City shall be included in the Bid and made part of the Contract Documents. Pursuant to Public Contract Code Section 4104.5, if the City issues an Addendum which includes material changes to the Project less than 72 hours prior to the deadline for submission of Bids, the City will extend the deadline for submission of Bids. The City may determine, in its sole discretion, whether an Addendum warrants postponement of the Bid submission date. Each prospective Bidder shall provide City a name, address, email address, and facsimile number to which Addenda may be sent, as well as a telephone number by which the City can contact the Bidder. Any Addenda will be posted on www.printscharlesrepro.com. Please Note: Bidders are responsible for ensuring that they have received any and all Addenda. To this end, each Bidder should contact **Lyhak Eam**, at City of Milpitas City Hall, 455 E. Calaveras Boulevard, Milpitas, CA 95035 or (408) 586-3349 to verify that it has received all Addenda issued, if any, prior to the Bid opening. The Bidder shall indicate the Addenda received prior to bidding in the space provided in the Bid Form. Failure to indicate all Addenda may be sufficient cause for rejecting the Bid.

6. ALTERNATE BIDS

If alternate bid items are called for in the Contract Documents, the time required for completion of the alternate bid items has already been factored into the Contract duration and no additional Contract time will be awarded for any of the alternate bid items. The City may elect to include one or more of the alternate bid items, or to otherwise remove certain work from the Project scope of work. Accordingly, each bidder must ensure that each bid item contains a proportionate share of profit, overhead, and other costs or expenses which will be incurred by the bidder.

7. COMPLETION OF BID FORMS

Bids shall only be prepared using copies of the Bid Forms which are included in the Contract Documents. The use of substitute Bid Forms other than clear and correct photocopies of those provided by the City will not be permitted. Bids shall be executed by an authorized signatory as described in these Instructions to Bidders. In addition, Bidders shall fill in all blank spaces (including inserting "N/A" where applicable), and initial all interlineations, alterations, or erasures to the Bid Forms. Bidders shall neither delete, modify, nor supplement the printed matter on the Bid Forms nor make substitutions thereon. USE OF BLACK OR BLUE INK, INDELIBLE PENCIL, OR A TYPEWRITER IS REQUIRED. Deviations in the Bid Forms may result in the Bid being deemed non-responsive.

8. MODIFICATIONS OF BIDS

Each Bidder shall submit its Bid in strict conformity with the requirements of the Contract Documents. Unauthorized additions, modifications, revisions, conditions, limitations, exclusions or provisions attached to a Bid may render it non-responsive and may cause its rejection. Bidders shall not delete, modify, or supplement the printed matter on the Bid Forms, or make substitutions thereon. Oral, telephonic and electronic modifications will not be considered.

9. SUBCONTRACTORS

Bidder shall set forth the name, address of the place of business, and contractor license number of each subcontractor who will perform work, labor, furnish materials or render services to the bidder on said contract and each subcontractor licensed by the State of California who, under subcontract to bidder, specially fabricates and installs a portion of the Work described in the Drawings and Specifications in an amount in excess of one half of one percent (0.5%) of the total bid price, and shall indicate the portion of the work to be done by such subcontractor in accordance with Public Contract Code Section 4104.

The successful bidder will be required to self-perform at least 30% of the work.

10. LICENSING REQUIREMENTS

Pursuant to Business and Professions Code Section 7028.15 and Public Contract Code Section 3300, all bidders must possess proper licenses for performance of this Contract. Subcontractors must possess the appropriate licenses for each specialty subcontracted. Pursuant to Business and Professions Code Section 7028.5, the City shall consider any bid submitted by a contractor not currently licensed in accordance with state law and pursuant to the requirements found in the Contract Documents to be nonresponsive, and the City shall reject the Bid. The City shall have the right to request, and Bidders shall provide within ten (10) calendar days, evidence satisfactory to the City of all valid license(s) currently held by that Bidder and each of the Bidder's subcontractors, before awarding the Contract.

Notwithstanding anything contained herein, if the Work involves federal funds, the Contractor shall be properly licensed by the time the Contract is awarded, pursuant to the provisions of Public Contract Code section 20103.5.

11. BID GUARANTEE (BOND)

Each bid shall be accompanied by: (a) cash; (b) a certified or cashier's check made payable to City of Milpitas; or (c) a Bid Bond secured from a surety company satisfactory to the City Council, the amount of which shall not be less than ten percent (10%) of the Total Bid Price, made payable to City of Milpitas as bid security. Personal sureties and unregistered surety companies are unacceptable. The surety insurer shall be California admitted surety insurer, as defined in Code of Civil Procedure Section 995.120. The bid security shall be provided as a guarantee that within ten (10) working days after the City provides the successful bidder the Notice of Award, the successful bidder will enter into a contract and provide the necessary bonds and certificates of insurance. The bid security will be declared forfeited if the successful bidder fails to comply within said time, and City may enter into a contract with the next lowest responsive responsible bidder, or may call for new bids. No interest shall be paid on funds deposited with the City. City will return the security accompanying the bids of all unsuccessful bidders no later than 60 calendar days after award of the contract.

12. IRAN CONTRACTING ACT OF 2010

In accordance with Public Contract Code Section 2200 *et seq*., the City requires that any person that submits a bid or proposal or otherwise proposes to enter into or renew a contract with the City with respect to goods or services of one million dollars ($1,000,000) or more, certify at the time the bid is submitted or the contract is renewed, that the person is not identified on a list created pursuant to subdivision (b) of Public Contract Code Section 2203 as a person engaging in investment activities in Iran described in subdivision (a) of Public Contract Code Section 2202.5, or as a person described in subdivision (b) of Public Contract Code Section 2202.5, as applicable.

The form of such Iran Contracting Certificate is included with the bid package and must be signed and dated under penalty of perjury.

13. NONCOLLUSION DECLARATION

Bidders on all public works contracts are required to submit a declaration of noncollusion with their bid. This form is included with the bid package and must be signed and dated under penalty of perjury.

14. PUBLIC WORKS CONTRACTOR REGISTRATION CERTIFICATION

Pursuant to Labor Code sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. No bid will be accepted nor any contract entered into without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations to perform public work. If awarded a contract, the bidder and its subcontractors, of any tier, shall maintain active registration with the Department of Industrial Relations for the duration of the Project. To this end, Bidder shall sign and submit with its Bid the Public Works Contractor Registration Certification on the form provided, attesting to the facts contained therein. Failure to submit this form may render the bid non-responsive. In addition, each Bidder shall provide the registration number for each listed subcontractor in the space provided in the Designation of Subcontractors form.

15. WAGE THEFT CERTIFICATION

Bidders on public works contracts are required to submit a certification disclosing whether the Bidder or any of its proposed subcontractors has been found by a final court order or administrative action of an investigatory government agency to have violated federal, state or local wage and hour laws, including but not limited to the federal Fair Labor Standards Act, the California Labor Code and the Milpitas Minimum Wage Ordinance, within the past five (5) years from the bid submission deadline.

16. BIDDER INFORMATION AND EXPERIENCE FORM

Each Bidder shall complete the questionnaire provided herein and shall submit the questionnaire along with its Bid. Failure to provide all information requested within the questionnaire along with the Bid may cause the bid to be rejected as non-responsive. The City reserves the right to reject any Bid if an investigation of the information submitted does not satisfy the Engineer that the Bidder is qualified to properly carry out the terms of the contract.

17. WORKERS' COMPENSATION CERTIFICATION

In accordance with the provisions of Labor Code Section 3700, Contractor shall secure the payment of compensation to its employees. Contractor shall sign and file with the City the following certificate prior to performing the work under this Contract:

> I am aware of the provisions of Section 3700 of the Labor Code, which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract.

The form of such Workers' Compensation Certificate is included as part of this document.

18. SIGNING OF BIDS

All Bids submitted shall be executed by the Bidder or its authorized representative. Bidders may be asked to provide evidence in the form of an authenticated resolution of its Board of Directors or a Power of Attorney evidencing the capacity of the person signing the Bid to bind the Bidder to each Bid and to any Contract arising therefrom.

If a Bidder is a joint venture or partnership, it may be asked to submit an authenticated Power of Attorney executed by each joint venturer or partner appointing and designating one of the joint venturers or partners as a management sponsor to execute the Bid on behalf of Bidder. Only that joint venturer or partner shall execute the Bid. The Power of Attorney shall also: (1) authorize that particular joint venturer or partner to act for and bind Bidder in all matters relating to the Bid; and (2) provide that each venturer or partner shall be jointly and severally liable for any and all of the duties and obligations of Bidder assumed under the Bid and under any Contract arising therefrom. The Bid shall be executed by the designated joint venturer or partner on behalf of the joint venture or partnership in its legal name.

19. SUBMISSION OF SEALED BIDS

Once the Bid and supporting documents have been completed and signed as set forth herein, they shall be placed, along with the Bid Guarantee and other required materials, in a sealed

envelope, addressed and delivered or mailed, postage prepaid, to the City Clerk before the time and day set for the receipt of bids. The envelope shall bear the title of the work and the name of the bidder. No oral or telephonic bids will be considered. No forms transmitted via the internet, e-mail, facsimile, or any other electronic means will be considered unless specifically authorized by the City as provided herein. Bids received after the time and day set for the receipt of bids shall be returned to the bidder unopened. The envelope shall also contain the following in the lower left-hand corner thereof:

Bid of _____ (Bidder's Name)_____
for the FIRE STATION NO.2 DEMOLITION PROJECT

Only where expressly permitted in the Notice Inviting Bids may bidders submit their bids via electronic transmission pursuant to Public Contract Code sections 1600 and 1601. Any acceptable method(s) of electronic transmission shall be stated in the Notice Inviting Bids. City may reject any bid not strictly complying with City's designated methods for delivery.

20. OPENING OF BIDS

At the time and place set for the opening and reading of bids, or any time thereafter, each and every bid received prior to the time and day set for the receipt of bids will be publicly opened and read. The City will leave unopened any Bid received after the specified date and time, and any such unopened Bid will be returned to the bidder. It is the bidder's sole responsibility to ensure that its Bid is received as specified. Bids may be submitted earlier than the date(s) and time(s) indicated.

The public reading of each bid will include the following information:

A. The name and business location of the bidder.

B. The nature and amount of the bid security furnished by bidder.

C. The bid amount.

Bidders or their representatives and other interested persons may be present at the opening of the bids. The City may, in its sole discretion, elect to postpone the opening of the submitted Bids. The City reserves the right to reject any or all Bids and to waive any informality or irregularity in any Bid.

21. WITHDRAWAL OF BID

Any bid may be withdrawn either personally or by written request, incurring no penalty, at any time prior to the scheduled closing time for receipt of bids. Requests to withdraw bids shall be worded so as not to reveal the amount of the original bid. Withdrawn bids may be resubmitted until the time and day set for the receipt of bids, provided that resubmitted bids are in conformance with the instructions herein.

Bids may be withdrawn after bid opening only by providing written notice to City within five (5) working days of the bid opening and in compliance with Public Contract Code Section 5100 *et seq*., or as otherwise may be allowed with the consent of the City.

22. BIDDERS INTERESTED IN MORE THAN ONE BID

No Bidder shall be allowed to make, file or be interested in more than one bid for the same work unless alternate bids are specifically called for. A person, firm or corporation that has submitted a sub-proposal to a Bidder, or that has quoted prices of materials to a Bidder, is not thereby disqualified from submitting a sub-proposal or quoting prices to other bidders. No person, firm, corporation, or other entity may submit a sub-proposal to a Bidder, or quote prices of materials to a Bidder, when also submitting a prime Bid on the same Project.

23. SUBSTITUTION OF SECURITY

The Contract Documents call for monthly progress payments based upon the percentage of the Work completed. The City will retain a percentage of each progress payment as provided by the Contract Documents. At the request and expense of the successful Bidder, the City will substitute securities for the amount so retained in accordance with Public Contract Code Section 22300.

24. PREVAILING WAGES

The City has obtained from the Director of the Department of Industrial Relations the general prevailing rate of per diem wages in the locality in which this work is to be performed for each craft or type of worker needed to execute the Contract. These rates are available at the City or may be obtained online at http://www.dir.ca.gov. Bidders are advised that a copy of these rates must be posted by the successful Bidder at the job site(s).

25. DEBARMENT OF CONTRACTORS AND SUBCONTRACTORS

In accordance with the provisions of the Labor Code, contractors or subcontractors may not perform work on a public works project with a subcontractor who is ineligible to perform work on a public project pursuant to Labor Code Sections 1777.1 or 1777.7. Any contract on a public works project entered into between a contractor and a debarred subcontractor is void as a matter of law. A debarred subcontractor may not receive any public money for performing work as a subcontractor on a public works contract. Any public money that is paid to a debarred subcontractor by the Contractor for the Project shall be returned to the City. The Contractor shall be responsible for the payment of wages to workers of a debarred subcontractor who has been allowed to work on the Project.

26. INSURANCE REQUIREMENTS

Prior to commencing work, the successful bidder shall purchase and maintain insurance as set forth in the General Conditions.

27. PERFORMANCE BOND AND PAYMENT BOND REQUIREMENTS

The successful bidder will be required to furnish a Labor and Material Payment Bond and a Faithful Performance Bond each in an amount equal to one hundred percent (100%) of the contract price. Each bond shall be secured from a surety company that meets all State of California bonding requirements, as defined in California Code of Civil Procedure Section 995.120 and is admitted by the State of California. Each bond shall be accompanied, upon the request of City, with all documents required by California Code of Civil Procedure Section 995.660 to the extent required by law. All bonding and insurance requirements shall be completed and submitted

to City within ten (10) working days from the date the City provides the successful bidder with the Notice of Award.

28. SALES AND OTHER APPLICABLE TAXES, PERMITS, LICENSES AND FEES

Contractor and its subcontractors performing work under this Contract will be required to pay California sales tax and other applicable taxes, and to pay for permits, licenses and fees required by the agencies with authority in the jurisdiction in which the Work will be located, unless otherwise expressly provided by the Contract Documents.

29. FILING OF BID PROTESTS

Bidders may file a "protest" of a Bid with the City of Milpitas City Engineer. In order for a Bidder's protest to be considered valid, the protest must:

A. Be filed in writing within five (5) calendar days after the bid opening date;

B. Clearly identify the specific irregularity or accusation;

C. Specify in detail the grounds for protest and the facts supporting the protest; and

D. Include all relevant, supporting documentation with the protest at time of filing.

If the protest does not comply with each of these requirements, the City may reject the protest without further review.

If the protest is timely and complies with the above requirements, the City Engineer, or other designated City staff member, shall review the protest, any response from the challenged Bidder(s), and all other relevant information. The City Engineer will provide a written decision to the protestor.

The procedure and time limits set forth in this Article are mandatory and are the sole and exclusive remedy in the event of a Bid protest. Failure to comply with these procedures shall constitute a failure to exhaust administrative remedies and a waiver of any right to further pursue the Bid protest, including filing a Government Code Claim or legal proceedings.

30. BASIS OF AWARD; BALANCED BID

The City shall award the Contract to the lowest responsible Bidder submitting a responsive Bid. The lowest Bid will be determined on the basis of the Total Base Bid alone unless otherwise set forth in the Notice Inviting Bids.

The City may reject any Bid which, in its opinion when compared to other Bids received or to the City's internal estimates, does not accurately reflect the cost to perform the Work. The City may reject as non-responsive any Bid which unevenly weights or allocates costs, including but not limited to overhead and profit to one or more particular bid items.

31. AWARD PROCESS

Once all Bids are opened and reviewed to determine the lowest responsive and responsible Bidder, the City Council may award the contract. The apparent successful Bidder should begin to prepare the following documents: (1) the Performance Bond; (2) the Payment Bond; and (3)

the required insurance certificates and endorsements. Once the City notifies the Bidder of the award, the Bidder will have fourteen (14) calendar days from the date of this notification to execute the Contract and supply the City with all of the required documents and certifications. Regardless of whether the Bidder supplies the required documents and certifications in a timely manner, the Contract time will begin to run twenty-one (21) calendar days from the date of the Notice of Award. Once the City receives all of the properly drafted and executed documents, certifications from the Bidder, and any other documents as maybe specified in the Contract Documents, the City shall issue a Notice to Proceed to that Bidder.

32. EXECUTION OF CONTRACT

As required herein the Bidder to whom an award is made shall execute the Contract in the amount determined by the Contract Documents. The City may require appropriate evidence that the persons executing the Contract are duly empowered to do so. The Contract and bond forms to be executed by the successful Bidder are included within these Specifications and shall not be detached.

00 41 43 – BID FORMS

1.1 Bid Acknowledgement.

NAME OF BIDDER: _____

To the Honorable City Council of the City of Milpitas, attn City Clerk:

The undersigned hereby declare that we have carefully examined the location of the proposed Work, and have read and examined the Contract Documents, including all plans, specifications, and all addenda, if any for the following Project:

FIRE STATION NO.2 DEMOLITION

A We hereby propose to furnish all labor, materials, equipment, tools, transportation, and services, and to discharge all duties and obligations necessary and required to perform and complete the Project, as described and in strict conformity with the Contract Documents for the Total Bid Price indicated herein.

B The undersigned agrees that this Bid constitutes a firm offer to the City which cannot be withdrawn for the number of calendar days indicated in the Notice Inviting Bids from and after the Bid opening, or until a Contract for the Work is fully executed by the City and a third party, whichever is earlier.

C The undersigned has by careful examination of the Contract Documents and any addenda thereto, and by examination of the actual Site conditions, satisfied itself as to the nature and location of all Work, the plans and specifications, and the general and local conditions to be encountered in the performance of any Work, the requirements of the Contract and all other matters which can in any way affect the Work or the cost thereof.

D The undersigned acknowledges receipt, understanding, and full consideration of the following addenda to the Contract Documents:

List Addenda No's. _____

E Attached hereto and by this reference incorporated herein and made a part of this Bid are the following forms which have been completed and executed by undersigned Bidder:

1. Designation of Subcontractors form.
2. Bidder Information and Experience form.
3. Noncollusion Declaration form.
4. Iran Contracting Act Certification form.
5. Public Works Contractor Registration Certification form.
6. Attached is the completed Wage Theft Certification form.

7. Contractor's Certificate Regarding Workers' Compensation form.

8. Bid Guarantee in the amount of not less than 10% of the Total Bid Price.

F If awarded a contract, the undersigned hereby agrees to sign the contract and furnish the necessary bonds and certificates of insurance within fourteen (14) days after the City provides the successful bidder with the Notice of Award.

G Upon receipt of the signed contract and other required documents, the contract will be executed by the City, after which the City will prepare a letter giving Contractor Notice to Proceed. The official starting date shall be the date of the Notice to Proceed, unless otherwise specified. The undersigned agrees to begin the Work within ten (10) working days of the date of the Notice to Proceed, unless otherwise specified.

H Bidder is an individual _____, or corporation _____, or partnership _____, organized under the laws of the State of _____.

I Bidder represents and confirms that license(s) required by California State Contractor's License Law for the performance of the subject project are in full effect and proper order. The following are the Bidder's applicable license number(s), with their expiration date(s) and class of license(s):

_____

_____

_____

If the Bidder is a joint venture, <u>each</u> member of the joint venture must include the required licensing information.

(SIGNATURES CONTINUED ON NEXT PAGE)

J The undersigned that the representations made herein herein are true and correct and all of the information submitted in connection with this Bid are made under penalty of perjury under the laws of the State of California.

Executed at _____, on this ____ day of _____, _____.

(Bidder's Name – Print or Type)

_____
(Name and Title)

(Corporate Seal)

_____
(Signature)

Names of individual members of firm or names and titles of all officers of corporation and their addresses are listed below:

Name _____ Title _____

Complete Address _____

Phone _____ Fax _____

Name _____ Title _____

Complete Address _____

Phone _____ Fax _____

Name _____ Title _____

Complete Address _____

Phone _____ Fax _____

Name _____ Title _____

Complete Address _____

Phone _____ Fax _____

1.2 BID SCHEDULE

NO.	ITEM DESCRIPTION	UNIT OF MEASURE	EST. QTY.	UNIT PRICE	TOTAL ITEM PRICE
1.	Mobilization and Demobilization	LS	1		
2.	Demolition and Off-Haul	LS	1		
3.	SWPPP	LS	1		
4.	Trees Removal	LS	1		
5.	Traffic Control	LS	1		
				TOTAL BASE BID PRICE	

Bidders must provide pricing for every bid item. The costs for any Work shown or required in the Contract Documents, but not specifically identified as a line item are to be included in the related line items and no additional compensation shall be due to Contractor for the performance of the Work.

In case of discrepancy between the Unit Price and the Total Item Price set forth for a unit basis item, the unit price shall prevail and shall be utilized as the basis for determining the lowest responsive, responsible Bidder. However, if the amount set forth as a unit price is ambiguous, unintelligible or uncertain for any cause, or is omitted, or is the same amount as the entry in the "Item Price" column, then the amount set forth in the "Item Price" column for the item shall prevail and shall be divided by the estimated quantity for the item and the price thus obtained shall be the Unit Price.

For purposes of evaluating Bids, the City will correct any apparent errors in the extension of unit prices and any apparent errors in the addition of lump sum and extended prices.

The estimated quantities for Unit Price items are for purposes of comparing Bids only and the City makes no representation that the actual quantities of work performed will not vary from the estimates. Final payment shall be determined by the Engineer from measured quantities of work performed based upon the Unit Price.

If the Contract Documents specify Alternate Bid items, the following Alternate Bid amounts shall be added to or deducted from the Total Bid Price entered above (please check the appropriate box), in the City's sole discretion. The City can choose to include any, all, or none of the Alternate Bid items in the Work. If the City selects any of the Alternate Bid items, the corresponding Alternate Bid prices shall be added to or deducted from Base Bid Price for the Work. The City can award/select Alternate Bid items at any time(s).

Alternate Bids BIDS	Description	Unit of Measure	Est. Quantity	Unit Price	Total Item Price
ALTERNATE #1 ☒ Add ☐ Deduct	Monthly maintenance for SWPPP	Monthly	6	$	$

1.3 List of Subcontractors

In compliance with the Subletting and Subcontracting Fair Practices Act Chapter 4 (commencing at Section 4100), Part 1, Division 2 of the Public Contract Code of the State of California and any amendments thereof, Bidder shall set forth below: (a) the name and the location of the place of business, (b) the California contractor license number, (c) the DIR public works contractor registration number unless exempt pursuant to Labor Code Sections 1725.5 and 1771.1, and (d) the portion of the work which will be done by each subcontractor who will perform work or labor or render service to the Bidder in or about the construction of the work or improvement to be performed under this Contract in an amount in excess of one-half of one percent (0.5%) of the Bidder's Total Bid Price. Notwithstanding the foregoing, if the work involves the construction of streets and highways, then the Bidder shall list each subcontractor who will perform work or labor or render service to the Bidder in or about the work in an amount in excess of one-half of one percent (0.5%) of the Bidder's Total Bid Price or $10,000, whichever is greater. No additional time shall be granted to provide the below requested information.

If a Bidder fails to specify a subcontractor or if a contractor specifies more than one subcontractor for the same portion of work, then the Bidder shall be deemed to have agreed that it is fully qualified to perform that portion of work and that it shall perform that portion itself.

As stated in the Instructions to Bidders, Bidder is required to complete at least 30% of the contract value with its own forces. Bidder shall indicate the value of each subcontractor's work and the sum may not exceed the allowable amount.

Work to be done by Subcontractor	Name of Subcontractor	Location of Business	CSLB Contractor License No.	DIR Registration Number	% of the Work

(Attach additional sheets if necessary)

Name of Bidder_____

Signature_____

Name and Title_____

Dated_____

1.4 Bidder Information and Experience Form

A. INFORMATION ABOUT BIDDER

NOTE: Indicate not applicable ("N/A") where appropriate. If Bidder is a joint venture, pages shall be duplicated and information provided for all parties to the joint venture.

1.0 Name of Bidder: _____

2.0 Type, if Entity: _____

3.0 Bidder Address: _____

_____

_____

Facsimile Number Telephone Number

_____

Email Address

4.0 How many years has Bidder's organization been in business as a Contractor?

_____

5.0 How many years has Bidder's organization been in business under its present name? _____

5.1. Under what other or former names has Bidder's organization operated?

_____

6.0 If Bidder's organization is a corporation, answer the following:

6.1. Date of Incorporation: _____

6.2. State of Incorporation: _____

6.3. President's Name: _____

6.4. Vice-President's Name(s): _____

_____

6.5. Secretary's Name: _____

6.6. Treasurer's Name: _____

7.0 If an individual or a partnership, answer the following:

7.1. Date of Organization: _____

7.2. Name and address of all partners (state whether general or limited partnership):

_____

_____

_____

8.0 If other than a corporation or partnership, describe organization and name principals:

_____

_____

9.0 List other states in which Bidder's organization is legally qualified to do business.

_____

_____

10.0 What type of work does the Bidder normally perform with its own forces?

_____

_____

11.0 Has Bidder ever failed to complete any work awarded to it? If so, note when, where, and why:

_____

_____

12.0 Within the last five years, has any officer or partner of Bidder's organization ever been an officer or partner of another organization when it failed to complete a contract? If so, attach a separate sheet of explanation:

_____

_____

13.0 List Trade References:

_____

_____

_____

_____

14.0 List Bank References (Bank and Branch Address):

_____

_____

_____

_____

15.0 Name of Bonding Company and Name and Address of Agent:

_____

_____

_____

[REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]

B. LIST OF CURRENT PROJECTS (BACKLOG)

[**Duplicate Page if needed for listing additional current projects.**]

Project Name, & Owner Contact Information	Description of Bidder's Work	Completion Date	Cost of Bidder's Work

C. LIST OF COMPLETED PROJECTS – LAST THREE YEARS

[**Duplicate Page if needed for listing additional completed projects.**]

Project Name, & Owner Contact Information	Description of Bidder's Work	Completion Date	Cost of Bidder's Work

D. EXPERIENCE AND TECHNICAL QUALIFICATIONS QUESTIONNAIRE

Personnel:

The Bidder shall identify the key personnel to be assigned to this project in a management, construction supervision or engineering capacity.

1. List each person's job title, name and percent of time to be allocated to this project:

_____

_____

_____

2. Summarize each person's specialized education:

_____

_____

_____

3. List each person's years of construction experience relevant to the project:

_____

_____

_____

4. Summarize such experience:

_____

_____

_____

Bidder agrees that personnel named in this Bid will remain on this Project until completion of all relevant Work, unless substituted by personnel of equivalent experience and qualifications approved in advance by the City.

Additional Bidder's Statements:

If the Bidder feels that there is additional information which has not been included in the questionnaire above, and which would contribute to the qualification review, it may add that information in a statement here or on an attached sheet, appropriately marked:

_____

_____

_____

E. VERIFICATION AND EXECUTION

These Bid Forms shall be executed only by a duly authorized official of the Bidder:

I declare under penalty of perjury under the laws of the State of California that the foregoing information is true and correct:

Name of Bidder_____

Signature_____

Name_____

Title_____

Date_____

1.5 Non-Collusion Declaration

The undersigned declares:

I am the _____ of _____, the party making the foregoing Bid.

The Bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The Bid is genuine and not collusive or sham. The Bidder has not directly or indirectly induced or solicited any other Bidder to put in a false or sham bid. The Bidder has not directly or indirectly colluded, conspired, connived, or agreed with any Bidder or anyone else to put in a sham bid, or to refrain from bidding. The Bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the Bid Price of the Bidder or any other Bidder, or to fix any overhead, profit, or cost element of the Bid Price, or of that of any other Bidder. All statements contained in the Bid are true. The Bidder has not, directly or indirectly, submitted his or her Bid Price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a Bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the Bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____ [date], at _____ [city], _____ [state].

Name of Bidder_____

Signature_____

Name_____

Title_____

1.6 Iran Contracting Act Certification.
(Public Contract Code section 2200 et seq.)

As required by California Public Contract Code Section 2204, the Contractor certifies subject to penalty for perjury that the option checked below relating to the Contractor's status in regard to the Iran Contracting Act of 2010 (Public Contract Code Section 2200 *et seq*.) is true and correct:

☐ The Contractor is not:

(1) identified on the current list of person and entities engaged in investment activities in Iran prepared by the California Department of General Services in accordance with subdivision (b) of Public Contract Code Section 2203; or

(2) a financial instruction that extends, for 45 days or more, credit in the amount of $20,000,000 or more to any other person or entity identified on the current list of persons and entities engaging in investment activities in Iran prepared by the California Department of General Services in accordance with subdivision (b) of Public Contract Code Section 2203, if that person or entity uses or will use the credit to provide goods or services in the energy sector in Iran.

☐ The City has exempted the Contractor from the requirements of the Iran Contracting Act of 2010 after making a public finding that, absent the exemption, the City will be unable to obtain the goods and/or services to be provided pursuant to the Contract.

☐ The amount of the Contract payable to the Contractor for the Project does not exceed $1,000,000.

Signature:_____

Printed Name:_____

Title:_____

Firm Name:_____

Date:_____

Note: In accordance with Public Contract Code Section 2205, false certification of this form shall be reported to the California Attorney General and may result in civil penalties equal to the greater of $250,000 or twice the Contract amount, termination of the Contract and/or ineligibility to bid on contracts for three years.

1.7 Public Works Contractor Registration Certification

Pursuant to Labor Code sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. See http://www.dir.ca.gov/Public-Works/PublicWorks.html for additional information.

No bid will be accepted nor any contract entered into without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations to perform public work.

Bidder hereby certifies that it is aware of the registration requirements set forth in Labor Code sections 1725.5 and 1771.1 and is currently registered as a contractor with the Department of Industrial Relations.[1]

Name of Bidder:_____

DIR Registration Number:_____

DIR Registration Expiration:_____

Small Project Exemption: _____ Yes or _____ No

Unless Bidder is exempt pursuant to the small project exemption, Bidder further acknowledges:

1. Bidder shall maintain a current DIR registration for the duration of the project.
2. Bidder shall include the requirements of Labor Code sections 1725.5 and 1771.1 in its contract with subcontractors and ensure that all subcontractors are registered at the time of bid opening and maintain registration status for the duration of the project.
3. Failure to submit this form or comply with any of the above requirements may result in a finding that the bid is non-responsive.

Name of Bidder_____

Signature_____

Name and Title_____

Dated_____

[1] If the Project is exempt from the contractor registration requirements pursuant to the small project exemption under Labor Code Sections 1725.5 and 1771.1, please mark "Yes" in response to "Small Project Exemption."

1.8 Wage Theft Certification

The Bidder certifies subject to penalty for perjury that the option checked below relating to the Bidder and its subcontractors' status in regard to wage theft is true and correct:

☐ Neither the Bidder nor any of its subcontractors have been found by a final court order or administrative action of an investigatory government agency to have violated federal, state or local wage and hour laws, including but not limited to the federal Fair Labor Standards Act, the California Labor Code and the Milpitas Minimum Wage Ordinance, within the past five (5) years from the bid submission deadline.

☐ The Bidder or its subcontractors have been found by a final court order or administrative action of an investigatory government agency to have violated federal, state or local wage and hour laws, including but not limited to the federal Fair Labor Standards Act, the California Labor Code and the Milpitas Minimum Wage Ordinance, within the past five (5) years from the bid submission deadline. For each violation, the Bidder shall provide a copy of (i) the final court order and/or final administrative decision/action; and (ii) documents demonstrating either that the order/decision/action has been fully satisfied, or if the order/decision/action has not been fully satisfied, documents evidencing a payment or other alternative plan approved by the court/government agency to satisfy the order/decision/action and proof that the Bidder or its subcontractors are in compliance with that plan as of the bid submission deadline.

☐ The City has exempted the Bidder from the requirements of the City of Milpitas Wage Theft Procurement Policy.

Signature:_____

Printed Name:_____

Title:_____

Firm Name:_____

Date:_____

1.9 Contractor's Certificate Regarding Workers' Compensation.

I am aware of the provisions of section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this Contract.

Name of Bidder_____

Signature_____

Name_____

Title_____

Dated_____

1.10 Bid Bond

Note: Not required when other form of Bidder's Security, e.g. cash, certified check or cashier's check, accompanies bid.

The makers of this bond are, _____, as Principal, and _____, as Surety and are held and firmly bound unto the City of Milpitas, hereinafter called the City, in the penal sum of TEN PERCENT (10%) OF THE TOTAL BID PRICE of the Principal submitted to CITY for the work described below, for the payment of which sum in lawful money of the United States, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that whereas the Principal has submitted the accompanying bid dated _____, 20 ____, for **FIRE STATION NO. 2 DEMOLITION, PROJECT NO. 3447**.

If the Principal does not withdraw its Bid within the time specified in the Contract Documents; and if the Principal is awarded the Contract and provides all documents to the City as required by the Contract Documents; then this obligation shall be null and void. Otherwise, this bond will remain in full force and effect.

Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract Documents shall in affect its obligation under this bond, and Surety does hereby waive notice of any such changes.

In the event a lawsuit is brought upon this bond by the City and judgment is recovered, the Surety shall pay all litigation expenses incurred by the City in such suit, including reasonable attorneys' fees, court costs, expert witness fees and expenses.

IN WITNESS WHEREOF, the above-bound parties have executed this instrument under their several seals this _____ day of _____, 20____, the name and corporate seal of each corporation.

(Corporate Seal)

_____
Contractor/Principal

By _____

Title _____

(Corporate Seal)

_____
Surety

By _____
Attorney-in-Fact

(Attach Attorney-in-Fact Certificate)

Title _____

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF _____

On _____, 20___, before me, _____, Notary Public, personally

appeared _____, who proved to me on the basis of satisfactory
Name(s) of Signer(s)

evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____
Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

☐ Individual
☐ Corporate Officer

_____
Title(s)

☐ Partner(s) ☐ Limited ☐ General
☐ Attorney-In-Fact
☐ Trustee(s)
☐ Guardian/Conservator
☐ Other:

Signer is representing:
Name Of Person(s) Or Entity(ies)

_____

_____

DESCRIPTION OF ATTACHED DOCUMENT

_____
Title or Type of Document

_____
Number of Pages

_____
Date of Document

_____
Signer(s) Other Than Named Above

NOTE: This acknowledgment is to be completed for Contractor/Principal.

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF _____

On _____, 20___, before me, _____, Notary Public, personally

appeared _____, who proved to me on the basis of satisfactory

evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____

Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

☐ Individual
☐ Corporate Officer

_____
Title(s)

☐ Partner(s) ☐ Limited ☐ General
☐ Attorney-In-Fact
☐ Trustee(s)
☐ Guardian/Conservator
☐ Other:

Signer is representing:
Name Of Person(s) Or Entity(ies)

_____

_____

DESCRIPTION OF ATTACHED DOCUMENT

_____
Title or Type of Document

_____
Number of Pages

_____
Date of Document

_____
Signer(s) Other Than Named Above

NOTE: This acknowledgment is to be completed for the Attorney-in-Fact. The Power-of-Attorney to local representatives of the bonding company must also be attached.

END OF BID BOND

00 52 13 – CONTRACT

This CONTRACT, No. _____ is made and entered into this ____ day of _____, _____, by and between City of Milpitas, sometimes hereinafter called "City," and _____, sometimes hereinafter called "Contractor."

WITNESSETH: That the parties hereto have mutually covenanted and agreed, and by these presents do covenant and agree with each other as follows:

a. **SCOPE OF WORK.** The Contractor shall perform all Work within the time stipulated in the Contract, and shall provide all labor, materials, equipment, tools, utility services, and transportation to complete all of the Work required in strict compliance with the Contract Documents as specified in Article 5, below, for the following Project:

FIRE STATION NO.2 DEMOLITION

The Contractor and its surety shall be liable to the City for any damages arising as a result of the Contractor's failure to comply with this obligation.

b. **TIME FOR COMPLETION.** Time is of the essence in the performance of the Work. The Work shall be commenced on the date stated in the City's Notice to Proceed. The Contractor shall complete all Work required by the Contract Documents within **40 CALENDAR DAYS** calendar days from the commencement date stated in the Notice to Proceed. By its signature hereunder, Contractor agrees the time for completion set forth above is adequate and reasonable to complete the Work.

c. **CONTRACT PRICE.** The City shall pay to the Contractor as full compensation for the performance of the Contract, subject to any additions or deductions as provided in the Contract Documents, and including all applicable taxes and costs, the sum of _____ Dollars ($_____). Payment shall be made as set forth in the General Conditions.

d. **LIQUIDATED DAMAGES.**In accordance with Government Code section 53069.85, it is agreed that the Contractor will pay the City the sum set forth in Section 00 73 13, Article 1.11 for each and every calendar day of delay beyond the time prescribed in the Contract Documents for finishing the Work, as Liquidated Damages and not as a penalty or forfeiture. In the event this is not paid, the Contractor agrees the City may deduct that amount from any money due or that may become due the Contractor under the Contract. This Article does not exclude recovery of other damages specified in the Contract Documents.

e. **COMPONENT PARTS OF THE CONTRACT.** The "Contract Documents" include the following:

Notice Inviting Bids
Instructions to Bidders
Bid Form
Bid Bond
Designation of Subcontractors
Information Required of Bidders

Non-Collusion Declaration Form
Iran Contracting Act Certification
Public Works Contractor Registration Certification
Wage Theft Certification
Performance Bond
Payment (Labor and Materials) Bond
General Conditions
Special Conditions
Technical Specifications
Addenda
Plans and Drawings
Caltrans Standard Specifications, except Division 1
Caltrans Standard Plans
Applicable Local Agency Standards and Specifications, as last revised
Approved and fully executed change orders
Any other documents contained in or incorporated into the Contract

The Contractor shall complete the Work in strict accordance with all of the Contract Documents.

All of the Contract Documents are intended to be complementary. Work required by one of the Contract Documents and not by others shall be done as if required by all. This Contract shall supersede any prior agreement of the parties.

f. **PROVISIONS REQUIRED BY LAW AND CONTRACTOR COMPLIANCE.** Each and every provision of law required to be included in these Contract Documents shall be deemed to be included in these Contract Documents. The Contractor shall comply with all requirements of applicable federal, state and local laws, rules and regulations, including, but not limited to, the provisions of the California Labor Code and California Public Contract Code which are applicable to this Work.

g. **INDEMNIFICATION.** Contractor shall provide indemnification and defense as set forth in the General Conditions.

h. **PREVAILING WAGES.** Contractor shall be required to pay the prevailing rate of wages in accordance with the Labor Code which such rates shall be made available at the City's Administrative Office or may be obtained online at http://www.dir.ca.gov and which must be posted at the job site.

i. **WAGE THEFT PREVENTION.**

(a) Contractor, and any subcontractor it employs to complete work under this Contract, shall comply with all applicable federal, state and local wage and hour laws. Applicable laws may include, but are not limited to, the Federal Fair Labor Standards Act, the California Labor Code and the Milpitas Minimum Wage Ordinance.

(b) BY SIGNING THIS CONTRACT, CONTRACTOR AFFIRMS THAT IT HAS DISCLOSED ANY FINAL JUDGMENTS, DECISIONS OR ORDERS FROM A COURT OR INVESTIGATORY GOVERNMENT AGENCY, FINDING IN THE FIVE (5) YEARS PRIOR TO EXECUTING THIS CONTRACT THAT CONTRACTOR OR ITS SUBCONTRACTORS HAS VIOLATED ANY APPLICABLE WAGE AND HOUR LAWS. CONTRACTOR FURTHER AFFIRMS THAT IT OR ITS SUBCONTRACTOR(S) HAS EITHER FULLY SATISFIED EACH

JUDGMENT, DECISION OR ORDER, OR, IF ANY JUDGMENT, DECISION OR ORDER HAS NOT BEEN FULLY SATISFIED, CONTRACTOR AFFIRMS THAT IT OR ITS SUBCONTRACTOR(S) IS CURRENTLY SATISFYING SAID JUDGMENT, DECISION OR ORDER THROUGH A PAYMENT OR ALTERNATIVE PLAN APPROVED BY THE APPLICABLE COURT/GOVERNMENT AGENCY AND THAT CONTRACTOR OR ITS SUBCONTRACTOR(S) ARE IN COMPLIANCE WITH SAID PLAN AS OF THE DATE OF EXECUTING THIS CONTRACT.

(c) If at any time during the term of this Contract, a court or investigatory government agency issues a final judgment, decision or order finding that Contractor or a subcontractor it employs to perform work under this Contract has violated any applicable wage and hour law, or Contractor learns of such a judgment, decision, or order that was not previously disclosed in its bid/proposal, Contractor shall inform the City no more than fifteen (15) calendar days after the judgment, decision or order becomes final or from the date of learning of the final judgment, decision or order. Contractor or its subcontractor(s) shall, within thirty (30) calendar days after notifying the City, either (i) fully satisfy any such judgment, decision, or order and provide the City with documentary evidence of satisfying said judgment, decision or order; or (ii) provide the City documentary evidence of a payment or other alternative plan approved by the court/government agency to satisfy the judgment, decision or order. If the Contractor or its subcontractor is subject to a payment or other alternative plan, the Contractor or its subcontractor shall continue to submit documentary evidence every thirty (30) calendar days during the term of the Contract demonstrating continued compliance with the plan until the judgment, decision or order has been fully satisfied.

(d) For purposes of this Section, a "final judgment, decision, or order" refers to one for which all appeals have been exhausted or the time period to appeal has expired. Relevant investigatory government agencies include: the United States Department of Labor, the California Division of Labor Standards Enforcement, the City, or any other governmental entity or division tasked with the investigation and enforcement of wage and hour laws.

(e) Failure to comply with any part of this Section constitutes a material breach of this Contract. Such breach may serve as a basis for immediate termination of this Contract and/or any other remedies available under this Contract and/or law.

(f) Notice provided to the City shall be addressed to: Attention: Finance Director, 455 E. Calaveras Blvd. Milpitas, CA 95035. The Notice provisions of this Section are separate from any other notice provisions in this Contract and, accordingly, only notice provided to the above address satisfies the notice requirements in this Section.

[REMAINDER OF PAGE LEFT INTENTIONALLY BLANK]

IN WITNESS WHEREOF, this Contract has been duly executed by the above-named parties, on the day and year above written.

CITY OF MILIPITAS

By: _____
Steven G. McHarris
Interim City Manager

[INSERT NAME OF CONTRACTOR]

By: _____

Its: _____

Printed Name: _____

(CONTRACTOR'S SIGNATURE MUST BE NOTARIZED AND CORPORATE SEAL AFFIXED, IF APPLICABLE)

APPROVED

By: _____
Walter C. Rossmann,
Risk Manager/Director of Finance

APPROVED AS TO FORM:

By: _____
Christopher J. Diaz, City Attorney

APPROVED AS TO CONTENT

By: _____
Steven Erickson
Engineering Director/City Engineer

END OF CONTRACT

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF _____

On _____, 20___, before me, _____, Notary Public, personally

appeared _____, who proved to me on the basis of satisfactory

evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____

Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

☐ Individual
☐ Corporate Officer

_____
Title(s)

☐ Partner(s) ☐ Limited ☐ General
☐ Attorney-In-Fact
☐ Trustee(s)
☐ Guardian/Conservator
☐ Other:

Signer is representing:
Name Of Person(s) Or Entity(ies)

_____

_____

DESCRIPTION OF ATTACHED DOCUMENT

_____
Title or Type of Document

_____
Number of Pages

_____
Date of Document

_____
Signer(s) Other Than Named Above

00 61 13 – BOND FORMS

1.1 Performance Bond.

KNOW ALL PERSONS BY THESE PRESENTS:

THAT WHEREAS, the City of Milpitas, (hereinafter referred to as "City") has awarded to _____, (hereinafter referred to as the "Contractor") an agreement for _____, (hereinafter referred to as the "Project").

WHEREAS, the work to be performed by the Contractor is more particularly set forth in the Contract Documents for the Project dated _____, (hereinafter referred to as "Contract Documents"), the terms and conditions of which are expressly incorporated herein by reference; and

WHEREAS, the Contractor is required by said Contract Documents to perform the terms thereof and to furnish a bond for the faithful performance of said Contract Documents.

NOW, THEREFORE, we, _____, the undersigned Contractor and _____ as Surety, a corporation organized and duly authorized to transact business under the laws of the State of California, are held and firmly bound unto the City in the sum of _____ DOLLARS, ($_____), said sum being not less than one hundred percent (100%) of the total amount of the Contract, for which amount well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that, if the Contractor, his or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in the Contract Documents and any alteration thereof made as therein provided, on its part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their intent and meaning; and shall faithfully fulfill all obligations including the one (1) year guarantee of all materials and workmanship; and shall indemnify and save harmless the City, its officials, officers, employees, and authorized volunteers, as stipulated in said Contract Documents, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

As a part of the obligation secured hereby and in addition to the face amount specified therefore, there shall be included costs and reasonable expenses and fees including reasonable attorney's fees, incurred by City in enforcing such obligation.

As a condition precedent to the satisfactory completion of the Contract Documents, unless otherwise provided for in the Contract Documents, the above obligation shall hold good for a period of one (1) year after the acceptance of the work by City, during which time if Contractor shall fail to make full, complete, and satisfactory repair and replacements and totally protect the City from loss or damage resulting from or caused by defective materials or faulty workmanship. The obligations of Surety hereunder shall continue so long as any obligation of Contractor remains. Nothing herein shall limit the City's rights or the Contractor or Surety's obligations under the Contract, law or equity, including, but not limited to, California Code of Civil Procedure Section 337.15.

Whenever Contractor shall be, and is declared by the City to be, in default under the Contract Documents, the Surety shall remedy the default pursuant to the Contract Documents, or shall promptly, at the City's option:

i Take over and complete the Project in accordance with all terms and conditions in the Contract Documents; or

ii Obtain a bid or bids for completing the Project in accordance with all terms and conditions in the Contract Documents and upon determination by Surety of the lowest responsive and responsible bidder, arrange for a Contract between such bidder, the Surety and the City, and make available as work progresses sufficient funds to pay the cost of completion of the Project, less the balance of the contract price, including other costs and damages for which Surety may be liable. The term "balance of the contract price" as used in this paragraph shall mean the total amount payable to Contractor by the City under the Contract and any modification thereto, less any amount previously paid by the City to the Contractor and any other set offs pursuant to the Contract Documents.

iii Permit the City to complete the Project in any manner consistent with California law and make available as work progresses sufficient funds to pay the cost of completion of the Project, less the balance of the contract price, including other costs and damages for which Surety may be liable. The term "balance of the contract price" as used in this paragraph shall mean the total amount payable to Contractor by the City under the Contract and any modification thereto, less any amount previously paid by the City to the Contractor and any other set offs pursuant to the Contract Documents.

Surety expressly agrees that the City may reject any contractor or subcontractor which may be proposed by Surety in fulfillment of its obligations in the event of default by the Contractor.

Surety shall not utilize Contractor in completing the Project nor shall Surety accept a bid from Contractor for completion of the Project if the City, when declaring the Contractor in default, notifies Surety of the City's objection to Contractor's further participation in the completion of the Project.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract Documents or to the Project to be performed thereunder shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract Documents or to the Project.

[REMAINDER OF PAGE LEFT INTENTIONALLY BLANK]

IN WITNESS WHEREOF, we have hereunto set our hands and seals this _____ day of _____, 20___.

(Corporate Seal)

_____
Contractor/Principal

By _____

Title _____

(Corporate Seal)

_____
Surety

By _____
Attorney-in-Fact

(Attach Attorney-in-Fact Certificate)

Title _____

(The rate of premium on this bond is _____ per thousand. The total amount of premium charges is $_____.

(The above must be filled in by corporate attorney.)

THIS IS A REQUIRED FORM

Any claims under this bond may be addressed to:

(Name and Address of Surety) _____
_____
_____

(Name and Address of Agent or Representative for service of process in California, if different from above) _____
_____
_____

(Telephone number of Surety and Agent or Representative for service of process in California) _____

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF _____

On _____, 20___, before me, _____, Notary Public, personally

appeared _____, who proved to me on the basis of satisfactory

evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____

Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

☐ Individual
☐ Corporate Officer

_____
Title(s)

☐ Partner(s) ☐ Limited ☐ General
☐ Attorney-In-Fact
☐ Trustee(s)
☐ Guardian/Conservator
☐ Other:

Signer is representing:
Name Of Person(s) Or Entity(ies)

_____

_____

DESCRIPTION OF ATTACHED DOCUMENT

_____
Title or Type of Document

_____
Number of Pages

_____
Date of Document

_____
Signer(s) Other Than Named Above

NOTE: This acknowledgment is to be completed for Contractor/Principal.

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COUNTY OF _____

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evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____

Signature of Notary Public

OPTIONAL

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Title(s)

☐ Partner(s) ☐ Limited ☐ General
☐ Attorney-In-Fact
☐ Trustee(s)
☐ Guardian/Conservator
☐ Other:

Signer is representing:
Name Of Person(s) Or Entity(ies)

_____

_____

DESCRIPTION OF ATTACHED DOCUMENT

_____
Title or Type of Document

_____
Number of Pages

_____
Date of Document

_____
Signer(s) Other Than Named Above

NOTE: This acknowledgment is to be completed for the Attorney-in-Fact. The Power-of Attorney to local representatives of the bonding company must also be attached.

END OF PERFORMANCE BOND

1.2 Payment Bond (Labor and Materials).

KNOW ALL MEN BY THESE PRESENTS That

WHEREAS, the City of Milpitas (hereinafter designated as the "City"), by action taken or a resolution passed _____ , 20_____, has awarded to _____ hereinafter designated as the "Principal," a contract for the work described as follows: _____ (the "Project"); and

WHEREAS, said Principal is required to furnish a bond in connection with said contract; providing that if said Principal or any of its Subcontractors shall fail to pay for any materials, provisions, provender, equipment, or other supplies used in, upon, for or about the performance of the work contracted to be done, or for any work or labor done thereon of any kind, or for amounts due under the Unemployment Insurance Code or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of said Principal and its Subcontractors with respect to such work or labor the Surety on this bond will pay for the same to the extent hereinafter set forth.

NOW THEREFORE, we, the Principal and _____ as Surety, are held and firmly bound unto the City in the penal sum of _____ Dollars ($_____) lawful money of the United States of America, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if said Principal, his or its subcontractors, heirs, executors, administrators, successors or assigns, shall fail to pay any of the persons named in Civil Code Section 9100, fail to pay for any materials, provisions or other supplies, used in, upon, for or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or amounts due under the Unemployment Insurance Code with respect to work or labor performed under the contract, or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department or Franchise Tax Board from the wages of employees of the contractor and his subcontractors pursuant to Revenue and Taxation Code Section 18663, with respect to such work and labor the Surety or Sureties will pay for the same, in an amount not exceeding the sum herein above specified, and also, in case suit is brought upon this bond, all litigation expenses incurred by the City in such suit, including reasonable attorneys' fees, court costs, expert witness fees and investigation expenses.

This bond shall inure to the benefit of any of the persons named in Civil Code Section 9100 so as to give a right of action to such persons or their assigns in any suit brought upon this bond.

It is further stipulated and agreed that the Surety on this bond shall not be exonerated or released from the obligation of this bond by any change, extension of time for performance, addition, alteration or modification in, to, or of any contract, plans, specifications, or agreement pertaining or relating to any scheme or work of improvement herein above described, or pertaining or relating to the furnishing of labor, materials, or equipment therefore, nor by any change or modification of any terms of payment or extension of the time for any payment pertaining or relating to any scheme or work of improvement herein above described, nor by any rescission or attempted rescission or attempted rescission of the contract, agreement or bond, nor by any conditions precedent or subsequent in the bond attempting to limit the right of recovery of claimants otherwise entitled to recover under any such contract or agreement or under the bond, nor by any fraud practiced by any person other than the claimant seeking to recover on the bond and that

this bond be construed most strongly against the Surety and in favor of all persons for whose benefit such bond is given, and under no circumstances shall Surety be released from liability to those for whose benefit such bond has been given, by reason of any breach of contract between the owner or City and original contractor or on the part of any obligee named in such bond, but the sole conditions of recovery shall be that claimant is a person described in Civil Code Section 9100, and has not been paid the full amount of his claim and that Surety does hereby waive notice of any such change, extension of time, addition, alteration or modification herein mentioned, including but not limited to the provisions of sections 2819 and 2845 of the California Civil Code.

IN WITNESS WHEREOF, we have hereunto set our hands and seals this _____ day of _____, 20__.

(Corporate Seal)

_____
Contractor/Principal

By _____

Title _____

(Corporate Seal)

_____
Surety

By _____
Attorney-in-Fact

(Attach Attorney-in-Fact Certificate)

Title _____

Notary Acknowledgment

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STATE OF CALIFORNIA
COUNTY OF _____

On _____, 20___, before me, _____, Notary Public, personally

appeared _____, who proved to me on the basis of satisfactory

evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____

Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

☐ Individual
☐ Corporate Officer

_____
Title(s)

☐ Partner(s) ☐ Limited ☐ General
☐ Attorney-In-Fact
☐ Trustee(s)
☐ Guardian/Conservator
☐ Other:

Signer is representing:
Name Of Person(s) Or Entity(ies)

_____

_____

DESCRIPTION OF ATTACHED DOCUMENT

_____
Title or Type of Document

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Number of Pages

_____
Date of Document

_____
Signer(s) Other Than Named Above

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COUNTY OF _____

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appeared _____, who proved to me on the basis of satisfactory

evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

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Signature of Notary Public

OPTIONAL

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CAPACITY CLAIMED BY SIGNER

☐ Individual
☐ Corporate Officer

_____
Title(s)

☐ Partner(s) ☐ Limited ☐ General
☐ Attorney-In-Fact
☐ Trustee(s)
☐ Guardian/Conservator
☐ Other:

Signer is representing:
Name Of Person(s) Or Entity(ies)

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DESCRIPTION OF ATTACHED DOCUMENT

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Title or Type of Document

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Number of Pages

_____
Date of Document

_____
Signer(s) Other Than Named Above

NOTE: This acknowledgment is to be completed for the Attorney-in-Fact. The Power-of-Attorney to local representatives of the bonding company must also be attached.

END OF PAYMENT BOND

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00 72 13 – GENERAL CONDITIONS

ARTICLE 1 DEFINED TERMS

Whenever used in the Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof. In addition to terms specifically defined below, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.

A. Act of God – An earthquake of magnitude of 3.5 or higher on the Richter scale or a tidal wave.

B. Addenda -- Written or graphic instruments issued prior to the submission of Bids which clarify, correct, or change the Contract Documents.

C. Additional Work -- New or unforeseen work will be classified as "Additional Work" when the City's Representative determines that it is not covered by the Contract.

D. Applicable Laws -- The laws, statutes, ordinances, rules, codes, regulations, permits, and licenses of any kind, issued by local, state or federal governmental authorities or private authorities with jurisdiction (including utilities), to the extent they apply to the Work.

E. Bid -- The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices and other terms for the Work to be performed.

F. Bidder -- The individual or entity who submits a Bid directly to the City.

G. Caltrans Standard Specifications - Standard Specifications of the State of California, Department of Transportation, 2018. Any reference therein to a State agency or officer shall be interpreted as if the corresponding City office or agent acting under this contract were so specified.

H. Caltrans Standard Plans - Standard plans of the State of California, Department of Transportation, 2018. All metric measurements or quantities in the Caltrans Standard Plans shall be disregarded, and equivalent United States measures used.

I. Change Order ("CO") -- A document that authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Contract, in accordance with the Contract Documents and in the form contained in the Contract Documents.

J. Change Order Request ("COR") -- A request made by the Contractor for an adjustment in the Contract Price and/or Contract Times as the result of a Contractor-claimed change to the Work. This term may also be referred to as a Change Order Proposal ("COP"), or Request for Change ("RFC").

K. City -- The City of Milpitas.

L. City Council, Council -- The City Council of the City.

M. City's Representative -- The individual or entity as identified in the Special Conditions to act as the City's Representative.

N. Claim -- A demand or assertion by the City or Contractor seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.

O. Contract -- The entire integrated written agreement between the City and Contractor concerning the Work. "Contract" may be used interchangeably with "Agreement" in the Contract Documents. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral, and includes all Contract Documents.

P. Contract Documents -- The documents listed in Section 00 52 13, Article 5. Some documents provided by the City to the Bidders and Contractor, including but not limited to reports and drawings of subsurface and physical conditions are not Contract Documents.

Q. Contract Price -- Amount to be paid by the City to the Contractor as full compensation for the performance of the Contract and completion of the Work, subject to any additions or deductions as provided in the Contract Documents, and including all applicable taxes and costs.

R. Contract Times -- The number of days or the dates stated in the Contract Documents to: achieve defined Milestones, if any; and to complete the Work so that it is ready for final payment.

S. Contractor -- The individual or entity with which the City has contracted for performance of the Work.

T. Contractor's Designated On-Site Representative -- The Contractor's Designated On-Site Representative will be as identified in Section 00 72 13, Article 3 and shall not be changed without prior written consent of the City.

U. Daily Rate -- The Daily Rate stipulated in the Contract Documents as full compensation to the Contractor due to the City's unreasonable delay to the Project that was not contemplated by the parties.

V. Day -- A calendar day of 24 hours measured from midnight to the next midnight.

W. Defective Work -- Work that is unsatisfactory, faulty, or deficient; or that does not conform to the Contract Documents; or that does not meet the requirements of any inspection, reference standard, test, or approval referenced in the Contract Documents.

X. Demobilization -- The complete dismantling and removal by the Contractor of all of the Contractor's temporary facilities, equipment, and personnel at the Site.

Y. Drawings -- That part of the Contract Documents prepared by of the Engineer of Record which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings and other Contractor submittals are not Drawings as so defined.

Z. Effective Date of the Contract -- The date indicated in the Contract on which it becomes effective, but if no such date is indicated, it means the date on which the Contract is signed and delivered by the last of the two parties to sign and deliver.

AA. Engineer, whenever not qualified, shall mean the City Engineer or its designee, acting either directly or through properly authorized agents, such agents acting severally within the scope of the particular duties entrusted to them. On all questions concerning the acceptance of materials, machinery, the classifications of material, the execution of work, conflicting interest of the contractors performing related work and the determination of costs, the decision of the Engineer, duly authorized by the City Council, shall be binding and final upon both parties.

BB. Engineer of Record -- The individual, partnership, corporation, joint venture, or other legal entity named as such in Section 00 73 13, Article 1.1. or any succeeding entity designated by the City.

CC. Hazardous Waste -- The term "Hazardous Waste" shall have the meaning provided in Section 104 of the Solid Waste Disposal Act (42 U.S.C. § 6903) as amended from time to time or, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a class I, class II, or class III disposal site in accordance with provisions of existing law, whichever is more restrictive.

DD. Holiday – The Holidays are defined as legal Federal, State, and City holidays including:

New Year's Day - January 1
Martin Luther King Jr.'s Birthday – Third Monday in January
President's Day – Third Monday in February
Cesar Chavez Day – March 31
Memorial Day - Last Monday in May
Independence Day - July 4
Labor Day - First Monday in September
Veteran's Day - November 11
Thanksgiving Day - Fourth Thursday in November
Friday after Thanksgiving
Christmas Eve – December 24
Christmas Day - December 25

If any Holiday listed above falls on a Saturday, Saturday and the preceding Friday are both Holidays. If the Holiday should fall on a Sunday, Sunday and the following Monday are both Holidays.

EE. Notice of Award -- The written notice by the City to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, the City will sign and deliver the Contract.

FF. Notice of Completion -- The form which may be executed by the City and recorded by the county where the Project is located constituting final acceptance of the Project.

GG. Notice to Proceed -- A written notice given by the City to Contractor fixing the date on which the Contractor may proceed with the Work and when Contract Times will commence to run.

HH. Project -- The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.

II. Recyclable Waste Materials -- Materials removed from the Site which are required to be diverted to a recycling center rather than an area landfill. Recyclable Waste Materials include asphalt, concrete, brick, concrete block, and rock.

JJ. Schedule of Submittals -- A schedule, prepared and maintained by Contractor, of required submittals and the time requirements to facilitate scheduled performance of related construction activities.

KK. Shop Drawings -- All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.

LL. Specifications -- That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable thereto.

MM. Stop Payment Notice -- A written notice as defined in Civil Code section 8044.

NN. Subcontractor -- An individual or entity other than a Contractor having a contract with any other entity than the City for performance of any portion of the Work at the Site.

OO. Submittal -- Written and graphic information and physical samples prepared and supplied by the Contractor demonstrating various portions of the Work.

PP. Successful Bidder -- The Bidder submitting a responsive Bid to whom the City makes an award.

QQ. Supplier -- A manufacturer, fabricator, supplier, distributor, material man, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment used in the performance of the Work or to be incorporated in the Work.

RR. Underground Facilities -- All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.

SS. Unit Price Work -- Work to be paid for on the basis of unit prices as provided by the Contractor in its bid or as adjusted in accordance with the Contract Documents.

TT. Warranty -- A written guarantee provided to the City by the Contractor that the Work will remain free of defects and suitable for its intended use for the period required by the Contract Documents or the longest period permitted by the law of this State, whichever is longer.

UU. Work -- The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.

ARTICLE 2 CONTRACT DOCUMENTS

A. **Contract Documents.** The Contract Documents are complementary, and what is called for by one shall be as binding as if called for by all.

B. **Interpretations.** The Contract Documents are intended to be fully cooperative and complementary. If the Contractor observes that any documents are in conflict, the Contractor shall promptly notify the Engineer in writing. In case of conflicts between the Contract Documents, the order of precedence shall be as follows:

1. Change Orders
2. Contract
3. Addenda
4. Special Conditions
5. Technical Specifications
6. Plans (Contract Drawings)
7. General Conditions
8. Instructions to Bidders
9. Notice Inviting Bids
10. Contractor's Bid Forms
11. City Standard Specifications
12. City Standard Drawings
13. Caltrans Standard Specifrications, except Division 1
14. Caltrans Standard Plans
15. Reference Documents

With reference to the Drawings, the order of precedence shall be as follows:

1. Figures govern over scaled dimensions
2. Detail drawings govern over general drawings
3. Addenda or Change Order drawings govern over Contract Drawings
4. Contract Drawings govern over Standard Drawings
5. Contract Drawings govern over Shop Drawings

C. **Conflicts in Contract Documents.** Notwithstanding the orders of precedence established above, in the event of conflicts, the higher standard, higher quality, and most expensive shall always apply.

D. **Organization of Contract Documents.**Organization of the Contract Documents into divisions, sections, and articles, and arrangement of drawings shall not control the Contractor in dividing Project Work among subcontractors or in establishing the extent of Work to be performed by any trade.

ARTICLE 3 PRECONSTRUCTION AND CONSTRUCTION COMMUNICATION

Before any Work at the site is started, a conference attended by the City, Contractor, City's Representative, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to herein, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

At this conference the City and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit instructions, receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

ARTICLE 4 CONTRACT DOCUMENTS: COPIES & MAINTENANCE

Contractor will be furnished, free of charge, **five (5)** copies of the Contract Documents. Additional copies may be obtained at cost of reproduction.

Contractor shall maintain a clean, undamaged set of Contract Documents, including submittals, at the Project site.

ARTICLE 5 EXAMINATION OF DRAWINGS, SPECIFICATIONS AND SITE OF WORK

A. **Examination of Contract Documents.** Before commencing any portion of the Work, Contractor shall again carefully examine all applicable Contract Documents, the Project site, and other information given to Contractor as to materials and methods of construction and other Project requirements. Contractor shall immediately notify the Engineer of any potential error, inconsistency, ambiguity, conflict, or lack of detail or explanation. If Contractor performs, permits, or causes the performance of any Work which is in error, inconsistent or ambiguous, or not sufficiently detailed or explained, Contractor shall bear any and all resulting costs, including, without limitation, the cost of correction. In no case shall the Contractor or any subcontractor proceed with Work if uncertain as to the applicable requirements.

B. **Additional Instructions.** After notification of any error, inconsistency, ambiguity, conflict, or lack of detail or explanation, the Engineer will provide any required additional instructions, by means of drawings or other written direction, necessary for proper execution of Work.

C. **Quality of Parts, Construction and Finish.** All parts of the Work shall be of the best quality of their respective kinds and the Contractor must use all diligence to inform itself fully as to the required construction and finish.

D. **Contractor's Variation from Contract Document Requirements.** If it is found that the Contractor has varied from the requirements of the Contract Documents including the requirement to comply with all applicable laws, ordinances, rules and regulations, the Engineer may at any time, before or after completion of the Work, order the improper Work removed, remade or replaced by the Contractor at the Contractor's expense.

ARTICLE 6 EXISTENCE OF UTILITIES AT THE WORK SITE

A. The City has endeavored to determine the existence of utilities at the Project site from the records of the owners of known utilities in the vicinity of the Project. The positions of these utilities as derived from such records are shown on the Plans.

B. Unless indicated otherwise on the Plans and Specifications, no excavations were made to verify the locations shown for underground utilities. The service connections to these utilities may not be not shown on the Plans. Any connections shown on the Plans are general locations. It shall be the responsibility of the Contractor to determine the exact location of all service connections. The Contractor shall make its own investigations, including exploratory excavations, to determine the locations and type of service connections, prior to commencing Work which could result in damage to such utilities. The Contractor shall immediately notify the City in writing of any utility discovered in a different position than shown on the Plans or which is not shown on the Plans.

C. If applicable, all water meters, water valves, fire hydrants, electrical utility vaults, telephone vaults, gas utility valves, and other subsurface structures shall be relocated or adjusted to final grade by the Contractor. Locations of existing utilities shown on the Plans are approximate and may not be complete. The Contractor shall be responsible for coordinating its Work with all utility companies during the construction of the Work.

D. Notwithstanding the above, pursuant to section 4215 of the Government Code, the City has the responsibility to identify, with reasonable accuracy, main or trunkline facilities on the plans and specifications. In the event that main or trunkline utility facilities are not identified with reasonable accuracy in the plans and specifications made a part of the invitation for Bids, the City shall assume the responsibility for their timely removal, relocation, or protection.

E. Contractor, except in an emergency, shall contact the appropriate regional notification center (USA North), Northern California Underground Service Alert at 811 or 1-800-227-2600 or on-line at usanorth811.org at least two working days prior to commencing any excavation if the excavation will be performed in an area which is known, or reasonably should be known, to contain subsurface installations other than the underground facilities owned or operated by the City, and obtain an inquiry identification number from that notification center. No excavation shall be commenced or carried out by the Contractor unless such an inquiry identification

number has been assigned to the Contractor or any subcontractor of the Contractor and the City has been given the identification number by the Contractor.

ARTICLE 7 SOILS INVESTIGATIONS

A. Reports and Drawings. The Special Conditions identify:

1. those reports known to the City of explorations and tests of subsurface conditions at or contiguous to the site; and

2. those drawings known to the City of physical conditions relating to existing surface or subsurface structures at the site (except Underground Facilities).

B. Limited Reliance by Contractor on Technical Data Authorized. Contractor may rely upon the accuracy of the "technical data" contained in such reports and drawings, which were expressly not created or obtained to evaluate or assist in the evaluation of constructability, and are not Contract Documents. Contractor shall make its own interpretation of the "technical data" and shall be solely responsible for any such interpretations. Except for reliance on the accuracy of such "technical data," Contractor may not rely upon or make any claim against the City, City's Representative, or Engineer of Record, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including without limitation any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or

2. other data, interpretations, opinions, conclusions and information contained in such reports or shown or indicated in such drawings; or

3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.

ARTICLE 8 CONTRACTOR'S SUPERVISION

Contractor shall continuously keep at the Project site, a competent and experienced full-time Project superintendent acceptable to the City. Superintendent must be able to proficiently speak, read and write in English and shall have the authority to make decisions on behalf of the Contractor.Contractor shall continuously provide efficient supervision of the Project. Contractor's Superintendent shall not be replaced without City's express written consent and the replacement Superintendent shall have equal or more qualifying and relevant experience.

ARTICLE 9 WORKERS

A. Contractor shall at all times enforce strict discipline and good order among its employees. Contractor shall not employ on the Project any unfit person or any one not skilled in the Work assigned to him or her.

B. Any person in the employ of the Contractor whom the City may deem incompetent or unfit shall be dismissed from the Work and shall not be employed on this Project.

C. The Contractor's workers shall not make any obscene, discriminatory, or hateful gestures, acts, or statements, including the use of foul language or screaming/yelling at City employees or others; or wear any obscene, discriminatory, or hateful graphics or statements on clothing of any sort. Any violations of the requirements of this Section are grounds for immediate termination of the Contract by the City.

ARTICLE 10 INDEPENDENT CONTRACTORS

Contractor shall be an independent contractor for the City and not an employee. Contractor understands and agrees that it and all of its employees shall not be considered officers, employees, or agents of City and are not entitled to benefits of any kind normally provided employees of City, including but not limited to, state unemployment compensation or workers' compensation. Contractor assumes full responsibility for the acts and omissions of its employees or agents related to the Work.

ARTICLE 11 SUBCONTRACTS

A. Contractor agrees to bind every subcontractor to the terms of the Contract Documents as far as such terms are applicable to subcontractor's portion of the Work. Contractor shall be as fully responsible to the City for the acts and omissions of its subcontractors and of persons either directly or indirectly employed by its subcontractors, as Contractor is for acts and omissions of persons directly employed by Contractor. Nothing contained in these Contract Documents shall create any contractual relationship between any subcontractor and the City.

B. The City reserves the right to accept all subcontractors. The City's acceptance of any subcontractor under this Contract shall not in any way relieve Contractor of its obligations in the Contract Documents.

C. Prior to substituting any subcontractor listed in the Bid Forms, Contractor must comply with the requirements of the Subletting and Subcontracting Fair Practices Act pursuant to California Public Contract Code section 4100 et seq.

ARTICLE 12 VERIFICATION OF EMPLOYMENT ELIGIBILITY

By executing this Contract, Contractor verifies that it fully complies with all requirements and restrictions of state and federal law respecting the employment of undocumented aliens, including, but not limited to, the Immigration Reform and Control Act of 1986, as may be amended from time to time, and shall require all subcontractors, sub-subcontractors and consultants to comply with the same. Each person executing this Contract on behalf of Contractor verifies that he or she is a duly authorized officer of Contractor and that any of the following shall be grounds for the City to terminate the Contract for cause: (1) failure of the Contractor or its subcontractors, sub-subcontractors or consultants to meet any of the requirements provided for in this Article; (2) any misrepresentation or material omission concerning compliance with such requirements; or (3) failure to immediately remove from the Work any person found not to be in compliance with such requirements.

ARTICLE 13 REQUESTS FOR SUBSTITUTION

A. For the purposes of this provision, the term “substitution” shall mean the substitution of any material, method or service substantially equal to or better in every respect to that indicated in the Standard Specifications or otherwise referenced herein.

B. Pursuant to Public Contract Code section 3400(b), the City may make a finding that is described in the Notice Inviting Bids that designates certain products, things, or services by specific brand or trade name.

C. Unless specifically designated in the Special Conditions, whenever any material, process, or article is indicated or specified by grade, patent, or proprietary name or by name of manufacturer, such specifications shall be deemed to be used for the purpose of facilitating the description of the material, process, or article desired and shall be deemed to be followed by the words “or equal.” Contractor may, unless otherwise stated, offer for substitution any material, process, or article which may be substantially equal to or better in every respect to that so indicated or specified in the Contract Documents. However, the City has adopted uniform standards for certain materials, processes, and articles.

D. The Contractor shall submit substitution requests, together with substantiating data, for substitution of any “or equal” material, process, or article no later than 15 (15) calendar days after award of Contract. Provisions regarding submission of substitution requests shall not in any way authorize an extension of time for the performance of this Contract. If a substitution request is rejected by the City, the Contractor shall provide the material, method or service specified herein. The City shall not be responsible for any costs incurred by the Contractor associated with substitution requests. The burden of proof as to the equality of any material, process, or article shall rest with the Contractor. The Engineer has the complete and sole discretion to determine if a material, process, or article is substantially equal to or better than that specified and to approve or reject all substitution requests.

E. Substantiating data as described above shall include, at a minimum, the following information:

1. A signed affidavit from the Contractor stating that the material, process, or article proposed as a substitution is substantially equal to or better than that specified in every way except as may be listed on the affidavit.

2. Illustrations, specifications, catalog cut sheets, and any other relevant data required to prove that the material, process, or article is substantially equal to or better than that specified.

3. A statement of the cost implications of the substitution being requested, indicating whether and why the proposed substitution will reduce or increase the amount of the contract.

4. Information detailing the durability and lifecycle costs of the proposed substitution.

F. Failure to submit all the required substantiating data detailed above in a timely manner so that the substitution request can be adequately reviewed may result in rejection of the substitution request. The Engineer is not obligated to review multiple submittals related the same substitution request resulting from the Contractor's failure to initially submit a complete package.

G. Time limitations within this Article shall be strictly complied with and in no case will an extension of time for completion of the contract be granted because of Contractor's failure to provide substitution requests at the time and in the manner described herein.

H. The Contractor shall bear the costs of all City work associated with the review of substitution requests.

I. If substitution requests approved by the Engineer require that Contractor furnish materials, methods or services more expensive than that specified, the increased costs shall be borne by Contractor.

ARTICLE 14 SHOP DRAWINGS

A. Contractor shall check and verify all field measurements and shall submit with such promptness as to provide adequate time for review and cause no delay in its own Work or in that of any other contractor, subcontractor, or worker on the Project, six (6) copies of all shop drawings, calculations, schedules, and materials list, and all other provisions required by the Contract Documents. Contractor shall sign all submittals affirming that submittals have been reviewed and approved by Contractor prior to submission to Engineer. Each signed submittal shall affirm that the submittal meets all the requirements of the Contract Documents except as specifically and clearly noted and listed on the transmittal letter of the submittal.

B. Contractor shall make any corrections required by the Engineer, and file with the Engineer six (6) corrected copies each, and furnish such other copies as may be needed for completion of the Work. Engineer's acceptance of shop drawings shall not relieve Contractor from responsibility for deviations from the Contract Documents unless Contractor has, in writing, called Engineer's attention to such deviations at time of submission and has secured the Engineer's written acceptance. Engineer's acceptance of shop drawings shall not relieve Contractor from responsibility for errors in shop drawings.

ARTICLE 15 SUBMITTALS

A. Contractor shall furnish to the Engineer for approval, prior to purchasing or commencing any Work, a log of all samples, material lists and certifications, mix designs, schedules, and other submittals, as required in the Contract Documents. The log shall indicate whether samples will be provided in accordance with other provisions of this Contract.

B. Contractor will provide samples and submittals, together with catalogs and supporting data required by the Engineer, to the Engineer within a reasonable time period to provide for adequate review and avoid delays in the Work.

C. These requirements shall not authorize any extension of time for performance of this Contract. Engineer will check and approve such samples, but only for conformance with design concept of work and for compliance with information given in the Contract Documents. Work shall be in accordance with approved samples and submittals.

ARTICLE 16 MATERIALS

A. Except as otherwise specifically stated in the Contract Documents, Contractor shall provide and pay for all materials, labor, tools, equipment, lights, power, transportation, superintendence, temporary constructions of every nature, and all other services and facilities of every nature whatsoever necessary to execute and complete this Contract within specified time.

B. Unless otherwise specified, all materials shall be new and the best of their respective kinds and grades as noted and/or specified, and workmanship shall be of good quality.

C. Materials shall be furnished in ample quantities and at such times as to ensure uninterrupted progress of the Work and shall be stored properly and protected as required by the Contract Documents. Contractor shall be entirely responsible for damage or loss by weather or other causes to materials or Work.

D. No materials, supplies, or equipment for Work under this Contract shall be purchased subject to any chattel mortgage or under a conditional sale or other agreement by which an interest therein or in any part thereof is retained by the seller or supplier. Contractor warrants good title to all material, supplies, and equipment installed or incorporated in the Work and agrees upon completion of all work to deliver the Project, to the City free from any claims, liens, or charges.

E. Materials shall be stored on the Project site in such manner so as not to interfere with any operations of the City or any independent contractor.

F. Contractor shall verify all measurements, dimensions, elevations, and quantities before ordering any materials or performing any Work, and the City shall not be liable for Contractor's failure to so. No additional compensation, over and above payment for the actual quantities at the prices set out in the Bid Form, will be allowed because of differences between actual measurements, dimension, elevations and quantities and those indicated on the Plans and in the Specifications.Any difference therein shall be submitted to the Engineer for consideration before proceeding with the Work.

G. The City shall provide compensation for actual quantities of materials installed in accordance with the Contract Documents and at the price set forth in the Contractor's bid and/or executed change order. The City is not obligated to pay for materials stored on/off site but not yet installed in accordance with the Contract Documents.

ARTICLE 17 PERMITS AND LICENSES

A. Contractor shall obtain all other necessary permits and licenses for the construction of the Project, including encroachment permits, and shall pay all fees required by law and shall comply with all laws, ordinances, rules and regulations relating to the Work and to the preservation of public health and safety. Before acceptance of the Project, the Contractor shall submit all licenses, permits, certificates of inspection and required approvals to the City.Any construction permits required by City for performing any work on this project will be issued by City at no charge to Contractor. Contractor and all subcontractors shall maintain a City business license at all times they are performing the Work.

ARTICLE 18 TRENCHES

A. **Trenches Five Feet or More in Depth.** Contractor shall submit to the Engineer at the preconstruction meeting, a detailed plan showing the design of shoring, bracing, sloping or other provisions to be made for worker protection from hazards of caving ground during the excavation of any trench or trenches five feet or more in depth. If such plan varies from shoring system standards established by the Construction Safety Orders of the California Code of Regulations, Department of Industrial Relations, the plan shall be prepared by a California registered civil or structural engineer. The plan shall not be less effective than the shoring, bracing, sloping, or other provisions of the Construction Safety Orders, as defined in the California Code of Regulations. The Contractor shall designate in writing the "competent person" as defined in Title 8, California Code of Regulations, who shall be present at the Work Site each day that trenching/excavation is in progress. The "competent person" shall prepare and provide daily trenching/excavation inspection reports to the Engineer. Contractor shall also submit a copy of its annual California Occupational Safety and Health Administration (Cal/OSHA) trench/excavation permit. Contractor shall contact the regional notification center, "Underground Service Alert" ("USA"), and schedule the work to allow ample time for the center to notify its members and, if necessary, for any member to field locate and mark its facilities. Contractor is charged with knowledge of all subsurface conditions reflected in USA records or shown on plans. Prior to commencing excavation or trenching work, Contractor shall provide City with copies of all USA records secured by Contractor.

A. **Excavations Deeper than Four Feet.** If the Work involves excavating trenches or other excavations that extend deeper than four feet below the surface, Contractor shall promptly, and before the excavation is further disturbed, notify the City in writing of any of the following conditions:

1. Material that the Contractor believes may be material that is hazardous waste, as defined in section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law.

2. Subsurface or latent physical conditions at the site differing from those indicated.

3. Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract

The City shall promptly investigate the conditions, and if it finds that the conditions do so materially differ, or do involve hazardous waste, and cause a decrease or increase in Contractor's cost of, or the time required for, performance of any part of the Work, shall issue a change order under the procedures described in the Contract Documents.

In the event that a dispute arises between the City and the Contractor as to whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the Contractor's cost of, or time required for, performance of any part of the Work, the Contractor shall not be excused from any scheduled completion date provided for by the Contract, but shall proceed with all Work to be performed under the Contract. Contractor shall retain any and all rights provided either by contract or by law which pertain to the resolution of disputes and protests between the parties.

Contractor shall bear the risk that Underground Facilities not owned or built by City may differ in nature or locations shown in information made available by City, in information on file at USA, or otherwise reasonably available to Contractor. Underground Facilities are inherent in construction involving digging of trenches or other excavations and Contractor is to apply its skill and industry to verify the information available.

ARTICLE 19 DIVERSION OF RECYCLABLE WASTE MATERIALS

In compliance with the applicable City's waste reduction and recycling efforts, Contractor shall divert all Recyclable Waste Materials to appropriate recycling centers as required for compliance with the local jurisdiction's waste diversion ordinances, and provide the City Engineer with detailed records and quantities of the materials that were sent to recycling centers. Contractor will be required to submit weight tickets and written proof of diversion with its monthly progress payment requests. Contractor shall complete and execute any certification forms required by City or other applicable agencies to document Contractor's compliance with these diversion requirements. All costs incurred for these waste diversion efforts shall be the responsibility of the Contractor.

ARTICLE 20 REMOVAL OF HAZARDOUS MATERIALS

Should Contractor encounter material reasonably believed to be polychlorinated biphenyl (PCB) or other toxic wastes and hazardous materials which have not been rendered harmless at the Project site, the Contractor shall immediately report the condition to the City in writing and contact any services required to directly remove and/or abate PCBs and other toxic wastes and hazardous materials. The Work in the affected area shall not thereafter be resumed except by written agreement of the City and Contractor.

ARTICLE 21 SANITARY FACILITIES

Contractor shall provide sanitary temporary toilet buildings and hand washing facilities for the use of all workers. All toilets and hand washing facilities shall comply with all applicable federal, state and local laws, codes, ordinances, and regulations. Toilets shall be kept supplied with toilet paper

and shall have workable door fasteners. Toilets and hand washing facilities shall be serviced no less than once weekly and shall be present in a quantity of not less than 1 per 20 workers as required by Cal/OSHA regulations. The toilets and hand washing facilities shall be maintained in a sanitary condition at all times. Use of toilet and hand washing facilities in the Work under construction shall not be permitted. Any other sanitary facilities required by Cal/OSHA shall be the responsibility of the Contractor.

During the progress of the Work, Contractor shall keep the Site and the Project free from accumulations of waste materials, rubbish and other debris resulting from the Work. Waste shall be removed as a minimum weekly. At the completion of the Work, Contractor shall remove all waste materials, rubbish and debris from and about the Site as well as all tools, appliances, construction equipment and machinery and surplus materials. Contractor shall leave the premises clean and ready for occupancy by City at Substantial Completion of Work. Contractor shall restore to original condition all property not designated for alteration by Contract Documents.

ARTICLE 22 AIR POLLUTION CONTROL

Contractor shall comply with all air pollution and dust control rules, regulations, ordinances and statutes, including, but not limited to, those required by thet Air Quality Management District. All containers of paint, thinner, curing compound, solvent or liquid asphalt shall be labeled to indicate that the contents fully comply with the applicable material requirements.

ARTICLE 23 LAYOUT AND FIELD ENGINEERING

All field engineering required for laying out the Work and establishing grades for earthwork operations shall be furnished by the Contractor at its expense.

ARTICLE 24 TESTS AND INSPECTIONS

A. If the Contract Documents, the Engineer, or any instructions, laws, ordinances, or public authority requires any part of the Work to be tested or Approved, Contractor shall provide the Engineer at least two (2) working days' notice of its readiness for observation or inspection. If inspection is by a public authority other than the City, Contractor shall promptly inform the City of the date fixed for such inspection. Required certificates of inspection (or similar) shall be secured by Contractor. Costs for City testing and City inspection shall be paid by the City. Costs of tests for Work found not to be in compliance shall be paid by the Contractor.

B. If any Work is done or covered up without the required testing or approval, the Contractor shall uncover or deconstruct the Work, and the Work shall be redone after completion of the testing at the Contractor's cost in compliance with the Contract Documents.

C. Where inspection and testing are to be conducted by an independent laboratory or agency, materials or samples of materials to be inspected or tested shall be selected by such laboratory or agency, or by the City, and not by Contractor. All tests or inspections of materials shall be made in accordance with the commonly recognized standards of national organizations.

D. In advance of manufacture of materials to be supplied by Contractor which must be tested or inspected, Contractor shall notify the City so that the City may arrange for testing at the source of supply. Any materials which have not satisfactorily passed such testing and inspection shall not be incorporated into the Work.

E. If the manufacture of materials to be inspected or tested will occur in a plant or location greater than sixty (60) miles from the City, the Contractor shall pay for any excessive or unusual costs associated with such testing or inspection, including but not limited to excessive travel time, standby time and required lodging.

F. Reexamination of Work may be ordered by the City. If so ordered, Work must be uncovered or deconstructed by Contractor. If Work is found to be in accordance with the Contract Documents, the City shall pay the costs of reexamination and reconstruction. If such work is found not to be in accordance with the Contract Documents, Contractor shall pay all costs.

ARTICLE 25 PROTECTION OF WORK AND PROPERTY

A. The Contractor shall be responsible for all damages to persons or property that occurs as a result of the Work. Contractor shall be responsible for the proper care and protection of all materials delivered and Work performed until completion and final Acceptance by the City. All Work shall be solely at the Contractor's risk. Contractor shall adequately protect adjacent property from settlement or loss of lateral support as necessary. Contractor shall comply with all applicable safety laws and building codes to prevent accidents or injury to persons on, about, or adjacent to the Project site where Work is being performed. Contractor shall erect and properly maintain at all times, as required by field conditions and progress of work, all necessary safeguards, signs, barriers, lights, and watchmen for protection of workers and the public, and shall post danger signs warning against hazards created in the course of construction.

B. In an emergency affecting safety of life or of work or of adjoining property, Contractor, without special instruction or authorization from the Engineer, is hereby permitted to act to prevent such threatened loss or injury; and Contractor shall so act, without appeal, if so authorized or instructed by the Engineer or the City. Any compensation claimed by Contractor on account of emergency work shall be determined by and agreed upon by the City and the Contractor.

C. Contractor shall designate a qualified and experienced safety representative at the site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

ARTICLE 26 CONTRACTOR'S MEANS AND METHODS

Contractor is solely responsible for the means and methods utilized to perform the Work. In no case shall the Contractor's means and methods deviate from commonly used industry standards.

ARTICLE 27 AUTHORIZED REPRESENTATIVES

The City shall designate representatives, who shall have the right to be present at the Project site at all times. The City may designate an inspector who shall have the right to observe all of the

Contractor's Work. The inspector shall not be responsible for the Contractor's failure to carry out the Work in accordance with the Contract Documents.Contractor shall provide safe and proper facilities for such access.

ARTICLE 28 HOURS OF WORK

A. As provided in Article 3 (commencing at section 1810), Chapter 1, Part 7, Division 2 of the Labor Code, Contractor stipulates that eight (8) hours of labor shall constitute a legal day's work. The time of service of any worker employed at any time by the Contractor or by any subcontractor on any subcontract under this Contract upon the Work or upon any part of the Work contemplated by this Contract is limited and restricted to eight (8) hours during any one calendar day and 40 hours during any one calendar week, except as hereinafter provided. Notwithstanding the provisions herein above set forth, work performed by employees of Contractor in excess of eight (8) hours per day, and 40 hours during any one week, shall be permitted upon this public work upon compensation for all hours worked in excess of eight (8) hours per day at not less than one and one-half times the basic rate of pay.

B. The Contractor and every subcontractor shall keep an accurate record showing the name of and actual hours worked each calendar day and each calendar week by each worker employed in connection with the Work or any part of the Work contemplated by this Contract. The record shall be kept open at all reasonable hours to the inspection of the City and to the Division of Labor Law Enforcement, Department of Industrial Relations of the State of California.

C. The Contractor shall pay to the City a penalty of twenty-five dollars ($25.00) for each worker employed in the execution of this Contract by the Contractor or by any subcontractor for each calendar day during which such worker is required or permitted to work more than eight (8) hours in any calendar day and 40 hours in any one calendar week in violation of the provisions of Article 3 (commencing at section 1810), Chapter 1, Part 7, Division 2 of the Labor Code.

D. Any work necessary to be performed after regular working hours, or on Saturdays and Sundays or other holidays, shall be performed without additional expense to the City. Contractor shall also timely notify the City when work will be perfomed outside regular working hours or on weekends or holidays.

E. City will provide inspection during normal working hours from 7:00 a.m. to 3:30 p.m. Monday through Friday. Inspection before or after this time will be charged to the Contractor as reimbursable inspection time. Inspections on weekends requires two days' notice for review and approval. Upon written request and approval the 8.5 hour working day may be changed to other limits subject to city/county ordinance.

F. Refer to the most current version of the City of Milpitas Noise Abatement Ordinance, Ord. 196.6 of the Municipal Code Section V-213. It shall be unlawful for any person to engage or permit to engage in construction of any building or related road or walkway, pool, or landscape improvement or in the construction operations related thereto including to operate, permit, use, or cause to operate

any of the following at the Project site, other than between the hours of 7:00 a.m. to 7:00 p.m., Monday through Sunday, unless otherwise approved by the City:

1. Powered Vehicles

2. Construction Equipment

3. Loading and Unloading Vehicles

4. Domestic Power Tools

ARTICLE 29 PAYROLL RECORDS; LABOR COMPLIANCE

A. Pursuant to Labor Code section 1776, Contractor and all subcontractors shall maintain weekly certified payroll records, showing the names, addresses, Social Security numbers, work classifications, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by them in connection with the Work under this Contract. Contractor shall certify under penalty of perjury that records maintained and submitted by Contractor are true and accurate. Contractor shall also require subcontractor(s) to certify weekly payroll records under penalty of perjury.

B. In accordance with Labor Code section 1771.4, the Contractor and each subcontractor shall furnish the certified payroll records directly to the Department of Industrial Relations ("DIR") on the specified interval and format prescribed by the DIR, which may include electronic submission. Contractor shall comply with all requirements and regulations from the DIR relating to labor compliance monitoring and enforcement. The requirement to submit certified payroll records directly to the Labor Commissioner under Labor Code section 1771.4 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Section 1771.4.

C. Any stop orders issued by the Department of Industrial Relations against Contractor or any subcontractor that affect Contractor's performance of Work, including any delay, shall be Contractor's sole responsibility. Any delay arising out of or resulting from such stop orders shall be considered Contractor caused delay subject to any applicable liquidated damages and shall not be compensable by the City. Contractor shall defend, indemnify and hold the City, its officials, officers, employees and agents free and harmless from any claim or liability arising out of stop orders issued by the Department of Industrial Relations against Contractor or any subcontractor.

D. The payroll records described herein shall be certified and submitted by the Contractor at a time designated by the City. The Contractor shall also provide the following:

1. A certified copy of the employee's payroll records shall be made available for inspection or furnished to such employee or his or her authorized representative on request.

2. A certified copy of all payroll records described herein shall be made available for inspection or furnished upon request of the DIR.

E. Unless submitted electronically, the certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement ("DLSE") of the DIR or shall contain the same information as the forms provided by the DLSE.

F. Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency, the City, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement shall be marked or obliterated in such a manner as to prevent disclosure of an individual's name, address and social security number. The name and address of the Contractor awarded the Contract or performing the contract shall not be marked or obliterated.

G. In the event of noncompliance with the requirements of this Article, the Contractor shall have ten (10) calendar days in which to comply subsequent to receipt of written notice specifying in what respects the Contractor must comply with this Article. Should noncompliance still be evident after such 10-day period, the Contractor shall pay a penalty of one hundred dollars ($100.00) to the City for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, such penalties shall be withheld from progress payment then due.

H. The responsibility for compliance with this Article shall rest upon the Contractor.

ARTICLE 30 PREVAILING RATES OF WAGES

A. The Contractor is aware of the requirements of Labor Code sections 1720 *et seq.* and 1770 *et seq.*, as well as California Code of Regulations, Title 8, Section 16000 *et seq.* ("Prevailing Wage Laws"), which require the payment of prevailing wage rates and the performance of other requirements on certain "public works" and "maintenance" projects. Since this Project involves an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, and since the total compensation is $1,000 or more, Contractor agrees to fully comply with such Prevailing Wage Laws. The Contractor shall obtain a copy of the prevailing rates of per diem wages at the commencement of this Contract from the website of the Division of Labor Statistics and Research of the Department of Industrial Relations located at www.dir.ca.gov. In the alternative, the Contractor may view a copy of the prevailing rate of per diem wages which are on file at the City's Administration Office and shall be made available to interested parties upon request. Contractor shall make copies of the prevailing rates of per diem wages for each craft, classification, or type of worker needed to perform work on the Project available to interested parties upon request, and shall post copies at the Contractor's principal place of business and at the Project site. Contractor shall defend, indemnify and hold the City, its officials, officers, employees and authorized volunteers free and harmless from any claims, liabilities, costs, penalties or interest arising out of any failure or allege failure to comply with the Prevailing Wage Laws.

B. The Contractor shall forfeit as a penalty to the City not more than Two Hundred Dollars ($200.00), pursuant to Labor Code section 1775, for each calendar day, or

portion thereof, for each worker paid less than the prevailing wage rate as determined by the Director of the Department of Industrial Relations for such work or craft in which such worker is employed for any public work done under the Contract by it or by any subcontractor under it. The difference between such prevailing wage rate and the amount paid to each worker for each calendar day or portion thereof, for which each worker was paid less than the prevailing wage rate, shall be paid to each worker by the Contractor.

C. Contractor shall post, at appropriate conspicuous points on the Project site, a schedule showing all determined general prevailing wage rates and all authorized deductions, if any, from unpaid wages actually earned.

ARTICLE 31 PUBLIC WORKS CONTRACTOR REGISTRATION

Pursuant to Labor Code sections 1725.5 and 1771.1, the Contractor and its subcontractors must be registered with the Department of Industrial Relations prior to the execution of a contract to perform public works. By entering into this Contract, Contractor represents that it is aware of the registration requirement and is currently registered with the DIR. Contractor shall maintain a current registration for the duration of the Project. Contractor shall further include the requirements of Labor Code sections 1725.5 and 1771.1 in any subcontract and ensure that all subcontractors are registered at the time this Contract is entered into and maintain registration for the duration of the Project. Notwithstanding the foregoing, the contractor registration requirements mandated by Labor Code Sections 1725.5 and 1771.1 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Sections 1725.5 and 1771.1.

ARTICLE 32 EMPLOYMENT OF APPRENTICES

A. Contractor and all subcontractors shall comply with the requirements of Labor Code sections 1777.5 and 1777.6 in the employment of apprentices.

B. Information relative to apprenticeship standards, wage schedules, and other requirements may be obtained from the Director of Industrial Relations, ex officio the Administrator of Apprenticeship, San Francisco, California, or from the Division of Apprenticeship Standards and its branch offices.

C. Knowing violations of Labor Code section 1777.5 will result in forfeiture not to exceed one hundred dollars ($100.00) for each calendar day of non-compliance pursuant to Labor Code section 1777.7.

D. The responsibility for compliance with this Article shall rest upon the Contractor.

ARTICLE 33 NONDISCRIMINATION/EQUAL EMPLOYMENT OPPORTUNITY

Pursuant to Labor Code section 1735 and other applicable provisions of law, the Contractor and its subcontractors shall not discriminate against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, or any other classifications protected by law on this Project. The Contractor will take affirmative action to insure that employees are treated during employment or training without regard to their race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical

condition, marital status, sex, age, sexual orientation, or any other classifications protected by law.

Employment Eligibility; Contractor. By executing this Contract, Contractor verifies that it fully complies with all requirements and restrictions of state and federal law respecting the employment of undocumented aliens, including, but not limited to, the Immigration Reform and Control Act of 1986, as may be amended from time to time. Such requirements and restrictions include, but are not limited to, examination and retention of documentation confirming the identity and immigration status of each employee of the Contractor. Contractor also verifies that it has not committed a violation of any such law within the five (5) years immediately preceding the date of execution of this Contract, and shall not violate any such law at any time during the term of the Contract. Contractor shall avoid any violation of any such law during the term of this Contract by participating in an electronic verification of work authorization program operated by the United States Department of Homeland Security, by participating in an equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, or by some other legally acceptable method. Contractor shall maintain records of each such verification, and shall make them available to the City or its representatives for inspection and copy at any time during normal business hours. The City shall not be responsible for any costs or expenses related to Contractor's compliance with the requirements provided for or referred to herein.

Employment Eligibility; Subcontractors, Sub-subcontractors and Consultants. To the same extent and under the same conditions as Contractor, Contractor shall require all of its subcontractors, sub-subcontractors and consultants performing any part of the Work or of this Contract to make the same verifications and comply with all requirements and restrictions provided for herein.

Employment Eligibility; Failure to Comply. Each person executing this Contract on behalf of Contractor verifies that he or she is a duly authorized officer of Contractor, and understands that any of the following shall be grounds for the City to terminate the Contract for cause: (1) failure of Contractor or its subcontractors, sub-subcontractors or consultants to meet any of the requirements provided for herein; (2) any misrepresentation or material omission concerning compliance with such requirements; or (3) failure to immediately remove from the Work any person found not to be in compliance with such requirements.

ARTICLE 34 DEBARMENT OF CONTRACTORS AND SUBCONTRACTORS

Contractors or subcontractors may not perform work on a public works project with a subcontractor who is ineligible to perform work on a public project pursuant to Labor Code section 1777.1 or 1777.7. Any contract on a public works project entered into between a contractor and a debarred subcontractor is void as a matter of law. A debarred subcontractor may not receive any public money for performing work as a subcontractor on a public works contract. Any public money that is paid, or may have been paid to a debarred subcontractor by a contractor on the project shall be returned to the City. The Contractor shall be responsible for the payment of wages to workers of a debarred subcontractor who has been allowed to work on the project.

ARTICLE 35 LABOR/EMPLOYMENT SAFETY

The Contractor shall comply with all applicable laws and regulations of the federal, state, and local government, including Cal/OSHA requirements and requirements for verification of employees' legal right to work in the United States.

The Contractor shall maintain emergency first aid treatment for his employees which complies with the Federal Occupational Safety and Health Act of 1970 (29 U.S.C. § 651 *et seq.*), and California Code of Regulations, Title 8, Industrial Relations Division 1, Department of Industrial Relations, Chapter 4. The Contractor shall ensure the availability of emergency medical services for its employees in accordance with California Code of Regulations, Title 8, Section 1512.

The Contractor shall submit the Illness and Injury Prevention Program and a Project site specific safety program to the City prior to beginning Work at the Project site. Contractor shall maintain a confined space program that meets or exceeds the City Standards. Contractor shall adhere to the City's lock out tag out program.

ARTICLE 36 INSURANCE

The Contractor shall obtain, and at all times during performance of the Work of Contract, maintain all of the insurance described in this Article. Contractor shall not commence Work under this Contract until it has provided evidence satisfactory to the City that it has secured all insurance required hereunder. Contractor shall not allow any subcontractor to commence work on any subcontract until it has provided evidence satisfactory to the City that the subcontractor has secured all insurance required under this Article. Failure to provide and maintain all required insurance shall be grounds for the City to terminate this Contract for cause. Contractor shall furnish City with original certificates of insurance and endorsements effective coverage required by this Contract on forms satisfactory to the City. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf, and shall be on forms acceptable to the City. All certificates and endorsements must be received and approved by the City before Work commences.

A. **Additional Insureds; Waiver of Subrogation**. The City, its officials, officers, employees, agents and authorized volunteers shall be named as Additional Insureds on Contractor's All Risk policy and on Contractor's and its subcontractors' policies of Commercial General Liability and Automobile Liability insurance using, for Contractor's policy/ies of Commercial General Liability insurance, ISO CG forms 20 10 and 20 37 (or endorsements providing the exact same coverage, including completed operations), and, for subcontractors' policies of Commercial General Liability insurance, ISO CG form 20 38 (or endorsements providing the exact same coverage). Notwithstanding the minimum limits set forth in this Contract for any type of insurance coverage, all available insurance proceeds in excess of the specified minimum limits of coverage shall be available to the parties required to be named as Additional Insureds hereunder. Contractor and its insurance carriers shall provide a Waiver of Subrogation in favor of those parties.

B. **Workers' Compensation Insurance**. The Contractor shall provide workers' compensation insurance for all of the employees engaged in Work under this Contract, on or at the Site, and, in case of any sublet Work, the Contractor shall require the subcontractor similarly to provide workers' compensation insurance for all the latter's employees as prescribed by State law. Any class of employee or employees not covered by a subcontractor's insurance shall be covered by the Contractor's insurance. In case any class of employees engaged in work under this Contract, on or at the Site, is not protected under the Workers' Compensation Statutes, the Contractor shall provide or shall cause a subcontractor to provide, adequate insurance coverage for the protection of such employees not otherwise protected. The Contractor is required to secure payment of compensation to his

employees in accordance with the provisions of section 3700 of the Labor Code. The Contractor shall file with the City certificates of his insurance protecting workers. Company or companies providing insurance coverage shall be acceptable to the City, if in the form and coverage as set forth in the Contract Documents.

C. **Employer's Liability Insurance**. Contractor shall provide Employer's Liability Insurance, including Occupational Disease, in the amount of at least one million dollars ($1,000,000.00) per person per accident. Contractor shall provide City with a certificate of Employer's Liability Insurance. Such insurance shall comply with the provisions of the Contract Documents. The policy shall be endorsed, if applicable, to provide a Borrowed Servant/Alternate Employer Endorsement and contain a Waiver of Subrogation in favor of the City.

D. **Commercial General Liability Insurance**. Contractor shall provide "occurrence" form Commercial General Liability insurance coverage at least as broad as the most current ISO CGL Form 00 01, including but not limited to, premises liability, contractual liability, products/completed operations, personal and advertising injury which may arise from or out of Contractor's operations, use, and management of the Site, or the performance of its obligations hereunder. The policy shall not contain any exclusion contrary to this Contract including but not limited to endorsements or provisions limiting coverage for (1) contractual liability (including but not limited to ISO CG 24 26 or 21 39); or (2) cross-liability for claims or suits against one insured against another. Policy limits shall not be less than $2,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit. Defense costs shall be paid in addition to the limits.

1. Such policy shall comply with all the requirements of this Article. The limits set forth herein shall apply separately to each insured against whom claims are made or suits are brought, except with respect to the limits of liability. Further the limits set forth herein shall not be construed to relieve the Contractor from liability in excess of such coverage, nor shall it limit Contractor's indemnification obligations to the City, and shall not preclude the City from taking such other actions available to the City under other provisions of the Contract Documents or law.

2. All general liability policies provided pursuant to the provisions of this Article shall comply with the provisions of the Contract Documents.

3. All general liability policies shall be written to apply to all bodily injury, including death, property damage, personal injury, owned and non-owned equipment, blanket contractual liability, completed operations liability, explosion, collapse, under-ground excavation, removal of lateral support, and other covered loss, however occasioned, occurring during the policy term, and shall specifically insure the performance by Contractor of that part of the indemnification contained in these General Conditions relating to liability for injury to or death of persons and damage to property.

4. If the coverage contains one or more aggregate limits, a minimum of 50% of any such aggregate limit must remain available at all times; if over 50% of any aggregate limit has been paid or reserved, the City may require additional coverage to be purchased by Contractor to restore the required limits. Contractor may combine primary, umbrella, and as broad as possible excess liability coverage to achieve the total limits indicated above. Any umbrella or excess liability policy shall include the additional insured endorsement described in the Contract Documents.

5. All policies of general liability insurance shall permit and Contractor does hereby waive any right of subrogation which any insurer of Contractor may acquire from Contractor by virtue of the payment of any loss.

E. **Automobile Liability Insurance**. Contractor shall provide "occurrence" form Automobile Liability Insurance at least as broad as ISO CA 00 01 (Any Auto) in the amount of, at least, two million dollars ($2,000,000) per accident for bodily injury and property damage. Such insurance shall provide coverage with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by Contractor or for which Contractor is responsible, in a form and with insurance companies acceptable to the City. All policies of automobile insurance shall permit and Contractor does hereby waive any right of subrogation which any insurer of Contractor may acquire from Contractor by virtue of the payment of any loss.

F. **Builder's Risk ["All Risk"]** [NOT USED]

G. **Contractor's Pollution Liability Coverage**. Contractor shall provide pollution liability insurance in an amount not less than $1,000,000 per occurrence and $2,000,000 aggregate.

H. Contractor shall require all tiers of sub-contractors working under this Contract to provide the insurance required under this Article unless otherwise agreed to in writing by City. Contractor shall make certain that any and all subcontractors hired by Contractor are insured in accordance with this Contract. If any subcontractor's coverage does not comply with the foregoing provisions, Contractor shall indemnify and hold the City harmless from any damage, loss, cost, or expense, including attorneys' fees, incurred by the City as a result thereof.

ARTICLE 37 FORM AND PROOF OF CARRIAGE OF INSURANCE

A. Any insurance carrier providing insurance coverage required by the Contract Documents shall be admitted to and authorized to do business in the State of California unless waived, in writing, by the City's Risk Manager. Carrier(s) shall have an A.M. Best rating of not less than an A:VII. Insurance deductibles or self-insured retentions must be declared by the Contractor. At the election of the City the Contractor shall either 1) reduce or eliminate such deductibles or self-insured retentions, or 2) procure a bond which guarantees payment of losses and related investigations, claims administration, and defense costs and expenses. If umbrella or excess liability coverage is used to meet any required limit(s) specified herein, the Contractor shall provide a "follow form" endorsement satisfactory to the City

indicating that such coverage is subject to the same terms and conditions as the underlying liability policy.

B. Each insurance policy required by this Contract shall be endorsed to state that: (1) coverage shall not be suspended, voided, reduced or cancelled except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the City; and (2) any failure to comply with reporting or other provisions of the policies, including breaches of warranties, shall not affect coverage provided to the City, its officials, officers, agents, employees, and volunteers.

C. The Certificates(s) and policies of insurance shall contain or shall be endorsed to contain the covenant of the insurance carrier(s) that it shall provide no less than thirty (30) days written notice be given to the City prior to any material modification or cancellation of such insurance. In the event of a material modification or cancellation of coverage, the City may terminate the Contract or stop the Work in accordance with the Contract Documents, unless the City receives, prior to such effective date, another properly executed original Certificate of Insurance and original copies of endorsements or certified original policies, including all endorsements and attachments thereto evidencing coverage's set forth herein and the insurance required herein is in full force and effect. Contractor shall not take possession, or use the Site, or commence operations under this Contract until the City has been furnished original Certificate(s) of Insurance and certified original copies of endorsements or policies of insurance including all endorsements and any and all other attachments as required in this Article. The original endorsements for each policy and the Certificate of Insurance shall be signed by an individual authorized by the insurance carrier to do so on its behalf.

D. The Certificate(s) of Insurance, policies and endorsements shall so covenant and shall be construed as primary, and the City's insurance and/or deductibles and/or self-insured retentions or self-insured programs shall not be construed as contributory.

E. City reserves the right to adjust the monetary limits of insurance coverages during the term of this Contract including any extension thereof if, in the City's reasonable judgment, the amount or type of insurance carried by the Contractor becomes inadequate.

F. Contractor shall report to the City, in addition to the Contractor's insurer, any and all insurance claims submitted by the Contractor in connection with the Work under this Contract.

ARTICLE 38 TIME FOR COMPLETION AND LIQUIDATED DAMAGES

A. **Time for Completion/Liquidated Damages.** Time is of the essence in the completion of the Work. Work shall be commenced within **ten (10) Days** of the date stated in the City's Notice to Proceed and shall be completed by Contractor specified in the Contract Documents. The City is under no obligation to consider early completion of the Project; and the Contract completion date shall not be amended by the City's receipt or acceptance of the Contractor's proposed earlier completion date. Furthermore, Contractor shall not, under any circumstances, receive additional compensation from the City (including but not limited to indirect,

general, administrative or other forms of overhead costs) for the period between the time of earlier completion proposed by the Contractor and the Contract completion date. If the Work is not completed as stated in the Contract Documents, it is understood that the City will suffer damage. In accordance with Government Code section 53069.85, being impractical and infeasible to determine the amount of actual damage, it is agreed that Contractor shall pay to the City as fixed and liquidated damages, and not as a penalty, the sum stipulated in the Contract for each calendar day of delay until the Work is fully completed as determined by the City. Contractor and its surety shall be liable for any liquidated damages. Any money due or to become due the Contractor may be retained to cover liquidated damages.

B. **Inclement Weather.** Contractor shall abide by the Engineer's determination of what constitutes inclement weather. Time extensions for inclement weather shall only be granted when the Work stopped during inclement weather is on the critical path of the Project schedule. The Contractor shall implement measures and make contingencies as may be required to protect the Work and to all allow Work to proceed during wet or inclement weather to prevent delay or stoppage.

C. **Extension of Time.** Contractor shall not be charged liquidated damages because of any delays in completion of the Work due to unforeseeable causes beyond the control and without the fault or negligence of Contractor (or its subcontractors or suppliers). Contractor shall within five (5) Days of identifying any such delay notify the City in writing of causes of delay. The City shall ascertain the facts and extent of delay and grant extension of time for completing the Work when, in its judgment, the facts justify such an extension. Time extensions to the Project shall be requested by the Contractor as they occur and without delay. No delay claims shall be permitted unless the event or occurrence delays the completion of the Project beyond the Contract completion date.

D. **No Damages for Reasonable Delay.** The City's liability to Contractor for delays for which the City is responsible shall be limited to only an extension of time unless such delays were unreasonable under the circumstances. In no case shall the City be liable for any costs which are borne by the Contractor in the regular course of business, including, but not limited to, home office overhead and other ongoing costs. Damages caused by unreasonable City delay, including delays caused by items that are the responsibility of the City pursuant to Government Code section 4215, shall be based on actual costs only, no proportions or formulas shall be used to calculate any delay damages.

ARTICLE 39 SCHEDULE OF VALUES, COST BREAKDOWN AND PERIODIC ESTIMATES

Contractor shall furnish on forms Approved by the City:

A. When requested by the Engineer, and within ten (10) Days of Notice to Proceed with the Contract, the Contractor shall provide a Schedule of Values consisting of a detailed estimate giving a complete breakdown of the Contract price for each lump sum bid item in the Contract.

B. A monthly itemized estimate of Work done for the purpose of making progress payments. In order for the City to consider and evaluate each progress payment application, the Contractor shall submit a detailed measurement of Work performed and a progress estimate of the value thereof before the tenth (10th) Day of the following month.

C. Contractor shall submit, with each of its payment requests, an adjusted list of actual quantities, verified by the Engineer, for unit price items listed, if any, in the Bid Form.

D. Following the City's Acceptance of the Work, the Contractor shall submit to the City a written statement of the final quantities of unit price items for inclusion in the final payment request.

E. The City shall have the right to adjust any estimate of quantity and to subsequently correct any error made in any estimate for payment.

Contractor shall certify under penalty of perjury, that all cost breakdowns and periodic estimates accurately reflect the Work on the Project.

ARTICLE 40 PROGRESS ESTIMATES AND PAYMENT

A. By the tenth (10th) Day of the following calendar month, Contractor shall submit to Engineer a payment request which shall set forth in detail the value of the Work done for the period beginning with the date work was first commenced and ending on the end of the calendar month for which the payment request is prepared. Contractor shall include any amount earned for authorized extra work. From the total thus computed, a deduction shall be made in the amount of five percent (5%) for retention, except where the City has adopted a finding that the Work done under the Contract is substantially complex, and then the amount withheld as retention shall be the percentage specified in the Notice Inviting Bids. From the remainder a further deduction may be made in accordance with Section B below. The amount computed, less the amount withheld for retention and any amounts withheld as set forth below, shall be the amount of the Contractor's payment request.

B. The Contractor shall provide an updated project schedule with each payment request.

C. The City may withhold a sufficient amount or amounts of any payment or payments otherwise due to Contractor, as in his judgment may be necessary to cover:

1. Payments which may be past due and payable for just claims against Contractor or any subcontractors for labor or materials furnished in and about the performance of work on the Project under this Contract.

2. Defective work not remedied.

3. Failure of Contractor to make proper payments to his subcontractor or for material or labor.

4. Completion of the Contract if there is a reasonable doubt that the Work can be completed for balance then unpaid.

5. Damage to another contractor or a third party.

6. Amounts which may be due the City for claims against Contractor.

7. Failure of Contractor to keep the record ("as-built") drawings up to date.

8. Failure to provide update on construction schedule as required herein.

9. Site cleanup.

10. Failure to comply with Contract Documents.

11. Liquidated damages.

12. Legally permitted penalties.

D. The City may apply such withheld amount or amounts to payment of such claims or obligations at its discretion with the exception of subsections (B)(1), (3), and (5) of this Article, which must be retained or applied in accordance with applicable law. In so doing, the City shall be deemed the agent of Contractor and any payment so made by the City shall be considered as a payment made under contract by the City to Contractor and the City shall not be liable to Contractor for such payments made in good faith. Such payments may be made without prior judicial determination of claim or obligations. The City will render Contractor a proper accounting of such funds disbursed on behalf of Contractor.

E. Upon receipt, the Engineer shall review the payment request to determine whether it is undisputed and suitable for payment. If the payment request is determined to be unsuitable for payment, it shall be returned to Contractor as soon as practicable but not later than seven (7) Days after receipt, accompanied by a document setting forth in writing the reasons why the payment request is not proper. The City shall make the progress payment within 30 calendar days after the receipt of an undisputed and properly submitted payment request from Contractor, provided that a release of liens and claims has been received from the Contractor pursuant to Civil Code section 8132. The number of days available to the City to make a payment without incurring interest pursuant to this paragraph shall be reduced by the number of days by which the Engineer exceeds the seven (7) Day requirement.

F. A payment request shall be considered properly executed if funds are available for payment of the payment request and payment is not delayed due to an audit inquiry by the financial officer of the City.

ARTICLE 41 SECURITIES FOR MONEY WITHHELD

Pursuant to section 22300 of the Public Contract Code of the State of California, Contractor may request the City to make retention payments directly to an escrow agent or may substitute securities for any money withheld by the City to ensure performance under the contract. At the request and expense of Contractor, securities equivalent to the amount withheld shall be

deposited with the City or with a state or federally chartered bank as the escrow agent who shall return such securities to Contractor upon satisfactory completion of the contract. Deposit of securities with an escrow agent shall be subject to a written agreement substantially in the form provided in section 22300 of the Public Contract Code.

ARTICLE 42 CHANGES AND EXTRA WORK.

A. **Contract Change Orders.**

1. The City, without invalidating the Contract, may order changes in the Work consisting of additions, deletions or other revisions, and the Contract Price and Contract Time shall be adjusted accordingly. Except as otherwise provided herein, all such changes in the Work shall be authorized by Change Order, and shall be performed under the applicable conditions of the Contract Documents. A Change Order signed by the Contractor indicates the Contractor's agreement therewith, including any adjustment in the Contract Price or the Contract Time, and the full and final settlement of all costs (direct, indirect and overhead) related to the Work authorized by the Change Order.

2. Contractor shall promptly execute changes in the Work as directed in writing by the City even when the parties have not reached agreement on whether the change increases the scope of Work or affects the Contract Price or Contract Time. All claims for additional compensation shall be presented in writing. No claim will be considered after the Work in question has been completed unless a written Change Order has been issued or a timely written notice of claim has been made by Contractor.

3. Whenever any change is made as provided for herein, such change shall be considered and treated as though originally included in the Contract, and shall be subject to all terms, conditions, and provisions of the original Contract.

4. Contractor shall not be entitled to claim or bring suit for damages, whether for loss of profits or otherwise, on account of any decrease or omission of any item or portion of Work to be done.

5. No dispute, disagreement, or failure of the parties to reach agreement on the terms of the Change Order shall relieve the Contractor from the obligation to proceed with performance of the work, including Additional Work, promptly and expeditiously.

6. Contractor shall make available to the City any of the Contractor’s documents related to the Project immediately upon request of the City, as set forth in Article 52.

7. Any alterations, extensions of time, Additional Work, or any other changes may be made without securing consent of the Contractor’s surety or sureties.

B. **Contract Price Change.**

1. Process for Determining Adjustments in Contract Price.

   a. Owner Initiated Change. The Contractor must submit a complete cost proposal, including any change in the Contract Price or Contract Time, within seven (7) Days after receipt of a scope of a proposed change order initiated by the City, unless the City requests that proposals be submitted in less than seven (7) Days.

   b. Contractor Initiated Change. The Contractor must give written notice of a proposed change order required for compliance with the Contract Documents within seven (7) Days of discovery of the facts giving rise to the proposed change order.

   c. Whenever possible, any changes to the Contract amount shall be in a lump sum mutually agreed to by the Contractor and the City.

   d. Price quotations from the Contractor shall be accompanied by sufficiently detailed supporting documentation to permit verification by the City, including but not limited to estimates and quotations from subcontractors or material suppliers, as the City may reasonably request. Contractor shall certify the accuracy of all Change Order Requests under penalty of perjury.

   e. If the Contractor fails to submit a complete cost proposal within the seven (7) Day period (or as requested), the City has the right to order the Contractor in writing to commence the Work immediately on a time and materials basis and/or issue a lump sum change to the Contract Price and/or Contract Time in accordance with the City's estimate. If the change is issued based on the City's estimate, the Contractor will waive its right to dispute the action unless within fifteen (15) Days following completion of the added/deleted work, the Contractor presents written proof that the City's estimate was in error.

2. Unit Price Change Orders.

   a. When the actual quantity of a Unit Price item is found to vary from the Bid Form, compensation for the change in quantity will be calculated by multiplying the actual quantity by the Unit Price. This calculation may result in either an additive or deductive Final Change Order pursuant to the Contract Documents. Contractor shall immediately inform the Engineer when the actual quanities vary from estimated quantities.

   b. No Mark up for Overhead and Profit. Because the Contract Unit Prices provided in the Bid Form include Overhead and Profit as determined by Contractor at the time of Bid submission, no mark up or deduction for Overhead and Profit will be included in Unit Price Change Orders.

c. Bid items included on the Bid Form may be deducted from the Work in their entirety without any negotiated extra costs.

d. Contractor acknowledges that unit quantities are estimates and agrees that the estimated unit quantities listed on the Bid Form will be adjusted to reflect the actual unit quantities which may result in an adjustment to the Contract Unit Prices. Such an adjustment will be made by execution of a final additive or deductive Change Order following Contractor's completion of the Work. Upon notification, Contractor's failure to respond within seven (7) Days will result in City's issuance of a unit quantity adjustment to the Contract Unit Prices and/or Contract Time in accordance with the Contract Documents.

3. Lump Sum Change Orders. Compensation for Lump Sum Change Orders shall be limited to expenditures necessitated specifically by the Additional Work, and shall be segregated as follows:

a. Labor. The costs of labor will be the actual cost for wages prevailing locally for each craft or type of worker at the time the Additional Work is done, plus employer payments of payroll taxes and insurance, health and welfare, pension, vacation, apprenticeship funds, and other direct costs resulting from Federal, State or local laws, as well as assessment or benefits required by lawful collective bargaining agreements. The use of a labor classification which would increase the Additional Work cost will not be permitted unless the Contractor establishes the necessity for such new classifications. Labor costs for equipment operators and helpers shall be reported only when such costs are not included in the invoice for equipment rental.

b. Materials. The cost of materials reported shall be at invoice or lowest current price at which such materials are locally available in the quantities involved, plus sales tax, freight, and delivery. Materials costs shall be based upon supplier or manufacturer's invoice. If invoices or other satisfactory evidence of cost are not furnished within fifteen (15) Days of delivery, then the City shall determine the materials cost, at its sole discretion.

c. Tool and Equipment Use. Costs for the use of small tools, which are tools that have a replacement value of $1,000 or less, shall be considered included in the Overhead and Profit mark-ups established below. Regardless of ownership, the rates to be used in determining equipment use costs shall not exceed listed rates prevailing locally at equipment rental agencies, or distributors, at the time the Work is performed.

4. Time and Materials Change Orders.

a. General. The term Time and Materials means the sum of all costs reasonably and necessarily incurred and paid by Contractor for

labor, materials, and equipment in the proper performance of Additional Work. Except as otherwise may be agreed to in writing by the City, such costs shall be in amounts no higher than those prevailing in the locality of the Project, and shall include only the following items.

b. Timely and Final Documentation.

i. T&M Daily Sheets. Contractor must submit timesheets, materials invoices, records of equipment hours, and records of rental equipment hours to the City's Representative for an approval signature **each day** Additional Work is performed. Failure to get the City's Representative's approval signature each Day shall result in a waiver of Contractor's right to claim these costs. The City's Representative's signature on time sheets only serves as verification that the Work was performed and is not indicative of City's agreement to Contractor's entitlement to the cost.

ii. T&M Daily Summary Sheets. All documentation of incurred costs ("T&M Daily Summary Sheets") shall be submitted by Contractor within **three (3) Days** of incurring the cost for labor, material, equipment, and special services as Additional Work is performed. Contractor's actual costs shall be presented in a summary table in an electronic spreadsheet file by labor, material, equipment, and special services. Each T&M Daily Summary Sheet shall include Contractor's actual costs incurred for the Additional Work performed that day and a cumulative total of Contractor's actual costs incurred for the Additional Work. Contractor's failure to provide a T&M Daily Summary Sheet showing a total cost summary within three (3) Days but within five (5) Days of performance of the Work will result in the Contractor's otherwise allowable overhead and profit being reduced by 50% for that portion of Additional Work which was not documented in a timely manner. Contractor's failure to submit the T&M Daily Summary Sheet within five (5) Days of performance of the Work will result in a total waiver of Contractor's right to claim these costs.

iii. T&M Total Cost Summary Sheet. Contractor shall submit a T&M Total Cost Summary Sheet, which shall include total actual costs, within **seven (7) Days** following completion of City approved Additional Work. Contractor's total actual cost shall be presented in a summary table in an electronic spreadsheet file by labor, material, equipment, and special services. Contractor's failure to submit the T&M Total Cost Summary Sheet within seven (7) Days of completion of the Additional Work will result in Contractor's waiver for any reimbursement of any costs associated with the T&M Summary Sheets or the performance of the Additional Work.

c. Labor. The Contractor will be paid the cost of labor for the workers used in the actual and direct performance of the Work. The cost of labor will be the sum of the actual wages paid (which shall include any employer payments to or on behalf of the workers for health and welfare, pension, vacation, and similar purposes) substantiated by timesheets and certified payroll for wages prevailing for each craft or type of workers performing the Additional Work at the time the Additional Work is done, and the labor surcharge set forth in the Department of Transportation publication entitled *Labor Surcharge and Equipment Rental Rates*, which is in effect on the date upon which the Work is accomplished and which is a part of the Contract. The labor surcharge shall constitute full compensation for all payments imposed by Federal, State, or local laws and for all other payments made to, or on behalf of, the workers, other than actual wages.

i. Equipment Operator Exception. Labor costs for equipment operators and helpers shall be paid only when such costs are not included in the invoice for equipment rental.

ii. Foreman Exception. The labor costs for foremen shall be proportioned to all of their assigned work and only that applicable to the Additional Work shall be paid. Indirect labor costs, including, without limitation, the superintendent, project manager, and other labor identified in the Contract Documents will be considered Overhead.

d. Materials. The cost of materials reported shall be itemized at invoice or lowest current price at which materials are locally available and delivered to the Project site in the quantities involved, plus the cost of sales tax, freight, delivery, and storage.

i. Trade discounts available to the purchaser shall be credited to the City notwithstanding the fact that such discounts may not have been taken by Contractor.

ii. For materials secured by other than a direct purchase and direct billing to the purchaser, the cost shall be deemed to be the price paid to the actual supplier as determined by the City's Representative.

iii. Payment for materials from sources owned wholly or in part by the purchaser shall not exceed the price paid by the purchaser for similar materials from said sources on Additional Work items or the current wholesale price for such materials delivered to the Project site, whichever price is lower.

iv. If, in the opinion of the City's Representative, the cost of materials is excessive, or Contractor does not furnish satisfactory evidence of the cost of such materials, then the

cost shall be deemed to be the lowest current wholesale price for the total quantity concerned delivered to the Project site less trade discounts.

v. The City reserves the right to furnish materials for the Additional Work and no Claim shall be allowed by Contractor for costs of such materials or Indirect Costs or profit on City furnished materials.

e. Equipment.

i. Rental Time. The rental time to be paid for equipment on the Project site shall be the time the equipment is in productive operation on the Additional Work being performed and, in addition, shall include the time required to move the equipment to the location of the Additional Work and return it to the original location or to another location requiring no more time than that required to return it to its original location; except that moving time will not be paid if the equipment is used on other than the Additional Work, even though located at the site of the Additional Work.

(a) Rental Time Not Allowed. Rental time will not be allowed while equipment is inoperative due to breakdowns.

(b) Computation Method. The following shall be used in computing the rental time of equipment on the Project site.

(i) When hourly rates are paid, any part of an hour less than 30 minutes of operation shall be considered to be 1/2-hour of operation, and any part of an hour in excess of 30 minutes will be considered one hour of operation.

(ii) When daily rates are paid, any part of a day less than 4 hours operation shall be considered to be 1/2-day of operation, and any part of an hour in excess of 4 hours will be considered one day of operation.

ii. Rental Rates. Contractor will be paid for the use of equipment at the lesser of (i) the actual rental rate, or (ii) the rental rate listed for that equipment in the California Department of Transportation publication entitled *Labor Surcharge and Equipment Rental Rates*, which is in effect on the date upon which the Contract was executed. Such rental rates will be used to compute payments for equipment whether the equipment is under Contractor's control through

direct ownership, leasing, renting, or another method of acquisition. The rental rate to be applied for use of each item of equipment shall be the rate (i.e., daily, monthly) resulting in the least total cost to the City for the total period of use. If it is deemed necessary by Contractor to use equipment not listed in the publication, an equitable rental rate for the equipment will be established by the City's Representative. Contractor may furnish cost data which might assist the City's Representative in the establishment of the rental rate.

iii. Contractor-Owned Equipment.

(a) For Contractor-owned equipment, the allowed equipment rental rate will be limited to the monthly equipment rental rate using a utilization rate of 173 hours per month.

(b) For Contractor-owned equipment, the rental time to be paid for equipment on the Site shall be the time the equipment is in productive operation, unless, in the instance of standby time, the equipment could be actively used by Contractor on another project, then City shall pay for the entirety of the time the equipment is on Site. It shall be Contractor's burden to demonstrate to the City that the equipment could be actively used on another project.

(i) All equipment shall, in the opinion of the City's Representative, be in good working condition and suitable for the purpose for which the equipment is to be used.

(ii) Before construction equipment is used on the Additional Work, Contractor shall plainly stencil or stamp an identifying number thereon at a conspicuous location, and shall furnish to the City's Representative, in duplicate, a description of the equipment and its identifying number and the scheduled Additional Work activities planned.

(iii) Unless otherwise specified, manufacturer's rating and manufacturer approved modifications shall be used to classify equipment for the determination of applicable rental rates. Equipment which has no direct power unit shall be powered by a unit of at least the minimum rating recommended by the manufacturer.

f. Special Services. Special work or services are defined as that Additional Work characterized by extraordinary complexity, sophistication, or innovation or a combination of the foregoing attributes which are unique to the construction industry.

i. Invoices for Special Services. When the City's Representative and Contractor determine that a special service is required which cannot be performed by the forces of Contractor or those of any of its Subcontractors, the special service may be performed by an entity especially skilled in the Additional Work. Invoices for special services based upon the current fair market value thereof may be accepted without complete itemization of labor, material, and equipment rental costs, after validation of market values by the City's Representative.

ii. Discount and Allowance. All invoices for special services will be adjusted by deducting all trade discounts offered or available, whether the discounts were taken or not. In lieu of Overhead and Profit specified herein, a total allowance not to exceed fifteen percent (15%) for Overhead and Profit will be added to invoices for Special Services.

iii. When the City determines, in its sole discretion, that competitive bidding is necessary for certain special services, Contractor shall solicit competitive bids for those special services.

g. Excluded Costs. The term Time and Material shall not include any of the following costs or any other home or field office overhead costs, all of which are to be considered administrative costs covered by Contractor's allowance for Overhead and Profit.

i. Overhead Cost. Payroll costs and other compensation of Contractor's officers, executives, principals, general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, timekeepers, clerks, and other personnel employed by Contractor whether at the Site or in Contractor's principal office or any branch office, material yard, or shop for general administration of the Additional Work;

ii. Office Expenses. Expenses of Contractor's principal and branch offices;

iii. Capital Expenses. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Additional Work and charges against Contractor for delinquent payments;

iv. Negligence. Costs due to the negligence of Contractor or any Subcontractor or Supplier, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including without limitation the correction of Defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property;

v. Other. Other overhead or general expense costs of any kind and the cost of any item not specifically and expressly included in the Contract Documents;

vi. Small Tools. Cost of small tools valued at less than $1,000 and that remain the property of Contractor;

vii. Administrative Costs. Costs associated with the preparation of Change Orders (whether or not ultimately authorized), cost estimates, or the preparation or filing of Claims;

viii. Anticipated Lost Profits. Expenses of Contractor associated with anticipated lost profits or lost revenues, lost income or earnings, lost interest on earnings, or unpaid retention;

ix. Home Office Overhead. Costs derived from the computation of a "home office overhead" rate by application of the *Eichleay, Allegheny*, burden fluctuation, or other similar methods;

x. Special Consultants and Attorneys. Costs of special consultants or attorneys, whether or not in the direct employ of Contractor, employed for services specifically related to the resolution of a Claim, dispute, or other matter arising out of or relating to the performance of the Additional Work.

h. Overhead, Profit and Other Charges. The mark-up for overhead (including supervision) and profit on work added to the Contract shall be according to the following:

i. "Net Cost" is defined as consisting of costs of labor, materials, and tools and equipment only excluding overhead and profit. The costs of applicable insurance and bond premium will be reimbursed to the Contractor and subcontractors at cost only, without mark-up. Contractor shall provide City with documentation of the costs, including, but not limited to, payroll records, invoices, and such other information as City may reasonably request.

ii. For Work performed by the Contractor's forces, the added cost for overhead and profit shall not exceed fifteen percent (15%) of the Net Cost of the Work.

iii. For Work performed by a subcontractor, the added cost for overhead and profit shall not exceed fifteen percent (15%) of the subcontractor's Net Cost of the Work to which the Contractor may add five percent (5%) of the subcontractor's Net Cost.

iv. For Work performed by a sub-subcontractor, the added cost for overhead and profit shall not exceed fifteen percent (15%) of the sub-subcontractor's Net Cost for Work to which the subcontractor and general contractor may each add an additional five percent (5%) of the Net Cost of the lower tier subcontractor.

v. No additional mark-up will be allowed for lower tier subcontractors, and in no case shall the added cost for overhead and profit payable by City exceed twenty-five percent (25%) of the Net Cost as defined herein, of the party that performs the Work.

5. All of the following costs are included in the markups for overhead and profit described above, and Contractor shall not receive any additional compensation for: Submittals, drawings, field drawings, Shop Drawings, including submissions of drawings; field inspection; General Superintendence; General administration and preparation of cost proposals, schedule analysis, Change Orders, and other supporting documentation; computer services; reproduction services; Salaries of project engineer, superintendent, timekeeper, storekeeper, and secretaries; Janitorial services; Small tools, incidentals and consumables; Temporary On-Site facilities (Offices, Telephones, High Speed Internet Access, Plumbing, Electrical Power, Lighting; Platforms, Fencing, Water), Jobsite and Home office overhead or other expenses; vehicles and fuel used for work otherwise included in the Contract Documents; Surveying; Estimating; Protection of Work; Handling and disposal fees; Final Cleanup; Other Incidental Work; Related Warranties; insurance and bond premiums.

6. For added or deducted Work by subcontractors, the Contractor shall furnish to the City the subcontractor's signed detailed record of the cost of labor, material and equipment, including the subcontractor markup for overhead and profit. The same requirement shall apply to sub-subcontractors

7. For added or deducted work furnished by a vendor or supplier, the Contractor shall furnish to the City a detailed record of the cost to the Contractor, signed by such vendor or supplier.

8. Any change in the Work involving both additions and deletions shall indicate a net total cost, including subcontracts and materials. Allowance for overhead and profit, as specified herein, shall be applied if the net total cost is an increase in the Contract Price; overhead and profit allowances shall not be applied if the net total cost is a deduction to the Contract Price. The estimated cost of deductions shall be based on labor and material prices on the date the Contract was executed.

9. Contractor shall not reserve a right to assert impact costs, extended job site costs, extended overhead, constructive acceleration and/or actual acceleration beyond what is stated in the Change Order for Work. No claims shall be allowed for impact, extended overhead costs, constructive acceleration and/or actual acceleration due to a multiplicity of changes and/or clarifications. The Contractor may not change or modify the City's change order form in an attempt to reserve additional rights.

10. If the City disagrees with the proposal submitted by Contractor, it will notify the Contractor and the City will provide its opinion of the appropriate price and/or time extension. If the Contractor agrees with the City, a Change Order will be issued by the City. If no agreement can be reached, the City shall have the right to issue a unilateral Change Order setting forth its determination of the reasonable additions or savings in costs and time attributable to the extra or deleted work. Such determination shall become final and binding if the Contractor fails to submit a claim in writing to the City within fifteen (15) Days of the issuance of the unilateral Change Order, disputing the terms of the unilateral Change Order, and providing such supporting documentation for its position as the City may require.

C. **Change of Contract Times.**

1. The Contract Times may only be changed by a Change Order.

2. All changes in the Contract Price and/or adjustments to the Contract Times related to each change shall be included in Contractor's COR pursuant to this Article. No cost or time will be allowed for cumulative effects of multiple changes. All Change Orders must state that the Contract Time is not changed or is either increased or decreased by a specific number of days. Failure to include a change to time shall waive any change to the time unless the parties mutually agree in writing to postpone a determination of the change to time resulting from the Change Order.

3. Notice of the amount of the request for adjustment in the Contract Times with supporting data shall be delivered within seven (7) Days after such start of occurrence, unless City's Representative allows an additional period of time to ascertain more accurate data in support of the request. No extension of time or additional compensation shall be given for a delay if the Contractor failed to give notice in the manner and within the time prescribed.

4. City may elect, at City's sole discretion, to grant an extension in Contract Times, without Contractor's request, because of delays or other factors.

5. <u>Use of Float and Critical Path.</u>

   a. Float is for the benefit of the Project. Float shall not be considered for the exclusive use or benefit of either the City or the Contractor.

   b. Contractor shall not be entitled to compensation, and City will not compensate Contractor, for delays which impact early completion.

Any difference in time between the Contractor's early completion and the Contract Time shall be considered a part of the Project float.

6. Contractor's entitlement to an extension of the Contract Times is limited to a City-caused extension of the critical path, reduced by the Contractor's concurrent delays, and established by a proper time impact analysis. No time extension shall be allowed unless, and then only to the extent that, the City-caused delay extends the critical path beyond the previously approved Contract Time. If approved, the increase in time required to complete the Work shall be added to the Contract Time.

   a. Contractor shall not be entitled to an adjustment in the Contract Price or Contract Times for delays within the control of Contractor. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Contractor.

   b. If Contractor is delayed in the performance or progress of the Work by fire, flood, epidemic, abnormal weather conditions (as determined by the City), Acts of God, acts or failures to act of utility owners not under the control of City, or other causes not the fault of and beyond control of City and Contractor, then Contractor shall be entitled to an time extension when the Work stopped is on the critical path. Such a non-compensable adjustment shall be Contractor's sole and exclusive remedy for such delays. Contractor must submit a timely request in accordance with the requirements of this Article.

   c. Utility-Related Delays.

      i. Contractor shall immediately notify in writing the utility owner and City's Representative of its construction schedule and any subsequent changes in the construction schedule which will affect the time available for protection, removal, or relocation of utilities. Requests for extensions of time arising out of utility relocation or repair delays shall be filed in accordance with this Article.

      ii. Contractor shall not be entitled to damages or additional payment for delays attributable to utility relocations or alterations if correctly located, as noted in the Contract Documents or by the Underground Service Alert survey.

7. Content for Requests for Contract Extension. Contractor's justification for entitlement shall be clear and complete citing specific Contract Document references and reasons on which Contractor's entitlement is based. At a minimum, each request for a time extension must include:

   a. Each request for an extension of Contract Time must identify the impacting event, in narrative form, providing a description of the delay event and sufficient justification as to why the Contractor is

entitled to a time extension. Contractor must demonstrate that the delay arises from unforeseeable causes beyond the control and without the fault or negligence of both Contractor and any Subcontractors or Suppliers, or any other persons or organizations employed by any of them or for whose acts any of them may be liable, and that such causes in fact lead to performance or completion of the Work, or specified part in question, beyond the corresponding Contract Times, despite Contractor's reasonable and diligent actions to guard against those effects.

b. Each request for an extension of Contract Time must include a time impact analysis in CPM format, using the Contemporaneous Impacted As-Planned Schedule Analysis to calculate the impact of the delay event.

8. No Damages for Reasonable Delay.

a. City's liability to Contractor for delays for which City is responsible shall be limited to only an extension of time unless such delays were unreasonable under the circumstances. In no case shall City be liable for any costs which are borne by the Contractor in the regular course of business, including, but not limited to, home office overhead and other ongoing costs.

b. City and City's Representative, and the officers, members, partners, employees, agents, consultants, or subcontractors of each of them, shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

9. Contractor's failure, neglect, or refusal to comply with the requirements of the Contract Documents, or any portion thereof, shall bar Contractor's request for extensions of the Contract Times. Such failure, neglect, or refusal prejudices City's and City's Representative's ability to recognize and mitigate delay, and such failure, neglect, or refusal prevent the timely analysis of requests for extensions of Contract Times, and whether such extensions may be warranted. Contractor hereby waives all rights to extensions of Contract Times due to delays or accelerations that result from or occur during periods of time for which Contractor fails, neglects, or refuses to fully comply with the requirements of this Article.

10. Contractors submission of daily construction reports and schedule updates in accordance with these Contract Documents is required for the evaluation of the merits of time extension request. Failure of the Contractor to submit daily construction reports and schedule updates shall constitute a waiver of its right to seek a time extension or additional compensation.

ARTICLE 43 FINAL ACCEPTANCE AND PAYMENT

A. Final Inspection. Upon written notice from Contractor that the entire Work is complete, the Engineer will promptly make a final inspection and will notify Contractor in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

B. Final Acceptance. After Contractor has, in the opinion of the Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, marked-up record documents (as-builts), and other documents required by the Contract Documents, the City shall execute and file with the County in which the Project is located a Notice of Completion, constituting final acceptance and completion of the Project, except as may be expressly noted.

C. Final Payment.

1. Application for Payment. Upon execution of the Notice of Completion, Contractor may make application for final payment following the procedure for progress payments. The final application for payment shall be accompanied (except as previously delivered) by: all documentation called for in the Contract Documents, including but not limited to a fully completed Conditional Waiver and Release on Final Payment

2. City's Review of Application and Acceptance. If, on the basis of the City's observation of the Work during construction and final inspection, and review of the final Application for Payment and accompanying documentation as required by the Contract Documents, the City is satisfied that the Work has been completed and Contractor has satisfied all other requirements for final payment, the City will process the final payment application. Otherwise, the City will return the payment application to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the application for payment.

3. Payment Becomes Due. Within sixty (60) Days after the presentation to the City of the proper and complete final application for payment and accompanying documentation, the amount recommended by the Engineer, less any sum the City is entitled to set off pursuant to the Contract Documents, will become due and will be paid by the City to Contractor.

D. Waiver of Claims. The making and acceptance of final payment will constitute a waiver of all Claims by Contractor against the City other than those previously made in accordance with the requirements herein and expressly acknowledged by the City in writing as still unsettled.

ARTICLE 44 OCCUPANCY

The City reserves the right to occupy or utilize any portion of the Work at any time before completion, and such occupancy or use shall not constitute acceptance of any part of Work covered by this Contract. This use shall not relieve the Contractor of its responsibilities under the Contract.

ARTICLE 45 INDEMNIFICATION

To the fullest extent permitted by law, Contractor shall immediately defend (with counsel of the City's choosing), indemnify and hold harmless the City, officials, officers, agents, employees, and representatives, and each of them from and against:

A. Any and all claims, demands, causes of action, costs, expenses, injuries, losses or liabilities, in law or in equity, of every kind or nature whatsoever, but not limited to, injury to or death, including wrongful death, of any person, and damages to or destruction of property of any person, arising out of, related to, or in any manner directly or indirectly connected with the Work or this Contract, including claims made by subcontractors for nonpayment, including without limitation the payment of all consequential damages and attorney's fees and other related costs and expenses, however caused, regardless of whether the allegations are false, fraudulent, or groundless, and regardless of any negligence of the City or its officers, employees, or authorized volunteers (including passive negligence), except the sole negligence or willful misconduct or active negligence of the City or its officials, officers, employees, or authorized volunteers.

B. Contractor's defense and indemnity obligation herein includes, but is not limited to damages, fines, penalties, attorney's fees and costs arising from claims under the Americans with Disabilities Act (ADA) or other federal or state disability access or discrimination laws arising from Contractor's Work during the course of construction of the improvements or after the Work is complete, as the result of defects or negligence in Contractor's construction of the improvements.

C. Any and all actions, proceedings, damages, costs, expenses, fines, penalties or liabilities, in law or equity, of every kind or nature whatsoever, arising out of, resulting from, or on account of the violation of any governmental law or regulation, compliance with which is the responsibility of Contractor;

D. Any and all losses, expenses, damages (including damages to the Work itself), attorney's fees, and other costs, including all costs of defense which any of them may incur with respect to the failure, neglect, or refusal of Contractor to faithfully perform the Work and all of Contractor's obligations under the agreement. Such costs, expenses, and damages shall include all costs, including attorney's fees, incurred by the indemnified parties in any lawsuit to which they are a party.

Contractor shall immediately defend, at Contractor's own cost, expense and risk, with the City Council's choosing, any and all such aforesaid suits, actions or other legal proceedings of every kind that may be brought or instituted against the City, its officials, officers, agents, employees and representatives. Contractor shall pay and satisfy any judgment, award or decree that may be rendered against the City, its officials, officers, employees, agents, employees and representatives, in any such suit, action or other legal proceeding. Contractor shall reimburse the

City, its officials, officers, agents, employees and representatives for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided. The only limitations on this provision shall be those imposed by Civil Code section 2782.

ARTICLE 46 PROCEDURE FOR RESOLVING DISPUTES

Contractor shall timely comply with all notices and requests for changes to the Contract Time or Contract Price, including but not limited to all requirements of Article 42, Changes and Extra Work, as a prerequisite to filing any claim governed by this Article. The failure to timely submit a notice of delay or notice of change, or to timely request a change to the Contract Price or Contract Time, or to timely provide any other notice or request required herein shall constitute a waiver of the right to further pursue the claim under the Contract or at law.

A. **Intent.** Effective January 1, 1991, Section 20104 et seq., of the California Public Contract Code prescribes a process utilizing informal conferences, non-binding judicial supervised mediation, and judicial arbitration to resolve disputes on construction claims of $375,000 or less. Effective January 1, 2017, Section 9204 of the Public Contract Code prescribes a process for negotiation and mediation to resolve disputes on construction claims. The intent of this Article is to implement Sections 20104 et seq. and Section 9204 of the California Public Contract Code. This Article shall be construed to be consistent with said statutes.

B. **Claims.** For purposes of this Article, "Claim" means a separate demand by the Contractor, after a change order duly requested in accordance with Article 42 "Changes and Extra Work" has been denied by the City, for (A) a time extension, (B) payment of money or damages arising from Work done by or on behalf of the Contractor pursuant to the Contract, or (C) an amount the payment of which is disputed by the City. Claims governed by this Article may not be filed unless and until the Contractor completes all procedures for giving notice of delay or change and for the requesting of a time extension or change order, including but not necessarily limited to the procedures contained in Article 42, Changes and Extra Work, and Contractor's request for a change has been denied in whole or in part. Claims governed by this Article must be filed no later than the date of final payment. The claim shall be submitted in writing to the City and shall include on its first page the following in 16 point capital font: "THIS IS A CLAIM." Furthermore, the claim shall include the documents necessary to substantiate the claim. Nothing herein is intended to extend the time limit or supersede notice requirements otherwise provided by contract for the filing of claims, including all requirements pertaining to compensation or payment for extra Work, disputed Work, and/or changed conditions. Failure to follow such contractual requirements shall bar any claims or subsequent lawsuits for compensation or payment thereon.

C. **Supporting Documentation.** The Contractor shall submit all claims in the following format:

1. Summary of claim merit and price, reference Contract Document provisions pursuant to which the claim is made

2. List of documents relating to claim:

   Specifications

Drawings

Clarifications (Requests for Information)

Schedules

Other

3. Chronology of events and correspondence

4. Analysis of claim merit

5. Analysis of claim cost

6. Time Impact Analysis in CPM format

D. **City's Response.** Upon receipt of a claim pursuant to this Article, City shall conduct a reasonable review of the claim and, within a period not to exceed 45 Days, shall provide the Contractor a written statement identifying what portion of the claim is disputed and what portion is undisputed. Any payment due on an undisputed portion of the claim will be processed and made within 60 Days after the City issues its written statement.

1. If the City needs approval from its governing body to provide the Contractor a written statement identifying the disputed portion and the undisputed portion of the claim, and the City's governing body does not meet within the 45 Days or within the mutually agreed to extension of time following receipt of a claim sent by registered mail or certified mail, return receipt requested, the City shall have up to three Days following the next duly publicly noticed meeting of the City's governing body after the 45-Day period, or extension, expires to provide the Contractor a written statement identifying the disputed portion and the undisputed portion.

2. Within 30 Days of receipt of a claim, the City may request in writing additional documentation supporting the claim or relating to defenses or claims the City may have against the Contractor. If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of City and the Contractor. The City's written response to the claim, as further documented, shall be submitted to the Contractor within 30 Days (if the claim is less than $15,000, within 15 Days) after receipt of the further documentation, or within a period of time no greater than that taken by the Contractor in producing the additional information or requested documentation, whichever is greater.

E. **Meet and Confer.** If the Contractor disputes the City's written response, or the City fails to respond within the time prescribed, the Contractor may so notify the City, in writing, either within 15 Days of receipt of the City's response or within 15 Days of the City's failure to respond within the time prescribed, respectively, and demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand, the City shall schedule a meet and confer conference within 30 Days for settlement of the dispute.

F. **Mediation.** Within 10 business Days following the conclusion of the meet and confer conference, if the claim or any portion of the claim remains in dispute, the City shall provide the Contractor a written statement identifying the portion of the claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the claim shall be processed and made within 60 Days after the City issues its written statement. Any disputed portion of the claim, as identified by the Contractor in writing, shall be submitted to nonbinding mediation, with the City and the Contractor sharing the associated costs equally. The City and Contractor shall mutually agree to a mediator within 10 business Days after the disputed portion of the claim has been identified in writing, unless the parties agree to select a mediator at a later time.

1. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator.

2. For purposes of this section, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section.

3. Unless otherwise agreed to by the City and the Contractor in writing, the mediation conducted pursuant to this section shall excuse any further obligation under Public Contract Code Section 20104.4 to mediate after litigation has been commenced.

4. The mediation shall be held no earlier than the date the Contractor completes the Work or the date that the Contractor last performs Work, whichever is earlier. All unresolved claims shall be considered jointly in a single mediation, unless a new unrelated claim arises after mediation is completed.

G. **Procedures After Mediation.** If following the mediation, the claim or any portion remains in dispute, the Contractor must file a claim pursuant to Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code prior to initiating litigation. For purposes of those provisions, the running of the period of time within which a claim must be filed shall be tolled from the time the Contractor submits his or her written claim pursuant to subdivision (a) until the time the claim is denied, including any period of time utilized by the meet and confer conference.

H. **Civil Actions.** The following procedures are established for all civil actions filed to resolve claims of $375,000 or less:

1. Within 60 Days, but no earlier than 30 Days, following the filing or responsive pleadings, the court shall submit the matter to non-binding mediation unless waived by mutual stipulation of both parties or unless mediation was held prior to commencement of the action in accordance with Public Contract Code section 9204 and the terms of this Contract. The mediation process shall provide for the selection within 15 Days by both parties of a disinterested third person as mediator,

shall be commenced within 30 Days of the submittal, and shall be concluded within 15 Days from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the court.

2. If the matter remains in dispute, the case shall be submitted to judicial arbitration pursuant to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, notwithstanding Section 1114.11 of that code. The Civil Discovery Act of 1986 (Article 3 (commencing with Section 2016) of Chapter 3 of Title 3 of Part 4 of the Code of Civil Procedure) shall apply to any proceeding brought under this subdivision consistent with the rules pertaining to judicial arbitration. In addition to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, (A) arbitrators shall, when possible, be experienced in construction law, and (B) any party appealing an arbitration award who does not obtain a more favorable judgment shall, in addition to payment of costs and fees under that chapter, also pay the attorney's fees on appeal of the other party.

I. **Government Code Claims.** In addition to any and all contract requirements pertaining to notices of and requests for compensation or payment for extra Work, disputed Work, construction claims and/or changed conditions, the Contractor must comply with the claim procedures set forth in Government Code Sections 900, et seq. prior to filing any lawsuit against the City. Such Government Code claims and any subsequent lawsuit based upon the Government Code claims shall be limited to those matters that remain unresolved after all procedures pertaining to extra Work, disputed Work, construction claims, and/or changed conditions have been followed by Contractor. If no such Government Code claim is submitted, or if the prerequisite contractual requirements are not satisfied, no action against the City may be filed. **A Government Code claim must be filed no earlier than the date the Work is completed or the date the Contractor last performs Work on the Project, whichever occurs first. A Government Code claim shall be inclusive of all unresolved claims unless a new unrelated claim arises after the Government Code claim is submitted.**

J. **Non-Waiver.** The City's failure to respond to a claim from the Contractor within the time periods described in this Article or to otherwise meet the time requirements of this Article shall result in the claim being deemed rejected in its entirety.

ARTICLE 47 CITY'S RIGHT TO TERMINATE CONTRACT

A. **Termination for Cause by the City:**

1. In the sole estimation of the City, if the Contractor refuses or fails to prosecute the Work or any separable part thereof with such diligence as will insure its completion within the time specified by the Contract Documents, or any extension thereof, or fails to complete such Work within such time, or if the Contractor should be adjudged a bankrupt, or if it should make a general assignment for the benefit of its creditors, or if a receiver should be appointed on account of its insolvency, or the Contractor or any of its subcontractors should violate any of the provisions of this Contract, the City may serve written notice upon the Contractor and its Surety of the City's intention to terminate this Contract. This notice of intent to terminate

shall contain the reasons for such intention to terminate this Contract, and a statement to the effect that the Contractor's right to perform this Contract shall cease and terminate upon the expiration of ten (10) calendar days unless such violations have ceased and arrangements satisfactory to the City have been made for correction of said violations.

2. In the event that the City serves such written notice of termination upon the Contractor and the Surety, the Surety shall have the right to take over and perform the Contract. If the Surety does not: (1) give the City written notice of Surety's intention to take over and commence performance of the Contract within 15 calendar days of the City's service of said notice of intent to terminate upon Surety; and (2) actually commence performance of the Contract within 30 calendar days of the City's service of said notice upon Surety; then the City may take over the Work and prosecute the same to completion by separate contract or by any other method it may deem advisable for the account and at the expense of the Contractor.

3. In the event that the City elects to obtain an alternative performance of the Contract as specified above: (1) the City may, without liability for so doing, take possession of and utilize in completion of the Work such materials, appliances, plants and other property belonging to the Contractor that are on the site and reasonably necessary for such completion (A special lien to secure the claims of the City in the event of such suspension is hereby created against any property of Contractor taken into the possession of the City under the terms hereof and such lien may be enforced by sale of such property under the direction of the City Council without notice to Contractor. The proceeds of the sale after deducting all expenses thereof and connected therewith shall be credited to Contractor. If the net credits shall be in excess of the claims of the City against Contractor, the balance will be paid to Contractor or Contractor’s legal representatives.); and (2) Surety shall be liable to the City for any cost or other damage to the City necessitated by the City securing an alternate performance pursuant to this Article.

B. **Termination for Convenience by the City:**

1. The City may terminate performance of the Work called for by the Contract Documents in whole or, from time to time, in part, if the City determines that a termination is in the City's interest.

2. The Contractor shall terminate all or any part of the Work upon delivery to the Contractor of a Notice of Termination specifying that the termination is for the convenience of the City, the extent of termination, and the Effective Date of such termination.

3. After receipt of Notice of Termination, and except as directed by the City's Representative, the Contractor shall, regardless of any delay in determining or adjusting any amounts due under this Termination for Convenience clause, immediately proceed with the following obligations:

   a. Stop Work as specified in the Notice.

b. Complete any Work specified in the Notice of Termination in a least cost/shortest time manner while still maintaining the quality called for under the Contract Documents.

c. Leave the property upon which the Contractor was working and upon which the facility (or facilities) forming the basis of the Contract Document is situated in a safe and sanitary manner such that it does not pose any threat to the public health or safety.

d. Terminate all subcontracts to the extent that they relate to the portions of the Work terminated.

e. Place no further subcontracts or orders, except as necessary to complete the continued portion of the Contract.

f. Submit to the City's Representative, within ten (10) calendar days from the Effective Date of the Notice of Termination, all of the usual documentation called for by the Contract Documents to substantiate all costs incurred by the Contractor for labor, materials and equipment through the Effective Date of the Notice of Termination. Any documentation substantiating costs incurred by the Contractor solely as a result of the City's exercise of its right to terminate this Contract pursuant to this clause, which costs the contractor is authorized under the Contract documents to incur, shall: (1) be submitted to and received by the Engineer no later than 30 calendar days after the Effective Date of the Notice of Termination; (2) describe the costs incurred with particularity; and (3) be conspicuously identified as “Termination Costs occasioned by the City's Termination for Convenience.”

4. Termination of the Contract shall not relieve Surety of its obligation for any just claims arising out of or relating to the Work performed.

5. In the event that the City exercises its right to terminate this Contract pursuant to this clause, the City shall pay the Contractor, upon the Contractor's submission of the documentation required by this clause and other applicable provisions of the Contract Documents, the following amounts:

   a. All actual reimbursable costs incurred according to the provisions of this Contract.

   b. A reasonable allowance for profit on the cost of the Work performed, provided Contractor establishes to the satisfaction of the City's Representative that it is reasonably probable that Contractor would have made a profit had the Contract been completed and provided further, that the profit allowed shall in no event exceed fifteen (15%) percent of the costs.

c. A reasonable allowance for Contractor's administrative costs in determining the amount payable due to termination of the Contract under this Article.

C. Notwithstanding any other provision of this Article, when immediate action is necessary to protect life and safety or to reduce significant exposure or liability, the City may immediately order Contractor to cease Work on the Project until such safety or liability issues are addressed to the satisfaction of the City or the Contract is terminated.

ARTICLE 48 WARRANTY AND GUARANTEE OF WORK

A. Contractor hereby warrants that materials and Work shall be completed in conformance with the Contract Documents and that the materials and Work provided will fulfill the requirements of this Warranty. Contractor hereby agrees to repair or replace, at the discretion of the City, any or all Work that may prove to be defective in its workmanship, materials furnished, methods of installation or fail to conform to the Contract Document requirements together with any other Work which may be damaged or displaced by such defect(s) within a period of one (1) year from the date of the Notice of Completion of the Project without any expense whatever to the City, ordinary wear and tear and unusual abuse and neglect excepted. Contractor shall be required to promptly repair or replace defective equipment or materials, at Contractor's option. All costs associated with such corrective actions and testing, including the removal, replacement, and reinstitution of equipment and materials necessary to gain access, shall be the sole responsibility of the Contractor.

B. For any Work so corrected, Contractor's obligation hereunder to correct defective Work shall be reinstated for an additional one (1) year period, commencing with the date of acceptance of such corrected Work. The reinstatement of the one (1) year warranty shall apply only to that portion of work that was corrected. Contractor shall perform such tests as City may require to verify that any corrective actions, including, without limitation, redesign, repairs, and replacements comply with the requirements of the Contract. In the event of Contractor's failure to comply with the above-mentioned conditions within ten (10) calendar days after being notified in writing of required repairs, to the reasonable satisfaction of the City, the City shall have the right to correct and replace any defective or non-conforming Work and any work damaged by such work or the replacement or correction thereof at Contractor's sole expense. Contractor shall be obligated to fully reimburse the City for any expenses incurred hereunder immediately upon demand.

C. In addition to the warranty set forth in this Article, Contractor shall obtain for City all warranties that would be given in normal commercial practice and assign to City any and all manufacturer's or installer's warranties for equipment or materials not manufactured by Contractor and provided as part of the Work, to the extent that such third-party warranties are assignable and extend beyond the warranty period set forth in this Article. Contractor shall furnish the City with all warranty and guarantee documents prior to final Acceptance of the Project by the City as required.

D. When specifically indicated in the Contract Documents or when directed by the Engineer, the City may furnish materials or products to the Contractor for installation. In the event any act or failure to act by Contractor shall cause a warranty applicable to any materials or products purchased by the City for installation by the Contractor to be voided or reduced, Contractor shall indemnify City from and against any cost, expense, or other liability arising therefrom, and shall be responsible to the City for the cost of any repairs, replacement or other costs that would have been covered by the warranty but for such act or failure to act by Contractor.

E. The Contractor shall remedy at its expense any damage to City-owned or controlled real or personal property.

F. The City shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect, or damage. The Contractor shall within ten (10) calendar days after being notified commence and perform with due diligence all necessary Work. If the Contractor fails to promptly remedy any defect, or damage; the City shall have the right to replace, repair or otherwise remedy the defect, or damage at the Contractor's expense.

G. In the event of any emergency constituting an immediate hazard to health, safety, property, or licensees, when caused by Work of the Contractor not in accordance with the Contract requirements, the City may undertake at Contractor's expense, and without prior notice, all Work necessary to correct such condition.

H. Acceptance of Defective Work.

1. If, instead of requiring correction or removal and replacement of Defective Work, the City prefers to accept it, City may do so. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) attributable to City's evaluation of and determination to accept such Defective Work and for the diminished value of the Work.

2. If any acceptance of defective work occurs prior to release of the Project Retention, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and City shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work and all costs incurred by City.

3. If the Project Retention is held in an escrow account as permitted by the Contract Documents, Contractor will promptly alert the escrow holder, in writing, of the amount of Retention to be paid to City.

4. If the acceptance of Defective Work occurs after release of the Project Retention, an appropriate amount will be paid by Contractor to City.

I. City May Correct Defective Work.

1. If Contractor fails within a reasonable time after written notice from City's Representative to correct Defective Work, or to remove and replace rejected Work as required by City, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, City may, after seven (7) Days' written notice to Contractor, correct, or remedy any such deficiency.

2. In connection with such corrective or remedial action, City may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, take possession of Contractor's tools, appliances, construction equipment and machinery at the Site, and incorporate in the Work all materials and equipment stored at the Site or for which City has paid Contractor but which are stored elsewhere. Contractor shall allow City and City's Representative, and the agents, employees, other contractors, and consultants of each of them, access to the Site to enable City to exercise the rights and remedies to correct the Defective Work.

3. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred or sustained by City correcting the Defective Work will be charged against Contractor, and a Change Order will be issued incorporating the necessary revisions into the Contract Documents with respect to the Work; and City shall be entitled to an appropriate decrease in the Contract Price.

4. Such claims, costs, losses and damages will include, but not be limited to, all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Defective Work.

5. If the Change Order is executed after all payments under the Contract have been paid by City and the Project Retention is held in an escrow account as permitted by the Contract Documents, Contractor will promptly alert the escrow holder, in writing, of the amount of Retention to be paid to City.

6. If the Change Order is executed after release of the Project Retention, an appropriate amount will be paid by Contractor to City.

7. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to City correcting Defective work.

J. Nothing in the Warranty or in the Contract Documents shall be construed to limit the rights and remedies available to City at law or in equity, including, but not limited to, Code of Civil Procedure section 337.15.

ARTICLE 49 DOCUMENT RETENTION & EXAMINATION

A. In accordance with Government Code section 8546.7, records of both the City and the Contractor shall be subject to examination and audit by the State Auditor General for a period of three (3) years after final payment.

B. Contractor shall make available to the City any of the Contractor's other documents related to the Project immediately upon request of the City.

C. In addition to the State Auditor rights above, the City shall have the right to examine and audit all books, estimates, records, contracts, documents, bid documents, subcontracts, and other data of the Contractor (including computations and projections) related to negotiating, pricing, or performing the modification in order to evaluate the accuracy and completeness of the cost or pricing data at no additional cost to the City, for a period of four (4) years after final payment.

ARTICLE 50 SEPARATE CONTRACTS

A. The City reserves the right to let other contracts in connection with this Work or on the Project site. Contractor shall permit other contractors reasonable access and storage of their materials and execution of their work and shall properly connect and coordinate its Work with theirs.

B. To ensure proper execution of its subsequent Work, Contractor shall immediately inspect work already in place and shall at once report to the Engineer any problems with the Work in place or discrepancies with the Contract Documents.

C. Contractor shall ascertain to its own satisfaction the scope of the Project and nature of any other contracts that have been or may be awarded by the City in prosecution of the Project to the end that Contractor may perform this Contract in the light of such other contracts, if any. Nothing herein contained shall be interpreted as granting to Contractor exclusive occupancy at site of the Project. Contractor shall not cause any unnecessary hindrance or delay to any other contractor working on the Project. If simultaneous execution of any contract for the Project is likely to cause interference with performance of some other contract or contracts, the Engineer shall decide which Contractor shall cease Work temporarily and which contractor shall continue or whether work can be coordinated so that contractors may proceed simultaneously. The City shall not be responsible for any damages suffered or for extra costs incurred by Contractor resulting directly or indirectly from award, performance, or attempted performance of any other contract or contracts on the Project site.

ARTICLE 51 NOTICE AND SERVICE THEREOF

All notices shall be in writing and either served by personal delivery or mailed to the other party as designated in the Bid Forms. Written notice to the Contractor shall be addressed to Contractor's principal place of business unless Contractor designates another address in writing for service of notice. Notice to City shall be addressed to the City as designated in the Notice Inviting Bids unless City designates another address in writing for service of notice. Notice shall be effective upon receipt or five (5) calendar days after being sent by first class mail, whichever

is earlier. Notice given by facsimile shall not be effective unless acknowledged in writing by the receiving party.

ARTICLE 52 NOTICE OF THIRD PARTY CLAIMS

Pursuant to Public Contract Code section 9201, the City shall provide the Contractor with timely notification of the receipt of any third-party claims relating to the Contract. The City is entitled to recover reasonable costs incurred in providing such notification.

ARTICLE 53 STATE LICENSE BOARD NOTICE

Contractors are required by law to be licensed and regulated by the Contractors' State License Board which has jurisdiction to investigate complaints against contractors if a complaint regarding a patent act or omission is filed within four (4) years of the date of the alleged violation. A complaint regarding a latent act or omission pertaining to structural defects must be filed within ten (10) years of the date of the alleged violation. Any questions concerning a contractor may be referred to the Registrar, Contractors' State License Board, P.O. Box 26000, Sacramento, California 95826.

ARTICLE 54 INTEGRATION

A. **Oral Modifications Ineffective.** No oral order, objection, direction, claim or notice by any party or person shall affect or modify any of the terms or obligations contained in the Contract Documents.

B. **Contract Documents Represent Entire Contract.**The Contract Documents represent the entire agreement of the City and Contractor.

ARTICLE 55 ASSIGNMENT OF CONTRACT

Contractor shall not assign, transfer, convey, sublet or otherwise dispose of the rights or title of interest of any or all of this contract without the prior written consent of the City. Any assignment or change of Contractor's name of legal entity without the written consent of the City shall be void. Any assignment of money due or to become due under this Contract shall be subject to a prior lien for services rendered or Material supplied for performance of Work called for under the Contract Documents in favor of all persons, firms, or corporations rendering such services or supplying such Materials to the extent that claims are filed pursuant to the Civil Code, the Code of Civil Procedure or the Government Code.

ARTICLE 56 CHANGE IN NAME AND NATURE OF CONTRACTOR'S LEGAL ENTITY

Should a change be contemplated in the name or nature of the Contractor's legal entity, the Contractor shall first notify the City in order that proper steps may be taken to have the change reflected on the Contract and all related documents. No change of Contractor's name or nature will affect City's rights under the Contract, including but not limited to the bonds.

ARTICLE 57 ASSIGNMENT OF ANTITRUST ACTIONS

Pursuant to Public Contract Code section 7103.5, in entering into a public works contract or subcontract to supply goods, services, or materials pursuant to a public works contract, Contractor or subcontractor offers and agrees to assign to the City all rights, title, and interest in and to all

causes of action it may have under Section 4 of the Clayton Act (15 USC, Section 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from the purchase of goods, services, or materials pursuant to this contract or any subcontract. This assignment shall be made and become effective at the time the City tenders final payment to the Contractor, without further acknowledgment by the parties.

ARTICLE 58 PROHIBITED INTERESTS

No City official or representative who is authorized in such capacity and on behalf of the City to negotiate, supervise, make, accept, or approve, or to take part in negotiating, supervising, making, accepting or approving any engineering, inspection, construction or material supply contract or any subcontract in connection with construction of the project, shall be or become directly or indirectly interested financially in the Contract.

ARTICLE 59 CONTROLLING LAW

Notwithstanding any subcontract or other contract with any subcontractor, supplier, or other person or organization performing any part of the Work, this Contract shall be governed by the law of the State of California excluding any choice of law provisions.

ARTICLE 60 JURISDICTION; VENUE

Contractor and any subcontractor, supplier, or other person or organization performing any part of the Work agrees that any action or suits at law or in equity arising out of or related to the bidding, award, or performance of the Work shall be maintained in the Superior Court of Santa Clara County, California, and expressly consent to the jurisdiction of said court, regardless of residence or domicile, and agree that said court shall be a proper venue for any such action.

ARTICLE 61 LAWS AND REGULATIONS

A. Contractor shall give all notices and comply with all laws, ordinances, rules and regulations bearing on conduct of work as indicated and specified. If Contractor observes that drawings and specifications are at variance therewith, it shall promptly notify the Engineer in writing and any necessary changes shall be adjusted as provided for in this Contract for changes in work. If Contractor performs any work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the Engineer, it shall bear all costs arising therefrom.

B. Contractor shall be responsible for familiarity with the Americans with Disabilities Act (“ADA”) (42 U.S.C. § 12101 et seq.). The Work will be performed in compliance with ADA regulations.

ARTICLE 62 PATENTS

Contractor shall hold and save the City, officials, officers, employees, and authorized volunteers harmless from liability of any nature or kind of claim therefrom including costs and expenses for or on account of any patented or unpatented invention, article or appliance manufactured, furnished or used by Contractor in the performance of this contract.

ARTICLE 63 OWNERSHIP OF CONTRACT DOCUMENTS

All Contract Documents furnished by the City are City property. They are not to be used by Contractor or any subcontractor on other work nor shall Contractor claim any right to such documents. With exception of one complete set of Contract Documents, all documents shall be returned to the City on request at completion of the Work.

ARTICLE 64 NOTICE OF TAXABLE POSSESSORY INTEREST

In accordance with Revenue and Taxation Code section 107.6, the Contract Documents may create a possessory interest subject to personal property taxation for which Contractor will be responsible.

ARTICLE 65 SURVIVAL OF OBLIGATIONS

All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

00 73 13 – SPECIAL CONDITIONS

1.1 Engineer of Record.

A For purposes of this Project, the Engineer of Record or Engineer shall be: Philip Luo, Shah Kawasaki Architects.

1.2 Location of the Project.

A The Project is located 1263 Yosemite Drive, Milpitas, CA 95035.

B The general location of the Project is shown on City Drawing No. AD-001.

1.3 Status of the Project Area and Rights-of-Way.

A City, at its expense, will provide all rights-of-way or permits, or both, covering the crossing of private property and public and private rights-of-way necessary for the permanent Work; provided, however, Contractor shall, at its expense, obtain any bonds or insurance policies or pay any fees and enter into any agreements required by a controlling authority, *e.g.*, Caltrans or Southern Pacific Railroad Company, before Contractor enters upon any property or right-of-way under the jurisdiction of any such controlling authority for the purpose of performing Work.

B City has acquired or is negotiating to acquire any rights-of-way, or both, necessary for the permanent Work.

C If such permits are required, all operations of Contractor shall conform to the restrictions, regulations, and requirements set forth in said permits, copies of which will be included in the Contract Documents.

D Contractor may be required, as a condition for receiving final payment, to obtain, and provide City's Representative with copies of, executed damage releases from the owners of public and private property whose property has been damaged by the Work. The damage releases will be on a form provided by City.

E Contractor shall, also, as a condition for receiving final payment, obtain, and provide City's Representative with copies of, executed damage releases from the owners of certain public and private property or areas which have been crossed by the Work or otherwise affected by the Work. The damage releases will be on a form provided by City.

1.4 Site Data.

A The data provided herein is for the information of Contractor and is subject to all limitations and conditions set forth in the Contract Documents.

B Subsurface Exploration Data. The following data are included in the Project Manual. PDF version of the reports are attached as an appendix.

1. Pre-Demolition Hazardous Material Survey, Terracon- July 29, 2019

2. Geotechnical Engineering Report, Terracon- March 29, 2019

3. Analytical Report, McCampbell Analytical, Inc.- March 01, 2019

4. Fuel Leak Site Case Closure Letter, Santa Clara Valley Water District- August 20, 1998

5. CEQA document for Milpitas Fire station No.2 Replacement Project

C Other Site Data. The following data are available for inspection at City's office:

1. Fire Station No. 2 and No. 3 Facility Assessment – March, 2015

2. Fire Station No. 2 Rehabilitation Project -1996

3. Fire Station No. 2 and No. 3 Construction – 1968

Copies of these reports, drawings and other materials may be examined at City's office during regular business hours.

1.5 Pre-Purchased or Pre-Negotiated Material [NOT USED.]

1.6 Designation of City's Representative.

A Unless otherwise modified by City, City's Representative shall be Lyhak Eam.

1.7 Project Retention

In accordance with Public Contract Code § 7201, City will withhold 5% of each progress payment as retention on the Project.

1.8 Liquidated Damages Due to Contractor Delay.

A Time is of the essence. Should Contractor fail to complete all or any part of the Work within the time specified in the Contract Documents, City will suffer damage, the amount of which is difficult, if not impossible, to ascertain and, pursuant to the authority of Government Code section 53069.85, City shall therefore be entitled to **$5,000** per Day as liquidated damages for each Day or part thereof that actual completion extends beyond the time specified.

B Liquidated damages may be deducted from progress payments due to Contractor, Project retention or may be collected directly from Contractor, or from Contractor's surety. These provisions for liquidated damages shall not prevent City, in case of Contractor's default, from terminating the Contractor.

1.9 Utility Outages – Notices to Residents.

A Should Contractor's operations require interruption of any utility service, Contractor shall notify City at least ten (10) Days prior to the scheduled outage. Contractor will notify all impacted residents on a form provided by City at least seven (7) Days prior to the scheduled outage.

B Contractor shall be responsible for providing, at its cost, any temporary utility or facilities necessitated by the utility outage.

1.10 Schedule Constraints.

A. It is anticipated that the tenant improvement work for the Temporary Fire Station No. 2 be completed and the entire fire station operation be relocated to the temporary station by April 15, 2020. Other than the two scheduled pre-bid conferences on February 20 and 25, 2020, the Contractor will not have access to the site and start the demolition work prior to the specific date.

B. In an event there are any delays beyond the date specified above, the City has the right to postpone the notice to proceed until the building is clear and ready for demolition. No additional time nor compensation will be added to the contract due to these constraints.

1.11 Safety Programs.

[NOT USED.

1.12 Coordination with Other Contractors.

A. In addition to the Contract requirements relating to other work at the Site, City anticipates that other contractors will be performing work within the Site, Specifically:

- Traffic Control Cabinet Relocation Contractor
- PG&E, ATT and COMCAST
- Coordination with adjacent property owner for tree removal.

END OF SPECIAL CONDITIONS

01 00 00 – GENERAL REQUIREMENTS

PART 1 GENERAL

1.1 DESCRIPTION

The demolition of existing Fire Station No.2, located at 1263 Yosemite Drive, includes, but not limited to the following :

- Remove and dispose of existing building, foundation and sub base material;
- Remove and dispose of existing generator, fuel convault and day tank;
- Remove and dispose of existing concrete and asphalt paving;
- Remove and dispose of existing landscaping including trees, shrub, and sod lawn;
- Remove and dispose of existing underground utilities (wet and dry);
- Remove and dispose of existing fencing, signage, bollard and all other miscellaneous items inside the building and project site per Contract Document and Specifications
- Cap, remove and dispose of existing underground utilities
- Place and monitor temporary erosion and sediment controls per SWPPP requirements
- Contractor to provide and conduct Biological Survey prior to removal of any trees
- Obtain a building permit for fuel tank and generator removal
- Cap and abandon water, sewer and storm drain service in the Public Right of Way

PART 2 (NOT USED)

PART 3 EXECUTION

3.1 LAYOUT OF WORK AND QUANTITY SURVEYS

A. General. The Contractor shall utilize a properly licensed surveyor to perform all layout surveys required for the control and completion of the Work, and all necessary surveys to compute quantities of Work performed.

City and/or the Engineer of Record has established primary control to be used by the Contractor for establishing lines and grades required for the Work.

Primary control consists of benchmarks and horizontal control points in the vicinity of the Work. A listing and identification of the primary control is provided on the Drawings. Before beginning any layout work or construction activity, the Contractor shall check and verify primary control, and shall advise the City Representative of any discrepancies.

B. Quantity surveys. The Contractor shall perform such surveys and computations as are necessary to determine quantities of Work performed or placed during each progress payment period, and shall perform all surveys necessary for the City Representative to determine final quantities of Work in place. The City Representative will determine final quantities based upon the survey data provided by the Contractor, and the design lines and grades. If requested by the City Representative, the Contractor shall provide an electronic copy of data used for quantity computations.

All surveys performed for measurement of final quantities of Work and material shall be subject to approval of City's Representative. Unless waived by City's Representative in each specific case, quantity surveys made by the Contractor shall be made in the presence of City's Representative.

C. Surveying

1. Accuracy. Degree of accuracy shall be an order high enough to satisfy tolerances specified for the Work and the following:

(a) Right-of-way and alignment of tangents and curves shall be within 0.1 foot.

(b) Structure points shall be set within 0.01 foot, except where operational function of the special features or installation of metalwork and equipment require closer tolerances. When formwork has been placed and is ready for concrete, the Contractor shall check the formwork for conformance with the drawings and to ensure that the forms are sufficiently within the tolerance limits for the completed work.

(c) Cross-section points shall be located within 0.1 foot, horizontally and vertically.

(d) Aerial Mapping shall meet National Mapping Standards for 2-foot contour intervals.

D. Records. Survey data shall be recorded in accordance with recognized professional surveying standards. Original field notes, computations, and other surveying data shall be recorded on electronic data collectors or in standard field books and must be of sufficient quality to enable the Contractor to prepare accurate record drawings as required by the Contract Documents.

E. Cost. Unless otherwise called for by the Contract Documents, the cost of all material, equipment, and labor required for surveys for the layout of work and quantity surveys shall be included in the Schedule of Pay Items for items of work requiring the surveys. No additional compensation shall be made to the Contractor for this Work.

3.2 SCHEDULE

A. Estimated Schedule. Within 21 Days after the issuance of the Notice of Award, Contractor shall prepare a Project schedule and shall submit this to the Engineer for Approval. The receipt or Approval of any schedules by the Engineer or the City shall not in any way relieve the Contractor of its obligations under the Contract Documents. The Contractor is fully responsible to determine and provide for any and all staffing and resources at levels which allow for good quality and timely completion of the Project. Contractor's failure to incorporate all elements of Work required for the performance of the Contract or any inaccuracy in the schedule shall not excuse the Contractor from performing all Work required for a completed Project within the specified Contract time period. If the required schedule is not

received by the time the first payment under the Contract is due, Contractor shall not be paid until the schedule is received, reviewed and accepted by the Engineer.

B. Schedule Contents. The schedule shall indicate the beginning and completion dates of all phases of construction; critical path for all critical, sequential time related activities; and "float time" for all "slack" or "gaps" in the non-critical activities. The schedule shall clearly identify all staffing and other resources which in the Contractor's judgment are needed to complete the Project within the time specified for completion. The overall Project Schedule duration shall be within the Contract time.

C. Weather Allowance. The schedule shall allow adequate time for inclement weather.

D. Schedule Updates. Contractor shall continuously update its construction schedule. Contractor shall submit an updated and accurate construction schedule to the Engineer monthly when requested to do so by Engineer. Contractor shall also submit schedules showing a three week detailed look-ahead at bi-weekly meetings conducted with the City. The Engineer may withhold progress payments or other amounts due under the Contract Documents if Contractor fails to submit an updated and accurate construction schedule.

3.3 TEMPORARY FIELD OFFICE

A. Utility Services. Contractor, at its expense, shall arrange for, develop and maintain all utilities, including but not limited to water, electric power, sewage disposal and telephone communications, at the Site to meet the requirements of the Work.

B. Sanitation. The Contractor shall provide sanitary facilities for all persons working on the project. These facilities shall be kept clean and shall not be unsightly or produce odors.

3.4 PROTECTION OF WORK AND PROPERTY

A. All traffic detector loops, fences, walls, culverts, monuments, or other obstructions (except property line monuments within five (5) feet of the centerline of the mains) which are removed, damaged, or destroyed in the course of the Work, shall be replaced or repaired to the original condition at no additional cost to City. Contractor shall be responsible for the cost to repair, replace, relocate, and replacement of utilities whether or not those obstructions have been shown on the Plans, unless otherwise stated herein. It is then the Contractor's responsibility to employ at its expense a Licensed Land Surveyor to restore all property line monuments located more than five (5) feet from the centerline of the mains, which are destroyed or obliterated. Property line monuments located within five (5) feet of the centerline of the mains will be replaced by the City at no expense to the Contractor, provided the City is notified at least 48 hours before the property line monuments are damaged.

B. Contractor shall provide such heat, covering, and enclosures as are necessary to protect all Work, materials, equipment, appliances, and tools against damage by weather conditions.

C. Contractor shall take adequate precautions to protect existing sidewalks, curbs, pavements, utilities, and other adjoining property and structures, and to avoid damage thereto, and Contractor shall repair any damage thereto caused by the Work operations. Contractor shall:

1. Enclose the working area with a substantial barricade, and arrange work to cause minimum amount of inconvenience and danger to the public.

2. The contractor is required to wrap ribbon around the tree and tag to save and provide tree protection barrier prior to commencing the demolition work.

3. Deliver materials to the Project site over a route designated by the Engineer.

4. Provide any and all dust control required and follow the Applicable air quality regulations as appropriate. If the Contractor does not comply, the City shall have the immediate authority to provide dust control and deduct the cost from payments to the Contractor.

5. Confine Contractor's apparatus, the storage of materials, and the operations of its workers to limits required by law, ordinances, permits, or directions of the Engineer. Contractor shall not unreasonably encumber the Project site with its materials.

6. Take care to prevent disturbing or covering any survey markers, monuments, or other devices marking property boundaries or corners. If such markers are disturbed by accident, they shall be replaced by a civil engineer or land surveyor acceptable to the City, at no cost to the City.

7. Ensure that existing facilities, fences and other structures are all adequately protected and that, upon completion of all Work, all facilities that may have been damaged are restored to a condition acceptable to the City.

8. Preserve and protect from injury all buildings, pole lines and all direction, warning and mileage signs that have been placed within the right-of-way.

9. At the completion of work each day, leave the Project site in a clean, safe condition.

10. Comply with any approved stage construction and traffic control plans. Access to residences and businesses shall be maintained at all times, unless otherwise permitted in writing by the City.

11. Cover and or protect work and project site as may be required to prevent or mitigate schedule delay and to allow work to proceed during wet weather or wet conditions.

D. These precautionary measures will apply continuously and not be limited to normal working hours. Full compensation for the Work involved in the preservation of life,

safety and property as above specified shall be considered as included in the prices paid for the various contract items of Work, and no additional allowance will be made therefore.

E. Should damage to persons or property occur as a result of the Work, Contractor shall be responsible for proper investigation, documentation, including video or photography, to adequately memorialize and make a record of what transpired. The City shall be entitled to inspect and copy any such documentation, video, or photographs.

3.5 SITE CONDITIONS SURVEYS

A. Work Included.

Contractor shall conduct thorough pre-construction and post-construction site condition surveys of the entire project area. Site Conditions surveys shall include written documentation of the conditions found, as well as photographs and video recordings of the area within at least 80 feet of any construction area and staging area. The written notes, photographs, and video shall be suitable for forensic purposes to resolve any damage claims that may arise as a result of construction.

B. Submittals.

1. Written documentation of site condition survey at pre-construction and post-construction.

2. Photographs as described herein of pre-construction and post-construction conditions.

3. Video recordings as described herein of pre-construction and post-construction conditions.

4. Submittals shall be made within three days of the surveys. All post-construction data shall be submitted prior to the final project inspection.

C. Site Condition Written Documentation.

Written documentation shall include the time, date, and conditions under which the site survey was made. The documentation shall note the condition of structures, pavement, sidewalks, utilities, fences, and etc. within the work areas.

D. Photographs & Video Recording.

1. General – Prior to starting Work, Contractor shall provide a video recording of the project site. Contract shall take enough photographs during each site survey to provide a record of conditions existing prior to construction and conditions after construction. Pre-construction video and photographs shall be taken prior to any construction or mobilization of equipment, but not more than one week prior to actual start of work. The pre-construction photographs may be staged at different times to match the progression of the Work.

2. The photographs shall document existing damage to public and private facilities, both prior to and after construction. Conditions to be documented include, but are not limited to: sidewalk cracks, broken curbs, separated property walls, improvements within public right-of-ways, access roads used, utility covers and markings, signs, pavement striping, pavement, unique or unusual conditions, adjacent driveways, landscaping, survey markers, and any feature directed by the Engineer. Private property that is adjacent to the public right-of-way shall be documented to the extent visible from the public right-of-way.

3. Photographs shall include items to indicate scale, as needed. In particular, scales or other items shall be laid next to close ups of structural cracks and other damaged areas being recorded. Scaling shall also be used to document elevation differences, as needed.

4. One set of color prints and the preconstruction site video shall be submitted. Additional sets shall be available for reviewing in settling any construction disputes. A set of photos shall also be furnished in electronic format. The resolution shall be at least equal to 7 mega-pixels. All photos shall be documented as to time and date taken, photographer, project number, location, and orientation. Documentation shall include a brief description of objects photographed.

E. Video Recording.

1. Video recordings shall document the conditions of the entire area affected by construction, as well as nearby structures and facilities. The general documentation requirements for videos are the same as for photographs. Video recorders shall accurately and continuously record the time and date.

2. Video recordings shall include an audio portion made simultaneously during the videoing. The audio recording shall describe the location, time, orientation, and objects being recorded. Special commentary shall be provided for unusual conditions or damage noted.

3. Video equipment shall be capable of producing high resolution images and shall have zoom capabilities.

4. Video recordings shall provide an overall picture of the sites and shall provide detailed images of damaged areas. Video shall extend to the maximum height of structures.

5. The Engineer shall have the right to reject any audio video recordings submitted with unintelligible audio, uncontrolled pan or zoom, or of poor quality. Video recordings shall be repeated when rejected.

6. Video recordings shall be submitted with labels indicating the project, date, recorder, and other pertinent information. Recordings shall be submitted on standard DVDs in a standard format.

F. Timing.

Contractor shall provide written notice of the time scheduled for the site conditions survey and the place it is to begin. Contractor shall obtain the Engineer's concurrence prior to beginning the condition survey. The Engineer reserves the right to cancel the survey due to weather conditions or other problems. Videoing shall be done during times of good visibility and no videoing or photography shall be done during periods of visible precipitation or when standing water obscures pavement. Contractor shall provide the Engineer with an opportunity to have a representative present when taking the photos and provide guidance during photographing.

G. Site Surveyor.

The site condition surveyor(s) shall be experienced in construction and potential damage concerns. The site condition surveyor(s) shall be familiar with the photography and video equipment being used.

H. Field Quality Control.

Prior to submitting videos and photographs, the Contractor shall spot check the photos and videos in the field to insure they accurately reflect the actual conditions and to insure they are correctly labeled.

I. Soils Compaction Testing.

1. All soils compaction testing will be done by a licensed geotechnical engineer furnished by the City. Soils compaction testing will be done for all footings and foundations prior to placement of rebar or concrete.

2. For pipeline construction, soil compaction testing will be done at 100-foot intervals or as ordered by the project soils/geotechnical report at the bottom of the trench prior to placement of pipe bedding; at the top of the pipe bedding above the pipe; every two vertical feet of trench backfill or as otherwise ordered by the project soils/geotechnical report; at the top of the trench backfill, which should be the bottom of the pavement section; and at the top of the aggregate base prior to pavement construction.

3.6 SUBMITTAL REQUIREMENTS FOR MANUALS AND RECORD DRAWINGS

A. General. The Contractor shall furnish all materials and perform all Work required for furnishing submittals to City in accordance with Contract Documents. The Contractor shall submit Project Record Drawings, Technical Manual, Spare Parts, and other required items within 5 days following completion of project construction, and prior to Contractors request for Project Acceptance.

B. Technical Manuals.

1. The Contractor shall submit technical operation and maintenance information for each item of mechanical, electrical and instrumentation equipment in an organized manner in the Technical Manual. It shall be written so that it can be used and understood by City's operation and maintenance staff.

2. The Technical Manual shall be subdivided first by specification section number; second, by equipment item; and last, by "Category." The Contractor shall furnish to City four (4) identical Technical Manuals. Each set shall consist of one or more volumes, each of which shall be bound in a standard binder.

C. Spare Parts List - The Contractor shall furnish to City six (6) identical sets of spare parts information for all mechanical, electrical, and instrumentation equipment. The spare parts list shall include the current list price of each spare part. The spare parts list shall include those spare parts which each manufacturer recommends be maintained by City in inventory. Each manufacturer or supplier shall indicate the name, address, and telephone number of its nearest outlet of spare parts to assist City in ordering. The Contractor shall cross-reference all spare parts lists to the equipment numbers designated in the Contract Documents. The spare parts lists shall be bound in standard size, 3-ring binder.

D. Record Drawings

1. The Contractor shall maintain one record set of Drawings at the Site. On these, it shall mark all Project conditions, locations, configurations, and any other changes or deviations which may vary from the information represented in the original Contract Documents, including buried or concealed construction and utility features which are revealed during the course of construction. Special attention shall be given to recording the horizontal and vertical location of all buried utilities that differ from the locations indicated, or which were not indicated on the Contract Drawings. Said record drawings shall be supplemented by any detailed sketches as necessary or directed to fully indicate the Work as actually constructed. These master record drawings of the as-built conditions, including all revisions made necessary by Addenda and Change Orders shall be maintained up-to-date during the progress of the Project. Red ink shall be used for alterations and notes. Notes shall identify relevant Change Orders by number and date.

2. For all Projects involving the installation of any pipeline, Contractor shall survey and record the top of the pipe at a minimum of every 100 linear feet, and at each bend, recording both the horizontal and vertical locations.

3. Record drawings shall be accessible to City's Representative at all times during the construction period. The record drawings shall be kept up to date and will be checked by the City prior to each progress payment. Failure on the Contractor's part to keep record drawings current could result in withholding partial payment.

4. Upon Completion of the Project and as a condition of final acceptance, the Contractor shall finalize and deliver a complete set of Record Drawings to City's Representative. The information submitted by the Contractor will be assumed to be correct, and the Contractor shall be responsible for, and liable to City, for the accuracy of such information, and for any errors or omissions which may or may not appear on the Record Drawings.

E. Cost. Unless otherwise called for by the Contract Documents, the cost of all material, equipment, and labor required to complete the Manuals and Record Drawings shall be included in Contractor's bid and distributed in the Schedule of Pay. No additional compensation shall be made to the Contractor for this Work.

3.7 MATERIALS

A. Materials to be Furnished by the Contractor

1. Inspection of Materials. Materials furnished by the Contractor which will become a part of the Project shall be subject to inspection at any one or more of the following locations, as determined by City's Representative: at the place of production or manufacture, at the shipping point, or at the site of the Work. To allow sufficient time to provide for inspection, the Contractor shall submit to City's Representative, at the time of issuance, copies of purchase orders or other written instrument confirming procurement of the materials, including drawings and other pertinent information, covering materials on which inspection will be made.

2. No later than fourteen (14) Days prior to manufacture of material, Contractor shall inform City's Representative, in writing, the date the material is to be manufactured.

3. Contractors Obligations. The inspection of materials at any of the locations specified above or the waiving of the inspection thereof shall not impact whether the materials and equipment conform to the Contract Documents. Contractor will not be relieved from furnishing materials meeting the requirements of the Contract Documents due to City's inspection or lack of inspection of the equipment or materials. Acceptance of any materials will be made only after materials are installed in the Project.

4. Cost. Unless otherwise called for by the Contract Documents, the cost of all material, equipment, and labor required to accommodate City's testing efforts, including any travel required by Contractor's forces, shall be included in Contractor's bid and distributed in the Schedule of Pay Items related to the materials requiring testing. No additional compensation shall be made to the Contractor for this Work.

3.8 LOCAL CONDITIONS AND REQUIREMENTS

A. Access to Work and Haul Routes

1. General. All work on the rights-of-way necessary for access to the Site shall be performed by the Contractor. Contractors anticipated Haul Routes shall be in compliance with the City's approved Truck Routes available from the Engineer.

2. Access, Damage, Restoration. The Contractor shall make his own investigation of the condition of available public or private roads and of clearances, restrictions, bridge-load limits, permit or bond requirements,

and other limitations that affect or may affect transportation and ingress or egress at the Site.

3. The Contractor shall maintain and repair any damage arising out of Contractor's operations to all roads used during construction of the Project, and upon completion of all Work, but prior to final acceptance, the roads shall be restored to their original condition. Prior to using any road for access to the Site, the Contractor shall conduct a photograph and/or video survey of the roadway with a copy submitted to City's Representative.

4. Cost. Unless otherwise called for by the Contract Documents, the cost of all material, equipment, and labor required to complete this Work, shall be included in Contractor's bid and distributed in the Schedule of Pay Items. No additional compensation shall be made to the Contractor for this Work.

B. Power. Contractor shall provide at its own expense all necessary power required for operations under the contract. The Contractor shall provide and maintain in good order such modern equipment and installations as shall be adequate in the opinion of the Engineer to perform in a safe and satisfactory manner the Work required by the contract.

C. Construction Water.

1. Construction water shall not be used for purposes other than those required to satisfactorily complete the contract.

2. Construction recycled water will be made available to the contractor from one of three fill locations within the city limits. If there is a need for construction recycled water during construction, the contractor shall apply for a city construction recycled water meter at the city hall finance counter prior to the beginning of work. A security deposit of $2,000 is required for the construction water meter from which the meter rental fee and cost of water will be deducted. if the rental fee and the water costs exceed the $2,000.00 deposited, an invoice will be issued to the contractor for payment.

3. Construction potable water will only be made available to the contractor if it can be demonstrated that recycled water cannot be used for the construction activities. potable water will be made available from existing city fire hydrant(s) nearest the proposed construction site as approved by the engineer, or by such other means as may be expressly approved in writing by the engineer. If there is a need for water during construction, the contractor shall apply for a city construction water meter at the city hall finance counter prior to the beginning of work. a security deposit of $2,000 is required for the construction water meter from which the meter rental fee and cost of water will be deducted. If the rental fee and the water costs exceed the $2,000.00 deposited, an invoice will be issued to the contractor for payment.

4. All required water, all work and materials required for obtaining, pumping, transporting and applying and otherwise disposing of said water shall be in

an approved manner and shall be performed by, and at the expense of the contractor and no extra or separate compensation will be made thereof.

D. Operation of Existing Water Facilities

1. The Contractor shall not operate any of the existing water systems, including pumps, motors, valves, and hydrants, but shall contact the City two (2) working days in advance with a list and location of the water system facilities that will require operating, opening, stopping, or closure by the City.

2. At the option of the Engineer, the Contractor may be permitted to operate valves for the purpose of making connections to existing mains. The City will perform all notification to existing customers regarding temporary loss of service.

3. Contractor shall submit a request on City's standard form for any shut-down of existing water facilities.

E. Construction at Existing Utilities

1. General. Where the Work to be performed crosses or otherwise interferes with water, sewer, gas, or oil pipelines; buried cable; or other public or private utilities, the Contractor shall perform construction in such a manner so that no damage will result to either public or private utilities. It shall be the responsibility of the Contractor to determine the actual locations of, and make accommodates to maintain, all utilities.

2. Permission, Notice and Liability. Before any utility is taken out of service, permission shall be obtained by the Contractor from the owner. The owner, any impacted resident or business owner and the City Representative will be advised of the nature and duration of the utility outage as well as the Contractor's plan for providing temporary utilities if required by the owner. The Contractor shall be liable for all damage which may result from its failure to maintain utilities during the progress of the Work, and the Contractor shall indemnify City as required by the Contract Documents from all claims arising out of or connected with damage to utilities encountered during construction; damages resulting from disruption of service; and injury to persons or damage to property resulting from the negligent, accidental, or intentional breaching of utilities.

3. Cost. Unless otherwise called for by the Contract Documents, the cost of all material, equipment, and labor required to complete this Work, shall be included in Contractor's bid and distributed in the Schedule of Pay Items. No additional compensation shall be made to the Contractor for this Work.

F. Traffic Control

1. General. Contractor shall abide by traffic control plans approved by the City.

2. Protections. Roads subject to interference by the Work shall be kept open or suitable temporary passages through the Work shall be provided and maintained by the Contractor. The Contractor shall provide, erect, and maintain all necessary barricades, suitable and sufficient flasher lights, flag persons, danger signals, and signs, and shall take all necessary precautions for the protection of the Work and the safety of the public. No construction work along public or private roads may proceed until the Contractor has proper barricades, flasher lights, flag persons, signals, and signs in place at the construction site.

3. Cost. Unless otherwise called for by the Contract Documents, the cost of all material, equipment, and labor required to complete this Work, shall be included in Contractor's bid and distributed in the Schedule of Pay Items. No additional compensation shall be made to the Contractor for this Work.

G. Cleaning Up

1. Contractor at all times shall keep premises free from debris such as waste, rubbish, and excess materials and equipment. Contractor shall not store debris under, in, or about the premises. Contractor shall also clean all asphalt and concrete areas to the degree necessary to remove oil, grease, fuel, or other stains caused by Contractor operations or equipment, including all USA markings. The use of water, resulting in mud on streets, will not be permitted as substitute for sweeping or other methods. Dust control may require having a water truck onsite for the duration of the project, and/or use of temporary hoses and pipelines to convey water.

2. Contractor shall fully clean up the site at the completion of the Work. If the Contractor fails to immediately clean up at the completion of the Work, the City may do so and the cost of such clean up shall be charged back to the Contractor.

3.9 ENVIRONMENTAL QUALITY PROTECTION

A. Environmental Conditions

1. Contractor must comply with all applicable environmental laws, Project conditions, and constraints.

2. City has considered these Environmental Conditions when determining the Contract Times and no additional time or compensation will be added to the Contract due to these Conditions.

B. Landscape and Vegetation Preservation

1. General. The Contractor shall exercise care to preserve the natural landscape and vegetation, and shall conduct operations so as to prevent unnecessary destruction, scarring, or defacing of the natural surroundings in the vicinity of the Work.

2. Damage and Restoration. Movement of crews and equipment within the rights-of-way and over routes provided for access to the Work shall be performed in a manner to prevent damage to property. When no longer required, construction roads shall be restored to original contours.

3. Upon completion of the Work, and following removal of construction facilities and required cleanup, land used for construction purposes and not required for the completed installation shall be scarified and regraded, as required, so that all surfaces are left in a condition that will facilitate natural revegetation, provide for proper drainage, and prevent erosion.

4. Cost. Unless otherwise called for by the Contract Documents, the cost of all material, equipment, and labor required to complete this Work, shall be included in Contractor's bid and distributed in the Schedule of Pay Items. No additional compensation shall be made to the Contractor for this Work.

C. Protected Species

1. General. If, in the performance of the Work, evidence of the possible occurrence of any State or Federally listed threatened or endangered plant or animal is discovered, the Contractor shall notify the City Representative immediately, giving the location and nature of the findings. Written confirmation of the evidence, location and nature of the findings shall be forwarded to City within 2 Days.

2. Procedures. The Contractor shall immediately cease all construction activities in the immediate area of the discovery to the extent necessary to protect the endangered plant or animal.

   If directed by the City Representative, Contractor will refrain from working in the immediate area, suspend the Work in its entirety, or alter its performance to ensure full compliance with all applicable permits, laws and regulations. Any City directed changes to the Work as a result of a siting will be pursuant to the Contract Documents.

3. False Siting. Any costs or delays incurred by City or the Contractor due to unreasonable or false notification of an endangered plant or animal will be borne by the Contractor.

4. Cost. Unless otherwise called for by the Contract Documents, the cost of all material, equipment, and labor required to comply with this paragraph, shall be included in Contractor's bid and distributed in the Schedule of Pay Items. No additional compensation shall be made to the Contractor for this Work.

D. Preservation of Historical and Archeological Resources

1. General. If, in the performance of the Work, Contractor should unearth cultural resources (for example, human remains, animal bones, stone tools, artifacts and/or midden deposits) through excavation, grading, watering or other means, the Contractor notify the

Construction/Archeological Monitor and/or the City Representative immediately, giving the location and nature of the findings. Written confirmation of the evidence, location and nature of the findings shall be forwarded to the Construction/Archeological Monitor and/or City within 2 Days.

2. Procedures. The Contractor shall immediately cease all construction activities in the immediate area of the discovery to the extent necessary to protect the cultural resource.

   If directed by the City Representative, Contractor will refrain from working in the immediate area, suspend the Work in its entirety, or re-sequence and/or alter its performance to ensure full compliance with all applicable permits, laws and regulations. Should the presence of cultural resources be confirmed, the Contractor will assist the City Representative and the Construction/Archeological Monitor in the preparation and implementation of a data recovery plan. The Contractor shall provide such cooperation and assistance as may be necessary to preserve the cultural resources for removal or other disposition. Any City directed changes to the Work as a result of the cultural resource will be pursuant to the Contract Documents.

3. Contractor's Liability. Should Contractor, without permission, injure, destroy, excavate, appropriate, or remove any cultural resource on or adjacent to the Site, it will be subject to disciplinary action, arrest and penalty under applicable law. The Contractor shall be principally responsible for all costs of mitigation and/or restoration of cultural resources related to the unauthorized actions identified above. Contractor shall be required to pay for unauthorized damage and mitigation costs to cultural resources (historical and archeological resources) as a result of unauthorized activities that damage cultural resources and shall indemnify City pursuant to the Contract Documents.

4. Cost. Unless otherwise called for by the Contract Documents, the cost of all material, equipment, and labor required to comply with this paragraph, shall be included in Contractor's bid and distributed in the Schedule of Pay Items. No additional compensation shall be made to the Contractor for this Work.

E. Dust and Pollution Control

1. Contractor shall provide all necessary material, equipment and labor to prevent and control the emission of dust and any other potential pollutant on site. Contractor shall remove construction caused debris from streets and sidewalks as directed by the Engineer.

2. Contractor shall not discharge into the atmosphere from any source smoke, dust or other air contaminants in violation of the law, rules, and regulations of the governing agency.

3. Cost. Unless otherwise called for by the Contract Documents, the cost of all material, equipment, and labor required to comply with this paragraph,

shall be included in Contractor's bid and distributed in the Schedule of Pay Items. No additional compensation shall be made to the Contractor for this Work.

F. Management of Storm, Surface and Other Waters

1. Storm water, surface water, groundwater, and nuisance, or other waters may be encountered at various times during construction of the Project. Federal and State laws require the City and its contractors to manage such waters pursuant to the requirements of California State Water Resources Control Board Order Number 2009-0009-DWQ, the Federal Clean Water Act, and the California Porter Cologne Water Quality Control Act. Contractor acknowledges that it has investigated the risk arising from such waters in conjunction with the Project, has prepared its Bid accordingly, and assumes any and all risks and liabilities arising therefrom.

2. The Contractor shall keep itself and all subcontractors, staff, and employees fully informed of and in compliance with all local, state and federal laws, rules and regulations that may impact, or be implicated by the performance of the Work including, without limitation, all applicable provisions of the City's ordinances regulating discharges of storm water; the Federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.); the California Porter-Cologne Water Quality Control Act (Water Code § 13000 et seq.); and any and all regulations, policies, or permits issued pursuant to any such authority. These include, but are not limited to the San Francisco Bay Regional Water Quality Control Board Order No. R2-2015-0049 (NPDES Permit No. CAS 612008), and State Water Resources Control Board Order No. 2010-0014-DWQ, Order No. 2009-0009-DWQ, and Order No. 2012-0006-DWQ, and any amendment or renewal thereof ("Construction General Permit"). Contractor must perform all construction operations in such a manner as to comply, and ensure all subcontractors to comply, with all applicable Federal, State, and local laws, orders, and regulations concerning the control and abatement of water pollution; and all terms and conditions of any applicable permits issued for the Project. In the event there is a conflict between Federal, State, and local laws, regulations, and requirements, the most stringent shall apply.

3. Compliance with Construction General Permit. Contractor must comply with all aspects of the Construction General Permit, State Water Resources Control Board (State Board) Water Quality Order No. 2009-0009-DWQ, as amended by Order Nos. 2010-0014-DWQ and 2012-0006-DWQ, and any amendment or renewal thereof (NPDES CAS000002), for all projects that involve construction on or disturbance of one acre or more of land or which are part of a larger common plan of development or sale.

   (a) Permit registration. Unless otherwise specified in the Special Conditions, Contractor must prepare the Notice of Intet for coverage under the Construction General Permit and all Permit Registration Documents (PRDs), including but not limited to the Storm Water Pollution Prevention Plan (SWPPP), as those terms are defined in the Construction General Permit. Contractor must coordinate

submittal of all PRDs with the city's Legally Responsible Person and/or Authorized Signatory, as those terms are defined in the Construction General Permit. The Contractor must submit the PRDs, including the SWPPP to the City Representative for review not less than fifteen (15) Days prior to the start of on- site construction work. City will file the Notice of Intent and PRDs and pay the filing fee.

(b) Before any Construction General Permit related documents may be submitted to the State Board or implemented on the Project site, they must first be reviewed and accepted by City. Acceptance by the City does not relieve the Contractor from ensuring such documents comply with all laws applicable laws, regulations, and orders.

(c) Contractor must ensure that the SWPPP is developed by a Qualified SWPPP Developer and implemented by a Qualified SWPPP Practitioner as those terms are defined in the Permit. Contractor must implement the SWPPP and all other provisions of the Construction General Permit, including the monitoring and reporting requirements, preparing and submitting all reports, plans, inspections, and monitoring information in compliance with the Construction General Permit. The SWPPP must include industry standard requirements for water quality control including but not be limited to the following:

(1) Sediment and erosion control measures to manage sediment and erosion including vegetative practices, structural control, silt fences, straw dikes, sediment controls or operator controls as appropriate. Storm water management measures shall be instituted as required, including velocity dissipaters, and solid waste controls shall address controls for building materials and offsite tracking of sediment.

(2) Wastewater and storm water management controls to divert offsite surface flows around the Project site and to divert surface flows within the Project area away from areas of open earth or stockpiles of building and other materials. Wastewater from general construction activities, such as drain water collection, aggregate processing, concrete batching, drilling, grouting, or other construction operations, shall not enter flowing or dry watercourses without having met the authorized non-storm water discharge requirements listed in State Board Water Quality Order No. 2009-0009-DWQ, Section III.C., including proper notification to the Regional Water Board.

(3) Pollution prevention measures including methods of dewatering, unwatering, excavating, or stockpiling earth and rock materials which include prevention measures to control

silting and erosion, and which will intercept and settle any runoff of sediment-laden waters.

(4) Turbidity prevention measures for prevention of excess turbidity including, but are not restricted to, intercepting ditches, settling ponds, gravel filter entrapment dikes, flocculating processes, recirculation, combinations thereof, or other approved methods that are not harmful to aquatic life. All such wastewaters discharged into surface waters, shall contain the least concentration of settleable material possible, and shall meet all conditions of section 402, the National Pollutant Discharge Elimination System (NPDES) permit.

(5) Overall construction site management measures to address changes at the Project site as the Project moves through different phases and changes that account for rainy and dry season management practices.

(6) Pollution control measures and construction activity methods that will prevent entrance, or accidental spillage, of solid matter, contaminants, debris, or other pollutants or wastes, into streams, flowing or dry watercourses, lakes, wetlands, reservoirs, or underground water sources. Such pollutants and wastes include, but are not restricted to: refuse, garbage, cement, sanitary waste, industrial waste, hazardous materials, radioactive substances, oil and other petroleum products, aggregate processing, tailings, mineral salts, and thermal pollution.

(7) Control measures for stockpiled or deposited materials prohibiting the stockpile or deposit of excavated materials, or other construction materials, near or on stream banks, lake shorelines, or other watercourse perimeters where they can be washed away by high water or storm runoff, or can, in any way, encroach upon the watercourse.

(8) Develop and implement a Rain Event Action Plan (REAP), if required, that must be designed and implemented to protect all exposed portions of the site 48 hours prior to any likely precipitation event.

(9) Monitoring, reporting and record keeping, as necessary to achieve compliance with applicable Permit requirements, including but not limited to annual reports and rain event reports.

(d) City retains the right to procure and maintain coverage under the Construction General Permit for the Project site if the Contractor fails to draft a SWPPP or other Construction General Permit related document, or fails to proceed in a manner that is satisfactory to City.

City reserves the right to implement its own SWPPP at the Project site, and hire additional contractors to maintain compliance. Whether Contractor has adequately maintained compliance with the Construction General Permit shall be City's sole determination. In the event that Contractor has failed or is unable to maintain compliance with the Construction General Permit, any costs or fines incurred by City in implementing a SWPPP, or otherwise maintaining compliance with the Construction General Permit shall be paid by the Contractor.

4. For those Work sites where construction activity results in the disturbance of less than one acre of total land area and/or do not need coverage under the Construction General Permit, the Contractor shall be responsible for preparing and implementing construction industry best management practices to eliminate or reduce the discharge of pollutants from construction sites, such as the best management practices set forth in the CASQA Construction BMP Handbook.

5. In addition to compliance with the Permit, Contractor shall comply with the lawful requirements of any applicable municipality, district, drainage district, flood control district, and other local agencies regarding discharges of storm water, surface water, groundwater or other nuisance waters off of the Project site.

6. Contractor violations.

   (a) Failure to implement the SWPPP or otherwise comply with the Construction General Permit or local state and federal laws is a violation of this Contract. Notwithstanding any other indemnity contained in this Agreement, Contractor agrees to indemnify, defend – with counsel acceptable to the City – and hold harmless the City, its officials, officers, agents, employees and authorized volunteers from and against any and all claims, demands, losses or liabilities of any kind or nature which the City, its officials, officers, agents, employees and authorized volunteers may sustain or incur for noncompliance with the laws, regulations, and ordinances listed above, arising out of or in connection with the Work, except for liability resulting from the sole established negligence, willful misconduct or active negligence of the City, its officials, officers, agents, employees or authorized volunteers.

   (b) City reserves the right to defend any enforcement action or civil action brought against the City for Contractor's failure to comply with any applicable water quality law, regulation, or policy. Contractor hereby agrees to be bound by, and to reimburse the City for the costs associated with, any enforcement action and/or settlement reached between the City and any relevant enforcement entity.

   (c) City may seek damages from Contractor for delay in completing the Contract in accordance with the Contract Documents, caused by

Contractor's failure to comply with the the laws, regulations and policies described in this Article, or any other relevant water quality law, regulation, order, or policy.

(d) If noncompliance with any relevant law, regulation or permit, order, or policy occurs, the Contractor shall report this to the City Representative immediately, with the specific information submitted in writing within 2 Days. Consistent violations of applicable Federal, State, or local laws, orders, regulations, or Water Quality Standards may result in City stopping all site activity until compliance is ensured. The Contractor shall not be entitled to any change in Contract Price or Contract Times, claim for damage, or additional compensation by reason of such a work stoppage. Corrective measures required to bring activities into compliance shall be at the Contractor's expense.

7. Oil storage tanks management.

(a) Storage tank placement. All oil or other petroleum product (hereinafter referred to collectively as oil) storage tanks shall be placed at least 20 feet from streams, flowing or dry watercourses, lakes, wetlands, reservoirs, and any other water source.

(b) Storage area dikes. Storage areas shall be diked at least 12 inches high or graded and sloped to permit safe containment of leaks and spills equal to the capacity of all tanks and/or containers located within each area, plus a sufficient amount of freeboard to contain the 25-year rainstorm.

(c) Diked area barriers. Diked areas shall have an impermeable barrier at least 10 mils thick. Areas used for refueling operations shall have an impermeable liner at least 10 mils thick buried under 2 to 4 inches of soil.

(d) Spill Prevention Control and Countermeasure Plan (SPCC). Where the location of a construction site is such that oil from an accidental spillage could reasonably be expected to enter into or upon the navigable waters of the United States or adjoining shorelines, and the aggregate storage of oil at the site is over 1,320 gallons or a single container has a capacity in excess of 660 gallons, the Contractor shall prepare an SPCC Plan. The Contractor shall submit the SPCC Plan to the Engineer at least 30 days prior to delivery or storage of oil at the site. The Plan must have been reviewed and certified by a registered professional engineer in accordance with 40 C.F.R., part 112

8. Underground tank prohibition. The Contractor shall not use underground storage tanks.

9. Construction safety standards. The Contractor shall comply with the sanitation and potable water requirements of Section 7 of United States

Bureau of Reclamation's publication “Reclamation Safety And Health Standards.”

10. Other Permits.

    (a) Other permits applicable to the Project are listed in the Special Conditions. The Contractor shall obtain all other necessary licenses and permits.

    (b) Monitoring. The Contractor is required to conduct monitoring in order to meet the requirements of the permits, which may include sampling, testing and inspections.

    (c) Recordkeeping. The Contractor shall retain all records and data required by the permits for the time specified in the contract.

11. Cost. Except as specified herein, the cost of complying with this section shall be included in the Schedule of Pay Items for work which necessitate the water pollution prevention measures required by this paragraph.

END OF GENERAL REQUIREMENTS

01 20 00 – MEASUREMENT AND PAYMENT

Bid Item No.1 – Mobilization and Demobilization

The Contract lump sum price paid for "Mobilization and Demobilization," not to exceed five percent (5%) of total contract, includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work and associated costs involved, but not limited to, for transportation of contractor's personnel, equipment, and operating supplies to the site; establishment of offices, buildings, bonds and insurance, project close out, and site cleanup of offices and other necessary general facilities for the contractor's operations at the site as specified in Technical Provisions, as shown on the plans, and as directed by the Engineer, and no additional compensation shall be allowed therefore.

Payment for the lump sum price of "Mobilization and Demobilization" shall be 50% after the mobilization and 100% upon the completion of all work. Refer to Section E-04 "Mobilization".

Bid Item No.2 – Demolition and Off-haul

The Contract lump sum price paid for "Demolition and Off-Haul" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved, but not limited to, demolition, removal and disposal of existing building, tool shed, foundation, hardscape, utilities, fencing, grading, generator, fuel tank, CMU wall and other miscellaneous work; disconnection and capping of utilities at the property line and in the public right of way; relocation of existing steel container to other site as indicated on the drawing; and off-hauling and disposal of all debris to approved legal disposal site including any required testing and fees; permitting for removal of fuel tank and generator; and coordination with contractors, PG&E, and AT&T as shown on the plans, as specified in these Technical Provisions and State Standard Specification, and as directed by the Engineer, and no additional compensation shall be allowed therefore.

Bid Item No.3 – Water Pollution Control Work

The contract lump sum price paid for "Water Pollution Control Work" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in the preparation of and maintenance of the Storm Water Pollution Prevention Plan (SWPPP) for a Risk Level 1 construction site and for implementation of the SWPPP, including collection and input of data required by the SWPPP, compliance with the State General Construction Permit complete in place, as shown on the Contract Drawings, as specified in these Technical Provisions and State Standard Specification, and as directed by the Engineer, and no additional compensation shall be allowed therefore.. Refer to Section E-12 " Water Pollution Control Work".

Payment of the lump sum price for "Water Pollution Control Work" shall be a maximum of 25% upon City's acceptance of the Storm Water Pollution Prevention Plan (SWPPP). A maximum of 25% of the lump sum price shall be paid to the Contractor upon installation of the initial water pollution control measures for the entire project. The remainder of the lump sum price for Water Pollution Control Work shall be paid to the Contractor for maintenance and removal of the water pollution control measures. This payment amount shall be prorated until the Notice of Termination for the project site is submitted by the City.

Bid Item No.4 – Trees Removal

The Contract lump sum price paid for “Trees Removal” includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved removal, disposal, grinding and treatment of stumps and grade restoration, coordination and notification with adjacent property owner as specified in these Technical Provisions, as shown on the Contract Drawings, and as directed by the Engineer, and no additional compensation shall be allowed therefore.. Refer to Section E-03 “Trees Removal”.

Bid Item No.5 – Traffic Control

The contract lump sum price paid for “Traffic Control” shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in Traffic Control, complete in place, including preparation and approval process for Traffic Control/Staging/Detour Plans and Truck/Haul Route plans, warning devices, beacons, flagger(s), temporary pavement delineation, detours for sidewalk closures, signage, placing, removing, storing, maintaining, moving to new locations, re-sequencing to accommodate project schedule, replacing and disposing of the components of the traffic control system, and traffic control devices as specified in the State Standard Specifications, these Technical Provisions, and as directed by the Engineer and no additional compensation shall be allowed therefore.. Total lump sum shall not exceed 3% of the total Base Bid.

Add Alternate Bid Item No. 1 - Monthly Maintenance for SWPPP

The contract unit price paid per month for “Monthly Maintenance of SWPPP” includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work to continue the maintenance and implementation of the Risk Level 1 Storm Water Pollution Prevention Plan (SWPPP) after the final acceptance of the demolition work until the City files Change of Information with the State. The work includes collection and input of data required by the SWPPP and compliance with the State General Construction Permit as shown on the Contract Drawings, as specified in these Technical Provisions and State Standard Specification, and as directed by the Engineer, and no additional compensation shall be allowed therefore. Refer to Section E-12 “ Water Pollution Control Work”.

The Contractor shall provide a monthly cost for the work. Payment of the unit price for “Monthly Maintenance of SWPPP” will be monthly until the City files Change of Information with the State.

TECHNICAL PROVISIONS

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E-01 MAINTENANCE OF ACCESS AND PUBLIC COORDINATION

Maintenance of Access:
Vehicular access shall be maintained at all times to all existing driveways within the project site. Pedestrian access and circulation that is fully wheelchair accessible shall be maintained by the Contractor throughout the project area. No closure of any street, driveway, or right of way may occur without written authorization from the Engineer.

Advance Public Notification:
Two weeks, one week, and 24 hours prior to beginning any work, the Contractor shall provide approved Construction Notice's as approved by the Engineer, to all residents, businesses, property owners, tenants and applicable parties within 300 feet and or adjacent to the Project area.

- Specify the expected date for start of construction, a general description of the construction activity to take place, expected duration of the activity, and the name, address, and 24-hour telephone number of the Contractor.

- The Contractor shall provide a copy of the notice for review and approval by the Engineer. Refer to the Submittal requirements in General Conditions.

- The Contractor shall provide the Engineer with a list of the streets and address where the notices were posted.

No Parking Signs/Towing:
The contractor shall provide "No Parking" signs with day of the week and work hours written out or properly abbreviated with 3 or 4 letters; the month shall be written out or properly abbreviated with 3 or 4 letters; date or dates of restriction shall be listed completely; the beginning and ending times shall be clearly listed on the sign.

Signs shall be mounted such that the words, “No Parking” are at an elevation at least 3 feet and not more than 7 feet above the adjacent flow line. Signs may be tied with string to trees and power poles, taped to existing sign poles, or mounted to stakes or barricades as provided by the Contractor. The Contractor shall also include on the backside of the mounting stakes or barricades a current copy of the Construction Notice. The signs shall be placed as needed to control the parking of cars within the construction zone and shall be placed at a maximum spacing of sixty (60) feet.

Signs shall be posted and maintained by the Contractor for a period of 72 hours prior to the restrictions becoming effective. The Contractor shall promptly reset or replace all damaged and defective signs. Upon completion of work in each area, all signs, stakes, and barricades shall be promptly and completely removed by the Contractor.

The Contractor shall be fully responsible for adequate removal of all parked cars. All vehicle removal shall be coordinated by the Contractor with the Police Department. The Contractor shall notify the Police traffic sergeant upon posting of the parking restrictions for a particular street and when the signs are removed. For removal of parked vehicles, the Contractor shall notify the Police traffic sergeant not less than 2 hours prior to the needed removal with the address nearest

the parked vehicle, make, model, color, and license number. The City shall not be responsible for any delay or additional cost associated with the removal of parked cars which obstruct the construction operation.

If a vehicle owner successfully contests a towing citation in court, and their citation is dismissed for causes related to the Contractor's failure to perform the requirements of this section, the Contractor shall reimburse the City for the cost of any claims associated with the towing citation.

The following shall also contacted by the Contractor and made aware of the intended construction activities 5 days, and 48-hours, prior to planned construction activities.

Contact	Telephone Number
Milpitas Police Department	(408) 586-2400
Milpitas Fire Department	(408) 586-2800
Contact the following only when work activities may affect	
Waste Pick-up	
Republic Services Solid Waste (garbage collection):	(408) 432-1234
City of Milpitas Solid Waste Coordinator:	(408) 586-3353
Milpitas Schools	
Milpitas Unified School Districts Transportation Dept:	(408) 635-2888
Milpitas Unified School District Superintendent:	(408) 635-2600
John Sinnott Elementary – 2025 Yellowstone Av	(408) 635-2674
Rancho Milpitas Jr High – 1915 Yellowstone Av	(408) 635-2656
Robert Randall Elementary – 1300 Edsel Dr, Pk Victoria Dr	(408) 635-2662
Milpitas Christian Preschool – 1000 S. Park Victoria Dr	(408) 262-2630
Milpitas Montessori School – 1500 Yosemite Dr	(408) 263-0991
Merryhill – 1500 Yosemite Dr	(408) 945-9090
Post Office Milpitas Branch	
U.S. Post Office	(408) 262-0860

The Contractor shall provide the City with written proof of notification of the parties listed above by listing all parties contacted, the names of those contacted, and the dates the contacts were made.

Postal Service Coordination:
Prior to starting any construction activities, the Contractor shall contact the Milpitas branch of the U.S. Post Office to provide notice of the construction work, and to coordinate to ensure no stoppage of mail delivery due to the work.

The Contractor shall be responsible to ensure the work operations do not interrupt, impede, or stop mail delivery services to Milpitas residents, business or others. The Contractor shall provide temporary mailboxes or other services and facilities as necessary to ensure the mail delivered and not affected by the work.

Notice shall be given for general construction activity in an area as well as specific activities, which will, in any way, inconvenience the resident/property owner or affect their operations or access to their property.

Solid Waste Pick-up:
The Contractor shall not impede or impair waste haulers, recycling operations and buses within the project area. It is the Contractor's responsibility to determine which waste haulers, recycling operators and buses are scheduled to work in the project area and to develop a project schedule that will not impede or impair their operations.

The Contractor shall install and maintain a 24-hour telephone for project information and questions. The Contractor shall check for messages at least once every twelve hours, seven days a week, including weekends and holidays. The Contractor shall respond promptly to all calls.

Failure to comply with the above notification requirements could result in cancellation by the Engineer, of the day's work. No extension of time or additional cost will be granted for delays to the Contractor caused by any work cancellations due to Contractors failure to comply with the requirements of this Section.

Measurement and Payment:
Full Compensation for Maintenance of Access and Public Coordination including providing notification, maintaining access, installation of the 24-hour telephone line, coordination, providing temporary mailboxes and all other work as necessary to fulfill the requirements of this section shall be considered as included in the various other contract items of work, and no additional compensation shall be allowed.

E-02 PROJECT APPEARANCE, TREES AND SWEEPING

Project Appearance:
The Contractor shall maintain a neat, litter free job site with a professional appearance at all times. Debris developed during construction shall be disposed of concurrently with its generation daily.

- The stockpiling of debris during construction shall not be allowed unless otherwise approved by the Engineer.

- The stockpiling of materials and equipment within the street or public right-of-way shall not be permitted unless authorized by the Engineer.

Care shall be taken to avoid tracking debris, mud, oil, soil, asphalt concrete, or binder material onto existing surfaces. The Contractor shall be responsible to promptly remove any tracked material to the satisfaction of the Engineer.

Existing Trees:
The project may include work adjacent to existing mature trees where the canopy of the trees extends over or interferes with the work. It shall be the responsibility of the Contractor to conduct construction operations around said tree canopies such that the work is accomplished without damaging or injuring trees or tree limbs in any way.

The contractor may be permitted to trim said trees in order to facilitate construction operations after approval by the Engineer, however, the Contractor shall possess a C-27 license, a C-61 license, and the trimming shall be performed by a Certified Arborist. All trimming of trees shall be performed in accordance with “Pruning Standards,” published by the Western Chapter of the International Society of Arboriculture.

The following guidelines shall be followed whenever tree roots with a diameter of two inches or greater are encountered during the Contractors trenching or grading activities:

1. Trenches shall be hand dug within a tree canopy zone to avoid damage to the tree roots.
2. Upon uncovering, immediately cover the root with a board or burlap and keep it moist.
3. Backfill the exposed root area with soil as soon as the work has been completed.
4. If the tree becomes damaged, cut the damaged root clean with a saw and immediately wrap the root end with plastic secured with tape.

Tree Protection:
The Contractor may be required to install Tree Protection Zone (TPZ) fencing around existing trees within or adjacent to the project Work that are to remain or be preserved as directed by the Engineer. The fencing shall be five-foot-tall and mounted on two-inch diameter posts driven two feet into the ground every ten feet.

The TPZ fencing shall be installed at the trees drip line (canopy) of the tree or at a distance from the trunk equivalent to one foot for every one-inch of trunk diameter, whichever is larger. The TPZ fence shall be maintained in place until the end of construction activities.

Except to perform the specified Work as required as part of the project, all other activities including parking, materials storage, etc. shall be performed outside of the TPZ fencing unless

directed otherwise by the Engineer. The ground surface within the TPZ shall not be disturbed except to perform the specified Work.

Sweeping:
City streets within the project site, including those of the Contractors truck haul route shall be swept daily and immediately following all cold planning, grinding, sandblasting, excavating and trucking operations.

The Contractor shall sweep the street with a power pick-up broom immediately prior to, and after the paving operations. The Contractor shall keep a power pick-up broom on the job at all times and it shall be used to keep the streets free of loose or tracked material from the Contractor's operation.

Power sweepers that don't pick-up the material shall not be used.

Measurement and Payment:
Full compensation for "Project Appearance, Trees and Sweeping" shall be considered as included in the contract unit prices paid for the various items of work performed and no additional compensation will be allowed.

E-03 TREE REMOVAL

I. DESCRIPTION OF WORK

The Contractor shall furnish all labor, material, equipment, tools, and incidentals necessary for tree removal as shown on the Contract Drawings and as specified in this Technical Provisions. The work includes but is not limited to:

1. Removal of existing trees and stumps
2. Provide pre-construction surveys by a qualified biologist prior to tree removal
3. Coordination with the adjacent Property Owner for removal of trees on their property.
4. Preservation of carpool structure and existing improvement on the adjacent property and public right of way.

i. QUALITY ASSURANCE

A. An experienced and professional tree service firm, with a Class C61-D49 license, that has successfully completed tree removal and pruning work similar to that required for this Project. Cost of the tree service firm's services shall be borne by the Contractor.

B. Prior to any site clearing work, prepare tree protection measures. Conduct a pre-construction walk-through at Project site to review tree work and tree protection measures by the Owner's Representative if needed. Notify the Owners Representative 24 hours in advance of this review.

C. Arborist Qualifications: Engage an ISA certified arborist (Project Arborist) to direct plant-protection measures in the vicinity of trees and vegetation indicated to remain and to prepare inspection reports. Submit qualification data indicating proof of certification / license of the Project Arborist. Cost of the Project Arborist's services shall be borne by the Contractor.

D. Contractor shall provide biologist survey prior to the demolition and removal of all existing trees. If the removal of the trees takes place between February 1 and August 31, the contractor shall provide pre-construction survey performed by qualified biologist. Refer to Specification CEQA memo.

E. Contractor shall coordinate with the City and the adjacent property owner prior to the removal of trees along the property line. A minimum of 10 working days notice shall be provided prior to starting work.

F. Contractor shall be extremely cautious while removing trees, specifically to the existing traffic control cabinet and the existing carport on the adjacent property. The contractor shall be responsible for any damages to traffic control cabinet and carport caused by the contractor's work.

ii. SUBMITTALS

A. Arborist and Tree Service Firms Qualifications: List of four completed projects, with tree removal and pruning work similar to that required for this project. Include names and addresses of landscapes architects and owners.

B. Class C61-D49 Tree Service Contractor License

C. Contractor to submit pre-construction survey to be performed by qualified biologist.

II. PRODUCTS

A. Water: Clean, potable and free of deleterious matter. Source, in accordance with local regulations and codes governing water conservation measures.

B. Temporary Mulch: Commercial recycled wood chip mulch or approved chippings from removed trees on site.

III. EXECUTION

A. Tree Removal:
   1. Fell trees designated to be removed so as to fall away from Tree Protection Zone and avoid pulling and breaking of roots of trees to remain. If roots are entwined, the Owner's Representative may require first severing the major woody root mass before extracting the trees, or grinding the stump below ground.
   2. For trees/stumps to be removed in areas of new path alignments or where paving, footings, foundations, piers, or other new structures are to be installed, grind/remove entire stump to allow new proposed construction, see clause on Root Grinding.

B. Root Grinding
   1. Crews shall be well-trained in the use of root grinding equipment.
   2. For trees to be removed, grind down roots to a depth of minimum 18" below finished grade.
   3. Verify that there are no existing irrigation or utility lines that will be affected by the root grinding process.
   4. Protect any structures and landscape that will be affected by the throw of the root grinding machine.
   5. Chase and remove surface roots beyond the stump till the extent of the planted area.
   6. Remove chips from the site, do not re-use as mulch on the project unless for temporary haul roads.

C. Stump Treatment
   1. For other trees/stumps to be removed, cut stump flush to finish grade and immediately apply an approved herbicide (Garlon 4 or Aquamaster) to prevent re-sprouting. If herbicide will not be applied immediately, leave greater amount of trunk above grade, and make the final cut immediately prior to applying herbicide. Cut and re-apply approved herbicide as needed in the event of re-sprouting.
   2. Approved herbicide and pesticide shall be per local Integrated Pest Management ordinance.
   3. Posting of herbicide application must occur per the following Herbicide Pre-Application Requirements:
   4. Public Protection and Required Noticing of Herbicide Application:
      a. Area to receive approved herbicide must be closed off from public access with temporary construction fencing approved by the Owner's Representative.
      b. A minimum of four (4) days prior to herbicide application, post required notices at area where herbicide will be applied, and/or entrances to overall site, as approved

by the Owner's Representative. Herbicide notice template forms will be provided to the Contractor by the Owner's Representative. Request notice template forms at least ten (10) days in advance of herbicide application. Write the application window dates in the spaces provided on the Notice. A one-week window is advised.

c. On application of herbicide, fill out the "Date Completed" on the Notice. The Notice is to remain for four (4) calendar days following the application.
d. Remove the notices on the fifth (5th) day following application.

D. Grade Restoration
1. For backfill of voids in proposed paving areas, see Specification Section Earthwork & Grading.
2. For backfill of voids in proposed planting areas, see Specification Section Soil Preparation.
3. Fine grade and prepare planting backfill for planting. For disturbed and backfilled areas on slopes steeper than 4H:1V, install erosion control mesh and straw wattles prior to planting.
4. Remove excess topsoil or planting backfill as required to complete finish grades as shown on the Drawings.

IV. REPAIR, REPLACEMENT, & CLEAN-UP

A. Tree Repair: Repair trees damaged by construction operations within 24 hours. Treat damaged trunks, limbs, and roots as directed the Owner's Representative. Aerate, water and mulch as directed by the Owner's Representative.

B. Carport Repair: Repair existing carport on the adjacent properly, damaged by construction operation, to match existing condition or better within 7 working days after receiving the notification from the City regarding the matter.

C. Traffic Control Repair: The contractor shall take full responsibility to repair any damages caused by construction operation, to the existing traffic control cabinet within 48 hours after receiving a notification from the City. Should the damage causes any interruptions to the traffic signal system, the contractor shall address the issue immediately.

D. Soil Restoration: Aerate surface soil compacted during construction around trees to remain, 10-feet beyond drip line and no closer than 36-inches to tree trunk. Drill 2-inch diameter holes a minimum of 12-inches deep at 24-inches on center. Backfill holes with an equal mix of augered soil and sand. Deep-root water or as directed by the Owner's Representative.

E. Disposal: Remove all tree removal / pruning debris, and associated waste, unsuitable, and excess material from the Owner's property and dispose of legally as directed by the Owners Representative. Burning of waste materials is not permitted.

MEASUREMENT AND PAYMENT
Refer to Section 01 20 00 "Trees Removal".

E-04 MOBILIZATION

General:
Mobilization shall conform to the applicable provisions in Section 9-1.16D, “Mobilization,” of the State Standard Specifications.

MEASUREMENT AND PAYMENT
Refer to Section 01 20 00 “Mobilization and Demobilization”.

E-05 TRAFFIC CONTROL

General:
Traffic Control shall supply and install traffic control devices including, but not limited to, warning, regulator, and guide signs, equipment, pavement delineation, and flaggers in accordance with Section 12, "Construction Area Traffic Control Devices," of the standard specifications. The contractor shall prepare and submit Traffic Control/staging/Detour plans for the work on Yosemite Drive and S. Park Victoria Drive.

Submittals:
1. Traffic Control/Staging/Detour Plans
2. Proposed Truck Route/Hall Route
3. City of Milpitas Transportation Permit (if applicable to Contractors operations)

Public Convenience and Safety
1. The Contractor shall conduct his operations as to cause the least possible obstruction and inconvenience and maximum safety to both vehicular and pedestrian traffic.

2. The Contractor shall bear full responsibility for maintaining all traffic control include, but not limited to, signage, equipment and devices and traffic circulation at all times during the Work.

3. It is imperative that field traffic control be handled in such a manner as to adequately and safely direct all traffic movements in the construction area. The Contractor shall not be allowed to proceed with construction at any time when traffic control measures are inadequate to the field conditions, in the opinion of the Engineer. Additional traffic control measures may be required according to field conditions at the Contractor expense.

4. At their own expense, whenever the Contractor's operations creates a condition potentially hazardous to the public or traffic, the Contractor shall furnish additional traffic control measures and devices by any means necessary to provide adequate warning to the public of any dangerous conditions to be encountered.

5. Contractor occupying the public streets and sidewalks shall be immediately vacated and returned to public use when the use thereof is no longer necessary for the construction work.

Traffic Control/Stage/Detour Plan:
1. The Contractor shall submit site-specific Traffic Control/Stage/Detour Plan(s) for City's review and approval prior to issuance of Notice to Proceed. Plans shall be submitted to the Engineer a minimum of two (2) full Working Days prior to the Preconstruction Meeting or minimum of 14 calendar days prior to the Work.

2. The Plan(s) shall consist of a scaled aerial view drawing(s) in accordance with the latest version of the State of California Department of Transportation "Manual of Traffic Controls for Maintenance and Construction Work Zones." Copies or modified copies of the Manual of Traffic Controls for Maintenance and Construction Work Zones or the Work Area Traffic Control Handbook or any other type of copied standardized traffic control plans shall not be acceptable.

3. The Plan(s) shall show all traffic control measures and devices on the actual street(s) as it relates to the site conditions and to the safe movement of traffic for, but not limited to, lane closures, detours, no parking areas, signing program for construction, access to private

property and business establishments, pedestrian traffic, railroad crossings, transit routes, loading areas, the proposed routing of the construction vehicles, hours required for access and the safe guards and procedures necessary to carry out the Work. The Plan(s) shall also indicate, but not limited to, placement and type of warning signs, delineators, temporary lighting, devices, flaggers persons, construction vehicles and equipment staging, work hours and schedule.

Lane Closure Restrictions:

1. For any lane closure, the Contractor shall submit Traffic Control and Detour Plan for City's review and approval. The Plan(s) shall provide for the orderly and predictable movement of all traffic and pedestrians and for such guidance and warning as needed to ensure the safe and informed operation of individual elements of the traffic stream. Contractor shall not detour traffic or close lanes until the traffic control plan has been approved by the Engineer.

2. The Contractor shall keep a minimum of one 11-foot wide lane of traffic open in each direction during working hours. Attention is directed to these Contract Documents regarding specific traffic lane closure restrictions.

3. Additional lane closure restrictions may be imposed if there is evidence that excessive inconvenience to the public is observed during construction.

4. All lane closures or when an entire segment of roadway is closed, flashing arrow boards, detour signs, and flaggers are required to direct traffic.

5. Contractor shall provide safe passage to residents' property along the road or street affected by lane closure at all times. Temporary crossings shall be provided and maintained in good condition.

6. Vehicle lane closure will not be permitted during peak commute hours on Jacklin Road and McCarthy Blvd. Work will be allow in bike and parking lanes during peak commute hours only. Contractor shall not place any construction signs, delineators, cones, or any other construction type signs or appurtenances in the lane to be close before 9:00 a.m. and after 4:00 p.m.

Sidewalks, Driveways, ADA Ramps, and Bus Stops:

1. The Contractor shall maintain pedestrian, vehicular, and bus stop access at all times.

2. Driveway Construction/Closure:

    a. In locations where only one driveway exists for a property, the Contractor shall coordinate with the property owner for limited access or partial closure. Driveway apron replacement shall be constructed in segments to allow one-half of the driveway to remain open.

    b. For properties with multiple driveways, Contractor shall provide at least one driveway access to each property at all times during the construction activities.

3. Sidewalk & Curb Ramp Construction/Closures:

    a. Where sidewalk and curb ramps are closed for construction, the Contractor shall provide a continuous, safe, and ADA complaint pedestrian path of travel at all time. The path of travel shall be within the immediate location of the Work.

b. Sidewalk/Curb Ramp closures will be permitted on one side of a street at a time from intersection to intersection with appropriate detour signage. At street intersections, the Contractor shall maintain an ADA compliant path of travel through and around the intersection.

c. Where immediate alternate pedestrian path of travel cannot be provided, the Contractor shall provide ADA compliant pedestrian detour(s). It shall be clearly planned, marked, constructed and approved by the Engineer. Appropriate signs and barricades must be installed at the limits of construction and in advance of the closure (or detour) in order to divert pedestrians to the appropriate walkway or detour.

d. Contractor shall submit Sidewalk Closure and Detour Plan to the Engineer for review and approval. Plan(s) shall show, but not limited to, closures, pedestrian routing, and signage.

4. Bus Stop(s):

a. The Contractor shall coordinate with the Valley Transportation Authority (VTA) when the Work is at or near the Bus Stop. The work shall not impede or close a bus stop unless coordinated first with VTA. The Work shall not cause unsafe conditions for bus riders or cause buses to release riders in the street or within the construction zone.

Flagging:

1. The Contractor shall comply with flagging, traffic handling equipment, and device requirements of Section 12, “Temporary Traffic Control,” of the State Standard Specifications with the exception of Section 12-1.04, “Payment”.

2. The Contractor shall provide radio-equipped flag persons during all one-lane operations.

3. Flag persons shall be properly equipped and trained in accordance with “Instructions to Flagmen,” published by the California Department of Transportation.

4. Flaggers and all personnel working near traffic shall wear hardhats, orange/red, or State approved fluorescent green vests or shirts.

5. Flaggers shall guide traffic with an appropriate stop/slow sign.

Signage:

1. All construction signs and other warning devices shall be provided by the Contractor and shall become the Contractor’s property after completion of the Contract. The Contractor shall refer to the current “Manual of Warning Signs, Lights and Devices for use in the Performance of Work Upon Highways” and the “Uniform Sign Chart” issued by the Department of Transportation, Division of Operations.

2. Signage shall not block any driveway or access to private/public properties owners at any time, unless instructed by the Engineer.

3. If the Contractor fails to provide, is neglectful of or negligent in furnishing and maintaining warning and protective facilities and personnel as herein provided within eight (8) hours of being notified by the Engineer of the need for such, the City may furnish and maintain such facilities and personnel. In this event, the City may charge the Contractor therefore by

deducting the cost of such facilities and personnel from progress payments due to the Contractor as such costs are incurred by the City.

Operation of Construction Vehicles and Equipment:

1. Construction Traffic and Vehicles: All inbound and outbound construction related traffic to and from the Site is restricted to public street(s) immediately adjacent to the Site.

2. Construction Parking: Construction vehicles and equipment parking is restricted along the park frontage on Olympic Drive or on site in designed area approved by the City. No construction parking will be allowed on Creighton Ct., Matterhorn Ct., Big Bear Ct., Lassen Ave, and in front of residential homes on Olympic Dr. unless otherwise approved.

3. Most City streets within Milpitas have a 4-ton weight limit. A Truck Route/Haul Route Plan approved by the City is required for use of overweight equipment within the City of Milpitas. Refer to Appendix "A" or the City's Webpage for the City's approved Truck Route Map.

   The Contractor is advised that ALL Vehicle Code regulations apply to construction equipment in operation on this project, and the City will enforce all Vehicle Code regulations with respect to use of construction equipment operating on City Streets and Public Rights of Way.

   A. Extralegal Loads - Equipment over 8'6" wide, 14' tall, and 80,000 pounds gross or over on axle weights. A City of Milpitas Transportation Permit is required for extralegal loads (oversize and overweight). It contains a specific route of travel for that single load. A Haul Route would be for major on-haul/off-hauls of material that bring in a large number of trucks at one time. Refer to the Appendix "A" for a copy of the City of Milpitas Transportation Permit. The Permit shall have been issued, and shall be in possession when operating such vehicles within the City of Milpitas. Drivers shall maintain strict adherence to the routs specified on the City approved Haul Route.

   B. Special Equipment (SE) Plates & Slow Moving Vehicle Emblems - Refer to Appendix "A" and the Vehicle Code for more information. All non-street legal construction equipment operating on a City Street or right-of-way shall display a Special Equipment (SE) plate when operating outside of the work zone, or traffic control cone zone.

   C. Load Regulations - Contractors are cautioned to ensure proper loading and on-haul/off-haul procedures are followed.
      a. Vehicles shall not be loaded to overweight
      b. Off-haul loads for disposal or recycling shall be covered
      c. All loads shall be properly secured with the correct number of tie-downs or chains
      d. All vehicles leaving the construction site shall be clean-off. No material no debris shall be on the vehicle body or stuck to its tires.

Temporary Pavement Delineation:

1. Temporary pavement delineation shall be furnished, placed, maintained, and removed in accordance with the provisions in Section 12-3, “Temporary Traffic Control Devices,” of the State Standard Specifications and these Technical Provisions. Nothing in these Technical

Provisions shall be construed as to reduce the minimum standards specified in the Manual of Traffic Controls published by the Department of Transportation.

2. Whenever the work causes obliteration of any and all of the pavement delineation, temporary or permanent delineation shall be in place prior to opening the traveled way to public traffic. Lane line or centerline, edge line and limit line (e.g. stop bars or crosswalks) pavement delineation shall be provided at all times for traveled ways open to public traffic.

3. All work necessary, including any required lines or marks, to establish the alignment of temporary pavement delineation shall be performed by the Contractor. Surfaces to receive temporary pavement delineation shall be dry and free of dirt or loose material. Temporary pavement delineation shall not be applied over existing pavement delineation or other temporary pavement delineation. Temporary pavement delineation shall be maintained until replaced with a new pattern of temporary pavement delineation or permanent pavement delineation.

4. Temporary pavement markers and removable traffic type tape which conflicts with a new traffic pattern or which is applied to the final layer of surfacing or existing pavement to remain in place shall be removed when no longer required for the direction of public traffic, as determined by the Engineer.

5. Whenever lane lines and centerlines are obliterated, the minimum lane line and centerline delineation to be provided shall be temporary reflective raised pavement markers placed at longitudinal intervals of not more than 24 feet. The temporary reflective raised pavement markers shall be the same color as the lane line or centerline markers replaced.

6. Temporary reflective raised pavement markers shall be placed in accordance with the manufacturer's instructions and shall be cemented to the surfacing with the adhesive recommended by the manufacturer, except epoxy adhesive shall not be used to place pavement markers in areas where removal of the markers will be required.

Violation of working Time Limit & Late Pick-up of Traffic Control:
A violation of the working time limitations for traffic control (late pick-up of controls) as set forth in these Contract Documents may result in the Engineer to issue a written notice to Stop Work. The Stop Work shall be imposed on the Contractor at the start of the next or following working day after issuance of the Stop Work. The Stop Work will not be lifted, and the Contractor shall not resume work until after the Contractor assures the Engineer, in writing, that there will not be a reoccurrence of the working time violation, and provides a plan for how operations will be conducted in the future to prevent such violation.

Further violations shall result in the Engineer to notify the Contractor in writing that there will be a price reduction charge for each incident in accordance with the following table. This incident price reduction charge may be deducted from any money due the Contractor. This price reduction will not be considered a penalty but will be a price reduction for failure to perform traffic control in compliance with these Contract Documents.

An incident is defined as any violation up to 30 minutes in duration. Each 30 minutes or increment thereof will be considered as an incident. A price reduction will be assessed for each successive or cumulative 30 minute period in violation of the working time limitations, as determined by the Engineer. The price reduction for each incident will increase at a progressive rate starting with

$150 for the second incident and increasing to $1,200 for the fifth and subsequent incidents in accordance with the following schedule.

A 15 minute grace period will be allowed at the beginning of the second incident on the project before the price reduction is applied. This 15 minute grace period applies only to the second incident. The number of incident charges will be accumulative throughout the duration of the Contract.

INCIDENT TOTAL	INCIDENT PRICE	RATE REDUCTION
1st	Notice to Stop Work	----
2nd	$150	$150
3rd	$300	$450
4th	$600	$1,050
5th	$1,200	$2,250
6th	$1,200	$3,450
Etc.	$1,200	$4,650
Etc.	Etc.	

Measurement and Payment:
Refer to Section 01 20 00 “Traffic Control”.

E-06 PRESERVATION OF PROPERTY

Existing improvements or facilities including traffic control cabinet, utilities box, fencing pavement, trees, shrubs, and other plantings, irrigations systems, sidewalks, driveways, curbs and gutters, etc., that are not to be demolished and are injured or damaged by reason of the Contractor's operations shall be replaced by the Contractor at its expense to the satisfaction of the Engineer.

Submittal:
Pre-Existing Condition Site Video meeting the requirements specified above.

The minimum size of replacement trees shall be a 24-inch box.

Damage to slopes, plants, irrigation systems and other facilities that occur as a result of irrigation line break or other defects in an irrigation system installed by or broken by the Contractor, shall be repaired or reconstructed by the Contractor to the satisfaction of the Engineer and at no additional cost to the City.

Damage caused by or as a result of improper programming or operation of the irrigation system during the plant establishment period shall be repaired or reconstructed by the Contractor to the satisfaction of the Engineer and at no additional cost to the City.

Prior to starting work, the Contractor shall provide a videotape (DVD format) of the job site for the purpose of providing a record of existing conditions. The video record shall provide a view encompassing the entire project site, including plus 20 feet beyond the Contractors limit of work. The record shall include clear details of all existing above ground improvements including but not limited to pavement, landscaping and irrigation, sidewalk, driveways, curb and gutter.

The video record shall include audio commentary describing what is being viewed, all provide detail of significant existing damage and disrepair, cracks, settlements, deficiencies, or any other pre-existing condition.

The Contractor shall perform the actual recording at a time when the street is not filled with parked vehicles. Any significant pre-existing conditions shall also be photographed to a 4x6 size, matte finish and shall be accompanied by a brief narrative of date, location, and conditions.

Measurement and Payment:
Full compensation for “Preservation of Property” shall be considered as included in the contract unit prices paid for the various items of work performed and no additional compensation will be allowed.

E-07 CONTROL OF WATER

The Contractor is responsible for implementing measures as required to allow for work to proceed during wet weather, should wet weather occur, and when groundwater is present. The Contractor is advised that the groundwater surface in the City of Milpitas is high and may be just below the pavement surface. Contractor shall provide all necessary labor and materials required to protect the work from wet weather and to allow work to proceed without delay.

The Contractor shall remove all water that accumulates in all excavations during the progress of work so that all work may proceed. Excavated areas shall be kept free from water while underground utilities or structures are constructed, while concrete is setting, and until backfill has been placed to a sufficient height to anchor the work against possible flotation or leakage.

The Contractor's dewatering system shall be designed to prevent pumping fines from below grade or disturbing materials exposed at the excavation bottom. Attention is directed to other related sections in these specifications.

Disposal of water through dewatering operations shall conform to the requirements of these Contract Documents and State and Federal Law. Water from dewatering operations shall not be directed into existing sanitary sewers unless the Contractor obtains a City of San Jose Short Term Wastewater Discharge Permit. Discharge to storm drains, creeks and channels will not be allowed. The Contractor shall submit written procedures in accordance with Article 15, Submittals, for the disposal of water extracted under such conditions to the City for approval 15 days prior to work. The Contractor shall be held responsible for any fines and penalties assessed due to the disposal of extracted water deemed in violation of said approved procedures.

Submittal:

1. Dewatering Plan
2. City of San Jose Short Term Wastewater Discharge Permit

Dewatering Plan:

Where required by the Contract Documents, the Contractor shall provide a detailed Dewatering Plan designed by a licensed Civil Engineer.

The Contractor shall, at all times, have sufficient pumping equipment available for immediate use including standby pumps for use in case other pumps become inoperable. Water shall be disposed of so as to be compliant with the law, and so it does not cause injury to public or private property or be a menace to the public health.

The Contractor's dewatering system shall be designed to prevent pumping fines from below grade or disturbing materials exposed at the excavation bottom. Attention is directed to other related sections in these specifications.

Disposal of water through dewatering operations shall conform to the requirements of the Contract Documents and State and Federal Law.

Discharge of water through dewatering operations into City Storm Drain system is not permitted.

Discharge to Sanitary Sewer:

The Contractor shall obtain approval from the Engineer prior to any discharge to the City's sewer system. In addition, the Contractor shall obtain a "Short-Term" Wastewater Discharge Permit from the City of San Jose Environmental Services Department, including payment of any required permit fees. The Contractor shall monitor its discharge flow rate to ensure surcharging of the downstream sewer system does not occur, and provide all flow measurement, testing, or other requirements of the Wastewater Discharge Permit, and shall be responsible for all costs as required to discharge to the sewer system. The Contractor shall be responsible for any fines, or related costs and repairs for damage or clean-up resulting from its discharge operations

Measurement and Payment:
Full compensation for "Control of Water" shall be considered as included in the contract unit prices paid for the various items of work performed and no additional compensation will be allowed.

E-08 COOPERATION

The Contractor shall coordinate with and accommodate any other contractors who may be working in the area when preparing work schedules, and when executing items of work including traffic control.

The Contractor shall coordinate with utility companies for relocation of any existing utilities. The Contractor shall give the required advance notice of work to the utility company.

The Contractor's work shall be so conducted to allow utility companies to maintain services and relocate their facilities with the minimum of interruption to the public. Proper coordination with utility company staff is critical to ensure that their facility is relocated prior to installation of new improvements by the Contractor.

Measurement and Payment:
Full compensation for "Cooperation" shall be considered as included in the contract unit prices paid for the various items of work performed and no additional compensation will be allowed.

E-09 TRENCH EXCAVATION AND BACKFILL

General:
Trench excavation and backfill shall conform to the most current City Standard Drawing No, 220 Trench Construction, the City Standard Specifications, and these Technical Provisions.

Trench excavation shall include removal of material for the installation of pipes, conduits, shoring, and removal of existing utility facilities as identified on the plans and all other trenching and excavation related work as specified, and as directed by the Engineer.

Trench bedding and backfill shall consist of furnishing, placing, and compacting bedding and backfill material around and on top of pipes or other items specified on the plans or in the Technical Specifications to the lines designated on the plans or specified or directed by the Engineer.

Unless specified differently elsewhere in the plans and Technical Specifications, the trench bedding and backfill material shall be 3/4 inch Class II Aggregate Base meeting the requirements of the State Standard Specifications.

Geotextile fabric shall be Mirafi 140N or Approved Equal.

Submittal:
1. The Contractor shall provide a Certificate of Compliance for all materials used under this Section in conformance with the requirements of the Contract Documents.

Execution:
The Contractor shall not excavate more linear foot of trench than can be backfilled and replaced by the end of each day. No trenches or excavations shall be left unattended at any time.

All trenches and excavations shall be backfilled by the end of the work day. Exceptions to this requirement may be granted by the Engineer in situations where trenches are less than a pipe length at special locations, such as the connection point for the next day's work, a freshly poured manhole base, a crossing with a waterline that is under pressure testing or other conditions. For these exceptions, the Contractor shall be responsible to make trenches and excavations safe by plating over or by other means.

Asphalt pavement to be removed for trenching and excavation shall be saw cut to clean to a minimum depth of 4-inches.

The trench shall be excavated to a depth required to allow for placement of bedding material. Bedding material shall provide a uniform and continuous bearing and support for the pipe at every point between bell holes or joints.

Any part of the bottom of the trench excavated below the specified grade shall be backfilled with approved backfill material and thoroughly compacted as specified by the City Standard and the Engineer. The finished grade of the bedding material shall be prepared accurately by means of hand tools.

Ground water & Unsuitable Material:
Where groundwater or other unsuitable material is encountered at the trench bottom, the trench bottom shall be over excavated to a depth as directed by the Engineer, and stabilized with pipe

foundation ballast rock wrapped in geotextile filter fabric with a 12-inch minimum fabric overlap at the top. The rock ballast shall be a minimum of an18-inch thick section of 1/2 to 3/4 inch or larger angular crush rock as necessary to establish as stabilized trench foundation.

Where groundwater is present at the bottom of the trench, or where the bottom of the trench is found to be unstable as determined by the Engineer shall be removed. Contractor shall excavate and remove such unsuitable material to the width and depth ordered by the Engineer. Before the pipe is installed, the sub grade shall be made by backfilling and compacting with material as specified by the Engineer.

All excavated material shall be removed from the project site concurrent with the excavation operations. The Contractor shall not stockpile materials or debris within the street or public right of way.

Relative compaction of trench backfill materials shall conform to the requirements shown in the City Standards and on contract plans and shall be done concurrently with pipe installation and placement of backfill materials.

Definition Of Relative Compaction:
Relative compaction is the ratio of the in-place dry density of constructed fill to the maximum dry density determined by ASTM Dl557 (Standard Test Methods for Moisture Density Relations of Soils and Soil-Aggregate Mixtures Using 10 pound Rammer and 18-inch Drop). As an alternative method, the relative compaction shall be determined in accordance with California Test 216 on the dry-in-place density to dry test maximum density basis. Field density and moisture content tests of the fill material shall be performed in accordance with ASTM Test designation D2922 and D3017-78 (Nuclear Probe Methods), respectively. Alternative methods for the latter test methods shall be California Test 231. The Engineer will determine the locations and number of field density tests. The results of these tests and compliance with the specifications will be the basis upon which satisfactory completion of work is judged by the Engineer.

Unsuitable and surplus excavated materials or items identified for removal shall become the property of the Contractor and shall be disposed of outside the limits of work in accordance with the local requirements at no additional cost to the City.

Measurement and Payment:
Full compensation for Trench Excavation and Backfill, including trenching, excavation, saw cutting, bedding material and compaction, removal of unsuitable materials, providing a stabilized trench bottom, aggregate base, shoring pavement replacement, and maintaining traffic, traffic control, and all other work as required shall be considered as included in the contract price paid for various items requiring trench excavation and backfill, and no additional compensation shall be allowed.

E-10 OBSTRUCTIONS

Attention is directed to Section 15, "Existing Highway Facilities," of the State Standard Specifications.

The Contractor's attention is directed to the existence of certain underground facilities that may require special precautions be taken by the Contractor to protect the health, safety, and welfare of workers and of the public. Facilities requiring special precautions include, but are not limited to, storm drainage pipes, sanitary sewers, irrigation lines, telephone ducts, water line, traffic signal conduit, gas lines, and underground electrical cables. Some of the facilities might be relocated by the various utility companies. The locations of the facilities as shown on the plans are approximate. It is the Contractor's responsibility to verify the exact locations and depths with the respective utility company.

Underground Services Alert (USA) 811:
Prior to any underground excavation of one (1) foot or more in depth, the Contractor shall contact Underground Services Alert (USA) 811 two days prior to the beginning of each excavation.

The Contractor shall notify USA at 1-800-227-2600 to locate and mark existing subsurface utilities within the Contractor's project site. The Contractor shall also be responsible for contacting private utility companies for the review of their as-built records for their underground utilities.

The Contractor shall have the responsibility to contact directly all agencies that do not participate in USA program to arrange for the location and mark-out of their utilities. The California Department of Transportation (Caltrans) is an example of such an agency that does not participate in the USA program.
UNMARKED UTILITIES:

As required by law, should the Contractor find utilities during excavation that were unmarked by the USA locate process, that Contractor shall immediately notify Underground Services Alert (USA) 811 of the find and request they respond.

The following utilities have facilities within the limits of work:

PG&E	Gas/Electrical
City of Milpitas	Water, Recycled Water, Storm Drain, and Sanitary Sewer lines; Street light, Traffic Signal, and Fiber Optics
MCI	Telephone/Fiber Optics
AT&T	Telephone/Fiber Optics
Comcast	Cable TV/ Fiber Optics
XO Communications	Fiber Optics

Protection and repair of damage of laterals and appurtenances shall be the responsibility of the Contractor.

In the event that water services, fire hydrants, storm drainpipes, or other appurtenances are broken or damaged, the Contractor shall immediately notify the Engineer. The Contractor shall be required to repair at his own expense such damage in a manner satisfactory to the Engineer, or City forces may repair such damage at the Contractor's expense.

In the event damage is done to any gas, electric, cable TV, fiber optics, or telephone facility by the Contractor, the Contractor shall immediately notify the respective utility company. The utility company at the Contractor's expense shall make repairs.

Measurement and Payment - Full compensation for conformance to the provisions in this section shall be considered as included in the contract prices paid for various items of work involved, and no additional compensation shall be allowed.

E-11 SHEETING, SHORING, AND BRACING

General:
The Construction Safety Orders of the Division of Occupational Safety and Health shall apply to all excavations. For all excavations 5 feet or more in depth, the Contractor, in accordance with California Labor Code Section 6705, shall submit to the Engineer a detailed plan showing the design and details of the protective systems to be provided for worker protection from the hazard of caving ground during excavation. The detailed plan shall include any tabulated data and any design calculations used in the preparation of the plan. Excavation shall not begin until the detailed plan has been reviewed and approved by the Engineer.

Detailed plans of protective systems for which the Construction Safety Orders require design by a registered professional engineer shall be prepared and signed by an engineer who is registered as a Civil Engineer in the State of California, and shall include the soil classification, soil properties, soil design calculations that demonstrate adequate stability of the protective system, and any other design calculations used in the preparation of the plan.

No plan shall allow the use of a protective system less effective than that required by the Construction Safety Orders.

Nothing in this section shall be construed to impose tort liability on the awarding body or any of its employees.

Attention is also directed to Sections 6422, 6423, 6424, 6705, and 6707 of the Labor Code of the State of California, OSHA 29 CFR Part 1926 Federal Regulations, Standards-Excavation, and elsewhere within these Contract Documents.

Prior to any excavation, the Contractor shall designate a competent person who is responsible for trench and structure excavation, and the Contractor shall obtain a Cal/OSHA Safety Permit.

Submittals:

1. Contractor's detailed Sheeting, Shoring and Bracing Plan. The Plan shall be submitted a minimum of 15 working days prior to the intended start of excavation. The Plan shall include structural calculations, and alternative protection systems. The Contractor shall be prepared to implement these alternative systems should the initial systems not achieve the following minimum requirements:
    a. Protect personnel that enter the excavation;
    b. Protect existing utilities, pavements and structures;
    c. Installation of the shoring system must not damage existing structures, pavements, and utilities including through settlement, heave, or vibrations;
    d. Prevent caving or lateral movement of excavation walls and associated loss of adjacent ground and adjacent ground surface settlement, even when subjected to construction vibrations;
    e. Provide stable excavation walls and bottom;
    f. Prevent heave of the excavation bottom;
    g. Allow for removal or abandonment of shoring in a manner that does not damage the project or existing structures, pavements, and utilities including through settlement, heave, or vibrations (contractor to address removal/abandonment concerns specific to the type of shoring selected in their shoring submittal). Any

void space created by shoring removal should be completely filled with CLSM or approved equivalent; and

h. Resist lateral loads from vehicular traffic, construction equipment and spoils, and hydrostatic pressures, if any.

2. Copy of the Contractors Cal/OSHA Safety Permit.

3. Name and contact information for the Contractors Competent Person.

Sheeting, shoring, and/or bracing of open cut excavations shall be provided, inclusive of all construction conforming to applicable safety orders, including any necessary subsurface investigations, preparing and submitting shoring designs, labor, tools, materials, equipment, power, and fuel for doing all required work including but not limited to that as required by Sections 6700-6708 of the Labor Code.

When close sheeting (sheet piles) is required, it shall be so driven so as to prevent adjacent soil from entering the trench either below or through such sheeting. Where sheeting and shoring and bracing are used, the trench width shall be increased accordingly.

The Engineer reserves the right to order the sheeting driven to the full depth of the trench or to such additional depths as may be required for the protection of the work. Where the soil in the lower limits of a trench has the necessary stability, the Contractor may submit a request to modify the shoring design and submit supporting calculations to stop the driving of sheeting at some designated elevation above the trench bottom. However, the Contractor retains full responsibility for all excavation support under the Contract.

Where Sheeting, Shoring, and Bracing are used, the trench width shall be increased accordingly for the installation of utilities.

Sheeting and bracing which have been ordered left in place must be removed for a distance of 3 feet below the established street grade or the existing surface of the street, whichever is lower.

Trench bracing, except those that must be left in place, may be removed when the backfilling has reached the respective levels of such bracing.

Sheeting, except that which has been left in place, may be removed after the backfilling has been completed or has been brought up to such an elevation as to permit its safe removal.

Measurement and Payment:

Full compensation for conformance to the provisions in this section shall be considered as included in the contract prices paid for various items of work involved, and no additional compensation shall be allowed.

E-12 WATER POLLUTION CONTROL WORK

General:
In compliance with section 01 00 00-3.9F and the State and Federal regulations on construction storm water management and urban runoff pollution control, no pollutants will be allowed to enter the storm drainage system. The Contractor shall exercise every reasonable precaution to protect storm drains, inlets, drainage swales, streams, lakes, reservoirs, bays, and coastal waters from pollution with fuels, oils, bitumen's, calcium chloride and other harmful materials and shall conduct and schedule operations so as to avoid or minimize muddying and silting of streams, lakes, reservoirs, bays and coastal waters. Care shall be exercised to preserve roadside vegetation beyond the limits of construction.

Construction shall adhere with the requirements of the California State Water Resource Control Board, General Permit for Storm Water Discharges Associated with Industrial Activities (General Permit). Project construction is covered under the General Permit WDID number

The project Stormwater Pollution Prevention Plan (SWPPP) applies to operations within the limits of work and adjacent points of discharge that may be outside the limits of work. The SWPPP describes the proposed facilities, identifies potential sources of pollution and recommends appropriate Best Management Practices (BMPs) to reduce the discharge of pollutants. The contractor shall be strictly held to the requirements of the General Permit and shall provide the services of Qualified Stormwater Practitioner (QSP) as the agent to the District, who is the Legally Responsible Person (LRP). Refer Appendix H " Storm Water Pollution Prevention Plan"

SCOPE OF WORK:

No construction work shall begin on the project until the Contractor receives written notification from the Engineer that the SWPPP is acceptable. **The City has determined the project will be a <u>Risk Level 1.</u>** The City will prepare and file the Notice of Intent and Change of Information (COI) when the building general contractor is contracted to start the construction of the Fire Station.

The Contractor shall ensure the requirements of the General Permit Is satisfied. The work shall include, but not limited to:

- Providing the Qualified SWPPP Developer (QSD) and Qualified SWPPP Practitioners
- Install, adjust and maintain all necessary BMPs, non-stormwater pollutants, safe storage, hazardous material controls and construction activities to protect discharge with best available technology.
- Monitoring, testing and action plans as required by the project SWPPP Document.
- Amend the SWPPP whenever there is a change in construction or operations that will affect the discharge of pollutants or change in schedule delaying completion of grading activities beyond completion date identified in the project SWPPP.
- All necessary data entry submit documentation to the Storm Water Multiple Application and Report Tracking System (SMART) during construction and closeout.

Execution:
The Contractor shall implement, maintain and be responsible for the collection and input of data and for the effectiveness of the SWPPP measures in accordance with the above referenced Order for a **<u>Risk Level 1</u>** construction site until the project is accepted by the City.

This includes providing the Qualified SWPPP Developer (QSD) and Qualified SWPPP Practitioners. The Contractor shall maintain a rain gauge at the site and record daily (Monday through Friday) rain fall amounts until the project is accepted by the City. The contractor shall perform monitoring, testing, and action plans documentation required by the project SWPPP Document, and/or as required by the General Permit. The contractor shall notify the City if either the QSD or QSP is no longer associated with the work. The City shall be notified within 24 hours and a qualified replacement named within 72 hours. After September 2, 2011, both the QSD and the QSP must meet the Permit certification requirements that take effect on this date.

If there is a Permit violation, the Contractor shall notify the Engineer within 24 hours and corrections shall be made as necessary to comply with the Construction General Permit. Contractor is responsible for any fines, and additional sampling, testing and monitoring that result from their negligence to comply with the General Construction Permit requirements without any additional compensation by the City. If the Regional Water Quality Board inspects the site, the Contractor shall notify the City Engineer within 24 hours and shall provide a written notice of any deficiencies noted and/or changes requested by the inspector.

Violation of this provision shall cause the City to issue a stop-work notice and take necessary actions to require the Contractor to correct and comply with the regulations. All costs related to the stop-work action and corrective work to come into compliance shall be fully borne by the Contractor. The cost of corrective actions required of the Contractor shall be made without any additional compensation by the City.

Month Maintenance of Stormwater Pollution Prevention Plan

If there is a delay in contracting with the General Contractor for construction of the Fire Station after the City has accepted the demolition, the City will require the Contractor to continue the maintenance, implementation, reporting, and monitoring of the Stormwater Pollution Prevention Plan according to the State's General Permit and these Technical Provisions until the City files Change of Information with the State.

Measurement & Payment:

Refer to Section 01 20 00 " Water Pollution Control Work"

SECTION 01 74 10

WASTE MANAGEMENT

PART 1 - GENERAL

1.1 SUMMARY

A. Project requires special Waste Management Program.

1. CALGreen Waste Management: Comply with applicable requirements.
2. Effect optimum control of solid wastes.
3. Prevent environmental pollution and damage.

B. Related Work:

1. Section 01 50 00: Temporary facilities and controls.

1.2 DEFINITIONS

A. Inert Fill: A permitted facility that accepts inert waste such as asphalt and concrete exclusively.

B. Class III Landfill: A landfill that accepts non-hazardous waste such as household, commercial, and industrial waste, including construction, remodeling, repair, and demolition operations.

C. Construction and Demolition Waste: Includes solid wastes, such as building materials, packaging, rubbish, debris, and rubble resulting from construction, remodeling, repair, and demolition operations.

1. Rubbish: Includes both combustible and noncombustible wastes, such as paper, boxes, glass, crockery, metal and lumber scrap, tin cans, and bones.

2. Debris: Includes both combustible and noncombustible wastes, such as leaves and tree trimmings that result from construction or maintenance and repair work.

D. Chemical Waste: Includes petroleum products, bituminous materials, salts, acids, alkalis, herbicides, pesticides, organic chemicals and inorganic wastes.

E. Sanitary Wastes:

1. Garbage: Refuse and scraps resulting from preparation, cooking, distribution, or consumption of food.

2. Sewage: Domestic sanitary sewage.

1.3 SUBMITTALS

A. Waste Management Program: Comply with Contract Documents and applicable code requirements for salvaging, recycling, and disposing of nonhazardous waste.

1. Prior to commencement of Work, schedule and conduct meeting with City to discuss proposed Waste Management Program.

2. Develop mutual understanding relative to details of recycling, and rebate programs.

3. Prepare and submit a written and graphic Waste Management Program including, but not limited to, the following:

a. Indicate procedures to be implemented.

b. Estimate total Project waste to be generated, and estimated cost of disposing of Project waste in landfills.

c. Submit permit or license and location of waste disposal areas.

d. Submit procedures for recycling/re-use program.

e. Submit procedures for rebate programs.

f. Revise and resubmit Waste Management Program as required by City.

1) Review of Contractor's Waste Management Program will not relieve Contractor of responsibility for control of pollutants and other environmental protection measures.

B. Submit summary of solid waste generated by Project with each application for progress payment, on form acceptable to City; include manifests, weight tickets, receipts, and invoices identifying Project and waste delivered to following locations.

1. Recycling Centers.
2. Class III landfills.
3. Inert fills.

C. Prepare rebate information and product documentation as required for City to qualify for rebate programs; submit with final closeout submittals.

1. Where feasible submit in electronic format, otherwise in 3-ring binder.

1.4 RECYCLING PROGRAM

A. Recycling: Implement recycling program that includes separate collection of waste materials as applicable to Project requirements; recycling program to be applied by Contractors and subcontractors.

1. Land clearing debris.
2. Asphaltic concrete.
3. Concrete.
4. Others as appropriate.

B. Handling: Keep materials free of dirt, adhesives, solvents, petroleum contamination, and other substances deleterious to recycling process.

1. Clean materials contaminated prior to placing in collection containers.

2. Arrange for collection by or delivery to appropriate recycling center or transfer station that accepts construction and demolition waste for purpose of recycling.

C. Participate in Re-Use Programs: Rebates, tax credits, and other savings obtained for recycled or re-used materials shall accrue to Contractor.

END OF SECTION

SECTION 02 41 10

STRUCTURE DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes: Demolish existing construction as required for Project.

1. Remove existing materials and equipment from site.
2. Remove foundations including basement floor slabs.
3. Cap and identify active utilities.

B. Related Sections:

1. Section 01 11 00: Summary of work including hazardous materials requirements.
2. Section 01 50 00: Temporary facilities including barriers and waste management.
3. Section 01 57 23: Temporary storm water pollution control – SWPPP Binder.
4. Section 01 74 10: Waste management.
5. Section 31 10 00: Clearing and grubbing.
6. Municipal Authorities: Dismantling, removing, and capping of Municipal utilities.

1.2 ADMINISTRATIVE REQUIREMENTS

A. Coordination:

1. Do not interfere with use of adjacent buildings; maintain free and safe passage to and from.

2. Prevent movement or settlement of adjacent structures, provide and place bracing or shoring and be responsible for safety and support of structures. Assume liability for movement, settlement, damage or injury.

3. Cease operations and notify City immediately if safety of adjacent structures appears to be endangered; take precautions to properly support structures. Do not resume operations until safety is restored.

4. Prevent movement, settlement or collapse of adjacent services, sidewalks, driveways and trees. Assume liability for such movement, settlement or collapse, promptly repair.

5. Obtain permission from adjacent property owners when outriggers, swinging cranes or similar equipment traverse their property.

B. Design/Build: Provide special engineering to ensure compliance with applicable codes and Contract Documents for shoring.

C. Scheduling: Do not close or obstruct roadways without permits. Conduct operations with minimum interference to adjacent traffic.

1.3 SUBMITTALS

A. Action Submittals:

1. Submit demolition procedures and operational sequence to ensure Project sequencing is consistent with City needs.

B. Informational Submittal:

1. Submit copies of permits and notices authorizing demolition work.
2. Submit copies of certificates of severance of utility services.
3. Submit copies of decommissioning permit prior to beginning Work.
4. Submit copies of permit for transport and disposal of debris.
5. Submit copies of Contractor Class A or B license with Hazardous Substance Removal Certificate prior to beginning Work.

C. Pre-Demolition Photographs: Show conditions of exiting adjacent construction and site improvements that might be misconstrued as damaged by demolition operations. Submit before work begins.

D. Design/Build Certificates: Submit certification signed by California licensed structural engineer indicating shoring compliance with code requirements.

1.4 QUALITY ASSURANCE

A. Sustainability Requirements: Comply with *CAL*Green requirements including those relative to pollution control for construction waste.

1.5 SITE CONDITIONS

A. Structures to be demolished shall be evacuated and their use discontinued before start of work.

B. Arrange and pay for disconnecting or removing, capping and plugging utility services; disconnect and stub off; notify affected utility company in advance and obtain approval before starting Work.

C. Place markers to indicate location of disconnected services; identify service lines and capping locations on Project Record Documents.

D. Maintain access to existing walkways, exits, and adjacent occupied facilities.

E. Contractor shall be responsible for traffic control when working on streets.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Debris: Maintain possession of materials being demolished except where noted as a material for reinstallation or a material to be retained by City. Immediately remove debris from site.

1. Material, equipment, tools, and appliances not indicated to be retained by Owner shall become property of Contractor and removed from site and disposed of at

an appropriate site approved by authorities having jurisdiction for disposal of materials involved.

B. City Retained Materials: Contact City prior to beginning demolition to determine extent of materials to be retained. Carefully remove materials indicated to be retained by City; deliver and store where directed.

1. Inventory and record condition of items to be retained by City.

PART 3 - EXECUTION

3.1 DEMOLITION

A. Demolish structures and appurtenances in an orderly and careful manner. Contractor shall be responsible for means and methods for completing Work.

1. Generator: Take special care to disconnect generator and to ensure generator is safe for removal. Remove generator and dispose of at an appropriate site approved by authorities having jurisdiction for disposal of materials involved.

2. Tanks: Remove any fuel from fuel tanks and dispose of at an appropriate site approved by authorities having jurisdiction for disposal of materials involved.

a. Remove tanks within construction area and dispose of at an appropriate site approved by authorities having jurisdiction for disposal of materials involved.

3. Wet Utilities: Remove utilities on site and not indicated to be used for new construction and dispose of at an appropriate site approved by authorities having jurisdiction for disposal of materials involved.

B. Perform demolition in accordance with authorities having jurisdiction.

1. Do not use explosives.

C. Keep work sprinkled to prevent dust; provide hoses and water as required for demolition.

1. Construction water to be recycled water; coordinate with City for information regarding nearest recycle water filling station.

2. Include costs and fees for recycled water and attend training as required by City prior to using recycled water.

D. Remove demolished materials from site, unless otherwise directed.

1. Burning of materials on site is not permitted.

2. On daily basis remove from site, contaminated, vermin infested, or dangerous materials encountered and dispose of by safe means so as not to endanger health of workers or public.

3. Transport demolished materials in manner that prevents spillage during transit.

4. Dispose of demolished materials at certified facility approved by City.

E. Rough grade areas affected by demolition and leave level to within one percent; maintain grades and contours of site as indicated.

1. Backfill over excavated areas, open pits and holes caused as a result of demolition which exceed excavation limits for project; use approved fill.

F. Remove demolished materials, tools and equipment upon completion of work; leave site in condition acceptable to City.

3.2 REPAIR

A. Repair damage to adjacent structures caused as result of demolition at no additional cost to City.

B. Repair demolition beyond that required for Project at no additional cost to City.

END OF SECTION

SECTION 02 41 13

SELECTIVE SITE DEMOLITION

PART 1 - GENERAL

1.1 SCOPE OF WORK

A. Remove paved asphalt concrete areas, concrete sidewalks, concrete ramps, utility pipes, utility appurtenances, light poles, light fixtures, bike racks, trees, and gate control arm equipment, as noted on the Drawings.

1.2 REQUIREMENTS

A. Prior to starting demolition, comply with requirements listed in the City of Milpitas General Conditions. Comply with BAAQMD and Environmental Protection Agency (EPA) regulations and disposal regulations.

1.3 RELATED WORK

A. Section 01 57 23: Temporary Storm Water Pollution Control

B. Section 31 10 00: Clearing and Grubbing

C. Section 31 20 00: Earthwork

D. Section 31 22 19: Finish Grading

PART 2 - - PRODUCTS (NOT USED)

PART 3 - - EXECUTION

3.1 UTILITIES

A. Coordinate with utility companies as required.

B. Locate, identify, disconnect, and cap off utility services to be demolished.

C. Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated.

D. Maintain and protect existing utilities to remain in service before proceeding with demolition, providing bypass connections to other parts of the building.

E. Notify the City of Milpitas Representative not less than 72 hours in advance if there are any proposed utility interruptions

F. Do not proceed with utility interruptions without the City of Milpitas Representative's written permission

G. Where equipment or devices have been removed, and where the active side of the pipe remains, Contractor shall cap or plug all abandoned piping using either threaded or soldered fittings. Do not rely on the existing valves for a positive shutoff.

H. For the abandonment of wet utilities, Contractor shall cut and cap at the property line, remove everything behind the property line, disconnect lateral at mainline, and abandon in place the segment between mainline and property line. Contractor shall perform work as specified in the Drawings.

3.2 DEMOLITION

A. Conduct demolition without disrupting use of adjacent property or nearby buildings.

B. Conduct demolition operations and remove debris to prevent injury to people and damage to adjacent buildings and site improvements.

C. Perform Work in such a manner as to prevent damage to existing facilities to remain or to be salvaged. Hazardous Work shall not be left standing or hanging, but shall be knocked or pulled down to avoid damage or injury to employees or the public.

D. Conduct demolition operations in such a manner as to prevent damage to existing trees and plants that are to remain.

E. Contractor shall provide biologist survey prior to the demolition and removal of all existing trees.

F. Contractor shall coordinate with the City and the adjacent property owner prior to the removal of trees along the property line. A minimum of 7 days notice shall be provided prior to starting work.

G. If the removal of the trees takes place between February 1 and August 31, the contractor shall provide pre-construction survey performed by qualified biologist. Refer to Specification CEQA memo.

H. Contractor shall be extremely cautious while removing trees, specifically to the existing traffic control cabinet and the existing carport on the adjacent property. The contractor shall be responsible for any damages to traffic control cabinet and carport caused by the contractor’s work.

I. Contractor shall be responsible for traffic control when performing any work in the street.

3.3 CUTTING AND PATCHING

A. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction.

3.4 SAW CUTTING

All saw cutting shall be made in a neat, clean line perpendicular to the face of the paved surface such that no damage shall take place on the paving to remain. Refer to plans for locations.

3.5 SALVAGE

A. Items indicated to be removed and salvaged remain the City's property. Remove, clean, and deliver to the City's designated storage area or as directed by the City's Representative.

3.6 DISPOSAL

A. Unless otherwise indicated, demolished materials become Contractor's property.

B. Promptly remove demolished materials from City's property and legally dispose of them. Do not burn demolished materials.

C. After the demolition work is complete, the contractor shall remove and dispose of all excess materials from the demolition operations and other unwanted materials, garbage, debris, and rubbish scattered throughout the site and perform minor grading as directed by the Engineer to eliminate uneven ground surface. The restored sites shall have no significant depressed areas that may hold rain water.

3.7 HAZARDOUS MATERIALS

A. Except as otherwise specified, in the event Contractor encounters on the Project site material reasonably believed to be asbestos, polychlorinated biphenyl (PCB), lead, or other hazardous substances that have not been rendered harmless, Contractor shall immediately stop work in the area affected and report the condition to the City of Milpitas's representative in writing. The work in the affected area shall not thereafter be resumed except by written agreement of the City and Contractor if in fact the material is asbestos, PCB, lead, or other hazardous substances and has not been rendered harmless. The work in the affected area shall be resumed in the absence of asbestos, PCB, lead, or other hazardous substances, or when such materials have been rendered harmless.

B. Disclose any hazardous substance or condition exposed during the work to the City's Representative for decision or remedy.

END OF SECTION

SECTION 31 10 00

CLEARING AND GRUBBING

PART 1 - GENERAL

1.1 DESCRIPTION

A. Work included:

Clear and grub the site to remove and dispose of all trash, debris, and natural growth which will interfere with new construction as shown on the Drawings and specified herein except such objects as are designated to remain or are to be removed in accordance with other sections of these specifications within designated limits of the project area. This work shall also include the preservation from injury or defacement of all vegetation and objects designated to remain.

Strip topsoil from areas that are to be incorporated into the limit of project and storage of topsoil where it will not interfere with other work.

B. Related work:

1. Section 01 57 23: Temporary Storm Water Pollution

2. Section 02 41 13 Selective Site Demolition

1.2 QUALITY ASSURANCE

A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

1.3 ENVIRONMENTAL REQUIREMENTS

A. Provide temporary erosion and sedimentation control measures as necessary per Section 01 57 23 and CASQA or ABAG storm water pollution prevention guidelines to prevent soil erosion and discharge of sediment laden water runoff or airborne dust to adjacent properties and water resources.

B. Sitework Sub-Contractor shall be totally responsible to conduct inspections, repair, and maintain erosion and sedimentation control measures during construction until permanent vegetation has been established.

C. Sitework Contractor will be responsible to remove temporary erosion and sedimentation controls when site is re-stabilized and re-vegetated. Any areas disturbed during removal of temporary measures will be restored and stabilized within fourteen (14) calendar days.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Provide materials, not specifically described but required for proper completion of the work of this Section, as selected by the contractor subject to the approval of the City of Milpitas Representative.

2.2 MATERIAL OWNERSHIP

A. Except for stripped topsoil or other materials indicated to remain Owner's property, cleared materials shall become Contractor's property and shall be removed from Project site.

PART 3 - EXECUTION

3.1 SURFACE CONDITIONS

A. Examine the areas and conditions under which work of this Section will be performed. Notify the City of Milpitas Representative of conditions which may be detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

3.2 PROTECTION

A. Protect existing utilities indicated or made known.

B. No vegetation shall be cut outside the limits of construction as determined by the grading requirements shown on the Drawings, unless approved by the City of Milpitas Representative.

C. Protection of persons and property:

1. Barricade open depressions and holes occurring as part of this Work, and post warning lights on property adjacent to or with public access.

2. Operate warning lights during hours from dusk to dawn each day and as otherwise required.

3. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by operations under this Section.

D. Use means necessary to prevent dust from becoming a nuisance to the public, to neighbors, and to other work being performed on or near the site.

E. Maintain access to the site at all times.

F. Protect and maintain benchmarks and survey control points from disturbance during construction. If monuments need to be removed they shall be referenced by a Land Surveyor Licensed in the State of California. Same applies to property corners that are disturbed by site clearing operations.

G. Locate and clearly flag trees and vegetation to remain or to be relocated.

3.3 CLEARING

A. All stumps and root mat shall be thoroughly removed regardless of their depth and regardless of the proposed fill height. The area within the construction lines shall be cleared of all surface objects and all trees, stumps, roots and other objectionable obstructions resting on or protruding through the surface of the original ground not designated to be retained, unless otherwise noted.

3.4 CONSERVATION OF TOPSOIL

A. After the area has been cleared of vegetation, strip the existing topsoil to the depth necessary to remove all organic material and reveal firm subsoil at the direction of the City's Representative.

B. Topsoil to be respread shall consist of organic surficial soil reasonably free of subsoil, clay lumps, stones, and other objects over 2 inches in diameter, weeds, roots, and other objectionable material.

C. Stockpile topsoil in areas where directed by the City's Representative. Construct storage piles to freely drain surface water. Cover storage piles as required to prevent windblown dust. Install erosion control silt fence around perimeter of topsoil stockpile if there are no other measures between the stockpile and water resources.

3.5 DISPOSAL

A. General:

1. Disposal of structures, trash and debris resulting from clearing operations shall be off site. The Contractor shall submit, prior to beginning work, a plan for the satisfactory disposal of material and debris from the clearing and grubbing operations for approval of the City of Milpitas Representative. Said plan shall provide for the satisfactory disposal of perishable materials and rubbish within thirty (30) days after accumulation, unless a longer period is authorized in writing by the City of Milpitas Representative, to prevent infestation of pests.

3.6 UTILITIES

A. Coordinate with utility companies and agencies as required.

B. Locate, identify, disconnect, and seal or cap off utilities indicated to be removed. Arrange with utility companies to shut off indicated utilities.

C. Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:

D. Notify the City's Representative not less than two (2) days in advance if there are any proposed utility interruptions.

E. Do not proceed with utility interruptions without the City Representative's written permission.

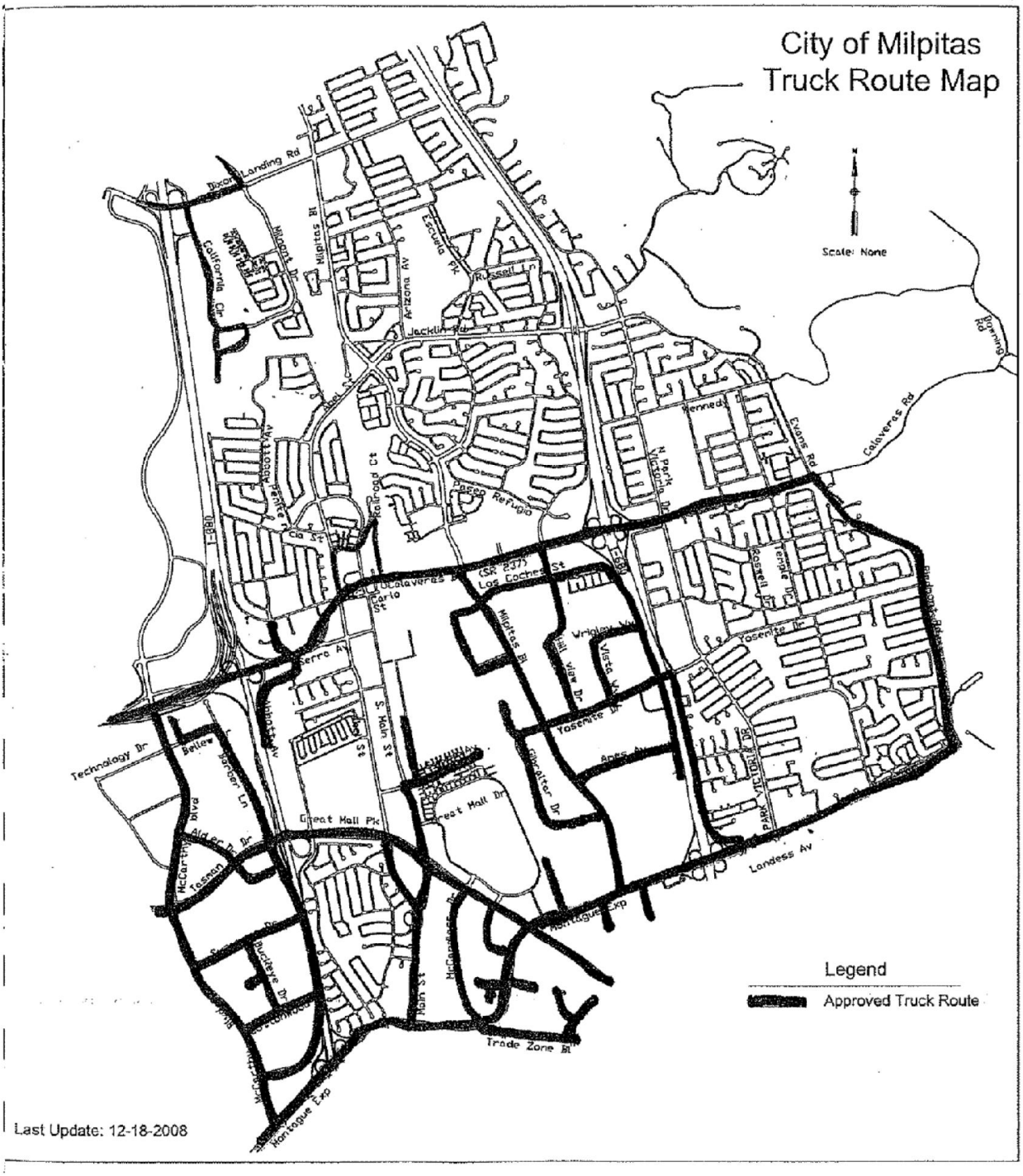
END OF SECTION

APPENDIX A – CITY STANDARD FORMS

The contractor shall submit the required documents during the City forms shown in Appendix A

CITY OF MILPITAS

TRUCK ROUTE MAP



SPECIAL EQUIPMENT PLATE

- Photograph of the vehicle **not** to exceed 8 1/2" x 11";
- SE fee.

Final determination of eligibility is based upon review of the application and the photograph. Proof of ownership and verification of the identification number are not required to obtain an SE plate.

Why a vehicle may not qualify for an SE plate

The following list presents examples of why a vehicle may not qualify. This is not a complete list of reasons.

- A vehicle that is **not** oversized or overweight would **not** qualify for an **SE** plate. (An oversized or overweight vehicle would require a permit issued by the Department of Transportation (DOT) to move it unladen over the highways and, therefore, would qualify for an SE plate.)
- A water well-drilling vehicle that is **not** oversized or overweight would **not** qualify for an SE plate. (An oversized or overweight well-drilling vehicle would require a permit issued by the DOT to move it unladen over the highways and, therefore, would qualify for an SE plate.)
- Self-propelled special mobile equipment.
- Auxiliary dollies.
- Special construction equipment used less than 51 percent of the time for highway construction work or railroad right-of-way.
- Farm trailer with a GVW over 10,000 pounds.
- Farm vehicle **not** being used solely to transport agricultural products and is operated on the highways for a distance greater than one mile.
- Photograph submitted shows that the vehicle is designed to carry property and is **not** designated in the *Vehicle Code* as an implement of husbandry or special mobile equipment.

NOTE: For registration fees, see the brochure, *Registration Related Fees* (FFVR 34). Because fees are subject to change, visit our website at ***www.dmv.ca.gov*** for the most current information or call DMV toll free at 1-800-777-0133.

Try These Service Options

Key *www.dmv.ca.gov* for service 24/7:

- Renew your vehicle registration (see your renewal notice for the RIN-Renewal ID Number)
- Renew your driver license (see your renewal notice for the RIN)
- Take a sample driver license test
- Order special plates
- Get forms, brochures, and handbooks
- Find answers to your questions
- Make appointments (except commercial driving test)
- Calculate registration fees

Call 1-800-921-1117 for DMV's Automated Voice Recognition service 24/7:

- Make appointments (except driving test*)
- Pay registration renewals (see your renewal notice for the RIN-Renewal ID Number)

Call 1-800-777-0133 for service 24/7:

- Get forms and publications
- Listen to general information
- Make appointments (except driving test*)

To make a driving test appointment or speak with a technician, call 1-800-777-0133 during normal business hours

- Between 8-5, Mon., Tues., Thurs., & Fri.
- Between 9-5 on Wednesdays

SPECIAL EQUIPMENT

FAST FACTS

A Public Service Agency

Visit our website at www.dmv.ca.gov

FFVR 19 (REV. 10/2006)

Special Equipment (SE) Registration

What is Special Equipment?

Certain specialized vehicles, which are sometimes operated on the highway, fall under the definition of Special Equipment (SE) and are exempt from regular registration. This category includes special construction equipment, cemetery equipment, special mobile equipment, logging equipment, implements of husbandry, and cotton or farm trailers. (See *California Vehicle Code* §§5011, 5015, 5016.)

When SE registration is issued

SE registration is issued to qualified vehicles as outlined in this brochure. The owner of a qualifying vehicle is issued an SE plate and an identification card. A title is not issued to vehicles with SE registration; however, the owner may apply for a Certificate of Title as a separate transaction. You may obtain the Application for Title or Registration form (REG 343) at ***www.dmv.ca.gov*** or by calling 1-800-777-0133.

When SE registration is required

A special equipment identification plate is:

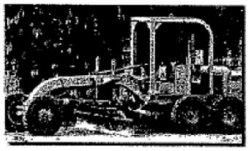
- **Required** for special construction equipment, special mobile equipment, cemetery equipment, and logging vehicles (VC §5011);
- **Required** for cotton trailers, farm trailers, water tanks, oversize feed and seed motor vehicles, automatic bale wagons, and cotton module movers (VC §36101);
- **Optional** for implements of husbandry and farm tractors (VC §36115).

Special Equipment definitions

Special Construction Equipment (VC §565)

A special construction vehicle is one that is used more than 51 percent of the time for highway construction, occasionally moves over the highways, and is oversize or overweight. This vehicle also requires special permits issued by the Department of Transportation—or local authorities—because of its size.

Special construction equipment includes any legal size (not requiring a special permit) vehicle used primarily for highway grading, paving, earth moving, or other highway or railroad right-of-way work. These vehicles are not designed for transporting persons or property and are only occasionally operated or moved over a highway.



EARTH MOVING EQUIPMENT

Special Construction Exclusions

Special construction equipment does **not** include truck-mounted transit mixers, cranes, shovels, and dump trucks that are not oversize or overweight, or any commercial vehicle **not** specified in VC §565 to which machinery has been attached (VC §570).

Special Mobile Equipment (VC §575)

Special mobile equipment is **not** self-propelled, **not** designed or used primarily for transporting persons or property, and only incidentally operated or moved over the highways. Some examples of special mobile equipment are generators, log splitters, tar pots, chippers, cement mixers, and welders.

CEMENT MIXER

Logging Vehicle (VC §379)

LOG LOADER

A logging vehicle is one used exclusively in logging operations and is not designed for transporting persons or property on a highway.

Cemetery Equipment (VC §4012)

Cemetery equipment is a vehicle, implement, or equipment specifically designed or altered for maintenance or operation of cemetery grounds and only incidentally operated or moved on a highway.

Implements of Husbandry (VC §§36000, 36015)

A vehicle used exclusively in the conduct of agricultural operations is an implement of husbandry.

Implements of husbandry include any farm tractor that is used to draw a farm trailer carrying farm produce on a highway, or to draw a trailer or semitrailer carrying other implements of husbandry between farms, or from a farm to a processing or handling point and returning with or without the trailer.

NOTE: An implement of husbandry does **not** include a vehicle designed primarily for transporting persons or property on the highways unless specified in the *Vehicle Code*.

Farm Trailer (VC §§36109, 36010)

A "farm trailer" is either a trailer or semitrailer that is **never** more than 10,000 lbs. gross vehicle weight (GVW*) and is:

- Owned and operated by a farmer in agricultural operations, and used exclusively to transport agricultural products upon the highway to and from the point of first handling

  OR

- Owned, rented, or leased by a farmer in agricultural operations and
  - — equipped with rollers on the bed with a frame **not** more than 10 inches high;
  - — used exclusively to transport fruits and vegetables;
  - — manufactured and in use prior to January 1, 1997.

*GVW is the weight of the trailer and the load.

How to obtain an SE identification plate

To obtain an SE plate and identification card, the following is required:

- Application for Identification Plate (REG 88), which includes the vehicle make, identification number, body type, and certification of the vehicle use;

VC§ 21461. Obedience by Driver to Official Traffic Control Devices
(a) It is unlawful for a driver of a vehicle to fail to obey a sign or signal defined as regulatory in the federal Manual on Uniform Traffic Control Devices, or a Department of Transportation approved supplement to that manual of a regulatory nature erected or maintained to enhance traffic safety and operations or to indicate and carry out the provisions of this code or **a local traffic ordinance or resolution adopted pursuant to a local traffic ordinance, or to fail to obey a device erected or maintained by lawful authority of a public body or official.**
(b) Subdivision (a) does not apply to acts constituting violations under Chapter 9 (commencing with Section 22500) of this division or to acts constituting violations of a local traffic ordinance adopted pursuant to Chapter 9 (commencing with Section 22500).
(Amended by Stats. 2004, Ch. 203, Sec. 1. Effective January 1, 2005.)

(Amended by Stats. 1981, Ch. 775, Sec. 2.)

V-100-4.04 Obedience to Traffic Control Devices

The driver of any vehicle shall obey the instructions of any official traffic control device applicable thereto placed in accordance with this Chapter of this City unless otherwise directed by a police officer subject to the exceptions granted the driver of an authorized emergency vehicle when responding to emergency calls.

V-100-12.07 Vehicles Exceeding Maximum Gross Weight of 4 Tons Prohibited From Using Certain Streets

12.07-1 Whenever any ordinance of this City designates and describes any street or portions thereof as a street the use of which is prohibited by any vehicle exceeding a maximum gross weight limit of 4 tons, the Chief Police Officer shall erect and maintain appropriate signs as necessary to adequately provide notice of the prohibition.

12.07-2 Those streets and parts of streets designated in Subsection V-100-15.12 hereof are hereby declared to be streets the use of which is prohibited by any vehicles exceeding a maximum gross weight limit of 4 tons.

12.07-3 The provisions of this Section shall not apply to any commercial vehicle having ingress and egress by direct route to and from said restricted streets when necessary for the purpose of making pickups or deliveries of goods, wares and merchandise from or to any building or structure located on such restricted streets or for the purpose of delivering materials to be used in the actual and bona fide repair, alteration, remodeling or construction of any building or structure upon such restricted streets for which a building permit has previously been obtained therefor.

12.07-4 The provisions of this Section shall not apply to (i) passenger buses under the jurisdiction of the Public Utility Commission or to (ii) any vehicle owned by a public utility while necessarily in use in the construction, installation or repair of any public utility or (iii) any vehicle owned or operated by a City Department while necessarily in use for construction or repair work or any vehicle owned by the United States while in use for the collection, transportation or delivery of United States mail.

12.07-5 The provisions of this Section shall not apply to the bridge at Old Alviso-Milpitas Road over Coyote Creek just north of Highway 237 which lies partly in the County of Santa Clara and partly within the City of Milpitas, which shall have a maximum limit of 10 tons.

"The provisions of this Section shall not apply to non-commercial recreational vehicles or trailers, including boat and utility trailers, having ingress and egress by direct route to and from said restricted streets when necessary for the purpose of parking, loading, or unloading said recreational vehicle or trailer on said restricted street."

(Ord. 43.195(2), 12/7/99; Ord. 43.159 (B), 6/5/90: Ord. 43.64 (part), 12/2/69: Ord. 43 (part), 6/7/55)

VC§ 565. Special Construction Equipment

"Special construction equipment" is:

(a) Any vehicle used primarily off the highways for construction purposes and which moves only occasionally over the highways and which because of the length, height, width, or unladen weight may not move over the public highways unladen without the permit specified in Section 35780.

(b) Any vehicle which is designed and used primarily either for grading of highways, paving of highways, earth moving, and other construction work on highways, or for construction or maintenance work on railroad rights-of-way, and which is not designed or used primarily for the transportation of persons or property and which is only incidentally operated or moved over the highway. It includes, but is not limited to, road and railroad construction and maintenance machinery so designed and used such as portable air compressors, air drills, asphalt spreaders, bituminous mixers, bucket loaders, tracktype tractors, crawler tractors, ditchers, leveling graders, finishing machines, motor graders, paving mixers, road rollers, scarifiers, earth moving scrapers and carryalls, lighting plants, welders, pumps, water wagons, power shovels and draglines, speed swings, skip loaders, weed mowers, self-propelled and tractor-drawn earth moving equipment and machinery, including dump trucks and tractor-dump trailer combinations which either (1) are in excess of 96 inches in width or (2) which, because of their length, height or unladen weight, may not be moved on a public highway without the permit specified in Section 35780 of this code and which are not operated laden except within the boundaries of the job construction site, and other similar types of construction equipment.

(Amended by Stats. 1969, Ch. 90.)

VC§ 591. Street or Highway

A "street" or "highway" shall not include those portions of a way or place in or upon which construction, alteration, or repair work is being performed insofar as the equipment performing such work and its operation are concerned. Where the work consists of a street or highway project, the limits of the project as shown or described in the plans or specifications of the awarding body shall be so excluded with reference to the equipment actually engaged in performing the work. The authority having jurisdiction over such way or place may include any or all of the requirements set forth in Divisions 11, 12, 13, 14 and 15 in any permit issued for work on such way or place and the awarding body on any such street or highway project may include such requirements in the specifications for such project. It is the intention of the Legislature, in enacting this section, that this section shall not be construed to relieve any person from the duty of exercising due care.

(Added by Stats. 1959, Ch. 659.)

VC§ 24615. Slow-Moving Vehicle Emblem

It is unlawful to operate upon a public highway any vehicle or combination of vehicles, which is designed to be and is operated at a speed of 25 miles per hour or less, unless the rearmost vehicle displays a "slow-moving vehicle emblem," except upon vehicles used by a utility, whether publicly or privately owned, for the construction, maintenance, or repair of its own facilities or upon vehicles used by highway authorities or bridge or highway districts in highway maintenance, inspection, survey, or construction work, while such vehicle is engaged in work at the jobsite upon a highway. Any other vehicle or combination of vehicles, when operated at a

speed of 25 miles per hour or less, may display such emblem. The emblem shall be mounted on the rear of the vehicle, base down, and at a height of not less than three nor more than five feet from ground to base. Such emblem shall consist of a truncated equilateral triangle having a minimum height of 14 inches with a red reflective border not less than 1 3/4 inches in width and a fluorescent orange center.

This emblem shall not be displayed except as permitted or required by this section.

(Amended by Stats. 1971, Ch. 287.)

City of Milpitas
455 E. Calaveras Blvd.
Milpitas, California 95035

Date
Contractor
Address
Subject: Project #, name
NOTICE OF INTENT TO AWARD

Dear Mr. _____:

The Milpitas City Council, at its meeting of _____, is scheduled to award the subject project to your company. Enclosed are the following documents, which require the signature of representatives of your company:

1	Contract	2 copies
2.	Faithful Performance Bond	2 copies
3.	Payment Bond	2 copies
4.	Data Sheet: Regarding Bonding Co.	1 copy
5.	Certificate of Insurance	1 copy
6.	Data Sheet: Regarding Insurance Co.	1 copy
7.	Certificate of Worker's Compensation Insurance	1 copy
8.	Contractor's Certificate Relating To Worker's Compensation Insurance	1 copy
9.	Data Sheet: Regarding Worker's Compensation Insurance Co.	1 copy
10.	City Business License	1 copy
11.	Taxpayer Identification Number and Certification	1 copy
12.	Apprenticeship Standards	1 copy
13.	Urban Runoff Prevention, BMP, SWPPP Acknowledgement	1 copy

Please refer to the project specifications regarding the time limit for execution of the contract with the City. Your attention is also directed to Specification Special Conditions and elsewhere within the Contract Documents regarding the start of the first chargeable day, and other items to be completed by the contractor prior to receiving a notice-to-proceed.

Please return the signed construction contract, bonding and insurance documents to my attention by _____ (to facilitate a timely completion). In addition, please submit a construction schedule, SWPPP, traffic control plan including staging and haul route, concrete mix design, R-bar, notices, site video, Contractor Safety Plan, Contractor's Caltrans permit, and other (refer to the Special Conditions for additional items) for review by _____. Please contact me at (408) 586-____ to schedule a pre-construction conference. Your attention is directed to Specification Special Conditions which requires the attendance of the Contractor's Representative and Job Superintendent at the pre-construction conference. Please be advised that no work may proceed until the contract documents have been fully executed and your copy of the notice to proceed is issued to you.

Sincerely,

_____
Project Engineer

Enclosure

City of Milpitas
455 E. Calaveras Blvd.
Milpitas, California 95035

Date

Contractor

Subject: Project #, name
Notice of Award

Dear _____ ____:

The Milpitas City Council, at its meeting of _____, has awarded the subject project to your company. The contract document forms (including the bonds, insurances, business license, and other related documents) had been previously sent to you via the notice of intent to award. Please refer to the project specifications regarding the time limit for execution of the contract with the City. Your attention is also directed to Specification Special Conditions and elsewhere within the Contract Documents regarding the start of the first chargeable day, and other items to be completed by the contractor prior to receiving a notice-to-proceed.

Please return the signed construction contract, bonding and insurance documents to my attention by _____ (to facilitate a timely completion). In addition, please submit a construction schedule, SWPPP, traffic control plan including staging and haul route, concrete mix design, R-bar, notices, site video, Contractor Safety Plan, Contractor's Caltrans permit, and other (refer to the Special Conditions for additional items) for review by _____. Please contact me at (408) 586-3___ to schedule a pre-construction conference. Your attention is directed to the Special Conditions, which requires the attendance of the Contractor's Representative and Job Superintendent at the pre-construction conference. Please be advised that no work may proceed until the contract documents have been fully executed and your copy of the notice to proceed is issued to you.

Sincerely,

_____
Project Engineer

NOTICE TO PROCEED

Date: _____

TO: _____
ADDRESS: _____
PROJECT: _____

You are notified that the Contract Time under the above contract will commence to run on _____. By that date, you are to start performing your obligations under the Contract Documents. In accordance with Section D, the date of final completion is _____.

Before you may start any Work at the site, you must: (conditions if applicable)

_____

_____

CITY OF MILPITAS,
A Municipal Corporation

By :_____

Title:_____

SUBMITTAL COVER SHEET

SUBMITTAL NO. :_____ DATE SUBMITTED:

PROJECT:_____ PROJECT #: _____

FROM: GENERAL CONTRACTOR

_____

_____

_____

Phone #:_____

TO: CITY OF MILPITAS
ENGINEERING DIVISION
455 E. CALAVERAS BLVD.
MILPITAS, CA 95035
Attn._____

Item Required	Specification Section/Plan Sheet	Submittal Description	Check If Substitution or Exception	Comment / Date
1			☐	
2			☐	
3			☐	
4			☐	

I certify that this submittal is in conformance with the requirements of the Contract Documents and is not in conflict with other submittals. Any proposed submittal substitution or exception is fully indicated within the submittal, and the proposed substitution or exception is in compliance with the Contract Documents.

_____
General Contractors Signature

DESIGN CONSULTANT RESPONSE: Date Received:

_____

_____

_____

_____

Reviewer:_____ Date Transmitted to City: _____

CITY RESPONSE: Date Received:_____

☐ NO EXCEPTIONS NOTED – The City does not find any exceptions to the submittal, relying solely upon information provided in the submittal including the contractor's certification, and subject to its compatibility with future submittals and additional partial submittals for portions of the work not covered in this submittal. Does not constitute acceptance or deletion of specified or required items not shown in a partial submittal.

☐ MAKE CORRECTIONS NOTED – The same as above, except that minor corrections as noted by the Engineer shall be made by the Contractor. No resubmittal is required.

☐ REVISE AND RESUBMIT – Rejected due to noncompliance with the requirements of the project plans and Specifications because of major inconsistencies or errors which shall be resolved or corrected by the Contractor prior to subsequent review by the Engineer.

☐ SUBMIT SPECIFIED ITEM – Submittal is rejected because the submitted material does not conform to the requirements of the project plans and specifications in major respects. This material is not to be resubmitted, and it is expected that the material specified in the project plans and specifications be submitted.

City Reviewer:_____ Date:_____

REQUEST FOR INFORMATION

RFI #: _____ DATE CREATED: _____

PROJECT:_____ PROJECT #: _____

FROM: GENERAL CONTRACTOR

_____
_____
_____

Phone #:_____

TO: CITY OF MILPITAS
ENGINEERING DIVISION
455 E. CALAVERAS BLVD.
MILPITAS, CA 95035

ATTN.: _____

Subject:_____

INFORMATION REQUESTED: **Date Required:** _____

Specification/Plan Sheet Reference: _____

_____

_____

_____

I certify that this is not a frivolous Request For Information and that I have completely reviewed all project Contract Documents and to the best of my professional judgment have determined that the information requested is not obvious or found.

_____
General Contractor Signature

DESIGN CONSULTANT RESPONSE: **Date RFI Received:** _____

_____

_____

_____

_____

Response by_____ Date Answered_____

CITY RESPONSE: **Date RFI Received:**_____

_____

_____

_____

Response by_____ Date Answered:_____

_____

NOTICE OF NON-COMPLIANCE

Date & Time Issued:_____

To: _____

_____

_____

Project:_____ Project Number: _____

In accordance with General Conditions of the Project Specifications, you are hereby notified that the following work is defective and does not comply with the requirements of the Project Contract Documents: _____

_____

_____

_____

_____

_____

_____

Work found to be defective or not in compliance with the Contract Documents shall not be paid for by the City, and it shall be the Contractor's responsibility to remove and replace the defective Work at no additional cost to the City. The Contractor shall determine what corrective action is necessary to bring the Work into compliance, and shall notify the Engineer prior to starting corrective action.

City Project Manager:_____

City Inspector: _____

Notice of Non-Compliance was received by: _____/_____/_____

FIELD MEMORANDUM

Date: _____ Page 1 of ___

To: _____

From: _____

Project: _____

Subject: _____

_____

_____

_____

_____

_____

_____

_____

Disclaimer:
All work shall be done in accordance with the Contract Documents. The written direction above provides clarification only. The Contractor acknowledges that any additional cost shall be authorized in advance in a fully executed Contract Change Order.

_____
Signature

CC: _____
_____
_____

Project Punchlist

Project:_____
Contractor:_____
Punchlist Acknowledged:_____

Project Eng.:_____ Inspector:_____Date:_____

Item	Date Item Entered	Description	Item Completed	
			Date	Initial
Part A	**Standing Items**			
1		The contractor shall submit a full set of As-built /Record Drawings showing the work performed and pothole information. Include contractor's signature, contractor's name, state license # and phone # of general contractor name and subcontractors-paving, striping, loops on the title sheet.		
2		Submit written warranties in accordance with the Specifications: Warranty bonds from surety and contractor's letterhead for warranty per appendix sample-page 151. **If not applicable check here.** ☐		
3		Operation/Maintenance Manuals have been received in full numbers specified. **If not applicable check here.** ☐		
4		Deliverables (i.e. special tools or spare parts) have been received as specified. **If not applicable check here.** ☐		
5		Training has been performed as specified. **If not applicable check here.** ☐		
6		Verify that all Building Permits have been signed off. **If not applicable check here.** ☐		
7		Verify Certificate of Monumentation has been received. **If not applicable check here.** ☐		
8		Ordinance 238 (Landscape/Sprinkler has been completed). **If not applicable check here.** ☐		
9		Verify that Planning Department Conditions have been met. **If not applicable check here.** ☐		
10		Compliance with Special Conditions **If not applicable check here.** ☐		
11		Compliance with Reclaimed Water Requirements **If not applicable check here.** ☐		
12		Submit lien releases from all subcontractors and suppliers.		
13		Submit complete certified payroll.		
Part B	**Project Specific Items**			
14		Construction Water Meter(s) returned.		

ESCROW AGREEMENT

SECURITY DEPOSITS IN LIEU OF RETENTION

This Escrow Agreement is made and entered into effective (date) _____by and between City of Milpitas whose address is 455 E Calaveras Blvd. Milpitas, CA 95035-5479 hereinafter called "Owner," whose address is hereinafter called "Contractor" and whose address is hereinafter called "Escrow Agent." For the consideration hereinafter set forth, the Owner, Contractor, and Escrow Agent agree as follows:

(1) Pursuant to Section 22300 of the Public Contract Code of the State of California, Contractor has the option to deposit securities with Escrow Agent as a substitute for retention earnings required to be withheld by Owner pursuant to the Construction Contract entered into between the Owner and Contractor for _____ in the amount of _____ dated _____ (hereinafter referred to as the "Contract"). Alternatively, on written request of the Contractor, the Owner shall make payments of the retention earnings directly to the Escrow Agent. When the Contractor deposits the securities as a substitute for Contract earnings, the Escrow Agent shall notify the Owner within 10 days of the deposit. The market value of the securities at the time of the substitution shall be at least equal to the cash amount then required to be withheld as retention under the terms of the Contract between the Owner and Contractor. Securities shall be held in the name of Owner and shall designate the Contractor as the beneficial owner.

(2) The Owner shall make progress payments to the Contractor for those funds which otherwise would be withheld from progress payments pursuant to the Contract provisions, provided that the Escrow Agent holds securities in the form and amount specified above.

(3) When the Owner makes payment of retentions earned directly to the Escrow Agent, the Escrow Agent shall hold them for the benefit of the Contractor until the time that the escrow created under this contract is terminated. The Contractor may direct the investment of the payments into securities. All terms and conditions of this agreement and the rights and responsibilities of the parties shall be equally applicable and binding when the Owner pays the Escrow Agent directly.

(4) Contractor shall be responsible for paying all fees for the expenses incurred by Escrow Agent in administering the Escrow Account and all expenses of the Owner. These expenses and payment terms shall be determined by the Owner, Contractor, and Escrow Agent.

(5) The interest earned on the securities or the money market accounts held in escrow and all interest earned on that interest shall be for the sole account of Contractor and shall be subject to withdrawal by Contractor at any time and from time to time without notice to the Owner.

(6) Contractor shall have the right to withdraw all or any part of the principal in the Escrow Account only by written notice to Escrow Agent accompanied by written authorization from the Owner to the Escrow Agent that Owner consents to the withdrawal of the amount sought to be withdrawn by Contractor.

(7) The Owner shall have a right to draw upon the securities in the event of default by the Contractor. Upon seven days written notice to the Escrow Agent from the owner of the default,

the Escrow Agent shall immediately convert the securities to cash and shall distribute the cash as instructed by the Owner.

(8) Upon receipt of written notification from the Owner certifying that the Contract is final and complete, and that the Contractor has complied with all requirements and procedures applicable to the Contract, Escrow Agent shall release to Contractor all securities and interest on deposit less escrow fees and charges of the Escrow Account. The escrow shall be closed immediately upon disbursement of all moneys and securities on deposit and payments of fees and charges.

(9) Escrow Agent shall rely on the written notifications from the Owner and the Contractor pursuant in Sections (5) to (8), inclusive, of this Agreement and the Owner and Contractor shall hold Escrow Agent harmless from Escrow Agent's release and disbursement of the securities and interest as set forth above.

(10) The names of the persons who are authorized to give written notice or to receive written notice on behalf of the Owner and on behalf of the Contractor in connection with the foregoing, and exemplars of their respective signatures are as follows:

On behalf of Owner:

City Manager
Title

Name

Signature

Address

On behalf of Contractor:

Title

Name

Signature

Address

On behalf of Escrow Agent:

Title

Name

Signature

Address

At the time the Escrow Account is opened, the Owner and Contractor shall deliver to the Escrow Agent a fully executed counterpart of this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement by their proper officers on the date first set forth above.

Owner	Contractor
_____	_____
Title	Title
_____	_____
Name	Name
_____	_____
Signature	Signature

COST PROPOSAL FORM (See General Conditions, Contract Change Orders)

Date: _____ Project Number _____

In Response To _____ (RFP #, etc.)

To: City of Milpitas
455 East Calaveras Boulevard
Milpitas, CA 95035

Brief description of change(s): _____

ITEM DESCRIPTION	PRIME CONTR.	SUB 1	SUB 2	SUB 3	TOTAL
Material					
Direct Labor Cost					
Equipment					
Other (Specify) Extended Overhead					
Total Cost					
Subcontractor's Overhead and Profit (15% max)					
Contractor's Overhead and Profit on Labor & Materials (15% max)					
Contractor's Overhead and Profit on Equipment (10% max)					
Mark-Up for Subcontractor's work (5% max)					
Bonds					
(% of total cost above not including any O/P)					
GRAND TOTAL					
REQUESTED CHANGE IN CONTRACT TIME (DAYS)					

By: _____ (Firm Name)

Signature: _____ Date: _____

Title: _____

City of Milpitas
455 E. Calveras Boulevard
Milpitas, California 93035

CHANGE ORDER FORM

CONTRACT CHANGE ORDER NO. __

Date: [INSERT]

To: [CONTRACTOR NAME]

[ADDRESS]

[ADDRESS]

Attn: [CONTRACTOR REP]

Project: [INSERT]

This Change Order covers changes to the contract as described herein. The Contractor shall construct, furnish equipment and materials, and perform all work as necessary or required to complete the Change Order items for the amount agreed upon between the Contractor and City of Milpitas and set forth herein.

Item No.	Description of Changes	Increase/ (Decrease) in Contract Amount	Contract Time Extension, Days
1			
2			
	Totals	**$**	

Original Contract Amount:	$XX.00
Change by Previous Change Order(s):	$XX.00
Contract Price Prior to this Change Order:	$XX.00
Current Change Order Amount:	$XX.00
Revised Contract Amount including this Change Order:	$XX.00

The Contract Price and Contract Time shall be adjusted as set forth above. The undersigned Contractor approves the foregoing Change Order as to the changes, if any, in the contract price specified for each item including any and all supervision costs and other miscellaneous costs relating to the change in work, and as to the extension of time allowed, if any, for completion of the entire work on account of said Change Order. The Contractor agrees to furnish all labor and materials and perform all other necessary work, inclusive of the directly or indirectly related to the approved time extension, required to complete the Change order items. This document will become a supplement of the contract and all provisions will apply hereto. It is understood that the Change Order shall be effective when approved by the City.

Contractor accepts the terms and conditions stated above as full and final settlement of any and all claims arising out of or related to the subject of this Change Order and acknowledges that the compensation (time and cost) set forth herein comprises the total compensation due for the work or change defined in the Change Order, including all impact on any unchanged work. By signing this Change Order, the Contractor acknowledges and agrees that the stipulated compensation includes payment for all Work contained in the Change Order, plus all payment for any acceleration or interruption of schedules, extended overhead costs, delay, and all impact or cumulative impact on all Work under this Contract. The signing of this Change Order acknowledges full mutual accord and satisfaction for the change and that the stated time and/or cost constitute the total equitable adjustment owed the Contractor as a result of the change. The Contractor hereby releases and agrees to waive all rights, without exception or reservation of any kind whatsoever, to file any further claim or request for equitable adjustment of any type, for any reasonably foreseeable cause that shall arise out of, or as a result of, this Change Order and/or its impact on the remainder of the Work under the Contract.

Accepted:

(Signature) Contractor's Authorized Representative	Date

Recommended:

(Signature) [**INSERT NAME, TITLE**]	Date

Approved:

(Signature) [**INSERT NAME, TITLE**]	Date

This Contract Change Order consists of **2 pages** and any exhibits attached to this Contract Change Order shall not be part of the Contract Change Order unless specifically initialed by or on behalf of both the Contractor and the City of Milpitas.

Contract Change Order #

WEEKLY STATEMENT OF DAYS CHARGED TO CONTRACT

City of Milpitas
Engineering Division

Date:_____

Project:_____Project No. _____

Weekly Statement No. :_____

Notice of Project Award Issued:_____, Notice To Proceed Issued: _____

The following statement shows the number of _____ days charged to the contract
(Calendar or Working)

for the week ending: _____.

1. First chargeable day of the Contract: _____

2. Number of Days in the Contract: _____

3. Contractual completion date: _____
(= #1 + #2)

4. Days added by Contract Change Order: _____

5. Days not charged to Contract (note reason below): _____

6. Revised completion date based on #4 and/or #5: _____
(= #3 + #4 + #5)

Total number of Days charged to the Contract as of this Statement:_____

Total number of Days remaining as of this Statement: _____

Notes:
_____
_____
_____
_____

_____ _____
City Project Manager City Inspector

Refer to Special Conditions of the Contract Documents. The Contractor has fifteen (15) days to submit written protest of this Statement to the Engineer; otherwise, this Statement shall be deemed to have been accepted by the Contractor.

Accepted By: _____
Contractors Signature

SAMPLE PROGRESS PAYMENT FORM

CITY OF MILPITAS | PROJECT NAME, NUMBER | PROGRESS PAYMENT Page 1 of 1

Date:

#	Description	Bid Quantity	Units	Unit Price	Bid Amount	Previous Quantity	Previous Amount	Remaining Quantity	Remaining Amount	Current Quantity	Current Amount	Diff.	Payable Amount	Note
Bid Items														
1		0		$ -	$ -		$ -	0%	$ -	0%	$ -	0%	$ -	
2		0		$ -	$ -		$ -	-	$ -	-	$ -	-	$ -	
3		0		$ -	$ -		$ -	-	$ -	-	$ -	-	$ -	
4		0		$ -	$ -		$ -	-	$ -	-	$ -	-	$ -	
5								-	$ -		$ -			
6								-	$ -		$ -			
7								-	$ -		$ -			
8								-	$ -		$ -			
9								-	$ -		$ -			
10								-	$ -		$ -			
	Subtotals				$ -		$ -		$ -		$ -		$ -	
Contract Change Order Items														
	CCO #1	0		$ -			$ -	0%	$ -	0%	$ -	0%	$ -	
	CCO #2	0		$ -			$ -	-	$ -	-	$ -	-	$ -	
	CCO #3	0		$ -			$ -	-	$ -	0	$ -	-	$ -	
	CCO #4													
	Subtotals						$ -				$ -		$ -	
	TOTALS						$ -				$ -		$ -	
	Retention	10%					$ -				$ -		$ -	
	TOTALS						$ -				$ -		$ -	
												Check	$ -	
												PAYMENT TOTAL		

Recommended by _____ Inspector

Approved by _____ Project Manager

Approved for Payment _____ CIP Manager or City Engineer

Contract Time as Bid	Working or Calendar Days
CCO Time #2	Working or Calendar Days
Total Contract Time	0 Working or Calendar Days
Contract End Date	Date Estimated or Actual

Refer to the Special Conditions regarding requirements for requesting Progress Payments.

Contractor's Letter Head

GUARANTY / WARRANTY

TO: CITY OF MILPITAS, for the (project name), Project (#), in Milpitas, CA.

The undersigned guarantees all construction performed on this project and also guarantees all material and equipment incorporated therein Contractor hereby grants to Owner for a period of one (1) year following the date of acceptance of the Work by the City of Milpitas or such longer period specified in the Contract Documents, its unconditional warranty of the quality and adequacy of all of the Work including, without limitation, all labor, materials and equipment provided by Contractor and its Subcontractors of all tiers in connection with the Work.

Neither final payment nor use or occupancy of the Work performed by the Contractor shall constitute an acceptance of work not done in accordance with this Guaranty or relieve Contractor of liability with respect to any express warranties or responsibilities for faulty materials or workmanship. Contractor shall remedy any defects in the Work and pay for any damage resulting there from which shall appear within one (1) year, or longer if specified, from the date of acceptance as described above.

Should any of the materials or equipment prove defective or should the Work as a whole prove defective, due to faulty workmanship, material furnished or methods or installation, or should the Work or any part thereof fail to operate properly as originally intended and in accordance with the Contract Documents due to any of the above causes within one (1) year after date of acceptance, or such longer period specified in the Contract Documents, Contractor shall: (1) reimburse Owner, upon demand, for its expenses incurred in restoring said Work to the condition contemplated in the Contract Documents, including the cost of any such equipment or materials replaced and the cost of removing and replacing any other work necessary to make such replacement or repairs, or (2) upon demand by Owner, replace any such material and to immediately repair said Work completely without cost to Owner so that said Work will function successfully as originally contemplated.

Inspection of the work shall not relieve Contractor of any of its obligations under the Contract Documents. Even though equipment, materials, or work required to be provided under the Contract Documents have been inspected, accepted, and estimated for payment, Contractor shall, at its own expense, replace or repair any such equipment, material, or work found to be defective or otherwise not to comply with the requirements of the Contract Documents up to the end of the guaranty period.

Owner shall have the unqualified option to make any needed replacement or repairs itself or to have such replacements or repairs done by Contractor. In the event Owner elects to have said work performed by Contractor, Contractor shall make such repairs within a reasonable period of time after the receipt of demand from Owner; provided, however, that in no event shall such period exceed twenty-five (25) days.

All definition of terms used in this Agreement shall have the meanings set forth in the Project Specifications, Special Conditions, Definitions of Words and Terms.

The foregoing Guaranty is in addition to any other warranties by Contractor contained in the Contract Documents, and not in lieu of, any and all other liability imposed on Contractor under the Contract Documents and by law with respect to Contractor's duties, obligations, and

performance under the Contract Documents. In the event of any conflict or inconsistency between the terms of this Guaranty and any warranty or obligation of the Contractor under the Contract Documents or by law, such inconsistency or conflict shall be resolved in favor of the higher level of obligation of the Contractor.

CONTRACTOR:

_____ Corporate Seal:
Name of Firm

_____
Signature Date

_____
Title

_____
Signature Date

_____
Title

CONSTRUCTION CHANGE DIRECTIVE NO: ___

City of Milpitas
Engineering Division

Project Name Project No: _____ PAGE 1 of

TO:_____

FROM:_____ DATE: _____

SUBJECT/ITEM:
_____

DESCRIPTION:

References:

Attachments:

CONSTRUCTION CHANGE DIRECTIVE INSTRUCTIONS:

☐ The Contractor is directed to proceed with the above-described work without change in contract price.

☐ The Contractor is directed to proceed with the above-described work and submit within the next 14 calendar days an itemized lump sum price and requested time extension, if any, to facilitate the review and settlement of this CCD in accordance with the Contract Documents. The cost of the work covered by this directive shall not exceed $. In the event that the cost of this work is anticipated to exceed the amount above, the Contractor will notify the City/Agency in writing and obtain additional authorization before proceeding.

☐ The Contractor is directed to proceed with the above-described work on a time and material basis with a Not-To-Exceed Amount of $0. Itemized time and material documentation shall be provided on a daily basis in accordance with the Contract Documents.

☐ The Contractor shall be paid at bid item prices for the work performed.

☐ The Contractor is directed to provide pricing for the above-described work within the next 7 calendar days. The Contractor shall not proceed with the work until authorized by written Contract Change Order.

AUTHORIZED BY:		ACKNOWLEGEMENT OF RECEIPT:	
City of Milpitas			
OWNER		CONTRACTOR:	
BY:		BY:	
SIGNED	DATED	SIGNED	DATED

CONSTRUCTION RECYCLED WATER APPLICATION

TEMPORARY CONSTRUCTION METER FOR PURCHASE OF RECYCLED WATER*

Milpitas City Hall
455 East Calaveras Boulevard
Milpitas, CA 95035
(408) 586-3100
www.ci.milpitas.ca.gov

Temporary Permit No. _____

Date: _____, 20_____

PLEASE COMPLETE AND SIGN APPLICATION.

TYPE OF APPLICATION: ☐ *NEW* ☐ *RENEWAL* ☐ *RELOCATION*

BUSINESS NAME	METER #
BILLING ADDRESS:	READING WHEN TAKEN OUT
PHONE NUMBER:	CONDITION WHEN TAKEN OUT
PROJECT NAME	STATE LIC CONTRACTOR # CLASS EXP DATE
PROJECT NUMBER	CITY BUSINESS #
PROJECT LOCATION (Site Address)	BUILDING PERMIT #
	ENCROACHMENT PERMIT #
ASSIGNED INSPECTOR	INSPECTOR SIGNATURE

I understand that this application is for temporary recycled water (through a construction meter) for the sole purpose of construction work at the address/location stated above and intended for use with the City of Milpitas's fill-station sites. I further understand that the City has the right to remove the construction meter without prior notice if the meter is being used in an improper manner as determined by the City and will discontinue any water service to the properties until permanent water service is established. Time period for use of construction meter will expire upon the following (whichever occurs first): 1) 12 months, 2) Expiration of the permit, 3) Completion of the permitted work, or 4) Permanent water service is established. I also understand that the water supplied through the meter may be subject to frequent or indefinite interruptions at any time by the City. I also understand that I am responsible for this meter and its usage until I give proper written notification to the City that the meter is to be removed and the City has the meter back in its possession. I also understand that I will operate the meter in a responsible manner so as not to cause damage to the meter and/or the water system and agree to be held accountable for any and all damage caused from improper operation of the meter. A missing or stolen water meter will be assessed at the current replacement rate. Payment for the meter replacement must be made at Milpitas City Hall before re-installation. I also understand that by the City issuing this temporary meter, this action in no way obligates the City to provide me with permanent water service to the subject property. I agree to place a deposit of $2,000 for the loan of the meter. I agree to forfeit part or all of the deposit to pay for any damage to the meter during the term of this agreement, and to forfeit the deposit in full if the meter is not returned on or before the expiration date. I understand that the deposit, less the water use and meter charges, will be returned upon return of the meter in satisfactory and working condition. No interest shall be paid on the deposited amount. Should water charges exceed the deposit amount, I agree to pay the additional charges upon demand. **I agree to abide by all rules and regulations of the City of Milpitas Public Works Department and to pay a monthly meter charge of $_____ for each full or partial calendar month the meter is used, and to pay for all water used at the commercial rate in effect at the time ($_____ per hundred cubic foot and $ _____ per unit for capital surcharge). If a water rate increase is approved during the rental period, the new rates will be in effect. In the event that I fail to keep satisfactory records, I agree to pay the City on the basis of an estimate made by the Accounting Officer of the City of Milpitas. I understand that a copy of this permit must be kept on hand at all times by the person taking water and must be available to show as evidence to any authorized representative of the City of Milpitas that a permit has been obtained.**

Name _____ Signature _____ Date _____

OFFICE USE ONLY

Date meter is to be returned _____	Accepted by _____
Deposit $ _____ Receipt # _____	Reading when returned _____
Date meter is returned _____	_____
Condition when returned _____	(Permit Holder to Initial)

****ORIGINAL PERMIT MUST BE RETURNED WITH METER****

* Applicant must complete and submit South Bay Water Recycling Recycled Water Access Point User Agreement along with this application.

Distribution: Original – Finance Copies to: PW Utility Maintenance, Cashier, PW Inspector

Meter Log

Meter Serial Number: _____

Month	Reading	Reading Date
January		
February		
March		
April		
May		
June		
July		
August		
September		
October		
November		
December		

Please contact the Finance Department via email at ConstructionMeters@ci.milpitas.ca.gov for any questions and for submitting your monthly readings of the meter.

- **General Questions** – Please contact Utility Engineering at (408) 586-3350.
- **Inspection Appointment** – Please contact Public Works Inspector at (408) 586-3252.
- **Billing Questions** – Please contact the Finance Department at (408) 586-3100.

RECYCLED WATER ACCESS POINT PROGRAM USER AGREEMENT

PRODUCER: San Jose/Santa Clara Regional Wastewater Facility - 700 Los Esteros Road, San Jose CA 95134

REGULATORY AGENCY: South Bay Water Recycling - 3025 Tuers Road San Jose, CA 95121 - 408.277.3671

EFFECTIVE DATES OF PERMIT: _____ TO _____ License #: SJ-_____

USER INFO

TRAINEE NAME: _____ CSLB CONTRACTOR LICENSE #: _____

COMPANY NAME: _____ TRUCK/TRAILER LICENSE #: _____

COMPANY ADDRESS: _____ ATTACH YOUR ACORD INSURANCE FORM TO THIS AGREEMENT

COMPANY PHONE #: _____ PLEASE GIVE THIS AGREEMENT TO YOUR OFFICE MANAGER

A USER AGREEMENT MUST BE COMPLETED FOR EACH VEHICLE OPERATOR AND MUST BE RETAINED DURING ACQUISITION AND APPLICATION OF RECYCLED WATER. USERS AND USERS' COMPANIES SHALL ADHERE TO THE ATTACHED SBWR TERMS OF USE. USER AGREEMENT IS SUBJECT TO RWQCB ORDER 95-117.

RECYCLED WATER USE INFORMATION (CHECK ALL THAT APPLY)

METHOD OF WATER DISTRIBUTION: ☐ RECYCLED WATER ACCESS POINT ☐ TEMPORARY SITE METER OTHER:_____

APPLICATION METHOD: ☐ TANKER TRUCK SPRAY ☐ HOSE OTHER:_____

USE OF RECYCLED WATER*: ☐ CONSTRUCTION (COMPACTION/DUST CONTROL) ☐ STREET SWEEPING ☐ SEWER CLEAN OUT

OTHER*: _____

* REFER TO THE FULL TEXT OF THE LATEST VERSION OF TITLE-22: CALIFORNIA WATER RECYCLING CRITERIA, ARTICLE 3. USES OF RECYCLED WATER, JUNE 18, 2014.

SIGNS REQUIRED: ☐ TANKER TRUCK ☐ CONTAINER ☐ OVERHEAD TANK ☐ PROJECT SITE OTHER: _____

LOCATION WHERE RECYCLED WATER WILL BE APPLIED:

ADDRESS: _____ SITE SUPERINTENDENT: _____

CERTIFICATION

I HEREBY CERTIFY THAT THE INFORMATION PROVIDED IN THIS APPLICATION AND ALL ATTACHMENTS ARE TRUE, ACCURATE, AND COMPLETE TO THE BEST OF MY KNOWLEDGE. I ALSO CERTIFY THAT I HAVE READ AND AGREE TO ABIDE BY THE SBWR TERMS OF USE AND ALL APPLICABLE RULES AND REGULATIONS OF THE RWQCB ORDER NO. 95-117 AND HAVE SUCCESSFULLY COMPLETED INSPECTION BY THE LOCAL RETAILER.

_____

TRUCK CONTRACTOR/DRIVER/EMPLOYEE SIGNATURE | PRINTED NAME | TITLE | DATE

_____

** SUPERINTENDENT OR FOREMAN SIGNATURE | PRINTED NAME | TITLE | DATE

LYLE FROHMAN

_____

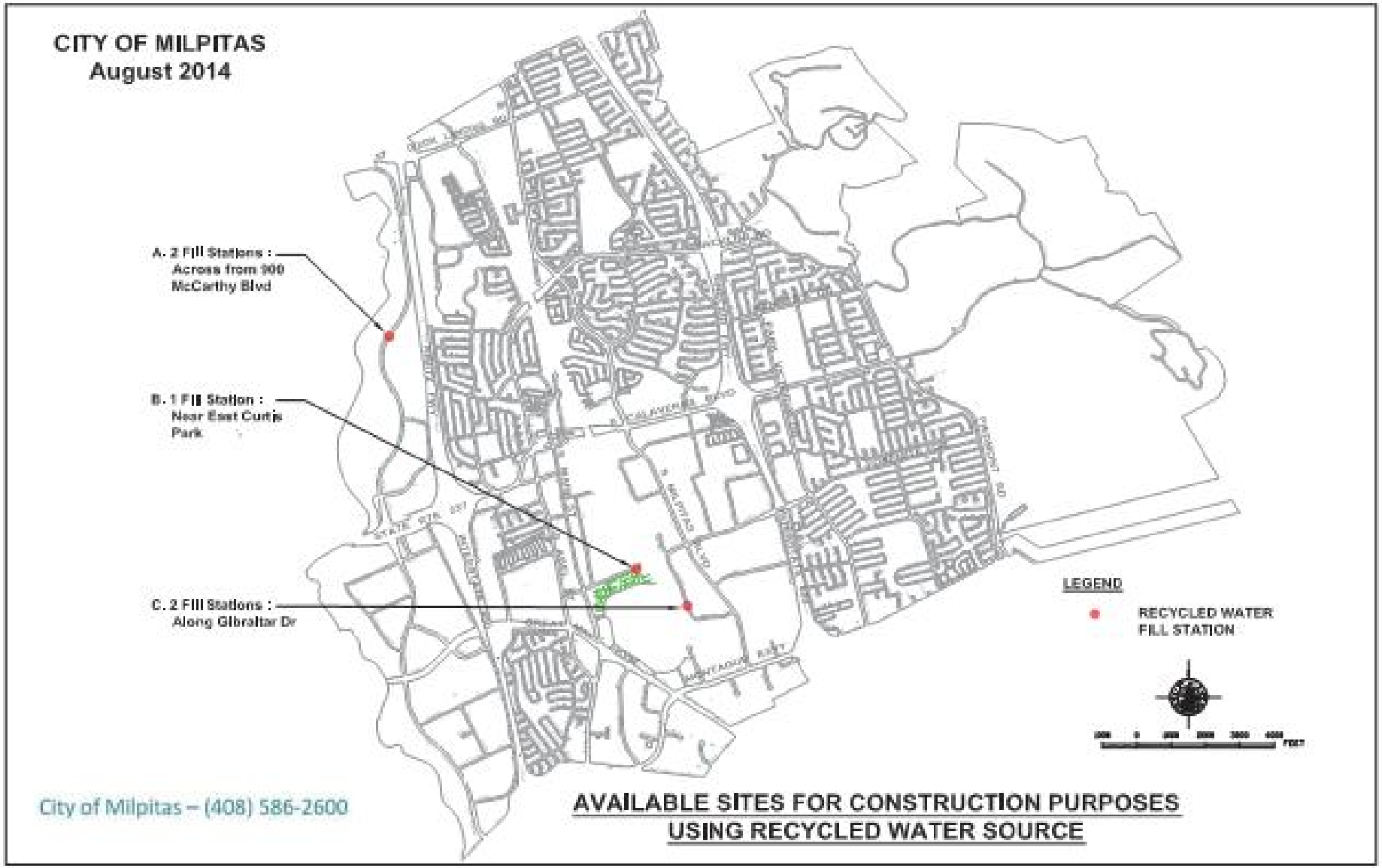
SBWR SIGNATURE | PRINTED NAME | DATE

RECYCLED WATER ACCESS POINT PROGRAM

TERMS OF USE

CHECK	THIS USER AGREEMENT LIMITS THE USE OF RECYCLED WATER TO THE FOLLOWING CONDITIONS:
☐	1. **RECYCLED WATER IS FOR NONPOTABLE USES ONLY - NO DRINKING!** Recycled water may not be exposed to food, used within designated eating areas or used within 50 feet of any domestic well, drinking fountain or potable water supply.
☐	2. There shall be **no cross-connection** between recycled water and any potable water supply. Recycled water may **not be plumbed into potable** irrigation or onsite plumbing systems. Recycled water meters are prohibited from connecting to potable hydrants. **Match purple to purple only**
☐	3. Recycled water may not be discharged into storm drains or outside the designated use area that was approved by the water retailer and/or SBWR. Overspray, pooling and runoff of recycled water is not permitted. **Cover this in your Safety meetings.**
☐	4. **Tanker trucks must maintain an air gap** of at least twice the diameter of the fill pipe (i.e. water overflows the tank before reaching the fill pipe). Tanker trucks must have **water-tight connections**, piping and hoses to ensure no leakage will occur during fill-up or use. They must be fully drained before transport and prior to every connection.
☐	5. Recycled water tanker trucks may not transport potable water for potable uses.
☐	6. All tanker trucks accessing and hauling recycled water must satisfy local and state safety requirements. Active auto/truck/trailer and general liability insurance (i.e. an ACORD form) is required.
☐	7. Recycled water meters may be inspected by the retailer for appropriate use at any time. The volume of recycled water used must be reported as specified by the recycled water retailer. 
	SPECIAL APPROVAL, TRAINING AND SITE INSPECTION REQUIRED
☐	8. If recycled water is transferred to other storage containers/reservoirs, they must be labeled with signage equivalent to tanker truck signage and must follow the safety guidelines in this User Agreement.
☐	9. Recycled water may be used for pressure washing and washing equipment and vehicles if the recycled water is not heated and where the general public is excluded from the washing process.
☐	10. Recycled Water may not be used for directional drilling without prior approval from SBWR.
	ADVISORY SIGNS
☐	**Tanker Truck Sign:** Tanker trucks hauling recycled water must have an SBWR approved adhesive sign issued by retailer at least six inches by twelve inches on the tank, in a location clearly visible to users and workers, with the following wording in one inch, or larger, letters on a purple background.
☐	**Tanker Truck Inspection Decal:** Tanker trucks hauling recycled water must have an SBWR approved adhesive decal issued by retailer at least three inches by six inches signifying that the tanker truck has passed inspection and met all SBWR requirements.
☐	**Appurtenance Sign:** Appurtenances serving recycled water must have an SBWR approved adhesive or bolted sign issued by the retailer at least six inches by eight inches, in a location clearly visible to users and workers, with the following wording in one inch, or larger, letters on a purple background.

PLEASE WASH YOUR HANDS AFTER USING RECYCLED WATER


CITY OF MILPITAS
August 2014
A. 2 Fill Stations : Across from 900 McCarthy Blvd
B. 1 Fill Station : Near East Curtis Park
C. 2 Fill Stations : Along Gibraltar Dr
LEGEND
RECYCLED WATER FILL STATION
City of Milpitas – (408) 586-2600
AVAILABLE SITES FOR CONSTRUCTION PURPOSES
USING RECYCLED WATER SOURCE

South Bay Water Recycling
Recycled Water Access Point Program
Fact Sheet

Expanding Recycled Water Use with Recycled Water Access Points (RWAP)

To conserve our valuable drinking (potable) water supplies, South Bay Water Recycling (SBWR) has made recycled water available for commercial non-potable uses at several truck fill locations in San José and Milpitas. State Approved uses include construction activities such as grading, compaction, concrete wetting, and dust control as well as landscape irrigation, pressure washing, and sewer flushing.

Recycled Water Quality

Recycled water is highly treated to meet rigorous and protective standards set by the State Water Resources Control Board – Division of Drinking Water, and SBWR currently supplies clean and safe tertiary-treated recycled water to over 750 customers in San Jose, Milpitas and Santa Clara.

Participation Requirements

Users must complete a short Training and sign a User Agreement to confirm the correct use of the fill stations and the proper handling of recycled water. In addition, trucks must be inspected and labeled to certify that they are correctly equipped to transfer recycled water.

After truck and driver certification, users will be issued a portable recycled water meter, with a unique nozzle that can only fit the RWAP hydrants. This minimizes the possibility of cross-connections between the potable and recycled water distribution systems.

Construction exemptions for required use of recycled water may be granted on a case by case basis, depending on the availability of recycled water near the project site. Please contact the City Planning Department for more information on the required use of recycled water for proposed projects.

Getting Started

In order to complete the certification process, and receive meters, site keys, and the most updated site maps, please contact the recycled water retail agencies listed below:

Milpitas – call (408) 586-2600
San Jose –call (408) 277-3671

RWAP Supervisor Trainings are scheduled every Wednesday morning from 9am-11am at the San Jose/Santa Clara Regional Wastewater Facility (700 Los Esteros Road in San José) or by appointment. Contact the City of Milpitas for trainings and inspections in their area.

Revision 0223015

South Bay Water Recycling
Recycled Water Access Point
FAQs

1. **What is a Recycled Water Access Point?**
   A Recycled Water Access Point (or RWAP) is a stand-pipe that allows a certified RWAP Supervisor access to recycled water to fill their tanker truck.
2. **How can I get locations and information about using recycled water from an RWAP?**
   Please contact your local water retailer or South Bay Water Recycling for availability in your area.
   City of Milpitas – (408) 586-2600
   City of San José – South Bay Water Recycling (408) 277-3671
3. **What are the uses for recycled water?**
   Recycled water is approved for nonpotable (non drinking) uses such as irrigation, dust control, and street sweeping
4. **Can I use recycled water to irrigate my landscape at home?**
   No. Recycled Water is approved only for commercial (non-residential) uses.
5. **Can I drink recycled water?**
   No. At this time, recycled water is not approved for drinking.
6. **Do I have to use recycled water?**
   The use of recycled water is required by many city ordinances if recycled water is available. Visit your local city's planning department for availability in your area.
7. **Where does recycled water come from?**
   Recycled water is produced from treated wastewater from the San Jose/Santa Clara Regional Wastewater Facility.
8. **Why is recycled water regulated more than potable (drinking) water?**
   Recycled water is safe to use by trained personnel to assure it is used appropriately and that the public drinking water supply is separated and protected from contamination.
9. **Are there any rules I need to follow when using recycled water?**
   Recycled water has not been treated and disinfected for drinking. The use of recycled water is therefore regulated by the State of California Division of Drinking Water, State Water Resources Control Board to ensure that the public health and potable water supply are separated and protected from contamination. To assure that the use is appropriate, the State has required that users be trained, vehicles and sites are inspected and certified, and appropriate safeguards are in place to protect public health.
10. **Do I have to use a special container?**
    All containers must be properly labeled, per the SBWR RWAP User Agreement. Recycled water is only distributed to certified RWAP Supervisors with registered trucks that have been inspected.
11. **Can I store recycled water at my site or commercial business?**
    Yes. Recycled water can be stored on site, with appropriate signage and use management per the User Agreement.
12. **Do I have to get certified in multiple cities or will one certification work at all SBWR locations?**
    Recycled Water Access Point Supervisors can be trained and registered at any qualified SBWR water agency.
13. **Can I take the recycled water I picked up in one city and take it to another city?**
    Yes. Recycled water purchased from one city may be used in a different city.
14. **Can I use a potable meter to access recycled water or do I have to get a special meter?**
    The RWAP meter is different from a potable water meter, so you must use a recycled water RWAP meter when accessing recycled water.
15. **Do I need to clean my tank or container before filling it with potable water?**
    Recycled water trucks must be certified and registered to carry water for nonpotable uses only.
16. **What if I have multiple tanker trucks?**
    All trucks must be inspected and registered with SBWR.
17. **How much does recycled water cost?**
    Please contact your water retailer for prices and availability.
18. **How do I report my recycled water usage and pay?**
    It will vary depending on recycled water retailer. Please see your local recycled water retailer for specifics.

BAY AREA AIR QUALITY DECLARATION

Project Address: _____ Permit #B-_____

Section 19827.5 of the State of California, Health and Safety Code states in part:

> "A demolition permit shall not be issued by any city… as to any building or other structure except upon the receipt from the permit applicant of a copy of each written asbestos notification regarding the building that has been required to be submitted to the United States Environmental Protection Agency or to a designated state agency (BAAQMD), or both, pursuant to Part 61 of Title 40 of the Code of Federal Regulations, or the successor to that part. The permit may be issued without the applicant submitting a copy of the written notification if the applicant declares that the notification is not applicable to the scheduled demolition project."

BAAQMD requires that they be notified of every "demolition" project **even where no asbestos-containing material is present**, and, for each renovation project where the amount of friable asbestos-containing material is greater than or equal to 100 square feet, 100 linear feet or 35 cubic feet. BAAQM Regulation 11-2-216 defines demolition as "wrecking, intentional burning, moving or dismantling of any load-supporting structural member, or portion thereof of a building, facility or ship. This includes, but is not limited to, any related cutting, disjointing, stripping or removal of structural elements."

As applicant for a demolition permit (or renovation permit with demolition work) in the City of Milpitas, I certify that: I have read the excerpt from Section 19827.5 of the Health and Safety Code provided above; the information I have provided on this form is true and correct; and I further certify the following:

[ ] Attached is a copy of the acknowledgement letter from the Bay Area Air Quality Management District (BAAQMD) confirming they have received my Demolition Notification Form for the work to be performed under the above referenced permit.

[ ] I declare that the written asbestos notification required by Section 19827.5 H&S Code is not applicable for the work to be performed under the above referenced permit.

Property Owner's or Contractor's Name: _____

Signature: _____ Date: _____

DEMOLITION RECYCLING REPORT PROCESS

Residential, commercial and industrial demolition permits require completion of this Recycling Report process for the following projects:

- **Remodel or Tenant Improvements where 2,700 square feet or greater of material is removed.**
- **Removal of a portion of a building where 5,000 square feet or greater of material is removed.**

Area is calculated by the area of demolished material (example, 10' high x 20' long wall has an area of 200 sf).

Contractors and Subcontractors that fail to comply with the Demolition Recycling Report process will be subject to withholding of a demolition or building permit final and/or issuance of the Certificate of Occupancy. If you have any questions regarding this process, please call the Building and Safety Department at (408) 586-3240.

PART I - Prior to demolition permit issuance, the Property Owner or Contractor shall submit on ***business letterhead*** to the Building and Safety Department a Construction Waste Management Plan. This Construction Waste Management Plan shall be approved by the City's Utility Engineering Section prior to demolition permit issuance. The Plan shall including the following:

1) Project Name, address and permit number.
2) The Property Owner or Contractor, to the maximum extent possible, shall salvage and reuse or recycle all useful construction materials generated during the demolition and construction project including, but not limited to roofing materials, wood, drywall, metals, and miscellaneous and composite materials, aggregate base material, asphalt, and concrete. The Construction Waste Management Plan shall identify and estimate the total tonnage by material type to be removed, the tonnage by material type to be diverted from disposal in the landfill by efficient usage, recycling, reuse on the project or salvaged for future use or sale, and the percentage of material diverted from the landfill by material type. See sample Worksheet attached.
3) State that the project will conform with the City's franchise agreement for waste hauling and that all materials recycled and/or disposed shall be sorted on-site and hauled separately, with the exception of hauling conducted by Allied Waste Services which may be commingled (visit http://www.ci.milpitas.ca.gov/business/com_debris_boxes.asp?fr=com for more information).
4) Identify the diversion facility where the material collected will be taken.
5) Identify construction methods employed to reduce the amount of waste generated.
6) State that each Subcontractor that comes on-site shall receive a copy of the Construction Waste Management Plan and sign an acknowledgement that they received a copy (see sample form attached).

The Construction Waste Management Plan shall be updated as necessary and shall be accessible during construction for examination by the City.

PART II - After completion of demolition and/or prior to final permit inspection, the Property Owner or Contractor shall submit on ***business letterhead*** to the Building & Safety Department a Confirmation of Compliance letter stating compliance with the requirements of the Construction Waste Management Plan, listing all materials generated and actual quantities of materials diverted. The quantities of recycled materials shall be supported by copies of weight tags and/or receipts of "end dumps". Include the signatures of subcontractors acknowledgement of receiving a copy of the Plan.

Final inspection will not be signed off without the Confirmation of Compliance letter. If final inspection is made and the report is not presented, a re-inspection fee will be charged.

Construction Waste Management Plan Worksheet

Project Name:_____

Project Address:_____

Permit Number:_____

Project Manager:_____

Waste Hauling Company:_____

Diversion Facility:_____

WASTE MATERIAL TYPE	TONNAGE TOTAL MATERIAL TO BE REMOVED	DIVERSION METHOD				% PROJECTED DIVERSION RATE
		TONNAGE DIVERTED THROUGH EFFICIENT USE	TONNAGE RECYCLED	TONNAGE SALVAGED FOR FUTURE USE OR SALE	TONNAGE TOTAL MATERIAL DIVERTED	
Asphalt						
Concrete						
Shotcrete						
Metals						
Wood						
Rigid insulation						
Fiberglass insulation						
Acoustic ceiling tile						
Gypsum drywall						
Carpet/carpet pad						
Plastic pipe						
Plastic buckets						
Plastic						
Hardiplank siding and boards						
Glass						
Cardboard						
Pallets						
Job office trash, paper, glass & plastic bottles, cans, plastic						
Alkaline and rechargeable batterias, toner cartridges, and electronic devices						
Other:						
Other:						
Other:						
TOTALS:						

APPENDIX B- PRE-DEMOLITION HAZARDOUS MATERIAL SURVEY

Pre-Demolition Hazardous Materials Survey

Milpitas Fire Station #2
1263 Yosemite Drive
Milpitas, California

July 29, 2019

Terracon Project No. R1197759

Prepared for:

City of Milpitas

Milpitas, California

Prepared by:

Terracon Consultants, Inc.

Emeryville, California

August 2, 2019

Phillip Luo
Shah Kawasaki Architects
570 10th Street, Suite 201
Oakland, CA 94607

Attn: Philip Luo
E: pluo@skarc.com

RE: Pre-Demolition Hazardous Materials Survey
Milpitas Fire Station #2
1263 Yosemite Drive
Milpitas, CA
Terracon Project No: R1197759

Dear Mr. Luo:

Terracon Consultants, Inc. (Terracon) hereby submits the attached report for the referenced site to Shah Kawasaki Architects working on behalf of the City of Milpitas. The purpose of this report is to present the data gathered during the pre-demolition hazardous materials survey that was performed at the referenced site on July 2, 2019. We understand that this survey was requested due to the planned demolition of the affected fire station comprising a single building located at the specified address in Milpitas, California.

Terracon appreciates the opportunity to provide this service to Shah Kawasaki Architects and the City of Milpitas. If you have any questions regarding this report, please contact our office at your convenience.

Sincerely,
Terracon Consultants, Inc.

William Frieszell, CAC, CIH
Senior Industrial Hygienist

Steffen Steiner, CAC, CDPH Lead I/A
Office Manager

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APPENDIX E CERTIFICATIONS

PRE-DEMOLITION HAZARDOUS MATERIALS SURVEY
Milpitas Fire Station #2
1263 Yosemite Drive
Milpitas, California

Terracon Project No. R1197759
August 2, 2019

1.0 INTRODUCTION

Terracon Consultants, Inc. (Terracon) conducted a pre-demolition hazardous materials survey of a single structure associated with the City of Milpitas Fire Station #2 located at 1263 Yosemite Drive in Milpitas, California. The survey was conducted on July 2, 2019 in general accordance with the asbestos sampling protocols established in Environmental Protection Agency (EPA) regulation 40 Code of Federal Regulations (CFR) Part 763 Subpart E 763.86, (Asbestos Hazard Emergency Response Act, AHERA).

The referenced site comprises a single contiguous building. It should be noted that the purpose of this survey was to identify materials within the affected areas that may be impacted by the pending planned demolition project scheduled to occur at the property. The areas included in this survey were limited to interior, exterior and roofing elevations of the suspect property. No sub-surface survey work was performed during this phase of testing. In addition, a second portable structure was observed on site during the course of the survey, but was excluded from this event.

A total of sixty-nine (69) samples were collected from twenty-five (25) distinct suspect asbestos containing materials (ACMs) that were identified throughout the aforementioned structures. Of the materials sampled, two (2) were reported positive for asbestos content in concentrations exceeding the laboratory limit of detection. Confirmed asbestos containing materials were noted to be limited to interior wall systems within the fire station building.

Four (4) painted surfaces and two (2) ceramic tile glazing compounds were sampled for potential lead content during the survey. One (1) painted surface was reported to contain lead in concentrations in exceedance of the laboratory detection limit.

Two (2) interior building materials were sampled for potential polychlorinated biphenyl (PCB) content in accordance with recent ordinances promulgated throughout the bay area. PCBs were not detected above the analytical reporting limit in either of the materials sampled.

1.1 Project Scope

The scope of the survey was as follows:

- Inspect the interior, exterior and roofing levels of the Milpitas Fire Station #2 site for the presence of suspect ACMs, lead-containing paint, and PCB-containing sealants.
- Collect samples of suspect ACMs following a National Emissions Standards for Hazardous Air Pollutants (NESHAPS) protocol for sample collection for a demolition survey.
- Asbestos bulk samples will be analyzed using polarized light microscopy (PLM) in accordance with the EPA's July 1993 method for the determination of asbestos in bulk building materials - EPA 600/R-93/116.
- Collect bulk paint chip samples of primary painted surfaces and other materials suspected to be lead containing. Bulk samples will be analyzed at an accredited laboratory by Flame Atomic Absorption (AA) for Total Lead reported in parts per million (ppm).
- Collect bulk samples of predominant sealants and caulks that may either contain or be contaminated with PCBs for analysis by EPA Method SW8082, Polychlorinated Biphenyls by Gas Chromatography.
- Submit a written report including analytical results, regulatory requirements and conclusions.

1.2 Reliance

This report is for the exclusive use of Shah Kawasaki Architects and the City of Milpitas for the demolition of Milpitas Fire Station #2 in Milpitas, California. Reliance by any other party on this report is prohibited without written authorization of Terracon and the client. Reliance on this report by the clients listed above and all authorized parties will be subject to the terms, conditions, and limitations stated in the proposal, this report and the project contract.

2.0 BUILDING DESCRIPTIONS

The referenced fire station in Milpitas, California is comprised of two separate buildings, the main fire station and a temporary portable structure. It is Terracon's understanding that the portable is not to be demolished with the rest of the fire station and will be relocated. For the purposes of this survey, it has been removed from the scope of this report.

Building exteriors were generally comprised of concrete, stone aggregate or stucco systems, with typical interior finishes such as drywall and joint compound-based wall systems with resilient flooring materials and drop ceiling assemblies.

3.0 METHODS AND SAMPLING STRATEGY

3.1 Asbestos, Lead, PCBs, and Other Hazardous Building Materials

The survey was conducted by Wyatt Renner, Certified Site Surveillance Technician (CSST), under the direction of William Frieszell, Certified Asbestos Consultant (CAC) and California

Department of Public Health (CDPH) Lead Inspector/Assessor. Copies of pertinent training certifications are included in Appendix D. The asbestos portion of the survey was conducted in general accordance with the sample collection protocols established in EPA 40 CFR Part 763 Subpart E 763.86, AHERA. A summary of survey activities is provided below. EPA regulation 40 CFR 61, Subpart M, the National Emission Standards for Hazardous Air Pollutants (NESHAP) prohibits the release of asbestos fibers to the atmosphere during renovation or demolition activities. The asbestos NESHAP requires that regulated ACM be identified, classified, and quantified prior to planned disturbances, renovations, or demolition activities.

3.2 Visual Assessment - Asbestos

Survey activities were initiated with visual observation of the subject structure to identify homogeneous areas of suspect ACM. A homogeneous area (HA) consists of a building material that appears similar throughout in terms of color, size and texture with consideration given to the date of application. Assessment was conducted in all accessible areas of the building including the interior, exterior, and roof level elevations.

3.3 Physical Assessment - Asbestos

A physical assessment of each HA of suspect ACM was conducted to assess the current friability and condition of the materials. A friable material is defined by the EPA as a material which can be crumbled, pulverized or reduced to powder by hand pressure when dry. Friability was assessed by physically touching suspect materials.

Based on results of the visual observation, bulk samples of suspect ACM were collected in general accordance with EPA AHERA sampling protocols. Samples of suspect materials were collected from representative locations in each homogeneous area. Bulk samples were collected using wet methods as applicable to reduce the potential for fiber release. Samples were placed in sealable containers and labeled with unique sample numbers using an indelible marker.

The selection of sample locations and frequency of sampling were based on Terracon's observations and the assumption that like materials in the same area are homogeneous in content.

Terracon collected a total of sixty-nine (69) bulk samples from twenty-five (25) homogeneous instances of suspect ACM. A summary of the materials reported to contain asbestos is provided in Table I below.

3.4 Sample Analysis - Asbestos

Asbestos bulk samples were submitted under chain of custody to EMLab P&K (EML) in Phoenix, Arizona for analysis by polarized light microscopy with dispersion staining techniques per EPA

methodology 600/R-93/116. The percentage of asbestos, where applicable, was determined by microscopic visual estimation. Building materials that reported to contain asbestos in concentrations below one percent were additionally analyzed using 400-point count methodology to provide a more precise concentration and potentially limit disposal requirements for the affected materials.

EML is accredited under the National Voluntary Laboratory Accreditation Program (NVLAP) Accreditation No. 500031-0. The laboratory reports for the asbestos bulks samples are included as Appendix A.

3.5 Lead Containing Paint and Materials

Terracon collected paint chip samples to determine the lead content in parts per million (ppm) of the predominant painted interior and exterior surfaces throughout the subject structures. In addition, suspect lead containing bulk materials, such as exterior sealants were sampled to determine potential lead content. Suspect lead paint and bulk material samples were collected in sealable containers and labeled with unique sample numbers using an indelible marker.

3.6 Visual Assessment - Lead Containing Paint and Materials

Inspection activities began with visual observations of painted surfaces to identify unique combinations of paint on building materials. A unique combination of paint consists of paint that is applied to a building material and has similar color, substrate and component. Assessment was conducted throughout the visually accessible areas of the subject buildings. Suspect lead containing bulk materials were also identified visually in similar fashion.

3.7 Physical Assessment - Lead Containing Paint and Materials

A physical assessment of the predominant combination of paints that would be expected to be impacted by pending construction activities was conducted in order to assess the condition of the paint. Typically, known lead containing paints that are in visually poor condition require stabilization activities prior to final building demolition. Lead paint chip samples were collected to comply with Cal-OSHA regulations (Title 8 CCR 1532.1 - Lead Exposure in Construction) for the proposed demolition activities. Paint and bulk materials were sampled to identify potential worker exposure and disposal restrictions.

Terracon collected six (6) bulk samples of suspect lead-containing paint (LCP) and materials. A summary of suspect lead samples collected during the survey is included in Table III.

3.8 Paint and Bulk Material Analysis - Lead

Paint chip and bulk material samples were submitted under chain of custody to EMLab P&K of Phoenix, Arizona. Paint chip and material samples were analyzed by Flame Atomic Absorption method SW846-7000B. QuanTEM is accredited by the American Industry Hygiene Association's (AIHA) Environmental Lead Laboratory Accreditation Program (ELLAP) to perform Flame Atomic Absorption analysis. The laboratory reports for the lead paint chip and material samples are included as Appendix B.

3.9 Interior Building Materials - PCBs

Bulk sealant samples were collected using a razor knife and were placed into individual containers. Each sample was provided a discreet sample number, which was recorded on a chain of custody form. The samples were transported under chain of custody procedures to McCampbell Analytical, Inc. in Pittsburg, California. All samples were analyzed for PCB content in accordance to EPA Method SW8082. The laboratory reports for PCB samples are included as Appendix C.

Terracon collected samples from (2) bulk building materials suspected for PCB content in accordance with local city ordinances concerned with the demolition of structures. A summary of the PCB sealant results is included in Table IV.

4.0 SURVEY FINDINGS

4.1 Asbestos

A total of twenty-five (25) suspect asbestos containing materials (ACMs) were identified and sampled throughout the interior, exterior and roof level areas of the affected structure during the survey.

Upon laboratory analysis using polarized light microscopy techniques, two (2) of the twenty-five (25) materials identified during the survey were reported to contain asbestos in concentrations exceeding the laboratory method limit of detection.

The confirmed asbestos containing materials are listed in Table I below.

Table I - Asbestos Containing Materials

Material Description	General Material Location(s)	Waste Category	Asbestos Result
Interior Wall Systems - Textured Drywall with Joint Compound	Material is Present throughout Wall Systems within the Affected Building	Construction Debris	Drywall: None Detected Joint Compound: <1% Chrysotile Asbestos Composite System: 0.25% Chrysotile Asbestos by 400 Point Count
Drywall Texturing Material	Material is Present throughout Wall Systems within the Affected Building	Construction Debris	0.75% Chrysotile Asbestos by 400 Point Count

All materials that were reported as containing less than one percent asbestos were further analyzed using 400-point count techniques in order to provide a definitive result for disposal considerations. None of the materials that were analyzed this way were reported to contain asbestos in concentrations exceeding one percent.

It should be reemphasized that although reasonable efforts were made to survey accessible suspect materials, additional suspect but un-sampled materials could be located under existing building materials, inside walls, above ceilings, in isolated areas or in other concealed areas. Therefore, if suspect materials are encountered during abatement and/or demolition activities that do not appear to have been characterized as ACM or non-ACM, these materials must be assumed to be ACM until samples are collected and analyzed to prove otherwise. Any assumed material should be treated as asbestos or sampled to determine asbestos content before disturbing the material.

Twenty-three additional (23) suspect materials were sampled throughout the affected structure, but were not reported to contain asbestos in detectable quantities during the survey. The non-asbestos containing materials and sampling locations are listed in Table II below.

Table II - Non-Asbestos Containing Materials

Sample Number	Material Description	Approximate Sample Location
1A	Gray Roofing Field Over Black Asphaltic Field	Low Roof East Side
1B	Gray Roofing Field Over Black Asphaltic Field	Low Roof Center
1C	Gray Roofing Field Over Black Asphaltic Field	Low Roof West
2A	Black Penetration/Patch Mastic	High Roof Central Skylight
2B	Black Penetration/Patch Mastic	Low Roof West

Sample Number	Material Description	Approximate Sample Location
2C	Black Penetration/Patch Mastic	Low Roof Curb Cap South
3A	Gray Roof Flashing Over Black Asphaltic Flashing	Low Roof East Side
3B	Gray Roof Flashing Over Black Asphaltic Flashing	Low Roof South Side
3C	Gray Roof Flashing Over Black Asphaltic Flashing	Low Roof West Side
4A	Silver HVAC Mastic	High Roof Central HVAC Unit
4B	Silver HVAC Mastic	High Roof Central HVAC Unit
5A	Black Asphaltic Roof Field	High Roof-East
5B	Black Asphaltic Roof Field	High Roof-Center
5C	Black Asphaltic Roof Field	High Roof-West
6A	Black Asphaltic Curb	High Roof HVAC Curb
6B	Black Asphaltic Curb	High Roof West Perimeter
7A	Beige Roof Patch Mastic	South Parapet
7B	Beige Roof Patch Mastic	Tower Base
8A	Dark Grey Base Cove with Tan Glue	North Wall Behind Door, Main Dorms
8B	Dark Grey Base Cove with Tan Glue	North, Dining Room
8C	Dark Grey Base Cove with Tan Glue	South West Wall - Watch Tower
10A	Multi-Colored Glue Carpet with Tan Glue	North Wall, Behind Door, Main Dorms
10B	Multi-Colored Glue Carpet with Tan Glue	South West Wall, Watch Tower
11A	Multi-Colored Blue Carpet Squares with Beige Glue	North, Dining Room
11B	Multi-Colored Blue Carpet Squares with Beige Glue	South Wall Dining Room
12A	Wainscot Yellow Glue	Watch Tower Bathroom
12B	Wainscot Yellow Glue	Men's Bathroom
12C	Wainscot Yellow Glue	Outside Watch Tower Door /Hallway

Sample Number	Material Description	Approximate Sample Location
13A	Gray Pebble Sheet Flooring with Grey Glue	Watch Tower Bathroom
13B	Gray Pebble Sheet Flooring with Grey Glue	Watch Tower Bathroom
13C	Gray Pebble Sheet Flooring with Grey Glue	Kitchen
14A	White Ceramic 2"x2" Tile W/ Grout with Glue	Women's Bathroom
14B	White Ceramic 2"x2" Tile W/ Grout with Glue	Men's Bathroom
15A	Beige with Brown Ceramic 1"X1" Tile with Grout with Mortar	Officers Bathroom
15B	Beige with Brown Ceramic 1"X1" Tile with Grout with Mortar	Officers Bathroom
16A	White 1'x1' Acoustical Tile with Fissures	Southwest End of Dorms
16B	White 1'x1' Acoustical Tile with Fissures	Hallway in Front of Heater Room
17A	Tan Coating on Concrete Floor	South East, Engine Room
17B	Tan Coating on Concrete Floor	Middle
17C	Tan Coating on Concrete Floor	North West
20A	Outside Asphalt	Back Drive Way/Wear Entrance of Back Driveway
20B	Outside Asphalt	Back Drive Way/Center
20C	Outside Asphalt	Parking Lot/Near Front
21A	Concrete Masonry Unit Grout	Diesel Tank Area
21B	Concrete Masonry Unit Grout	Diesel Tank Area
21C	Concrete Masonry Unit Grout	Diesel Tank Area
22A	Beige Stucco	Southwest Exterior Wall
22B	Beige Stucco	Entrance
22C	Beige Stucco	Diesel Tank Area
22D	Beige Stucco	Tower Base Exterior Wall

Sample Number	Material Description	Approximate Sample Location
22E	Beige Stucco	South West Side of Building Exterior Wall
23A	Black Asphaltic Vapor Barrier	Southwest Exterior Wall
23B	Black Asphaltic Vapor Barrier	Entrance Exterior Wall
23C	Black Asphaltic Vapor Barrier	Tower Base Exterior Wall
24A	Silver Window Putty	Entrance Window Closet to Front Door
24B	Silver Window Putty	Back Windows
24C	Silver Window Putty	Southwest Side of Building Middle Window
25A	HVAC Beige Glue	Heater Room
25B	HVAC Beige Glue	Heater Room
25C	HVAC Beige Glue	Heater Room

4.2 Lead Containing Paint and Bulk Materials

Terracon sampled four (4) painted surfaces and two (2) ceramic tile glazing compounds. Of the materials sampled, one (1) of the paint samples collected was reported to contain lead in detectable concentrations upon analysis by Flame Atomic Absorption Spectroscopy. A summary of lead sample locations and analytical results is below in Table III. Paint or materials reported with "<" is below the laboratory analytical reporting limit for the sample submitted.

Table III - Lead Containing Paints and Materials

Sample No.	Material Description	Sample Location	Lead Concentration (ppm)
Pb-01	Brown Paint on Wooden Roof Perimeter	High Roofing Field Area at Southern Side	390
Pb-02	Grey Glazing Compound on Ceramic Floor Tile	Women's Restroom Area	<50.0
Pb-03	Tan/Brown Glazing Compounds on 2" Ceramic Floor Tile	Men's Restroom Area	<50.0
Pb-04	Silver Window Putty on Metal Window Frame Assembly	Building Exterior Area	<50.0

Sample No.	Material Description	Sample Location	Lead Concentration (ppm)
Pb-05	Beige Paint on Stucco Exterior Wall System	Building Exterior Area	<50.0
Pb-06	White Paint on Interior Drywall Wall Systems	Watchtower Restroom Area	<50.0

ppm = parts per million

Uncharacterized paints and/or suspect materials should be assumed to contain lead until sampling and analysis prove otherwise.

4.3 PCB Containing Materials

Terracon collected bulk samples from two (2) interior building materials during the survey. Neither of these materials were reported with PCB concentrations exceeding the laboratory limit of detection. A summary of PCB sample locations and analytical results is below in Table IV.

Table IV - PCB Sampled Materials

Material Description	Material Location	PCB Concentration (ppm)
Carpet Mastic - Beige	Material is Located beneath Flooring Finishes in Areas throughout the Affected Fire Station	None Detected <2.5
HVAC Insulation Material - Fiberglass	Material is Located throughout the HVAC System of the Affected Fire Station	None Detected <1.7

ppm = parts per million

5.0 CONCLUSIONS

Based upon the survey results, Terracon concludes the following:

- Two (2) of the twenty-five (25) materials sampled during the course of the survey were reported to contain asbestos in concentrations exceeding the laboratory method limit of detection. Each of these materials was re-analyzed using 400-point count methodologies. Upon analysis, neither of the materials identified was reported to contain asbestos in concentrations exceeding 1%.

- If additional suspect materials that have not been characterized as ACM or non-ACM in this report are discovered during construction related processes, these materials should be assumed to contain asbestos and be treated accordingly until proven otherwise by appropriate sampling and laboratory analysis.

- Lead was detected above the laboratory detection limit in one (1) of the six (6) materials sampled; lead was reported in a painted surface on the roof of the structure. None of the painted surfaces were found to contain lead in concentrations exceeding 5,000 parts per million, the threshold signifying lead-based paint.

- Detectable PCB concentrations were not reported in either of the two (2) materials sampled during the course of the survey.

- Additional hazardous building materials, such as mercury containing florescent light fixtures and associated suspect PCB-containing ballasts were observed throughout the referenced structures.

6.0 REGULATORY OVERVIEW

6.1 Asbestos

The Asbestos NESHAP program in California is enforced by federal, state, and county Asbestos NESHAP Coordinators. For projects occurring in Milpitas, California, the Bay Area Air Quality Management District (BAAQMD) has been delegated authority from the EPA to enforce the Asbestos NESHAP within its respective jurisdictional boundaries, excluding tribal lands.

The asbestos NESHAP (40 CFR Part 61, Subpart M) regulates asbestos fiber emissions and asbestos waste disposal practices. The asbestos NESHAP regulation also requires the identification and classification of existing ACM according to friability prior to demolition or renovation activity. Friable ACM is a material containing more than 1% asbestos that, when dry, can be crumbled, pulverized or reduced to powder by hand pressure. All friable ACM is considered regulated asbestos-containing material (RACM). The NESHAP regulation is implemented locally by the BAAQMD in their Regulation 11, Rule 2.

The asbestos NESHAP regulation classifies ACM as either RACM, Category I non-friable ACM or Category II non-friable ACM. RACM includes all friable ACM, along with Category I and Category II non-friable ACM that has become friable, will be or has been subjected to sanding, grinding, cutting or abrading, or ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder in the course of renovation or demolition activity. Category I non-friable ACM are exclusively asbestos-containing packings, gaskets, resilient floor coverings, and asphalt roofing products that contain more than 1% asbestos. Category II non-friable ACM are all other non-friable materials other than Category I non-friable ACM that contain more than 1% asbestos.

The California Department of Occupational Safety and Health (DOSH) asbestos standard for construction (Title 8 CCR 1529) regulates workplace exposure to asbestos. The DOSH standard requires that employee exposure to airborne asbestos must not exceed 0.1 fibers per cubic

centimeter of air (0.1 f/cc) as an eight-hour time weighted average (TWA) and not exceed 1.0 fibers per cubic centimeter of air (1.0 f/cc) over a 30-minute time period known as an excursion limit (EL). The TWA and EL are known as DOSH's asbestos permissible exposure limits (PELs). The DOSH standard classifies construction and maintenance activities which could disturb ACM and specifies work practices and precautions which employers must follow when engaging in each class of regulated work.

6.2 Lead Containing Paint/Materials

Personnel performing demolition activities that may disturb painted components or materials with concentrations of lead above the designated analytical detection limit should comply with all current DOSH regulations in order to minimize employee exposure. DOSH defines lead containing paint as a paint, which contains lead, regardless of the concentration. Currently, any proposed renovation/demolition is subject to the DOSH regulations (Title 8 CCR 1532.1 – Lead Exposure in Construction). The DOSH regulation defines specific training requirements, engineering controls and working practices for construction personnel subject to this standard. Occupational exposure to lead occurring in the course of construction work, including maintenance activities, painting, alteration and repairs is subject to the DOSH Lead Exposure in Construction standard.

Construction work covered by Title 8 CCR 1532.1 includes any repair or renovation activities or other activities that disturb in-place lead-containing materials, but does not include routine cleaning and repainting where there is insignificant damage, wear, or corrosion of existing lead-containing coatings or substrates. Employers must assure that no employee will be exposed to lead at concentrations greater than 50 micrograms per cubic meter ($\mu g/m^3$) averaged over an eight-hour period without adequate protection. The DOSH Standard also establishes an action level of 30 $\mu g/m^3$ which if exceeded triggers the requirement for medical monitoring.

Proper waste stream categorization is required for the disposal of all lead containing materials and painted construction debris with total lead content that exceeds 50 ppm. The debris should be classified as hazardous waste if lead waste concentrations exceed either the total lead concentration or soluble lead concentration regulatory limits. Total lead concentration is determined by Total Threshold Limit Concentration (TTLC). Soluble or leachable lead is determined by the Soluble Threshold Limit Concentration (STLC, California required test) and/or Toxicity Characteristic Leaching Procedure (TCLP) (Federal EPA required test). Regulatory limits characterize a lead waste as a hazardous waste if lead concentrations exceed 1,000 ppm by TTLC or 5 milligrams per liter by STLC or TCLP.

The above overview is not intended to be inclusive of all potentially pertinent regulatory information. The relevant EPA and OSHA standards should be consulted prior to undertaking activities involving the demolition, renovation, or maintenance of surfaces coated with lead containing paints.

6.3 PCBs

PCBs are regulated by the EPA under 40 CFR 761. The production of PCBs has been banned since 1979 and may be present in electrical capacitors, sealants, hydraulic oils, and transformers commonly found in buildings. Materials with greater than 50 ppm PCB content are considered PCB contaminated waste while materials with greater than 500 ppm PCB are considered PCB containing.

PCB containing equipment and/or contaminated materials must be removed and disposed properly prior to demolition of a building. PCB containing lighting ballasts may be present in some lighting fixtures and must be verified by labeling. All PCB containing materials must be removed and disposed prior to building demolition.

6.4 Universal Waste

Universal waste are common wastes with hazardous properties that must be managed and have landfill disposal restrictions. Example of universal waste include electronic devices, batteries, and mercury containing equipment or lighting. Handling, transportation, and disposal is simplified under the universal waste regulation in the California Code of Regulations Title 22, Division 4.5 Chapter 11.

All materials in the building meeting the definition of the universal waste must be removed prior to demolition and handled, transported and disposed through an appropriate vendor.

7.0 LIMITATIONS / GENERAL COMMENTS

Terracon performed limited destructive testing such as selective demolition of walls, dismantling of equipment or removal of protective coverings during the survey. Uncharacterized hidden materials may exist under existing finishes, equipment or structural materials.

This hazardous materials survey was conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions in the same locale. The results, findings, conclusions and recommendations expressed in this report are based on conditions observed during our survey at the subject site. The information contained in this report is relevant to the date on which this survey was performed, and should not be relied upon to represent conditions at a later date. This report has been prepared on behalf of and exclusively for use by the City of Milpitas for specific application to their project as discussed. This report is not a bidding document. Contractors or consultants reviewing this report must draw their own conclusions regarding further investigation or remediation deemed necessary. Terracon does not warrant the work of regulatory agencies, laboratories or other third parties supplying information which may have been used in the preparation of this report. No warranty, express or implied is made.

APPENDIX A

ASBESTOS ANALYTICAL LABORATORY DATA

EMLab P&K
A TestAmerica Company

Report for:

William Frieszell
Terracon Consultants, Inc. - Emeryville
1466 66th Street
Emeryville, CA 94608

Regarding: Project: R1197759; Five Station #2-Milpitas
EML ID: 2197993

Approved by:

Approved Signatory
Renee Luna-Trepczynski

Dates of Analysis:
Asbestos PLM: 07-05-2019 and 07-08-2019

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267)

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

EMLab P&K
1501 West Knudsen Drive, Phoenix, AZ 85027
(800) 651-4802 Fax (623) 780-7695 www.emlab.com

Client: Terracon Consultants, Inc. - Emeryville
C/O: William Frieszell
Re: R1197759; Five Station #2-Milpitas

Date of Sampling: 07-02-2019
Date of Receipt: 07-03-2019
Date of Report: 07-08-2019

ASBESTOS PLM REPORT

Total Samples Submitted:	69
Total Samples Analyzed:	69
Total Samples with Layer Asbestos Content > 1%:	0

Location: 1A, Gray Roofing Field Over Black Asphaultic Field;Low Roof East Side Lab ID-Version‡: 10443866-1

Sample Layers	Asbestos Content
Gray Roofing Material with Gray Pebbles	ND
Yellow Foam	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Brown Fibrous Material	ND
Composite Non-Asbestos Content:	5% Cellulose 3% Glass Fibers
Sample Composite Homogeneity:	Poor

Location: 1B, Gray Roofing Field Over Black Asphaultic Field;Low Roof Center Lab ID-Version‡: 10443867-1

Sample Layers	Asbestos Content
Gray Roofing Material with Gray Pebbles	ND
Yellow Foam	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Brown Fibrous Material	ND
Composite Non-Asbestos Content:	25% Cellulose 3% Glass Fibers
Sample Composite Homogeneity:	Poor

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

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Client: Terracon Consultants, Inc. - Emeryville
C/O: William Frieszell
Re: R1197759; Five Station #2-Milpitas

Date of Sampling: 07-02-2019
Date of Receipt: 07-03-2019
Date of Report: 07-08-2019

ASBESTOS PLM REPORT

Location: 1C, Gray Roofing Field Over Black Asphaultic Field;Low Roof West Lab ID-Version‡: 10443868-1

Sample Layers	Asbestos Content
Gray Roofing Material with Gray Pebbles	ND
Yellow Foam	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Brown Fibrous Material	ND
Composite Non-Asbestos Content:	5% Cellulose 3% Glass Fibers
Sample Composite Homogeneity:	Poor

Location: 2A, Black Penetration/Patch Mastic;High Roof Central Skylight Lab ID-Version‡: 10443869-1

Sample Layers	Asbestos Content
Black Roofing Mastic with White Pebbles	ND
Composite Non-Asbestos Content:	5% Cellulose 2% Wollastonite
Sample Composite Homogeneity:	Good

Location: 2B, Black Penetration/Patch Mastic;Low Roof West Lab ID-Version‡: 10443870-1

Sample Layers	Asbestos Content
Black Roofing Mastic	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Good

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

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Client: Terracon Consultants, Inc. - Emeryville
C/O: William Frieszell
Re: R1197759; Five Station #2-Milpitas

Date of Sampling: 07-02-2019
Date of Receipt: 07-03-2019
Date of Report: 07-08-2019

ASBESTOS PLM REPORT

Location: 2C, Black Penetration/Patch Mastic;Low Roof Curb Cap South Lab ID-Version‡: 10443871-1

Sample Layers	Asbestos Content
Gray Roofing Mastic	ND
Black Roofing Mastic	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 3A, Gray Roof Flashing Over Black Asphaultic Flashing;Low Roof East Side

Lab ID-Version‡: 10443872-1

Sample Layers	Asbestos Content
Gray Roof Flashing with Gray Pebbles	ND
Yellow Foam	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Brown Fibrous Material	ND
Brown Wood	ND
Composite Non-Asbestos Content:	10% Cellulose 3% Glass Fibers
Sample Composite Homogeneity:	Poor

Location: 3B, Gray Roof Flashing Over Black Asphaultic Flashing;Low Roof South Side

Lab ID-Version‡: 10443873-1

Sample Layers	Asbestos Content
Gray Roof Flashing with Gray Pebbles	ND
Yellow Foam	ND
Sample Composite Homogeneity:	Moderate

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Client: Terracon Consultants, Inc. - Emeryville
C/O: William Frieszell
Re: R1197759; Five Station #2-Milpitas

Date of Sampling: 07-02-2019
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ASBESTOS PLM REPORT

Location: 3C, Gray Roof Flashing Over Black Asphaultic Flashing;Low Roof West Side

Lab ID-Version‡: 10443874-1

Sample Layers	Asbestos Content
Gray Roof Flashing with Gray Pebbles	ND
Yellow Foam	ND
Black Roofing Tar and Felt	ND
Composite Non-Asbestos Content:	2% Glass Fibers
Sample Composite Homogeneity:	Poor

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ASBESTOS PLM REPORT

Location: 4A, Silver HVAC Mastic;High Roof Central HVAC Unit Lab ID-Version‡: 10443875-1

Sample Layers	Asbestos Content
Silver Mastic	ND
Composite Non-Asbestos Content:	3% Polyethylene
Sample Composite Homogeneity:	Good

Location: 4B, Silver HVAC Mastic;High Roof Central HVAC Unit Lab ID-Version‡: 10443876-1

Sample Layers	Asbestos Content
Silver Mastic	ND
Composite Non-Asbestos Content:	3% Polyethylene
Sample Composite Homogeneity:	Good

Location: 5A, Black Asphaultic Roof Field;High Roof-East Lab ID-Version‡: 10443877-1

Sample Layers	Asbestos Content
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Brown Fibrous Material	ND
Composite Non-Asbestos Content:	15% Cellulose 5% Glass Fibers 5% Synthetic Fibers
Sample Composite Homogeneity:	Poor

Location: 5B, Black Asphaultic Roof Field;High Roof-Center Lab ID-Version‡: 10443878-1

Sample Layers	Asbestos Content
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Brown Fibrous Material	ND
Composite Non-Asbestos Content:	10% Cellulose 7% Glass Fibers
Sample Composite Homogeneity:	Poor

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ASBESTOS PLM REPORT

Location: 5C, Black Asphaultic Roof Field;High Roof-West

Lab ID-Version‡: 10443879-1

Sample Layers	Asbestos Content
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Brown Fibrous Material	ND
Composite Non-Asbestos Content:	10% Cellulose 7% Glass Fibers
Sample Composite Homogeneity:	Poor

Location: 6A, Black Asphaultic Curb;High Roof HVAC Curb

Lab ID-Version‡: 10443880-1

Sample Layers	Asbestos Content
Black Roofing Tar and Felt with White Pebbles	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Brown Fibrous Material	ND
Composite Non-Asbestos Content:	10% Cellulose 5% Glass Fibers 5% Synthetic Fibers
Sample Composite Homogeneity:	Poor

Location: 6B, Black Asphaultic Curb;High Roof West Perimeter

Lab ID-Version‡: 10443881-1

Sample Layers	Asbestos Content
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Brown Fibrous Material	ND
Composite Non-Asbestos Content:	30% Cellulose 10% Glass Fibers
Sample Composite Homogeneity:	Poor

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ASBESTOS PLM REPORT

Location: 7A, Beige Patch;South Parapet

Lab ID-Version‡: 10443882-1

Sample Layers	Asbestos Content
Beige Non-Fibrous Material	ND
Gray Non-Fibrous Material	ND
Yellow Foam	ND
Sample Composite Homogeneity:	Poor

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ASBESTOS PLM REPORT

Location: 7B, Beige Patch;Tower Base Lab ID-Version‡: 10443883-1

Sample Layers	Asbestos Content
Beige Non-Fibrous Material	ND
Sample Composite Homogeneity:	Good

Location: 8A, Dark Grey Base Cove + Tan Glue;North Wall Behind Door, Main Dorms

Lab ID-Version‡: 10443884-1

Sample Layers	Asbestos Content
Tan Glue	ND
Sample Composite Homogeneity:	Good

Location: 8B, Dark Grey Base Cove + Tan Glue;North, Dining Room Lab ID-Version‡: 10443885-1

Sample Layers	Asbestos Content
Dark Gray Baseboard	ND
Tan Glue	ND
Sample Composite Homogeneity:	Moderate

Location: 8C, Dark Grey Base Cove + Tan Glue;South Wesr Wall -Watch Tower Lab ID-Version‡: 10443886-1

Sample Layers	Asbestos Content
Tan Glue	ND
Sample Composite Homogeneity:	Good

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ASBESTOS PLM REPORT

Location: 9A, White Drywall + Base Compound;North Wall, Behind Door, Main Dorms

Lab ID-Version‡: 10443887-1

Sample Layers	Asbestos Content
Off-White Compound with White Paint	< 1% Chrysotile
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 9B, White Drywall + Base Compound;Watch Tower Bathroom

Lab ID-Version‡: 10443888-1

Sample Layers	Asbestos Content
White Compound with White Paint	ND
Cream Tape	ND
White Joint Compound	ND
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity:	Poor

Location: 9C

Lab ID-Version‡: 10443889-1

Sample Layers	Asbestos Content
White Compound with Beige Paint	ND
Cream Tape	ND
White Joint Compound	ND
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity:	Poor

Location: 10A, Multi-Colored Glue Carpet + Tan Glue;North Wall, Behind Door, Main Dorms

Lab ID-Version‡: 10443890-1

Sample Layers	Asbestos Content
Tan Glue	ND
White Compound with White Paint	ND
Composite Non-Asbestos Content:	< 1% Synthetic Fibers
Sample Composite Homogeneity:	Moderate

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ASBESTOS PLM REPORT

Location: 10B, Multi-Colored Glue Carpet + Tan Glue;South West Wall, Watch Tower Lab ID-Version‡: 10443891-1

Sample Layers	Asbestos Content
Tan Glue	ND
Composite Non-Asbestos Content:	< 1% Synthetic Fibers
Sample Composite Homogeneity:	Good

Location: 11A, Multi-Colored Blueish Carpet Squares + Beige Glue;North, Dining Room

Lab ID-Version‡: 10443892-1

Sample Layers	Asbestos Content
Beige Glue	ND
Composite Non-Asbestos Content:	< 1% Cellulose
Sample Composite Homogeneity:	Good

Location: 11B, Multi-Colored Blueish Carpet Squares + Beige Glue;South Wall Dining Room Lab ID-Version‡: 10443893-1

Sample Layers	Asbestos Content
Beige Glue	ND
Composite Non-Asbestos Content:	< 1% Cellulose
Sample Composite Homogeneity:	Good

Location: 12A, Wainscot Yellow Glue;Watch Tower Bathroom Lab ID-Version‡: 10443894-1

Sample Layers	Asbestos Content
Yellow Glue	ND
White Compound with White Paint	ND
Sample Composite Homogeneity:	Moderate

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ASBESTOS PLM REPORT

Location: 12B, Wainscot Yellow Glue;Mens Bathroom Lab ID-Version‡: 10443895-1

Sample Layers	Asbestos Content
Yellow Glue	ND
Sample Composite Homogeneity:	Good

Location: 12C, Wainscot Yellow Glue;Outside Watch Tower Door /Hallway Lab ID-Version‡: 10443896-1

Sample Layers	Asbestos Content
Yellow Glue	ND
Sample Composite Homogeneity:	Good

Location: 13A, Gray Pebble Sheet Flooring + Grey Glue;Watch Tower Bathroom Lab ID-Version‡: 10443897-1

Sample Layers	Asbestos Content
Gray Sheet Flooring with Fibrous Backing	ND
Off-White Glue	ND
Gray Flooring Leveler	ND
Composite Non-Asbestos Content:	5% Cellulose 2% Glass Fibers < 1% Synthetic Fibers
Sample Composite Homogeneity:	Poor

Location: 13B, Gray Pebble Sheet Flooring + Grey Glue;Watch Tower Bathroom Lab ID-Version‡: 10443898-1

Sample Layers	Asbestos Content
Gray Sheet Flooring with Fibrous Backing	ND
Off-White Glue	ND
Gray Flooring Leveler	ND
Composite Non-Asbestos Content:	5% Cellulose 2% Glass Fibers < 1% Synthetic Fibers
Sample Composite Homogeneity:	Poor

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ASBESTOS PLM REPORT

Location: 13C, Gray Pebble Sheet Flooring + Grey Glue;Kitchen Lab ID-Version‡: 10443899-1

Sample Layers	Asbestos Content
Gray Sheet Flooring with Fibrous Backing	ND
Off-White Glue	ND
Gray Flooring Leveler	ND
Composite Non-Asbestos Content:	5% Cellulose 2% Glass Fibers < 1% Synthetic Fibers
Sample Composite Homogeneity:	Poor

Location: 14A, White Ceramic 2"x2" Tile W/ Grout + Glue;Womens Bathroom Lab ID-Version‡: 10443900-1

Sample Layers	Asbestos Content
White Ceramic Tile	ND
Gray Grout	ND
Yellow Glue	ND
Gray Mortar	ND
Sample Composite Homogeneity:	Poor

Location: 14B, White Ceramic 2"x2" Tile W/ Grout + Glue;Mens Bathroom Lab ID-Version‡: 10443901-1

Sample Layers	Asbestos Content
Gray Ceramic Tile	ND
Gray Grout	ND
Yellow Glue	ND
White Cementitious Material	ND
Sample Composite Homogeneity:	Poor

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ASBESTOS PLM REPORT

Location: 15A, Beige + Brown Ceramic 1"X1" Tile W/ Grout + Mortar;Officers Bathroom

Lab ID-Version‡: 10443902-1

Sample Layers	Asbestos Content
Brown Ceramic Tile	ND
White Grout	ND
Gray Mortar	ND
Sample Composite Homogeneity:	Poor

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ASBESTOS PLM REPORT

Location: 15B, Beige + Brown Ceramic 1"X1" Tile W/ Grout + Mortar;Officers Bathroom

Lab ID-Version‡: 10443903-1

Sample Layers	Asbestos Content
Brown Ceramic Tile	ND
White Grout	ND
Gray Mortar	ND
Sample Composite Homogeneity:	Poor

Location: 16A, White 1'x1' Acoustical Tile W. Fissures;Southwest End of Dorms

Lab ID-Version‡: 10443904-1

Sample Layers	Asbestos Content
Brown Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	95% Cellulose
Sample Composite Homogeneity:	Good

Location: 16B, White 1'x1' Acoustical Tile W. Fissures;Hallway In Front of Heater Room

Lab ID-Version‡: 10443905-1

Sample Layers	Asbestos Content
Brown Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	95% Cellulose
Sample Composite Homogeneity:	Good

Location: 17A, Tan Coating on Concrete Floor;South East, Engine Room

Lab ID-Version‡: 10443906-1

Sample Layers	Asbestos Content
Tan Coating	ND
Sample Composite Homogeneity:	Good

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ASBESTOS PLM REPORT

Location: 17B, Tan Coating on Concrete Floor;Middle Lab ID-Version‡: 10443907-1

Sample Layers	Asbestos Content
Tan Coating	ND
Sample Composite Homogeneity:	Good

Location: 17C, Tan Coating on Concrete Floor;North West Lab ID-Version‡: 10443908-1

Sample Layers	Asbestos Content
Tan Coating	ND
Sample Composite Homogeneity:	Good

Location: 18A, White Wall Texture + Drywall;Wall/Fitness Room Lab ID-Version‡: 10443909-1

Sample Layers	Asbestos Content
White Texture with Off-White Paint	ND
White Texture with Off-White Paint	ND
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Poor

Location: 18B, White Wall Texture + Drywall;South Wall Lab ID-Version‡: 10443910-1

Sample Layers	Asbestos Content
White Texture with Off-White Paint	ND
Off-White Texture with Multilayered Paint	< 1% Chrysotile
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Poor

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ASBESTOS PLM REPORT

Location: 18C, White Wall Texture + Drywall;East Wall Lab ID-Version‡: 10443911-1

Sample Layers	Asbestos Content
White Texture with Off-White Paint	ND
White Texture with Off-White Paint	ND
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Poor

Location: 19A, White Wall Texture;North Wall /Fitness Room Lab ID-Version‡: 10443912-1

Sample Layers	Asbestos Content
White Texture with Off-White Paint	ND
White Drywall with Brown Paper and Off-White Paint	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 19B, White Wall Texture;South Wall /Fitness Room Lab ID-Version‡: 10443913-1

Sample Layers	Asbestos Content
White Texture with Off-White Paint	ND
Brown Paper with Multilayered Paint	ND
Composite Non-Asbestos Content:	20% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 19C, White Wall Texture;East Wall /Fitness Room Lab ID-Version‡: 10443914-1

Sample Layers	Asbestos Content
White Texture with Off-White Paint	ND
White Texture with Off-White Paint	ND
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Poor

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ASBESTOS PLM REPORT

Location: 20A, Outside Asphalt;Back Drive Way/Wear Entrance of Back Driveway Lab ID-Version‡: 10443915-1

Sample Layers	Asbestos Content
Black Asphalt	ND
Sample Composite Homogeneity:	Good

Location: 20B, Outside Asphalt;Back Drive Way/Center Lab ID-Version‡: 10443916-1

Sample Layers	Asbestos Content
Black Asphalt	ND
Sample Composite Homogeneity:	Good

Location: 20C, Outside Asphalt;Parking Lot/Near Front Lab ID-Version‡: 10443917-1

Sample Layers	Asbestos Content
Black Asphalt	ND
Sample Composite Homogeneity:	Good

Location: 21A, CMU Grout;Diesel Tank Area Lab ID-Version‡: 10443918-1

Sample Layers	Asbestos Content
Gray Block with White Paint	ND
Gray Grout	ND
Sample Composite Homogeneity:	Moderate

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ASBESTOS PLM REPORT

Location: 21B, CMU Grout;Diesel Tank Area Lab ID-Version‡: 10443919-1

Sample Layers	Asbestos Content
Gray Block with White Paint	ND
Gray Grout	ND
Sample Composite Homogeneity:	Moderate

Location: 21C, CMU Grout;Diesel Tank Area Lab ID-Version‡: 10443920-1

Sample Layers	Asbestos Content
Gray Block with White Paint	ND
Gray Grout	ND
Sample Composite Homogeneity:	Moderate

Location: 22A, Beige Stucco;Southwest Exterior Wall Lab ID-Version‡: 10443921-1

Sample Layers	Asbestos Content
Light Gray Stucco	ND
Sample Composite Homogeneity:	Good

Location: 22B, Beige Stucco;Entrance Lab ID-Version‡: 10443922-1

Sample Layers	Asbestos Content
Light Gray Stucco	ND
Sample Composite Homogeneity:	Good

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

EMLab P&K
1501 West Knudsen Drive, Phoenix, AZ 85027
(800) 651-4802 Fax (623) 780-7695 www.emlab.com

Client: Terracon Consultants, Inc. - Emeryville
C/O: William Frieszell
Re: R1197759; Five Station #2-Milpitas

Date of Sampling: 07-02-2019
Date of Receipt: 07-03-2019
Date of Report: 07-08-2019

ASBESTOS PLM REPORT

Location: 22C, Beige Stucco;Diesel Tank Area Lab ID-Version‡: 10443923-1

Sample Layers	Asbestos Content
Light Gray Stucco with Beige Paint	ND
Sample Composite Homogeneity:	Good

Location: 22D, Beige Stucco;Tower Base Exterior Wall Lab ID-Version‡: 10443924-1

Sample Layers	Asbestos Content
Light Gray Stucco	ND
Sample Composite Homogeneity:	Good

Location: 22E, Beige Stucco;South West Side of Building Exterior Wall Lab ID-Version‡: 10443925-1

Sample Layers	Asbestos Content
Gray Stucco with Beige Paint	ND
Sample Composite Homogeneity:	Good

Location: 23A, Black Asphaltic Vapor Barrier;Southwest Exterior Wall Lab ID-Version‡: 10443926-1

Sample Layers	Asbestos Content
Brown Vapor Barrier	ND
Composite Non-Asbestos Content:	95% Cellulose
Sample Composite Homogeneity:	Good

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
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Client: Terracon Consultants, Inc. - Emeryville
C/O: William Frieszell
Re: R1197759; Five Station #2-Milpitas

Date of Sampling: 07-02-2019
Date of Receipt: 07-03-2019
Date of Report: 07-08-2019

ASBESTOS PLM REPORT

Location: 23B, Black Asphaltic Vapor Barrier;Entrance Exterior Wall Lab ID-Version‡: 10443927-1

Sample Layers	Asbestos Content
Brown Vapor Barrier	ND
Composite Non-Asbestos Content:	95% Cellulose
Sample Composite Homogeneity:	Good

Location: 23C, Black Asphaltic Vapor Barrier;Tower Base Exterior Wall Lab ID-Version‡: 10443928-1

Sample Layers	Asbestos Content
Brown Vapor Barrier	ND
Brown Wood	ND
Composite Non-Asbestos Content:	97% Cellulose
Sample Composite Homogeneity:	Moderate

Location: 24A, Silver Window Putty;Entrance Window Closet to Front Door Lab ID-Version‡: 10443929-1

Sample Layers	Asbestos Content
Silver Window Putty	ND
Sample Composite Homogeneity:	Good

Location: 24B, Silver Window Putty;Back Windows Lab ID-Version‡: 10443930-1

Sample Layers	Asbestos Content
Silver Window Putty	ND
Sample Composite Homogeneity:	Good

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
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(800) 651-4802 Fax (623) 780-7695 www.emlab.com

Client: Terracon Consultants, Inc. - Emeryville
C/O: William Frieszell
Re: R1197759; Five Station #2-Milpitas

Date of Sampling: 07-02-2019
Date of Receipt: 07-03-2019
Date of Report: 07-08-2019

ASBESTOS PLM REPORT

Location: 24C, Silver Window Putty;Southwest Side of Building Middle Window Lab ID-Version‡: 10443931-1

Sample Layers	Asbestos Content
Silver Window Putty	ND
Sample Composite Homogeneity:	Good

Location: 25A, HVAC Beige Glue;Heater Room Lab ID-Version‡: 10443932-1

Sample Layers	Asbestos Content
Beige Glue	ND
Yellow Insulation	ND
Composite Non-Asbestos Content:	75% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 25B, HVAC Beige Glue;Heater Room Lab ID-Version‡: 10443933-1

Sample Layers	Asbestos Content
Beige Glue	ND
Yellow Insulation	ND
Composite Non-Asbestos Content:	75% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: 25C, HVAC Beige Glue;Heater Room Lab ID-Version‡: 10443934-1

Sample Layers	Asbestos Content
Beige Glue	ND
Yellow Insulation	ND
Composite Non-Asbestos Content:	75% Glass Fibers
Sample Composite Homogeneity:	Moderate

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

EMLab P&K
A TestAmerica Company

Report for:

William Frieszell
Terracon Consultants, Inc. - Emeryville
1466 66th Street
Emeryville, CA 94608

Regarding: Project: R1197759; Five Station #2-Milpitas
EML ID: 2197993

Approved by:

Approved Signatory
Renee Luna-Trepczynski

REVISED REPORT

Dates of Analysis:
Asbestos-EPA 400 point count: 07-24-2019 and 07-25-2019

Service SOPs: Asbestos-EPA 400 point count (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1262)

EMLab P&K
1501 West Knudsen Drive, Phoenix, AZ 85027
(800) 651-4802 Fax (623) 780-7695 www.emlab.com

Client: Terracon Consultants, Inc. - Emeryville
C/O: William Frieszell
Re: R1197759; Five Station #2-Milpitas

Date of Sampling: 07-02-2019
Date of Receipt: 07-03-2019
Date of Report: 07-25-2019

ASBESTOS POINT COUNT REPORT

Location:	9A White Drywall + Base Compound;North Wall, Behind Door, Main Dorms		
Total Points Counted:	400		
Lab ID-Version‡:	10507203-2		
Sample Layers	**Asbestos Type**	**Asbestos Points Counted**	**Asbestos Concentration (%)**
Off-White Compound with White Paint	Chrysotile	5	1.25
Layer Totals:		5	1.25
White Drywall / Compound Composite	Chrysotile	1	0.25
Layer Totals:		1	0.25

Location:	18B White Wall Texture + Drywall;South Wall		
Total Points Counted:	400		
Lab ID-Version‡:	10507204-1		
Sample Layers	**Asbestos Type**	**Asbestos Points Counted**	**Asbestos Concentration (%)**
Off-White Texture with Multilayered Paint	Chrysotile	3	0.75
Layer Totals:		3	0.75

The analytical sensitivity is 1 asbestos point. The limit of detection is 1 asbestos point divided by the total number of points counted and multiplied by 100.

The results relate only to the items tested. Interpretation is left to the company and/or persons who conducted the field work. The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by any agency of the federal government.

All samples were received in acceptable condition unless otherwise noted. EMLab P&K reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.
Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

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Client: Terracon Consultants, Inc. - Emeryville
C/O: William Frieszell
Re: R1197759; Five Station #2-Milpitas

Date of Sampling: 07-02-2019
Date of Receipt: 07-03-2019
Date of Report: 07-25-2019

SUMMARY OF REVISIONS

Location: 9A; White Drywall + Base Compound;North Wall, Behind Door, Main Dorms Lab ID-Version‡: 10507203-2

Analysis Time revised. Asbestos Points counted revised. Sample Layers revised.

‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

002197993

Terracon

E-MAIL REPORT TO: *SEE BELOW PROJECT MANAGER (PM)*

☐ PM – S. Steiner sosteiner@terracon.com
☐ PM – K. Schroeter kmschroeter@terracon.com
☐ PM – K. Pilgrim kmpilgrim@terracon.com
☐ PM- M. Benefield msbenefield@terracon.com
☐ PM – T. Kattchee takattchee@terracon.com
☒ PM – W. Frieszell wmfrieszell@terracon.com
☐ PM- D. Block David.block@terracon.com
☐ denise.wallen@terracon.com Engineering Assistant
☐ eric.dyer@terracon.com Engineering Assistant

ACM BULK SAMPLE DATA SHEET

☒ PLM Analysis (Analyze all samples)
☐ Stop Analysis at First Positive
☐ Point Count Analysis (400-point)

Project Name/ Address/ Building No. Fire Station #2 - Milpitas

Project# 1197759 Sampled By: Wyatt R. Sampling Date: 7-2-19

Sample(s) sent to: ☐ MAL ☐ ASB TEM ☒ EMLAB ☐ Other

TAT ☐ Rush ☐ 24HRS ☒ 48HR ☐ 3-5 days

HM# 01	Material Description: Gray Roofing field over Black asphaltic field	
Sample ID	Sample Location & Material Location	Quantity:
1A	Low Roof East Side	
1B	Low Roof Center	
1C	Low Roof West	
HM# 02	**Material Description: Black Penetration/Patch Mastic**	
Sample ID	Sample Location & Material Location	Quantity:
2A	High Roof central Skylight	
2B	Low Roof West	
2C	Low roof curb cap South	
HM# 03	**Material Description: Low Roof flashing over black asphaltic flashing**	
Sample ID	Sample Location & Material Location	Quantity:
3A	Low Roof East side	
3B	Low Roof South Side	
3C	Low Roof West side	
HM# 04	**Material Description: Silver HVAC Mastic**	
Sample ID	Sample Location & Material Location	Quantity:
4A	High roof central HVAC unit	
4B	High Roof central HVAC unit	
HM# 05	**Material Description: Black asphaltic roof felt**	
Sample ID	Sample Location & Material Location	Quantity:
5A	High roof - East	
5B	↓ - Center	
5C	↓ - West	

Relinquished By:	Wyatt Reiser	Signature:		Date/Time:	7/2/19
Received By:	Fedex 935	Signature:	K Griffith	Date/ Time:	7/3/19
Relinquished By:		Signature:		Date/Time:	
Received By:		Signature:		Date/Time:	


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☐ PM – S. Steiner sgsteiner@terracon.com	☐ PM – K. Schroeter kmschroeter@terracon.com	☐ PM – K. Pilgrim kmpilgrim@terracon.com
☐ PM- M. Benefield msbenefield@terracon.com	☐ PM – T. Kaltchee takaltchee@terracon.com	☒ PM – W. Frieszell wmfrieszell@terracon.com
☐ PM- D. Block David.block@terracon.com	☐ denise.walen@terracon.com Engineering Assistant	☐ eric.dyer@terracon.com Engineering Assistant

ACM BULK SAMPLE DATA SHEET

☒ PLM Analysis (Analyze all samples)
☐ Stop Analysis at First Positive
☐ Point Count Analysis (400-point)

Project Name/ Address/ Building No. Wildfires - Riverstation #2

Project# R1197159 Sampled By: Wyatt R. Asbl. Sampling Date: 7-2-19

Sample(s) sent to: ☐ MAL ☐ ASB TEM ☒ EMLAB ☐ Other

TAT ☐ Rush ☐ 24HRS ☒ 48HR ☐ 3-5 days

HM# 06	Material Description: Black asphaltic curb	
Sample ID	Sample Location & Material Location	Quantity:
6A	High Roof HVAC curb	
6B	High Roof West perimeter	

HM# 07	Material Description: Beige patch	
Sample ID	Sample Location & Material Location	Quantity:
7A	South parapet	
7B	Tower Base	

HM# 08	Material Description: Dark Grey Base Cove + Tan Glue	
Sample ID	Sample Location & Material Location	Quantity:
8A	NORTH WALL, Behind door, MAIN DORMS	
8B	NORTH, DINING ROOM	
8C	SOUTH WEST WALL WATCH TOWER.	

HM# 09	Material Description: White Drywall + Base compound	
Sample ID	Sample Location & Material Location	Quantity:
9A	NORTH WALL, Behind DOOR, MAIN DORMS	
9B	Watch tower Bathroom	
9C		

HM# 10	Material Description: Multi-colored blue carpet + TAN Glue	
Sample ID	Sample Location & Material Location	Quantity:
10A	NORTH WALL, Behind DOOR, MAIN DORMS	
10B	SOUTH-WEST WALL, Watch tower	

Relinquished By:	Wyatt Reno Fedex 935	Signature:		Date/Time:	7/2/19
Received By:		Signature:	KRISTIN	Date/ Time:	7/3/19
Relinquished By:		Signature:		Date/Time:	
Received By:		Signature:		Date/Time:	

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Terracon

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ACM BULK SAMPLE DATA SHEET

☒ PLM Analysis (Analyze all samples)
☐ Stop Analysis at First Positive
☐ Point Count Analysis (400-point)

Project Name/ Address/ Building No. Milpitas Restroom #2

Project# R1197759 Sampled By: [redacted] Wyatt R Sampling Date: 7/2/19

Sample(s) sent to: ☐ MAL ☐ ASB TEM ☒ EMLAB ☐ Other

TAT ☐ Rush ☐ 24HRS ☒ 48HR ☐ 3-5 days

HM# 11	Material Description: Multi-colored Bluish carpet squares + Beige glue
Sample ID	Sample Location & Material Location — Quantity:
11A	North Dining Room
11B	South Wall Dining Room

HM# 12	Material Description: Wainscot yellow glue
Sample ID	Sample Location & Material Location — Quantity:
12A	Water tower Bathroom
12B	MENS Bathroom
12C	Outside Water tower Door / Hallway

HM# 13	Material Description: GRAY Pebble sheet flooring + grey glue
Sample ID	Sample Location & Material Location — Quantity:
13A	Water tower Bathroom
13B	↓
13C	Kitchen

HM# 14	Material Description: White ceramic 2" x 2" tile w/ Grout + glue
Sample ID	Sample Location & Material Location — Quantity:
14A	Womens Bathroom
14B	MENS Bathroom

HM# 15	Material Description: Beige + Brown ceramic 1" x 1" tile w/ grout + mortar
Sample ID	Sample Location & Material Location — Quantity:
15A	Officers Bathroom
15B	↓

Relinquished By:	Wyatt Renn Fedex 935	Signature:	[signature]	Date/Time:	7/2/19
Received By:		Signature:	K Griffith	Date/ Time:	7/3/19
Relinquished By:		Signature:		Date/Time:	
Received By:		Signature:		Date/Time:	

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ACM BULK SAMPLE DATA SHEET

☑ PLM Analysis (Analyze all samples)
☐ Stop Analysis at First Positive
☐ Point Count Analysis (400-point)

Project Name/ Address/ Building No. Milpitas - Firestation #2

Project# R-1197759 Sampled By: Wyatt R. Sampling Date: 7/2/19

Sample(s) sent to: ☐ MAL ☐ ASB TEM ☒ EMLAB ☐ Other

TAT ☐ Rush ☐ 24HRS ☒ 48HR ☐ 3-5 days

HM# 16	Material Description: White 1'x1' acoustic tile w/ Fissures	
Sample ID	Sample Location & Material Location	Quantity:
16A	Southwest end of Dorms	
16B	Hallway, in front of ~~Heating~~ Heater Room	

HM# 17	Material Description: TAN COATING on Concrete floor	
Sample ID	Sample Location & Material Location	Quantity:
17A	South-East, Engine Room	
17B	Middle ↓	
17C	North-West ↓	

HM# 18	Material Description: White wall texture + Drywall	
Sample ID	Sample Location & Material Location	Quantity:
18A	~~West~~ ~~North~~ ~~West~~ wall / fitness Room	
18B	South wall ↓	
18C	East wall	

HM# 19	Material Description: White wall texture.	
Sample ID	Sample Location & Material Location	Quantity:
19A	North Wall / fitness Room	
19B	South wall ↓	
19C	east wall ↓	

HM# 20	Material Description: Outside asphalt	
Sample ID	Sample Location & Material Location	Quantity:
20A	back Drive way / Near entrance of back Driveway	
20B	↓ / center	
20C	Parking lot / near Front	

Relinquished By:	Wyatt R.	Signature:		Date/Time:	7/2/19
Received By:	Fedex 935	Signature:	K Griffith	Date/ Time:	7/3/19
Relinquished By:		Signature:		Date/Time:	
Received By:		Signature:		Date/Time:	

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ACM BULK SAMPLE DATA SHEET

☑ PLM Analysis (Analyze all samples)
☐ Stop Analysis at First Positive
☐ Point Count Analysis (400-point)

Project Name/ Address/ Building No. Milpitas - Fire Station #2

Project# R1197759 Sampled By: Wyatt R. Sampling Date: 7/2/19

Sample(s) sent to: ☐ MAL ☐ ASB TEM ☒ EMLAB ☐ Other

TAT ☐ Rush ☐ 24HRS ☒ 48HR ☐ 3-5 days

HM# 21	Material Description CMU grout	
Sample ID	Sample Location & Material Location	Quantity:
21A	Diesel tank area	
21B	↓	
21C	↓	

HM# 22	Material Description: Beige stucco	
Sample ID	Sample Location & Material Location	Quantity:
22A	South West exterior wall	
22B	Entrance ↓	
22C	Diesel tank area	

HM# 23	Material Description: Black asphaltic vapor barrier	
Sample ID	Sample Location & Material Location	Quantity:
23A	Southwest exterior wall	
23B	Entrance ↓	
23C	TOWER BASE EXTERIOR WALL	

HM# 22	Material Description: Beige stucco	
Sample ID	Sample Location & Material Location	Quantity:
22D	TOWER BASE EXTERIOR WALL	
22E	South-West side of building exterior wall	

HM# 23	Material Description: Black asphaltic vapor barrier	
Sample ID	Sample Location & Material Location	Quantity:
23D	ignore	
23E		

Relinquished By:	Wyatt Reyes	Signature:		Date/Time:	7/2/19
Received By:	Fedex 935	Signature:	KGth	Date/ Time:	7/3/19
Relinquished By:		Signature:		Date/Time:	
Received By:		Signature:		Date/Time:	

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☐ PM- D. Block David.block@terracon.com
☐ denise.wallen@terracon.com Engineering Assistant
☐ eric.dyer@terracon.com Engineering Assistant

ACM BULK SAMPLE DATA SHEET

☒ PLM Analysis (Analyze all samples)
☐ Stop Analysis at First Positive
☐ Point Count Analysis (400-point)

Project Name/ Address/ Building No. Whites Fire Station #2

Project# R1977759 Sampled By: Wyatt R. Sampling Date: 07/02/19

Sample(s) sent to: ☐ MAL ☐ ASB TEM ☒ EMLAB ☐ Other

TAT ☐ Rush ☐ 24HRS ☒ 48HR ☐ 3-5 days

HM# 24	Material Description Silver window Putty	
Sample ID	Sample Location & Material Location	Quantity:
24A	Entrance window closest to front door	
24B	Back windows	
24C	Southwest side of building middle window	

HM# 25	Material Description: HVAC Beige Glue	
Sample ID	Sample Location & Material Location	Quantity:
25A	Heater room	
25B	↓	
25C		

HM#	Material Description:	
Sample ID	Sample Location & Material Location	Quantity:

HM#	Material Description:	
Sample ID	Sample Location & Material Location	Quantity:

HM#	Material Description:	
Sample ID	Sample Location & Material Location	Quantity:

Relinquished By:	Wyatt Reno	Signature:		Date/Time:	7/2/19
Received By:	Fedex 935	Signature:		Date/ Time:	7/3/19
Relinquished By:		Signature:		Date/Time:	
Received By:		Signature:		Date/Time:	

APPENDIX B

LEAD ANALYTICAL LABORATORY DATA

J3 Resources, Inc.
3113 Red Bluff Road Pasadena, Texas 77503
Phone: (713) 290-0223 – Fax: (832) 831-5669
j3resources.com

Lead in Paint Performed by Flame AA – USEPA SW846 7420/3050B

Angela Hetherington
EMLab P&K
1501 W Knudsen Dr
Phoenix, AZ 85027

J3 Order #: JP191014444
Project #: 3042568
Receipt Date: 5-Jul-2019
Analysis Date: 8-Jul-2019
Report Date: 8-Jul-2019

EMLab ID: 2198091

SAMPLE ID	PAINT COLOR	LEAD CONCENTRATION (mg/kg)	LEAD CONCENTRATION (%)
Pb-01	**Paint Chip**	**390**	**0.039%**
Pb-02	**Paint Chip**	**< 50**	**< 0.005%**
Pb-03	**Paint Chip**	**< 50**	**< 0.005%**
Pb-04	**Paint Chip**	**< 50**	**< 0.005%**
Pb-05	**Paint Chip**	**< 50**	**< 0.005%**
Pb-06	**Paint Chip**	**< 50**	**< 0.005%**

Reporting Limit = 50.0 mg/kg N/A = Not Applicable
INS = Insufficient Sample Weight NS = Not Submitted

Analyst: Korry Huddleston

Scott Ward, Ph.D. Lab Director

AIHA LAP, LLC
ACCREDITED LABORATORY
INDUSTRIAL HYGIENE ENVIRONMENTAL LEAD
ENVIRONMENTAL MICROBIOLOGY
ISO/IEC 17025:2005
WWW.AIHAACCREDITEDLABS.ORG
LAB # 157714

☐ Open Lab Fee

IH CHAIN OF CUSTODY

J3 Or[illegible]ny) 14444

J3 resources, inc.

Submitter Name:	Angela Hetherington	**Bill to:**	Accounts Payable
Company:	EMLab P&K	**Address:**	EMLab P&K LLC
Address:	1501 W. Knudsen Drive		4101 Shuffel Street NW
		City/State:	North Canton, OH **Zip:** 44720
City/State:	Phoenix, AZ **Zip:** 85027	**PO #:**	3042568 Per D.H./n.t.

Project Information

Project Name: EMLab ID: 2198091	Project Manager: Angela Hetherington
Project #: EMLab ID: 2198091	Telephone – Office/Cell 623-298-1014
Reports - Email Address: ahetherington@emlabpk.com	
Invoice - Email Address: ahetherington@emlabpk.com	Notification By: Email: ☒ Verbal: ☐ Text: ☐
Special Instructions:	

Turnaround Times – Please Select One

Emergency* ☐	1 Day ☑	2 Day ☐	3 Day ☐	5 Day ☐

ASBESTOS

PLM - Bulk	PCM - Air	TEM - Air	TEM - Bulk	TEM - Water	TEM - Dust	TEM/PLM Soil/Vermiculite/Ore
EPA 600/R-93/116 ○ Visual Estimation (<1%) ○ 400 Point Count 0.25% ○ 1,000 Point Count 0.1% ○ Gravimetric Reduction ○ Matrix Reduction (+/-) ○ **NIOSH 9002** ○ **OSHA ID-191**	○ **NIOSH 7400** ○ **ASTM D7201** ○ **ISO 8672** ○ **OSHA ID-160**	○ **AHERA** ○ **NIOSH 7402** ○ **ASTM D6281** ○ **ISO 10312** ○ **ISO 13794**	○ Gravimetric Reduction (<1%) ○ Matrix Reduction (+/-) ○ Qualitative (+/-) ○ Drop Mount ○ Filtration	○ **EPA 100.2** Drinking Water ○ >10 µm fibers ○ ≥0.5 µm fibers ○ **EPA 100.2** Effluent / WW	○ **ASTM D5755** Microvac ○ **ASTM D6480** Wipe ○ **600/J-93/167** Carpet - EPA ○ Bulk Dust Qualitative	○ **ASTM 7521**-TEM (+/-) ○ **ASTM 7521**-TEM (<1%) ○ **CARB 435**-Modified ○ Soil – PLM Only (+/-) ○ Vermiculite - TEM (+/-) ○ Vermiculite-Cincinnati ○ Erionite ID

METALS

Flame AA	Graphite Furnace AA - LEAD	ICP
☒ Lead in Paint – **SW846 7420/3050B** ○ Lead in Air – **NIOSH 7082** ○ Lead in Wipes – **SW846 7420/3050B** ○ Lead in Soil – **SW846 7420/3050B**	○ Drinking Water – **EPA 200.9** ○ Wastewater – **SW846-7421** ○ Soil/Sludge – **SW846-7421** ○ Air – **NIOSH 7105**	○ Elements in Air – **NIOSH 7300** ○ Wipe/Soil – **SW846-6010B** ○ Effluent – **SW846-6010B** ○ Welding Fume – **NIOSH 7300M** ○ TCLP – **SW846-1311/6010B**

SILICA/PARTICULATES

X-Ray Diffraction / Gravimetric
○ Respirable Crystalline Silica **NIOSH 7500 / OSHA 142** ○ **NIOSH 0500** – Total Particulates ○ **NIOSH 0600** – Respirable Particulates

Total Number of Samples Submitted:

Positive Stop: ☐ YES ☐ NO

Signatures

Relinquished By:	M. Hernandez	**Date:**	7/3/19	**Time:**	1:34
Received By:	[signature]	**Date:**	7/5/19	**Time:**	9:41am
Relinquished By:		**Date:**		**Time:**	
Received By:		**Date:**		**Time:**	

** Emergency TAT requires prior lab notification. All samples analyzed outside normal business hours are charged at Emergency rate.*
***TAT's are in Business Days rather than Hours (i.e.1 Day TAT = End of Next Business Day)*

IH CHAIN OF CUSTODY

Project Name/Number EMLab ID: 2198091 Page 2 of 2

SAMPLE IDENTIFICATION

SAMPLE NUMBER	SAMPLE LOCATION / MATERIAL	VOLUME
Pb-01		
Pb-02		
Pb-03		
Pb-04		
Pb-05		
Pb-06		

Comments/Special Instructions:

002198091

Terracon

E-MAIL REPORT TO: PROJECT MANAGER (PM)

☐ denise.wallen@terracon.com Engineering Assistant	☐ eric.dyer@terracon.com Engineering Assistant
☐ PM – S. Steiner ssteiner@terracon.com	☐ PM – K. Schroeter kmschroeter@terracon.com
☐ PM – K. Pilgrim kmpilgrim@terracon.com	☐ PM- M. Benefield mjbenefield@terracon.com
☒ PM – W. Frierson wmfrierson@terracon.com	☐ PM – T. Katchee tskatchee@terracon.com
☐ PM – D. Block david.block@terracon.com	

LEAD PAINT SAMPLE DATA SHEET

* Lead Analysis
____ Flame AA (EPA 7420) ____ TTLC

PAGE 1 OF 2

Project Name/ Address/ Building No. Millitas Fire Station #2 Survey

Project# R1197759 Sampled By: Wyatt Renner Sampling Date: 7/2/19

Sample(s) sent to: ☐ MAL ☐ EMSL ☐ Aerobiology ☐ Quantem Other EnLab

TAT ☐ Rush ☐ 24HRS ☒ 48HRS ☐ 3-5 Day

Sample ID	Paint Description and Sample Location	Condition (U/F/P)
Pb-01	Paint Color: Brown Substrate: Wood Component: Roof perimeter Sample Location: Bldg # ____ Unit # ____ Room ____ High roof South perimeter	
Pb-02	Paint Color: Gray tile Substrate: floor mortar Component: Kit floor Sample Location: Bldg # ____ Unit # ____ Room ____ Womens RR	
Pb-03	Paint Color: Tan+Brown 2"x2" tile Substrate: mortar Component: floor Sample Location: Bldg # ____ Unit # ____ Room ____	
Pb-04	Paint Color: silver window paint Substrate: Metal Component: window frame Sample Location: Bldg # ____ Unit # ____ Room ____ Exterior Window	
Pb-05	Paint Color: Beige stucco paint Substrate: Stucco Component: exterior wall Sample Location: Bldg # ____ Unit # ____ Room ____	

Relinquished By: Wyatt Renner Fedex 935 Signature: K Griffith Date/Time: 7/2/19

Received By: ____ Signature: ____ Date/ Time: 7/3/19

Received By: ____ Signature: ____ Date/Time: ____

002198091

Terracon

E-MAIL REPORT TO: PROJECT MANAGER (PM)

☐ denise.wallen@terracon.com Engineering Assistant	☐ eric.dyer@terracon.com Engineering Assistant				
☐ PM – S. Steiner ssteiner@terracon.com	☐ PM – K. Schroeter kmschroeter@terracon.com				
☐ PM – K. Pilgrim kmpilgrim@terracon.com	☐ PM- M. Benefield msbenefield@terracon.com	☒ PM – W. Frieszell wmfrieszell@terracon.com	☐ PM – T. Katchee tskatchee@terracon.com	☐ PM – D. Block david.block@terracon.com	

LEAD PAINT SAMPLE DATA SHEET

*Lead Analysis
____ Flame AA (EPA 7420) ____ TTLC

Project Name/ Address/ Building No. Millpitas Fire Station #2 Survey

Project# R1197759 Sampled By: Wyatt Renner Sampling Date: 7/2/19

Sample(s) sent to: ☐ MAL ☐ EMSL ☐ Aerobiology ☐ Quantem Other EmLab

TAT ☐ Rush ☐ 24HRS ☒ 48HRS ☐ 3-5 Day

Sample ID	Paint Description and Sample Location	Condition (I/F/P)
Rb	Paint Color: White Substrate: Drywall Component: Wall Sample Location: Bldg # Watchtower Unit # ____ Room Restroom	
	Paint Color: ____ Substrate: ____ Component: ____ Sample Location: Bldg # ____ Unit # ____ Room ____	
	Paint Color: ____ Substrate: ____ Component: ____ Sample Location: Bldg # ____ Unit # ____ Room ____	
	Paint Color: ____ Substrate: ____ Component: ____ Sample Location: Bldg # ____ Unit # ____ Room ____	
	Paint Color: ____ Substrate: ____ Component: ____ Sample Location: Bldg # ____ Unit # ____ Room ____	

Relinquished By:	Wyatt Renner	Signature:		Date/Time:	7/2/19
Received By:	Fedex 935	Signature:	KGree	Date/ Time:	7/3/19
Received By:		Signature:		Date/Time:	

APPENDIX C

PCB ANALYTICAL LABORATORY DATA

McCampbell Analytical, Inc.
"When Quality Counts"

Analytical Report

WorkOrder: 1907160

Report Created for: Terracon

1466 66th Street
Emeryville, CA 94608

Project Contact: William Frieszell
Project P.O.:
Project: R1197759; Fire Station #2- Milpitas

Project Received: 07/03/2019

Analytical Report reviewed & approved for release on 07/15/2019 by:

Jennifer Lagerbom
Project Manager

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Glossary of Terms & Qualifier Definitions

Client: Terracon
Project: R1197759; Fire Station #2- Milpitas
WorkOrder: 1907160

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

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1534 Willow Pass Road, Pittsburg, CA 94565-1701
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http://www.mccampbell.com / E-mail: main@mccampbell.com

Glossary of Terms & Qualifier Definitions

Client: Terracon
Project: R1197759; Fire Station #2- Milpitas
WorkOrder: 1907160

Analytical Qualifiers

a4	Reporting limits raised due to the sample's matrix prohibiting a full volume extraction.
a7	Reporting limit raised due to limited sample amount
h4	Sulfuric acid permanganate (EPA 3665) cleanup
h7	Copper (EPA 3660B) cleanup

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http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Terracon	**WorkOrder:**	1907160
Date Received:	7/3/19 9:29	**Extraction Method:**	SW3550B
Date Prepared:	7/3/19	**Analytical Method:**	SW8082
Project:	R1197759; Fire Station #2- Milpitas	**Unit:**	mg/kg

Polychlorinated Biphenyls (PCBs) Aroclors

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
PCB-1A	**1907160-001A**	**Solid**	**07/02/2019**	**GC41 07101978.d**	**180854**

Analytes	Result	RL	DF	Date Analyzed
Aroclor1016	ND	0.50	1	07/11/2019 15:19
Aroclor1221	ND	0.50	1	07/11/2019 15:19
Aroclor1232	ND	0.50	1	07/11/2019 15:19
Aroclor1242	ND	0.50	1	07/11/2019 15:19
Aroclor1248	ND	0.50	1	07/11/2019 15:19
Aroclor1254	ND	0.50	1	07/11/2019 15:19
Aroclor1260	ND	0.50	1	07/11/2019 15:19
PCBs, total	ND	0.50	1	07/11/2019 15:19

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	85	69-143	07/11/2019 15:19

Analyst(s): LT Analytical Comments: a4,h4

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
PCB-1B	**1907160-002A**	**Solid**	**07/02/2019**	**GC23 07111927.d**	**180854**

Analytes	Result	RL	DF	Date Analyzed
Aroclor1016	ND	1.1	1	07/11/2019 23:16
Aroclor1221	ND	1.1	1	07/11/2019 23:16
Aroclor1232	ND	1.1	1	07/11/2019 23:16
Aroclor1242	ND	1.1	1	07/11/2019 23:16
Aroclor1248	ND	1.1	1	07/11/2019 23:16
Aroclor1254	ND	1.1	1	07/11/2019 23:16
Aroclor1260	ND	1.1	1	07/11/2019 23:16
PCBs, total	ND	1.1	1	07/11/2019 23:16

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	84	69-143	07/11/2019 23:16

Analyst(s): LT Analytical Comments: h4,a7

(Cont.)

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1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Terracon	**WorkOrder:**	1907160
Date Received:	7/3/19 9:29	**Extraction Method:**	SW3550B
Date Prepared:	7/3/19	**Analytical Method:**	SW8082
Project:	R1197759; Fire Station #2- Milpitas	**Unit:**	mg/kg

Polychlorinated Biphenyls (PCBs) Aroclors

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
PCB-1C	**1907160-003A**	**Solid**	**07/02/2019**	**GC41 07101979.d**	**180854**

Analytes	Result	RL	DF	Date Analyzed
Aroclor1016	ND	2.5	1	07/11/2019 15:35
Aroclor1221	ND	2.5	1	07/11/2019 15:35
Aroclor1232	ND	2.5	1	07/11/2019 15:35
Aroclor1242	ND	2.5	1	07/11/2019 15:35
Aroclor1248	ND	2.5	1	07/11/2019 15:35
Aroclor1254	ND	2.5	1	07/11/2019 15:35
Aroclor1260	ND	2.5	1	07/11/2019 15:35
PCBs, total	ND	2.5	1	07/11/2019 15:35

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	83	69-143	07/11/2019 15:35

Analyst(s): LT Analytical Comments: a4,h7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
PCB-3A	**1907160-004A**	**Solid**	**07/02/2019**	**GC41 07101980.d**	**180854**

Analytes	Result	RL	DF	Date Analyzed
Aroclor1016	ND	1.7	1	07/11/2019 15:50
Aroclor1221	ND	1.7	1	07/11/2019 15:50
Aroclor1232	ND	1.7	1	07/11/2019 15:50
Aroclor1242	ND	1.7	1	07/11/2019 15:50
Aroclor1248	ND	1.7	1	07/11/2019 15:50
Aroclor1254	ND	1.7	1	07/11/2019 15:50
Aroclor1260	ND	1.7	1	07/11/2019 15:50
PCBs, total	ND	1.7	1	07/11/2019 15:50

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	86	69-143	07/11/2019 15:50

Analyst(s): LT Analytical Comments: a4,h7

(Cont.)

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"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Terracon	**WorkOrder:**	1907160
Date Received:	7/3/19 9:29	**Extraction Method:**	SW3550B
Date Prepared:	7/3/19	**Analytical Method:**	SW8082
Project:	R1197759; Fire Station #2- Milpitas	**Unit:**	mg/kg

Polychlorinated Biphenyls (PCBs) Aroclors

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
PCB-3B	**1907160-005A**	**Solid**	**07/02/2019**	**GC41 07101981.d**	**180854**

Analytes	Result	RL	DF	Date Analyzed
Aroclor1016	ND	1.0	1	07/11/2019 16:05
Aroclor1221	ND	1.0	1	07/11/2019 16:05
Aroclor1232	ND	1.0	1	07/11/2019 16:05
Aroclor1242	ND	1.0	1	07/11/2019 16:05
Aroclor1248	ND	1.0	1	07/11/2019 16:05
Aroclor1254	ND	1.0	1	07/11/2019 16:05
Aroclor1260	ND	1.0	1	07/11/2019 16:05
PCBs, total	ND	1.0	1	07/11/2019 16:05

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	83	69-143	07/11/2019 16:05

Analyst(s): LT Analytical Comments: a4,h7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
PCB-3C	**1907160-006A**	**Solid**	**07/02/2019**	**GC41 07121929.d**	**180854**

Analytes	Result	RL	DF	Date Analyzed
Aroclor1016	ND	1.2	1	07/13/2019 04:58
Aroclor1221	ND	1.2	1	07/13/2019 04:58
Aroclor1232	ND	1.2	1	07/13/2019 04:58
Aroclor1242	ND	1.2	1	07/13/2019 04:58
Aroclor1248	ND	1.2	1	07/13/2019 04:58
Aroclor1254	ND	1.2	1	07/13/2019 04:58
Aroclor1260	ND	1.2	1	07/13/2019 04:58
PCBs, total	ND	1.2	1	07/13/2019 04:58

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	101	69-143	07/13/2019 04:58

Analyst(s): LT Analytical Comments: a7,h4

McCampbell Analytical, Inc.
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1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Quality Control Report

Client:	Terracon	**WorkOrder:**	1907160
Date Prepared:	7/2/19	**BatchID:**	180854
Date Analyzed:	7/3/19	**Extraction Method:**	SW3550B
Instrument:	GC20	**Analytical Method:**	SW8082
Matrix:	Soil	**Unit:**	mg/kg
Project:	R1197759; Fire Station #2- Milpitas	**Sample ID:**	MB/LCS/LCSD-180854

QC Summary Report for SW8082

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Aroclor1016	ND	0.0051	0.050	-	-	-
Aroclor1221	ND	0.011	0.050	-	-	-
Aroclor1232	ND	0.0063	0.050	-	-	-
Aroclor1242	ND	0.0067	0.050	-	-	-
Aroclor1248	ND	0.0040	0.050	-	-	-
Aroclor1254	ND	0.0068	0.050	-	-	-
Aroclor1260	ND	0.0061	0.050	-	-	-
PCBs, total	ND	N/A	0.050	-	-	-
Surrogate Recovery						
Decachlorobiphenyl	0.057			0.050	114	75-136

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Aroclor1016	0.16	0.16	0.15	107	110	90-125	2.54	20
Aroclor1260	0.14	0.14	0.15	91	94	77-122	3.24	20
Surrogate Recovery								
Decachlorobiphenyl	0.049	0.045	0.050	98	91	75-136	7.02	20

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1907160 **ClientCode: RGAE**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag
☐ Detection Summary ☐ Dry-Weight

Report to:
William Frieszell
Terracon
1466 66th Street
Emeryville, CA 94608
(510) 547-7771 FAX: (510) 547-1983

Email: wmfrieszell@terracon.com
cc/3rd Party:
PO:
Project: R1197759; Fire Station #2- Milpitas

Bill to:
Anita G. Ilsley
Terracon
1466 66th Street
Emeryville, CA 94608
anita.ilsley@rgaenv.com

Requested TAT: **5 days;**

Date Received: **07/03/2019**
Date Logged: **07/03/2019**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below) 1	2	3	4	5	6	7	8	9	10	11	12
1907160-001	PCB-1A	Solid	7/2/2019 00:00	☐	A											
1907160-002	PCB-1B	Solid	7/2/2019 00:00	☐	A											
1907160-003	PCB-1C	Solid	7/2/2019 00:00	☐	A											
1907160-004	PCB-3A	Solid	7/2/2019 00:00	☐	A											
1907160-005	PCB-3B	Solid	7/2/2019 00:00	☐	A											
1907160-006	PCB-3C	Solid	7/2/2019 00:00	☐	A											

Test Legend:

1	8082_PCB_S	2		3		4	
5		6		7		8	
9		10		11		12	

Project Manager: Angela Rydelius

Prepared by: Tina Perez

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

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McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

WORK ORDER SUMMARY

Client Name: TERRACON
Client Contact: William Frieszell
Contact's Email: wmfrieszell@terracon.com

Project: R1197759; Fire Station #2- Milpitas
Comments:

Work Order: 1907160
QC Level: LEVEL 2
Date Logged: 7/3/2019

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1907160-001A	PCB-1A	Solid	SW8082 (PCBs Only)	1	Plastic Baggie, Small	☐	7/2/2019	5 days		☐	
1907160-002A	PCB-1B	Solid	SW8082 (PCBs Only)	1	Plastic Baggie, Small	☐	7/2/2019	5 days		☐	
1907160-003A	PCB-1C	Solid	SW8082 (PCBs Only)	1	Plastic Baggie, Small	☐	7/2/2019	5 days		☐	
1907160-004A	PCB-3A	Solid	SW8082 (PCBs Only)	1	Plastic Baggie, Small	☐	7/2/2019	5 days		☐	
1907160-005A	PCB-3B	Solid	SW8082 (PCBs Only)	1	Plastic Baggie, Small	☐	7/2/2019	5 days		☐	
1907160-006A	PCB-3C	Solid	SW8082 (PCBs Only)	1	Plastic Baggie, Small	☐	7/2/2019	5 days		☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

303

1907160

Terracon

***E-MAIL REPORT TO: PROJECT MANAGER (PM) AND ADDITIONAL RECIPIENTS BELOW ***

- ☐ PM – S. Steiner spsteiner@terracon.com
- ☐ PM – K. Schroeter kmschroeter@terracon.com
- ☐ PM – K. Pilgrim kmpilgrim@terracon.com
- ☐ PM- M. Benefield msbenefield@terracon.com
- ☐ PM – T. Kattchee takattchee@terracon.com
- ☒ PM – W. Frieszell wmfrieszell@terracon.com
- ☐ PM – D. Block David.block@terracon.com
- ☐ denise.wallen@terracon.com Engineering Assistant
- ☐ eric.dyer@terracon.com Engineering Assistant

PCB
BULK SAMPLE DATA SHEET

PAGE 1 OF 1

Project Name/ Address/ Building No. Fire-Station #2 - Milpitas

Project# R1147759 **Sampled By:** Wyatt-R **Sampling Date:** 7/2/19

Sample(s) sent to: ~~Emzad~~ M°Campbell **TAT** ☐ Rush ☐ 24HRS ☒ ~~48HR~~ ☒ ~~3-5 days~~ 5 days

HM# PCB-1	Material Description: Beige carpet mastic	
Sample ID	**Sample Location & Material Location**	**Quantity:**
PCB-1A	Behind door in DORMS	
PCB-1B	kitchen entry, near dining room	
PCB-1C	dining room center	

HM# PCB-3	Material Description: Fiber glass insulation from HVAC	
Sample ID	**Sample Location & Material Location**	**Quantity:**
PCB-3A	HVAC in theater room	
PCB-3B	↓	
PCB-3C		

HM#	Material Description:	
Sample ID	**Sample Location & Material Location**	**Quantity:**

HM#	Material Description:	
Sample ID	**Sample Location & Material Location**	**Quantity:**

HM#	Material Description:	
Sample ID	**Sample Location & Material Location**	**Quantity:**

Relinquished By: Wyatt Renner **Signature** **Date/Time:** 7/2/19

Received By: T.P. **Signature:** **Date/ Time:** 7/3/19 @09:29

Received By: **Signature:** **Date/Time:**

TRK# 0201 6822 2397 3323 ST

1466 66th Street Emeryville CA 94608 Tel: (510) 547-7711 Fax: (510) 547-1983

304

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Sample Receipt Checklist

Client Name:	**Terracon**	Date and Time Received:	**7/3/2019 09:29**
Project:	**R1197759; Fire Station #2- Milpitas**	Date Logged:	**7/3/2019**
		Received by:	Tina Perez
WorkOrder №:	**1907160** Matrix: Solid	Logged by:	Tina Perez
Carrier:	FedEx		

Chain of Custody (COC) Information

Chain of custody present?	Yes	☑	No	☐	
Chain of custody signed when relinquished and received?	Yes	☑	No	☐	
Chain of custody agrees with sample labels?	Yes	☑	No	☐	
Sample IDs noted by Client on COC?	Yes	☑	No	☐	
Date and Time of collection noted by Client on COC?	Yes	☑	No	☐	
Sampler's name noted on COC?	Yes	☑	No	☐	
COC agrees with Quote?	Yes	☐	No	☐	NA ☑

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes	☑	No	☐	NA ☐
Shipping container/cooler in good condition?	Yes	☑	No	☐	
Samples in proper containers/bottles?	Yes	☑	No	☐	
Sample containers intact?	Yes	☑	No	☐	
Sufficient sample volume for indicated test?	Yes	☑	No	☐	

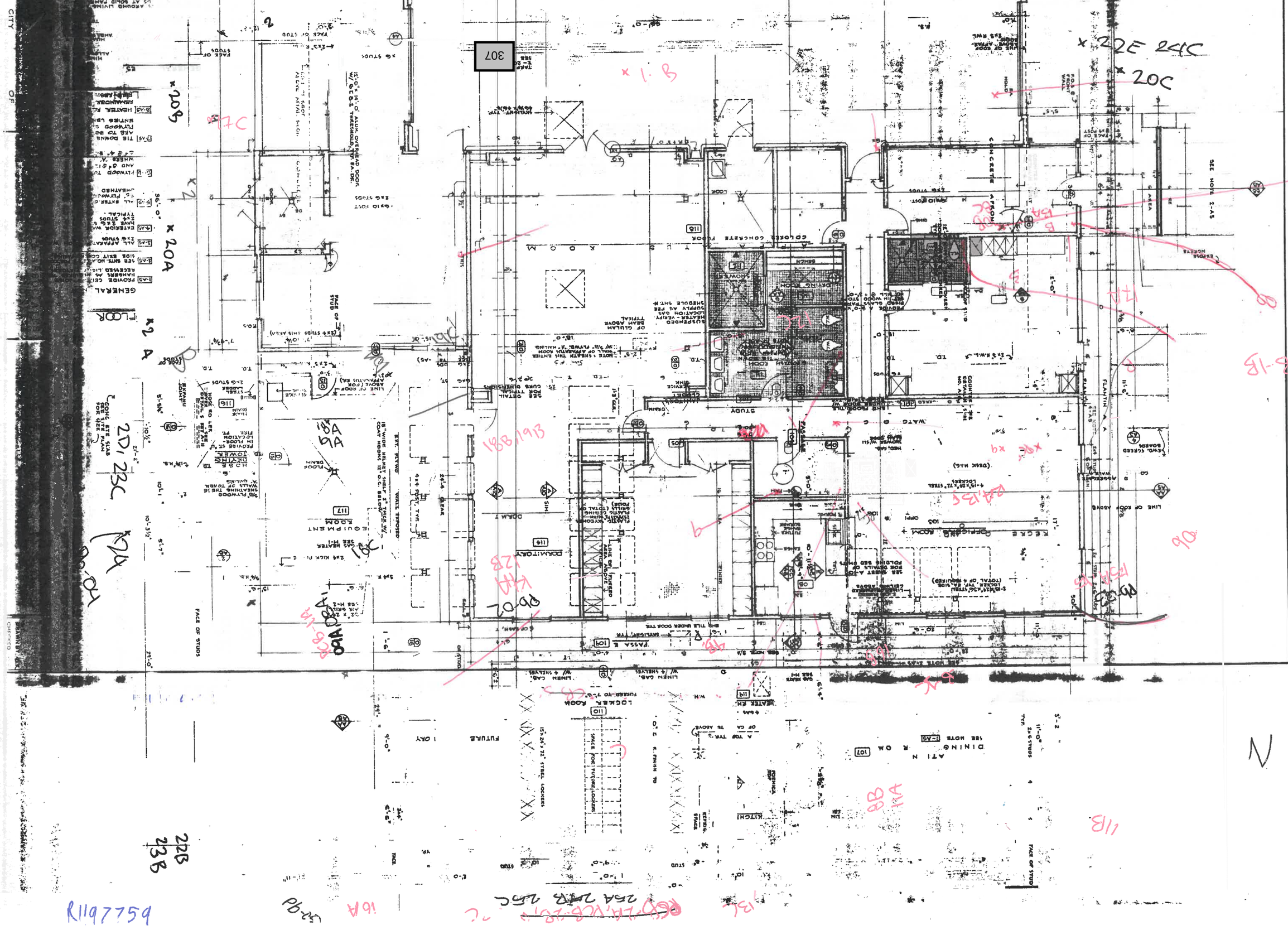
Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes	☑	No	☐	NA ☐
Samples Received on Ice?	Yes	☐	No	☑	
Sample/Temp Blank temperature	Temp:				NA ☑
Water - VOA vials have zero headspace / no bubbles?	Yes	☐	No	☐	NA ☑
Sample labels checked for correct preservation?	Yes	☑	No	☐	
pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO3: <2; 522: <4; 218.7: >8)?	Yes	☐	No	☐	NA ☑
UCMR Samples:					
pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)?	Yes	☐	No	☐	NA ☑
Free Chlorine tested and acceptable upon receipt (<0.1mg/L)?	Yes	☐	No	☐	NA ☑

Comments:

APPENDIX D

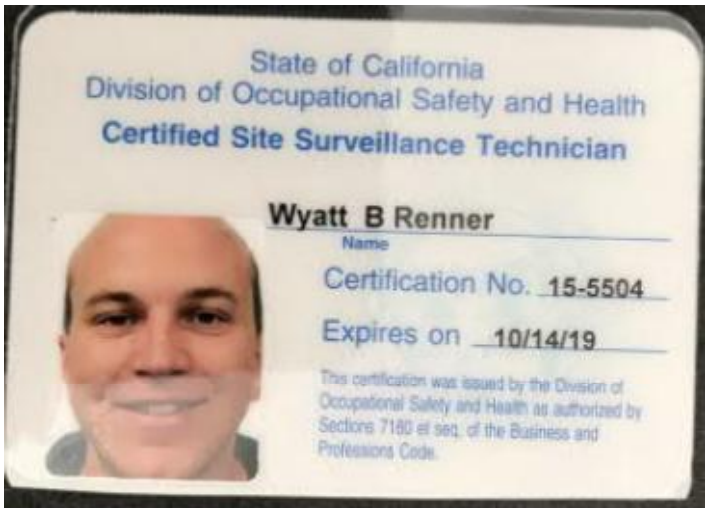
SAMPLE LOCATION DIAGRAMS

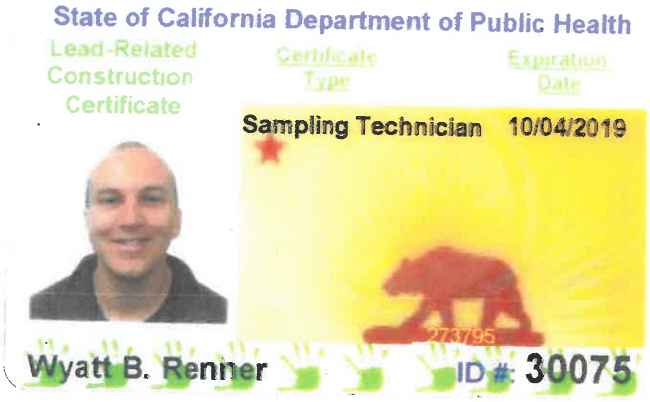

307
LOCKER ROOM
EQUIPMENT ROOM
DINING
KITCHEN
STUDY
FUTURE
SHOWER
LAUNDRY
FACE OF STUDS
SEE NOTE 2-A5

HIGH ROOF
6B
5C
2A
SKY
5A
4A
6A
HVAC
4B
SKY
5B
LOW ROOF
2C
2B
TOWER
7A
3B
2C
1A
HVAC
1C
2B
10-08
1A
3A
N

APPENDIX E

LICENSES AND CERTIFICATIONS


State of California
Division of Occupational Safety and Health
Certified Site Surveillance Technician
Wyatt B Renner
Name
Certification No. 15-5504
Expires on 10/14/19
This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code.



Mr. Wyatt B. Renner
Terracon
1466 66th Street
Emeryville, California 91702 94608

APPENDIX C- GEOTECHNICAL ENGINEERING REPORT

Geotechnical Engineering Report

Milpitas Fire Station 2
Milpitas, Santa Clara County, CA 95035
March 29, 2019
Terracon Project No. ND195009

Prepared for:
Shah Kawasaki Architects
Oakland, CA

Prepared by:
Terracon Consultants, Inc.
Concord, California

March 29, 2019

Shah Kawasaki Architects
570 10th Street, Suite 201
Oakland, CA 94607

Attn: Mr. Phillip Luo
P: (510) 663-6090
E: pluo@skarc.com

Re: Geotechnical Engineering Report
Milpitas Fire Station 2
1263 Yosemite Drive
Milpitas, Santa Clara County, CA 95035
Terracon Project No. ND195009

Dear Mr. Luo:

We have completed the Geotechnical Engineering services for the above referenced project. This study was performed in general accordance with Terracon Proposal No. PND195009 dated February 14, 2019. This report presents the findings of the subsurface exploration and provides geotechnical recommendations concerning earthwork and the design and construction of pavements, foundations and floor slabs for the proposed project.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning this report or if we may be of further service, please contact us.

Sincerely,
Terracon Consultants, Inc.

Hoda Alinasabbaboli, E.I.T.
Senior Staff Geotechnical Engineer

Patrick C. Dell, Senior Associate
Geotechnical Engineer 2186
Geotechnical Department Manager

REPORT TOPICS

INTRODUCTION 1
SITE CONDITIONS 2
PROJECT DESCRIPTION 3
GEOTECHNICAL CHARACTERIZATION 4
GEOTECHNICAL OVERVIEW 5
EARTHWORK 6
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SEISMIC CONSIDERATIONS 17
LIQUEFACTION 18
FLOOR SLABS 19
PAVEMENTS 22
CORROSIVITY 26
GENERAL COMMENTS 27
FIGURES 29

Note: This report was originally delivered in a web-based format. **Orange Bold** text in the report indicates a referenced section heading. The PDF version also includes hyperlinks which direct the reader to that section and clicking on the ***GeoReport*** logo will bring you back to this page. For more interactive features, please view your project online at client.terracon.com.

ATTACHMENTS

EXPLORATION AND TESTING PROCEDURES
SITE LOCATION AND EXPLORATION PLANS
EXPLORATION RESULTS
SUPPORTING INFORMATION

Note: Refer to each individual Attachment for a listing of contents.

REPORT SUMMARY

Topic [1]	Overview Statement [2]
Project Description	The project site is currently developed with a single story fire station (Calaveras Fire Station) and office buildings in a lot approximately 53,000 square feet in size. The fire station will be reconstructed which will include a fire station building and three inclusions for fire trucks and an ambulance. ■ Maximum Column Loads: 80 to 100 kips (assumed) ■ Maximum Wall Loads: 3 to 4 kips per linear foot (klf) (assumed)
Geotechnical Characterization	Subgrade soil conditions generally consist of 2 to 3½ feet of uncontrolled fill. The fill consists of medium dense well graded sand with gravel and stiff sandy lean clay. The fill is underlain by medium stiff to hard lean clay with variable amounts of sand and gravel and loose to medium dense sands with variable amounts of clay and gravel to the maximum explored depth of 51½ feet below the existing ground surface (bgs). Groundwater level could not be determined in borings B1 and B2 due to the need to use the mud rotary drilling method and groundwater was not encountered in boring B3. However, groundwater was encountered in the CPT sounding at a depth of 5 feet bgs.
Earthwork	Remove existing undocumented fill. The fill maybe reused if cleaned of any deleterious materials and recompacted as structural fill per the requirements provided in the **Earthwork** section of this report. Surface clays have moderate plasticity and are sensitive to moisture variation. Cuts and fills on the order of 3½ feet or less are anticipated with removing the undocumented fill and placing structural fill in the over-excavated areas. Grading should be conducted in accordance with the **Earthwork** section of this report.
Shallow Foundations	The building may be supported by a **Shallow Foundation** spread footing system that extends at least 18 inches below lowest adjacent grade and bears on a minimum 12 inches of compacted engineered fill. Allowable bearing pressure = 2,000 psf Expected settlements: < 1 inch total, < ½ inch differential
Floor Slabs	The upper 12 inches of subgrade below slabs should consist of LVC material in order to help protect the slabs from the swelling pressure of the surface moderate volume change soils.
Pavements	Pavement sections are provided for both rigid and flexible pavements.
General Comments	This section contains important information about the limitations of this geotechnical engineering report.

1. If the reader is reviewing this report as a pdf, the topics above can be used to access the appropriate section of the report by simply clicking on the topic itself.
2. This summary is for convenience only. It should be used in conjunction with the entire report for design purposes.

Geotechnical Engineering Report

Milpitas Fire Station 2

1263 Yosemite Drive

Milpitas, Santa Clara County, CA 95035

Terracon Project No. ND195009

March 29, 2019

INTRODUCTION

This report presents the results of our subsurface exploration and geotechnical engineering services performed for the proposed fire station to be located at 1263 Yosemite Drive in Milpitas, Santa Clara County, CA 95035. The purpose of these services is to provide information and geotechnical engineering recommendations relative to:

- Subsurface soil conditions
- Groundwater conditions
- Site preparation and earthwork
- Foundation design and construction
- Foundation design and construction
- Floor slab design and construction
- Seismic site classification per 2016 CBC
- Pavement design and construction

The geotechnical engineering Scope of Services for this project included the advancement of three test borings to depths ranging from approximately 5 to 51½ feet below existing site grades (bgs). One cone penetrometer test (CPT) was advanced to an approximate depth of 93 feet bgs.

Maps showing the site and boring and CPT locations are shown in the **Site Location** and **Exploration Plan** sections, respectively. The results of the laboratory testing performed on soil samples obtained from the site during the field exploration are included on the boring logs and as separate graphs in the **Exploration Results** section.

SITE CONDITIONS

The following description of site conditions was derived from our site visit in association with the field exploration and our review of publicly available geologic and topographic maps.

Item	Description
Parcel Information	The project is located at 1263 Yosemite Drive in Milpitas, Santa Clara County, CA 95035. 37.4269°N 121.8812°W (approximate) See **Site Location**
Existing Improvements	The project site is developed with single story fire station and office buildings in a lot approximately 53,000 square feet in size. The fire station building, and office buildings are approximately 6,260 and 1,530 square feet in size, respectively.
Current Ground Cover	Asphalt and concrete paved parking lot, landscaping, and hardscape.
Existing Topography (from Google Earth Pro)	The site is relatively flat with an approximate elevation of 64 feet above mean sea level (MSL).
Geology	Geologic maps indicate subsurface conditions consist of Holocene age alluvial gravel, sand, and clays. [1]

[1] *Dibblee, T.W., and Minch, J.A., 2005, Geologic map of the Milpitas quadrangle, Alameda & Santa Clara Counties, California: Dibblee Geological Foundation, Dibblee Foundation Map DF-153, scale 1:24,000*

PROJECT DESCRIPTION

Our initial understanding of the project was provided in our proposal and was discussed during project planning. A period of collaboration has transpired since the project was initiated, and our final understanding of the project conditions is as follows:

Item	Description
Information Provided	A description of the proposed improvement prepared by City of Milpitas was provided via email by Shah Kawasaki Architects.
Project Description	The project site is currently developed with single story fire station (Calaveras Fire Station) and office buildings in a lot approximately 53,000 square feet in size. The fire station will be reconstructed which will include inclusions for fire trucks and an ambulance.
Proposed Structures	The project includes a new single-story fire station with three apparatus bays. The size of the proposed fire station was not known at the time our proposal was prepared.
Building Construction (assumed)	Wood frame or masonry construction with a concrete slab-on-grade floor.
Finished Floor Elevation	Unknown
Maximum Loads (assumed)	■ Columns: 80 to 100 kips ■ Walls: 3 to 4 kips per linear foot (klf)
Grading	We anticipate 2 feet or less of cuts and fills will be required to develop final grades.
Below-Grade Structures	None anticipated
Free-Standing Retaining Walls	None anticipated
Pavements	Paved drives and parking will be constructed as part of development. We have assumed both rigid (concrete) and flexible (asphalt) pavement sections. Anticipated traffic indices (TIs) are as follows: ■ Auto Parking Areas: TI = 5.0 ■ Auto Parking Areas: TI = 5.5 ■ Truck Parking Areas: TI = 6.0 ■ Main Truck Entrances: TI = 8.0 Average Daily Truck Traffic for rigid pavements ■ Car Parking and Access Lanes: ADTT = 1 (Category A) ■ Truck Parking: ADTT = 25 (Category B) ■ Dumpster Pads: Per Category C The pavement design period is 20 years.
Estimated Start of Construction	Unknown

GEOTECHNICAL CHARACTERIZATION

We have developed a general characterization of the subsurface conditions based upon our review of the subsurface exploration, laboratory data, geologic setting and our understanding of the project. This characterization, termed GeoModel, forms the basis of our geotechnical calculations and evaluation of site preparation and foundation options. Conditions encountered at each exploration point are indicated on the individual logs. The individual logs can be found in the **Exploration Results** section and the GeoModel can be found in the **Figures** section of this report.

As part of our analyses, we identified the following model layers within the subsurface profile. For a more detailed view of the model layer depths at each boring location, refer to the GeoModel.

Model Layer	Layer Name	General Description
1	**Asphalt**	4-inches thick asphalt and 8-inches thick aggregate base
2	**Fill**	Medium dense well graded sand with gravel and stiff sandy lean clay.
3	**Lean Clay**	Medium stiff to hard lean clay with variable amounts of sand and gravel.
4	**Sand**	Loose to medium dense sand with variable amounts of clay and gravel.

Groundwater Conditions

The boreholes were observed while drilling and after completion for the presence and level of groundwater. Due to the need to use the mud rotary drilling method to keep the holes open below groundwater, groundwater levels could not be determined. However, water was encountered in the CPT sounding at a depth of 5 feet bgs.

Based on review of Seismic Hazard Report for The Milpitas 7.5-minute Quadrangle, historical groundwater ranges between 10 to 20 feet bgs[1].

Groundwater level fluctuations occur due to seasonal variations in the amount of rainfall, runoff and other factors not evident at the time the borings were performed. Therefore, groundwater levels during construction or at other times in the life of the structures may be higher or lower than the levels indicated on the boring logs. The possibility of groundwater level fluctuations should be considered when developing the design and construction plans for the project.

[1]*Clahan, Kevin B., Mattison, Elise, Rosinski, Ann M., Bott, Jacqueline D.J., 2001 Seismic Hazard Zone Report for the Milpitas 7.5-Minutre Quadrangle, Alameda and Santa Clara County, California. Department of Conservation, California Geologic Survey: Seismic Hazard Zone Report 051*

GEOTECHNICAL OVERVIEW

As indicated in the **Geotechnical Characterization** section of this report, the near surface soils primarily consist of medium stiff to hard medium plasticity lean clays could become unstable with typical earthwork and construction traffic, especially after precipitation events. Effective site drainage should be completed early in the construction sequence and maintained after construction to avoid potential issues. If possible, the grading should be performed during the warmer and drier times of the year. If grading is performed during the winter months, an increased risk for possible undercutting and replacement of unstable subgrade will persist. Additional site preparation recommendations, including subgrade improvement and fill placement, are provided in the **Earthwork** section.

Additionally, undocumented fill consisting of well graded sand with gravel and sandy lean clay was encountered in borings B1 and B2 below the pavement up to depths ranging from 2 to 3½ feet bgs. Compaction records for the fill could not be obtained or reviewed to confirm the fill was placed under controlled conditions. The density/consistency of the fill encountered in our borings was medium dense and stiff. The undocumented fill should be completely removed and may be reused if cleaned of any deleterious material and recompacted as structural fill per the requirements provided in the **Earthwork** section of this report.

The soils which form the bearing stratum for shallow foundations are plastic and exhibit potential for shrink-swell movements with changes in moisture. Additional areas of localized moderately to highly plastic clays may be present in the fire station and inclusion building areas where borings/CPTs were not performed. In order to help mitigate the effects of the anticipated shrink-well movements, we recommend the fire station and inclusion buildings be supported by a **Shallow Foundation** system that extends at least 18 inches below lowest adjacent grade and bear on a minimum 12 inches of Low Volume Change (LVC) material. This will help to provide uniform support for the foundations. The concrete slabs-on-grade should be underlain by a minimum of 12 inches of LVC material or chemically treated (lime) material.

Expansive soils are present on this site. This report provides recommendations to help mitigate the effects of soil shrinkage and expansion. However, even if these procedures are followed, some movement and (at least minor) cracking in the structure should be anticipated. The severity of cracking and other damage such as uneven floor slabs will probably increase if modification of the site results in excessive wetting or drying of the expansive soils. Eliminating the risk of movement and distress may not be feasible, but it may be possible to further reduce the risk of movement if significantly more expensive measures are used during construction.

Using an LVC zone as recommended in this report may not eliminate all future subgrade volume change and resultant slab movements. However, the procedures outlined herein should help to reduce the potential for subgrade volume change. Details regarding this LVC zone are provided in **Earthwork.** The **Floor Slabs** section addresses slab-on-grade support of the buildings.

The **General Comments** section provides an understanding of the report limitations.

EARTHWORK

We anticipate grading for this project will consist of cuts and fills on the order of 3½ feet or less associated with over-excavation of the undocumented fill and placing structural fill. It is our understanding site grades will remain at the same elevation as the current site conditions. If greater cuts and fills are required or if site grades will be elevated, Terracon should be contacted to provide supplemental recommendations. Earthwork is anticipated to include clearing and grubbing, excavations, and fill placement. The following sections provide recommendations for use in the preparation of specifications for the work. Recommendations include critical quality criteria, as necessary, to render the site in the state considered in our geotechnical engineering evaluation for foundations, floor slabs, a swimming pool, and pavements.

Site Preparation

The proposed construction area was developed with a fire station and office buildings, paved parking areas, and concrete slabs at the time of our investigation. All existing debris, debris generated from demolition of the existing improvements, and other deleterious materials should be stripped and removed from the site. This should include the removal of any buried concrete slabs, buried footings, or underground utilities that may exist within the area of the proposed construction. Aggregate base from stripped pavement sections may be stockpiled for use as general or structural fill provided it remains clean and free of debris. Exposed surfaces should be free of mounds and depressions, which could prevent uniform compaction.

The subgrade should be proof-rolled with an adequately loaded vehicle such as a fully loaded tandem axle dump truck. The proof-rolling should be performed under the direction of the Geotechnical Engineer. Areas excessively deflecting under the proof-roll should be delineated and subsequently addressed by the Geotechnical Engineer. Such areas should either be removed or modified by stabilizing as noted in the following section **Soil Stabilization**. Excessively wet or dry material should either be removed, or moisture conditioned and recompacted.

Subgrade Preparation

We understand site grades will remain at the same elevation present at the time of our field exploration and that any cuts and fills required will be to process the existing grades for construction. If site grades will be raised, Terracon should be contacted to provide additional recommendations as necessary.

After clearing any required cuts should be made. Up to 3½ feet of undocumented fill was encountered in our borings. Areas where uncommented fill is encountered should be over-

excavated, cleaned of any deleterious materials, and recompacted as structural fill during grading operations. Once any required cuts and over-excavations have been made, and prior to placing any fill, the subgrade soil should be scarified and compacted. The depth of scarification of subgrade soils and moisture conditioning of the subgrade is highly dependent on the time of year of construction and the site conditions that exist immediately prior to construction. If construction occurs during the winter or spring, when the subgrade soils are typically already in a moist condition, scarification and compaction may only be 12 inches. If construction occurs during the summer or fall when the subgrade soils have been allowed to dry out deeper, the depth of scarification and moisture conditioning may be as much as 18 inches. In our experience, many times the subgrade soils beneath pavements are in an overly moist condition and may require moisture conditioning in order to process them properly. A representative from Terracon should be present to observe the exposed subgrade and specify the depth of scarification and moisture conditioning required.

Following scarification and compaction of the subgrade, over-excavated areas may be backfilled with compacted structural fill and any additional fill may be placed and compacted. The moisture content and compaction of subgrade soils should be maintained until foundation/slab/pavement construction. Care should be taken to prevent wetting or drying of the bearing materials during construction.

Soil Stabilization

Methods of subgrade improvement, as described below, could include scarification, moisture conditioning and recompaction, removal of unstable materials and replacement with granular fill (with or without geosynthetics) and chemical treatment. The appropriate method of improvement, if required, will be dependent on factors such as schedule, weather, the size of the area to be stabilized, and the nature of the instability. More detailed recommendations can be provided during construction as the need for subgrade stabilization occurs. Performing site grading operations during warm seasons and dry periods would help to reduce the amount of subgrade stabilization required.

If the exposed subgrade is unstable during proof rolling operations, it could be stabilized using one of the methods outlined below.

- **Scarification and Compaction** – It may be feasible to scarify, dry, and compact the exposed soils. The success of this procedure would depend primarily upon favorable weather and sufficient time to dry the soils. Stable subgrades likely would not be achievable if the thickness of the unstable soil is greater than about 1 foot, if the unstable soil is at or near groundwater levels, or if construction is performed during a period of wet or cool weather when drying is difficult.

- **Aggregate Base** – The use of Caltrans Class II aggregate base is the most common procedure to improve subgrade stability. Typical undercut depths would be expected to range from about 6 to 18 inches below finished subgrade elevation with this procedure. The use of high modulus geotextiles (i.e., engineering fabric or geogrid) could also be considered after underground work such as utility construction is completed. Prior to placing the fabric or geogrid, we recommend that all below-grade construction, such as utility line installation, be completed to avoid damaging the fabric or geogrid. Equipment should not be operated above the fabric or geogrid until one full lift of aggregate base is placed above it. The maximum particle size of granular material placed over geotextile fabric or geogrid should meet the manufacturer's specifications.

- **Chemical Treatment** – Chemical treatment involves treating the unstable or pavement subgrade soils with a certain percentage of high calcium quicklime. Usually 3.5 to 5 percent based on the dry unit weight of the soil, for a depth of 12 inches. For estimating purposes, we recommend using 4.5 percent lime and a soil unit weight of 110 pounds per cubic foot. For a 12-inch treatment depth, this results in an estimated minimum spread rate of 5 pounds per square foot lime. The actual amount of lime to be used should be determined by Terracon and by laboratory testing **at least two weeks prior** to the start of grading operations. Chemical treatment is performed after rough grading is completed.

Further evaluation of the need and recommendations for subgrade stabilization can be provided during construction as the geotechnical conditions are exposed.

Fill Material Types

Fill required to achieve design grade should be classified as structural fill and general fill. Structural fill is material used below, or within 5 feet of structures, or pavements. General fill is material used to achieve grade outside of these areas. Earthen materials used for structural and general fill should meet the following material property requirements:

Fill Type[1]	USCS Classification	Acceptable Location for Placement
Lean Clay	CL (LL<40)	All structural and general locations and elevations, except as LVC material unless material explicitly meets LVC requirements.
Moderate Plasticity Material[2]	CL (50>LL≥40 or 30>PI≥25)	All general fill locations and elevations
Well-graded Granular[3]	GM, SM, SP, SW	All structural and general locations and elevations
Low Volume Change (LVC) Material[4]	CL, SC (LL<30 & PI<10) or Well-graded Granular Material [3]	All structural and general locations and elevations
On-Site Soils[5]	CL, SC, SW	As noted above

1. Compacted structural fill should consist of approved materials that are free of organic matter and debris. A sample of each material type should be submitted to Terracon for evaluation at least 2 weeks prior to construction.
2. Delineation of moderate to highly plastic clays should be performed in the field by a qualified geotechnical engineer or their representative and could require additional laboratory testing.
3. Caltrans Class II aggregate base may be used for this material.
4. Low plasticity cohesive soil or granular soil having low plasticity fines. Material should be approved by the geotechnical engineer.
5. This material should be removed and recompacted if used as an engineered or structural fill as described in section **Fill Compaction Requirements**.

Fill Compaction Requirements

Structural and general fill should meet the following compaction requirements.

Item	Structural Fill	General Fill
Maximum Lift Thickness[2]	8 inches or less in loose thickness when heavy, self-propelled compaction equipment is used. 4 to 6 inches in loose thickness when hand-guided equipment (i.e. jumping jack or plate compactor) is used.	Same as Structural fill
Minimum Compaction Requirements [1,3]	90% of max. above foundations and below floor slabs 95% of max. below foundations, and in the upper 12 inches of subgrade in pavement areas, and for aggregate base	90% of max.
Water Content Range [1]	Low plasticity cohesive: +1% to +3% above optimum High plasticity cohesive: +2% to +4% above optimum Granular: 0% to +2% of optimum	As required to achieve min. compaction requirements[4]

1. Maximum density and optimum water content as determined by the Modified Proctor test (ASTM D 1557).
2. Reduced lift thicknesses are recommended in confined areas (e.g., utility trenches, foundation excavations, and foundation backfill) and when hand-operated compaction equipment is used.
3. We recommend that engineered fill be tested for moisture content and compaction during placement. Should the results of the in-place density tests indicate the specified moisture or compaction limits have not been met, the area represented by the test should be reworked and retested as required until the specified moisture and compaction requirements are achieved. This procedure is intended for soils with 30 percent or less material larger than ¾ inch. Accordingly, we recommend full time proof roll observation be performed instead of moisture density testing for materials containing more than 30 percent aggregate retained on the ¾-inch sieve.
4. Specifically, moisture levels should be maintained low enough to allow for satisfactory compaction to be achieved without the cohesionless fill material pumping when proof rolled.

Utility Trench Backfill

All trench excavations should be made with sufficient working space to permit construction including backfill placement and compaction. If utility trenches are backfilled with relatively clean granular material, they should be capped with at least 18 inches of cementitious flowable fill or cohesive fill in non-pavement areas to reduce the infiltration and conveyance of surface water through the trench backfill. Attempts should also be made to limit the amount of fines migration into the clean granular material. Fines migration into clean granular fill may result in unanticipated localized settlements over a period of time. To help limit the amount of fines migration, Terracon recommends the use of a geotextile fabric that is designed to prevent fines migration in areas of contact between clean granular material and fine-grained soils. Terracon also recommends that clean granular fill be tracked or tamped in place where possible in order to limit the amount of future densification which may cause localized settlements over time.

Utility trenches are a common source of water infiltration and migration. Utility trenches penetrating beneath buildings should be effectively sealed to restrict water intrusion and flow through the trenches, which could migrate below the buildings. The trench should provide an effective trench plug that extends at least 5 feet from the face of the building exterior. The plug material should consist of cementitious flowable fill or low permeability clay. The trench plug material should be placed to surround the utility line. If used, the clay trench plug material should be placed and compacted to comply with the water content and compaction recommendations for structural fill stated previously in this report.

Post construction trenching through chemically treated soil should be backfilled with lean concrete or a sand cement slurry. Such areas trenched through chemically treated soil should not be backfilled with aggregate base, native soil, or previously treated soil. Post construction trenching through geogrid in the pavement areas shall be accomplished with conventional trenching equipment. Repairs to the trenched section shall be accomplished using a full structural replacement of the displaced materials or with a repaired section that is identical to the original section. If the trench section is repaired to match the original, the trench backfill must be compacted to the same or higher density and the geogrid must be over-lapped a minimum 3-inches at the proper geogrid elevation.

Grading and Drainage

All grades must provide effective drainage away from the buildings during and after construction and should be maintained throughout the life of the structures. Water retained next to the buildings can result in soil movements greater than those discussed in this report. Greater movements can result in unacceptable differential floor slab and/or foundation movements, cracked slabs and walls, and roof leaks. The roof should have gutters/drains with downspouts that discharge onto splash blocks at a distance of at least 10 feet from the buildings.

Exposed ground should be sloped and maintained at a minimum 5 percent away from the buildings for at least 10 feet beyond the perimeter of the buildings. Locally, flatter grades may be necessary to transition ADA access requirements for flatwork. After building construction and landscaping, final grades should be verified to document effective drainage has been achieved. Grades around the structure should also be periodically inspected and adjusted as necessary as part of the structure's maintenance program. Where paving or flatwork abuts the structure a maintenance program should be established to effectively seal and maintain joints and prevent surface water infiltration.

Planters and bio-swales located within 10 feet of structures should be self-contained or lined with an impermeable membrane to prevent water from accessing building subgrade soils. Sprinkler mains and spray heads should be located a minimum of 5 feet away from the building lines.

Trees or other vegetation whose root systems have the ability to remove excessive moisture from the subgrade and foundation soils should not be planted next to the structures. Trees and shrubbery should be kept away from the exterior of the structures a distance at least equal to their expected mature height.

Implementation of adequate drainage for this project can affect the surrounding developments. Consequently, in addition to designing and constructing drainage for this project, the effects of site drainage should be taken into consideration for the planned structures on this property, the undeveloped portions of this property, and surrounding sites. Extra care should be taken to ensure irrigation and drainage from adjacent areas do not drain onto the project site or saturate the construction area.

Earthwork Construction Considerations

Excavations for the proposed structures are anticipated to be accomplished with conventional construction equipment. Upon completion of filling and grading, care should be taken to maintain the subgrade moisture content prior to construction of floor slabs and pavements. Construction traffic over the completed subgrade should be avoided to the extent practical. The site should also be graded to prevent ponding of surface water on the prepared subgrades or in excavations. If the subgrade should become desiccated, saturated, or disturbed, the affected material should be removed or these materials should be scarified, moisture conditioned, and recompacted prior to floor slab or pavement construction.

We recommend that the earthwork portion of this project be completed during extended periods of dry weather if possible. If earthwork is completed during the wet season (typically November through April) it may be necessary to take extra precautionary measures to protect subgrade soils. Wet season earthwork operations may require additional mitigation measures beyond that which would be expected during the drier summer and fall months. This could include ground stabilization utilizing chemical treatment of the subgrade, diversion of surface runoff around exposed soils, and draining of ponded water on the site. Once subgrades are established, it may be necessary to protect the exposed subgrade soils from construction traffic.

As a minimum, excavations should be performed in accordance with OSHA 29 CFR, Part 1926, Subpart P, “Excavations” and its appendices, and in accordance with any applicable local, and/or state regulations.

Construction site safety is the sole responsibility of the contractor who controls the means, methods, and sequencing of construction operations. Under no circumstances shall the information provided herein be interpreted to mean Terracon is assuming responsibility for construction site safety, or the contractor's activities; such responsibility shall neither be implied nor inferred.

Construction Observation and Testing

The earthwork efforts should be monitored under the direction of the Geotechnical Engineer. Monitoring should include documentation of adequate removal of old structures, vegetation and top soil, proof-rolling and mitigation of areas delineated by the proof-roll to require mitigation.

Each lift of compacted fill should be tested, evaluated, and reworked as necessary until approved by the Geotechnical Engineer prior to placement of additional lifts. Each lift of fill should be tested for density and water content at a frequency of at least one test for every 2,500 square feet of compacted fill in the building and every 5,000 square feet in pavement areas. One density and water content test per lift should be performed for every 12-inch thick lift for every 50 linear feet of compacted utility trench backfill.

In areas of foundation and slabs excavations, the bearing subgrade should be evaluated under the direction of the Geotechnical Engineer. In the event that unanticipated conditions are encountered, the Geotechnical Engineer should prescribe mitigation options.

In addition to the documentation of the essential parameters necessary for construction, the continuation of the Geotechnical Engineer into the construction phase of the project provides the continuity to maintain the Geotechnical Engineer's evaluation of subsurface conditions, including assessing variations and associated design changes.

SHALLOW FOUNDATIONS

If the site has been prepared in accordance with the requirements noted in **Earthwork**, the buildings may be supported by spread footings designed per following design parameters.

Design Parameters – Compressive Loads

Item	Description
Maximum Net Allowable Bearing pressure [1, 2]	2,000 psf
Required Bearing Stratum [2]	Minimum 12 inches of LVC material
Minimum Footing Width	12 inches – Strip Footings 24 inches – Pad Footings
Maximum Footing Width	48 inches – Strip Footings 84 inches – Pad Footings
Ultimate Passive Resistance [3] **(equivalent fluid pressures)**	300 pcf
Ultimate Coefficient of Sliding Friction [4]	0.30
Minimum Embedment below Finished Grade [5]	18 inches
Estimated Total Settlement from Structural Loads [2]	Less than about 1 inch
Estimated Differential Settlement [2, 6]	About 1/2 of total settlement

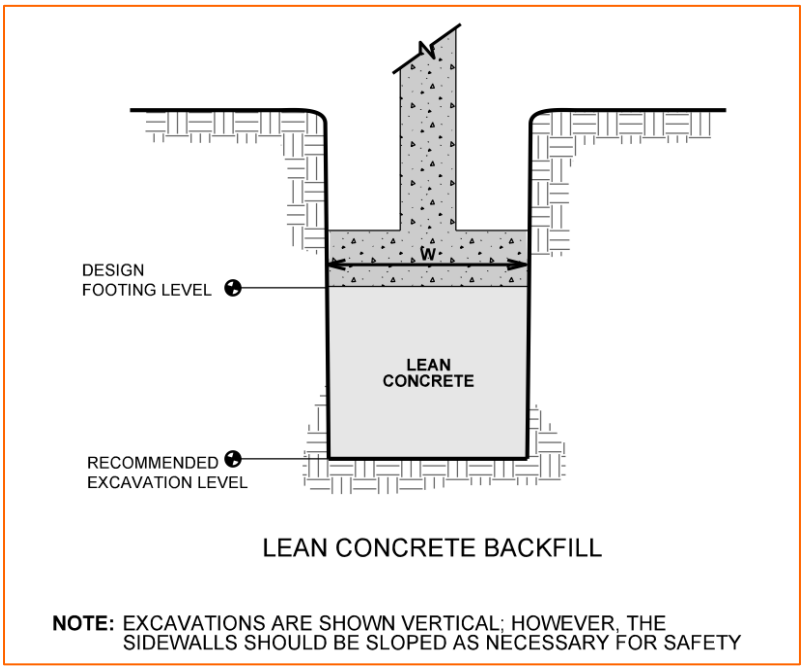
1. The maximum net allowable bearing pressure is the pressure in excess of the minimum surrounding overburden pressure at the footing base elevation. An appropriate factor of safety has been applied. These bearing pressures can be increased by 1/3 for transient loads unless those loads have been factored to account for transient conditions. Values assume that exterior grades are no steeper than 20% within 10 feet of structure.
2. Values provided are for maximum loads noted in **Project Description**.
3. Use of passive earth pressures require the sides of the excavation for the spread footing foundation to be nearly vertical and the concrete placed neat against these vertical faces or that the footing forms be removed and compacted structural fill be placed against the vertical footing face.
4. Can be used to compute sliding resistance where foundations are placed on suitable soil/materials. Should be neglected for foundations subject to net uplift conditions.
5. Embedment necessary to minimize the effects of seasonal water content variations. For sloping ground, maintain depth below the lowest adjacent exterior grade within 5 horizontal feet of the structure.
6. Differential settlements are as measured over a span of 40 feet.
7. Passive pressure and sliding friction may be combined to resist sliding provided the passive pressure is reduced by 25 percent.

Foundation Construction Considerations

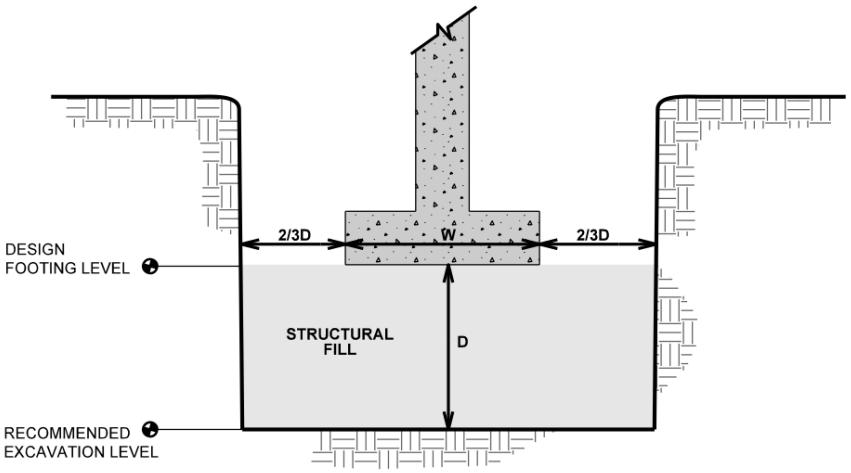
As noted in **Earthwork**, the footing excavations should be evaluated under the direction of the Geotechnical Engineer. The base of all foundation excavations should be free of water and loose soil, prior to placing concrete. Concrete should be placed soon after excavating to reduce bearing soil disturbance. Care should be taken to prevent wetting or drying of the bearing materials during construction. Excessively wet or dry material or any loose/disturbed material in the bottom of the footing excavations should be removed/reconditioned before foundation concrete is placed.

To ensure foundations have adequate support, special care should be taken when footings are located adjacent to trenches. The bottom of such footings should be at least 1 foot below an imaginary plane with an inclination of 1.5 horizontal to 1.0 vertical extending upward from the nearest edge of adjacent trenches.

If unsuitable bearing soils are encountered at the base of the planned footing excavation, the excavation should be extended deeper to suitable soils, and the footings could bear directly on these soils at the lower level or on lean concrete backfill placed in the excavations. This is illustrated on the sketch below.



Over-excavation for structural fill placement below footings should be conducted as shown below. The over-excavation should be backfilled up to the footing base elevation, with structural fill placed, as recommended in the **Earthwork** section.



OVER-EXCAVATION / BACKFILL ZONE

NOTE: EXCAVATIONS ARE SHOWN VERTICAL; HOWEVER, THE SIDEWALLS SHOULD BE SLOPED AS NECESSARY FOR SAFETY

SEISMIC CONSIDERATIONS

The seismic design requirements for buildings and other structures are based on Seismic Design Category. Site Classification is required to determine the Seismic Design Category for a structure. The Site Classification is based on the upper 100 feet of the site profile defined by a weighted average value of either shear wave velocity, standard penetration resistance, or undrained shear strength in accordance with Section 20.4 of ASCE 7-10.

Description	Value
2016 California Building Code Site Classification (CBC) [1]	D[2]
Site Latitude	37.4269°N
Site Longitude	121.8812°W
S_s, Spectral Acceleration for a Short Period[3]	1.899g
S_1, Spectral Acceleration for a 1-Second Period[3]	0.765g
F_a, Site Coefficient[3]	1.0
F_v, Site Coefficient (1-second period)[3]	1.5
S_{DS}, Spectral Acceleration for a Short Period[3]	1.266g
S_{D1}, Spectral Acceleration for a 1-Second Period[3]	0.765g

1. Seismic site classification in general accordance with the *2016 California Building Code*.
2. The 2016 California Building Code (CBC) requires a site soil profile determination extending a depth of 100 feet for seismic site classification. One CPT was extended to a maximum depth of approximately 93 feet bgs.
3. These values were obtained using online seismic design maps and tools provided by the USGS (http://earthquake.usgs.gov/hazards/designmaps/).

Faulting and Estimated Ground Motions

The site is located in the southern San Francisco Bay Area of California, which is a relatively high seismicity region. The type and magnitude of seismic hazards affecting the site are dependent on the distance to causative faults, the intensity, and the magnitude of the seismic event. The following table indicates the distance of the fault zones and the associated maximum credible earthquake that can be produced by nearby seismic events, as calculated using the USGS Unified Hazard Tool. Segments of the Hayward-Rodgers Creek Fault, which is located approximately 5 kilometers from the site, are considered to have the most significant effect at the site from a design standpoint.

Characteristics and Estimated Earthquakes for Regional Faults			
Fault Name	**Approximate Contribution (%)**	**Approximate Distance to Site (kilometers)**	**Maximum Credible Earthquake (MCE) Magnitude**
Hayward - Rodgers Creek : HS, aFault_MoBal	12.65	4.79	6.66
Hayward - Rodgers Creek : HS, aFault_aPriori_D2.1	13.91	4.79	6.68
Hayward - Rodgers Creek : HN+HS, aFault_MoBal	10.55	4.79	6.86
Hayward - Rodgers Creek : HN+HS, aFault_aPriori_D2.1	11.35	4.79	6.91

Based on the ASCE 7-10 Standard, the peak ground acceleration (PGA_M) at the subject site is approximately 0.731g. Based on the USGS 2008 interactive deaggregations, the PGA at the subject site for a 2% probability of exceedance in 50 years (return period of 2475 years) is expected to be about 0.990g. The site is not located within an Alquist-Priolo Earthquake Fault Zone based on our review of the State Fault Hazard Maps.[2]

LIQUEFACTION

Liquefaction is a mode of ground failure that results from the generation of high pore water pressures during earthquake ground shaking, causing loss of shear strength. Liquefaction is typically a hazard where loose sandy soils or low plasticity fine grained soils exist below groundwater. The California Geologic Survey (CGS) has designated certain areas within California as potential liquefaction hazard zones. These are areas considered at a risk of liquefaction-related ground failure during a seismic event, based upon mapped surficial deposits and the presence of a relatively shallow water table. The project site and surrounding area is located within a liquefaction hazard zone designated as having moderate susceptibility to liquefaction. Therefore, a liquefaction analysis was performed to determine the liquefaction induced settlement.

Groundwater could not be determined in our borings due to the need for mud rotary drilling. However, water was encountered in the CPT sounding at a depth of 5 feet bgs.

[2] California Department of Conservation Division of Mines and Geology (CDMG), *"Digital Images of Official Maps of Alquist-Priolo Earthquake Fault Zones of California, Southern Region"*, CDMG Compact Disc 2000-003, 2000.

A liquefaction analysis was performed in general accordance with California Geologic Survey Special Publication 117. The liquefaction study utilized the software "CLiq" by GeoLogismiki Geotechnical Software. This analysis was based on the soil data from the CPT sounding. A Peak Ground Acceleration (PGA) of 0.731g and a mean magnitude of 6.76 for the project site was used. A groundwater level of 5 feet bgs was used in our analysis. Analysis were performed on data obtained from CPT1. CPT calculations were assessed using the Idriss & Boulanger (2008), Moss et al. (2006), and Boulanger & Idriss (2014) methods.

A liquefaction potential analysis was calculated from a depth of 5 to 60 feet below the ground surface. Based on the analysis, liquefiable layers most susceptible to liquefaction potential were encountered between the depths of approximately 0 to 5, 20 to 25, and 54 to 57 feet bgs. Due to the cohesive nature and thickness of non-liquefiable soils across the surface of the site as well as the lithology consisting predominantly of clayey soils with thin sand layers, we believe the probability for liquefaction to manifest at the surface is low to moderate. However, based on our review of the calculations by the various methods, the anticipated potential total liquefaction-induced settlement is on the order of ½ inch. Actual settlement could vary by a factor of 2. The differential liquefaction-induced settlement may be considered to be half the total liquefaction induced settlement. Since the project site and surrounding area is relatively level ground, the potential for lateral spreading is considered to be low.

Accurate evaluation of the effects of liquefaction-induced instability requires accurate estimation of the shear strength of the liquefied soils. Terracon should be consulted to evaluate the subsurface conditions and foundation capacities after a significant event where liquefaction has occurred.

FLOOR SLABS

We have assumed that the fire station and building will be constructed with a concrete slab-on-grade floor. The surficial soils are primarily comprised of moderately plastic lean clays with variable amounts of sand and gravel exhibiting the potential for volume change with changes in moisture. Additional areas of localized moderately to highly plastic clays may be present in the building area where borings/CPTs were not performed. In order to help mitigate the effects of the moderately to highly plastic soils on building floor slabs we recommend the slabs be underlain by 12 inches, low volume change (LVC) zone.

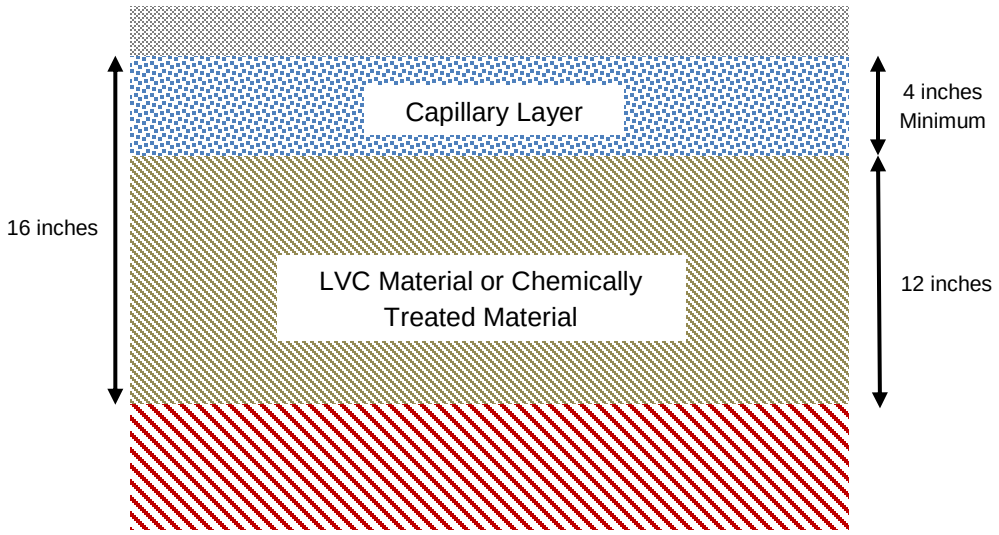
As an alternative, the top 12 inches of finished pad grade may be chemically treated with lime. Chemical treatment involves treating the subgrade soils with a certain percentage of high calcium quicklime, usually 3.5 to 5 percent based on the dry unit weight of the soil, for a depth of 12 inches. For estimating purposes, we recommend using 4.5 percent lime, and a soil unit weight of 110 pounds per cubic foot. For a 12-inch treatment depth, this results in an estimated minimum spread rate of 5 pounds per square foot lime. The actual amount of lime to be used should be determined

by Terracon and by laboratory testing **at least two weeks prior** to the start of grading operations. Chemical treatment is performed after rough grading is completed.

Using a 12-inch thick LVC zone or chemically treated material as recommended in this report may not eliminate all future subgrade volume change and resultant slab movements. However, the procedures outlined herein should help to reduce the potential for subgrade volume change. LVC fill should meet the specifications and be placed and compacted as recommended in **Earthwork** section of this report.

Due to the potential for significant moisture fluctuations of subgrade material beneath slabs supported at-grade, the Geotechnical Engineer should evaluate the material within 12 inches of the bottom of the LVC zone immediately prior to placement of additional fill or slabs. Soils below the specified water contents within this zone should be moisture conditioned or replaced with structural fill as stated in our **Earthwork** section.

Concrete Slab-on-Grade



Design parameters for floor slabs assume the requirements for **Earthwork** have been followed. Specific attention should be given to positive drainage away from the structure and positive drainage of the aggregate base beneath the floor slab.

Floor Slab Design Parameters

Item	Description
Floor Slab Support [1]	At least 12 inches of low volume change (LVC) material as described for structural fill in the **Fill Material Types** section or 12 inches of chemically treated soil.
Estimated Modulus of Subgrade Reaction [2]	200 pounds per square inch per inch (psi/in)
Capillary Break Layer Thickness [3, 4]	For floor slab areas covered with moisture sensitive flooring- Minimum 4 inches of free-draining (less than 6% passing the U.S. No. 200 sieve) crushed aggregate. For industrial floor slabs subjected to truck traffic- Minimum of 6 inches of Class 2 aggregate base compacted to at least 95% of the maximum dry density obtained in the ASTM D1557 test method.

1. Floor slabs should be structurally independent of building foundations or walls to reduce the possibility of floor slab cracking caused by differential movements between the slab and foundation.
2. Modulus of subgrade reaction is an estimated value based upon our experience with the subgrade condition, the requirements noted in **Earthwork**, and the floor slab support as noted in this table.
3. Free-draining granular material should have less than 5 percent fines (material passing the #200 sieve). Other design considerations such as cold temperatures and condensation development could warrant more extensive design provisions.
4. These granular materials are in addition to the LVC zone or chemically treated material.

The use of a vapor retarder should be considered beneath concrete slabs on grade covered with wood, tile, carpet, or other moisture sensitive or impervious coverings, or when the slab will support equipment sensitive to moisture. When conditions warrant the use of a vapor retarder, the slab designer should refer to ACI 302 and/or ACI 360 for procedures and cautions regarding the use and placement of a vapor retarder.

Saw-cut control joints should be placed in the slab to help control the location and extent of cracking. For additional recommendations refer to the ACI Design Manual. Joints or cracks should be sealed with a water-proof, non-extruding compressible compound specifically recommended for heavy duty concrete pavement and wet environments.

Where floor slabs are tied to perimeter walls or turn-down slabs to meet structural or other construction objectives, our experience indicates differential movement between the walls and slabs will likely be observed in adjacent slab expansion joints or floor slab cracks beyond the length of the structural dowels. The Structural Engineer should account for potential differential settlement through use of sufficient control joints, appropriate reinforcing or other means.

Floor Slab Construction Considerations

Finished subgrade, within and for at least 10 feet beyond the floor slab, should be protected from traffic, rutting, or other disturbance and maintained in a relatively moist condition until floor slabs are constructed. If the subgrade should become damaged or desiccated prior to construction of floor slabs, the affected material should be removed and structural fill should be added to replace the resulting excavation. Final conditioning of the finished subgrade should be performed immediately prior to placement of the floor slab support course.

The Geotechnical Engineer should approve the condition of the floor slab subgrades immediately prior to placement of the floor slab support course, reinforcing steel, and concrete. Attention should be paid to high traffic areas that were rutted and disturbed earlier, and to areas where backfilled trenches are located.

PAVEMENTS

General Pavement Comments

Pavement designs are provided for the traffic conditions and pavement life conditions as noted in **Project Description** and in the following sections of this report. A critical aspect of pavement performance is site preparation. Pavement designs, noted in this section, must be applied to the site, which has been prepared as recommended in the **Earthwork** section.

On most project sites, the site grading is accomplished relatively early in the construction phase. Fills are placed and compacted in a uniform manner. However, as construction proceeds, excavations are made into these areas, rainfall and surface water saturates some areas, heavy traffic from concrete trucks and other delivery vehicles disturbs the subgrade and many surface irregularities are filled in with loose soils to improve trafficability temporarily. As a result, the pavement subgrades, initially prepared early in the project, should be carefully evaluated as the time for pavement construction approaches.

We recommend the moisture content and density of the top 12 inches of the subgrade be evaluated and the pavement subgrades be proofrolled within two days prior to commencement of placing aggregate base and actual paving operations. Areas not in compliance with the required ranges of moisture or density should be moisture conditioned and recompacted. Particular attention should be paid to high traffic areas that were rutted and disturbed earlier and to areas where backfilled trenches are located. Areas where unsuitable conditions are located should be repaired by removing and replacing the materials with properly compacted fills.

After proof rolling and repairing deep subgrade deficiencies, the entire subgrade should be scarified and developed as recommended in the **Earthwork** section this report to provide a uniform subgrade for pavement construction. Areas that appear severely desiccated following site stripping may require further undercutting and moisture conditioning. If a significant precipitation event

occurs after the evaluation or if the surface becomes disturbed, the subgrade should be reviewed by qualified personnel immediately prior to paving. The subgrade should be in its finished form at the time of the final review.

Support characteristics of subgrade for pavement design do not account for shrink/swell movements of an expansive clay subgrade, such as soils encountered on this project. Thus, the pavement may be adequate from a structural standpoint, yet still experience cracking and deformation due to shrink/swell related movement of the subgrade.

Pavement Design Parameters

Design of Asphaltic Concrete (AC) pavement sections were calculated using the Caltrans Highway Design Manual, latest edition, and a 20-year design life. Design of Portland Cement Concrete (PCC) pavement sections were designed using ACI 330R-08, "Guide for the Design and Construction of Concrete Parking Lots."

One sample of the near surface soil taken from our borings was tested in a Terracon laboratory to determine the Hveem Stabilometer Value (R-value). The test produced an R-value of 29. A design R-Value of 29 was used to calculate the AC pavement thickness sections. A modulus of subgrade reaction of 120 pci was use for the PCC pavement designs.

Recommendations for conventional pavement section is presented below.

Pavement Section Thicknesses

The following table provide options for AC:

Asphaltic Concrete Design				
Layer	**Thickness (inches)**			
	Auto Parking Areas (TI=5.0 assumed)[3]	**Auto Parking Areas (TI=5.5 assumed)[3]**	**Truck Parking Areas (TI=6.0 assumed)[3]**	**Main Truck Entrance Areas (TI=8.0 assumed)[3]**
AC[1, 2]	3.0	3.0	3.5	5.0
Aggregate **B**ase[1]	5.5	7.5	8.0	11.0

1. All materials should meet the current Caltrans Highway Design Manual specifications
   - Asphaltic Base – Caltrans Class 2 aggregate base
2. A minimum 1.5-inch surface course should be used on ACC pavements.
3. The traffic index (TI) is a measure of traffic wheel loading frequency and intensity of anticipated traffic.

Rigid PCC pavements will perform better than AC in areas where short-radii turning and braking are expected (i.e. entrance/exit aprons) due to better resistance to rutting and shoving. In addition, PCC pavement will perform better in areas subject to large or sustained loads. We recommend rigid pavement for the dumpster area to include the area where the trucks will pick up the dumpster. An adequate number of longitudinal and transverse control joints should be placed in the rigid pavement in accordance with ACI and/or AASHTO requirements. Expansion (isolation) joints must be full depth and should only be used to isolate fixed objects abutting or within the paved area.

All concrete for rigid pavements should have a minimum flexural strength of 550 psi, a minimum compressive strength of 4,500 psi. and be placed with a maximum slump of four inches. Proper joint spacing will also be required to prevent excessive slab curling and shrinkage cracking. All joints should be sealed to prevent entry of foreign material and dowelled where necessary for load transfer.

We recommend all PCC pavement details for joint spacing, joint reinforcement, and joint sealing be prepared in accordance with American Concrete Institute (ACI 330R and ACI 325R.9). PCC pavements should be provided with mechanically reinforced joints (doweled or keyed) in accordance with ACI 330R. Where practical, we recommend early-entry cutting of crack-control joints in PCC pavements. Cutting of the concrete in its “green” state typically reduces the potential for micro-cracking of the pavements prior to the crack control joints being formed, compared to cutting the joints after the concrete has fully set. Micro-cracking of pavements may lead to crack formation in locations other than the sawed joints, and/or reduction of fatigue life of the pavement.

Thickened edges should be used along outside edges of concrete pavements. Edge thickness should be at least 2 inches thicker than concrete pavement thickness and taper to the actual concrete pavement thickness 36 inches inward from the edge. Integral curbs may be used in lieu of thickened edges.

Portland Cement Concrete Design			
Layer	Thickness (inches)		
	Car Parking and Access Lanes [1]	Truck Parking [1]	Dumpster Pads [1,3]
PCC [2]	4.5	6.0	7.0
Aggregate base [2]	4.0	4.0	4.0

1. Car Parking and Access Lanes: ADTT = 1 truck per day
   Truck Parking: ADTT = 25 trucks per day
   Dumpster Pads: Per Category C
2. All materials should meet the current Caltrans Highway Design Manual specifications.
3. The trash container pad should be large enough to support the container and the tipping axle of the collection truck.

As more specific traffic information becomes available for the project, we should be contacted to reevaluate the pavement calculations.

Pavement Drainage

Pavements should be sloped to provide rapid drainage of surface water. Water allowed to pond on or adjacent to the pavements could saturate the subgrade and contribute to premature pavement deterioration. In addition, the pavement subgrade should be graded to provide positive drainage within the granular base section. Appropriate sub-drainage or connection to a suitable daylight outlet should be provided to remove water from the granular subbase.

The pavement surfacing and adjacent sidewalks should be sloped to provide rapid drainage of surface water. Water should not be allowed to pond on or adjacent to these grade-supported slabs, since this could saturate the subgrade and contribute to premature pavement or slab deterioration. In areas where pavement sections abut bioswales, curb should extend below the planned AB section to intercept water infiltration below the pavement section. Water migration in and out of the pavement sections may result in repeated shrinkage and swelling and increasing pavement section fatigue.

Pavement Maintenance

The pavement sections represent minimum recommended thicknesses and, as such, periodic maintenance should be anticipated. Therefore, preventive maintenance should be planned and provided for through an on-going pavement management program. Maintenance activities are intended to slow the rate of pavement deterioration and to preserve the pavement investment. Maintenance consists of both localized maintenance (e.g., crack and joint sealing and patching)

and global maintenance (e.g., surface sealing). Preventive maintenance is usually the priority when implementing a pavement maintenance program. Additional engineering observation is recommended to determine the type and extent of a cost-effective program. Even with periodic maintenance, some movements and related cracking may still occur and repairs may be required.

Pavement performance is affected by its surroundings. In addition to providing preventive maintenance, the civil engineer should consider the following recommendations in the design and layout of pavements:

- Final grade adjacent to paved areas should slope down from the edges at a minimum 2%.
- Subgrade and pavement surfaces should have a minimum 2% slope to promote proper surface drainage.
- Install below pavement drainage systems surrounding areas anticipated for frequent wetting.
- Install joint sealant and seal cracks immediately.
- Seal all landscaped areas in or adjacent to pavements to reduce moisture migration to subgrade soils.
- Place compacted, low permeability backfill against the exterior side of curb and gutter.
- Place curb, gutter and/or sidewalk directly on clay subgrade soils rather than on unbound granular base course materials.

CORROSIVITY

The table below lists the results of laboratory soluble sulfate, soluble chloride, electrical resistivity, and pH testing. The values may be used to estimate potential corrosive characteristics of the on-site soils with respect to contact with the various underground materials which will be used for project construction.

Corrosivity Test Results Summary						
Boring	**Sample Depth (feet)**	**Soil Description**	**Soluble Sulfate (ppm)**	**Soluble Chloride (ppm)**	**Electrical Resistivity (Ω-cm)**	**pH**
B3	1-2½	Clayey Sand	259	25	2425	8.86

These test results are provided to assist in determining the type and degree of corrosion protection that may be required for the project. We recommend that a certified corrosion engineer determine the need for corrosion protection and design appropriate protective measures.

Resistivity

The resistivity value indicates the sample tested exhibits a moderate corrosive potential to buried metal pipes. Evaluation of the test results is based upon the guidelines of J.F. Palmer, "Soil Resistivity Measurements and Analysis", Materials Performance, Volume 13, January 1974. The following table outlines the guidelines for soil resistivity for corrosion potential.

Corrosion Potential of Soil on Steel	
Soil Resistivity (ohm-cm)	**Corrosion Potential**
0 to 1,000	Very High
1,000 to 2,000	High
2,000 to 5,000	Moderate
> 5,000	Mild

Sulfates

The sulfate test results indicate that the soil from boring B3 classify as Class S1 according to Table 19.3.1.1 of ACI 318-14. This indicates that the sulfate severity is moderate when considering corrosion to concrete. Based on the sulfate content test results, ACI 318-14, Section 19.3 requires the use of Type II cement, a maximum water/cement ratio of 0.50, and a minimum compressive strength of 4,000 psi. For further information, see ACI 318-14, Section 19.3.

Laboratory pH

Data suggests the soil pH should not be the dominant soil variable affecting soil corrosion if the soil has a pH in the 5 to 8 range. The pH of the sample tested was above the recommended range, and should therefore be considered when determining soil corrosion potential.

GENERAL COMMENTS

Our analysis and opinions are based upon our understanding of the project, the geotechnical conditions in the area, and the data obtained from our site exploration. Natural variations will occur between exploration point locations or due to the modifying effects of construction or weather. The nature and extent of such variations may not become evident until during or after construction. Terracon should be retained as the Geotechnical Engineer, where noted in this report, to provide observation and testing services during pertinent construction phases. If variations appear, we can provide further evaluation and supplemental recommendations. If variations are noted in the absence of our observation and testing services on-site, we should be immediately notified so that we can provide evaluation and supplemental recommendations.

Our Scope of Services does not include either specifically or by implication any environmental or biological (e.g., mold, fungi, bacteria) assessment of the site or identification or prevention of pollutants, hazardous materials or conditions. If the owner is concerned about the potential for such contamination or pollution, other studies should be undertaken.

Our services and any correspondence or collaboration through this system are intended for the sole benefit and exclusive use of our client for specific application to the project discussed and are accomplished in accordance with generally accepted geotechnical engineering practices with no third-party beneficiaries intended. Any third-party access to services or correspondence is solely for information purposes to support the services provided by Terracon to our client. Reliance upon the services and any work product is limited to our client, and is not intended for third parties. Any use or reliance of the provided information by third parties is done solely at their own risk. No warranties, either express or implied, are intended or made.

Site characteristics as provided are for design purposes and not to estimate excavation cost. Any use of our report in that regard is done at the sole risk of the excavating cost estimator as there may be variations on the site that are not apparent in the data that could significantly impact excavation cost. Any parties charged with estimating excavation costs should seek their own site characterization for specific purposes to obtain the specific level of detail necessary for costing. Site safety, and cost estimating including, excavation support, and dewatering requirements/design are the responsibility of others. If changes in the nature, design, or location of the project are planned, our conclusions and recommendations shall not be considered valid unless we review the changes and either verify or modify our conclusions in writing. This report should not be used after 3 years without written authorization from Terracon.

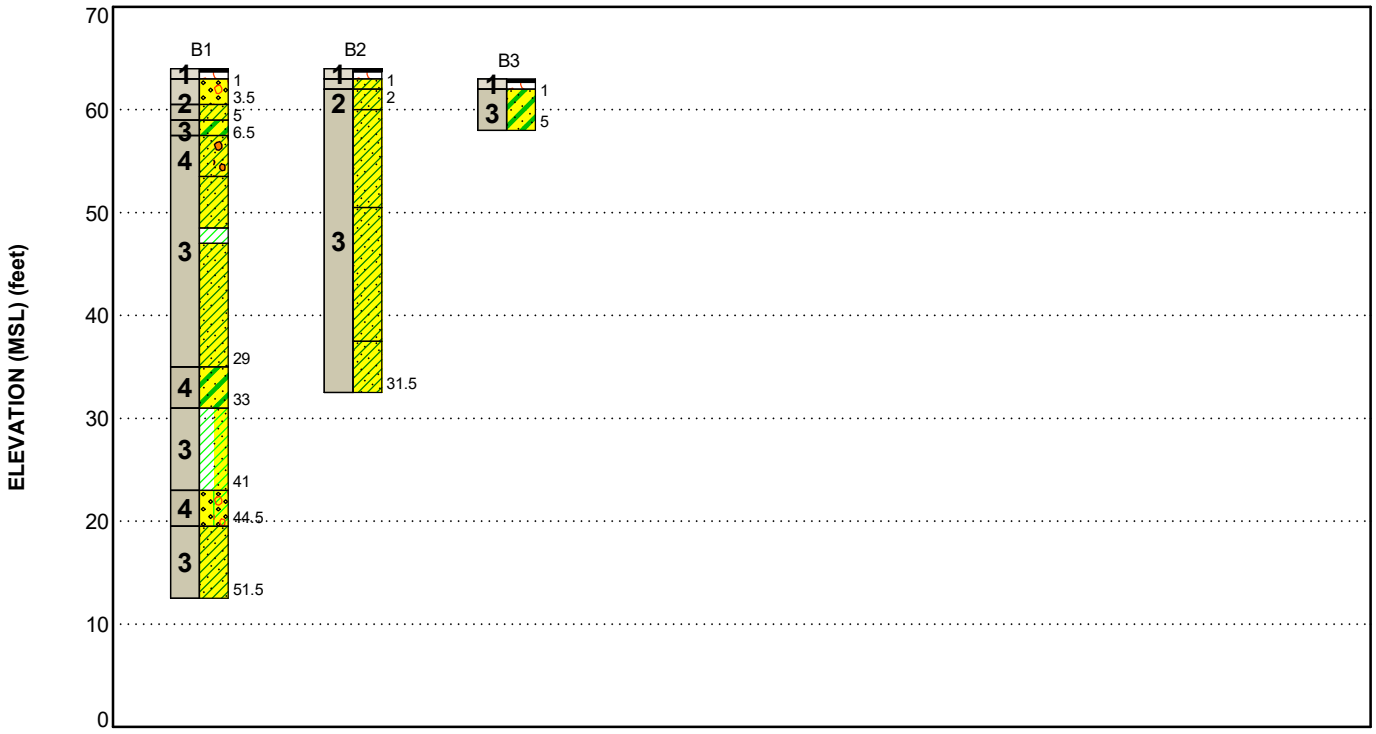
FIGURES

Contents:

GeoModel

GEOMODEL

Milpitas Fire Station 2 ■ Milpitas, CA
3/28/2019 ■ Terracon Project No. ND195009



This is not a cross section. This is intended to display the Geotechnical Model only. See individual logs for more detailed conditions.

Model Layer	Layer Name	General Description
1	**Asphalt**	4-inches thick asphalt and 8-inches thick aggregate base
2	**Fill**	Medium dense well graded sand with gravel and stiff sandy lean clay.
3	**Lean Clay**	Medium stiff to hard lean clay with variable amounts of sand and gravel.
4	**Sand**	Loose to medium dense sand with variable amounts of clay and gravel.

LEGEND

- Asphalt
- Aggregate Base Course
- Well-graded Sand with Gravel
- Sandy Lean Clay
- Clayey Sand
- Sandy Lean Clay with Gravel
- Lean Clay
- Lean Clay with Sand
- Well-graded Sand with Clay and Gravel

- First Water Observation
- Second Water Observation
- Third Water Observation

Groundwater levels are temporal. The levels shown are representative of the date and time of our exploration. Significant changes are possible over time. Water levels shown are as measured during and/or after drilling. In some cases, boring advancement methods mask the presence/absence of groundwater. See individual logs for details.

NOTES:
Layering shown on this figure has been developed by the geotechnical engineer for purposes of modeling the subsurface conditions as required for the subsequent geotechnical engineering for this project. Numbers adjacent to soil column indicate depth below ground surface.

ATTACHMENTS

EXPLORATION AND TESTING PROCEDURES

Field Exploration

Number of Borings/CPTs	Boring/CPT Depth (feet)	Planned Location
1	51½	Planned building area
1	31½	Planned inclusion area
1	5	Planned parking/driveway area
1 CPT[1]	92.7	Planned building area

Boring/CPT Layout and Elevations: The boring/CPT layout was performed by Terracon. Coordinates were obtained with a handheld GPS unit (estimated horizontal accuracy of about ±20 feet) and approximate elevations were estimated using Google Earth Pro. If more precise boring/CPT locations and elevations are desired, we recommend borings/CPTs be surveyed.

Subsurface Exploration Procedures: We advanced the borings with a truck-mounted drill rig using continuous flight, hollow stem augers and the mud rotary method. One to three samples were obtained in the upper 10 feet of each borings and at intervals of 5 feet thereafter. A bulk sample was also collected in boring B3. Soil sampling was performed using split-barrel sampling. In the split-barrel sampling procedure, a standard 2-inch outer diameter split-barrel sampling spoon was driven into the ground by a 140-pound automatic hammer falling a distance of 30 inches. The number of blows required to advance the sampling spoon the last 12 inches of a normal 18-inch penetration is recorded as the Standard Penetration Test (SPT) resistance value. The SPT resistance values, also referred to as N-values, are indicated on the boring logs at the test depths. A 2.5-inch O.D. split-barrel Modified California sampler with 2.0-inch I.D. tube lined sampler was also used for sampling. The Modified California sampling procedures are similar to standard split spoon sampling procedure; however, blow counts are not the same as the SPT N-value. The values provided on our boring logs are uncorrected. Additionally, we observed and recorded groundwater levels during drilling and sampling. Per the requirements of the local health department and for safety purposes, all borings were backfilled with grout or auger cuttings after their completion. Pavements were patched with cold-mix asphalt.

For the cone penetrometer testing, the CPT rig hydraulically pushed an instrumented cone through the soil while nearly continuous readings were recorded to a portable computer. The cone was equipped with electronic load cells to measure tip resistance and sleeve resistance and a pressure transducer to measure the generated ambient pore pressure. The face of the cone has an apex angle of 60° and an area of 15 cm^2. Digital Data representing the tip resistance, friction resistance, pore water pressure, and probe inclination angle were recorded about every 2 centimeters while advancing through the ground at a rate between 1½ and 2½ centimeters per second. These measurements are correlated to various soil properties used for geotechnical

design. No soil samples were gathered through this subsurface investigation technique. CPT testing was conducted in general accordance with ASTM D5778 "Standard Test Method for Performing Electronic Friction Cone and Piezocone Penetration Testing of Soils."

The sampling depths, penetration distances, and other sampling information was recorded on the field boring logs. The samples were placed in appropriate containers and taken to our soil laboratory for testing and classification by a Geotechnical Engineer. Our exploration team prepared field boring logs as part of the drilling operations. These field logs included visual classifications of the materials encountered during drilling and our interpretation of the subsurface conditions between samples. Final boring logs were prepared from the field logs. The final boring logs represent the Geotechnical Engineer's interpretation of the field logs and include modifications based on observations and tests of the samples in our laboratory.

Laboratory Testing

The project engineer reviewed the field data and assigned laboratory tests to understand the engineering properties of the various soil strata, as necessary, for this project. Procedural standards noted below are for reference to methodology in general. In some cases, variations to methods were applied because of local practice or professional judgment. Standards noted below include reference to other, related standards. Such references are not necessarily applicable to describe the specific test performed.

- ASTM D2216 Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
- ASTM D4318 Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
- ASTM D1140 Standard Test Method for Determining the Amount of Material Finer than No. 200 Sieve by Soil Washing
- ASTM D2435/D2435M Standard Test Methods for One-Dimensional Consolidation Properties of Soils Using Incremental Loading
- ASTM G162 – 99 Standard Practice for Conducting and Evaluating Laboratory Corrosion Tests in Soils
- ASTM D2844 Standard Test Method for Resistance R-Value and Expansion Pressure of Compacted Soils

The laboratory testing program included examination of soil samples by an engineer. Based on the material's texture and plasticity, we described and classified the soil samples in accordance with the Unified Soil Classification System.

SITE LOCATION AND EXPLORATION PLANS

Contents:

Site Location Plan
Exploration Plan

Note: All attachments are one page unless noted above.

SITE LOCATION

Milpitas Fire Station 2 ■ Milpitas, Santa Clara County, CA 95035
March 29, 2019 ■ Terracon Project No. ND195009

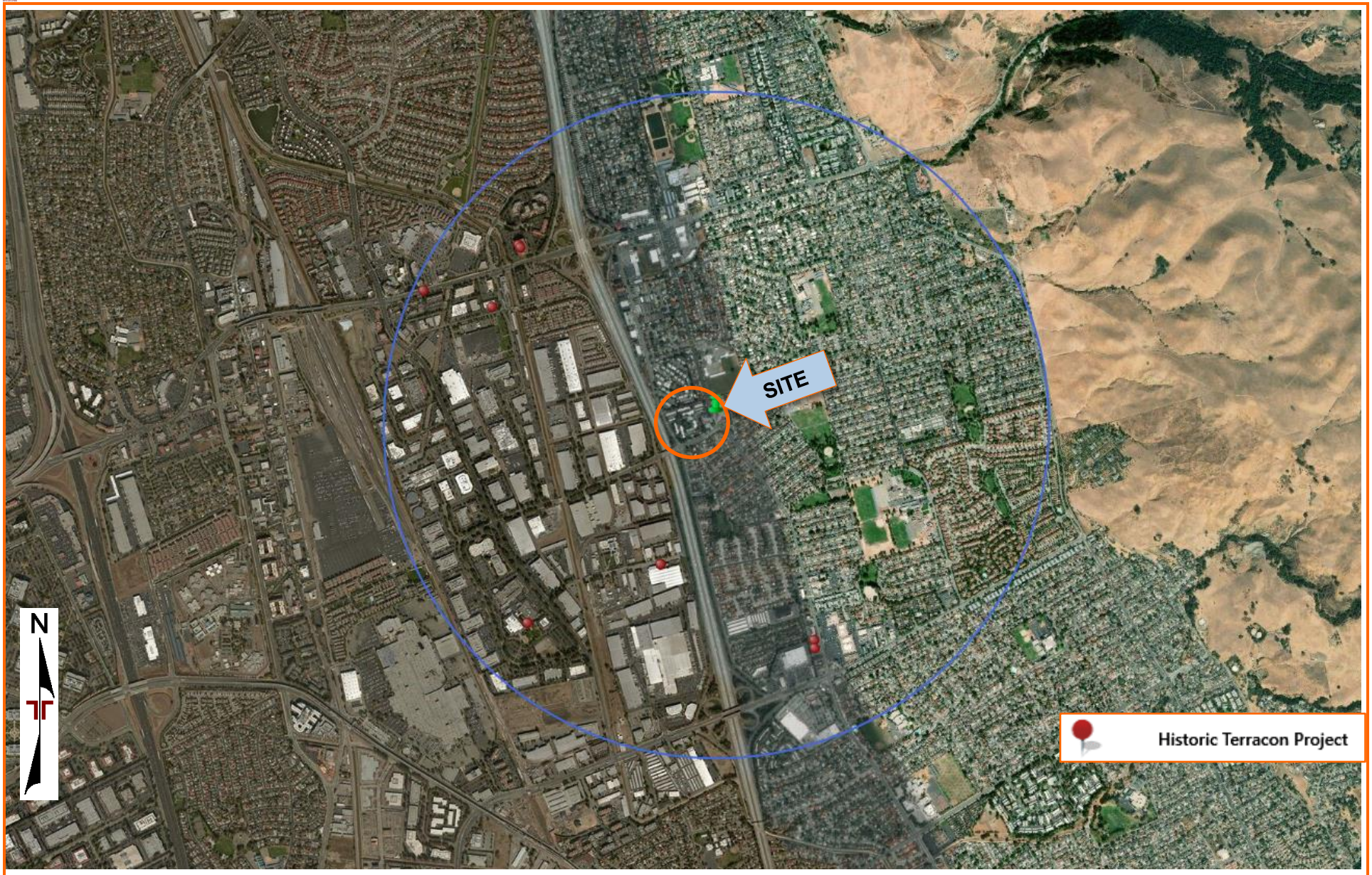


DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

MAP PROVIDED BY MICROSOFT BING

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

MAP PROVIDED BY MICROSOFT BING

EXPLORATION RESULTS

Contents:

Boring Logs (B-1 through B-3)
CPT Log
Atterberg Limits
Consolidation
R-Value
Corrosivity

Note: All attachments are one page unless noted above.

BORING LOG NO. B1

PROJECT: Milpitas Fire Station 2

CLIENT: Shah Kawasaki Architects
Oakland, CA

SITE: 1263 Yosemite Drive
Milpitas, CA

LOCATION See Exploration Plan

Latitude: 37.4271° Longitude: -121.8819°

Approximate Surface Elev.: 64 (Ft.) +/-

MODEL LAYER	DEPTH	ELEVATION (Ft.)	
1	0.3	63.5+/-	**ASPHALT**, 4"-thick
	1.0	63+/-	**AGGREGATE BASE COURSE**, 8"-thick
2			**FILL - WELL GRADED SAND WITH GRAVEL (SW)**, fine to coarse grained, dark brown to brown, medium dense
	3.5	60.5+/-	
3			**SANDY LEAN CLAY (CL)**, fine to coarse grained, dark brown, hard
	5.0	59+/-	
4			**CLAYEY SAND (SC)**, fine to medium grained, dark brown, medium dense
	6.5	57.5+/-	
3			**SANDY LEAN CLAY WITH GRAVEL (CL)**, fine to coarse grained, dark brown, hard
	10.5	53.5+/-	
			SANDY LEAN CLAY (CL), fine to medium grained, brown, medium stiff
	15.5	48.5+/-	
			LEAN CLAY (CL), fine to medium grained, yellowish brown with red, medium stiff
	17.0	47+/-	
			SANDY LEAN CLAY (CL), fine to medium grained, yellowish brown with red, stiff to hard, with a lense of cemented sand

DEPTH (Ft.)	SAMPLE TYPE	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
		12-13-5		3	95		
5		9-12-15	4.5+ (HP)	11	100		
		8-12-15	4.5+ (HP)	17	98	33-17-16	67
10		5-9-6	3.0 (HP)	21	102		
15		2-3-5	2.25 (HP)	34	82	49-23-26	88
20		3-7-11	3.25 (HP)	25	92		
25		13-36-23		6			

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
6" Hollow Stem Auger and Mud Rotary

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Water level not determined due to need to the need for mud rotary drilling

Terracon
5075 Commercial Cir, Ste E
Concord, CA

Boring Started: 02-28-2019 | Boring Completed: 02-28-2019

Drill Rig: CME 75 | Driller: Pitcher

Project No.: ND195009

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BORING LOG NO. B1

PROJECT: Milpitas Fire Station 2

CLIENT: Shah Kawasaki Architects
Oakland, CA

SITE: 1263 Yosemite Drive
Milpitas, CA

LOCATION See Exploration Plan

Latitude: 37.4271° Longitude: -121.8819°

Approximate Surface Elev.: 64 (Ft.) +/-

MODEL LAYER	GRAPHIC LOG	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
3			**SANDY LEAN CLAY (CL)**, fine to medium grained, yellowish brown with red, stiff to hard, with a lense of cemented sand *(continued)*									
		29.0	35+/-									
4			**CLAYEY SAND (SC)**, fine to medium grained, brown with yellowish red, loose, with a lense of poorly graded sand	30			6-8-8	1.5 (HP)	21	101	28-16-12	41
		33.0	31+/-									
3			**LEAN CLAY WITH SAND (CL)**, fine to medium grained, brown to yellowish brown, stiff	35			6-6-11	3.5 (HP)	21	97	30-17-13	76
		41.0	23+/-	40			4-5-20		21	99		
4			**WELL GRADED SAND WITH CLAY AND GRAVEL (SW-SC)**, fine to coarse grained, brown, medium dense									
		44.5	19.5+/-	45			3-7-9		25	93		
3			**SANDY LEAN CLAY (CL)**, fine to medium grained, brown, stiff									
		51.5	12.5+/-	50			4-8-10	2.0 (HP)	24	94		
			Boring Terminated at 51.5 Feet									

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
6" Hollow Stem Auger and Mud Rotary

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Water level not determined due to need to the need for mud rotary drilling

Terracon
5075 Commercial Cir, Ste E
Concord, CA

Boring Started: 02-28-2019 | Boring Completed: 02-28-2019

Drill Rig: CME 75 | Driller: Pitcher

Project No.: ND195009

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BORING LOG NO. B2

PROJECT: Milpitas Fire Station 2

CLIENT: Shah Kawasaki Architects
Oakland, CA

SITE: 1263 Yosemite Drive
Milpitas, CA

LOCATION See Exploration Plan

Latitude: 37.4271° Longitude: -121.8814°

Surface Elev.: 64 (Ft.)

MODEL LAYER	GRAPHIC LOG	DEPTH	ELEVATION (Ft.)	DESCRIPTION
1		0.3	63.5	**ASPHALT**, 4"-thick
		1.0	63	**AGGREGATE BASE COURSE**, 8"-thick
2		2.0	62	**FILL - SANDY LEAN CLAY (CL)**, fine to coarse grained, dark brown, stiff
		4.0	60	**SANDY LEAN CLAY (CL)**, fine to medium grained, dark brown, medium stiff
				SANDY LEAN CLAY (CL), fine to medium grained, dark brown to brown, medium stiff to stiff
		13.5	50.5	
3				**SANDY LEAN CLAY (CL)**, fine to medium grained, brown with gray, medium stiff to stiff
		26.5	37.5	

DEPTH (Ft.)	SAMPLE TYPE	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
		5-4-6		21	83	30-18-12	55
5		6-8-9	1.5 (HP)	18	100		
10		2-4-5	1.25 (HP)	27	92		
15		2-2-4 N=6		26			
20		5-6-8 N=14		24			
25		4-2-2 N=4		37			

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
6" Hollow Stem Auger and Mud Rotary

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Water level not determined due to need to the need for mud rotary drilling

Terracon
5075 Commercial Cir, Ste E
Concord, CA

Boring Started: 02-28-2019
Boring Completed: 02-28-2019
Drill Rig: CME 75
Driller: Pitcher
Project No.: ND195009

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BORING LOG NO. B2

PROJECT: Milpitas Fire Station 2

CLIENT: Shah Kawasaki Architects
Oakland, CA

SITE: 1263 Yosemite Drive
Milpitas, CA

LOCATION See Exploration Plan

Latitude: 37.4271° Longitude: -121.8814°

Surface Elev.: 64 (Ft.)

MODEL LAYER	GRAPHIC LOG	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
3		31.5	32.5	30			5-8-12 N=20		23			

SANDY LEAN CLAY (CL), fine to medium grained, brown with yellowish brown, very stiff *(continued)*

Boring Terminated at 31.5 Feet

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
6" Hollow Stem Auger and Mud Rotary

Abandonment Method:
Boring backfilled with cement-bentonite grout upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Water level not determined due to need to the need for mud rotary drilling

Terracon
5075 Commercial Cir, Ste E
Concord, CA

Boring Started: 02-28-2019
Boring Completed: 02-28-2019
Drill Rig: CME 75
Driller: Pitcher
Project No.: ND195009

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BORING LOG NO. B3

PROJECT: Milpitas Fire Station 2

CLIENT: Shah Kawasaki Architects
Oakland, CA

SITE: 1263 Yosemite Drive
Milpitas, CA

LOCATION See Exploration Plan

Latitude: 37.4272° Longitude: -121.8817°

Surface Elev.: 63 (Ft.)

MODEL LAYER	GRAPHIC LOG	DEPTH	ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	LABORATORY HP (tsf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
1		0.3 **ASPHALT**, 4"-thick	62.5									
		1.0 **AGGREGATE BASE COURSE**, 8"-thick	62									
3		**CLAYEY SAND (SC)**, fine to medium grained, dark brown to brown, very loose					2-3-2		13			
		5.0	58	5								
		Boring Terminated at 5 Feet										

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
6" Hollow Stem Auger

Abandonment Method:
Boring backfilled with soil cuttings upon completion.

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

Water level not determined due to need to the need for mud rotary drilling

Terracon
5075 Commercial Cir, Ste E
Concord, CA

Boring Started: 02-28-2019 | Boring Completed: 02-28-2019

Drill Rig: CME 75 | Driller: Pitcher

Project No.: ND195009

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CPT LOG NO. CPT-01

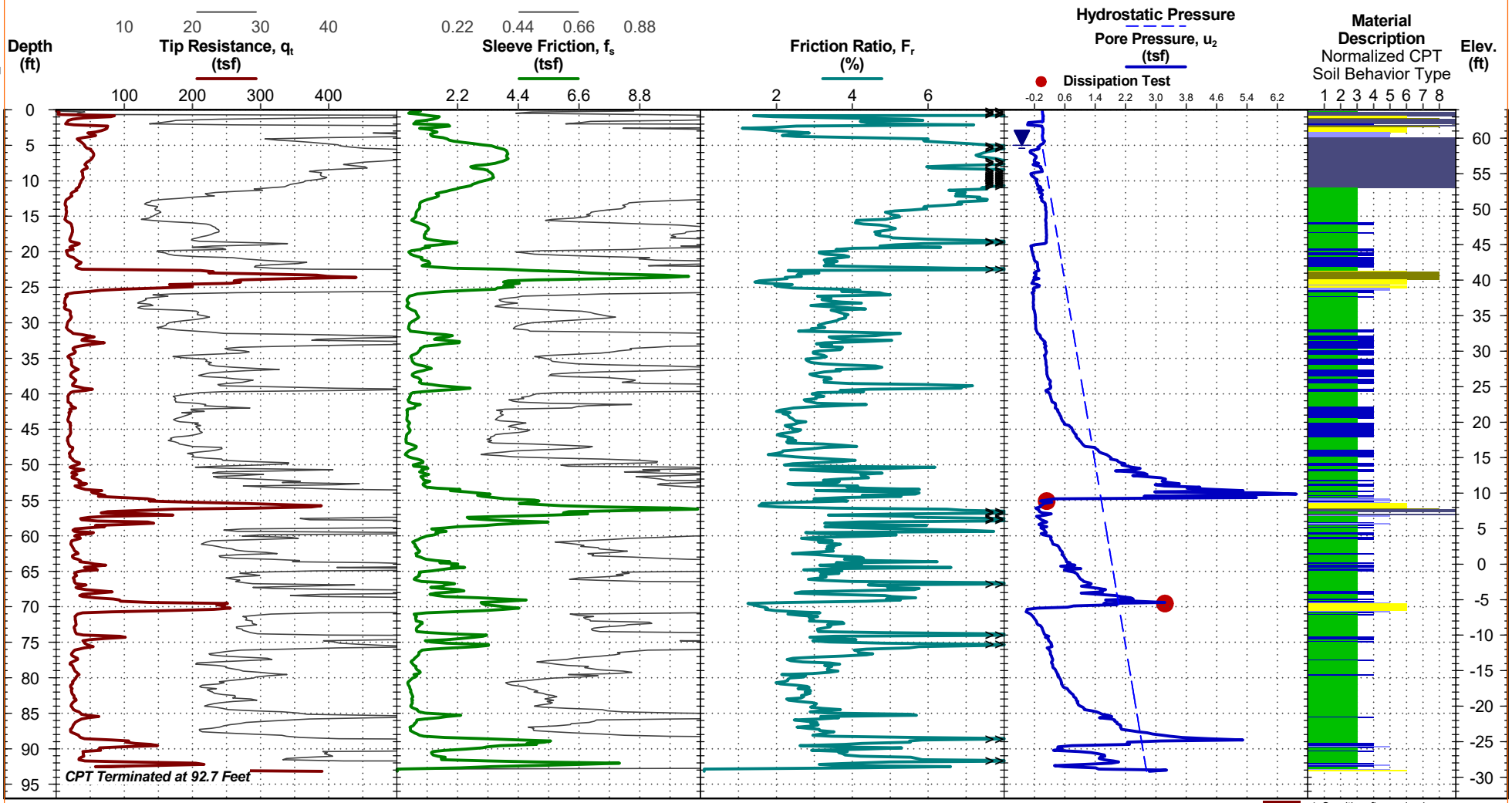
PROJECT: Milpitas Fire Station 2

CLIENT: Shah Kawasaki Architects
Oakland, CA

SITE: 1263 Yosemite Drive
Milpitas, CA

TEST LOCATION: See Exploration Plan

Surface Elev.: 64 ft
Latitude: 37.42705851°
Longitude: -121.881488°



See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

Dead weight of rig used as reaction force.
CPT sensor calibration reports available upon request.

1 Sensitive, fine grained
2 Organic soils - clay
3 Clay - silty clay to clay
4 Silt mixtures - clayey silt to silty clay
5 Sand mixtures - silty sand to sandy silt
6 Sands - clean sand to silty sand
7 Gravelly sand to dense sand
8 Very stiff sand to clayey sand
9 Very stiff fine grained

WATER LEVEL OBSERVATION
▼ 5 ft measured water depth
(used in normalizations and correlations; See Supporting Information)

Probe no. DDG1448

Terracon
5075 Commercial Cir, Ste E
Concord, CA

CPT Started: 2/28/2019
CPT Completed: 2/28/2019
Rig: CPT
Operator: Middle Earth
Project No.: ND195009

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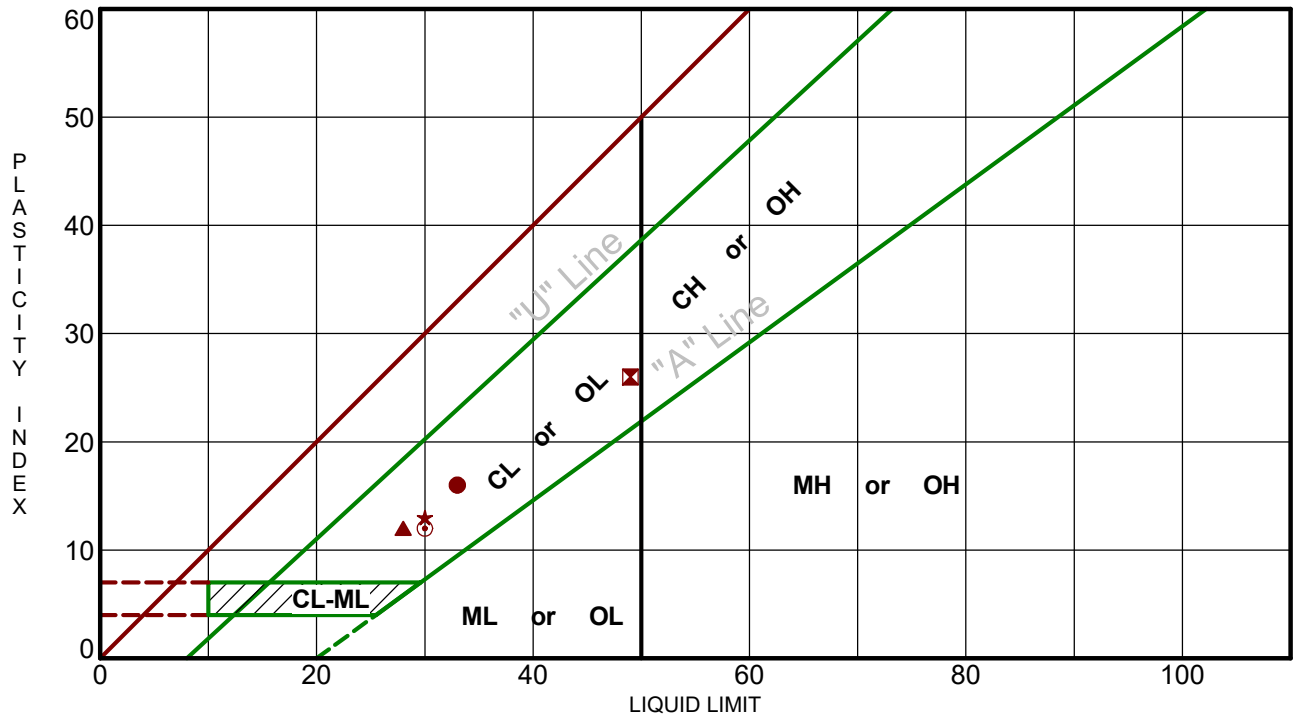
ATTERBERG LIMITS RESULTS

ASTM D4318



Boring ID		Depth	LL	PL	PI	Fines	USCS	Description
●	B1	7 - 8.5	33	17	16	67	CL	SANDY LEAN CLAY
⊠	B1	15 - 16.5	49	23	26	88	CL	LEAN CLAY
▲	B1	30 - 31.5	28	16	12	41	SC	CLAYEY SAND
★	B1	35 - 36.5	30	17	13	76	CL	LEAN CLAY with SAND
⊙	B2	1 - 2.5	30	18	12	55	CL	SANDY LEAN CLAY

PROJECT: Milpitas Fire Station 2

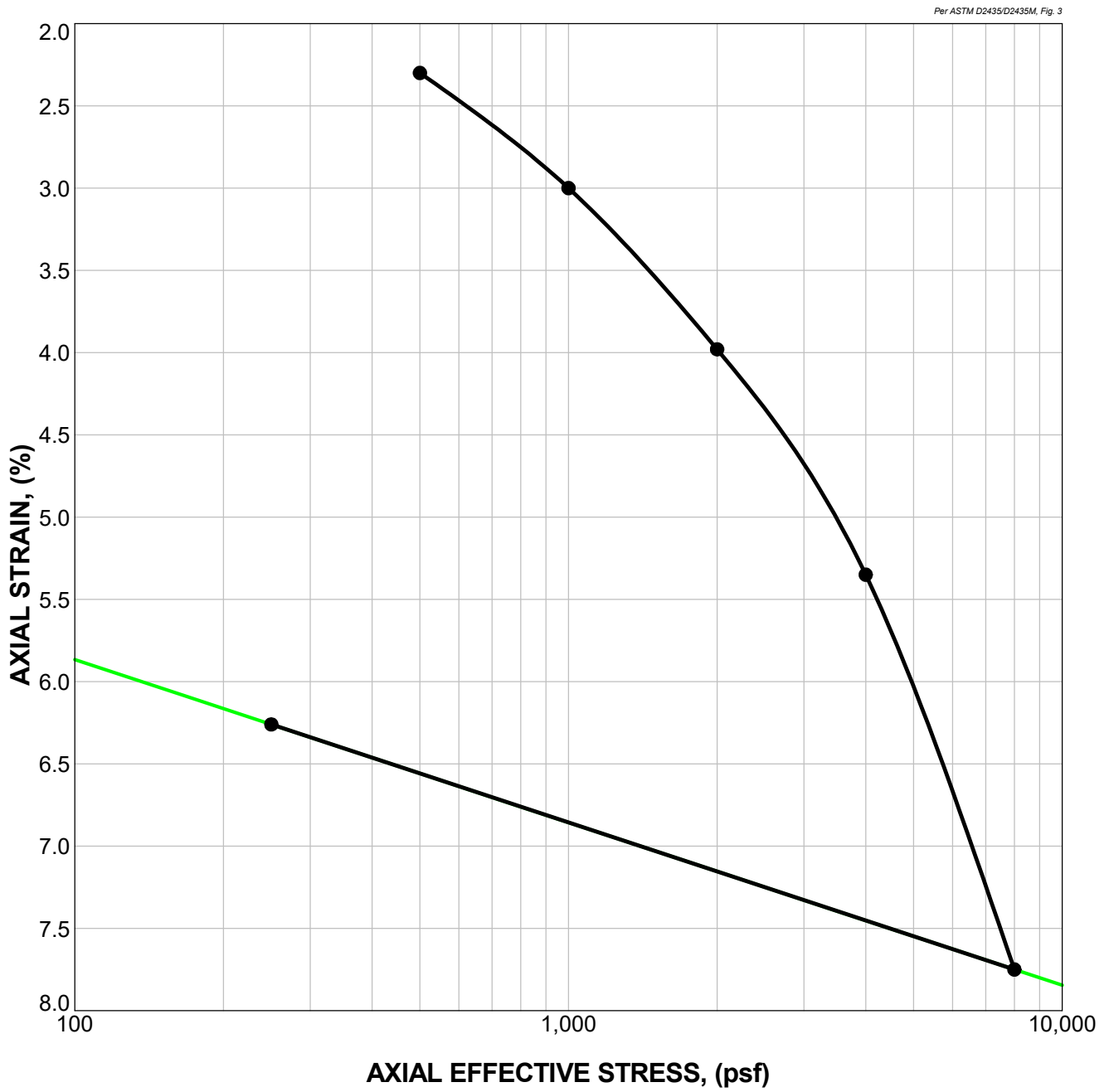
PROJECT NUMBER: ND195009

SITE: 1263 Yosemite Drive
Milpitas, CA

Terracon
5075 Commercial Cir, Ste E
Concord, CA

CLIENT: Shah Kawasaki Architects
Oakland, CA

CONSOLIDATION TEST (D2435)



Natural		Initial Dry Density (pcf)	LL	PI	Sp. Gr.	Overburden (psf)	P_c (psf)	C_c (% / log stress)	C_r (% / log stress)	Initial Void Ratio
Saturation	Moisture									
	18.8 %	100								

MATERIAL DESCRIPTION	USCS	AASHTO

NOTES:

Borehole: B2 Depth: 5 ft Specimen #: B2-2

PROJECT: Milpitas Fire Station 2

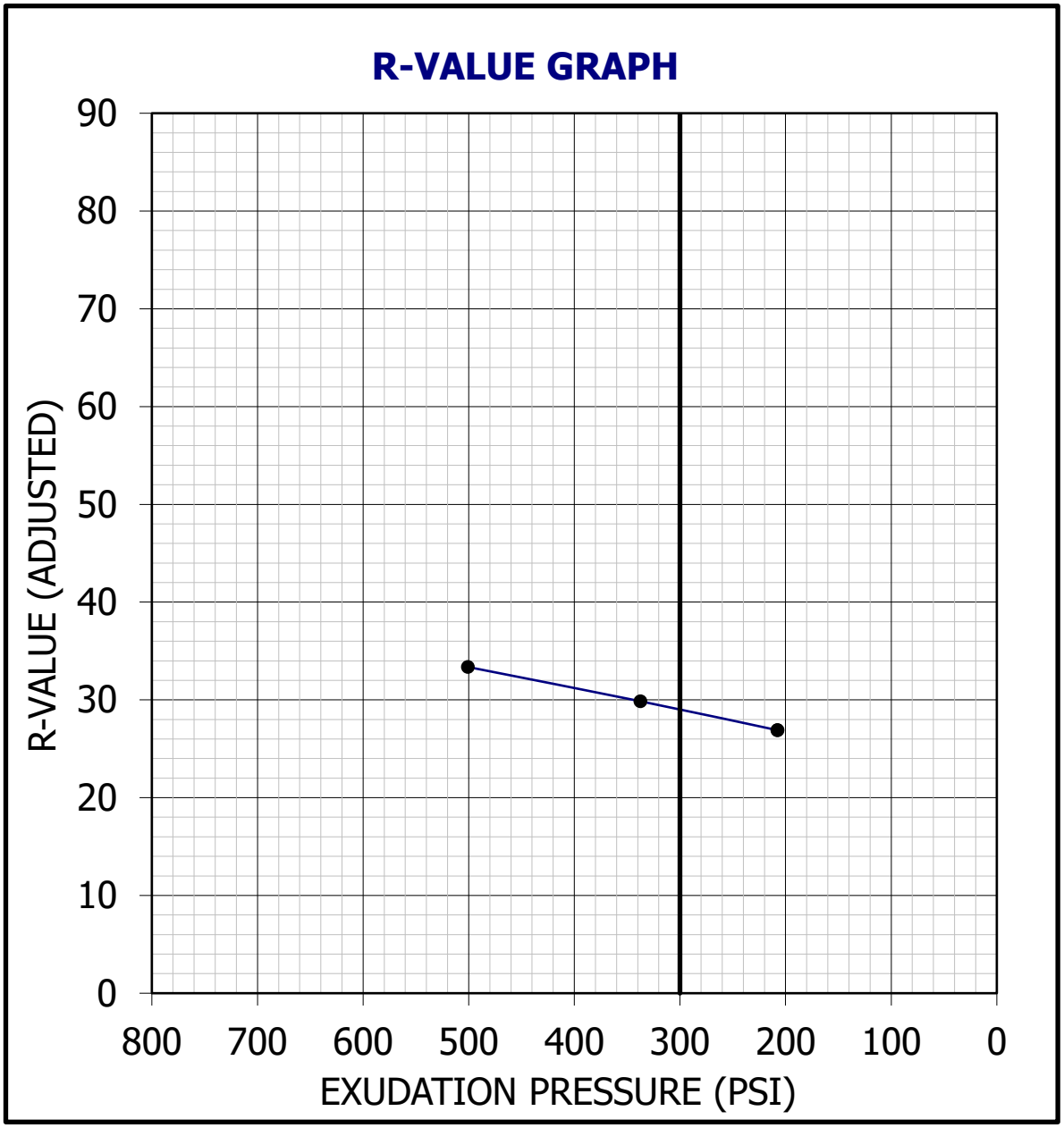
PROJECT NUMBER: ND195009

SITE: 1263 Yosemite Drive
Milpitas, CA

Terracon
5075 Commercial Cir, Ste E
Concord, CA

CLIENT: Shah Kawasaki Architects
Oakland, CA

JOB NAME:	Milpitas Fire Station 2	JOB #:	ND195009
SAMPLE NUMBER:	1	Location:	Native
SAMPLE CLASSIFICATION:	Sandy Clay w/ rock		



R-VALUE AT 300 PSI EXUDATION PRESSURE: **29**

NOTES:

CHEMICAL LABORATORY TEST REPORT

Project Number: ND195009
Service Date: 03/28/19
Report Date: 03/28/19
Task:

Terracon
750 Pilot Road, Suite F
Las Vegas, Nevada 89119
(702) 597-9393

Client

Shah Kawasaki Architects
Oakland, CA

Project

Milpitas Fire Station 2

Sample Submitted By: Terracon (ND) **Date Received:** 3/27/2019 **Lab No.: 19-0315**

Results of Corrosion Analysis

Sample Number	B3-1
Sample Location	B3
Sample Depth (ft.)	1.0-2.5
pH Analysis, AWWA 4500 H	8.86
Water Soluble Sulfate (SO4), ASTM C 1580 (mg/kg)	259
Sulfides, AWWA 4500-S D, (mg/kg)	Nil
Chlorides, ASTM D 512, (mg/kg)	25
Red-Ox, AWWA 2580, (mV)	+678
Total Salts, AWWA 2520 B, (mg/kg)	493
Resistivity, ASTM G 57, (ohm-cm)	2425

Analyzed By: Trisha Campo
Chemist

SUPPORTING INFORMATION

Contents:

General Notes
CPT General Notes
Unified Soil Classification System
Liquefaction Analysis

Note: All attachments are one page unless noted above.

GENERAL NOTES

DESCRIPTION OF SYMBOLS AND ABBREVIATIONS

Milpitas Fire Station 2 ■ Milpitas, CA

March 29, 2019 ■ Terracon Project No. ND195009

Terracon GeoReport

SAMPLING	WATER LEVEL	FIELD TESTS
Modified California Ring Sampler Grab Sample Standard Penetration Test	**Water Initially Encountered** **Water Level After a Specified Period of Time** **Water Level After a Specified Period of Time** Water levels indicated on the soil boring logs are the levels measured in the borehole at the times indicated. Groundwater level variations will occur over time. In low permeability soils, accurate determination of groundwater levels is not possible with short term water level observations.	**N** Standard Penetration Test Resistance (Blows/Ft.) **(HP)** Hand Penetrometer **(T)** Torvane **(DCP)** Dynamic Cone Penetrometer **UC** Unconfined Compressive Strength **(PID)** Photo-Ionization Detector **(OVA)** Organic Vapor Analyzer

DESCRIPTIVE SOIL CLASSIFICATION

Soil classification is based on the Unified Soil Classification System. Coarse Grained Soils have more than 50% of their dry weight retained on a #200 sieve; their principal descriptors are: boulders, cobbles, gravel or sand. Fine Grained Soils have less than 50% of their dry weight retained on a #200 sieve; they are principally described as clays if they are plastic, and silts if they are slightly plastic or non-plastic. Major constituents may be added as modifiers and minor constituents may be added according to the relative proportions based on grain size. In addition to gradation, coarse-grained soils are defined on the basis of their in-place relative density and fine-grained soils on the basis of their consistency.

LOCATION AND ELEVATION NOTES

Unless otherwise noted, Latitude and Longitude are approximately determined using a hand-held GPS device. The accuracy of such devices is variable. Surface elevation data annotated with +/- indicates that no actual topographical survey was conducted to confirm the surface elevation. Instead, the surface elevation was approximately determined from topographic maps of the area.

STRENGTH TERMS

RELATIVE DENSITY OF COARSE-GRAINED SOILS (More than 50% retained on No. 200 sieve.) Density determined by Standard Penetration Resistance			CONSISTENCY OF FINE-GRAINED SOILS (50% or more passing the No. 200 sieve.) Consistency determined by laboratory shear strength testing, field visual-manual procedures or standard penetration resistance			
Descriptive Term (Density)	**Standard Penetration or N-Value Blows/Ft.**	**Ring Sampler Blows/Ft.**	**Descriptive Term (Consistency)**	**Unconfined Compressive Strength Qu, (tsf)**	**Standard Penetration or N-Value Blows/Ft.**	**Ring Sampler Blows/Ft.**
Very Loose	0 - 3	0 - 6	Very Soft	less than 0.25	0 - 1	< 3
Loose	4 - 9	7 - 18	Soft	0.25 to 0.50	2 - 4	3 - 4
Medium Dense	10 - 29	19 - 58	Medium Stiff	0.50 to 1.00	4 - 8	5 - 9
Dense	30 - 50	59 - 98	Stiff	1.00 to 2.00	8 - 15	10 - 18
Very Dense	> 50	> 99	Very Stiff	2.00 to 4.00	15 - 30	19 - 42
			Hard	> 4.00	> 30	> 42

RELATIVE PROPORTIONS OF SAND AND GRAVEL		RELATIVE PROPORTIONS OF FINES	
Descriptive Term(s) of other constituents	Percent of Dry Weight	**Descriptive Term(s) of other constituents**	**Percent of Dry Weight**
Trace	<15	Trace	<5
With	15-29	With	5-12
Modifier	>30	Modifier	>12

GRAIN SIZE TERMINOLOGY		PLASTICITY DESCRIPTION	
Major Component of Sample	**Particle Size**	**Term**	**Plasticity Index**
Boulders	Over 12 in. (300 mm)	Non-plastic	0
Cobbles	12 in. to 3 in. (300mm to 75mm)	Low	1 - 10
Gravel	3 in. to #4 sieve (75mm to 4.75 mm)	Medium	11 - 30
Sand	#4 to #200 sieve (4.75mm to 0.075mm	High	> 30
Silt or Clay	Passing #200 sieve (0.075mm)		

CPT GENERAL NOTES

DESCRIPTION OF SYMBOLS AND ABBREVIATIONS

Milpitas Fire Station 2 ■ Milpitas, CA

3/29/2019 ■ Terracon Project No. ND195009

Terracon GeoReport

DESCRIPTION OF MEASUREMENTS AND CALIBRATIONS

To be reported per ASTM D5778:

Uncorrected Tip Resistance, q_c
Measured force acting on the cone divided by the cone's projected area

Corrected Tip Resistance, q_t
Cone resistance corrected for porewater and net area ratio effects
$q_t = q_c + u_2(1 - a)$

Where a is the net area ratio, a lab calibration of the cone typically between 0.70 and 0.85

Pore Pressure, u
Pore pressure measured during penetration
u_1 - sensor on the face of the cone
u_2 - sensor on the shoulder (more common)

Sleeve Friction, f_s
Frictional force acting on the sleeve divided by its surface area

Normalized Friction Ratio, F_r
The ratio as a percentage of f_s to q_t, accounting for overburden pressure

To be reported per ASTM D7400, if collected:

Shear Wave Velocity, V_s
Measured in a Seismic CPT and provides direct measure of soil stiffness

DESCRIPTION OF GEOTECHNICAL CORRELATIC

Normalized Tip Resistance, Q_{tn}
$Q_{tn} = ((q_t - \sigma_{v0})/P_a)(P_a/\sigma'_{v0})^n$
$n = 0.381(I_c) + 0.05(\sigma'_{v0}/P_a) - 0.15$

Over Consolidation Ratio, OCR
$OCR\ (1) = 0.25(Q_{tn})^{1.25}$
$OCR\ (2) = 0.33(Q_{tn})$

Undrained Shear Strength, S_u
$S_u = Q_{tn} \times \sigma'_{v0}/N_{kt}$
N_{kt} is a soil-specific factor (shown on S_u plot)

Sensitivity, S_t
$S_t = (q_t - \sigma_{v0}/N_{kt}) \times (1/f_s)$

Effective Friction Angle, ϕ'
$\phi'\ (1) = \tan^{-1}(0.373[\log(q_t/\sigma'_{v0}) + 0.29])$
$\phi'\ (2) = 17.6 + 11[\log(Q_{tn})]$

Unit Weight, γ
$\gamma = (0.27[\log(F_r)]+0.36[\log(q_t/atm)]+1.236) \times \gamma_{water}$
σ_{v0} is taken as the incremental sum of the unit weights

Small Strain Shear Modulus, G_0
$G_0\ (1) = \rho V_s^2$
$G_0\ (2) = 0.015 \times 10^{(0.55Ic + 1.68)}(q_t - \sigma_{v0})$

Soil Behavior Type Index, I_c
$I_c = [(3.47 - \log(Q_{tn}))^2 + (\log(F_r) + 1.22)^2]^{0.5}$

SPT N_{60}
$N_{60} = (q_t/atm) / 10^{(1.1268 - 0.2817Ic)}$

Elastic Modulus, E_s (assumes $q/q_{ultimate} \sim 0.3$, i.e. FS = 3)
$E_s\ (1) = 2.6\psi G_0$ where $\psi = 0.56 - 0.33\log Q_{tn,clean\ sand}$
$E_s\ (2) = G_0$
$E_s\ (3) = 0.015 \times 10^{(0.55Ic + 1.68)}(q_t - \sigma_{v0})$
$E_s\ (4) = 2.5q_t$

Constrained Modulus, M
$M = \alpha_M(q_t - \sigma_{v0})$
For $I_c > 2.2$ (fine-grained soils)
$\alpha_M = Q_{tn}$ with maximum of 14
For $I_c < 2.2$ (coarse-grained soils)
$\alpha_M = 0.0188 \times 10^{(0.55Ic + 1.68)}$

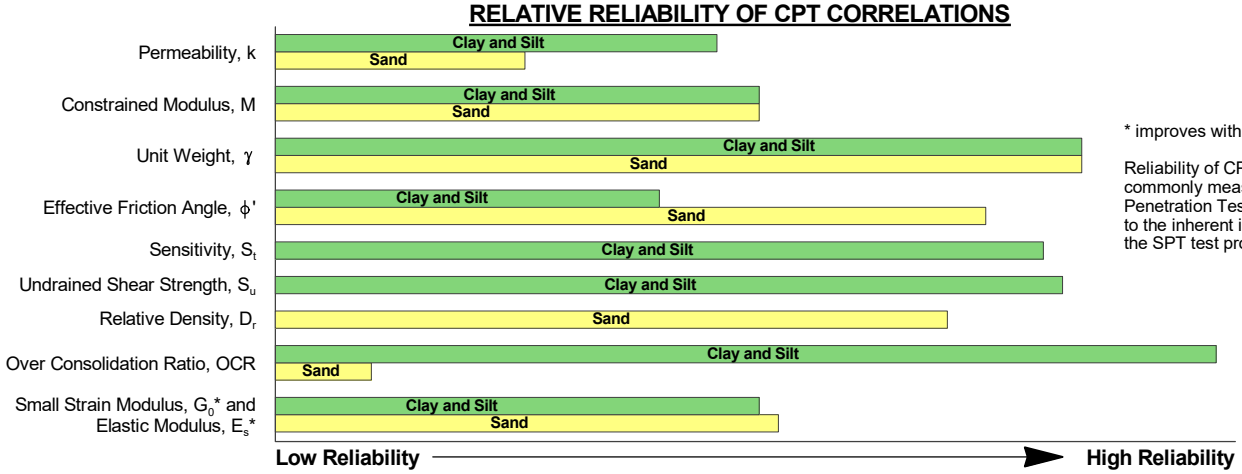
Hydraulic Conductivity, k
For $1.0 < I_c < 3.27$ $k = 10^{(0.952 - 3.04Ic)}$
For $3.27 < I_c < 4.0$ $k = 10^{(-4.52 - 1.37Ic)}$

Relative Density, D_f
$D_r = (Q_{tn} / 350)^{0.5} \times 100$

REPORTED PARAMETERS

CPT logs as provided, at a minimum, report the data as required by ASTM D5778 and ASTM D7400 (if applicable). This minimum data include q_t, f_s, and u. Other correlated parameters may also be provided. These other correlated parameters are interpretations of the measured data based upon published and reliable references, but they do not necessarily represent the actual values that would be derived from direct testing to determine the various parameters. To this end, more than one correlation to a given parameter may be provided. The following chart illustrates estimates of reliability associated with correlated parameters based upon the literature referenced below.

RELATIVE RELIABILITY OF CPT CORRELATIONS



* improves with seismic V_s measurements

Reliability of CPT-predicted N_{60} values as commonly measured by the Standard Penetration Test (SPT) is not provided due to the inherent inaccuracy associated with the SPT test procedure.

WATER LEVEL

The groundwater level at the CPT location is used to normalize the measurements for vertical overburden pressures and as a result influences the normalized soil behavior type classification and correlated soil parameters. The water level may either be "measured" or "estimated:"

Measured - Depth to water directly measured in the field

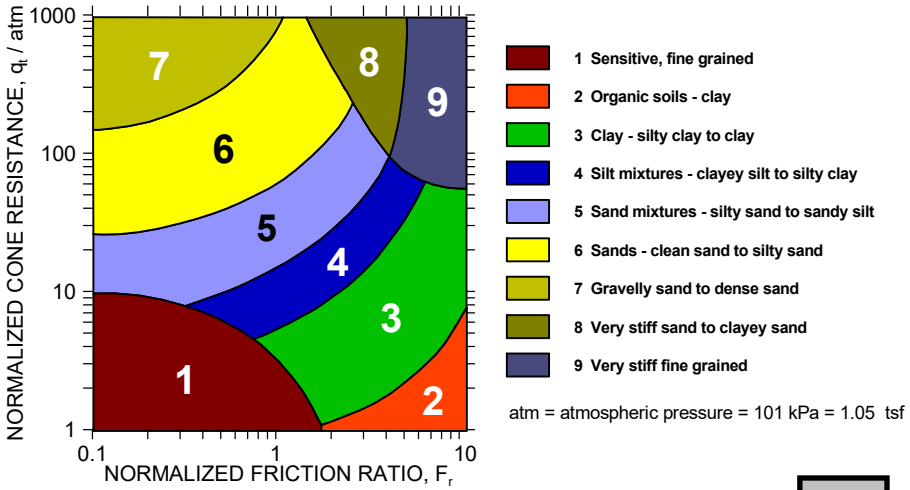
Estimated - Depth to water interpolated by the practitioner using pore pressure measurements in coarse grained soils and known site conditions

While groundwater levels displayed as "measured" more accurately represent site conditions at the time of testing than those "estimated," in either case the groundwater should be further defined prior to construction as groundwater level variations will occur over time.

CONE PENETRATION SOIL BEHAVIOR TYPE

The estimated stratigraphic profiles included in the CPT logs are based on relationships between corrected tip resistance (q_t), friction resistance (f_s), and porewater pressure (u_2). The normalized friction ratio (F_r) is used to classify the soil behavior type.

Typically, silts and clays have high F_r values and generate large excess penetration porewater pressures; sands have lower F_r's and do not generate excess penetration porewater pressures. The adjacent graph (Robertson *et al.*) presents the soil behavior type correlation used for the logs. This normalized SBT chart, generally considered the most reliable, does not use pore pressure to determine SBT due to its lack of repeatability in onshore CPTs.



atm = atmospheric pressure = 101 kPa = 1.05 tsf

REFERENCES

Kulhawy, F.H., Mayne, P.W., (1997). "Manual on Estimating Soil Properties for Foundation Design," Electric Power Research Institute, Palo Alto, CA.

Mayne, P.W., (2013). "Geotechnical Site Exploration in the Year 2013," Georgia Institue of Technology, Atlanta, GA.

Robertson, P.K., Cabal, K.L. (2012). "Guide to Cone Penetration Testing for Geotechnical Engineering," Signal Hill, CA.

Schmertmann, J.H., (1970). "Static Cone to Compute Static Settlement over Sand," *Journal of the Soil Mechanics and Foundations Division*, 96(SM3), 1011-1043.

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests [A]					Soil Classification	
					Group Symbol	Group Name [B]
Coarse-Grained Soils: More than 50% retained on No. 200 sieve	**Gravels:** More than 50% of coarse fraction retained on No. 4 sieve	**Clean Gravels:** Less than 5% fines [C]	Cu ≥ 4 and 1 ≤ Cc ≤ 3 [E]		GW	Well-graded gravel [F]
			Cu < 4 and/or [Cc<1 or Cc>3.0] [E]		GP	Poorly graded gravel [F]
		Gravels with Fines: More than 12% fines [C]	Fines classify as ML or MH		GM	Silty gravel [F, G, H]
			Fines classify as CL or CH		GC	Clayey gravel [F, G, H]
	Sands: 50% or more of coarse fraction passes No. 4 sieve	**Clean Sands:** Less than 5% fines [D]	Cu ≥ 6 and 1 ≤ Cc ≤ 3 [E]		SW	Well-graded sand [I]
			Cu < 6 and/or [Cc<1 or Cc>3.0] [E]		SP	Poorly graded sand [I]
		Sands with Fines: More than 12% fines [D]	Fines classify as ML or MH		SM	Silty sand [G, H, I]
			Fines classify as CL or CH		SC	Clayey sand [G, H, I]
Fine-Grained Soils: 50% or more passes the No. 200 sieve	**Silts and Clays:** Liquid limit less than 50	**Inorganic:**	PI > 7 and plots on or above "A"		CL	Lean clay [K, L, M]
			PI < 4 or plots below "A" line [J]		ML	Silt [K, L, M]
		Organic:	Liquid limit - oven / Liquid limit - not dried	< 0.75	OL	Organic clay [K, L, M, N] / Organic silt [K, L, M, O]
	Silts and Clays: Liquid limit 50 or more	**Inorganic:**	PI plots on or above "A" line		CH	Fat clay [K, L, M]
			PI plots below "A" line		MH	Elastic Silt [K, L, M]
		Organic:	Liquid limit - oven / Liquid limit - not dried	< 0.75	OH	Organic clay [K, L, M, P] / Organic silt [K, L, M, Q]
Highly organic soils:	Primarily organic matter, dark in color, and organic odor				PT	Peat

[A] Based on the material passing the 3-inch (75-mm) sieve.

[B] If field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name.

[C] Gravels with 5 to 12% fines require dual symbols: GW-GM well-graded gravel with silt, GW-GC well-graded gravel with clay, GP-GM poorly graded gravel with silt, GP-GC poorly graded gravel with clay.

[D] Sands with 5 to 12% fines require dual symbols: SW-SM well-graded sand with silt, SW-SC well-graded sand with clay, SP-SM poorly graded sand with silt, SP-SC poorly graded sand with clay.

[E] $Cu = D_{60}/D_{10}$ $\quad Cc = \dfrac{(D_{30})^2}{D_{10} \times D_{60}}$

[F] If soil contains ≥ 15% sand, add "with sand" to group name.

[G] If fines classify as CL-ML, use dual symbol GC-GM, or SC-SM.

[H] If fines are organic, add "with organic fines" to group name.

[I] If soil contains ≥ 15% gravel, add "with gravel" to group name.

[J] If Atterberg limits plot in shaded area, soil is a CL-ML, silty clay.

[K] If soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel," whichever is predominant.

[L] If soil contains ≥ 30% plus No. 200 predominantly sand, add "sandy" to group name.

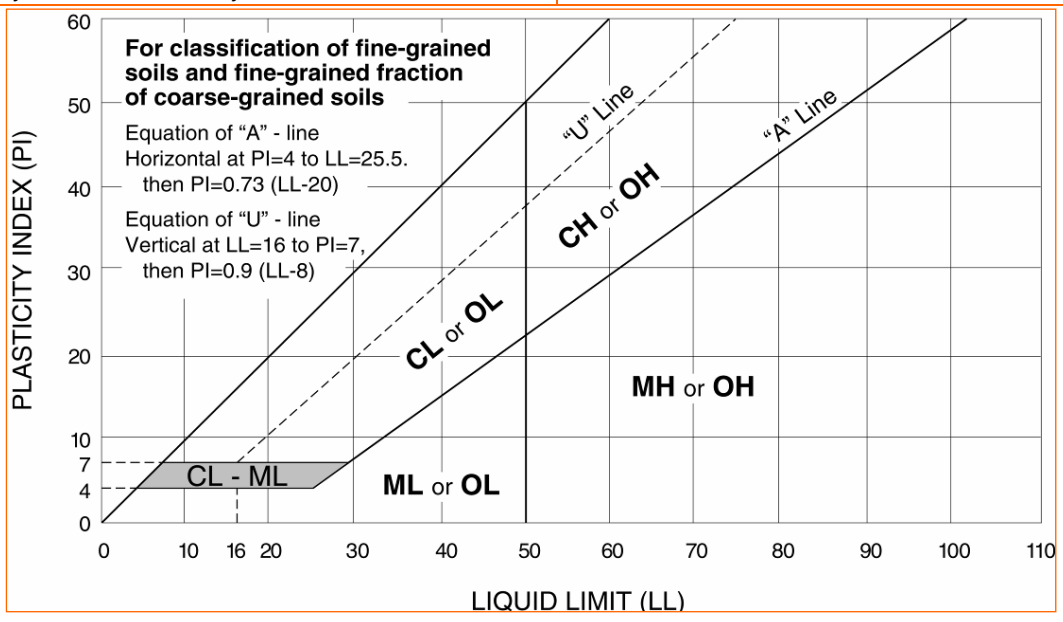
[M] If soil contains ≥ 30% plus No. 200, predominantly gravel, add "gravelly" to group name.

[N] PI ≥ 4 and plots on or above "A" line.

[O] PI < 4 or plots below "A" line.

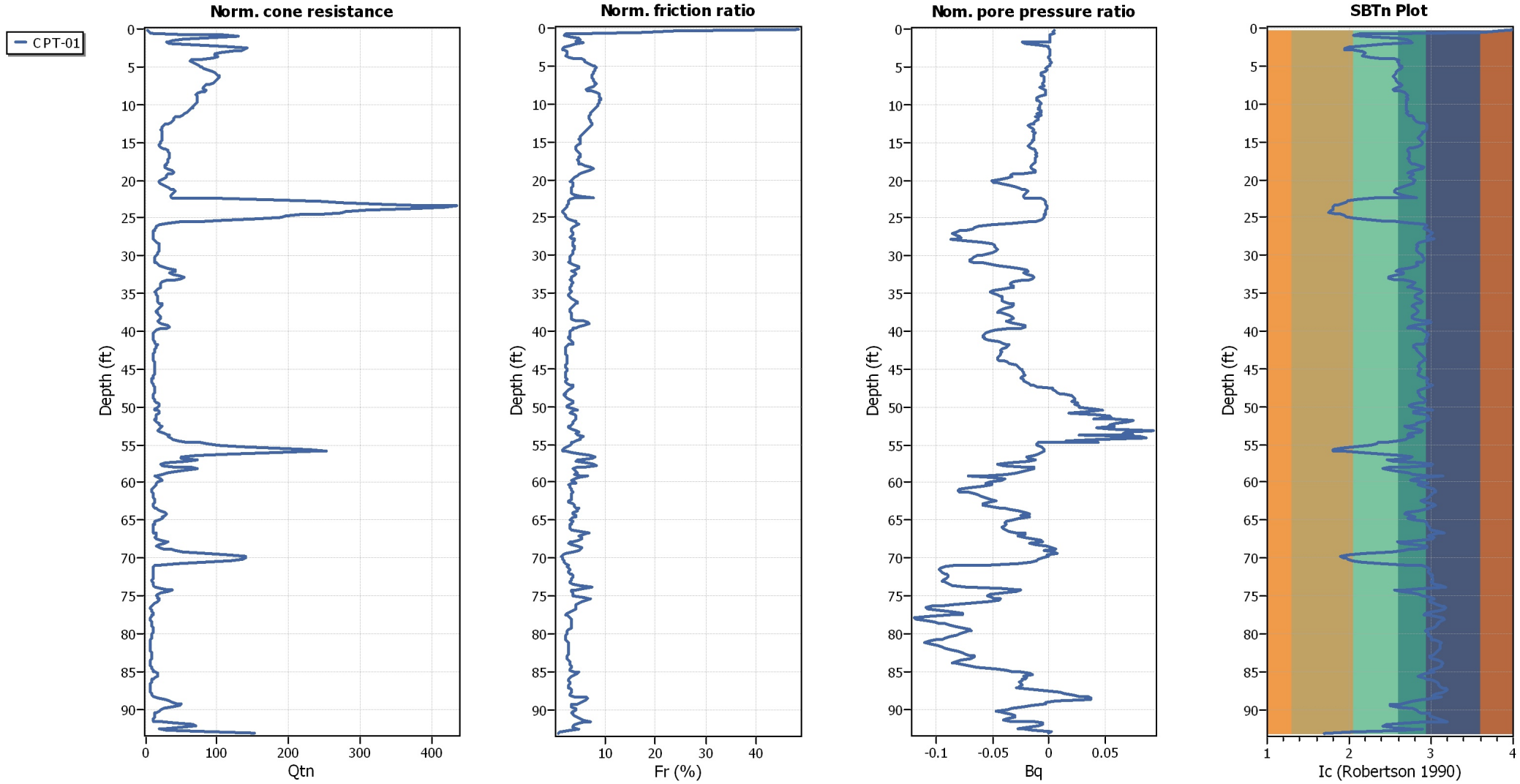
[P] PI plots on or above "A" line.

[Q] PI plots below "A" line.



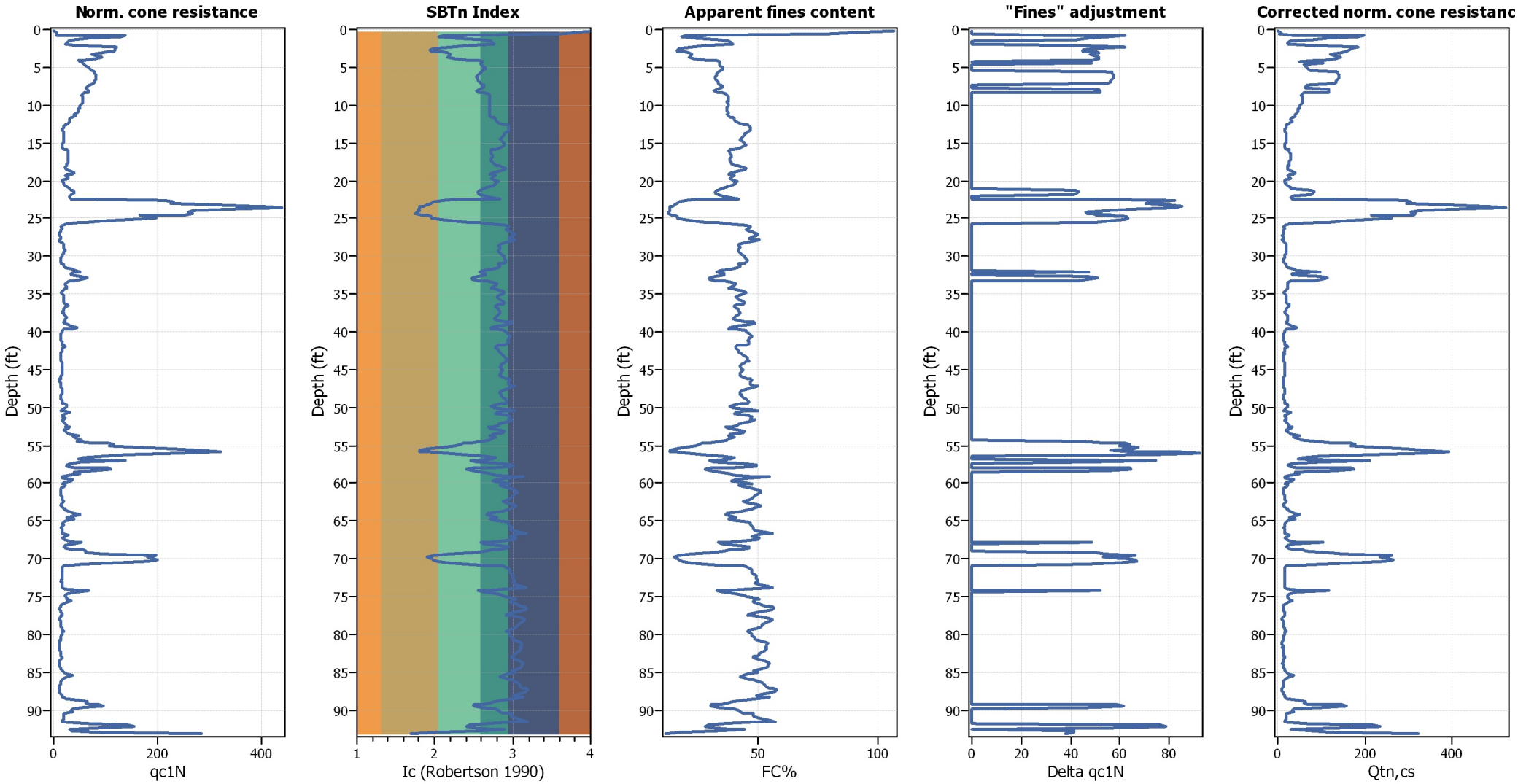
Project: Milpitas Fire Station No. 2

Overlay Normalized Plots



Project: Milpitas Fire Station No. 2

Overlay Intermediate Results



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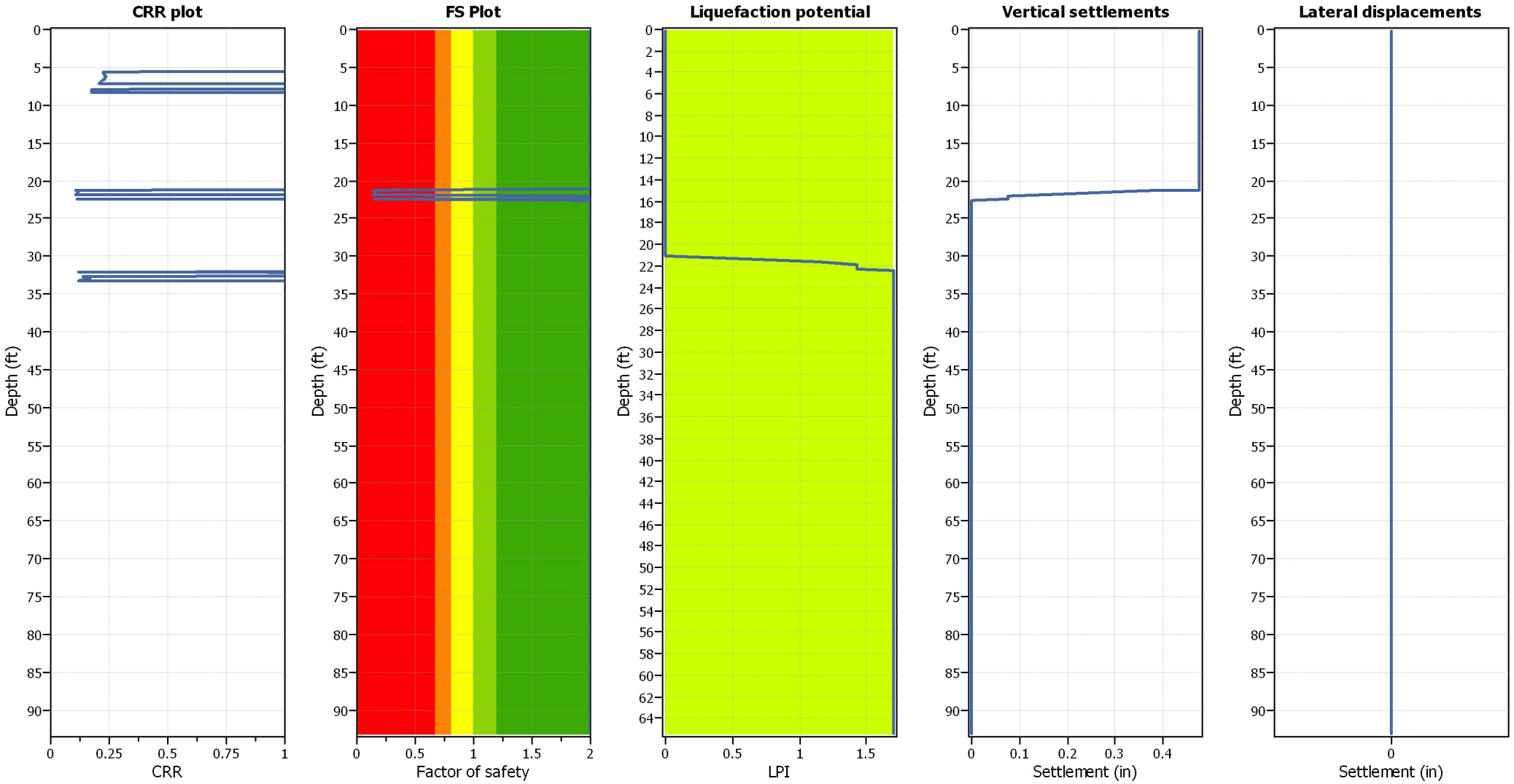
5075 Commercial Circle, Suite E
Concord, CA 94520
www.terracon.com

Project: Milpitas Fire Station No. 2

Overlay Cyclic Liquefaction Plots



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Concord, CA 94520
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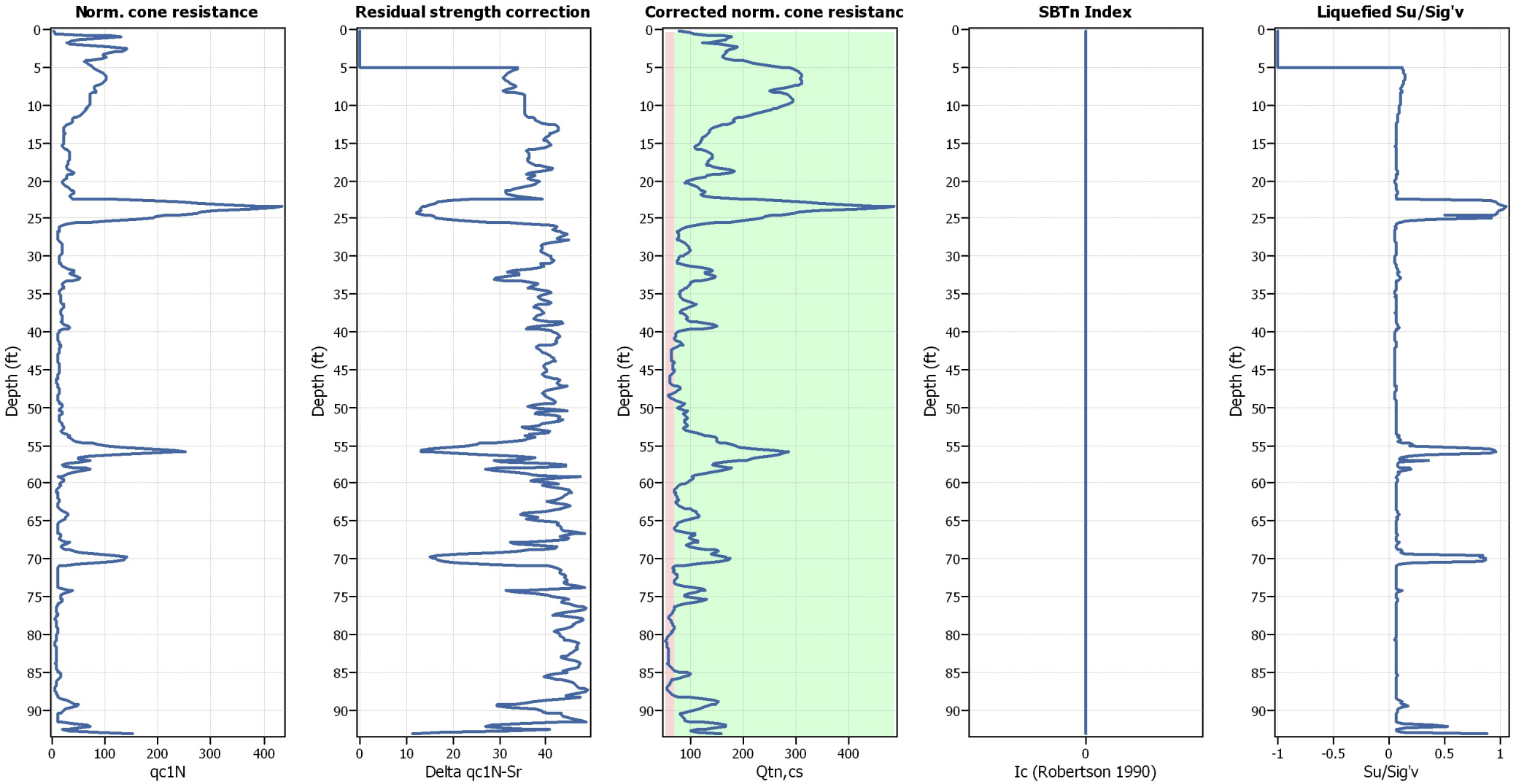
Project: Milpitas Fire Station No. 2

Overlay Strength Loss Plots



APPENDIX D- ANALYTICAL REPORT

McCampbell Analytical, Inc.
"When Quality Counts"

Analytical Report

WorkOrder: 1903068

Report Created for: Terracon Consultants, Inc.

5075 Commercial Circle, Ste. E
Concord, CA 94520

Project Contact: Hoda Alinasab
Project P.O.:
Project: ND195009; Milpitas Fire Station 2

Project Received: 03/01/2019

Analytical Report reviewed & approved for release on 03/07/2019 by:

Christine Askari
Project Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Glossary of Terms & Qualifier Definitions

Client: Terracon Consultants, Inc.
Project: ND195009; Milpitas Fire Station 2
WorkOrder: 1903068

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Glossary of Terms & Qualifier Definitions

Client: Terracon Consultants, Inc.
Project: ND195009; Milpitas Fire Station 2
WorkOrder: 1903068

Analytical Qualifiers

J	Result is less than the RL/ML but greater than the MDL. The reported concentration is an estimated value.
d7	Strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram
e1/e8	Unmodified or weakly modified diesel is significant; and/or Pattern resembles kerosene/kerosene range/jet fuel range
e7	Oil range compounds are significant

Quality Control Qualifiers

F2	LCS/LCSD recovery and/or RPD/RSD is out of acceptance criteria.
F3	The surrogate standard recovery and/or RPD is outside of acceptance limits.

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1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Terracon Consultants, Inc.	**WorkOrder:**	1903068
Date Received:	3/1/19 16:50	**Extraction Method:**	SW5030B
Date Prepared:	3/1/19	**Analytical Method:**	SW8260B
Project:	ND195009; Milpitas Fire Station 2	**Unit:**	mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E1	1903068-001A	Soil	02/28/2019 13:00	GC16 03021915.D	173841

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	03/02/2019 22:02
tert-Amyl methyl ether (TAME)	ND	0.0050	1	03/02/2019 22:02
Benzene	ND	0.0050	1	03/02/2019 22:02
Bromobenzene	ND	0.0050	1	03/02/2019 22:02
Bromochloromethane	ND	0.0050	1	03/02/2019 22:02
Bromodichloromethane	ND	0.0050	1	03/02/2019 22:02
Bromoform	ND	0.0050	1	03/02/2019 22:02
Bromomethane	ND	0.0050	1	03/02/2019 22:02
2-Butanone (MEK)	ND	0.020	1	03/02/2019 22:02
t-Butyl alcohol (TBA)	ND	0.050	1	03/02/2019 22:02
n-Butyl benzene	ND	0.0050	1	03/02/2019 22:02
sec-Butyl benzene	ND	0.0050	1	03/02/2019 22:02
tert-Butyl benzene	ND	0.0050	1	03/02/2019 22:02
Carbon Disulfide	ND	0.0050	1	03/02/2019 22:02
Carbon Tetrachloride	ND	0.0050	1	03/02/2019 22:02
Chlorobenzene	ND	0.0050	1	03/02/2019 22:02
Chloroethane	ND	0.0050	1	03/02/2019 22:02
Chloroform	ND	0.0050	1	03/02/2019 22:02
Chloromethane	ND	0.0050	1	03/02/2019 22:02
2-Chlorotoluene	ND	0.0050	1	03/02/2019 22:02
4-Chlorotoluene	ND	0.0050	1	03/02/2019 22:02
Dibromochloromethane	ND	0.0050	1	03/02/2019 22:02
1,2-Dibromo-3-chloropropane	ND	0.0040	1	03/02/2019 22:02
1,2-Dibromoethane (EDB)	ND	0.0040	1	03/02/2019 22:02
Dibromomethane	ND	0.0050	1	03/02/2019 22:02
1,2-Dichlorobenzene	ND	0.0050	1	03/02/2019 22:02
1,3-Dichlorobenzene	ND	0.0050	1	03/02/2019 22:02
1,4-Dichlorobenzene	ND	0.0050	1	03/02/2019 22:02
Dichlorodifluoromethane	ND	0.0050	1	03/02/2019 22:02
1,1-Dichloroethane	ND	0.0050	1	03/02/2019 22:02
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	03/02/2019 22:02
1,1-Dichloroethene	ND	0.0050	1	03/02/2019 22:02
cis-1,2-Dichloroethene	ND	0.0050	1	03/02/2019 22:02
trans-1,2-Dichloroethene	ND	0.0050	1	03/02/2019 22:02
1,2-Dichloropropane	ND	0.0050	1	03/02/2019 22:02
1,3-Dichloropropane	ND	0.0050	1	03/02/2019 22:02
2,2-Dichloropropane	ND	0.0050	1	03/02/2019 22:02

(Cont.)

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1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Terracon Consultants, Inc.	**WorkOrder:**	1903068
Date Received:	3/1/19 16:50	**Extraction Method:**	SW5030B
Date Prepared:	3/1/19	**Analytical Method:**	SW8260B
Project:	ND195009; Milpitas Fire Station 2	**Unit:**	mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E1	1903068-001A	Soil	02/28/2019 13:00	GC16 03021915.D	173841

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	03/02/2019 22:02
cis-1,3-Dichloropropene	ND	0.0050	1	03/02/2019 22:02
trans-1,3-Dichloropropene	ND	0.0050	1	03/02/2019 22:02
Diisopropyl ether (DIPE)	ND	0.0050	1	03/02/2019 22:02
Ethylbenzene	ND	0.0050	1	03/02/2019 22:02
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	03/02/2019 22:02
Freon 113	ND	0.0050	1	03/02/2019 22:02
Hexachlorobutadiene	ND	0.0050	1	03/02/2019 22:02
Hexachloroethane	ND	0.0050	1	03/02/2019 22:02
2-Hexanone	ND	0.0050	1	03/02/2019 22:02
Isopropylbenzene	ND	0.0050	1	03/02/2019 22:02
4-Isopropyl toluene	ND	0.0050	1	03/02/2019 22:02
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	03/02/2019 22:02
Methylene chloride	ND	0.010	1	03/02/2019 22:02
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	03/02/2019 22:02
Naphthalene	ND	0.0050	1	03/02/2019 22:02
n-Propyl benzene	ND	0.0050	1	03/02/2019 22:02
Styrene	ND	0.0050	1	03/02/2019 22:02
1,1,1,2-Tetrachloroethane	ND	0.0050	1	03/02/2019 22:02
1,1,2,2-Tetrachloroethane	ND	0.0050	1	03/02/2019 22:02
Tetrachloroethene	ND	0.0050	1	03/02/2019 22:02
Toluene	ND	0.0050	1	03/02/2019 22:02
1,2,3-Trichlorobenzene	ND	0.0050	1	03/02/2019 22:02
1,2,4-Trichlorobenzene	ND	0.0050	1	03/02/2019 22:02
1,1,1-Trichloroethane	ND	0.0050	1	03/02/2019 22:02
1,1,2-Trichloroethane	ND	0.0050	1	03/02/2019 22:02
Trichloroethene	ND	0.0050	1	03/02/2019 22:02
Trichlorofluoromethane	ND	0.0050	1	03/02/2019 22:02
1,2,3-Trichloropropane	ND	0.0050	1	03/02/2019 22:02
1,2,4-Trimethylbenzene	ND	0.0050	1	03/02/2019 22:02
1,3,5-Trimethylbenzene	ND	0.0050	1	03/02/2019 22:02
Vinyl Chloride	ND	0.0050	1	03/02/2019 22:02
m,p-Xylene	ND	0.0050	1	03/02/2019 22:02
o-Xylene	ND	0.0050	1	03/02/2019 22:02
Xylenes, Total	ND	0.0050	1	03/02/2019 22:02

(Cont.)

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1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Terracon Consultants, Inc.	**WorkOrder:**	1903068
Date Received:	3/1/19 16:50	**Extraction Method:**	SW5030B
Date Prepared:	3/1/19	**Analytical Method:**	SW8260B
Project:	ND195009; Milpitas Fire Station 2	**Unit:**	mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E1	**1903068-001A**	**Soil**	**02/28/2019 13:00**	**GC16 03021915.D**	**173841**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	105	66-116		03/02/2019 22:02
Toluene-d8	96	86-110		03/02/2019 22:02
4-BFB	97	71-114		03/02/2019 22:02
Benzene-d6	67	62-122		03/02/2019 22:02
Ethylbenzene-d10	74	69-130		03/02/2019 22:02
1,2-DCB-d4	64	55-108		03/02/2019 22:02

Analyst(s): TK

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Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
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Analytical Report

Client:	Terracon Consultants, Inc.	**WorkOrder:**	1903068
Date Received:	3/1/19 16:50	**Extraction Method:**	SW3050B
Date Prepared:	3/1/19	**Analytical Method:**	SW6020
Project:	ND195009; Milpitas Fire Station 2	**Unit:**	mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E1	**1903068-001A**	**Soil**	**02/28/2019 13:00**	**ICP-MS1 182SMPL.D**	**173902**

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	03/06/2019 07:25
Arsenic	**5.2**	0.50	1	03/06/2019 07:25
Barium	**150**	5.0	1	03/06/2019 07:25
Beryllium	ND	0.50	1	03/06/2019 07:25
Cadmium	ND	0.25	1	03/06/2019 07:25
Chromium	**39**	0.50	1	03/06/2019 07:25
Cobalt	**9.5**	0.50	1	03/06/2019 07:25
Copper	**14**	0.50	1	03/06/2019 07:25
Lead	**6.0**	0.50	1	03/06/2019 07:25
Mercury	ND	0.050	1	03/06/2019 07:25
Molybdenum	**0.54**	0.50	1	03/06/2019 07:25
Nickel	**53**	0.50	1	03/06/2019 07:25
Selenium	ND	0.50	1	03/06/2019 07:25
Silver	ND	0.50	1	03/06/2019 07:25
Thallium	ND	0.50	1	03/06/2019 07:25
Vanadium	**38**	0.50	1	03/06/2019 07:25
Zinc	**38**	5.0	1	03/06/2019 07:25

Surrogates	REC (%)	Limits	
Terbium	107	70-130	03/06/2019 07:25

Analyst(s): JC

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Analytical Report

Client:	Terracon Consultants, Inc.	**WorkOrder:**	1903068
Date Received:	3/1/19 16:50	**Extraction Method:**	SW5030B
Date Prepared:	3/1/19	**Analytical Method:**	SW8021B/8015Bm
Project:	ND195009; Milpitas Fire Station 2	**Unit:**	mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E1	**1903068-001A**	**Soil**	**02/28/2019 13:00**	**GC7 03041931.D**	**173854**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	**2.7**	1.0	1	03/05/2019 02:27
MTBE	**---**	0.050	1	03/05/2019 02:27
Benzene	**---**	0.0050	1	03/05/2019 02:27
Toluene	**---**	0.0050	1	03/05/2019 02:27
Ethylbenzene	**---**	0.0050	1	03/05/2019 02:27
m,p-Xylene	**---**	0.010	1	03/05/2019 02:27
o-Xylene	**---**	0.0050	1	03/05/2019 02:27
Xylenes	**---**	0.0050	1	03/05/2019 02:27

Surrogates	REC (%)	Limits	
2-Fluorotoluene	64	62-126	03/05/2019 02:27

Analyst(s): IA Analytical Comments: d7

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Analytical Report

Client:	Terracon Consultants, Inc.	**WorkOrder:**	1903068
Date Received:	3/1/19 16:50	**Extraction Method:**	SW3550B
Date Prepared:	3/1/19	**Analytical Method:**	SW8015B
Project:	ND195009; Milpitas Fire Station 2	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E1	**1903068-001A**	**Soil**	**02/28/2019 13:00**	**GC11B 03041945.D**	**173849**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**4.8**	1.0	1	03/04/2019 22:51
TPH-Motor Oil (C18-C36)	**19**	5.0	1	03/04/2019 22:51

Surrogates	REC (%)	Limits	
C9	98	74-123	03/04/2019 22:51

Analyst(s): TD Analytical Comments: e7,e1/e8

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Quality Control Report

Client:	Terracon Consultants, Inc.	**WorkOrder:**	1903068
Date Prepared:	2/28/19	**BatchID:**	173841
Date Analyzed:	3/1/19 - 3/4/19	**Extraction Method:**	SW5030B
Instrument:	GC10	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/kg
Project:	ND195009; Milpitas Fire Station 2	**Sample ID:**	MB/LCS/LCSD-173841

QC Summary Report for SW8260B

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Acetone	ND	0.039	0.10	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.0010	0.0050	-	-	-
Benzene	ND	0.0016	0.0050	-	-	-
Bromobenzene	ND	0.0017	0.0050	-	-	-
Bromochloromethane	ND	0.0015	0.0050	-	-	-
Bromodichloromethane	ND	0.0012	0.0050	-	-	-
Bromoform	ND	0.00080	0.0050	-	-	-
Bromomethane	ND	0.0020	0.0050	-	-	-
2-Butanone (MEK)	ND	0.0054	0.020	-	-	-
t-Butyl alcohol (TBA)	ND	0.0053	0.050	-	-	-
n-Butyl benzene	ND	0.0035	0.0050	-	-	-
sec-Butyl benzene	ND	0.0034	0.0050	-	-	-
tert-Butyl benzene	ND	0.0030	0.0050	-	-	-
Carbon Disulfide	ND	0.0017	0.0050	-	-	-
Carbon Tetrachloride	ND	0.0017	0.0050	-	-	-
Chlorobenzene	ND	0.0018	0.0050	-	-	-
Chloroethane	ND	0.0016	0.0050	-	-	-
Chloroform	ND	0.0016	0.0050	-	-	-
Chloromethane	ND	0.0017	0.0050	-	-	-
2-Chlorotoluene	ND	0.0022	0.0050	-	-	-
4-Chlorotoluene	ND	0.0021	0.0050	-	-	-
Dibromochloromethane	ND	0.0011	0.0050	-	-	-
1,2-Dibromo-3-chloropropane	ND	0.0012	0.0040	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0013	0.0040	-	-	-
Dibromomethane	ND	0.0014	0.0050	-	-	-
1,2-Dichlorobenzene	ND	0.0014	0.0050	-	-	-
1,3-Dichlorobenzene	ND	0.0018	0.0050	-	-	-
1,4-Dichlorobenzene	ND	0.0018	0.0050	-	-	-
Dichlorodifluoromethane	ND	0.0011	0.0050	-	-	-
1,1-Dichloroethane	ND	0.0017	0.0050	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0014	0.0040	-	-	-
1,1-Dichloroethene	ND	0.0017	0.0050	-	-	-
cis-1,2-Dichloroethene	ND	0.0015	0.0050	-	-	-
trans-1,2-Dichloroethene	ND	0.0016	0.0050	-	-	-
1,2-Dichloropropane	ND	0.0014	0.0050	-	-	-
1,3-Dichloropropane	ND	0.0016	0.0050	-	-	-
2,2-Dichloropropane	ND	0.0013	0.0050	-	-	-
1,1-Dichloropropene	ND	0.0018	0.0050	-	-	-

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Quality Control Report

Client:	Terracon Consultants, Inc.	**WorkOrder:**	1903068
Date Prepared:	2/28/19	**BatchID:**	173841
Date Analyzed:	3/1/19 - 3/4/19	**Extraction Method:**	SW5030B
Instrument:	GC10	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/kg
Project:	ND195009; Milpitas Fire Station 2	**Sample ID:**	MB/LCS/LCSD-173841

QC Summary Report for SW8260B

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
cis-1,3-Dichloropropene	ND	0.0015	0.0050	-	-	-
trans-1,3-Dichloropropene	ND	0.0014	0.0050	-	-	-
Diisopropyl ether (DIPE)	ND	0.0014	0.0050	-	-	-
Ethylbenzene	ND	0.0020	0.0050	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0013	0.0050	-	-	-
Freon 113	ND	0.0016	0.0050	-	-	-
Hexachlorobutadiene	ND	0.0050	0.0050	-	-	-
Hexachloroethane	ND	0.0025	0.0050	-	-	-
2-Hexanone	ND	0.0025	0.0050	-	-	-
Isopropylbenzene	ND	0.0022	0.0050	-	-	-
4-Isopropyl toluene	ND	0.0031	0.0050	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.0013	0.0050	-	-	-
Methylene chloride	ND	0.0036	0.010	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	0.00080	0.0050	-	-	-
Naphthalene	ND	0.00060	0.0050	-	-	-
n-Propyl benzene	ND	0.0029	0.0050	-	-	-
Styrene	ND	0.0014	0.0050	-	-	-
1,1,1,2-Tetrachloroethane	ND	0.0016	0.0050	-	-	-
1,1,2,2-Tetrachloroethane	ND	0.0013	0.0050	-	-	-
Tetrachloroethene	ND	0.0023	0.0050	-	-	-
Toluene	ND	0.0022	0.0050	-	-	-
1,2,3-Trichlorobenzene	ND	0.00070	0.0050	-	-	-
1,2,4-Trichlorobenzene	ND	0.0011	0.0050	-	-	-
1,1,1-Trichloroethane	ND	0.0018	0.0050	-	-	-
1,1,2-Trichloroethane	ND	0.0016	0.0050	-	-	-
Trichloroethene	ND	0.0017	0.0050	-	-	-
Trichlorofluoromethane	ND	0.0016	0.0050	-	-	-
1,2,3-Trichloropropane	ND	0.0019	0.0050	-	-	-
1,2,4-Trimethylbenzene	ND	0.0024	0.0050	-	-	-
1,3,5-Trimethylbenzene	ND	0.0027	0.0050	-	-	-
Vinyl Chloride	ND	0.0015	0.0050	-	-	-
m,p-Xylene	ND	0.0040	0.0050	-	-	-
o-Xylene	ND	0.0018	0.0050	-	-	-
Xylenes, Total	ND	N/A	0.0050	-	-	-

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Quality Control Report

Client:	Terracon Consultants, Inc.	**WorkOrder:**	1903068
Date Prepared:	2/28/19	**BatchID:**	173841
Date Analyzed:	3/1/19 - 3/4/19	**Extraction Method:**	SW5030B
Instrument:	GC10	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/kg
Project:	ND195009; Milpitas Fire Station 2	**Sample ID:**	MB/LCS/LCSD-173841

QC Summary Report for SW8260B

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Surrogate Recovery						
Dibromofluoromethane	0.10			0.12	84	66-112
Toluene-d8	0.14			0.12	109,F3	92-109
4-BFB	0.011			0.012	92	72-112
Benzene-d6	0.095			0.10	95	81-126
Ethylbenzene-d10	0.12			0.10	119	92-138
1,2-DCB-d4	0.076			0.10	76	68-108

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Quality Control Report

Client:	Terracon Consultants, Inc.	**WorkOrder:**	1903068
Date Prepared:	2/28/19	**BatchID:**	173841
Date Analyzed:	3/1/19 - 3/4/19	**Extraction Method:**	SW5030B
Instrument:	GC10	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/kg
Project:	ND195009; Milpitas Fire Station 2	**Sample ID:**	MB/LCS/LCSD-173841

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acetone	0.81	0.79	1	81	79	59-127	1.77	20
tert-Amyl methyl ether (TAME)	0.035	0.034	0.050	70	68	54-98	2.43	20
Benzene	0.039	0.038	0.050	78	76	71-115	2.42	20
Bromobenzene	0.036	0.036	0.050	73	72	69-120	0.731	20
Bromochloromethane	0.039	0.037	0.050	77	75	63-117	3.48	20
Bromodichloromethane	0.035	0.034	0.050	70	68	61-109	2.45	20
Bromoform	0.023	0.024	0.050	45, F2	47	46-87	4.50	20
Bromomethane	0.053	0.053	0.050	106	107	22-195	0.424	20
2-Butanone (MEK)	0.13	0.13	0.20	66	65	53-124	1.36	20
t-Butyl alcohol (TBA)	0.15	0.15	0.20	77	74	29-142	3.66	20
n-Butyl benzene	0.065	0.062	0.050	130	125	102-169	4.11	20
sec-Butyl benzene	0.064	0.063	0.050	128	125	100-166	2.48	20
tert-Butyl benzene	0.054	0.053	0.050	107	105	91-153	2.06	20
Carbon Disulfide	0.034	0.034	0.050	68	67	60-125	1.63	20
Carbon Tetrachloride	0.039	0.038	0.050	78	76	69-124	1.81	20
Chlorobenzene	0.041	0.040	0.050	82	80	73-116	2.46	20
Chloroethane	0.039	0.039	0.050	78	77	47-140	0.984	20
Chloroform	0.036	0.035	0.050	72	71	69-118	1.97	20
Chloromethane	0.034	0.034	0.050	69	68	30-132	1.94	20
2-Chlorotoluene	0.045	0.045	0.050	89	89	75-147	0	20
4-Chlorotoluene	0.043	0.043	0.050	86	85	75-137	0.901	20
Dibromochloromethane	0.036	0.036	0.050	72	71	57-105	0.994	20
1,2-Dibromo-3-chloropropane	0.019	0.021	0.020	96	103	36-103	7.18	20
1,2-Dibromoethane (EDB)	0.039	0.037	0.050	77	74	66-101	3.97	20
Dibromomethane	0.034	0.033	0.050	68	67	61-103	2.25	20
1,2-Dichlorobenzene	0.027	0.028	0.050	54, F2	57, F2	59-104	5.14	20
1,3-Dichlorobenzene	0.038	0.041	0.050	76	82	70-133	7.81	20
1,4-Dichlorobenzene	0.038	0.037	0.050	75	73	68-123	2.50	20
Dichlorodifluoromethane	0.022	0.022	0.050	44	44	13-107	0	20
1,1-Dichloroethane	0.035	0.034	0.050	70	69	69-118	2.29	20
1,2-Dichloroethane (1,2-DCA)	0.033	0.033	0.050	67	65	59-112	2.81	20
1,1-Dichloroethene	0.037	0.037	0.050	74	74	69-126	0	20
cis-1,2-Dichloroethene	0.038	0.037	0.050	76	74	69-116	2.18	20
trans-1,2-Dichloroethene	0.037	0.036	0.050	74	73	73-116	1.73	20
1,2-Dichloropropane	0.036	0.035	0.050	71	70	65-111	2.50	20
1,3-Dichloropropane	0.039	0.038	0.050	79	76	67-110	3.36	20
2,2-Dichloropropane	0.036	0.036	0.050	73	71	65-125	1.88	20
1,1-Dichloropropene	0.038	0.038	0.050	76	75	70-123	1.43	20

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Quality Control Report

Client:	Terracon Consultants, Inc.	**WorkOrder:**	1903068
Date Prepared:	2/28/19	**BatchID:**	173841
Date Analyzed:	3/1/19 - 3/4/19	**Extraction Method:**	SW5030B
Instrument:	GC10	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/kg
Project:	ND195009; Milpitas Fire Station 2	**Sample ID:**	MB/LCS/LCSD-173841

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	0.044	0.043	0.050	89	86	68-126	2.91	20
trans-1,3-Dichloropropene	0.041	0.040	0.050	82	79	69-117	3.50	20
Diisopropyl ether (DIPE)	0.033	0.032	0.050	66	64	57-110	2.01	20
Ethylbenzene	0.045	0.043	0.050	89	87	80-128	2.68	20
Ethyl tert-butyl ether (ETBE)	0.034	0.033	0.050	68	67	54-106	2.26	20
Freon 113	0.033	0.033	0.050	66	66	60-108	0	20
Hexachlorobutadiene	0.072	0.069	0.050	144	138	67-182	3.74	20
Hexachloroethane	0.045	0.044	0.050	90	88	85-156	2.53	20
2-Hexanone	0.031	0.030	0.050	62	59	37-90	4.32	20
Isopropylbenzene	0.043	0.042	0.050	87	85	64-167	2.61	20
4-Isopropyl toluene	0.062	0.060	0.050	123	120	88-167	2.36	20
Methyl-t-butyl ether (MTBE)	0.035	0.034	0.050	70	67	60-102	3.15	20
Methylene chloride	0.038	0.036	0.050	75	73	71-117	3.32	20
4-Methyl-2-pentanone (MIBK)	0.034	0.033	0.050	67	66	48-90	1.99	20
Naphthalene	0.025	0.025	0.050	49	50	29-65	0.674	20
n-Propyl benzene	0.059	0.058	0.050	117	116	88-161	1.34	20
Styrene	0.034	0.036	0.050	67, F2	71	70-108	5.76	20
1,1,1,2-Tetrachloroethane	0.041	0.040	0.050	82	80	69-117	2.25	20
1,1,2,2-Tetrachloroethane	0.029	0.028	0.050	59	57	53-96	3.37	20
Tetrachloroethene	0.049	0.048	0.050	97	95	78-128	2.40	20
Toluene	0.043	0.042	0.050	86	84	78-121	2.10	20
1,2,3-Trichlorobenzene	0.031	0.031	0.050	61	62	35-80	1.57	20
1,2,4-Trichlorobenzene	0.044	0.043	0.050	88	85	46-101	3.61	20
1,1,1-Trichloroethane	0.037	0.037	0.050	74	73	69-121	1.38	20
1,1,2-Trichloroethane	0.039	0.039	0.050	78	77	64-104	1.42	20
Trichloroethene	0.040	0.039	0.050	80	78	73-118	2.94	20
Trichlorofluoromethane	0.036	0.036	0.050	72	72	31-119	0	20
1,2,3-Trichloropropane	0.033	0.036	0.050	67	71	65-107	6.09	20
1,2,4-Trimethylbenzene	0.051	0.050	0.050	102	99	80-147	2.44	20
1,3,5-Trimethylbenzene	0.060	0.059	0.050	121	118	83-156	2.39	20
Vinyl Chloride	0.037	0.037	0.050	74	74	40-125	0	20
m,p-Xylene	0.084	0.082	0.10	84	82	80-122	2.60	20
o-Xylene	0.038	0.037	0.050	75, F2	73, F2	79-116	2.60	20
Xylenes, Total	0.12	0.12	0.15	81	79	70-130	2.60	20

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Quality Control Report

Client:	Terracon Consultants, Inc.	**WorkOrder:**	1903068
Date Prepared:	2/28/19	**BatchID:**	173841
Date Analyzed:	3/1/19 - 3/4/19	**Extraction Method:**	SW5030B
Instrument:	GC10	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/kg
Project:	ND195009; Milpitas Fire Station 2	**Sample ID:**	MB/LCS/LCSD-173841

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Surrogate Recovery								
Dibromofluoromethane	0.11	0.11	0.12	84	85	66-112	0.537	20
Toluene-d8	0.14	0.14	0.12	112, F3	112, F3	92-109	0	20
4-BFB	0.010	0.010	0.012	81	81	72-112	0	20
Benzene-d6	0.088	0.086	0.10	88	86	81-126	2.53	20
Ethylbenzene-d10	0.11	0.11	0.10	110	107	92-138	3.36	20
1,2-DCB-d4	0.061	0.059	0.10	61, F3	59, F3	68-108	2.99	20

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Quality Control Report

Client:	Terracon Consultants, Inc.	**WorkOrder:**	1903068
Date Prepared:	3/1/19	**BatchID:**	173902
Date Analyzed:	3/4/19	**Extraction Method:**	SW3050B
Instrument:	ICP-MS1, ICP-MS2	**Analytical Method:**	SW6020
Matrix:	Soil	**Unit:**	mg/Kg
Project:	ND195009; Milpitas Fire Station 2	**Sample ID:**	MB/LCS/LCSD-173902

QC Summary Report for Metals

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Antimony	ND	0.094	0.50	-	-	-
Arsenic	ND	0.14	0.50	-	-	-
Barium	ND	0.97	5.0	-	-	-
Beryllium	ND	0.072	0.50	-	-	-
Cadmium	ND	0.058	0.25	-	-	-
Chromium	ND	0.092	0.50	-	-	-
Cobalt	ND	0.056	0.50	-	-	-
Copper	ND	0.069	0.50	-	-	-
Lead	ND	0.094	0.50	-	-	-
Mercury	0.0087,J	0.0050	0.050	-	-	-
Molybdenum	ND	0.23	0.50	-	-	-
Nickel	ND	0.072	0.50	-	-	-
Selenium	ND	0.13	0.50	-	-	-
Silver	ND	0.055	0.50	-	-	-
Thallium	ND	0.10	0.50	-	-	-
Vanadium	ND	0.064	0.50	-	-	-
Zinc	ND	1.4	5.0	-	-	-
Surrogate Recovery						
Terbium	510			500	103	70-130

(Cont.)

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Quality Control Report

Client:	Terracon Consultants, Inc.	**WorkOrder:**	1903068
Date Prepared:	3/1/19	**BatchID:**	173902
Date Analyzed:	3/4/19	**Extraction Method:**	SW3050B
Instrument:	ICP-MS1, ICP-MS2	**Analytical Method:**	SW6020
Matrix:	Soil	**Unit:**	mg/Kg
Project:	ND195009; Milpitas Fire Station 2	**Sample ID:**	MB/LCS/LCSD-173902

QC Summary Report for Metals

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Antimony	50	51	50	100	102	75-125	2.91	20
Arsenic	52	52	50	103	105	75-125	1.34	20
Barium	520	540	500	104	109	75-125	4.05	20
Beryllium	52	53	50	103	105	75-125	2.05	20
Cadmium	50	51	50	99	102	75-125	2.73	20
Chromium	51	52	50	103	105	75-125	1.90	20
Cobalt	53	54	50	107	108	75-125	1.23	20
Copper	51	52	50	101	104	75-125	2.56	20
Lead	50	52	50	101	104	75-125	3.44	20
Mercury	1.2	1.3	1.25	99	104	75-125	4.49	20
Molybdenum	50	51	50	99	102	75-125	2.69	20
Nickel	51	52	50	101	103	75-125	1.54	20
Selenium	51	53	50	103	107	75-125	4.11	20
Silver	47	49	50	95	97	75-125	2.63	20
Thallium	51	52	50	102	105	75-125	2.88	20
Vanadium	51	52	50	102	104	75-125	1.40	20
Zinc	510	530	500	103	105	75-125	2.37	20
Surrogate Recovery								
Terbium	520	550	500	105	109	70-130	4.47	20

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Quality Control Report

Client:	Terracon Consultants, Inc.	**WorkOrder:**	1903068
Date Prepared:	2/28/19	**BatchID:**	173854
Date Analyzed:	3/1/19 - 3/2/19	**Extraction Method:**	SW5030B
Instrument:	GC19	**Analytical Method:**	SW8021B/8015Bm
Matrix:	Soil	**Unit:**	mg/Kg
Project:	ND195009; Milpitas Fire Station 2	**Sample ID:**	MB/LCS/LCSD-173854

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
TPH(g) (C6-C12)	0.16,J	0.090	1.0	-	-	-
MTBE	ND	0.0023	0.050	-	-	-
Benzene	ND	0.0010	0.0050	-	-	-
Toluene	ND	0.0012	0.0050	-	-	-
Ethylbenzene	ND	0.0020	0.0050	-	-	-
m,p-Xylene	ND	0.0013	0.010	-	-	-
o-Xylene	ND	0.0013	0.0050	-	-	-
Xylenes	ND	N/A	0.0050	-	-	-
Surrogate Recovery						
2-Fluorotoluene	0.089			0.10	89	75-134

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH(btex)	0.58	0.57	0.60	97	94	82-118	2.61	20
MTBE	0.082	0.084	0.10	82	84	61-119	2.07	20
Benzene	0.093	0.094	0.10	93	94	77-128	0.759	20
Toluene	0.096	0.096	0.10	96	96	74-132	0	20
Ethylbenzene	0.096	0.097	0.10	96	97	84-127	0.742	20
m,p-Xylene	0.20	0.20	0.20	98	99	80-120	1.21	20
o-Xylene	0.097	0.099	0.10	97	99	80-120	1.56	20
Xylenes	0.29	0.30	0.30	98	99	86-129	1.32	20
Surrogate Recovery								
2-Fluorotoluene	0.089	0.091	0.10	89	91	75-134	1.98	20

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Quality Control Report

Client:	Terracon Consultants, Inc.	**WorkOrder:**	1903068
Date Prepared:	2/28/19	**BatchID:**	173849
Date Analyzed:	3/3/19	**Extraction Method:**	SW3550B
Instrument:	GC6B	**Analytical Method:**	SW8015B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	ND195009; Milpitas Fire Station 2	**Sample ID:**	MB/LCS/LCSD-173849

QC Report for SW8015B w/out SG Clean-Up

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
TPH-Diesel (C10-C23)	ND	0.86	1.0	-	-	-
TPH-Motor Oil (C18-C36)	ND	3.5	5.0	-	-	-
Surrogate Recovery						
C9	24			25	94	72-122

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	45	44	40	112	110	75-128	1.87	30
Surrogate Recovery								
C9	23	23	25	92	93	72-122	1.28	30

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Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1903068 **ClientCode: TCIC**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☒ EQuIS ☐ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag
☒ Detection Summary ☒ Dry-Weight

Report to:
Hoda Alinasab
Terracon Consultants, Inc.
5075 Commercial Circle, Ste. E
Concord, CA 94520
FAX:
Email: Hoda.Alinasabbaboli@terracon.com
cc/3rd Party:
PO:
Project: ND195009; Milpitas Fire Station 2

Bill to:
Accounts Payable
Terracon Consultants, Inc.
5075 Commercial Circle, Ste. E
Concord, CA 94520
Jacky.Castaneda@terracon.com

Requested TAT: **5 days;**

Date Received: **03/01/2019**
Date Logged: **03/01/2019**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1903068-001	E1	Soil	2/28/2019 13:00	☐	A	A	A	A								

Test Legend:

1	8260B_S	2	CAM17MS_TTLC_S	3	G-MBTEX_S	4	TPH(DMO)_S
5		6		7		8	
9		10		11		12	

Project Manager: Rosa Venegas **Prepared by: Nancy Palacios**

The following SampID: 001A contains testgroup Multi Range_S.

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

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WORK ORDER SUMMARY

Client Name: TERRACON CONSULTANTS, INC. **Project:** ND195009; Milpitas Fire Station 2 **Work Order:** 1903068
Client Contact: Hoda Alinasab **QC Level:** LEVEL 2
Contact's Email: Hoda.Alinasabbaboli@terracon.com **Comments:** **Date Logged:** 3/1/2019

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☑ EQuIS ☐ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1903068-001A	E1	Soil	Multi-Range TPH(g,d,mo)	1	8OZ GJ, Unpres	☐	2/28/2019 13:00	5 days		☐	
			SW6020 (CAM 17)			☐		5 days		☐	
			SW8260B (VOCs)			☐		5 days		☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

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1903068

Terracon

5075 Commercial Circle, Suite E
Concord, California 94520
P: 925.609.7224 F: 925.609.6324

CHAIN OF CUSTODY RECORD

Laboratory: McCampbell Analytical
Address: 1534 Willow Pass Rd., Pittsburg CA 94565
Phone: 925-252-9262 Email:

Turnaround Time: ☒ Standard ☐ 1 Day Rush PO/SO#:
☐ 2 Day Rush ☐ 3 Day Rush Quote #:

Report To: Hoda Aliasabbaboli Bill To: Terraconconcard
Email: Hoda.Aliasabbaboli@terracon.com Alt. Email:
Project Number: ND198009 Project Name: Milpitas Fire Station 2
Sampler's Name: Hoda Aliasabbaboli Sampler's Signature:

Sample ID	Sampling Date	Sampling Time	# Containers	Matrix	Preserv.	TPH: G, D, M [8015M]	Cl Pesticides [8081A]	PCB's [8082]	VOCs [8260B]	SVOCs [8270]	CAM-17 Metals [6020]	STLC
E1	2/28/19	1:00pm	1	S	—	X			X		X	

Analysis Requested

Relinquished By	Date	Time	Received By	Date	Time
Jacky Castaneda	3/1	4:50		3/1/19	1650

Comments / Instructions

5.4°C wet ice

Temperature: _____ Initials: _____ Page ____ of ____

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Sample Receipt Checklist

Client Name:	**Terracon Consultants, Inc.**	Date and Time Received	**3/1/2019 16:50**
Project:	**ND195009; Milpitas Fire Station 2**	Date Logged:	**3/1/2019**
		Received by:	Nancy Palacios
WorkOrder №:	**1903068** Matrix: Soil	Logged by:	Nancy Palacios
Carrier:	Client Drop-In		

Chain of Custody (COC) Information

Chain of custody present?	Yes	☑	No	☐	
Chain of custody signed when relinquished and received?	Yes	☑	No	☐	
Chain of custody agrees with sample labels?	Yes	☑	No	☐	
Sample IDs noted by Client on COC?	Yes	☑	No	☐	
Date and Time of collection noted by Client on COC?	Yes	☑	No	☐	
Sampler's name noted on COC?	Yes	☑	No	☐	
COC agrees with Quote?	Yes	☐	No	☐	NA ☑

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes	☐	No	☐	NA ☑
Shipping container/cooler in good condition?	Yes	☑	No	☐	
Samples in proper containers/bottles?	Yes	☑	No	☐	
Sample containers intact?	Yes	☑	No	☐	
Sufficient sample volume for indicated test?	Yes	☑	No	☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes	☑	No	☐	NA ☐
Samples Received on Ice?	Yes	☑	No	☐	
	(Ice Type: WET ICE)				
Sample/Temp Blank temperature	Temp: 5.4°C				NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes	☐	No	☐	NA ☑
Sample labels checked for correct preservation?	Yes	☑	No	☐	
pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO3: <2; 522: <4; 218.7: >8)?	Yes	☐	No	☐	NA ☑
UCMR Samples:					
pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)?	Yes	☐	No	☐	NA ☑
Free Chlorine tested and acceptable upon receipt (<0.1mg/L)?	Yes	☐	No	☐	NA ☑

Comments: Sample received frozen

APPENDIX E- FUEL LEAK SITE CASE CLOSURE LETTER

Santa Clara Valley Water District

5750 ALMADEN EXPRESSWAY
SAN JOSE, CA 95118-3686
TELEPHONE (408) 265-2600
FACSIMILE (408) 266-0271

AN AFFIRMATIVE ACTION EMPLOYER

August 20, 1998

Mr. Don Bockman
City of Milpitas
1265 North Milpitas Boulevard
Milpitas, CA 95035

Dear Mr. Bockman:

Subject: Fuel Leak Site Case Closure—Milpitas Fire Station No. 2, 1263 Yosemite Drive, Milpitas, CA; Case No. 06S1E08H01f

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25299.37[h]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, the Santa Clara Valley Water District is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed.

If you have any questions, please call Ms. Christine Tulloch at the Camden Office, (408) 927-0710, extension 2636. Thank you.

Sincerely,

James S. Crowley, P.E.
Special Programs Engineer
Leaking Underground Storage Tank Oversight Program

Enclosures:
1. Case Closure Letter
2. Case Closure Summary

cc: Mr. Chuck Headlee (w/enc)
Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612

Ms. Nancy Commoncho
Division of Clean Water Programs
Underground Storage Tank Cleanup Fund
State Water Resources Control Board
P.O. Box 944212
Sacramento, CA 94244-2120

Mr. Steve Mizera (w/enc)
Division of Clean Water
State Water Resources Control Board
P.O. Box 944212
Sacramento, CA 94244-2120

Santa Clara Valley Water District

5750 ALMADEN EXPRESSWAY
SAN JOSE, CA 95118-3686
TELEPHONE (408) 265-2600
FACSIMILE (408) 266-0271

AN AFFIRMATIVE ACTION EMPLOYER

August 20, 1998

Mr. Don Bockman
City of Milpitas
1265 North Milpitas Boulevard
Milpitas, CA 95035

Dear Mr. Bockman:

Subject: Fuel Leak Site Case Closure—Milpitas Fire Station No. 2, 1263 Yosemite Drive, Milpitas, CA; Case No. 06S1E08H01f

This letter confirms the completion of a site investigation and remedial action for the underground storage tank(s) formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank(s) are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground tank release is required.

This notice is issued pursuant to a regulation contained in Section 2721(e) of Title 23 of the California Code of Regulations.

Please contact our office if you have any questions regarding this matter.

Sincerely,

James S. Crowley, P.E.
Special Programs Engineer
Leaking Underground Storage Tank Oversight Program

CASE CLOSURE SUMMARY
LEAKING UNDERGROUND FUEL STORAGE TANK PROGRAM

I. AGENCY INFORMATION

Date: August 17, 1998

Agency Name: Santa Clara Valley Water District	Address: 5750 Almaden Expressway
City/State/Zip: San Jose, CA 95118	Phone: (408) 265-2600
Responsible Staff Person: Christine A. Tulloch (JH)	Title: Water Quality Specialist

II. CASE INFORMATION

Site Facility Name: Milpitas Fire Station No. 2		
Site Facility Address: 1263 Yosemite Drive, Milpitas, CA 95035		
RB LUSTIS Case No.: –	Local Case No.: 06S1E08H01f	LOP Case No.: –
URF Filing Date: 06/19/98	SWEEPS No.: –	APN: 088-02-026

Responsible Parties	Addresses	Phone Number
Mr. Don Bockman, City of Milpitas	1265 North Milpitas Boulevard, Milpitas, CA 95035	(408) 942-3241

Tank I.D. No	Size in Gallons	Contents	Closed In Place/Removed?	Date
22332	550	Diesel	Removed	04/08/98
Piping			Not specified	–

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: Unknown cause of release of diesel.		
Site characterization complete? Yes	Date Approved By Oversight Agency: N/A	
Monitoring wells installed? No	Number: –	Proper screened interval? –
Highest GW Depth Below Ground Surface: –	Lowest Depth: –	Flow Direction: –
Most Sensitive Current Use: Potential drinking water		

Summary of Production Wells in Vicinity: There are no production wells within a quarter mile radius of the subject site that would be adversely affected.	
Are drinking water wells affected? No	Aquifer Name: Santa Clara Valley Basin
Is surface water affected? No	Nearest SW Name: Piedmont Creek
Off-Site Beneficial Use Impacts (Addresses/Locations): None reported	
Reports on file? Yes	Where are reports filed? Santa Clara Valley Water District

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL			
Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date
Tank	550-gallon	Disposed of at Erickson in Richmond, CA	04/08/98
Piping	—	—	—
Free Product	—	—	—
Soil	Unknown	Disposal off site	—
Groundwater	—	—	—
Barrels	—	—	—

MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS—BEFORE AND AFTER CLEANUP

Contaminant	Soil (ppm)		Water (ppb)		Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	Before	After		Before	After	Before	After
TPH (Gas)	NA	NS	NS	NS	Xylene	ND	NS	NS	NS
TPH (Diesel)	5*	NS	NS	NS	Ethylbenzene	ND	NS	NS	NS
Benzene	ND	NS	NS	NS	Oil & Grease	ND	NS	NS	NS
Toluene	ND	NS	NS	NS	Heavy Metals	NA	NS	NS	NS
Other (8240/8270)	ND	NS	NS	NS	MTBE (if not analyzed, explain below)	<0.05	NS	NS	NS

Description of Interim Remediation Activities: None other than the removal of the tank.

NA = Not analyzed
NS = Not sampled
ND = Not detected
*May represent naturally-occurring organic material that falls within the same carbon range as diesel.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Yes		
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Yes		
Does corrective action protect public health for current land use? Santa Clara Valley Water District staff does not make specific determinations concerning public health risk. However, it does not appear that the release would present a risk to human health.		
Site Management Requirements: None required		
Should corrective action be reviewed if land use changes? No		
Monitoring Wells Decommissioned: No	Number Decommissioned: —	Number Retained: —
List Enforcement Actions Taken: None taken		
List Enforcement Actions Rescinded: None rescinded		

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V. ADDITIONAL COMMENTS, DATA, ETC.

Considerations and/or Variances: Three boreholes were advanced in proximity to the underground storage tank using a Geoprobe™ rig, prior to the removal of the tank. Three samples, that had the highest Photo Ionization Detector readings, were selected for analysis. Analytical analysis of these samples did not contain detectable petroleum hydrocarbons.

One 550-gallon carbon-steel underground storage tank, that previously contained diesel, was removed. No holes were observed in the tank. No water was encountered in the excavation pit.

Upon the removal of the tank, three soil samples were taken. One sample was collected under the former fuel dispenser and two were collected under the ends of the former underground storage tank. Analytical analysis of the two samples collected under the former underground storage tank indicated concentrations of 5 parts per million of Total Petroleum hydrocarbons as Diesel.

Conclusion: The Santa Clara Valley Water District staff has concluded that the relatively small amount of residual soil contamination does not pose a threat to the beneficial uses of water.

VI. LOCAL AGENCY REPRESENTATIVE DATA

Prepared by: Christine A. Tulloch	Title: Water Quality Specialist
Signature:	Date: 8/18/98
Approved by: James S. Crowley, P.E.	Title: Special Programs Engineer (acting)
Signature:	Date: 08/19/98

This closure approval is based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions.

Attachments:

1. Site Vicinity Map
2. Site Plan

This document and the related CASE CLOSURE LETTER, shall be retained by the lead agency as part of the official site file.

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UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK) / CONTAMINATION SITE REPORT

EMERGENCY ☐ YES ☑ NO

HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED? ☐ YES ☑ NO

FOR LOCAL AGENCY USE ONLY
I HEREBY CERTIFY THAT I AM A DESIGNATED GOVERNMENT EMPLOYEE AND THAT I HAVE REPORTED THIS INFORMATION TO LOCAL OFFICIALS PURSUANT TO SECTION 25180.7 OF THE HEALTH AND SAFTY CODE.
SIGNED [signature] DATE

REPORT DATE 06/19/98 CASE #

REPORTED BY
NAME OF INDIVIDUAL FILING REPORT: DENISE SATTERLEE
PHONE: (408) 942-3266
SIGNATURE: [signature]
REPRESENTING ☐ OWNER/OPERATOR ☐ REGIONAL BOARD ☐ LOCAL AGENCY ☐ OTHER
COMPANY OR AGENCY NAME:
ADDRESS: 455 E. CALAVERAS BLVD (STREET) MILPITAS (CITY) CA (STATE) 95035 (ZIP)

RESPONSIBLE PARTY
NAME: CITY OF MILPITAS ☐ UNKNOWN
CONTACT PERSON: DENISE SATTERLEE
PHONE: (408) 942-3266
ADDRESS: 455 E. CALAVERAS BLVD (STREET) MILPITAS (CITY) CA (STATE) 95035 (ZIP)

SITE LOCATION
FACILITY NAME (IF APPLICABLE): MILPITAS FIRE ST. #2
OPERATOR: CITY OF MILPITAS
PHONE: (408) 942-3306
ADDRESS: 263 YOSEMITE DR (STREET) MILPITAS (CITY) SANTA CLARA (COUNTY) 95035 (ZIP)
CROSS STREET: S. PARK VICTORIA

IMPLEMENTING AGENCIES
LOCAL AGENCY / AGENCY NAME: SANTA CLARA VALLEY WATER DIST.
CONTACT PERSON: CHRIS TULLOCH
PHONE: (408) 927-0710
REGIONAL BOARD: SAN FRANCISCO BAY REGION
CONTACT PERSON: JOHN WEST
PHONE: (510) 286-1255

SUBSTANCES INVOLVED
(1) NAME: TPH D — QUANTITY LOST (GALLONS): ☐ UNKNOWN
(2) ☐ UNKNOWN

DISCOVERY/ABATEMENT
DATE DISCOVERED: 04/08/98
HOW DISCOVERED: ☐ INVENTORY CONTROL ☐ SUBSURFACE MONITORING ☐ NUISANCE CONDITIONS ☐ TANK TEST ☑ TANK REMOVAL ☐ OTHER
DATE DISCHARGE BEGAN: ☑ UNKNOWN
METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY): ☐ REMOVE CONTENTS ☐ REPLACE TANK ☑ CLOSE TANK ☐ REPAIR TANK ☐ REPAIR PIPING ☐ CHANGE PROCEDURE ☐ OTHER
HAS DISCHARGE BEEN STOPPED? ☑ YES ☐ NO IF YES, DATE: 04/08/98

SOURCE/CAUSE
SOURCE OF DISCHARGE: ☐ TANK LEAK ☑ UNKNOWN ☐ PIPING LEAK ☐ OTHER
CAUSE(S): ☐ OVERFILL ☐ RUPTURE/FAILURE ☐ SPILL ☐ CORROSION ☑ UNKNOWN ☐ OTHER

CASE TYPE
CHECK ONE ONLY: ☑ UNDETERMINED ☐ SOIL ONLY ☐ GROUNDWATER ☐ DRINKING WATER - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)

CURRENT STATUS
CHECK ONE ONLY: ☐ NO ACTION TAKEN ☐ PRELIMINARY SITE ASSESSMENT WORKPLAN SUBMITTED ☐ POLLUTION CHARACTERIZATION ☐ LEAK BEING CONFIRMED ☐ PRELIMINARY SITE ASSESSMENT UNDERWAY ☐ POST CLEANUP MONITORING IN PROGRESS ☐ REMEDIATION PLAN ☑ CASE CLOSED (CLEANUP COMPLETED OR UNNECESSARY) ☐ CLEANUP UNDERWAY

REMEDIAL ACTION
CHECK APPROPRIATE ACTION(S) (SEE BACK FOR DETAILS): ☐ EXCAVATE & DISPOSE (ED) ☐ REMOVE FREE PRODUCT (FP) ☐ ENHANCED BIO DEGRADATION (IT) ☐ CAP SITE (CD) ☐ EXCAVATE & TREAT (ET) ☐ PUMP & TREAT GROUNDWATER (GT) ☐ REPLACE SUPPLY (RS) ☐ CONTAINMENT BARRIER (CB) ☑ NO ACTION REQUIRED (NA) ☐ TREATMENT AT HOOKUP (HU) ☐ VENT SOIL (VS) ☐ VACUUM EXTRACT (VE) ☐ OTHER (OT)

COMMENTS

402

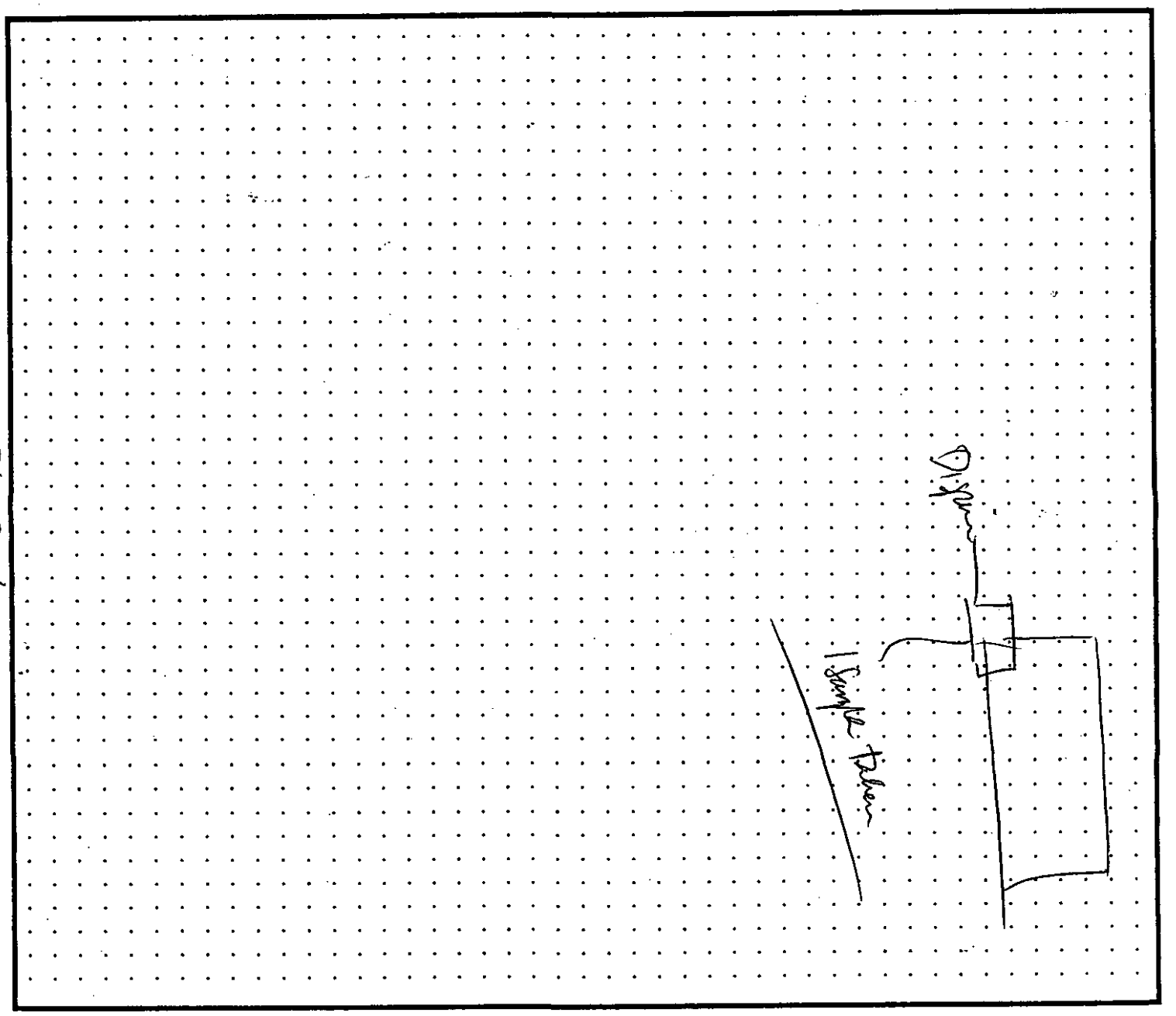
HSC 05 (11/09)

UNIFORM UNDERGROUND TANK SYSTEM CLOSURE SITE PLAN

Facility Name: _____

Facility Street Address: _____

Inspector: _____ Agency: _____ Date: _____



Comments: _____

9578082

UNIFORM UNDERGROUND TANK SYSTEM CLOSURE INSPECTION REPORT

For Use By All Jurisdictions, City and County, Within the Limits of the County of Santa Clara

Facility Name: FIRE STATION #2 Bldg. No.:

Address: 1263 YOSEMITE DR City: Zip:

Project Contact: Contact Phone No.:

Tank ID No.	22332		
Size	550		
Construction Material	STEEL		
Single/Double Wall	SINGLE		
Backfill Type			
Oxygen <10%	<10%		
LEL <20%	<10%		
Tank Condition	SLIGHT PITTING, STAINING - NO HOLES OBSERVED		
Soil/Groundwater Condition			
Soil Sample Depth			
Number and Description of Soil/Groundwater Samples *(Indicate Sample Locations on Site Plan.)*	1 under dispenser 2 from pit sand had odor -	no odor for samples	

Piping: ☐ Rinsed/Tested/Capped. **Rinsate:** ☐ Shipped on Manifest.

Tank & Piping Transport: ☐ Shipped on Manifest; ☐ Transporter Name Same as on Application; ☐ Vehicle Hazwaste Certificate Current.

Sampling: ☐ Evidence Tape; ☐ Chain of Custody; ☐ Samples Refrigerated; Pipeline Samples Taken ☐ Yes, ☐ No *(If no, explain why in Comments.)*

Soil: ☐ Soil Returned to Excavation; ☐ Soil Stored on Bermed Plastic & Covered.

Disposition of Tank Contents:

Comments/Special Conditions: NO SAFETY PLAN ON SITE

CLEAR, SUNNY, ~50°

TANK - SLIGHT PITTING, STAINING OF TANK **Site Plan:** ☐ Attached.

Inspector: Agency: Date: Start Time: Stop Time:

Signature of Contractor/Authorized Agent: Date: Page of

Rev 11/09/94

White - Local Agency; Yellow - Contractor

90-058

UNIFORM UNDERGROUND STORAGE TANK SYSTEM CLOSURE PERMIT APPLICATION/CLOSURE PLAN

For Use By All Jurisdictions, Cities and County, Within the Limits of the County of Santa Clara

1. **Facility Name (Tank Site):** Fire Station #2 **Bldg. No.:** _____
   Address: 1263 Yosemite Drive **City:** Milpitas **Zip:** 95035
   EPA ID No.: CAC 001 270 040 **Contact Person:** Carol Randisi **Phone No.:** (408) 942-2465
2. **Tank Owner's Name:** City of Milpitas
   Address: ~~455 Ex Calaveras Blvd.~~ 1265 N. Milpitas Blvd. **City:** Milpitas **Zip:** 95035
3. **Tank Operator's Name:** City of Milpitas
   Address: ~~455 Ex Calaveras Blvd.~~ 1265 N. Milpitas Blvd. **City:** Milpitas **Zip:** 95035
4. **Consultant (If Applicable):** Kleinfelder, Inc.
   Address: 7133 Koll Center Parkway, Suite 100 **City:** Pleasanton **Zip:** 94566
   Contact Person: Dan Carroll **Phone No.:** (510) 484-1700 x206
5. **Tank Closure Contractor:** HSR, Inc.
   Address: 830 Hillview Court, Suite 290 **City:** Milpitas **Zip:** 95035
   Contact Person: Jim Bowers **Phone No.:** (408) 262-6300

   Hazardous Substance Removal Certificate: X on file; ____ attached
   Worker's Compensation Declaration: X on file; ____ attached; ____ not applicable
   Business License (if required): X on file; ____ attached; ____ not applicable

6. **Firm that will take soil/water samples:** Kleinfelder, Inc. **Phone No.:** (510) 484-1700
7. **State-certified laboratory that will analyze samples:** American Environmental Network **Phone No.:** (510) 930-9090

Shaded areas to be completed by local agency

Laboratory analyses shall test for:

	TPH G	TPH D	BTX&E	TE Lead	CL Hydro	O&G	EPA 8270	pH	Other (Specify)
Tank 1	✓	X							
Tank 2									
Tank 3									
Tank 4									
Tank 5									
Tank 6									

Additional analyses may be required by inspector in field.

UGT Closure Permit Ap./Closure Plan - p. 2 of 2 Tank Site Address (from page 1): 1263 Yosemite Drive, Milpitas

8. Name of Licensed Transporter of Tanks: Erickson, Inc.

EPA ID No.: CAD 009 466 392 Phone No.: (510) 235-1393

9. Destination of Tanks and Piping: 255 Parr Blvd., Richmond

10. Tank System:

	Size (gallons)	Substance(s) Previously Contained
Tank 1	550 gal.	diesel
Tank 2		
Tank 3		
Tank 4		
Tank 5		
Tank 6		

If the owner/operator does not have a current Hazardous Materials Business Plan/HMMP which includes these tanks on file with the local agency, provide an 8-1/2" x 11" plot plan of the tanks to be closed. Indicate the nearest cross street to the facility, buildings immediately adjacent to the tanks, location(s) of tanks to be closed, and location of nearby utilities.

This Underground Tank Closure Permit expires 6 months from the date of closure plan approval. If tanks have not been closed within 6 months, a new closure permit application and appropriate fees may be required.

Facility closure inspections must be scheduled at least 48 hours in advance. Call the appropriate local agency to make necessary arrangements.

I certify that I have read the tank closure guidelines and declare that the above information is correct to the best of my knowledge. The owner of the tank(s) described above is aware of the pending closure. I agree to comply with all applicable city and county ordinances and state laws relating to hazardous materials/wastes, and hereby authorize representatives of local agencies to enter upon the within mentioned property for inspection purposes.

CAROL RANDISI		3-16-98
Applicant/Agent's Name (Print)	Applicant/Agent's Signature	Date

THIS APPROVAL CONSTITUTES A PERMIT FOR REMOVAL OF THE ABOVE LISTED TANKS.

Agency: MILPITAS FIRE DEPT Date: 3/19/98

Print Name: DENISE SAFFERLEE Sign Name:

THIS CERTIFIES THAT ALL TANK SYSTEM CLOSURE ACTIVITIES ARE COMPLETE.*

Agency: Date:

Print Name: Sign Name:

* If contamination of any detectable concentration is found, contact the Santa Clara Valley Water District and/or Regional Water Quality Control Board for cleanup and/or remediation requirements.

Rev. 9/30/

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

UNDERGROUND STORAGE TANK PERMIT APPLICATION - FORM A

COMPLETE THIS FORM FOR EACH FACILITY/SITE

MARK ONLY ONE ITEM: ☐ 1 NEW PERMIT ☐ 2 INTERIM PERMIT ☐ 3 RENEWAL PERMIT ☐ 4 AMENDED PERMIT ☐ 5 CHANGE OF INFORMATION ☐ 6 TEMPORARY SITE CLOSURE ☐ 7 PERMANENTLY CLOSED SITE

I. FACILITY/SITE INFORMATION & ADDRESS - (MUST BE COMPLETED)

DBA OR FACILITY NAME: Fire Station #2	NAME OF OPERATOR: City of Milpitas - Public Works		
ADDRESS: 1263 Yosemite Drive	NEAREST CROSS STREET: Park Victoria		PARCEL # (OPTIONAL)
CITY NAME: Milpitas	STATE: CA	ZIP CODE: 95035	SITE PHONE # WITH AREA CODE: (408) 942-2383

✓ BOX TO INDICATE: ☐ CORPORATION ☐ INDIVIDUAL ☐ PARTNERSHIP ☒ LOCAL-AGENCY ☐ COUNTY-AGENCY * ☐ STATE-AGENCY * ☐ FEDERAL-AGENCY *

* If owner of UST is a public agency, complete the following: name of Supervisor of division, section, or office which operates the UST _____

TYPE OF BUSINESS	✓ IF INDIAN RESERVATION OR TRUST LANDS	# OF TANKS AT SITE	E. P. A. I. D. # (optional)
☐ 1 GAS STATION ☐ 2 DISTRIBUTOR ☐ 3 FARM ☐ 4 PROCESSOR ☒ 5 OTHER	☐	1	CAC 001 271 040

EMERGENCY CONTACT PERSON (PRIMARY)		EMERGENCY CONTACT PERSON (SECONDARY) - optional	
DAYS: NAME (LAST, FIRST): Smith, Stephan	PHONE # WITH AREA CODE: (408) 942-2400	DAYS: NAME (LAST, FIRST): Garrison, Bill	PHONE # WITH AREA CODE: (408) 942-3295
NIGHTS: NAME (LAST, FIRST): Smith, Stephan	PHONE # WITH AREA CODE: (408) 942-2400	NIGHTS: NAME (LAST, FIRST): Garrison, Bill	PHONE # WITH AREA CODE: (408) 942-3295

II. PROPERTY OWNER INFORMATION - (MUST BE COMPLETED)

NAME: City of Milpitas - Public Works	CARE OF ADDRESS INFORMATION		
MAILING OR STREET ADDRESS: 1265 N. Milpitas Blvd.	✓ box to indicate ☐ INDIVIDUAL ☒ LOCAL-AGENCY ☐ STATE-AGENCY ☐ CORPORATION ☐ PARTNERSHIP ☐ COUNTY-AGENCY ☐ FEDERAL-AGENCY		
CITY NAME: Milpitas	STATE: CA	ZIP CODE: 95035	PHONE # WITH AREA CODE: (408) 942-2465

III. TANK OWNER INFORMATION - (MUST BE COMPLETED)

NAME OF OWNER: City of Milpitas - Public Works	CARE OF ADDRESS INFORMATION		
MAILING OR STREET ADDRESS: 1265 N. Milpitas Blvd.	✓ box to indicate ☐ INDIVIDUAL ☒ LOCAL-AGENCY ☐ STATE-AGENCY ☐ CORPORATION ☐ PARTNERSHIP ☐ COUNTY-AGENCY ☐ FEDERAL-AGENCY		
CITY NAME: Milpitas	STATE: CA	ZIP CODE: 95035	PHONE # WITH AREA CODE: (408) 942-2465

IV. BOARD OF EQUALIZATION UST STORAGE FEE ACCOUNT NUMBER - Call (916) 322-9669 if questions arise.

TY (TK) HQ 44- - ☐☐☐☐☐☐

V. PETROLEUM UST FINANCIAL RESPONSIBILITY - (MUST BE COMPLETED) – IDENTIFY THE METHOD(S) USED

✓ box to indicate: ☐ 1 SELF-INSURED ☐ 2 GUARANTEE ☐ 3 INSURANCE ☐ 4 SURETY BOND ☐ 5 LETTER OF CREDIT ☐ 6 EXEMPTION ☐ 99 OTHER _____

VI. LEGAL NOTIFICATION AND BILLING ADDRESS

Legal notification and billing will be sent to the tank owner unless box I or II is checked.

CHECK ONE BOX INDICATING WHICH ABOVE ADDRESS SHOULD BE USED FOR LEGAL NOTIFICATIONS AND BILLING: I. ☒ II. ☐ III. ☐

THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT

OWNER'S NAME (PRINTED & SIGNED)	OWNER'S TITLE	DATE MONTH/DAY/YEAR
CAROL RANDOL Carol Randol	SR. ADM. SUPV.	3-16-98

LOCAL AGENCY USE ONLY

COUNTY #	JURISDICTION #	FACILITY #
☐☐	☐☐☐	☐☐☐☐☐☐

LOCATION CODE - *OPTIONAL*	CENSUS TRACT # - *OPTIONAL*	SUPVISOR - DISTRICT CODE - *OPTIONAL*

THIS FORM MUST BE ACCOMPANIED BY AT LEAST (1) OR MORE PERMIT APPLICATION - **FORM B, UNLESS THIS IS A CHANGE OF SITE INFORMATION ONLY.**

OWNER MUST FILE THIS FORM WITH THE LOCAL AGENCY IMPLEMENTING THE UNDERGROUND STORAGE TANK REGULATIONS

FORM A (3/93) FOR0033A-R7

INSTRUCTIONS FOR COMPLETING FORM "A"

GENERAL INSTRUCTIONS:

SECTION 2711 OF TITLE 23, CHAPTER 16, CALIFORNIA CODE OF REGULATIONS AND SECTIONS 25286, 25287, AND 25289 OF CHAPTER 6.7, DIVISION 20, CALIFORNIA HEALTH AND SAFETY CODE REQUIRE OWNERS TO APPLY FOR AN UST OPERATING PERMIT.

1. One FORM "A" shall be completed for all NEW PERMIT CHANGES or any FACILITY/SITE INFORMATION CHANGES.
2. SUBMIT ONLY ONE (1) FORM "A" for a Facility/Site, regardless of the number of tanks located at the site.
3. This form should be completed by either the PERMIT APPLICANT or the LOCAL AGENCY UNDERGROUND TANK INSPECTOR.
4. Please type or print clearly all requested information.
5. Use a hard point writing instrument, you are making 3 copies.
6. Tank owner must submit a facility plot plan to the local agency as part of the application showing the location of the USTs with respect to buildings and landmarks [Section 2711 (a)(8), CCR].
7. Tank owner must submit documentation showing compliance with state financial responsibility requirements to the local agency as part of the application for petroleum USTs [Section 2711 (a)(11), CCR].

TOP OF FORM: "MARK ONLY ONE ITEM"

Mark an (X) in the box next to the item that best describes the reason the form is being completed.

I. FACILITY/SITE INFORMATION & ADDRESS (MUST BE COMPLETED)

1. Record name and address (physical location) of the underground tank(s).
   NOTE: Address MUST have a valid physical location including city, state, and zip code.
   P.O. BOX NUMBERS ARE NOT ACCEPTABLE.
   Include nearest cross street and name of the operator.
2. Phone number must have an area code. If the night number is the same, write "SAME" in proper location.
3. Check the appropriate box for TYPE OF BUSINESS OWNERSHIP (ex. CORPORATION, INDIVIDUAL, etc.).
4. Check the appropriate box for TYPE OF BUSINESS.
5. If Facility/Site is located within an Indian reservation or other Indian trust lands, check the box marked "YES".
6. Indicate the NUMBER of TANKS at this SITE.
7. Record the E.P.A. ID # or write "NONE" in the space provided.

II. PROPERTY OWNER INFORMATION & ADDRESS (MUST BE COMPLETED)

Complete all items in this section, unless all items are the same as SECTION I; If the same, write "SAME AS SITE" across this section. Be sure to check PROPERTY OWNERSHIP TYPE box.

III. TANK OWNER INFORMATION & ADDRESS (MUST BE COMPLETED)

Complete all items in this section, unless all items are the same as SECTION I; If the same, write "SAME AS SITE" across this section. Be sure to check TANK OWNERS TYPE box.

IV. BOARD OF EQUALIZATION UST STORAGE FEE ACCOUNT NUMBER (MUST BE COMPLETED SEE ARTICLE 5, CHAPTER 6.75, DIVISION 20, CALIFORNIA HEALTH AND SAFETY CODE.)

Enter your Board of Equalization (BOE) UST storage fee account number which is required before your permit application can be processed. Registration with the BOE will ensure that you will receive a quarterly storage fee return for reporting the [illegible] based on the number of gallons placed in your UST(s). The BOE will exempt persons exempt from paying the storage fee. If you do not have an account number with the BOE or if you have any questions regarding the fee or exemptions, please call the BOE at 916 322 [illegible] or write to the BOE at the following address: Board of Equalization, Fuel Taxes Division, P.O. Box 942879, Sacramento, CA 94279-0001.

V. PETROLEUM UST FINANCIAL RESPONSIBILITY (MUST BE COMPLETED FOR PETROLEUM USTs ONLY, SEE SECTIONS 2711 (a)(5) OF TITLE 23, CHAPTER 16, CALIFORNIA CODE OF REGULATIONS.)

Identify the method(s) used by the owner and/or operator, in meeting the Federal and State financial responsibility requirements for USTs containing any Federal or State approved as well as non petroleum USTs are exempt from this requirement.

VI. LEGAL NOTIFICATION AND BILLING ADDRESS

Check ONE BOX for the address that will be used for BOTH LEGAL AND BILLING NOTIFICATIONS.
TANK OWNER OR AUTHORIZED REPRESENTATIVE MUST SIGN AND DATE THE FORM AS INDICATED. [SEE SECTIONS 2711 (a)(13) OF TITLE 23 CHAPTER 16, CALIFORNIA CODE OF REGULATIONS.]

INSTRUCTION FOR THE LOCAL AGENCIES

The county an jurisdiction numbers are predetermined and can be obtained by calling the State Board (916) 227-4363. The facility number may be assigned by the local agency, however, this number must be numerical and cannot contain any alphabetical characters. If the local agency prefers the State Board to assign the facility number, please leave it blank.

IT IS THE RESPONSIBILITY OF THE LOCAL AGENCY THAT INSPECTS THE FACILITY TO VERIFY THE ACCURACY OF THE INFORMATION. THIS APPLICATION CANNOT BE PROCESSED IF THE BOE ACCOUNT NUMBER IS NOT FILLED IN. THE LOCAL AGENCY IS RESPONSIBLE FOR THE COMPLETION OF THE "LOCAL AGENCY USE ONLY" INFORMATION BOX AND FOR FORWARDING ONE FORM "A" AND ASSOCIATED FORM "B"(s) TO THE FOLLOWING ADDRESS. THE LOCAL AGENCY SHOULD RETAIN THE ORIGINALS AND FORWARD THE YELLOW COPIES TO THE FOLLOWING ADDRESS. THE PINK COPY SHOULD BE RETAINED BY THE TANK OWNER.

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

UNDERGROUND STORAGE TANK PERMIT APPLICATION - FORM B

COMPLETE A SEPARATE FORM FOR EACH TANK SYSTEM.

MARK ONE ITEM: [ ] 1 NEW PERMIT [ ] 2 INTERIM PERMIT [ ] 3 RENEWAL PERMIT [ ] 4 AMENDED PERMIT [ ] 5 CHANGE OF INFORMATION [X] 6 TEMPORARY TANK CLOSURE [ ] 7 PERMANENTLY CLOSED ON SITE [ ] 8 TANK REMOVED

DBA OR FACILITY NAME WHERE TANK IS INSTALLED: Fire Station #2

I. TANK DESCRIPTION

COMPLETE ALL ITEMS – SPECIFY IF UNKNOWN

A. OWNER'S TANK I. D. #	B. MANUFACTURED BY: unknown
C. DATE INSTALLED (MO/DAY/YEAR) unknown	D. TANK CAPACITY IN GALLONS: 550 gal

II. TANK CONTENTS

IF A-1 IS MARKED, COMPLETE ITEM C.

A. [X] 1 MOTOR VEHICLE FUEL [ ] 2 PETROLEUM [ ] 3 CHEMICAL PRODUCT [ ] 4 OIL [ ] 80 EMPTY [ ] 95 UNKNOWN

B. [ ] 1 PRODUCT [ ] 2 WASTE

C. [ ] 1a REGULAR UNLEADED [ ] 1b PREMIUM UNLEADED [ ] 1c MIDGRADE UNLEADED [ ] 2 LEADED [X] 3 DIESEL [ ] 4 GASAHOL [ ] 5 JET FUEL [ ] 6 AVIATION GAS [ ] 7 METHANOL [ ] 8 M85 [ ] 99 OTHER (DESCRIBE IN ITEM D. BELOW)

D. IF (A.1) IS NOT MARKED, ENTER NAME OF SUBSTANCE STORED C. A. S. # :

III. TANK CONSTRUCTION

MARK ONE ITEM ONLY IN BOXES A, B, AND C, AND ALL THAT APPLIES IN BOX D AND E

A. TYPE OF SYSTEM: [ ] 1 DOUBLE WALL [X] 2 SINGLE WALL [ ] 3 SINGLE WALL WITH EXTERIOR LINER [ ] 4 SINGLE WALL IN A VAULT [ ] 5 INTERNAL BLADDER SYSTEM [ ] 95 UNKNOWN [ ] 99 OTHER

B. TANK MATERIAL (Primary Tank): [X] 1 BARE STEEL [ ] 2 STAINLESS STEEL [ ] 3 FIBERGLASS [ ] 4 STEEL CLAD W/ FIBERGLASS REINFORCED PLASTIC [ ] 5 CONCRETE [ ] 6 POLYVINYL CHLORIDE [ ] 7 ALUMINUM [ ] 8 100% METHANOL COMPATIBLE W/FRP [ ] 9 BRONZE [ ] 10 GALVANIZED STEEL [ ] 95 UNKNOWN [ ] 99 OTHER

C. INTERIOR LINING OR COATING: [ ] 1 RUBBER LINED [ ] 2 ALKYD LINING [ ] 3 EPOXY LINING [ ] 4 PHENOLIC LINING [ ] 5 GLASS LINING [ ] 6 UNLINED [X] 95 UNKNOWN [ ] 99 OTHER

IS LINING MATERIAL COMPATIBLE WITH 100% METHANOL? YES ___ NO ___

D. EXTERIOR CORROSION PROTECTION: [ ] 1 POLYETHYLENE WRAP [ ] 2 COATING [ ] 3 VINYL WRAP [ ] 4 FIBERGLASS REINFORCED PLASTIC [ ] 5 CATHODIC PROTECTION [ ] 91 NONE [X] 95 UNKNOWN [ ] 99 OTHER

E. SPILL AND OVERFILL, etc. SPILL CONTAINMENT INSTALLED (YEAR) _____ OVERFILL PREVENTION EQUIPMENT INSTALLED (YEAR) _____ DROP TUBE YES ___ NO ___ STRIKER PLATE YES ___ NO ___ DISPENSER CONTAINMENT YES ___ NO ___

IV. PIPING INFORMATION

CIRCLE A IF ABOVE GROUND OR U IF UNDERGROUND, BOTH IF APPLICABLE

A. SYSTEM TYPE	A (U) 1 SUCTION	A U 2 PRESSURE	A U 3 GRAVITY	A U 4 FLEXIBLE PIPING	A U 99 OTHER
B. CONSTRUCTION	A (U) 1 SINGLE WALL	A U 2 DOUBLE WALL	A U 3 LINED TRENCH	A U 95 UNKNOWN	A U 99 OTHER
C. MATERIAL AND CORROSION PROTECTION	A U 1 BARE STEEL	A U 2 STAINLESS STEEL	A U 3 POLYVINYL CHLORIDE (PVC)	A U 4 FIBERGLASS PIPE	
	A U 5 ALUMINUM	A U 6 CONCRETE	A U 7 STEEL W/ COATING	A U 8 100% METHANOL COMPATIBLE W/FRP	
	A U 9 GALVANIZED STEEL	A U 10 CATHODIC PROTECTION	A (U) 95 UNKNOWN	A U 99 OTHER	

D. LEAK DETECTION: [ ] 1 MECHANICAL LINE LEAK DETECTOR [ ] 2 LINE TIGHTNESS TESTING [ ] 3 CONTINUOUS INTERSTITIAL MONITORING [ ] 4 ELECTRONIC LINE LEAK DETECTOR [ ] 5 AUTOMATIC PUMP SHUTDOWN [ ] 99 OTHER none

V. TANK LEAK DETECTION

[ ] 1 VISUAL CHECK [ ] 2 MANUAL INVENTORY RECONCILIATION [ ] 3 VADOZE MONITORING [ ] 4 AUTOMATIC TANK GAUGING [ ] 5 GROUND WATER MONITORING [ ] 6 ANNUAL TANK TESTING [ ] 7 CONTINUOUS INTERSTITIAL MONITORING [ ] 8 SIR [ ] 9 WEEKLY MANUAL TANK GAUGING [ ] 10 MONTHLY TANK TESTING [X] 95 UNKNOWN [ ] 99 OTHER

VI. TANK CLOSURE INFORMATION (PERMANENT CLOSURE IN-PLACE)

1. ESTIMATED DATE LAST USED (MO/DAY/YR)	2. ESTIMATED QUANTITY OF SUBSTANCE REMAINING	3. WAS TANK FILLED WITH INERT MATERIAL ?
unknown	50 GALLONS	YES [ ] NO [X]

THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT

TANK OWNER'S NAME (PRINTED & SIGNATURE)	DATE
CAROL RANDISI Carol Randisi	3-16-98

LOCAL AGENCY USE ONLY

THE STATE I.D. NUMBER IS COMPOSED OF THE FOUR NUMBERS BELOW

STATE I.D.#	COUNTY #	JURISDICTION #	FACILITY #	TANK #

PERMIT NUMBER	PERMIT APPROVED BY/DATE	PERMIT EXPIRATION DATE

THIS FORM MUST BE ACCOMPANIED BY A PERMIT APPLICATION - FORM A, UNLESS A CURRENT FORM A HAS BEEN FILED. FORM C MUST BE COMPLETED FOR INSTALLATIONS. SHOULD BE ACCOMPANIED BY A PLOT PLAN. FILE THIS FORM WITH THE LOCAL AGENCY IMPLEMENTING THE UNDERGROUND STORAGE TANK REGULATIONS

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INSTRUCTIONS FOR COMPLETING FORM "B"

GENERAL INSTRUCTIONS

Section 2711 of Title 23, Division 3, Chapter 16, California Code of Regulations and sections 25286, 25287, and 25289 of Chapter 6.7, Division 20, Health and Safety Code require tank owners to apply for an UST operating permit.

1. One FORM "B" shall be completed for each tank for all NEW PERMITS, PERMIT CHANGES, REMOVALS and/or any other TANK INFORMATION CHANGE.
2. This form should be completed by either the PERMIT APPLICANT or the LOCAL AGENCY UNDERGROUND TANK INSPECTOR.
3. Please type or print clearly all requested information.
4. Use a hard point writing instrument, you are making 3 copies.
5. Tank owners must submit a plot plan to the local agency showing the location of the USTs with respect to buildings and landmarks [2711 (a)(8) CCR].
6. Tank owners must submit documentation showing compliance with state financial responsibility requirements to the local agency for petroleum USTs [2711 (a)(11) CCR].

TOP OF FORM: MARK ONLY ONE ITEM

1. Mark an (X) in the box next to the item that best describes the reason the form is being completed.
2. Indicate the DBA or Facility name where the tank is installed.

I. TANK DESCRIPTION - COMPLETE ALL ITEMS - IF UNKNOWN - SO SPECIFY

A. Indicate owners tank ID # - If there is a tank number that is used by the owner to identify the tank (ex. AB70789).
B. Indicate the name of the company that manufactured the tank (ex. ACME TANK MFG).
C. Indicate the year the tank was installed (ex. 1987).
D. Indicate the tank capacity in gallons (ex. 25,000 or 10,000 etc.).

II. TANK CONTENTS

A. 1. IF MOTOR VEHICLE FUEL, check box 1 and complete items B & C.
2. If not MOTOR VEHICLE FUEL, check the appropriate box in section A and complete items B & D.
B. Check the appropriate box.
C. Check the type of MOTOR VEHICLE FUEL (if box 1 is checked in A).
D. Print the chemical name of the hazardous substance stored in the tank and the C.A.S.#. (Chemical Abstract Service number), if box 1 is NOT checked in A.

III. TANK CONSTRUCTION - MARK ONE ITEM ONLY IN BOX A, B, C & D

1. Check only one item in TYPE OF SYSTEM, TANK MATERIAL, INTERIOR LINING and CORROSION PROTECTION.
2. If OTHER, print in the space provided.

IV. PIPING INFORMATION

1. Circle "A" if above ground circle "U" if underground, and circle both if applicable.
2. If UNKNOWN circle; or if OTHER, print in space provided.
3. Indicate the LEAK DETECTION system(s) used to comply with the monitoring requirement for the piping.

V. TANK LEAK DETECTION

1. Indicate the LEAK DETECTION system(s) used to comply with the monitoring requirements for the tank.

VI. INFORMATION ON TANK PERMANENTLY CLOSED IN PLACE

1. ESTIMATED DATE LAST USED - MONTH/YEAR (January, 1988 or 01/88)
2. ESTIMATED QUANTITY of HAZARDOUS SUBSTANCE remaining in the tank (in Gallons).
3. WAS TANK FILLED WITH INERT MATERIAL? Check "Yes" or "No".

TANK OWNER OR AUTHORIZED REPRESENTATIVE MUST SIGN AND DATE THE FORM AS INDICATED [see section 2711 (a)(13) CCR]

INSTRUCTION FOR THE LOCAL AGENCIES

The state underground storage tank identification number is composed of the two digit county number, the three digit jurisdiction number, the six digit facility number and the six digit tank number. The county and jurisdiction numbers are predetermined and can be obtained by calling the State Board (916) 227-4303. The facility number must be the same as shown in form "A". The tank number may be assigned by the local agency, however, this number must be numerical and cannot contain an alphabet. If the local agency prefers the State Board to assign the tank number, please leave it blank.

IT IS THE RESPONSIBILITY OF THE LOCAL AGENCY THAT INSPECTS THE FACILITY TO VERIFY THE ACCURACY OF THE INFORMATION. THE LOCAL AGENCY IS RESPONSIBLE FOR THE COMPLETION OF THE "LOCAL AGENCY USE ONLY" INFORMATION BOX. THE LOCAL AGENCY SHOULD RETAIN THE ORIGINAL YELLOW COPIES. THE PINK COPY SHOULD BE RETAINED BY THE TANK OWNER.

KLEINFELDER
An employee owned company

June 9, 1998
File No. 10-3005-53/008

Ms. Carol Randisi
Administration Senior Supervisor
City of Milpitas Public Works Department
1265 North Milpitas Boulevard
Milpitas, California 95035

SUBJECT: Request For Underground Storage Tank Closure Report
City of Milpitas Properties, Fire Station # 2
1263 Yosemite Drive, Milpitas, California

Dear Ms. Randisi:

Kleinfelder Inc. (Kleinfelder) is pleased to present this letter report summarizing the work performed at the City of Milpitas Fire Station #2 (Fire Station #2), located at 1263 Yosemite Drive, Milpitas California (Plate 1 and 2). The work performed included closure activities associated with a 550-gallon, carbon steel underground storage tank (UST) the reportedly supplied diesel fuel for the fire station vehicles.

SITE INVESTIGATION

On April 30, 1997, three boreholes (KP-4, KP-5, and KP-6) were advanced by Vironex, Inc., under Kleinfelder's supervision, using a Geoprobe™ rig. Copies of the boring logs for KP-4, KP-5, and KP-6 are presented in Appendix A. Groundwater was not encountered during the advancement of borings KP-5, and KP-6, both to maximum depth of 21 feet below ground surface (bgs). During the advancement of boring KP-4 groundwater was encountered at a depth of 26 feet bgs, but not in a large enough quantity for sampling.

Soil samples were collected at five foot intervals, beginning at five feet bgs, for lithologic logging and chemical characterization purposes. A portable photoionization device (PID) was used to screen soil samples for the presence of hydrocarbon vapors. The samples (KP4-25, KP5-20, and KP6-5) that were selected for analysis had the highest PID readings recorded. Soil samples were collected in acetate tubes, capped with Teflon™ tape and plastic end caps, labeled, and placed into a chilled ice chest for transport to the laboratory.

KLEINFELDER 7133 Koll Center Parkway, Suite 100, Pleasanton, CA 94566-3101 (510) 484-1700

UNDERGROUND STORAGE TANK REMOVAL

A Uniform Underground Storage Tank System Closure Permit Application/Closure Plan was submitted by the City of Milpitas on March 16, 1998 and was approved by the Milpitas Fire Department on March 18, 1998. A copy of the application is presented in Appendix B.

On April 8, 1998, a Kleinfelder representative provided oversight during the removal of the UST at the Fire Station #2. An inspector from the City of Milpitas was also present during the removal of the UST. Copies of field notes taken by Kleinfelder and the City of Milpitas inspector are presented in Appendix C. Following the inerting of the tank using dry ice, the combustible gas indicator recorded readings of 0.0 percent lower explosive limit and 0.3 percent oxygen. No odor was present in stockpiled soils during excavation. The tank was inspected upon removal and no holes were observed. Prior to transport of the tank, all openings, except one for venting, were covered with duct tape and the tank ID number 22332 was painted on the side. The Uniform Hazardous Waste Manifest for the removed tank is presented in Appendix D.

Following the removal of the tank, the pit was excavated to eleven-feet bgs, approximately one-foot into native soil. Also, the fuel dispenser was removed and a small trench was excavated approximately six-inches into native soil. One soil sample (FS2-SS-01) was collected at the former fuel dispenser area and two soil samples (FS2-SS-02 and FS2-SS-03) were collected at each of the ends of the former tank. Samples were collected in brass tubes, capped with Teflon™ tape and plastic end caps, labeled, entered onto a chain-of-custody form, and placed into a chilled ice chest for transport to the laboratory.

Following the soil sampling, the excavation was backfilled with imported fill material. According to a City of Milpitas inspector the excavation was backfilled with "clean fill" using a backhoe with a vibratory 2x2 head, and compacted in 8-inch lifts. The excavation was backfilled according to Santa Clara Valley Water District (SCVWD) requirements (SCVWD, 1991). A current copy of the California State Contractors License for HSR, Inc. is included in Appendix E.

ANALYTICAL RESULTS OF SOIL SAMPLES

The soil samples were submitted under chain-of-custody control to American Environmental Network (AEN), a laboratory certified by the State of California to perform the requested analyses. The soil samples were analyzed for total petroleum hydrocarbons as diesel (TPH-d) using United States Environmental Protection Agency (EPA) Method 8015 (modified), and benzene, toluene, ethylbenzene, and total xylenes (BTEX) using EPA Method 8020. Soil sample FS2-SS-02 also was analyzed for polynuclear aromatic hydrocarbons (PAHs) using EPA Method 8270. The samples from borehole KP-4, KP-5, and KP-6 also were analyzed for methyl-tertiary-butyl-ether

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(MTBE) using EPA Method 8020. The analytical results are summarized on Plate 2. Copies of certified laboratory data sheets and chain-of-custody forms are presented in Appendix F.

TPH-d, BTEX, and MTBE were not detected in samples KP4-25, KP5-20, and KP6-5 at or above the reporting limit. TPH-d and BTEX were not detected at or above the laboratory reporting limits in sample FS2-SS-01. PAHs were not detected in sample FS2-SS-02.

The low concentrations of TPH-d found in samples FS2-SS-02 and FS2-SS-03 (5 mg/kg in both) are at the reporting limit and may represent naturally occurring organic material that falls within the same carbon range as diesel (and therefore shows up on the chromatograms) or may be within laboratory error. Additionally, BTEX was not detected at or above the laboratory reporting limits for these samples.

REGULATORY EVALUATION OF SITE SOIL CONTAMINATION

Typically, in California, sites impacted with petroleum hydrocarbons are evaluated on a case by case basis. Guidance regarding fuel cases is provided in the California Regional Water Quality Board (RWQCB), Tri-Regional Board Staff recommendations (CRWQCB, 1990), and the State of California Leaking Underground Fuel Tank (LUFT) Task Force Field Manual (LUFT, 1989).

Historically the RWQCB required soil and groundwater investigations at sites where TPH-d was detected at 100 mg/kg or greater. The LUFT Field Manual suggests that soil and groundwater assessments be performed at sites where TPH-d occurs at 100-10,000 mg/kg.

In accordance with the California Department of Toxic Substances Control (DTSC) as stated by the RWQCB, 1990, soil remediation is required if TPH-d occurs at 1,000 mg/kg or greater (considered hazardous by virtue of ignitability). The need for groundwater remediation is evaluated on a case by case basis.

Based on the analytical results, there is no potential impact to soil or groundwater at the Fire Station #2 site

CONCLUSIONS

Based on the data collected to date, the following conclusions can be formulated:

- The predominant materials encountered in the borings KP-4, KP-5, and KP-6 were clays. In general, these materials reduce the migration of contaminants through the subsurface.

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- Based on the analytical results and the fact that groundwater was not encountered, there appears to be no potential impact to soil or groundwater.

- This site should be considered as a candidate for closure by the lead implementing agency (LIA).

RECOMMENDATIONS

Kleinfelder makes the following recommendations:

- Submit this report to the City of Milpitas Fire Department, the LIA, requesting closure.

- Submit this report to the Santa Clara Valley Water District, as appropriate.

- Revise the City's Hazardous Materials Management Plan/Business Plan, as appropriate.

Sincerely,

KLEINFELDER, INC.

Neal Siler, REA
Environmental Group Manager

Paul A. Baginski, P.E.
Regional Environmental Manager

NES:PAB:sh
Attachments

KLEINFELDER 7133 Koll Center Parkway, Suite 100, Pleasanton, CA 94566-3101 (510) 484-1700 (510) 484-5838 fax

REFERENCES

California Regional Water Quality Control Board, 1990, *Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites*, dated August 10, 1990. Staff Report prepared by the North Coast Regional Water Quality Control Board, the San Francisco Bay Regional Water Control Board and the Central Valley Regional Water Quality Control Board.

Santa Clara Valley Water District, 1991, *Excavation Backfilling Well Standard Implementation Draft Guidance*, February 27, 1991.

State of California Leaking Underground Fuel Tank Task Force, 1989, *Leaking Underground Fuel Tank Field Manual: Guidelines for Site Assessment, Cleanup, and Underground Storage Tank Closure*, dated October 1989. State of California, Leaking Underground Fuel Tank Task Force. State Water Resources Control Board, Sacramento, California.

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UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS		LTR	DESCRIPTION
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	GW	Well-graded gravels or gravel sand mixtures, little or no fines.
		GP	Poorly-graded gravels or gravel sand mixture little or no fines.
		GM	Silty gravels, gravel-sand-silt mixtures.
		GC	Clayey gravels, gravel-sand-clay mixtures.
	SAND AND SANDY SOILS	SW	Well-graded sands or gravelly sands, little or no fines.
		SP	Poorly-graded sands or gravelly sands, little or no fines.
		SM	Silty sands, sand, and silt mixtures.
		SC	Clayey sands, and clay mixtures.

MAJOR DIVISIONS		LTR	DESCRIPTION
FINE GRAINED SOILS	SILTS AND CLAYS LL < 50	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity.
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, lean silty clays.
		OL	Organic silts and organic silt-clays of low plasticity.
	SILTS AND CLAYS LL > 50	MH	Inorganic silts, micaceous or diatomaceous fine or silty soils, elastic silts.
		CH	Inorganic clays of high plasticity, fat clays.
		OH	Organic clays of medium to high plasticity.
HIGHLY ORGANIC SOILS		Pt	Peat and other highly organic soils.

- Bulk, bag, or grab sample
- Soil Probe Split Spoon Sampler (SPT), 7/8 in. ø
- Modified California (Porter) Sampler (MPS), 2.5 in. ø
- California Sampler, 3 in. ø
- Shelby Tube, 3 in. ø

- OVA — Organic Vapor Analyzer
- PID — Total organic vapors (parts per million) measured by a photo-ionization device
- FID — Total organic vapors (parts per million) measured by a flame-ionization device
- NA — Not Applicable

- Blank casing
- Screened casing
- Cement grout
- Bentonite
- Sand pack or gravel pack

- ——— Sharp Contact (observed)
- — — Inferred Contact (contact not observed)
- ||||||||||||| Gradational Contact (observed)
- Water level observed in boring
- Stabilized water level
- NFWE — No free water encountered

NOTES: Blow counts represent the number of blows of a 140-pound hammer falling 30 inches required to drive a sampler through the last 12 inches of an 18-inch penetration.

The lines separating strata on the logs represent approximate boundaries only. The actual transition may be gradual. No warranty is provided as to the continuity of soil strata between borings. Logs represent the soil section observed at the boring location on the date of drilling only.

References to plasticity of cohesive soils are based on qualitative field observations and not on quantitative field or laboratory tests. Qualitative soil plasticity is noted solely to aid in stratigraphic correlation and is not intended for geotechnical characterization of soils.

KLEINFELDER

DRAFTED BY: L. Sue DATE: 5-6-97

CHECKED BY: D. Carroll DATE: 5-6-97

BORING LOG LEGEND

CITY OF MILPITAS
MILPITAS, CALIFORNIA

PROJECT NO. 10-300553-003

PLATE **A-1**

CAD FILE: C:_KA-PROJ\PLEAS\10300553\B-LEGEND.dwg

KLEINFELDER

ENVIRONMENTAL BORING AND MONITORING WELL DATA SHEET

Project	Boring No.
C. of Milpitas, Fire Station No. 2	KP4
Number: 10-300553-003	
Total Depth: 26 feet	Sheet: 1 of 2

Location

Well Location	Section, Range, Township	Owner and Mailing Information
1263 Yosemite Drive Milpitas, CA 95035	APN _____ Local Permit # _____	City of Milpitas Public Works Dept. 1265 Milpitas Blvd. Milpitas, CA 93035

Drilling Operations

Drilling Company	Logged By	Task	Start	Finish
Vironex	S. Quayle			
Rig Make/Model: Geoprobe	Driller/Crew	Drilling	4-29-97, 1410 hrs	4-29-97, 1515 hrs
Bit Type/Diameter: NA	Inspector	Completion	--	--
Hammer Data: NA	Agency	Development	--	--

Boring Completion

Monumentation		Well Design	Material and Size	Top	Bottom
Reference Point Description: --		Surface Casing	--	--	--
Northing: --	Easting: --	Casing	--	--	--
Elevation		Screen	--	--	--
Reference Point: --	Ground: --	Filter Pack	--	--	--
Datum: --		Bentonite	--	--	--
Surveyed By: --	Date: --	Surface Seal	--	--	--

Field Hydrologic Conditions and Observations

Weather			Other Observations	Ground Water			
Temperature	Max. --	Min. --	Recent Rainfall/Precipitation: --	Sym.	Date	Time	Level
Humidity: --			Nearby Wells Pumping: --	▽	4-29-97	1500 hrs	26 feet
Windspeed/Direction: --			Nearby Surface Water: --				
Cloud Cover: --			Nearby Utilities: --				

Surface Conditions

Asphalt

Development Information

Additional Remarks

Geoprobe

PLATE A-5

Date: 5-7-97

Revision Date: _____

CAD FILE C:_KA-LOGO\PLEAS\10300553_LOGS\KP4_DS.dwg

KLEINFELDER

Project	Boring No.
C. of Milpitas, Fire Station No. 2	KP-4
Number: 10-300553-003	
Total Depth: 26 feet	Sheet: 2 of 2

LOG OF BORING

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) ☑PID ☐FID	USCS	Description	Remarks	Well Construction
0			NA	NA			Asphalt at surface		NA
6					0.0	CL	CLAY – very dark brown (10YR 2/2), slightly moist, stiff, low plasticity, some fine to medium grained sand, no odor		
10					0.0		CLAY – dark yellowish brown (10YR 4/4)m moist, soft to medium stiff, low plasticity, some fine to coarse grained sand, no odor		
15					0.0	CH	CLAY – brown (10YR 5/3), moist, soft to medium stiff, high plasticity, some fine to medium grained sand, no odor		
20					0.0		as above		
25	KP4-25				1.0		CLAY – dark brown (10YR 4/3), moist, medium stiff, high plasticity, some fine to medium grained sand, no odor	Encountered water at 26 feet, but not enough water for sampling. ▽	
30									

Designated Purpose(s) of Log
Site Characterization

Note: Logs are to be used only for designated purpose(s).

Logged by	Date	Plate
S. Quayle	4-29-97	A-5
Drafted by: L. Sue	Date: 5-6-97	
Reviewed by: A. Gibbs	DRAFT 5-21-97	

CAD FILE: C:_KA-PROJ\PLEAS\10300553_LOGS\KP4_LOG.dwg

KLEINFELDER

ENVIRONMENTAL BORING AND MONITORING WELL DATA SHEET

Project	Boring No.
C. of Milpitas, Fire Station No. 2	KP5
Number: 10-300553-003	
Total Depth: 21 feet	Sheet: 1 of 2

Location

Well Location	Section, Range, Township	Owner and Mailing Information
1263 Yosemite Drive Milpitas, CA 95035	APN _____ Local Permit # _____	City of Milpitas Public Works Dept. 1265 Milpitas Blvd. Milpitas, CA 93035

Drilling Operations

Drilling Company	Logged By	Task	Start	Finish
Vironex	S. Quayle			
Rig Make/Model: Geoprobe	Driller/Crew	Drilling	4-29-97, 1515 hrs	4-29-97, 1610 hrs
Bit Type/Diameter: NA	Inspector	Completion	--	--
Hammer Data: NA	Agency	Development	--	--

Boring Completion

Monumentation		Well Design	Material and Size	Top	Bottom
Reference Point Description: --		Surface Casing	--	--	--
Northing: --	Easting: --	Casing	--	--	--
Elevation		Screen	--	--	--
Reference Point: --	Ground: --	Filter Pack	--	--	--
Datum: --		Bentonite	--	--	--
Surveyed By: --	Date: --	Surface Seal	--	--	--

Field Hydrologic Conditions and Observations

Weather			Other Observations	Ground Water			
Temperature	Max. --	Min. --	Recent Rainfall/Precipitation: --	Sym.	Date	Time	Level
Humidity: --			Nearby Wells Pumping: --		4-29-97	--	NFWE
Windspeed/Direction: --			Nearby Surface Water: --				
Cloud Cover: --			Nearby Utilities: --				

Surface Conditions

Soil

Development Information

Additional Remarks

Geoprobe

PLATE A-6

Date: 5-7-97

Revision Date: _____

CAD FILE C:_KA-LOGO\PLEAS\10300553_LOGS\KP5_DS.dwg

KLEINFELDER

Project	Boring No.
C. of Milpitas, Fire Station No. 2	KP-5
Number: 10-300553-003	
Total Depth: 21 feet	Sheet: 2 of 2

LOG OF BORING

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) ☑PID ☐FID	USCS	Description	Remarks	Well Construction
0			NA	NA			Soil at surface		NA
5					0.6	CL	CLAY – very dark brown (10YR 2/2), moist, stiff, low plasticity, no odor		
10					1.4		CLAY – dark yellowish brown (10YR 4/4), moist, soft, medium stiff, low plasticity, some fine to coarse grained sand, no odor		
15					1.0		CLAY – dark yellowish brown (10YR 4/4) with iron oxide staining, moist, medium stiff, low to medium plasticity, some fine to coarse grianed sand, no odor		
20	KP5-20				1.5		CLAY – dark yellowish brown (10YR 4/4), moist, medium stiff, medium plasticity, no odor	NFWE	
21									
30									

Designated Purpose(s) of Log	Logged by	Date	Plate
Site Characterization	S. Quayle	4-29-97	A-6
	Drafted by: L. Sue	Date: 5-6-97	
	Reviewed by: A. Gibbs	DRAFT 5-21-97	

Note: Logs are to be used only for designated purpose(s).

CAD FILE: C:_KA-PROJ\PLEAS\10300553_LOGS\KP5_LOG.dwg

KLEINFELDER

ENVIRONMENTAL BORING AND MONITORING WELL DATA SHEET

Project	Boring No.
C. of Milpitas, Fire Station No. 2	KP6
Number 10-300553-003	
Total Depth 21 feet	**Sheet** 1 of 2

Location

Well Location	Section, Range, Township	Owner and Mailing Information
1263 Yosemite Drive Milpitas, CA 95035	APN _____ Local Permit # _____	City of Milpitas Public Works Dept. 1265 Milpitas Blvd. Milpitas, CA 93035

Drilling Operations

Drilling Company	Logged By	Task	Start	Finish
Vironex	S. Quayle			
Rig Make/Model Geoprobe	**Driller/Crew**	Drilling	4-29-97, 1610 hrs	4-29-97, 1650 hrs
Bit Type/Diameter NA	**Inspector**	Completion	--	--
Hammer Data NA	**Agency**	Development	--	--

Boring Completion

Monumentation		Well Design	Material and Size	Top	Bottom
Reference Point Description --		Surface Casing	--	--	--
Northing --	**Easting** --	Casing	--	--	--
Elevation		Screen	--	--	--
Reference Point --	**Ground** --	Filter Pack	--	--	--
Datum --		Bentonite	--	--	--
Surveyed By --	**Date** --	Surface Seal	--	--	--

Field Hydrologic Conditions and Observations

Weather			Other Observations	Ground Water			
Temperature	**Max.** --	**Min.** --	**Recent Rainfall/Precipitation** --	**Sym.**	**Date**	**Time**	**Level**
Humidity --			**Nearby Wells Pumping** --		4-29-97	--	NFWE
Windspeed/Direction --			**Nearby Surface Water** --				
Cloud Cover --			**Nearby Utilities** --				

Surface Conditions

Soil

Development Information

Additional Remarks

Geoprobe

PLATE A-7

421

Date: 5-7-97

Revision Date: _____

CAD FILE C:_KA-LOGO\PLEAS\10300553_LOGS\ KP6_DS.dwg

KLEINFELDER

Project	Boring No.
C. of Milpitas, Fire Station No. 2	KP-6
Number: 10-300553-003	
Total Depth: 21 feet	Sheet: 2 of 2

LOG OF BORING

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) ☑ PID ☐ FID	USCS	Description	Remarks	Well Construction
			NA	NA			Soil at surface		NA
5	KP6-5				0.5	CL	CLAY – very dark brown (10YR 2/2), dry to moist, stiff, low plasticity, no odor		
10					0.1	CL	CLAY – dark yellowish brown (10YR 4/4), dry to moist, medium stiff, low plasticity, trace fine to medium grained sand, no odor		
15					0.1	CL	CLAY – very dark gray brown (10YR 3/1), moist, medium stiff, medium plasticity, no odor		
20					0.2	CL	SANDY CLAY – dark yellowish brown (10YR 4/4), moist, medium stiff, low plasticity, some gravel, no odor	NFWE	

Designated Purpose(s) of Log: Site Characterization

Note: Logs are to be used only for designated purpose(s).

Logged by	Date	Plate
S. Quayle	4-29-97	A-7
Drafted by: L. Sue	Date: 5-6-97	
Reviewed by: A. Gibbs	DRAFT 5-21-97	

CAD FILE: C:_KA-PROJ\PLEAS\10300553_LOGS\ KP6_LOG.dwg

90-058

UNIFORM UNDERGROUND STORAGE TANK SYSTEM CLOSURE PERMIT APPLICATION/CLOSURE PLAN

For Use By All Jurisdictions, Cities and County, Within the Limits of the County of Santa Clara

1. Facility Name (Tank Site): Fire Station #2 Bldg. No.: _____
   Address: 1263 Yosemite Drive City: Milpitas Zip: 95035
   EPA ID No.: CAC 001 270 040 Contact Person: Carol Randisi Phone No.: (408) 942-2465
2. Tank Owner's Name: City of Milpitas
   Address: ~~455 Calaveras Blvd.~~ 1265 N. Milpitas Blvd. City: Milpitas Zip: 95035
3. Tank Operator's Name: City of Milpitas
   Address: ~~455 Calaveras Blvd.~~ 1265 N. Milpitas Blvd. City: Milpitas Zip: 95035
4. Consultant (If Applicable): Kleinfelder, Inc.
   Address: 7133 Koll Center Parkway, Suite 100 City: Pleasanton Zip: 94566
   Contact Person: Dan Carroll Phone No.: (510) 484-1700 x206
5. Tank Closure Contractor: HSR, Inc.
   Address: 830 Hillview Court, Suite 290 City: Milpitas Zip: 95035
   Contact Person: Jim Bowers Phone No.: (408) 262-6300

Hazardous Substance Removal Certificate: X on file; ____ attached
Worker's Compensation Declaration: X on file; ____ attached; ____ not applicable
Business License (if required): X on file; ____ attached; ____ not applicable

6. Firm that will take soil/water samples: Kleinfelder, Inc. Phone No.: (510) 484-1700
7. State-certified laboratory that will analyze samples: American Environmental Network Phone No.: (510) 930-9090

Shaded areas to be completed by local agency

Laboratory analyses shall test for:

	TPH G	TPH D	BTX&E	TE Lead	CL Hydro	O&G	EPA 8270	pH	Other (Specify)
Tank 1	X	X							
Tank 2									
Tank 3									
Tank 4									
Tank 5									
Tank 6									

Additional analyses may be required by inspector in field.

UGT Closure Permit Ap./Closure Plan - p. 2 of 2 Tank Site Address (from page 1): 1263 Yosemite Drive, Milpitas

8. Name of Licensed Transporter of Tanks: Erickson, Inc.

EPA ID No.: CAD 009 466 392 Phone No.: (510) 235-1393

9. Destination of Tanks and Piping: 255 Parr Blvd., Richmond

10. Tank System: Size (gallons) Substance(s) Previously Contained

Tank 1	550 gal.	diesel
Tank 2		
Tank 3		
Tank 4		
Tank 5		
Tank 6		

If the owner/operator does not have a current Hazardous Materials Business Plan/HMMP which includes these tanks on file with the local agency, provide an 8-1/2" x 11" plot plan of the tanks to be closed. Indicate the nearest cross street to the facility, buildings immediately adjacent to the tanks, location(s) of tanks to be closed, and location of nearby utilities.

This Underground Tank Closure Permit expires 6 months from the date of closure plan approval. If tanks have not been closed within 6 months, a new closure permit application and appropriate fees may be required.

Facility closure inspections must be scheduled at least 48 hours in advance. Call the appropriate local agency to make necessary arrangements.

I certify that I have read the tank closure guidelines and declare that the above information is correct to the best of my knowledge. The owner of the tank(s) described above is aware of the pending closure. I agree to comply with all applicable city and county ordinances and state laws relating to hazardous materials/wastes, and hereby authorize representatives of local agencies to enter upon the within mentioned property for inspection purposes.

CAROL RANDISI		3-16-98
Applicant/Agent's Name (Print)	Applicant/Agent's Signature	Date

THIS APPROVAL CONSTITUTES A PERMIT FOR REMOVAL OF THE ABOVE LISTED TANKS.

Agency: MILPITAS FIRE DEPT. Date: 3/19/98

Print Name: DENISE SAFFELL Sign Name:

THIS CERTIFIES THAT ALL TANK SYSTEM CLOSURE ACTIVITIES ARE COMPLETE.*

Agency: Date:

Print Name: Sign Name:

* If contamination of any detectable concentration is found, contact the Santa Clara Valley Water District and/or Regional Water Quality Control Board for cleanup and/or remediation requirements.

Rev. 9/30/94

KLEINFELDER

TECHNICIAN'S DAILY REPORT

Date 4/8/98 Hours 1 1/2 on-site

File No. 10-3005-53 Miles

Project Milpitas Fire Stations, Tank Removal (FS2) Weather Clear, 60s

Diary: Attended construction meeting M-4. 7:30-8:30. Minutes in project file. DSC.

- Arrive on-site @ FS #2 0840. J. Bowers (HSR), S. Sawyer (City), P. Inouye (FD) DSC (KA). Trident trucking on-site. Paul (HSR)-crew
- 0900 pull 500-gal UST, soils noted to be black, organic
- Calibrated PID, 100 PPM Isobutylene, 99.1 reading ok
- Tank has three openings, none capped prior to loading. DSC mentioned to HSR to check on capping of holes. Holes taped with duct tape before transport. DSC
- Inspectors (DSC, P. Inouye) inspected tank, no holes observed

→ Sample FS2-SS-01, Dispenser location. 0920 @ approx 6" bgs (7.5YR 5/2) Dark brown, stiff to very stiff, fat clay, trace gravel PID = 1.2 ppm west 13'-6" from mon well, north 4'-0" eop.

Background PID = 0.2 ppm

→ Sample FS2-SS-02, approx. 1' into native 0935 @ 11 ft bgs light brown BCD olive gray (5Y 4/2), stiff to very stiff, fat clay PID = 0.2 ppm

Background PID = 0.2 ppm

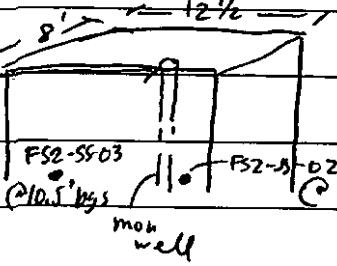
→ Sample FS2-SS-03, approx 1' into native 0940 @ 10.5 ft bgs same as FS2-SS-02, PID = 2.7 ppm

Background PID = 0.2 ppm

Excavation dimensions = 12.5' x 8' (surface dimensions)

Tank ID# 22332

Inertness LEL = 0.0, O_2 = 0.5%.



Reviewed by: Dan Cavell 4/9/98 10:00 a.m. Signed: Paul E Daw

City of Milpitas

455 E. Calaveras Blvd.
Milpitas, California 95035

Date 4.16.98
M T W (T) F S S Circle Day
Shift Hours Start 0700 Stop 1530
4 Hour.

PROJECT NAME Hazardous Material Removal Project III

PROJECT NUMBER 8085

Location & Description of Operation

HOURS - ITEM NO.

WEATHER
Clear
38-70

EQUIPMENT AND/OR LABOR:

EQPT. NO.	NO. MEN	DESCRIPTION (Of Equipment or Labor)	IDLE OR DOWN	REMARKS (Reason for Idleness or other remarks)

Contractor removed contaminated soil to a Class II dump site: "Waste Management" @ Kirby Canyon, off 101 in S. San Jose (Fire Sta's 2&3)
Placed "clean fill" in both removal trunk locations at Fire Sta's 2&3. Used vibratory 2x2 Head on backhoe & compacted in 18" lifts.

Inspector

City of Milpitas

455 E. Calaveras Blvd.
Milpitas, California 95035

Date 4.24.98

M T W T (F) S S Circle Day

Shift Hours Start 0700 Stop 1530

3 Hrs.

PROJECT NAME HAZARDOUS MATERIAL REMOVAL

PROJECT NUMBER 8095

Location & Description of Operation

HOURS - ITEM NO.

WEATHER
PM Cldy
50-65

EQUIPMENT AND/OR LABOR:

EQPT. NO.	NO. MEN	DESCRIPTION (Of Equipment or Labor)										IDLE OR DOWN	REMARKS (Reason for Idleness or other remarks)

Contractor backfilled, 90%, excavation at Maryinn Site and completed backfilling, 100%, excavations at Free Site 2 & 3.

Placing forms, ±75%, Free Site # 3

Picked up & distributed to contractor, Klemfelder plan revisions Sheets C-4, C-5 & C-9

State of California

Contractors State License Board

Pursuant to Chapter 9 of Division 3 of the Business and Professions Code
and the Rules and Regulations of the Contractors State License Board,
the Registrar of Contractors does hereby issue this license to:

H S R INC * J/D HAZARDOUS
SUBSTANCE REMOVAL INC

to engage in the business or act in the capacity of a contractor
in the following classification(s):

A - General Engineering Contractor
HAZ - Hazardous Substances Removal

DEPARTMENT OF Consumer Affairs

Witness my hand and seal this day,

August 18, 1989

Issued August 9, 1989

H S R Inc.

Signature of Licensee

R K [illegible]

Signature of License Qualifier

David R Phillips

Registrar of Contractors

574623

License Number

This license is the property of the Registrar of Contractors, is not transferrable, and shall be returned to the Registrar upon demand when suspended, revoked, or invalidated for any reason. It becomes void if not renewed.

428

13L-24 (REV. 1-89)

№ 230168

Form Approved OMB No. 2050-0039 (Expires 9-30-96)
Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

See Instructions on back of page 6.

Department of Toxic Substances Con
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of	Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address — FILE #2

4. Generator's Phone ( )

A. State Manifest Document Number: 95788082

B. State Generator's ID

5. Transporter 1 Company Name — 6. US EPA ID Number

C. State Transporter's ID

D. Transporter's Phone: (510) 793-2881

7. Transporter 2 Company Name — 8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address — 10. US EPA ID Number

G. State Facility's ID: CAD009466392

H. Facility's Phone: (510)235-1393

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
a.					State: 512 / EPA/Other: NONE
b.					State: / EPA/Other:
c.					State: / EPA/Other:
d.					State: / EPA/Other:

J. Additional Descriptions for Materials Listed Above

Qty. 1 Empty Storage Tank(s)#22332
5 Tank(s) have been inerted with 15.
lbs. Dry ice Per 1000 Gallon Capacity.

K. Handling Codes for Wastes Listed Above

a. 01 b. c. d.

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month	Day	Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

DO NOT WRITE BELOW THIS LINE.

DTSC 8022A (1/95)
EPA 8700—22

American Environmental Network

Certificate of Analysis

DOHS Certification: 1172 AIHA Accreditation: 11134

FILE COPY

10.3005.53
Laboratory Analysis

KLEINFELDER, INC.
7133 KOLL CENTER PARKWAY,
SUITE 100
PLEASANTON, CA 94566

ATTN: CHRIS KENNEDY
CLIENT PROJ. ID: 10-3005-53/003
CLIENT PROJ. NAME: CITY-MILPITAS
C.O.C. NUMBER: 2862
P.O. NUMBER: R4496

REPORT DATE: 05/13/97

DATE(S) SAMPLED: 04/29/97-04/30/97

DATE RECEIVED: 05/01/97

AEN WORK ORDER: 9705006

PROJECT SUMMARY:

On May 1, 1997, this laboratory received 20 (14 soil and 6 water) sample(s).

Client requested sample(s) be analyzed for chemical parameters. Results of analysis are summarized on the following page(s). Please see quality control report for a summary of QC data pertaining to this project.

Samples will be stored for 30 days after completion of analysis, then disposed of in accordance with State and Federal regulations. Samples may be archived by prior arrangement.

If you have any questions, please contact Client Services at (510) 930-9090.

Larry Klein
Laboratory Director

KLEINFELDER, INC.

SAMPLE ID: KP4-25
AEN LAB NO: 9705006-04
AEN WORK ORDER: 9705006
CLIENT PROJ. ID: 10-3005-53/003

DATE SAMPLED: 04/29/97
DATE RECEIVED: 05/01/97
REPORT DATE: 05/13/97

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
EPA 8020 for BTEX	EPA 8020				
Benzene	71-43-2	ND	5	ug/kg	05/06/97
Toluene	108-88-3	ND	5	ug/kg	05/06/97
Ethylbenzene	100-41-4	ND	5	ug/kg	05/06/97
Xylenes, Total	1330-20-7	ND	5	ug/kg	05/06/97
Methyl t-Butyl Ether	1634-04-4	ND	50	ug/kg	05/06/97
#Extraction for TPH	EPA 3550	-		Extrn Date	05/07/97
TPH as Diesel	GC-FID	ND	1	mg/kg	05/08/97

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

KLEINFELDER, INC.

SAMPLE ID: KP5-20
AEN LAB NO: 9705006-05
AEN WORK ORDER: 9705006
CLIENT PROJ. ID: 10-3005-53/003

DATE SAMPLED: 04/29/97
DATE RECEIVED: 05/01/97
REPORT DATE: 05/13/97

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
EPA 8020 for BTEX	EPA 8020				
Benzene	71-43-2	ND	5	ug/kg	05/06/97
Toluene	108-88-3	ND	5	ug/kg	05/06/97
Ethylbenzene	100-41-4	ND	5	ug/kg	05/06/97
Xylenes, Total	1330-20-7	ND	5	ug/kg	05/06/97
Methyl t-Butyl Ether	1634-04-4	ND	50	ug/kg	05/06/97
#Extraction for TPH	EPA 3550	-		Extrn Date	05/07/97
TPH as Diesel	GC-FID	ND	1	mg/kg	05/08/97

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

KLEINFELDER, INC.

SAMPLE ID: KP6-5
AEN LAB NO: 9705006-06
AEN WORK ORDER: 9705006
CLIENT PROJ. ID: 10-3005-53/003

DATE SAMPLED: 04/29/97
DATE RECEIVED: 05/01/97
REPORT DATE: 05/13/97

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
EPA 8020 for BTEX	EPA 8020				
Benzene	71-43-2	ND	5	ug/kg	05/06/97
Toluene	108-88-3	ND	5	ug/kg	05/06/97
Ethylbenzene	100-41-4	ND	5	ug/kg	05/06/97
Xylenes, Total	1330-20-7	ND	5	ug/kg	05/06/97
Methyl t-Butyl Ether	1634-04-4	ND	50	ug/kg	05/06/97
#Extraction for TPH	EPA 3550	-		Extrn Date	05/07/97
TPH as Diesel	GC-FID	ND	1	mg/kg	05/08/97

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

AEN (CALIFORNIA)
QUALITY CONTROL REPORT

AEN JOB NUMBER: 9705006

CLIENT PROJECT ID: 10-3005-53/003

Quality Control Summary

All laboratory quality control parameters were found to be within established limits.

Definitions

Laboratory Control Sample (LCS)/Method Spike(s): Control samples of known composition. LCS and Method Spike data are used to validate batch analytical results.

Matrix Spike(s): Aliquot of a sample (aqueous or solid) with added quantities of specific compounds and subjected to the entire analytical procedure. Matrix spike and matrix spike duplicate QC data are advisory.

Method Blank: An analytical control consisting of all reagents, internal standards, and surrogate standards carried through the entire analytical process. Used to monitor laboratory background and reagent contamination.

Not Detected (ND): Not detected at or above the reporting limit.

Relative Percent Difference (RPD): An indication of method precision based on duplicate analysis.

Reporting Limit (RL): The lowest concentration routinely determined during laboratory operations. The RL is generally 1 to 10 times the Method Detection Limit (MDL). Reporting limits are matrix, method, and analyte dependent and take into account any dilutions performed as part of the analysis.

Surrogates: Organic compounds which are similar to analytes of interest in chemical behavior, but are not found in environmental samples. Surrogates are added to all blanks, calibration and check standards, samples, and spiked samples. Surrogate recovery is monitored as an indication of acceptable sample preparation and instrumental performance.

D: Surrogates diluted out.

#: Indicates result outside of established laboratory QC limits.

QUALITY CONTROL DATA

METHOD: EPA 3510 GCFID

AEN JOB NO: 9705006
DATE EXTRACTED: 05/06/97
INSTRUMENT: C
MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery n-Pentacosane
05/07/97	KP8-W1	10	79
05/07/97	KP9-W1	12	76
05/07/97	KP10-W1	14	66
05/08/97	KP11-W1	16	78
05/08/97	KP12-W1	18	77
05/08/97	KP13-W1	20	84
QC Limits:			65-125

DATE EXTRACTED: 05/05/97
DATE ANALYZED: 05/06/97
SAMPLE SPIKED: 9704278-05
INSTRUMENT: C

Matrix Spike Recovery Summary

Analyte	Spike Added (mg/L)	Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Diesel	40.0	86	12	60-110	15

Daily method blanks for all associated analytical runs showed no contamination at or above the reporting limit.

QUALITY CONTROL DATA

METHOD: EPA 3550 GCFID

AEN JOB NO: 9705006
DATE EXTRACTED: 05/07/97; 05/08/97
INSTRUMENT: C
MATRIX: SOIL

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery n-Pentacosane
05/08/97	KP1-20	01	94
05/08/97	KP2-10	02	96
05/08/97	KP3-15	03	95
05/08/97	KP4-25	04	93
05/08/97	KP5-20	05	92
05/08/97	KP6-5	06	90
05/08/97	KP7-16	07	80
05/08/97	KP7-25	08	79
05/08/97	KP8-10	09	92
05/08/97	KP9-10	11	76
05/08/97	KP10-5	13	80
05/09/97	KP11-10	15	79
05/09/97	KP12-15	17	77
05/09/97	KP13-10	19	72
QC Limits:			55-115

QUALITY CONTROL DATA

METHOD: EPA 3550 GCFID

AEN JOB NO: 9705006
DATE EXTRACTED: 05/05/97
DATE ANALYZED: 05/06/97
SAMPLE SPIKED: 9704315-14
INSTRUMENT: C
MATRIX: SOIL

Matrix Spike Recovery Summary

Analyte	Spike Added (mg/kg)	Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Diesel	40.0	85	1	50-115	20

DATE EXTRACTED: 05/08/97
DATE ANALYZED: 05/09/97
SAMPLE SPIKED: 9704315-02
INSTRUMENT: C

Matrix Spike Recovery Summary

Analyte	Spike Added (mg/kg)	Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Diesel	40.0	94	<1	50-115	20

Daily method blanks for all associated analytical runs showed no contamination at or above the reporting limit.

QUALITY CONTROL DATA

METHOD: EPA 8020, 5030 GCFID

AEN JOB NO: 9705006
INSTRUMENT: F
MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery Fluorobenzene
05/06/97	KP8-W1	10	86
05/06/97	KP9-W1	12	86
05/06/97	KP10-W1	14	86
05/07/97	KP11-W1	16	87
05/06/97	KP12-W1	18	87
05/06/97	KP13-W1	20	86
QC Limits:			70-130

DATE ANALYZED: 05/06/97
SAMPLE SPIKED: 9705006-10
INSTRUMENT: F

Matrix Spike Recovery Summary

Analyte	Spike Added (ug/L)	Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Benzene	18.5	87	5	85-109	17
Toluene	64.4	105	2	87-111	16
Hydrocarbons as Gasoline	500	95	7	66-117	19

Daily method blanks for all associated analytical runs showed no contamination at or above the reporting limit.

QUALITY CONTROL DATA

METHOD: EPA 8020, 5030 GCFID

AEN JOB NO: 9705006
INSTRUMENT: H
MATRIX: SOIL

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery Fluorobenzene
05/06/97	KP1-20	01	102
05/06/97	KP2-10	02	103
05/06/97	KP3-15	03	103
05/06/97	KP4-25	04	101
05/06/97	KP5-20	05	100
05/06/97	KP6-5	06	102
05/06/97	KP7-16	07	102
05/06/97	KP7-25	08	104
05/06/97	KP8-10	09	102
05/06/97	KP9-10	11	101
05/07/97	KP10-5	13	101
05/07/97	KP11-10	15	101
05/07/97	KP12-15	17	101
05/07/97	KP13-10	19	101
QC Limits:			70-130

QUALITY CONTROL DATA

METHOD: EPA 8020, 5030 GCFID

AEN JOB NO: 9705006
DATE ANALYZED: 05/06/97
SAMPLE SPIKED: 9705006-01
INSTRUMENT: H
MATRIX: SOIL

Matrix Spike Recovery Summary

Analyte	Spike Added (ug/kg)	Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Benzene	21.9	90	1	79-113	20
Toluene	74.2	95	<1	84-110	20
Hydrocarbons as Gasoline	500	97	2	60-126	20

DATE ANALYZED: 05/06/97
SAMPLE SPIKED: LCS
INSTRUMENT: H

Laboratory Control Sample Recovery

Analyte	Spike Added (ug/kg)	Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Benzene	21.9	93	5	60-120	20
Toluene	74.2	96	2	60-120	20
Hydrocarbons as Gasoline	500	100	3	60-120	20

Daily method blanks for all associated analytical runs showed no contamination at or above the reporting limit.

*** END OF REPORT ***

[redacted] KLEINFELDER [redacted] A/E R355 9705006

PROJECT NO.	PROJECT NAME
10-3005-53/003	City of Milpitas

L.P. NO. (P.O. NO.)	SAMPLERS: (Signature/Number)
R4496	SBG Stephen B. Gough 3287

	DATE MM/DD/YY	SAMPLE I.D. TIME HH-MM-SS	SAMPLE I.D.	MATRIX	NO. OF CON-TAINERS	TYPE OF CON-TAINERS	ANALYSIS: TPH-d EPA 8015	BTEXM EPA 8020									
1	4-29-97	1110	KP1-20	Soil	1	Acetate	X	X									01
2		1155	KP2-10	Soil	1	"	X	X									02
3		1246	KP3-15	Soil	1	"	X	X									03
4		1500	KP4-25	Soil	1	"	X	X									04
5		1605	KP5-20	Soil	1	"	X	X									05
6		1625	KP6-5	Soil	1	"	X	X									06
7	4-30-97	0940	KP7-16	Soil	1	"	X	X									07
8		1020	KP7-25	Soil	1	"	X	X									08
9		1150	KP8-10	Soil	1	"	X	X									09
10		1220	KP8-W1	H_2O	4	3 Voas 1 Amber	X	X									10A-D
11		1325	KP9-10	Soil	1	Acetate	X	X									11A
12		1340	KP9-W1	H_2O	4	3 Voas 1 Amber	X	X									12A-D
13		1410	KP10-5	Soil	1	Acetate	X	X									13A
14		1500	KP10-W1	H_2O	4	3 Voas 1 Amber	X	X									14A-D
15		1610	KP11-10	Soil	1	Acetate	X	X									15A
16		~~1616~~ 1620	KP11-W1	H_2O	4	3 Voas 1 Amber	X	X									16A-D
17		1710	KP12-15	Soil	1	Acetate	X	X									17A
18		1720	KP12-W1	H_2O	4	3 Voas 1 Amber	X	X									18A-D
19		1800	KP13-10	Soil	1	Acetate	X	X									19A
20		1805	KP13-W1	H_2O	4	3 Voas 1 Amber	X	X									20A-D

RECEIVING LAB: AEN

INSTRUCTIONS/REMARKS: Standard T.A.T.

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Stephen B. Gough	5-1-97 1007	[signature]
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
[signature] 5/1/97	11:40	Rick Gilmore
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)
[signature]	~~5/1/97~~ ~~1307~~	Lynn Gillespie 5/1/97 1307

Instructions/Remarks:

BTEXM = BTEX + MTBE
Client notified 7-10 day TAT

Send Results To:

KLEINFELDER
7133 KOLL CENTER PARKWAY
SUITE 100
PLEASANTON, CA 94566
(510) 484-1700

Attn Chris Kennedy

441

↑ Rick Gilmore 5-1-97 13:07

White – Sampler | Canary – Return Copy To Shipper | Pink – Lab Copy

CHAIN OF CUSTODY

№ 2862

American Environmental Network

Certificate of Analysis

DOHS Certification: 1172 AIHA Accreditation: 11134

KLEINFELDER, INC.
7133 KOLL CENTER PARKWAY,
SUITE 100
PLEASANTON, CA 94566

ATTN: DAN CARROLL
CLIENT PROJ. ID: 10-3005-53
CLIENT PROJ. NAME: MILPITAS 5
C.O.C. NUMBER: 2208

REPORT DATE: 04/30/98

DATE(S) SAMPLED: 04/08/98

DATE RECEIVED: 04/08/98

AEN WORK ORDER: 9804092

PROJECT SUMMARY:

On April 8, 1998, this laboratory received 8 (7 soils and 1 water) sample(s).

Client requested sample(s) be analyzed for chemical parameters. Results of analysis are summarized on the following page(s). Please see quality control report for a summary of QC data pertaining to this project.

Samples will be stored for 30 days after completion of analysis, then disposed of in accordance with State and Federal regulations. Samples may be archived by prior arrangement.

If you have any questions, please contact Client Services at (510) 930-9090.

Reviewed by:

KLEINFELDER, INC.

SAMPLE ID: FS2-SS-01
AEN LAB NO: 9804092-01
AEN WORK ORDER: 9804092
CLIENT PROJ. ID: 10-3005-53

DATE SAMPLED: 04/08/98
DATE RECEIVED: 04/08/98
REPORT DATE: 04/30/98

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
EPA 8020 for BTEX	EPA 8020				
Benzene	71-43-2	ND	5	ug/kg	04/17/98
Toluene	108-88-3	ND	5	ug/kg	04/17/98
Ethylbenzene	100-41-4	ND	5	ug/kg	04/17/98
Xylenes, Total	1330-20-7	ND	5	ug/kg	04/17/98
#Extraction for TPH	EPA 3550	-		Extrn Date	04/17/98
TPH as Diesel	GC-FID	ND	3	mg/kg	04/21/98

Reporting limit elevated for diesel due to matrix interference.

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

KLEINFELDER, INC.

SAMPLE ID: FS2-SS-03
AEN LAB NO: 9804092-03
AEN WORK ORDER: 9804092
CLIENT PROJ. ID: 10-3005-53

DATE SAMPLED: 04/08/98
DATE RECEIVED: 04/08/98
REPORT DATE: 04/30/98

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
EPA 8020 for BTEX	**EPA 8020**				
Benzene	71-43-2	ND	5	ug/kg	04/16/98
Toluene	108-88-3	ND	5	ug/kg	04/16/98
Ethylbenzene	100-41-4	ND	5	ug/kg	04/16/98
Xylenes, Total	1330-20-7	ND	5	ug/kg	04/16/98
#Extraction for TPH	**EPA 3550**	-		Extrn Date	04/17/98
TPH as Diesel	**GC-FID**	5 *	1	mg/kg	04/20/98

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

KLEINFELDER, INC.

SAMPLE ID: FS2-SS-02
AEN LAB NO: 9804092-05
AEN WORK ORDER: 9804092
CLIENT PROJ. ID: 10-3005-53

DATE SAMPLED: 04/08/98
DATE RECEIVED: 04/08/98
REPORT DATE: 04/30/98

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
EPA 8020 for BTEX	**EPA 8020**				
Benzene	71-43-2	ND	5	ug/kg	04/17/98
Toluene	108-88-3	ND	5	ug/kg	04/17/98
Ethylbenzene	100-41-4	ND	5	ug/kg	04/17/98
Xylenes, Total	1330-20-7	ND	5	ug/kg	04/17/98
#Extraction for TPH	**EPA 3550**	-		Extrn Date	04/17/98
TPH as Diesel	**GC-FID**	5 *	1	mg/kg	04/21/98
#Extraction for PNAs	**EPA 3550**	-		Extrn Date	04/22/98
PNAs by EPA 8270	**EPA 8270**				
Acenaphthene	83-32-9	ND	330	ug/kg	04/23/98
Acenaphthylene	208-96-8	ND	330	ug/kg	04/23/98
Anthracene	120-12-7	ND	330	ug/kg	04/23/98
Benzo(a)anthracene	56-55-3	ND	330	ug/kg	04/23/98
Benzo(b)fluoranthene	205-99-2	ND	330	ug/kg	04/23/98
Benzo(k)fluoranthene	207-08-9	ND	330	ug/kg	04/23/98
Benzo(g,h,i)perylene	191-24-2	ND	330	ug/kg	04/23/98
Benzo(a)pyrene	50-32-8	ND	330	ug/kg	04/23/98
Chrysene	218-01-9	ND	330	ug/kg	04/23/98
Dibenzo(a,h)anthracene	53-70-3	ND	330	ug/kg	04/23/98
Fluoranthene	206-44-0	ND	330	ug/kg	04/23/98
Fluorene	86-73-7	ND	330	ug/kg	04/23/98
Indeno(1,2,3-cd)pyrene	193-39-5	ND	330	ug/kg	04/23/98
Naphthalene	91-20-3	ND	330	ug/kg	04/23/98
Phenanthrene	85-01-8	ND	330	ug/kg	04/23/98
Pyrene	129-00-0	ND	330	ug/kg	04/23/98

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

AEN (CALIFORNIA)
QUALITY CONTROL REPORT

AEN JOB NUMBER: 9804092
CLIENT PROJECT ID: 10-3005-53

Quality Control and Project Summary

All laboratory quality control parameters were found to be within established limits.

Definitions

Laboratory Control Sample (LCS)/Method Spikes(s): Control samples of known composition. LCS and Method Spike data are used to validate batch analytical results.

Matrix Spike(s): Aliquot of a sample (aqueous or solid) with added quantities of specific compounds and subjected to the entire analytical procedure. Matrix spike and matrix spike duplicate QC data are advisory.

Method Blank: An analytical control consisting of all reagents, internal standards, and surrogate standards carried through the entire analytical process. Used to monitor laboratory background and reagent contamination.

Not Detected (ND): Not detected at or above the reporting limit.

Relative Percent Difference (RPD): An indication of method precision based on duplicate analyses.

Reporting Limit (RL): The lowest concentration routinely determined during laboratory operations. The RL is generally 1 to 10 times the Method Detection Limit (MDL). Reporting limits are matrix, method, and analyte dependent and take into account any dilutions performed as part of the analysis.

Surrogates: Organic compounds which are similar to analytes of interest in chemical behaviour, but are not found in environmental samples. Surrogates are added to all blanks, calibration and check standards, samples, and spiked samples. Surrogate recovery is monitored as an indication of acceptable sample preparation and instrument performance.

D: Surrogates diluted out.

I: Interference.

!: Indicates result outside of established laboratory QC limits.

ANALYSIS: Extractable TPH

MATRIX: Water

METHOD BLANK SAMPLES

SAMPLE TYPE: Blank-Method/Media blank | LAB ID: BLKW-0417-1 | INSTR RUN: GC_C\980401000000/327/
INSTRUMENT: HP 5890 | PREPARED: 04/17/98 | BATCH ID: DSLW041798-1
UNITS: mg/L | ANALYZED: 04/22/98 | DILUTION: 1.000000
METHOD:

ANALYTE		RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	REC LIMITS (%) HIGH	RPD (%)	RPD LIMIT (%)
Diesel		ND		0.05						
Motor Oil		ND		0.2						
n-Pentacosane	(surr)	110.4			100	110	60	130		

LABORATORY CONTROL SAMPLES

SAMPLE TYPE: Laboratory Control Spike | LAB ID: LCDW-0417-1 | INSTR RUN: GC_C\980401000000/329/327
INSTRUMENT: HP 5890 | PREPARED: 04/17/98 | BATCH ID: DSLW041798-1
UNITS: mg/L | ANALYZED: 04/22/98 | DILUTION: 1.000000
METHOD:

ANALYTE		RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	REC LIMITS (%) HIGH	RPD (%)	RPD LIMIT (%)
Diesel		2.16	ND	0.05	2.00	108	60	130		
n-Pentacosane	(surr)	117.3	110.4		100	117	60	130		

SAMPLE TYPE: Laboratory Control Spike | LAB ID: LCSW-0417-1 | INSTR RUN: GC_C\980401000000/328/327
INSTRUMENT: HP 5890 | PREPARED: 04/17/98 | BATCH ID: DSLW041798-1
UNITS: mg/L | ANALYZED: 04/22/98 | DILUTION: 1.000000
METHOD:

ANALYTE		RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	REC LIMITS (%) HIGH	RPD (%)	RPD LIMIT (%)
Diesel		2.08	ND	0.05	2.00	104	60	130		
n-Pentacosane	(surr)	113.5	110.4		100	114	60	130		

LABORATORY CONTROL DUPLICATES

SAMPLE TYPE: Laboratory Control Sample Duplicate | LAB ID: LCRW-0417-1 | INSTR RUN: GC_C\980401000000/337/328
INSTRUMENT: HP 5890 | PREPARED: 04/17/98 | BATCH ID: DSLW041798-1
UNITS: mg/L | ANALYZED: 04/23/98 | DILUTION: 1.000000
METHOD:

ANALYTE		RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	REC LIMITS (%) HIGH	RPD (%)	RPD LIMIT (%)
Diesel		2.16	2.08	0.05					3.77	20
Motor Oil		ND	ND	0.2					0	
n-Pentacosane	(surr)	117.3	113.5		100	117	60	130		

SAMPLE SURROGATES

SAMPLE TYPE: Sample-Client | LAB ID: 9804092-06D | INSTR RUN: GC_C\980401000000/308/
INSTRUMENT: HP 5890 | PREPARED: 04/17/98 | BATCH ID: DSLW041798-1
UNITS: mg/L | ANALYZED: 04/23/98 | DILUTION: 1.000000
METHOD:

ANALYTE		RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	REC LIMITS (%) HIGH	RPD (%)	RPD LIMIT (%)
n-Pentacosane	(surr)	120.9			100	121	60	130		

SAMPLE TYPE: Sample-Client | LAB ID: 9804092-06D | INSTR RUN: GC_C\980401000000/397/
INSTRUMENT: HP 5890 | PREPARED: 04/17/98 | BATCH ID: DSLW041798-1
UNITS: mg/L | ANALYZED: 04/23/98 | DILUTION: 1.000000
METHOD:

ANALYTE		RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	REC LIMITS (%) HIGH	RPD (%)	RPD LIMIT (%)
n-Pentacosane	(surr)	120.9			100	121	60	130		

ANALYSIS: Extractable TPH

MATRIX: Water

SAMPLE SURROGATES

SAMPLE TYPE: Sample-Client | LAB ID: 9804092-06D | INSTR RUN: GC_C\980401000000/397/
INSTRUMENT: HP 5890 | PREPARED: 04/17/98 | BATCH ID: DSLW041798-1
UNITS: mg/L | ANALYZED: 04/23/98 | DILUTION: 1.000000
METHOD:

ANALYTE	RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	REC LIMITS (%) HIGH	RPD (%)	RPD LIMIT (%)

MATRIX: Soil/Bulk

METHOD BLANK SAMPLES

SAMPLE TYPE: Blank-Method/Media blank | LAB ID: BLKS-0417-1 | INSTR RUN: GC_C\980401000000/262/
INSTRUMENT: HP 5890 | PREPARED: 04/17/98 | BATCH ID: DSLS041798-1
UNITS: mg/kg | ANALYZED: 04/17/98 | DILUTION: 1.000000
METHOD:

ANALYTE		RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	REC LIMITS (%) HIGH	RPD (%)	RPD LIMIT (%)
Diesel		ND		1						
Motor Oil		ND		5						
n-Pentacosane	(surr)	108.5			100	109	55	130		

LABORATORY CONTROL SAMPLES

SAMPLE TYPE: Laboratory Control Spike | LAB ID: LCSS-0417-1 | INSTR RUN: GC_C\980401000000/263/262
INSTRUMENT: HP 5890 | PREPARED: 04/17/98 | BATCH ID: DSLS041798-1
UNITS: mg/kg | ANALYZED: 04/17/98 | DILUTION: 1.000000
METHOD:

ANALYTE		RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	REC LIMITS (%) HIGH	RPD (%)	RPD LIMIT (%)
Diesel		37.27	ND	1	40.0	93.2	55	130		
n-Pentacosane	(surr)	108.6	108.5		100	109	55	130		

SAMPLE SURROGATES

SAMPLE TYPE: Sample-Client | LAB ID: 9804092-01A | INSTR RUN: GC_C\980401000000/296/
INSTRUMENT: HP 5890 | PREPARED: 04/17/98 | BATCH ID: DSLS041798-1
UNITS: mg/kg | ANALYZED: 04/21/98 | DILUTION: 1.000000
METHOD:

ANALYTE		RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	REC LIMITS (%) HIGH	RPD (%)	RPD LIMIT (%)
n-Pentacosane	(surr)	110.4			100	110	55	130		

SAMPLE TYPE: Sample-Client | LAB ID: 9804092-02A | INSTR RUN: GC_C\980401000000/307/
INSTRUMENT: HP 5890 | PREPARED: 04/17/98 | BATCH ID: DSLS041798-1
UNITS: mg/kg | ANALYZED: 04/22/98 | DILUTION: 1.000000
METHOD:

ANALYTE		RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	REC LIMITS (%) HIGH	RPD (%)	RPD LIMIT (%)
n-Pentacosane	(surr)	100.0			100	100	55	130		

SAMPLE TYPE: Sample-Client | LAB ID: 9804092-02A | INSTR RUN: GC_C\980401000000/320/
INSTRUMENT: HP 5890 | PREPARED: 04/17/98 | BATCH ID: DSLS041798-1
UNITS: mg/kg | ANALYZED: 04/22/98 | DILUTION: 1.000000
METHOD:

ANALYTE		RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	REC LIMITS (%) HIGH	RPD (%)	RPD LIMIT (%)
n-Pentacosane	(surr)	100.0			100	100	55	130		

ANALYSIS: Extractable TPH

MATRIX: Soil/Bulk

SAMPLE SURROGATES

SAMPLE TYPE: Sample-Client | LAB ID: 9804092-03A | INSTR RUN: GC_C\980401000000/309/
INSTRUMENT: HP 5890 | PREPARED: 04/17/98 | BATCH ID: DSLS041798-1
UNITS: mg/kg | ANALYZED: 04/20/98 | DILUTION: 1.000000
METHOD:

ANALYTE		RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	HIGH	RPD (%)	RPD LIMIT (%)
n-Pentacosane	(surr)	107.3			100	107	55	130		

SAMPLE TYPE: Sample-Client | LAB ID: 9804092-03A | INSTR RUN: GC_C\980401000000/396/
INSTRUMENT: HP 5890 | PREPARED: 04/17/98 | BATCH ID: DSLS041798-1
UNITS: mg/kg | ANALYZED: 04/23/98 | DILUTION: 1.000000
METHOD:

ANALYTE		RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	HIGH	RPD (%)	RPD LIMIT (%)
n-Pentacosane	(surr)	113.8			100	114	55	130		

SAMPLE TYPE: Sample-Client | LAB ID: 9804092-04A | INSTR RUN: GC_C\980401000000/293/
INSTRUMENT: HP 5890 | PREPARED: 04/17/98 | BATCH ID: DSLS041798-1
UNITS: mg/kg | ANALYZED: 04/20/98 | DILUTION: 1.000000
METHOD:

ANALYTE		RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	HIGH	RPD (%)	RPD LIMIT (%)
n-Pentacosane	(surr)	111.8			100	112	55	130		

SAMPLE TYPE: Sample-Client | LAB ID: 9804092-05A | INSTR RUN: GC_C\980401000000/294/
INSTRUMENT: HP 5890 | PREPARED: 04/17/98 | BATCH ID: DSLS041798-1
UNITS: mg/kg | ANALYZED: 04/21/98 | DILUTION: 1.000000
METHOD:

ANALYTE		RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	HIGH	RPD (%)	RPD LIMIT (%)
n-Pentacosane	(surr)	104.8			100	105	55	130		

SAMPLE TYPE: Sample-Client | LAB ID: 9804092-07A | INSTR RUN: GC_C\980401000000/310/
INSTRUMENT: HP 5890 | PREPARED: 04/17/98 | BATCH ID: DSLS041798-1
UNITS: mg/kg | ANALYZED: 04/21/98 | DILUTION: 1.000000
METHOD:

ANALYTE		RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	HIGH	RPD (%)	RPD LIMIT (%)
n-Pentacosane	(surr)	106.6			100	107	55	130		

SAMPLE TYPE: Sample-Client | LAB ID: 9804092-08A | INSTR RUN: GC_C\980401000000/295/
INSTRUMENT: HP 5890 | PREPARED: 04/17/98 | BATCH ID: DSLS041798-1
UNITS: mg/kg | ANALYZED: 04/21/98 | DILUTION: 1.000000
METHOD:

ANALYTE		RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	HIGH	RPD (%)	RPD LIMIT (%)
n-Pentacosane	(surr)	103.0			100	103	55	130		

ANALYSIS: PNAs by EPA 8270

MATRIX: Soil/Bulk

METHOD BLANK SAMPLES

SAMPLE TYPE: Blank-Method/Media blank
INSTRUMENT: HP-5890 for Semi-volatiles
UNITS: ug/kg
METHOD:

LAB ID: BLNK_0422
PREPARED: 04/22/98
ANALYZED: 04/22/98

INSTR RUN: GCMS10\980422000000/1/
BATCH ID: BNAS042298
DILUTION: 1.00

ANALYTE		RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	REC LIMITS (%) HIGH	RPD (%)	RPD LIMIT (%)
Nitrobenzene-d5	(surr)	74.2			100	74.2	35	130		
2-Fluorobiphenyl	(surr)	69.8			100	69.8	40	130		
Terphenyl-d14	(surr)	75.8			100	75.8	45	155		
Acenaphthene		ND								
Pyrene		ND								
Acenaphthylene		ND								
Anthracene		ND								
Benzo(a)anthracene		ND								
Benzo(b)fluoranthene		ND								
Benzo(k)fluoranthene		ND								
Benzo(g,h,i)perylene		ND								
Benzo(a)pyrene		ND								
Chrysene		ND								
Dibenzo(a,h)anthracene		ND								
Fluoranthene		ND								
Fluorene		ND								
Indeno(1,2,3-cd)pyrene		ND								
Naphthalene		ND								
Phenanthrene		ND								

LABORATORY CONTROL SAMPLES

SAMPLE TYPE: Laboratory Control Spike
INSTRUMENT: HP-5890 for Semi-volatiles
UNITS: ug/kg
METHOD:

LAB ID: LCS_0422
PREPARED: 04/22/98
ANALYZED: 04/22/98

INSTR RUN: GCMS10\980422000000/2/1
BATCH ID: BNAS042298
DILUTION: 1.00

ANALYTE		RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	REC LIMITS (%) HIGH	RPD (%)	RPD LIMIT (%)
Nitrobenzene-d5	(surr)	68.9	74.2		100	68.9	35	130		
2-Fluorobiphenyl	(surr)	65.5	69.8		100	65.5	40	130		
Terphenyl-d14	(surr)	79.3	75.8		100	79.3	45	135		
Acenaphthene		2340	ND		3330	70.27	45	130		
Pyrene		2160	ND		3330	64.86	45	135		

MATRIX SPIKE SAMPLES

SAMPLE TYPE: Spike-Sample/Matrix
INSTRUMENT: HP-5890 for Semi-volatiles
UNITS: ug/kg
METHOD:

LAB ID: MD04092-08A
PREPARED: 04/22/98
ANALYZED: 04/22/98

INSTR RUN: GCMS10\980422000000/5/3
BATCH ID: BNAS042298
DILUTION: 1.00

ANALYTE		RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	REC LIMITS (%) HIGH	RPD (%)	RPD LIMIT (%)
Nitrobenzene-d5	(surr)	76.6	69.0		100	76.6	35	130		
2-Fluorobiphenyl	(surr)	72.0	68.9		100	72.0	40	130		
Terphenyl-d14	(surr)	77.6	76.4		100	77.6	45	135		
Acenaphthene		2600	ND		3330	78.08	45	130		
Pyrene		2110	ND		3330	63.36	45	135		

SAMPLE TYPE: Spike-Sample/Matrix
INSTRUMENT: HP-5890 for Semi-volatiles
UNITS: ug/kg
METHOD:

LAB ID: MS04092-08A
PREPARED: 04/22/98
ANALYZED: 04/22/98

INSTR RUN: GCMS10\980422000000/4/3
BATCH ID: BNAS042298
DILUTION: 1.00

ANALYTE		RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	REC LIMITS (%) HIGH	RPD (%)	RPD LIMIT (%)
Nitrobenzene-d5	(surr)	74.4	69.0		100	74.4	35	130		
2-Fluorobiphenyl	(surr)	67.8	68.9		100	67.8	40	130		
Terphenyl-d14	(surr)	73.8	76.4		100	73.8	45	135		

ANALYSIS: PNAs by EPA 8270

MATRIX: Soil/Bulk

MATRIX SPIKE SAMPLES

SAMPLE TYPE: Spike-Sample/Matrix | LAB ID: MS04092-08A | INSTR RUN: GCMS10\980422000000/4/3
INSTRUMENT: HP-5890 for Semi-volatiles | PREPARED: 04/22/98 | BATCH ID: BNAS042298
UNITS: ug/kg | ANALYZED: 04/22/98 | DILUTION: 1.00
METHOD:

ANALYTE	RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	REC LIMITS (%) HIGH	RPD (%)	RPD LIMIT (%)
Acenaphthene	2400	ND		3330	72.07	45	130		
Pyrene	1940	ND		3330	58.26	45	135		

MATRIX SPIKE DUPLICATES

SAMPLE TYPE: Spiked Sample Duplicate | LAB ID: MR04092-08A | INSTR RUN: GCMS10\980422000000/6/4
INSTRUMENT: HP-5890 for Semi-volatiles | PREPARED: 04/22/98 | BATCH ID: BNAS042298
UNITS: ug/kg | ANALYZED: 04/22/98 | DILUTION: 1.00
METHOD:

ANALYTE		RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	REC LIMITS (%) HIGH	RPD (%)	RPD LIMIT (%)
Nitrobenzene-d5	(surr)	76.6	74.4		100	76.6	35	130		
2-Fluorobiphenyl	(surr)	72.0	67.8		100	72.0	40	130		
Terphenyl-d14	(surr)	77.6	73.8		100	77.6	45	135		
Acenaphthene		2600	2400						8.000	35
Pyrene		2110	1940						8.395	35

SAMPLE SURROGATES

SAMPLE TYPE: Sample-Client | LAB ID: 9804092-05A | INSTR RUN: GCMS10\980422000000/7/
INSTRUMENT: HP-5890 for Semi-volatiles | PREPARED: 04/22/98 | BATCH ID: BNAS042298
UNITS: ug/kg | ANALYZED: 04/23/98 | DILUTION: 1.00
METHOD:

ANALYTE		RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	REC LIMITS (%) HIGH	RPD (%)	RPD LIMIT (%)
Nitrobenzene-d5	(surr)	71.2			100	71.2	35	130		
2-Fluorobiphenyl	(surr)	66.0			100	66.0	40	130		
Terphenyl-d14	(surr)	76.2			100	76.2	45	135		

SAMPLE TYPE: Sample-Client | LAB ID: 9804092-08A | INSTR RUN: GCMS10\980422000000/3/
INSTRUMENT: HP-5890 for Semi-volatiles | PREPARED: 04/22/98 | BATCH ID: BNAS042298
UNITS: ug/kg | ANALYZED: 04/22/98 | DILUTION: 1.00
METHOD:

ANALYTE		RESULT	REF RESULT	REPORTING LIMIT	SPIKE VALUE	RECOVERY (%)	REC LIMITS (%) LOW	REC LIMITS (%) HIGH	RPD (%)	RPD LIMIT (%)
Nitrobenzene-d5	(surr)	69.0			100	69.0	35	130		
2-Fluorobiphenyl	(surr)	68.9			100	68.9	40	130		
Terphenyl-d14	(surr)	76.4			100	76.4	45	135		

QUALITY CONTROL DATA

METHOD: EPA 8020, 5030 GCFID

AEN JOB NO: 9804092
INSTRUMENT: H
MATRIX: SOIL

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery Fluorobenzene
04/17/98	FS2-SS-01	01	101
04/16/98	FS3-SS-02	02	109
04/16/98	FS2-SS-03	03	97
04/17/98	FS3-SS-01	04	99
04/17/98	FS2-SS-02	05	97
04/17/98	FS3-SS-03	07	98
04/17/98	FS3-SS-04	08	98
QC Limits:			70-130

DATE ANALYZED: 04/17/98
SAMPLE SPIKED: 9804092-07
INSTRUMENT: H

Matrix Spike Recovery Summary

Analyte	Spike Added (ug/kg)	Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Benzene	200	83	5	65-135	30
Toluene	200	81	5	65-135	30
Ethylbenzene	200	80	6	65-135	30
Total Xylenes	600	80	7	65-135	30

Daily method blanks for all associated analytical runs showed no contamination at or above the reporting limit.

QUALITY CONTROL DATA

METHOD: EPA 8020, 5030 GCFID

AEN JOB NO: 9804092
INSTRUMENT: H
MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery Fluorobenzene
04/15/98	FS3-GW-01	06	95
QC Limits:			70-130

DATE ANALYZED: 04/16/98
SAMPLE SPIKED: LCS
INSTRUMENT: H

Laboratory Control Sample Recovery

Analyte	Spike Added (ug/L)	Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Benzene	200	86	3	70-130	20
Toluene	200	85	2	70-130	20
Ethylbenzene	200	84	2	70-130	20
Total Xylenes	600	84	2	70-130	20

Daily method blanks for all associated analytical runs showed no contamination at or above the reporting limit.

*** END OF REPORT ***

KLEINFELDER

RISE

9804092

PROJECT NO.	PROJECT NAME
10-3005-53	Milpitas, Five Stas.

L.P. NO. (P.O. NO.)	SAMPLERS: (Signature/Number)
	Brian G Daw 2471

	DATE MM/DD/YY	SAMPLE I.D. TIME HH-MM-SS	SAMPLE I.D.	MATRIX	NO. OF CONTAINERS	TYPE OF CONTAINERS	TPH-d (8015M)	BTEX (8020)	PAH (8270)	RECEIVING LAB: AEN
1	4/8/98	0920	FS2-SS-01	soil	1	brass	✓	✓		
2	"	0935	FS2-SS-02	"	1	"	✓	✓		
3	"	0940	FS2-SS-03	"	1	"	✓	✓		
4	4/8/98	1030	FS3-SS-01	"	1	brass	✓	✓		
5	"	1100	FS3-SS-02	"	1	"	✓	✓		
6	"	1140	FS3-GW-01	water	3	VOA		✓		
7	"	1140	FS3-GW-01	water	3	Amber 1L	✓	✓		
8	"	1210	FS3-SS-03	soil	1	brass	✓	✓		
9	"	1215	FS3-SS-04	"	1	"	✓	✓		
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

ANALYSIS

INSTRUCTIONS/REMARKS

See notes/instructions

No. BCD

*Run 8270, PAH on highest TPH-d result between FS2-SS-02 and FS2-SS-03

*Run 8270, PAH on highest TPH-d result between FS3-SS-03 and FS3-SS-04

* PAH on 5-day TAT after TPH-d results - ~~BCD~~

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Brian G Daw	4/8/98 1610	
	4/8/98 1650	
	Date/Time	Received for Laboratory by: (Signature)
		Greg Glaser

Instructions/Remarks:

5-day TAT

Send Results To:

KLEINFELDER
7133 KOLL CENTER PARKWAY
SUITE 100
PLEASANTON, CA 94566
(510) 484-1700

Attn Dan Carroll

454

M-60 White – Sampler Canary – Return Copy To Shipper Pink – Lab Copy

CHAIN OF CUSTODY

No 2208

APPENDIX F- CEQA DOCUMENT

1425 N. McDowell Boulevard
Suite 200
Petaluma, CA 94954
707.795.0900 phone
707.795.0902 fax

esassoc.com

memorandum

date	November 6, 2019
to	Lyhak Eam, P.E., Associate Civil Engineer, City of Milpitas
from	Luke Evans, Senior Managing Associate, Environmental Science Associates (ESA)
subject	CEQA Recommendation for City of Milpitas Fire Station No. 2 Replacement Project

Environmental Science Associates (ESA) has been asked to evaluate the City's proposed Fire Station No. 2 Replacement Project within the context of a California Environmental Quality Act (CEQA) Exemption. The City proposes to replace its existing Fire Station No. 2 with an updated facility to meet current "Essential Services Buildings" requirements as well as current Building and Fire Codes. The facility would be designed to provide for an additional Fire Apparatus bay as well as providing sustainability elements, gender equality/privacy, and operational efficiencies to improve response times. Work also would include placement of a temporary fire station, building demolition, debris removal, construction of the replacement station, furnishings, fixtures, and equipment, and new site improvements. Demolition of the existing facility would commence in May, 2020 and construction in September, 2020, with completion within 12 months.

ESA reviewed the applicability of CEQA exemptions, which include statutory exemptions, categorical exemptions, and the "common sense" exemption. Our review was based on our understanding of the project as conveyed to us by the City and its architectural consultants.

Statutory Exemptions

Statutory exemptions are set forth in Article 18 *Statutory Exemptions* of the CEQA Guidelines. Statutory exemptions are applicable regardless of the physical circumstances or potential environmental impacts of the project. The proposed project is a discretionary action that is subject to CEQA and is therefore not a ministerial type of project. None of the other statutory exemptions identified in the CEQA Guidelines are applicable to the proposed project.

Categorical Exemptions

Categorical exemptions are described in Article 19 *Categorical Exemptions* of the CEQA Guidelines. ESA performed a detailed review of the CEQA Categorical Exemptions that could apply to the project. Of those, a Class 2 Exemption, as defined in CEQA Guidelines Section 15302, seems most appropriate. A Class 2 project consists of replacement or reconstruction of existing structures and facilities where the new structure will be located on the same site as the structure replaced and will have substantially the same purpose and capacity as the structure replaced. The description of "replacement or reconstruction" as set forth in the exemption is appropriate to the proposed project.

CEQA Guidelines Section 15300.2(b) provides that a categorical exemption may not be used if the cumulative impact of successive projects of the same type may be significant. Based on the current project description and understanding, there is no evidence that this would be the case with respect to the proposed project.

CEQA Guidelines Section 15300.2(c) also provides that a categorical exemption may also not be used if there is a reasonable possibility that the project would have a significant effect on the environment due to "unusual circumstances" (CEQA Guidelines 15300.2(c)). ESA has evaluated the proposed project and its likelihood of creating a significant environmental effect. That analysis is attached hereto as **Attachment A**. Based on that analysis, we have determined that the project is not affected by or likely to cause any unusual circumstances that could be expected to cause any significant impacts. Therefore, this project is consistent with this requirement.

CEQA Guidelines Section 15300.2(d) provides that a categorical exemption may not be applied to projects that could damage scenic resources associated with a designated State scenic highway. As discussed in Attachment A, the project site is not located in the vicinity of a scenic highway, so this exception would not apply.

CEQA Guidelines Section 15300.2(e) provides that a categorical exemption may not be applied to projects on sites that appear on a list compiled pursuant to Section 65962.5 of the Government Code, relating to hazardous materials. As discussed in Attachment A, the project would not be located on such a site, so this exception would not apply.

Finally, CEQA Guidelines Section 15300.2(f) provides that a categorical exemption may not be applied to projects that may cause a substantial adverse change to the significance of a historical resource. As discussed in Attachment A and its associated Historic Resources Evaluation, the existing fire station on the site that would be removed and replaced under the project does not meet the criteria for a historic resource, as defined in CEQA Guidelines Section 15064.5. This exception would therefore not apply.

Based on each of the above considerations, a Class 2 exemption is appropriate for the proposed project.

"Common Sense" / General Rule Exemption

The "Common Sense" Exemption (formerly known as the General Rule Exemption) is codified in CEQA Guidelines Section 15061(b)(3), wherein it is stated that an undertaking is not subject to CEQA "where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment." Based on the analysis presented in Attachment A, and as described above, the proposed project would not have a significant effect on the environment. Therefore, the common sense exemption also applies to the proposed project.

Conclusion

The proposed project qualifies for a categorical exemption under CEQA. Specifically, the project is exempt under Class 2 "Replacement or Reconstruction," as defined in CEQA Guidelines Section 15302. In addition, the "Common Sense" exemption, as defined in CEQA Guidelines 15061(b)(3), is also applicable. Therefore, both exemptions apply to the project, and no further CEQA analysis is required. Should you have any questions or concerns, please feel free to contact me at levans@esassoc.com and 909-809-0508.

Attachment:

A: Documentation to Support a Finding of Exemption

Documentation to Support a Finding of Exemption

Project Location

The project is an existing City fire station facility located at 1263 Yosemite Drive, Milpitas, CA 95035, on the northwest corner of Yosemite Drive and South Park Victoria Drive. Assessor Parcel Number 08802026. Latitude: 37°25'36.59"N, Longitude: 121°52'53.38"W.

Project Description

The City of Milpitas proposes to replace its existing Fire Station No. 2 with an updated facility to meet the current "Essential Services Buildings" requirements as well as current Building and Fire Codes. The facility will be designed to provide for an additional Fire Apparatus bay as well as providing sustainable elements, gender equality/privacy, and operational efficiencies to improve response times. Work also includes placement of a temporary fire station, building demolition, site cleanup, furnishings, fixtures, and equipment, and new site improvements. Demolition of the existing facility is expected to commence in May, 2020 and construction in September, 2020, with completion within 12 months.

Environmental Analysis

The proposed project was evaluated against the various topics and criteria for environmental impacts as set forth in the CEQA Guidelines, Appendix G.

Aesthetics

The proposed project would generally replace the existing fire station structure with a similar building with the same function. The design and construction of the facility would be required to conform with the City's design standards, and would be subject to review by the City Council. The general setting and function of the site would remain unchanged. Public views of the site would not change substantially. There would be no impact.

Air Quality

The project would generate emissions during demolition, construction, and operation. Based on the project's size and type, emissions generated during demolition and construction would fall well below *de minimis* criteria pollutant emissions standards as established by the Bay Area Air Quality Management District (BAAQMD). Operational emissions would be generally the same as that being generated currently, though there would likely be a negligible increase in automotive-related emissions based on the slightly higher staffing numbers expected for the modernized station. Regardless, any operational emissions increases associated with the project would also fall well below *de minimis* criteria pollutant emissions standards as established by BAAQMD. No significant effect would occur.

Agricultural and Forestry Resources

The site is located in an urban setting where agricultural and forestry resources are not present. No significant effect would occur.

Biological Resources

The site is located in a densely-populated urban setting. Land cover on the site consists of paved areas, buildings, and limited ornamental landscaping, and these conditions are also present on the surrounding parcels. There is no habitat for any special status plant or wildlife species on the site, nor are there any riparian areas or other sensitive natural communities on the site. No significant effect would occur.

Ornamental trees on the site could provide habitat for nesting birds protected by the California Fish and Game Code. The code disallows the needless destruction of the nests and eggs of wild birds. Compliance with the law is usually undertaken by avoidance of nests during the avian nesting season, which is generally defined as February 1 through August 31. When avoidance is not practical, pre-construction surveys by a qualified biologist and subsequent avoidance of any active nests found are the standard practice to avoid impacts to nesting birds. As such, compliance with these standard practices and existing laws and regulations would avoid adverse effects to nesting birds, and no significant effect would occur.

Some of the trees on the site may qualify for heritage or protected tree status. If such trees are to be removed as part of the project, they would be subject to the protections and mitigations adopted in the City's Tree Maintenance and Protect Ordinance. As such, compliance with existing laws and regulations would avoid adverse effects to protected trees, and no significant effect would occur.

Cultural Resources and Tribal Cultural Resources

The project site is located in a developed urban area. The site has been subjected to intensive ground disturbance over the decades, and the entire site is currently covered with paved areas, buildings, and ornamental landscaped areas. The likelihood of encountering significant archaeological resources as defined in CEQA Guidelines Section 15064.5 is extremely low. No significant effect would occur.

The site is currently the setting for the existing Milpitas Fire Station No. 2, a Contemporary Style structure constructed in 1969. The structure would be demolished as part of the project. The structure was evaluated by an architectural historian meeting the Secretary of Interior's standards for architectural historians to determine if the structure met the criteria for significance for historical resources as defined in CEQA Guidelines Section 15064.5. The evaluation is attached to this document as **Attachment 1**. The evaluation determined that the structure does not meet the criteria for significance and is therefore ineligible for listing on the California Register or Milpitas Historic Sites Inventory. It is therefore not considered to be a historical resource for the purposes of CEQA. No significant effect would occur.

Energy

The project would replace an existing 50-year-old facility with a modern structure that meets or exceeds current energy standards, resulting in a net decrease in energy demand. The effect of the project on energy demand would be beneficial, and no significant effect would occur.

Geology and Soils

The project would not exacerbate any existing conditions relating to earthquake faults, ground shaking, ground failure, liquefaction, expansive soils, or landslides. Soil erosion and runoff effects during construction would be addressed through implementation of standard best management practices. No significant effect would occur.

Greenhouse Gas Emissions

The project would generate GHG emissions during demolition, construction, and operation. Based on the project's size and type, GHG emissions generated during demolition and construction would be negligible, and would fall well below applicable regulatory thresholds. Operational GHG emissions would be less than that generated currently, largely through use of more efficient building materials and implementation of modern energy efficiency building standards. No significant effect would occur.

Hazards and Hazardous Materials

The GeoTracker database was queried to determine if the site or the surrounding area is the location of any Recognized Environmental Conditions with respect to hazardous materials. The resultant search results are attached to this document as **Attachment 2**. No open cases were returned. Therefore, no impacts relating to existing Recognized Environmental Conditions are expected, and no significant effect would occur.

The site would likely house household and institutional cleaning and operational materials that are typical of such a facility. These materials are not acutely hazardous, and compliance with existing regulatory requirements pertaining to transport, storage, and use would effectively mitigate any potential effects. No significant effect would occur.

The site is not located within two miles of a public airport or within an airport land use planning area. The project would not introduce a safety hazard with respect to aviation. No significant effect would occur.

Hydrology and Water Quality

The proposed project would be subject to standard mitigation for site runoff and floodplain management, including the preparation and implementation of a construction Storm Water Pollution Prevention Plan (SWPPP). As is currently present, the proposed project would cover the majority of project site with impervious surfaces, which would be anticipated to create potential runoff impacts to the adjacent stormwater systems. Increases to potential runoff, if any, would be subject to standard mitigation for operational runoff. No significant effect would occur.

Land Use and Planning

The project site has been the location of an operational City fire station for 50 years. Under the proposed project, that use would not change. The project would be consistent with existing zoning and land use designations for the site. No significant effect would occur.

Mineral Resources

The site is located in an urban setting where mineral resource extraction activities are not present. Based on the site's location and the surrounding urban uses, it would be neither practical nor feasible to utilize the site for mineral resource extraction, even if such resources were present. No significant effect would occur.

Noise

Construction noise would occur at the site during the construction period. Construction activities would be temporary in nature, and would be required to comply with applicable noise ordinances and restrictions, thus lessening effects to nearby sensitive receptors. No significant effect would occur.

Operational noise would be similar to that which currently occurs at the site. The facility is an operational fire station, as has been the case for the last 50 years. This condition would continue under the proposed project, and no substantial change in use would occur. No significant effect would occur.

Population and Housing

The proposed project would not increase the City's population and no housing units or people would be displaced as a result of this project. No significant effect would occur.

Public Services and Recreation

The proposed project would replace the existing outdated fire station with a modern facility to better meet the needs of the community. Overall project impacts would be beneficial. The proposed project would not increase the City's population or otherwise create additional demands for public services. No significant effect would occur.

Transportation

Operational traffic and vehicle miles traveled (VMT) associated with the proposed project would remain substantially unchanged from that which is currently occurring. The project would replace an existing facility in a like-for-like manner, and no conflicts with existing programs, plans, ordinance, or policy addressing the circulation system would occur. No significant effect would occur.

Utilities and Service Systems

The project would replace an existing facility in a like-for-like manner, and no substantive increases to utility demands would occur. No significant effect would occur.

Wildfire

The site is located in an urban area that is substantially removed from the wildland-urban interface. The project would not exacerbate existing risks of wildfire based on introduction of new sources of ignition or flammable materials and vegetation. The overall effect of the project would be beneficial, in that the project would provide a modern firefighting facility with which to address all types of emergencies, including wildfires. No significant effect would occur.

Recommendations to Ensure Avoidance of Significant Effects

To ensure that standard practices to protect against potential impacts to nesting birds during construction are implemented, we recommend that the following measure be included with the project plans and specifications for implementation by the selected building contractor:

> **Nesting Bird Avoidance:** To the extent practicable, demolition and vegetation removal shall be performed between September 1 and January 31 in order to avoid breeding and nesting season for

birds. If these activities cannot be performed during this period, a preconstruction survey for nesting birds shall be conducted by a qualified biologist.

In coordination with the City, surveys shall be performed during breeding bird season (February 1 – August 31) no more than 14 days prior to demolition and vegetation removal activities listed above in order to locate any active passerine nests within 250 feet of the project site and any active raptor nests within 500 feet of the project site, as practicable. Demolition and vegetation removal performed between September 1 and January 31 avoid the general nesting period for birds and therefore would not require pre-construction surveys.

If active nests are found on either the proposed demolition site or within the 500-foot survey buffer surrounding the proposed demolition site, no-work buffer zones shall be established around the nests in coordination with CDFW. No renovation, demolition, vegetation removal, or ground-disturbing activities shall occur within a buffer zone until young have fledged or the nest is otherwise abandoned as determined by the qualified biologist. If work during the nesting season stops for 14 days or more and then resumes, then nesting bird surveys shall be repeated, to ensure that no new birds have begun nesting in the area.

Conclusion

Based on the information provided above, implementation of the proposed project would create no significant environmental effects. The findings support the conclusion that the proposed project qualifies for a categorical exemption under CEQA. Specifically, the project is exempt under Class 2 “Replacement or Reconstruction.” The “Common Sense” exemption, as defined in CEQA Guidelines 15061(b)(3), is also applicable. No further CEQA analysis is required.

APPENDIX G- FIRE STATION NO. 2 AND NO. 3 CONSTRUCTION-1968

City of Milpitas

FIREHOUSE STATION NO. 2

YOSEMITE AND PARK VICTORIA DRIVE, MILPITAS

AND

FIREHOUSE STATION NO. 3

NORTH MAIN STREET & MIDWICK DRIVE, MILPITAS

HEDLEY, JAMES AND ASSOCIATES

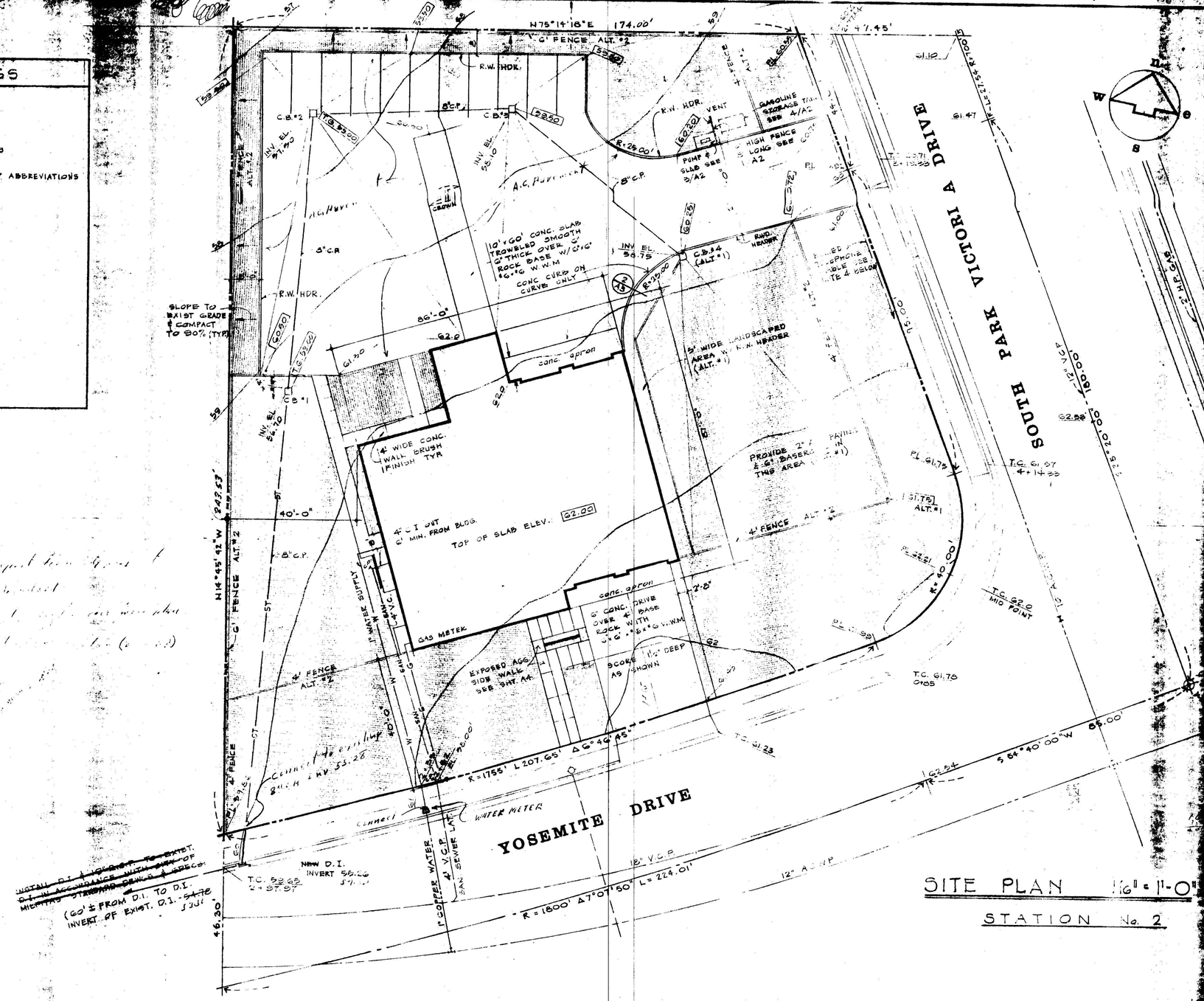
ARCHITECTS AND ENGINEERS

INDEX TO THE DRAWINGS

A-1 SITE PLAN FOR STATION #2, INDEX TO THE DRAWINGS
A-2 SITE PLAN FOR STATION #3, SITE DETAILS
A-3 ROOF PLAN, SITE DETAILS
A-4 ROOF FRAMING PLAN & DETAILS, FOUNDATION PLAN & DETAILS
A-5 FLOOR PLAN
A-6 DOOR SCHEDULE, FINISH SCHEDULE, LEGEND & SYMBOLS, TABLE OF ABBREVIATIONS
A-7 EXTERIOR ELEVATIONS
A-8 SECTIONS, INTERIOR ELEVATIONS & DETAILS
A-9 DETAILS
A-10 SECTIONS, DETAILS, REAR FRAMING ELEVATION
A-11 HOSE DRYING TOWER PLANS, SECTIONS & DETAILS

E-1 ELECTRICAL PLOT PLAN FIRESTATION #2
E-2 ELECTRICAL PLOT PLAN FIRESTATION #3
E-3 ELECTRICAL FIXTURE SCHEDULE & LEGEND
E-4 POWER PLAN
E-5 LIGHTING PLAN
E-6 SIGNAL PLAN

M-1 HEATING PLAN & DETAILS
M-2 HEATING DETAILS & SCHEDULES



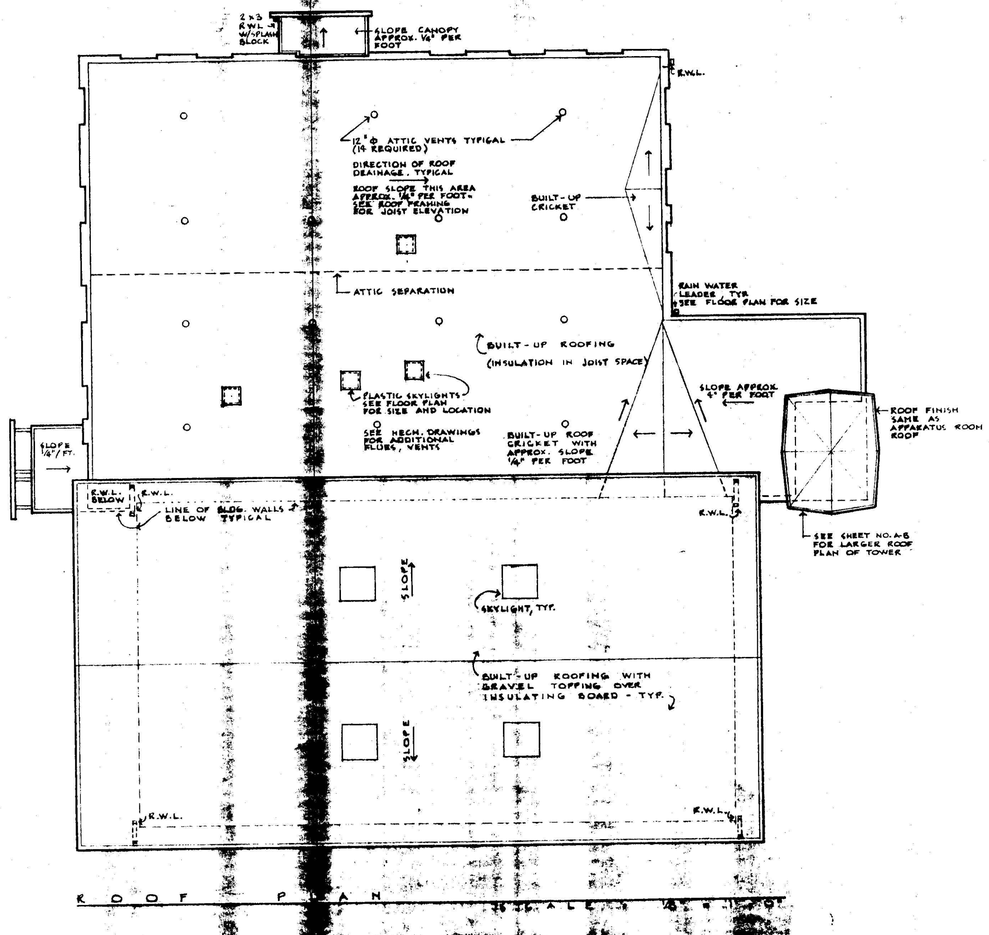
SITE PLAN 1/16" = 1'-0"

STATION No. 2

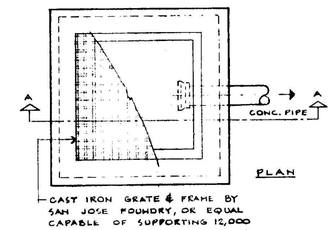
NOTES:

1. ALL A.C. PAVED AREAS SHALL HAVE 2½" A.C. & 10" BASE ROCK UNLESS OTHERWISE NOTED
2. 2x6 RWD. HEADERS SHALL BE PROVIDED AT ALL EDGES OF PAVING UNLESS OTHERWISE SHOWN ABOVE. SEE DETAIL B/A8
3. CONTOUR LINES DENOTE EXISTING GRADES. ALL OTHER ELEVATIONS GIVEN ARE FINISH GRADES.
4. CONTACT PACIFIC TELEPHONE FOR EXACT LOCATION & DEPTH OF BURIED CABLE ALONG EASTERLY PROPERTY LINE BEFORE ANY EXCAVATION IS STARTED.
5. ALL CONSTRUCTION WITHIN THE [illegible] RIGHT OF WAY WILL BE [illegible] BY THE DEVELOPER OF PARK[illegible] EXCEPTION WATER SERVICE WILL BE CONNECTED AT THE METER

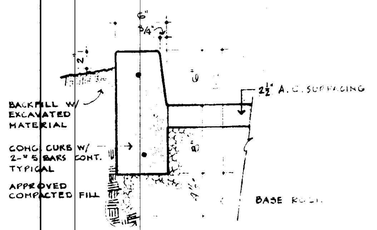
CATCH BASIN SCHEDULE		
C.B. No.	INTERIOR WIDTH & BREADTH	REMARKS
1, 2, 3	24" x 24"	
4	24" x 24"	INCLUDE IN ADD ALTERNATE #1



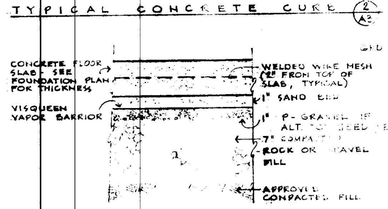
ROOF PLAN SCALE 1/8" = 1'-0"



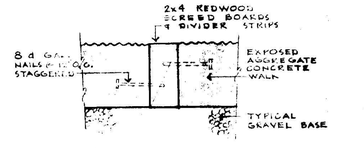
DETAIL OF CATCH BASIN (1/A2) SCALE 3/4" = 1'-0"



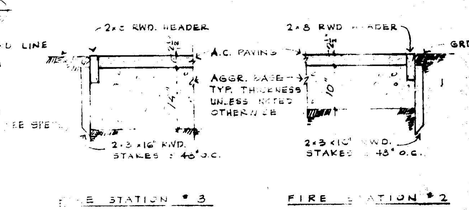
TYPICAL CONCRETE CURB (2/A2)



TYPICAL SLAB DETAIL (3/A2)



CONCRETE WALK DIVIDER (1/A2)

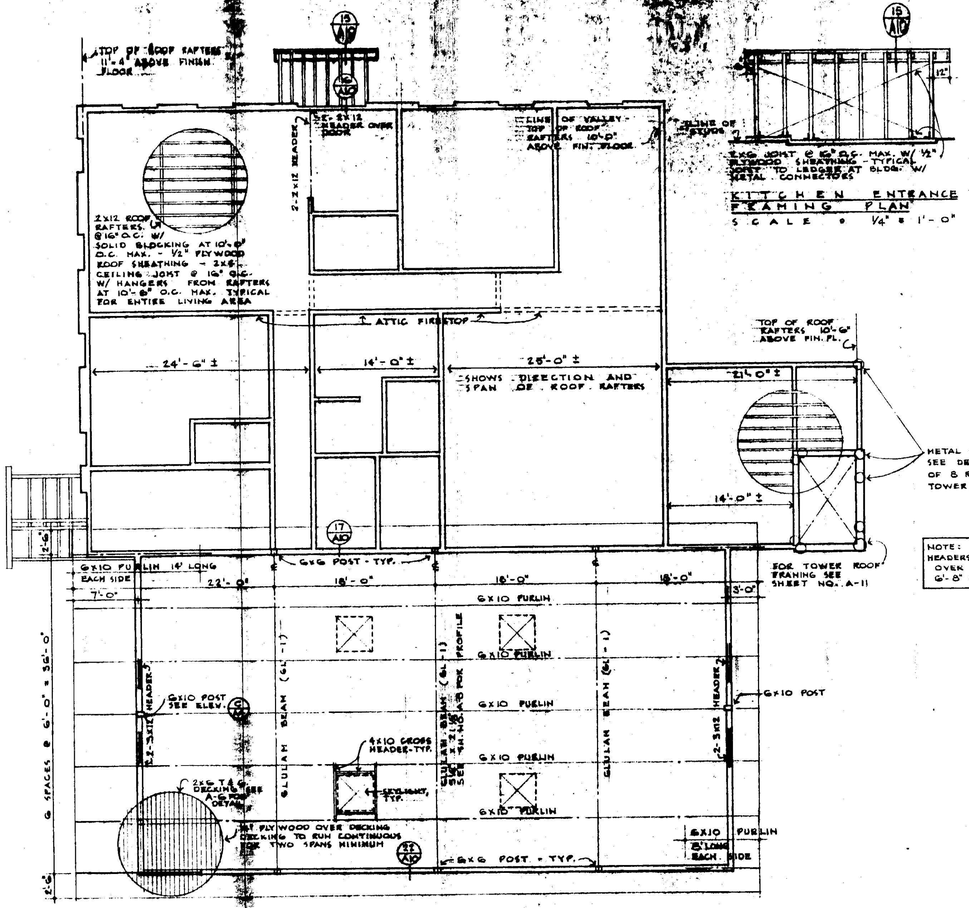


FIRE STATION # 3 FIRE STATION # 2

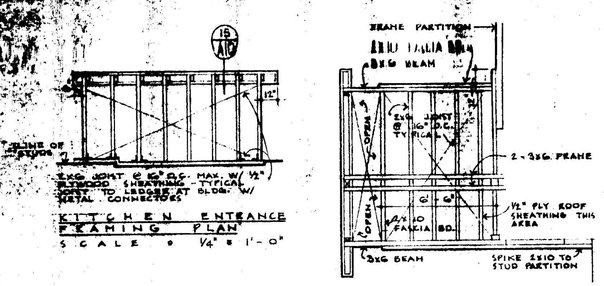
NOTE: UNLESS OTHERWISE SHOWN ALL A.C. PAVING SHALL HAVE WOOD EDGE HEADER

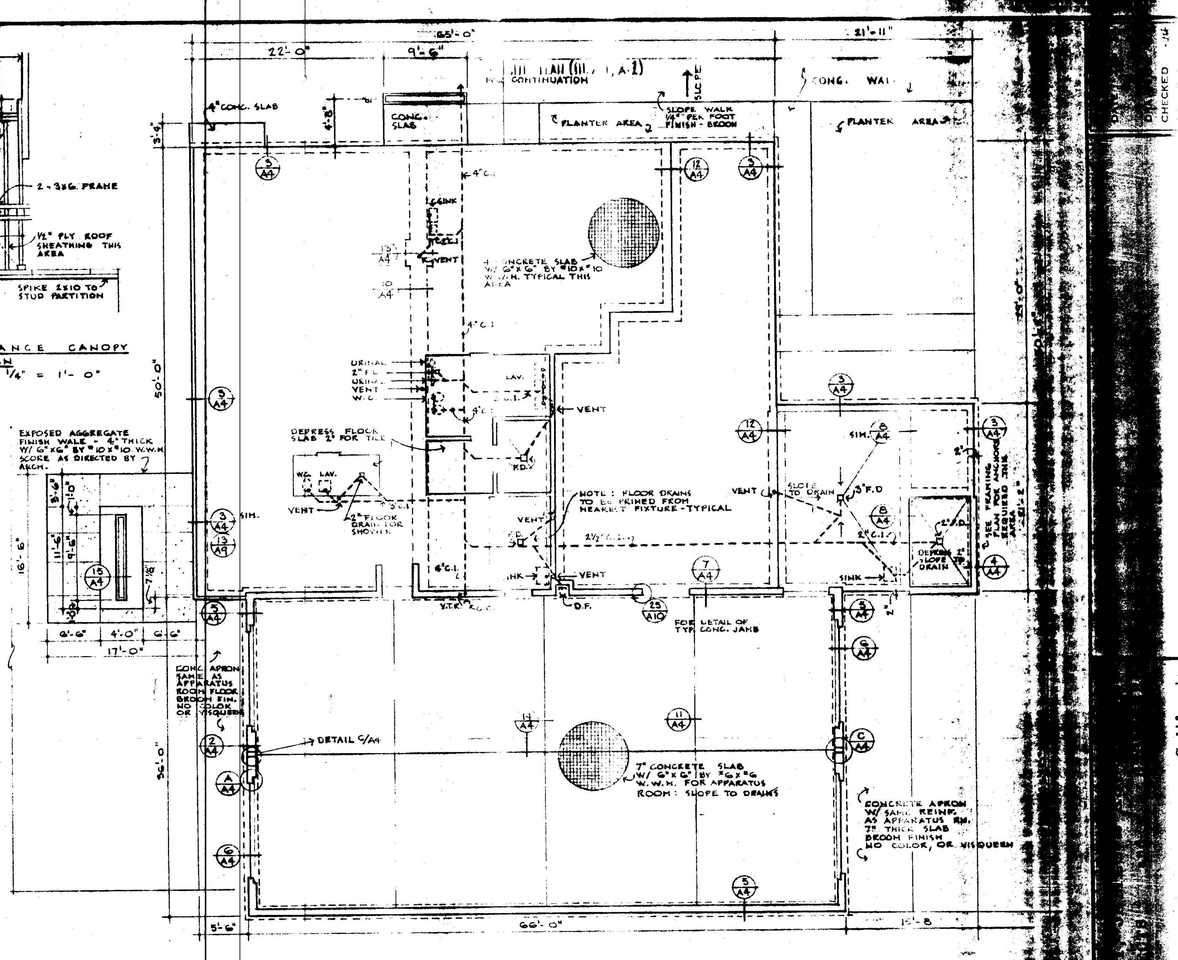
TYPICAL HEADER DETAIL (4/A2)

APPROVED AS NOTED

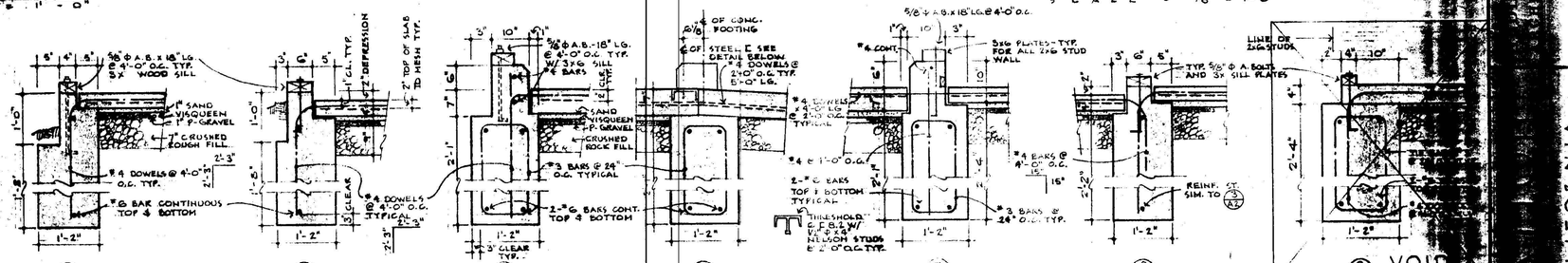


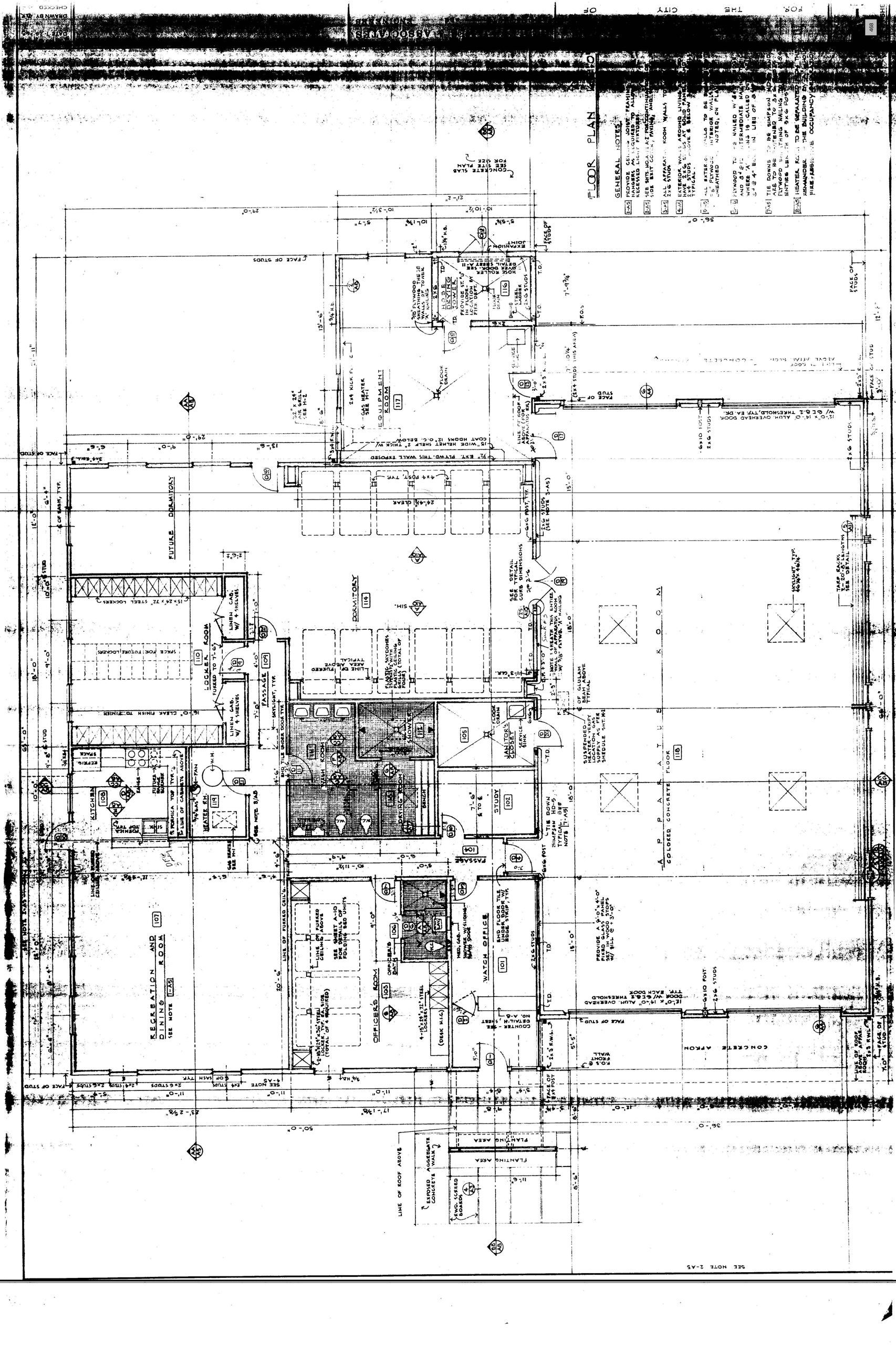
ROOF FRAMING PLAN
SCALE • 1/8" = 1'-0"





FOUNDATION AND PLUMBING PLAN
SCALE • 1/8" = 1'-0"




FLOOR PLAN
GENERAL NOTES
RECREATION AND DINING ROOM
SEE NOTE T-A5
OFFICERS ROOM
WATCH OFFICE
STUDY
DORMITORY
FUTURE DORMITORY
PASSAGE
LOCKER ROOM
KITCHEN
EQUIPMENT ROOM
APPARATUS ROOM
COLORED CONCRETE FLOOR
CONCRETE APRON
PLANTING AREA
EXPOSED AGGREGATE CONCRETE WALK
LINE OF ROOF ABOVE
SEE NOTE 2-A5

FIRE STATION

FOR THE CITY OF

MILPITAS, CALIFORNIA

SHEET NO. A-6

OF 19 SHEETS

HEDLEY, JAMES & ASSOCIATES

ARCHITECTS and ENGINEERS

San Jose, California

JOB: 67-208

DATE: 7-26-68

DRAWN BY: DK

CHECKED BY: CD

LEGEND & SYMBOLS

EARTH

GRAVEL

CONCRETE BLOCK

CONCRETE

MASONRY

WOOD, STRUCTURAL

WOOD, SIDING

WOOD, FINISH BOARDS

CERAMIC TILE

— LETTER OF SECTION

— SHEET WHERE SECTION IS SHOWN

SECTION REFERENCE

— SHEET WHERE DET. IS SHOWN

DETAIL REFERENCE

— NUMBER OF DETAIL

— DOOR NUMBER

— WINDOW REFERENCE

— WINDOW TYPE

— FINISH SCHEDULE REF.

— DOOR SCHEDULE REF.

— DOOR NUMBER

— FINISH SCHEDULE REF.

— WATER OR GROUT

ABBREVIATIONS

ALUM.	ALUMINUM	INSUL.	INSULATION, -ED
ANOD.	ANODIZED	INTER.	INTERIOR
APPROX.	APPROXIMATELY	JT.	JOINT
ASPH.	ASPHALTIC CONCRETE	LAV.	LAVATORY
BD.	BOARD	LT.	LIGHT
BLDG.	BUILDING	MAT.	MATERIAL
BLKG.	BLOCKING	MAX.	MAXIMUM
BOT.	BOTTOM	MECH.	MECHANICAL
BRG.	BEARING	MFR.	MANUFACTURER
BTWN.	BETWEEN OR BACK OF WALK	MIN.	MINIMUM
CAB.	CABINET	MTD.	MOUNTED
C.I.	CAST IRON	MTL.	METAL
CLKWK.	CLOCKWORK	NAT.	NATURAL
CLR.	CLEAR, ALL HEIGHT	NO.	NUMBER
CLOS.	CLOSET	OPNG.	OPENING
COL.	COLUMN	PERF.	PERFORATED
CONC.	CONCRETE	PL.	PLATE
CONT.	CONTINUOUS	PLAS.	PLASTER
CPT.	CARPET	PLYWD.	PLYWOOD
CTR.	CENTER	PR.	PAIR
CT.	CERAMIC TILE	PTD.	PAINTED
DBL.	DOUBLE	RAD.	RADIUS
DEPT.	DEPARTMENT	RECD.	RECESSED
DET.	DETAIL	REF.	REFRIGERATOR
DIA.	DIAMETER	REINF.	REINFORCED
DIM.	DIMENSION	REQ'D.	REQUIRED
DISP.	DISPENSER	RM.	ROOM
DN.	DOWN	R.O.	ROUGH OPENING
DR.	DOOR	SCHED.	SCHEDULE
DS.	DOWNSPOUT	SECT.	SECTION
DTL.	DETAIL	SHT.	SHEET
EA.	EACH	SIM.	SIMILAR
ELEC.	ELECTRIC, -AL	SPEC.	SPECIFICATION
ELEV.	ELEVATION	SQ.	SQUARE
EMER.	EMERGENCY	STA.	STATION
ENCL.	ENCLOSURE	STD.	STANDARD
EQ.	EQUAL	STL.	STEEL
EXH.	EXHAUST	STOR.	STORAGE
EXP.	EXPANSION	STRUCT.	STRUCTURAL
EXPOS.	EXPOSED	SUSP.	SUSPENDED
FAB.	FABRIC	SYM.	SYMMETRICAL
F.D.	FLOOR DRAIN	T.	TREAD
FDN.	FOUNDATION	TEL.	TELEPHONE (BOOTH)
F.E.	FIRE EXTINGUISHER	TEMP.	TEMPERED
FIN.	FINISH	THK.	THICK, -NESS
FLASH.	FLASHING	TOIL.	TOILET
FLR.	FLOOR	TOP.	TOPPING
F.O.C.	FACE OF CONCRETE	T.P.H.	TOILET PAPER HOLDER
F.O.F.	FACE OF FINISH	T.S.	TOILET SEAT & COVER
F.O.M.	FACE OF MASONRY	T.V.	TELEVISION
FPRF.	FIREPROOF	TYP.	TYPICAL
FT.	FOOT OR FEET	U.C.	UNDERCOUNTER
FTG.	FOOTING	U.L.	UNDERWRITERS LABORATORIES
FURN.	FURNISH	U.N.O.	UNLESS NOTED OTHERWISE
GA.	GAUGE	VERT.	VERTICAL
GALV.	GALVANIZED	V.I.F.	VERIFY IN FIELD
GL.	GLASS, -ING	VEST.	VESTIBULE
GND.	GROUND	VOL.	VOLUME
GR.	GRADE	W.	WIDE, WIDTH
GYP. BD.	GYPSUM BOARD	W/	WITH
H.B.	HOSE BIBB	W/O	WITHOUT
HDWE.	HARDWARE	WD.	WOOD
HGT.	HEIGHT	WDW.	WINDOW
H.M.	HOLLOW METAL	WP.	WATERPROOF
HORIZ.	HORIZONTAL	WSCT.	WAINSCOT
HR.	HOUR	WT.	WEIGHT
HTR.	HEATER	W.W.M.	WELDED WIRE MESH
HWD.	HARDWOOD		

ELEVATIONS OF ALUMINUM SASH

SCALE: ¼" = 1'-0"

NOTE: WIDTH OF SASH IS TO BE AS SHOWN. ALL OTHER WINDOW SIZES MAY BE ADJUSTED TO MEET MANUFACTURERS STANDARDS - SUBJECT TO ARCHITECT'S APPROVAL

ALL VENT SECTIONS TO HAVE INSECT SCREENS SEE FLOOR PLANS FOR ADDITIONAL INFORMATION

ALL SASH & FIXED GLASS ARE TO HAVE BLINDS EXCEPT WHERE NOTED OTHERWISE

DETAIL OF TYPICAL 2x6 T & G DECKING

SCALE: 1½" = 1'

NOTE: EXTERIOR TRIM ("T" & "E") TO BE REDWOOD GRADE OR BETTER, BASE AND INTERIOR AS PER SPECIFICATIONS.

DOOR SCHEDULE

SCALE: ¼" = 1'-0"

DOOR NUMBER	TYPE	MATERIAL	WIDTH	THICKNESS	HEIGHT	REMARKS
1	D	SOLID CORE	3'-0"	1¾"	7'-0"	WEATHER STRIPPING
2	E	HOLLOW CORE	2'-6"	1¾"	6'-8"	FORMICA FACING BOTH SIDES
3	A	DO.	2'-6"	1¾"	6'-8"	BOTH SIDES PLATE & KICK PLATE
4	B	SOLID CORE	3'-0"	1¾"	6'-8"	LOUVERED (8"x36") W/SOLID DOOR OPEN AREA
5	B	HOLLOW CORE	2'-6"	1¾"	6'-8"	
6	A	DO.	2'-6"	1¾"	6'-8"	
7	A	DO.	2'-6"	1¾"	6'-8"	
8	—	OMIT				
9	B	HOLLOW CORE	2'-6"	1¾"	6'-8"	WEATHER STRIPPING
10	D	SOLID CORE	3'-0"	1¾"	7'-0"	WEATHER STRIPPING
11	A	HOLLOW CORE	2'-6"	1¾"	6'-8"	CLOSURE (8"x45"W/ SOLID OPEN AREA)
12	A	DO.	2'-6"	1¾"	6'-8"	
13	E	SOLID CORE	3'-0"	1¾"	7'-0"	WEATHER STRIPPING
14	—	OMIT				
15	A	SOLID CORE	3'-0"	1¾"	6'-8"	
16	A	SOLID CORE	2'-2"-6"	1¾"	7'-0"	WEATHER STRIPPING
17	A	SOLID CORE	2'-2"-6"	1¾"	6'-8"	
18	A	SOLID CORE	2'-2"-6"	1¾"	6'-8"	
19	A	SOLID CORE	2'-8"	1¾"	6'-8"	
20	C	HOLLOW CORE	2'-8"	1¾"	6'-8"	
21	A	SOLID CORE	2'-8"	1¾"	6'-8"	
22						
23						
24						
25						
26						
27						
28						
29						
30						

ROOM SCHEDULE

ROOM NUMBER	NAME	FLOOR: CONCRETE	FLOOR: VINYL-ASBESTOS	FLOOR: CARPET	FLOOR: CERAMIC TILE	BASE: WOOD	BASE: CERAMIC TILE	BASE: RUBBER	WAINSCOT: V.W.C.	WAINSCOT: F.R.P.	WAINSCOT: CERAMIC TILE	WALLS: PLYWOOD	WALLS: GYPSUM BOARD	CEILING: ACOUSTICAL TILE	CEILING: WOOD	CEILING HEIGHT
101	WATCH OFFICE		○			○		○					2●F		○	SEE d-1
102	STUDY		○			○		○					2●F		○	
103	OFFICER'S ROOM		○			○		○					2●F		○	
104	PASSAGE		○			○		○					2●F		○	SEE d-1
105	JANITOR'S CLO.	○				○		○					2●S		○	T-6" CEILING HEIGHT
106	OFFICER'S BATH		○			○	○	○					2●S		○	
107	RECREATION & DINING		○		○			○					2●F		○	
108	KITCHEN		○			○		○					2●F		○	
109	PASSAGE		○			○		○					2●F		○	T-6" CEILING HEIGHT
110	LOCKER ROOM		○			○		○					2●S		○	
111	WASH ROOM		○		○		○	○		○			2●S		○	T-6" CEILING HEIGHT
112	SHOWER ROOM		○		○		○	○		○			2●S		○	T-6" CEILING HEIGHT
113	DRYING ROOM		○		○		○	○		○			2●S		○	CEILING HEIGHT SEE NOTE d-1
114	DORMITORY		○			○		○					2●F		○	
115	HOSE DRYING TOWER	○							2●F				2●S		○	
116	OMIT															
117	EQUIPMENT ROOM	○				○		○					2●S		○	
118	APPARATUS ROOM	○				○		○	2●F				2●F		○	
119	HEATER ROOM	○				○		○					2●S		○	SEE NOTE 8-AS

ROOM NUMBER	NAME	REMARKS
101	WATCH OFFICE	WEST WALL PLYWD. EXTOSED - FLOOR COLORED CONC. SEE BASE DET.1/A6
102	STUDY	
103	OFFICER'S ROOM	
104	PASSAGE	
105	JANITOR'S CLO.	
106	OFFICER'S BATH	
107	RECREATION & DINING	
108	KITCHEN	
109	PASSAGE	
110	LOCKER ROOM	
111	WASH ROOM	
112	SHOWER ROOM	
113	DRYING ROOM	
114	DORMITORY	
115	HOSE DRYING TOWER	
116	OMIT	
117	EQUIPMENT ROOM	
118	APPARATUS ROOM	
119	HEATER ROOM	

NOTES: d-1 : VA. TILE TO END DUDER DOOR W/ VINYL EDGE STRIP.

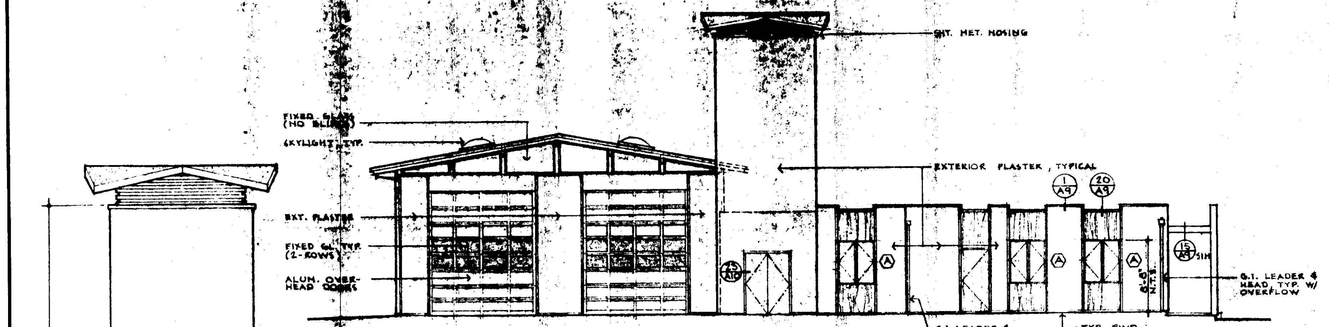
○ INDICATES NOT REQUIRED

2 ● 3 INDICATES PAINT OR STAIN SYSTEM

S SEALER, WHERE NECESSARY

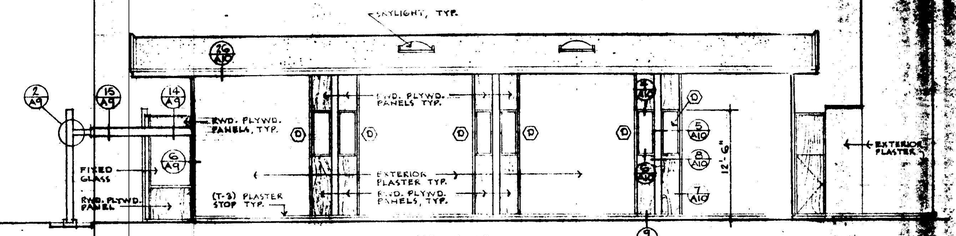
F FILLER, WHERE NECESSARY

SEE d-2 FOR ADDITIONAL ELEVATIONS & DETAILS

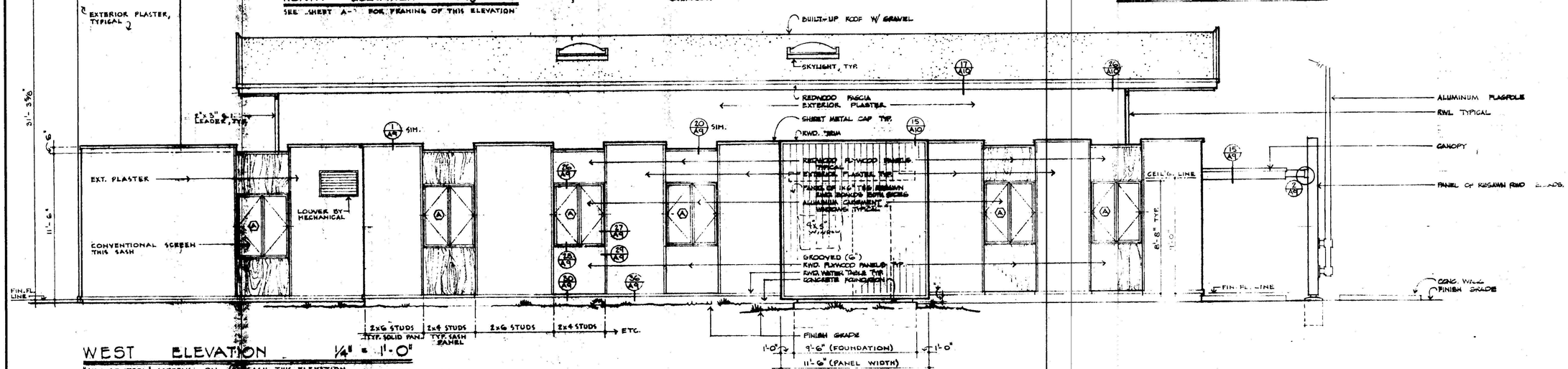


NORTH ELEVATION 1/8" = 1'-0"

SEE SHEET A- FOR FRAMING OF THIS ELEVATION

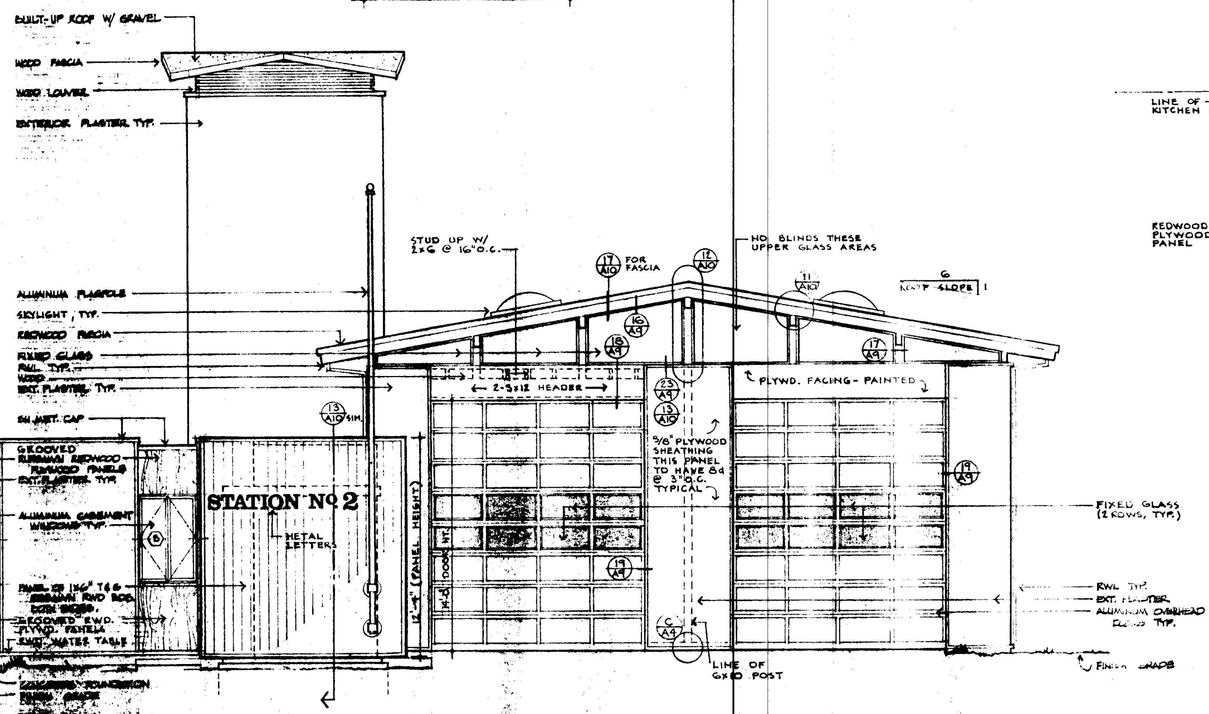


EAST ELEVATION 1/8" = 1'-0"



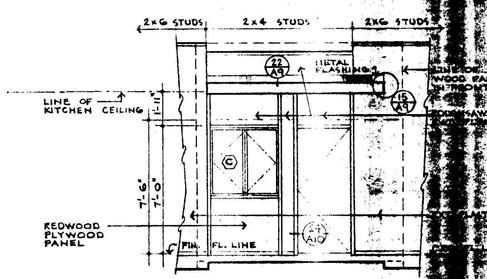
WEST ELEVATION 1/4" = 1'-0"

"SUN CONTROL" SCREENS ON (A) SASH THIS ELEVATION

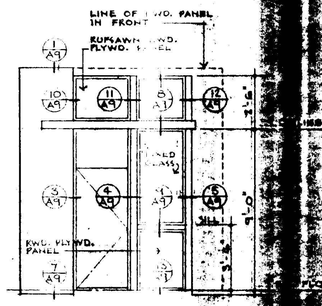


SOUTH ELEVATION 1/4" = 1'-0"

(B) SASH THIS ELEVATION TO HAVE "SUN CONTROL" SCREENS



ELEVATION F SIDE ENTRANCE



MAIN ENTRANCE ELEVATION

CERAMIC TILE TO CEILING & WALLS OF SHOWER

5/8" GYP. BD. OVER 2 x 4 FRAMING, FURR OUT FOR FINISH PLENUM W/ LOCKERS

RECESS

PLASTIC WALL BD.

STEEL LOCKERS

(DESK H.I.C.)

TILE BASE

4" HIGH x 3" TOE SPACE / FINISH W/ RUBBER BASE

ELEVATION OF OFFICER'S BATH (A/A6)

ELEVATION OF OFFICER'S LOCKERS (B/A6)

SCALE • 1/4" = 1'-0"

2x6 STUD GYP. BD. PARTITION

APPARATUS RM.

WOOD BASE PAINTED

CHAMFER

CONC. CURB PAINTED

1x3 WD. NAILER CONT.

RUBBER BASE WHERE SHOWN ON SCHEDULE

CONC. BASE (1/A6)

EXTERIOR PLASTER

2x6 KICK PLATE TO BLOCK W/ 1/2" ø A.B. @ 6'-0" O.C. TYP.

SCALE • 1 1/2" = 1'-0"

MIRROR

14 GA. STAINLESS STEEL SHELF

COUNTER-SINK R.H.W.S. 8" O.C. MAX. INTO SOLID BLOCKING

WALL LINE

STAINLESS STEEL SHELF (B/A6)

SCALE • 3" = 1'-0"

NOTE: SHELF LENGTH SAME AS MIRROR WIDTH

GYP. BD. TO UNDER SIDE OF ROOF JOIST

2x4 CEILING JOIST 16" O.C. TYPICAL

FURR OVER LOCKERS TYP.

SEE EXTERIOR ELEVATIONS FOR SASH

GYPSUM BOARD

METAL LOCKERS

RUBBER BASE

LOCKERS TO REST ON 2x WD. BASE (NET 4" HIGH) W/ RUBBER BASE - TYPICAL

SECTION (AA/A6)

SCALE • 1/4" = 1'-0"

SEE SHEET A-11 FOR TOWER DETAILS

EXTERIOR PLYWOOD W/ SPECIAL FINISH

3-2x6 PLATE CONT. TYP.

2x SOLID BLOCKING TYP. AS REQUIRED BY CODE

ACOUSTIC TILE OVER 1x3 FURRING STRIPS, TYP.

GYPSUM BD.

BUILT-IN COUNTER SEE DETAILS THIS SHEET

RUBBER BASE

ACOUSTIC TILE OVER 1x3 FURRING STRIPS

LINE OF CEILING BEYOND

GYP. BD.

STUDY

GYP. BD. TO UNDER SIDE OF ROOF JOIST

JAN. CLO.

SEE FRAMING PLAN FOR LOCATION OF ONE-HOUR FIRE STOP. 2x SOLID BLOCKING W/ 5/8" GYP. BD. TWO SIDES CONTINUOUS

ACOUSTIC TILE OVER 1x3 FURRING STRIPS

HEIGH. LOUVER - NOTE: LOCATE AS CLOSE TO CEILING AS POSSIBLE

BUILT-UP ROOF CRICKET

GYP. BD. TO UNDER SIDE OF ROOF RAFTERS

EXTER. PLYWD. SPECIAL FIN.

GYPSUM BD.

2x4 KICK PLATE THIS WALL ONLY - RUBBER BASE TYP. FOR ROOM

WOOD BASE (B-1)

1'-0" x 3'-0" CEILING W/ SCREEN, CASE W/ TX V.G.D.F.

WD. SHELF FROM 2" THICK, VERTICAL GRAIN D.F., STAINED, 15" WIDE WITH COAT HOOKS, @ 12" O.C. BELOW

SECTION (BB/A6)

SCALE • 1/4" = 1'-0"

GYP. BD.

PLASTIC WALL BOARD

METAL TOILET PARTITION

TILE BASE

DRYING AND WASH ROOM (G/A6)

EQ. EQ. EQ. EQ.

WD. CAB. W/ ADJ. SHELVES

1'-0" WIDE PLASTIC COUNTER

FORMICA SPLASH, EDGE & TOP TYP.

DRAWERS

WD. CAB. W/ ADJ. SHELVES

2'-0" 4'-0" 2'-0" 2'-0"

KITCHEN (D/A6)

OPEN

FORMICA SPLASH, EDGE & TOP

SINK

WD. CAB. W/ ADJ. SHELVES

2'-0" 3'-0" 3'-0"

KITCHEN (E/A6)

INTERIOR ROOM ELEVATIONS

SCALE • 1/4" = 1'-0"

MIRROR

SHELF

LAV.

OPEN TO DRYING ROOM

GYPSUM BOARD

PLASTIC WALL BD.

TILE BASE

WASH ROOM (F/A6)

WALL LINE

WD. GATE - FINISH TO MATCH COUNTER

6'-0" INSIDE

FORMICA TOP & EDGES

WD. FORMICA FINISH

DESK BY OTHERS

WATCH OFFICE COUNTER (H/A6)

TILE TO CEILING ALL WALLS OF SHOWER

GYPSUM BD.

PLASTIC WALL BD.

WD. BENCH (17/A6)

TILE BASE

SHOWER & DRYING ROOMS (A/A6)

PLASTIC WALL BOARD WAINSCOT TO BE TRIMED WITH ALUMINUM - TYPICAL CONTRACTOR TO SUBMIT LAYOUT OF JOINTS FOR PLASTIC BD. WAINSCOT FOR ARCHITECTS APPROVAL BEFORE INSTALLATION

STUD LINE

GYP. BD.

METAL TRIM

PLASTIC BD. OVER WATER PROOF PLASTIC

TILE (SEE SCHEDULE)

TILE SILL

TILE SH. PL.

CEMT. SETTING BED - SOLID BLKG. AS REQUIRED

TILE BASE (A/A6)

2-16x4 SPR STUD @ TYP.

WD. CAB. W/ ADJ. SHELVES

FORMICA TOP, SPLASH & EDGE TYP.

WD. CAB. W/ ADJ. SHELVES

RUBBER BASE

PROVIDE SHEET ROCK WELL (PAINTED WHITE) AND CEILING GRILL TYP.

PLASTIC SKY DOME

ATTIC FIRE STOP - SEE FRAMING PLAN FOR LOCATION

METAL FLASHING (22/A6)

GYP. BD. TO UNDER SIDE OF ROOF RAFTERS

GYPSUM BD.

MIRROR W/ 6" STAINLESS STEEL SHELF (2/A6)

PLASTIC FINISH BD.

CER. TILE BASE (4/A6)

OPEN

GYPSUM BD.

RUBBER BASE

WOOD BASE (1/A6)

CERAMIC TILE EDGE TRIM

PLASTIC FINISH BD.

2-16x4 PER STUD

15'-0" TO SEAT OF GLULAM BEAM

SECTION (CC/A6)

SCALE • 1/4" = 1'-0"

NOTE: KITCHEN CABINETS TO HAVE WOOD FRAMES DRAWERS & SHELVES

WOOD PURLINS

GLULAM BEAM (19/A6)

GYPSUM BOARD

GYP. BD. POST

FIXED GLASS

FIXED GLASS

ALUM. OVERHEAD DOOR

FIXED GLASS

FIXED GLASS

ALUM. OVERHEAD DOOR

(24/A6) SIM.

SECTION

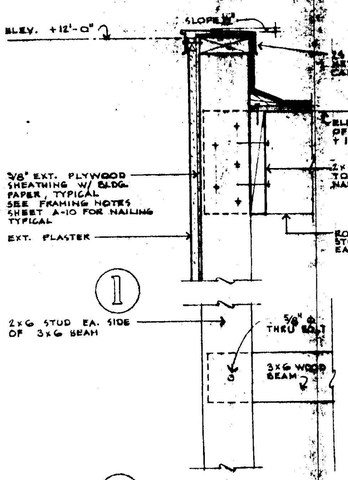
SCALE • 1/4" = 1'-0"

JOB NO. 6-72
DATE 2-73

ASTOUD JAMES & ASSOCIATES

471

SCHOOLS
MILLAS, CALIFORNIA
Scale 1/4" = 1'-0"
Date 8-11-53
Job 3068.
Sheet No. A-9
Millas, California.



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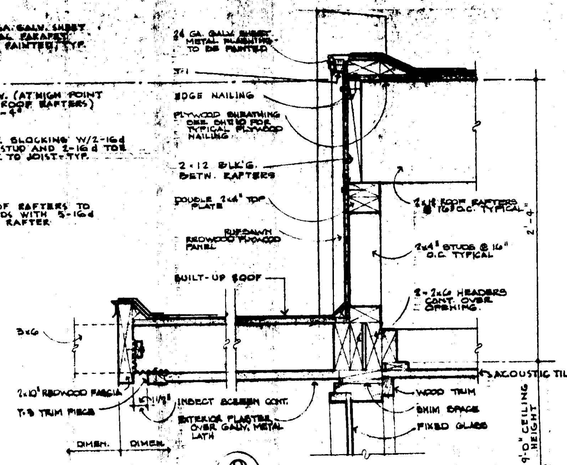

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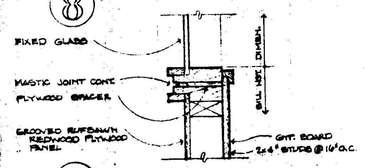

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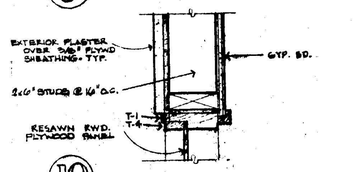

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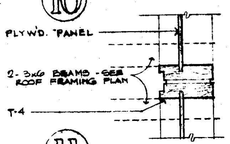

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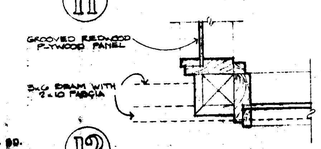

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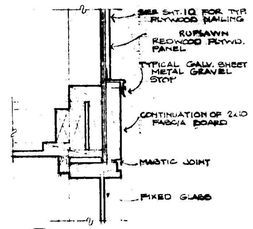

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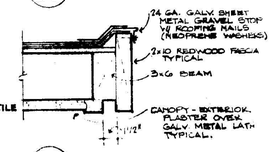

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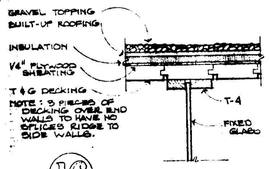

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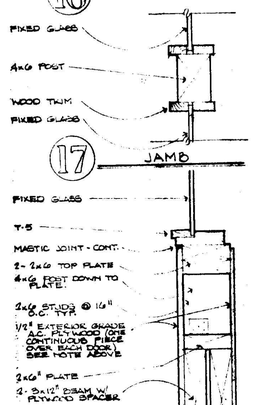

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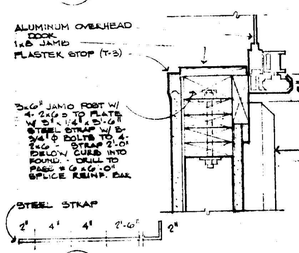
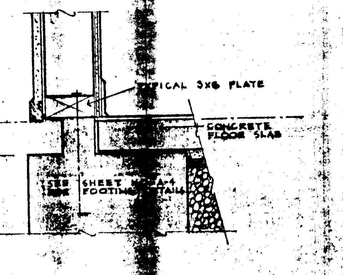


19 ALUM. OVERHEAD DOOR JAMB - TYPICAL



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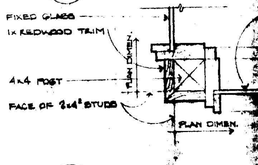
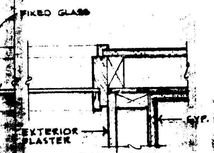
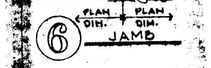


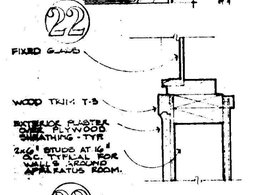
4 JAMB



5 JAMB

6 JAMB





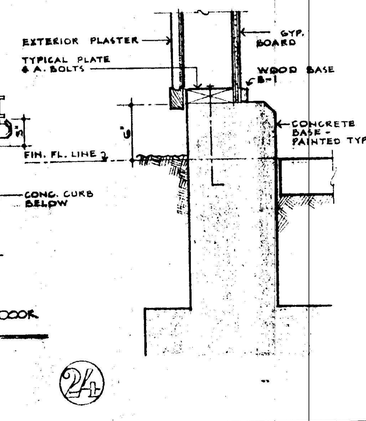
20

NOTE: USE EXPOSED PLYWOOD PAINTED UNDER EAVE OVERHANG WITH SHIP-LAP JOINTS TYPICAL

21

22

23



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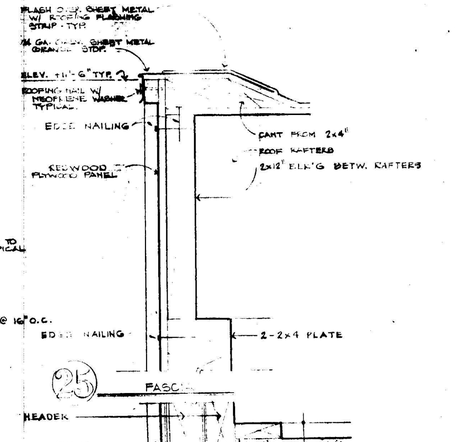

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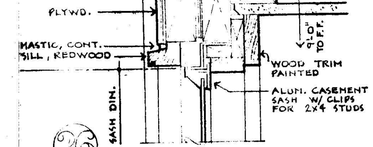
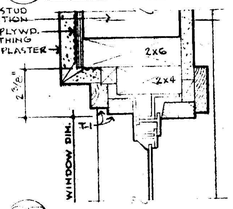
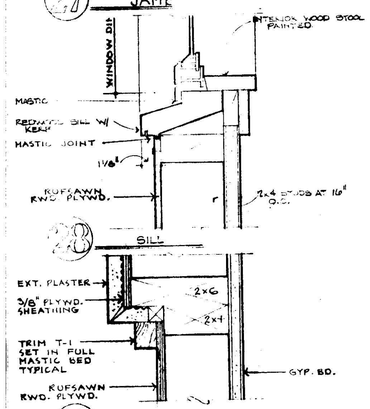


26 HEAD



27 JAMB



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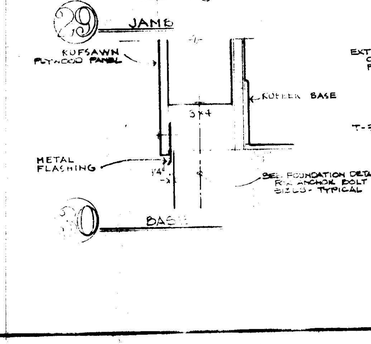
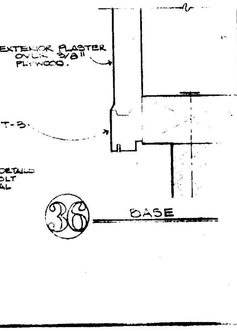


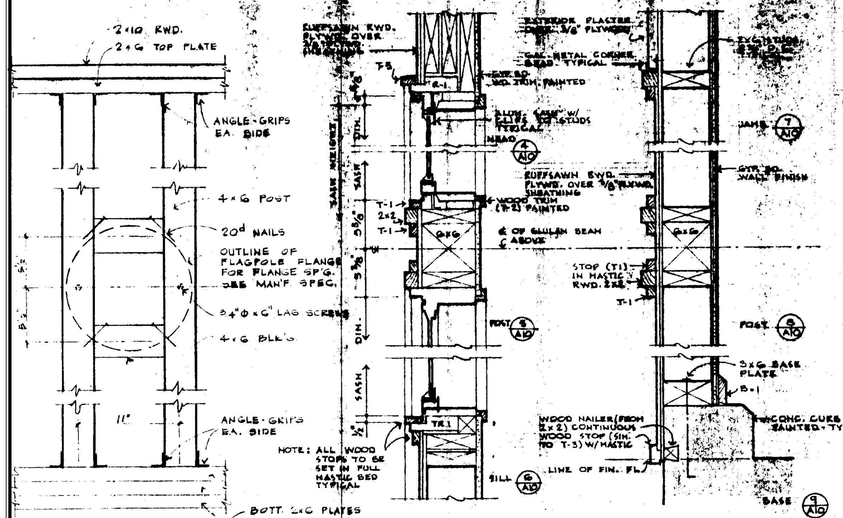
29 JAMB

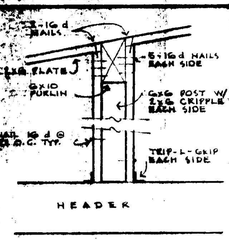
30 BASE

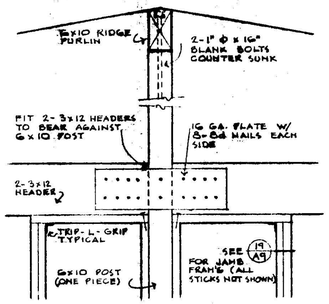
SEE FOUNDATION DETAILS FOR ANCHOR BOLT SPACING - TYPICAL

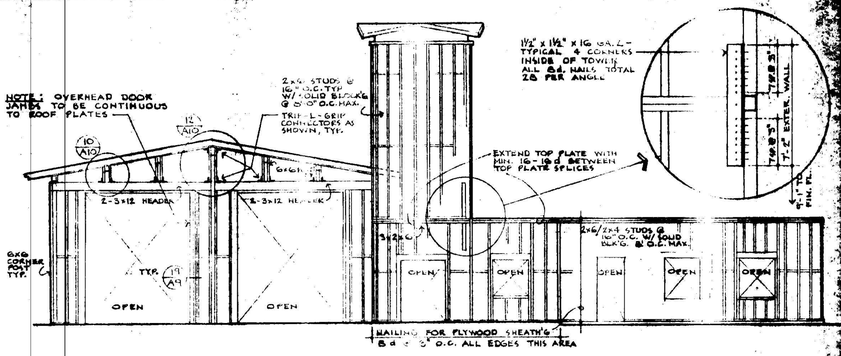


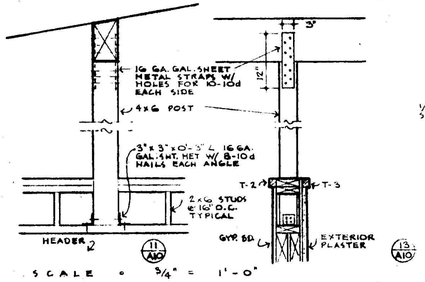
36 BASE

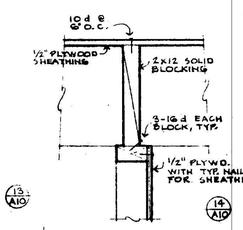


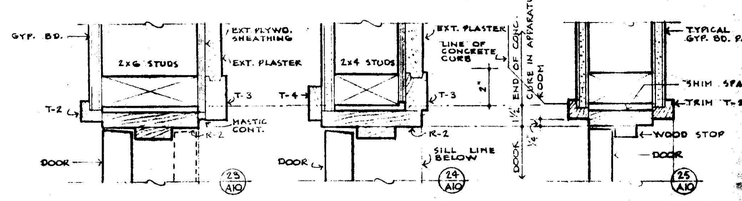


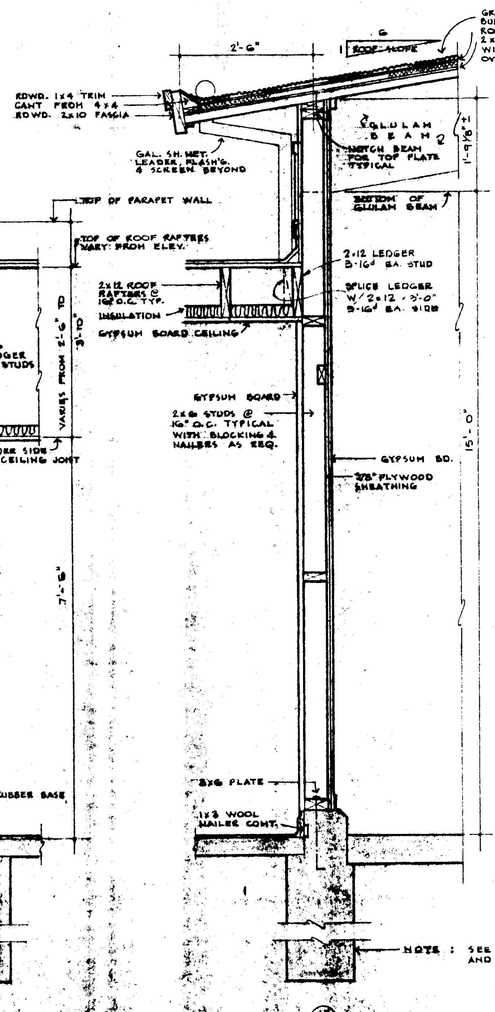


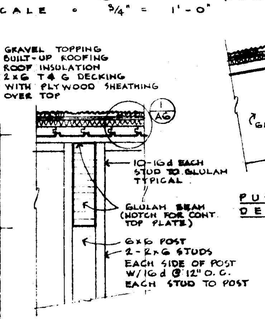








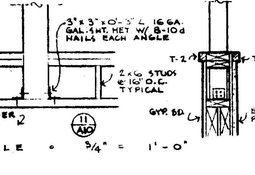




PURLIN TO GLULAM DETAIL

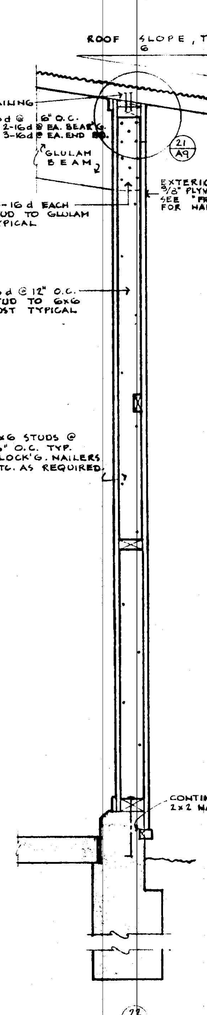
GLULAM TO POST DETAIL

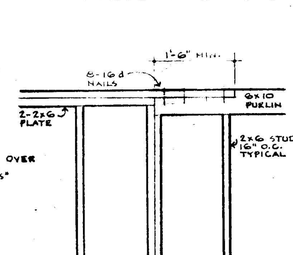
TYPICAL PURLIN HANGER DETAIL
SCALE = 1½" = 1'-0"



TYPICAL 6x6 POST CONNECTION AT BASE

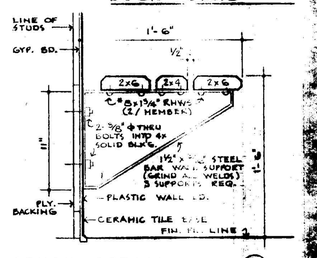
NOTE: SEE A-4 FOR FOOTING DETAILS AND REINFORCING REQUIRED



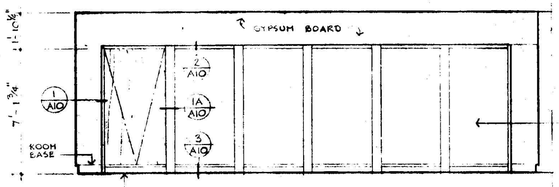


CONSTRUCTION DETAIL

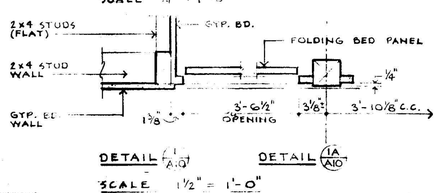
NOTE: NOTCH 9X10 PURLIN FOR ONE 2x6 PLATE AS SHOWN



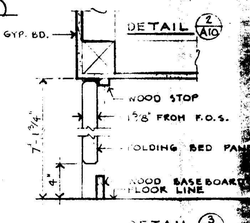
BENCH DETAIL
SCALE = 1½" = 1'-0"



ELEVATION (A) (FOLDING BED WALL)
SCALE ½" = 1'-0"



DETAIL (1) DETAIL (1A)
SCALE 1½" = 1'-0"



DETAIL (3)

FRAMING NOTES:

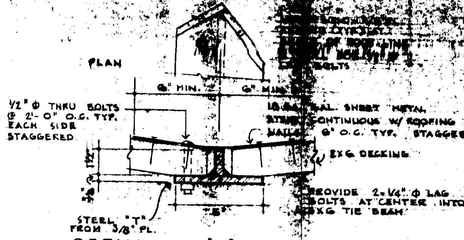
FLYWOOD NAILING

¼" - 6d @ 6" O.C. ALL EDGES (SHORT 6d MAY BE USED) 12" O.C. INTERMEDIATE SUPPORTS

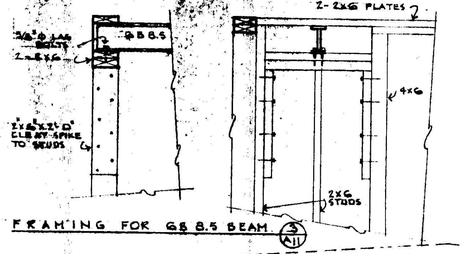
⅜" - 8d @ 6" O.C. ALL EDGES (UNLESS SHOWN OTHERWISE) 8d @ 12" O.C. INTERM. SUPP.

½" - 10d @ 6" O.C. ALL EDGES; 12" O.C. INTER.

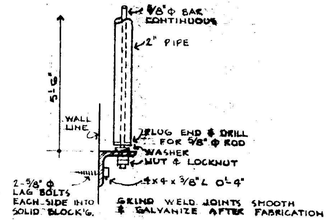
METAL CONNECTORS: ALL METAL CONNECTORS SHT. MET. STRAPS ANGLES, ETC. TO BE GAL./PAINTED.



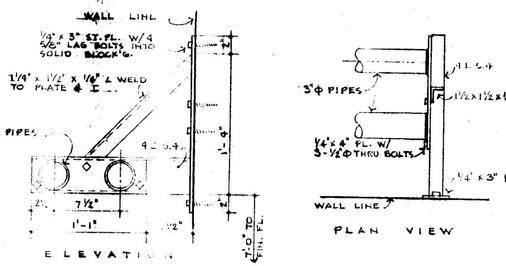
DETAIL OF "T" SUPPORT
SCALE 3" = 1'-0" (1/A11)



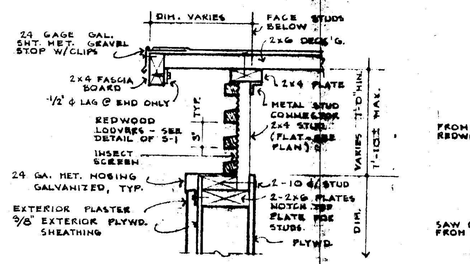
FRAMING FOR GS B.S BEAM (3/A11)



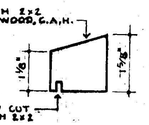
DETAIL OF HOSE ROLLER
SCALE 1½" = 1'-0" (4/A11)



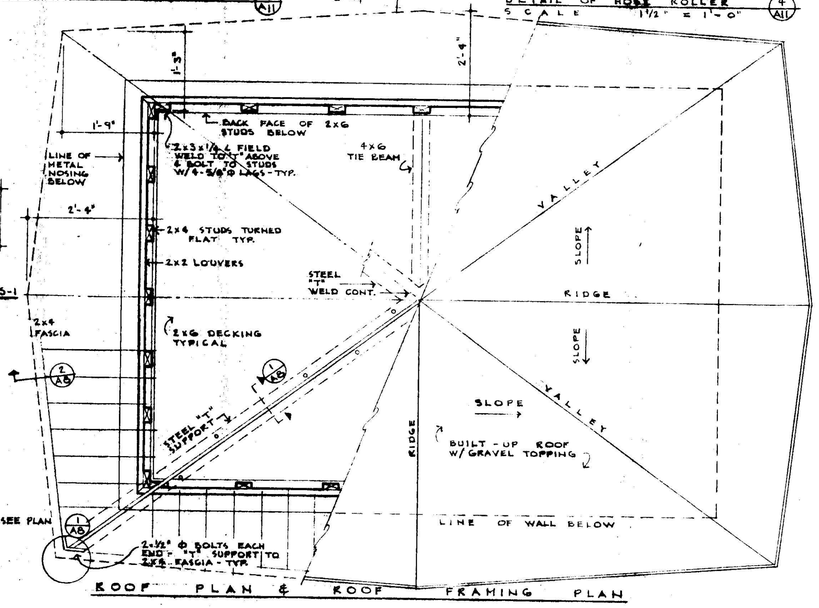
DETAIL OF TARP DRYING RACK
SCALE .0 1½" = 1'-0" (5/A11)



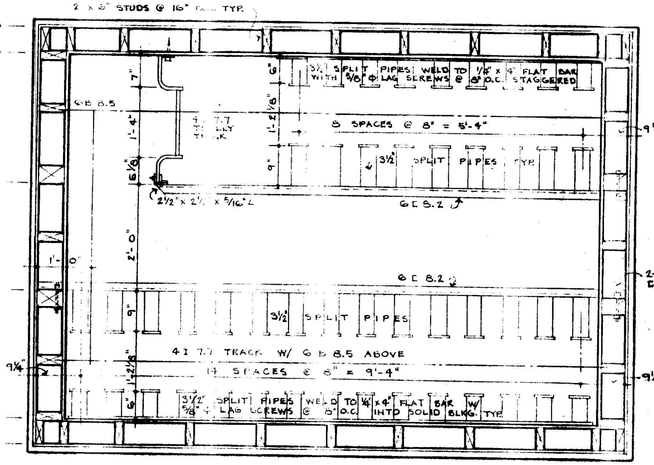
TYPICAL DETAIL OF LOUVER & FASCIA
SCALE 1½" = 1'-0" (2/A11)



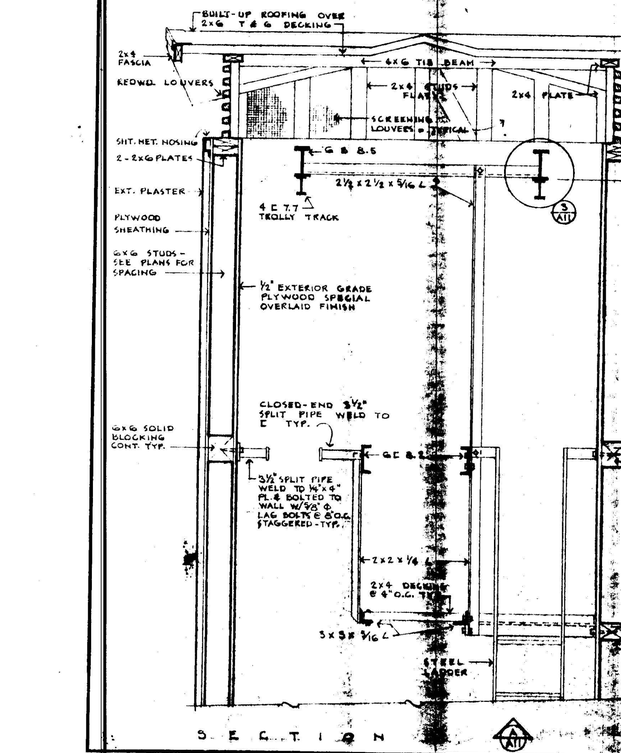
DETAIL OF S-1



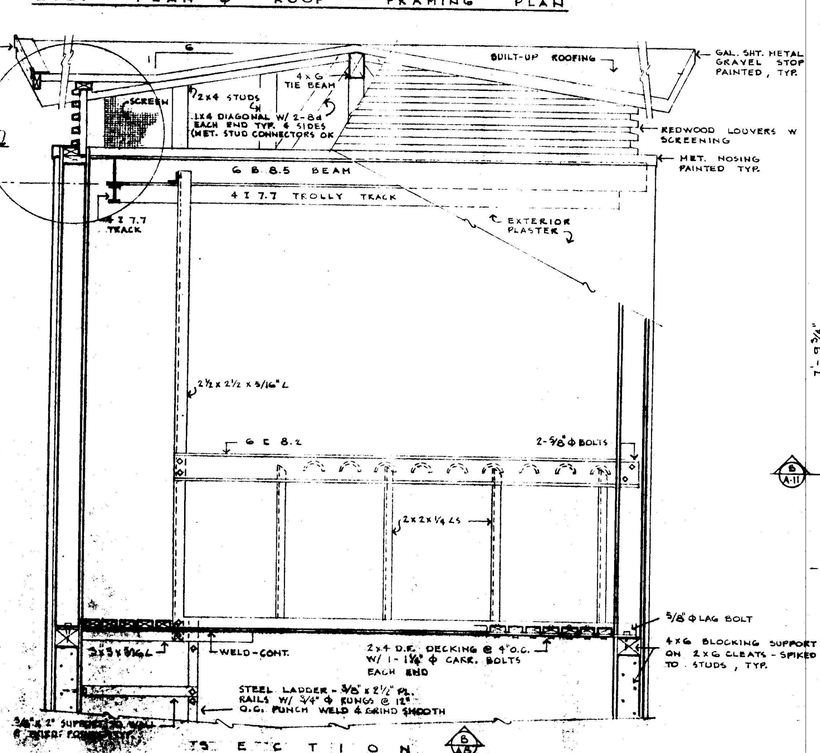
ROOF PLAN & ROOF FRAMING PLAN



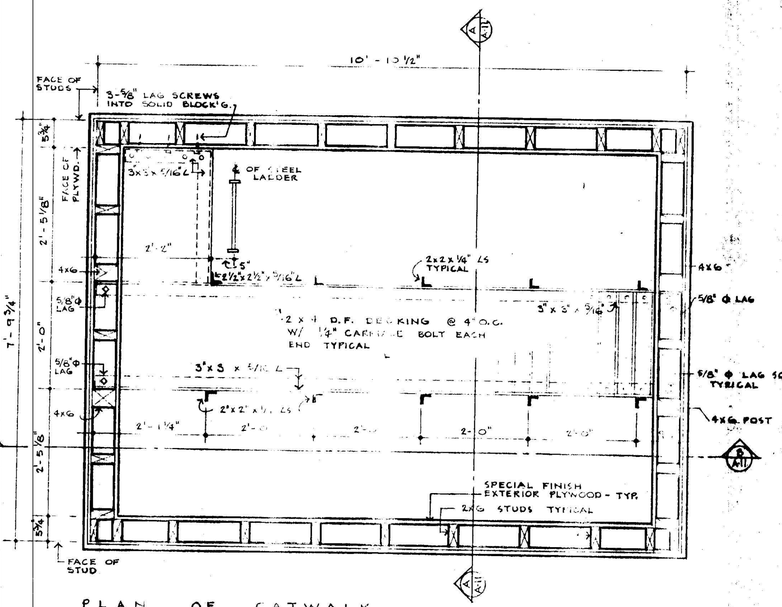
PLAN AT HOSE RACK



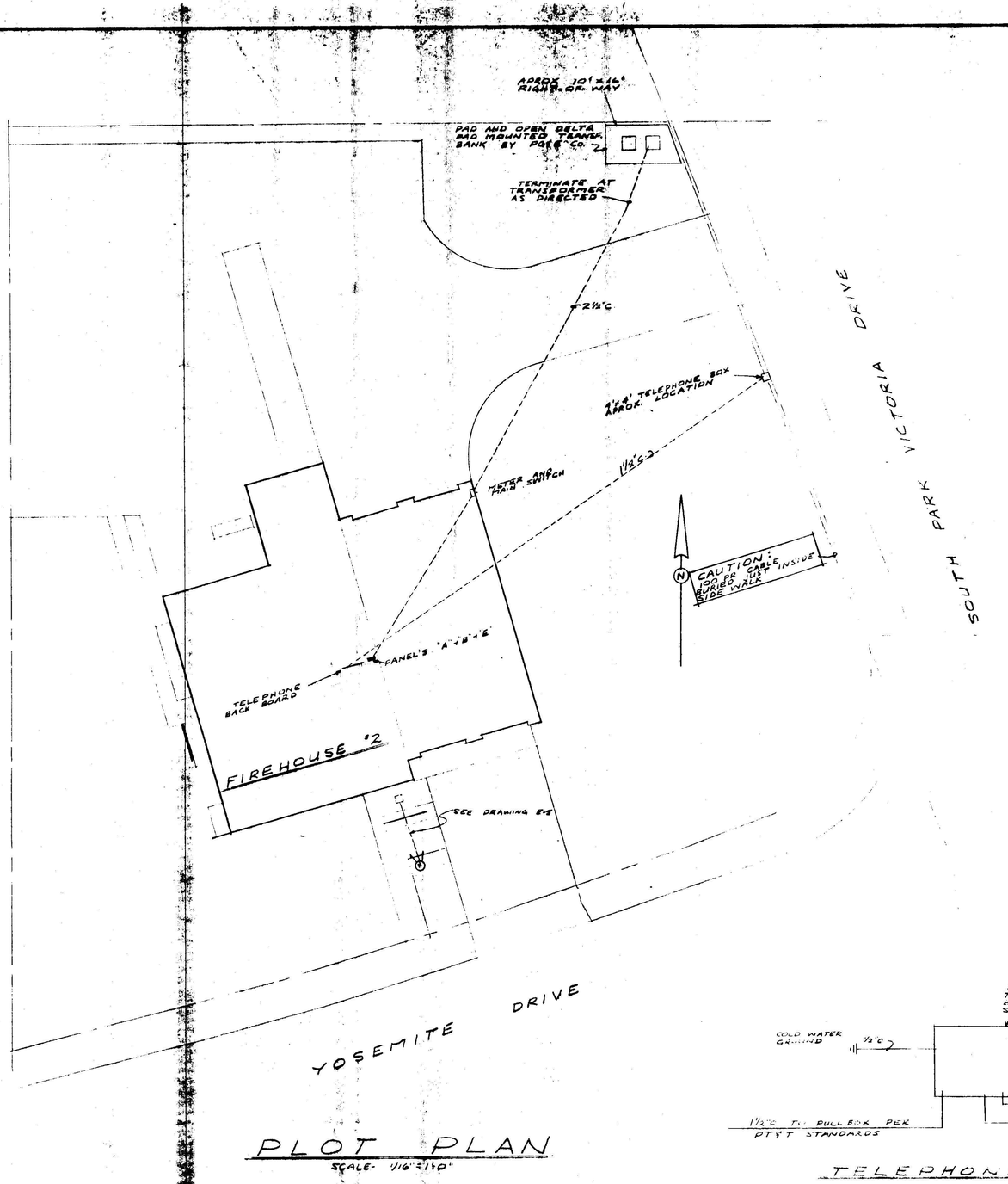
SECTION (4/A11)



SECTION (5/A11)

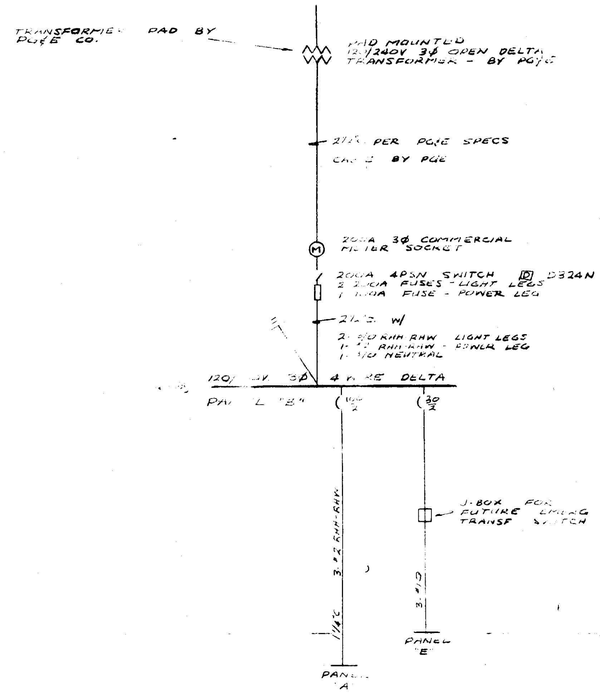


PLAN OF CATWALK
SCALE ⅜" = 1'-0" (6/A11)



PLOT PLAN

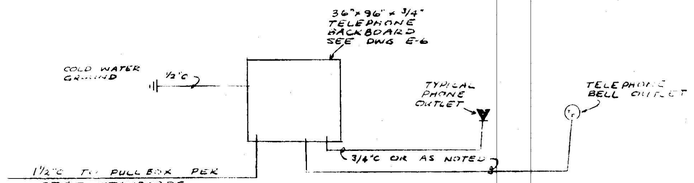
SCALE- 1/16"=1'0"



FEEDER DIAGRAM

LOAD SUMMARY

LIGHTS	12.5 KW
RECPTS	7.5 KW
COOKING	8 KW
1ϕ MOTORS	2 HP
1ϕ TOTAL	30 KVA
AT 240 V =	125 AMPS
3Ø AIR COND	26 AMPS
TOTAL	151 AMPS



TELEPHONE DIAGRAM

HEDLEY & ARMS CONSULTING ELECTRICAL ENGINEERS
SAN FRANCISCO, CALIFORNIA

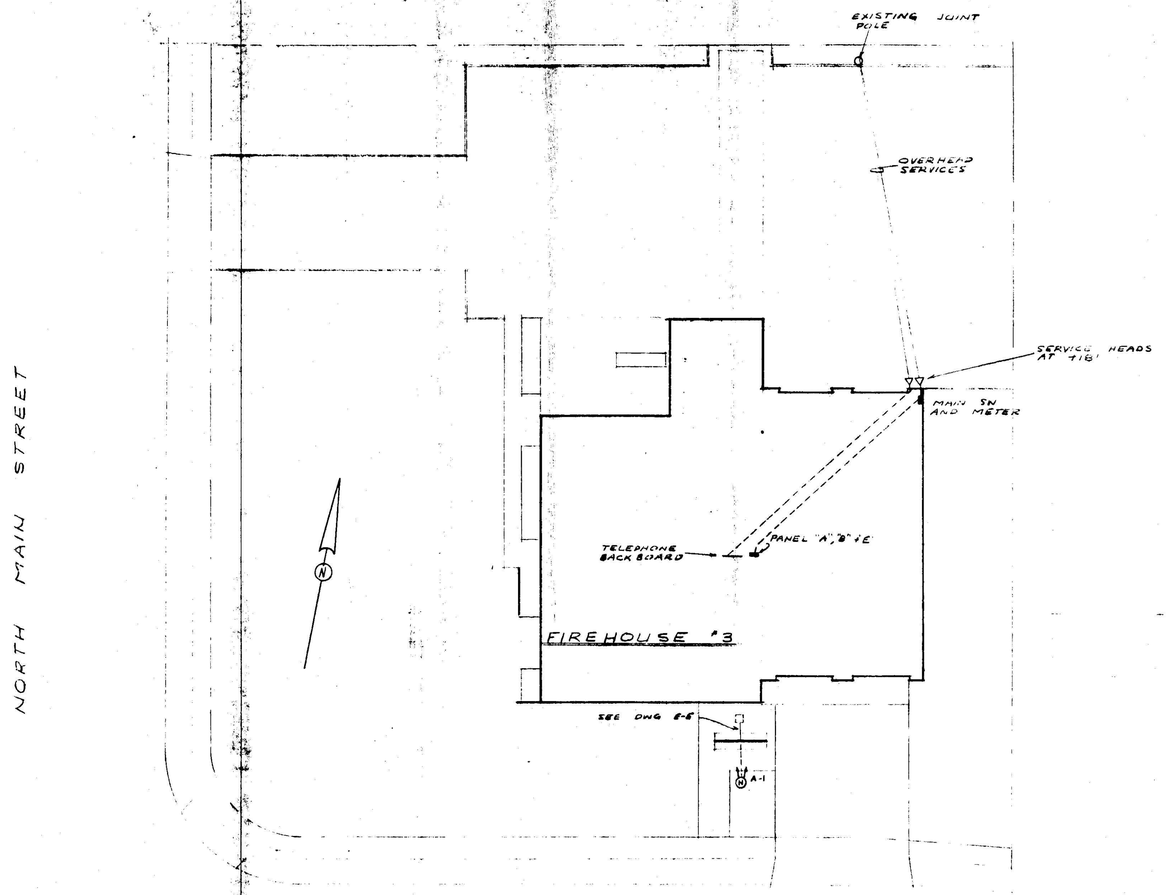
JOB NO. 67-04

APPROVED

ELECTRICAL PLOT PLAN FOR FIRE HOUSE #2 FOR THE CITY OF MODESTO, CALIFORNIA

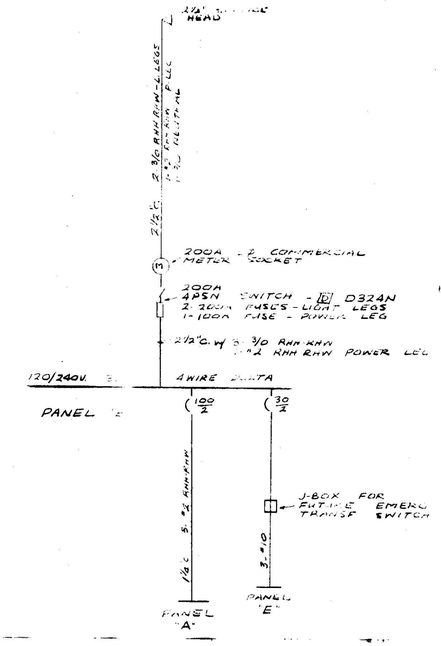
SHEET NO. E-1

475



PLOT PLAN

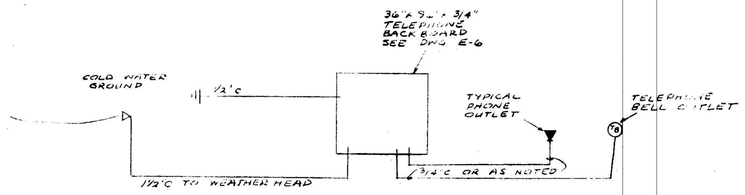
SCALE - 1/16" = 1'-0"



FEEDER DIAGRAM

LOAD SUMMARY

LIGHTS	12.5 KW
RECPTS	7.5 KW
COOKING	8 KW
3ϕ MOTORS	2 HP
1ϕ TOTAL	30 KVA
AT 240V	= 125 AMPS
3ϕ A/C COND	26 AMPS
TOTAL	151 AMPS



TELEPHONE DIAGRAM

REVISIONS

DRAWN BY

CHECKED

ENGINEERS

ROBERT JAMES & ASSOCIATES
CONSULTING ELECTRICAL ENGINEERS
San Jose, California

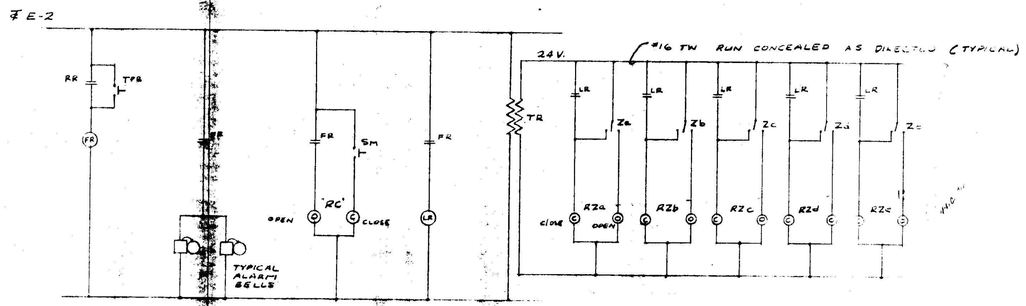
ELECTRICAL
FOR
MUNICIPAL GAS, CALIFORNIA

SHEET NO. E-2

FIXTURE SCHEDULE

TYPE	ARRGT QUAN (EACH BLDG)	DESCRIPTION	CATALOG NUMBER	LAMPS
A	19	96" LONG, 2 TUBE STRIP W/ 6" LAMP CENTERS	WELLMADE #208-296	2-F96T12/CW
B	11	96" LONG, 2 TUBE, SIDE-RETAINED, WRAPAROUND W/ ACRYLIC LENS	BENJAMIN #CD-2224-8	4-F40/CW
C	5	48" LONG, 2 TUBE, SIDE-RETAINED, WRAPAROUND W/ ACRYLIC LENS	BENJAMIN #CD-2224-4	2-F40/CW
D	5	24"x48", 4 TUBE WRAPAROUND, W/ ACRYLIC LENS	WELLMADE #130 3DA-448RS	4-F40/CW
E	1	12" DIA. DRUM	PRESCOLITE #7B12	4-60W
F	1	RECESSED SHOWER LIGHT W/ OVAL DIFFUSER	PRESCOLITE #90HF-3 W/ NEOPRENE TRIM GASKETS	100W
F1	1	SIMILAR TO "F" BUT SMALLER	PRESCOLITE #60HF-3 W/ NEOPRENE TRIM GASKETS	75W
G	1	MIRROR BRACKET	PRESCOLITE #WB-19	2-100W
H	2	VAPOR-PROOF INCANDESCENT W/ ANGLE-BODY, GLOBE, AND GUARD	BENJAMIN #7118	100W
K	2	KEYLESS SOCKET	BRYANT #5228	100W
L	1	14" DIA. RLM	BENJAMIN #9642	150W
M	2	RECESSED SQUARE W/ STRAIGHT SIDED DROP OPAL	PRESCOLITE #1015HP-3	150W
N	1	2 BULLET SPOTS MTD ON CAST BOX SET IN 12"x12"x12" CONCRETE PAD	2-SWIVELIER 10200 BK ON STEBER S-365 BOX	2-150 PAR/SP
P	4	WALL BRACKET W/ BRONZOTIC FINISH	PRESCOLITE #WB-28 W/ BRONZOTIC FINISH	200W
Q	1	DOUBLE WALL BRACKET W/ BRONZOTIC FINISH MOUNT VERTICALLY	PRESCOLITE #WB-28-2 W/ BRONZOTIC FINISH	2-200W
Q1	1	SAME AS "Q" W/ RED BULB IN TOP	PRESCOLITE WB-28-2 W/ BRONZOTIC FINISH	1-200W 1-150W RED
S	8	48" LONG 4 TUBE SIDE RETAINED, WRAPAROUND W/ ACRYLIC LENS.	BENJAMIN #CD-7244-4	4-F40/CW
T	10	LOW VOLTAGE BED LAMP W/ SWITCH, MOUNT OVER FLUSH 4" BOX W/ PLASTER RING AT +48"	HADCO #3220-SW	12V 7W-BPK

1. SWITCH INNER AND OUTER TUBES SEPERATELY OF FIXTURES "D" AND "S" FOR TWO LEVEL ILLUMINATION.



FIRE ALARM RELAY SYSTEM DIAGRAM

"RR"	RADIO FIRE ALARM CONTACT - SEE DRAWING #E-6
"TPB"	TEST PUSH BUTTON
"FR"	ALARM RELAY - 3 POLE, 120V. SEE DRAWING #E-6
"RC"	RANGE CONTACTOR - MECH. HELD SEE DRAWING E-4 -
"SM"	RESET SWITCH. LOCATE BESIDE RANGE
"LR"	LIGHTING RELAY - 6 POLE (1 SPARE) [D] 8501-GO-60 MOUNT AT "CB"
"TR"	TRANSFORMER - 24V., UL LISTED CLASS II GE #RT-1
"Za TO Ze"	LOW VOLTAGE SWITCH - GE #RCS2
"RZa TO RZe"	LOW VOLTAGE RELAY GE #RR-7 IN #RBS3 CABINET

LEGEND

	FLUORESCENT FIXTURE
○	SURFACE INCANDESCENT FIXTURE
□	RECESSED INCANDESCENT FIXTURE
○H	BRACKET FIXTURE
S	SINGLE POLE SWITCH, 15A, BRYANT #4901-W, +52" UNLESS NOTED.
S3	3 WAY SWITCH, 15A, BRYANT #4903-W, +52" UNLESS NOTED.
(P)	PHOTO CELL 2000W., MOUNTED ON ROOF, BRYANT #7680
Z	LOW-VOLTAGE SWITCH, +52", SEE WIRING DIAGRAMS
⊖	DUPLEX RECEPTACLE 15A, BRYANT, 5252-W, +12" UNLESS NOTED.
WP ⊖	WEATHER-PROOF DUPLEX RECEPTACLE PASS & SEYMOUR #6207 W/ #4500 COVER, MOUNT +30" UNLESS NOTED.
⊖	30 AMP RANGE RECEPTACLE, BRYANT #3946
⊖	HEAVY-DUTY SPECIAL GRADE - W/ 3 WIRE GROUNDING CONNECTOR OUTLET BOX MOUNTING, ADJUSTABLE CABLE STUD, AND ORANGE INSPECTION BODY - EQUAL TO "2001-G" W/ BRYANT #5209 COVER BODY.
J	JUNCTION BOX PROVIDE FLEX OR RECEPTACLE AS REQUIRED TO HOOK UP EQUIPMENT AS DIRECTED.
⊗	EXHAUST FAN MOUNTING
□	DISCONNECT SWITCH
⊖	15A 125V, GROUNDING TWIST-TYPE LOCKING RECEPTACLE BRYANT #4700, PROVIDE 2- BRYANT 4721-N PLUGS.
SM	SPDT MOMENTARY CONTACT SWITCH - BRYANT #4821
	SPST
	RIGID STEEL OR PVC CONDUIT ALL STEEL IN DIRECT CONTACT WITH EARTH SHALL HAVE HALF-LAP WRAPPING OF #50 SOUTHWRAP

CHECKED
APPROVED

HEDLEY & JAMES
ARCHITECTS
San Jose, California

ELEMENTARY SCHOOL NO. 4
MILPITAS, CALIFORNIA

SHEET NO. 10 OF 10 SHEETS

KITCHEN

RECREATION AND DINING ROOM

MECH. RM.

FURNACE

LOCKER ROOM

PASSAGE

FUTURE DORMITORY

WASH ROOM

DRYING ROOM

SHOWER

DORMITORY

OFFICERS ROOM

WATCH OFFICE

STUDY

JANITOR ROOM

APPARATUS ROOM

EQUIPMENT ROOM

EQUIPMENT

HOOD LITE

2-SPEED HOOD FAN

FUTURE COOK TOP

2 SPEED FAN SWITCH - PROVIDED BY OTHERS

AC UNIT ON ROOF

UNIT HEATER F-2

UNIT HEATER F-3

RUN CONTINUOUSLY

CONTACTORS
LV RELAYS
PANELS "A" "B" "E"

DOOR BELL BUZZERS SEE DIAGRAM

DOOR BELL PUSHBUTTON

REEL DRUM CORD FOR BATTERY CHARGER

LOCATION METER AND MAIN SWITCH

EXHAUST FAN

+36" ABOVE DESK 35"±

+15" ABOVE DESK 35"±

WP

POWER PLAN - SCALE - 1/4" = 1'-0"

120V.

TRANSFORMER EDWARDS 599 30VA MOUNT NEXT TO PANEL

PUSH BUTTON EDWARDS 702

DOOR BELL BUZZERS EDWARDS - 115 AT 24V AC

DOOR BELL DIAGRAM

WIRING - #14 TW CONCEALED IN STRUCTURE

RECEPT
CONTROL
RECEPT
SPARE
RECEPT
SPARE

PANEL "E"

QO6, 5

BATTERY CHARGER REEL
SPARE
RECEPTACLE
RANGE 50
FUTURE COOK TOP 40
SPARE
SPARE
SPARE
SPARE
SPARE
SPARE
FURNACE
266 AMP UNIT
EXHAUST FAN
UNIT HEATER
UNIT HEATER
PANEL "A"
PANEL "E"
SPARE
SPARE

PANEL "E"

QO 42 - SURFACE

FED FROM SERVICE BY: PG-12 - SEE RELAY DIAGRAM ... MECHANICAL DRAWING E-3

CHECKED

FOR CONSTRUCTION

CITY OF SAN JOSE, CALIFORNIA

WILLIAM H. WEEKS, City Architect

San Jose, California

NO.

REGISTERED PROFESSIONAL ENGINEER
No. 2[illegible]
7/[illegible]
ELECTRICAL
STATE OF CALIFORNIA

478

RECREATION + DINING ROOM

KITCHEN

MECH ROOM

LOCKER ROOM

NOTE: SWITCH INNER AND OUTER TUBES SEPARATELY TO GIVE TWO LEVEL ILLUM.

40 BOXES 2 GANG 2 EXTRA RING 1" BLANK PLATE FOR FUTURE "T" FIXTURES

+9'-0"

A-10,12

WASH ROOM

SHOWER

DORMITORY

OFFICERS ROOM

WATCH OFFICE

JANITOR ROOM

STUDY

CONTACTORS
RELAYS
PANELS "A", "B", "E"

A-8 VIA RELAYS "D+E"

A-14,16

A-5 VIA TRANSFORMER

A-6 VIA RELAY "C"

A-18

A-3

EQUIPMENT ROOM

+9'-0" NL

+10'-0"

A-1

SWITCH INNER AND OUTER TUBES SEPARATELY

ON RELIEF

DOWN WALL

A-2,4 VIA RELAYS "B + E"

SKY LITE

APPARATUS ROOM

+10'-0" NL

"ZE" RELAYS SEE DWG. E-3

NITE LITES
SWITCHED 12V

SPARE

SPACE

APPARATUS RM.
DORM. LTS
CORRIDOR LTS
OFFICES LTS
LOUNGE + LOCKER
OFFICE + BATH LTS
EQUIPMENT RM. L

PANEL A
(E) 120 3Ø - SURFACE

PC PHOTO CELL - ON ROOF

T 208-120V. TRANSFORMER FOR 240 LAMP ISOLATED + GROUNDED SIDE OF 150 VA CAPACITY NEXT TO PANEL.

LIGHTING PLAN — SCALE 1/4" = 1'-0"

1 - SEE FLOOR PLAN

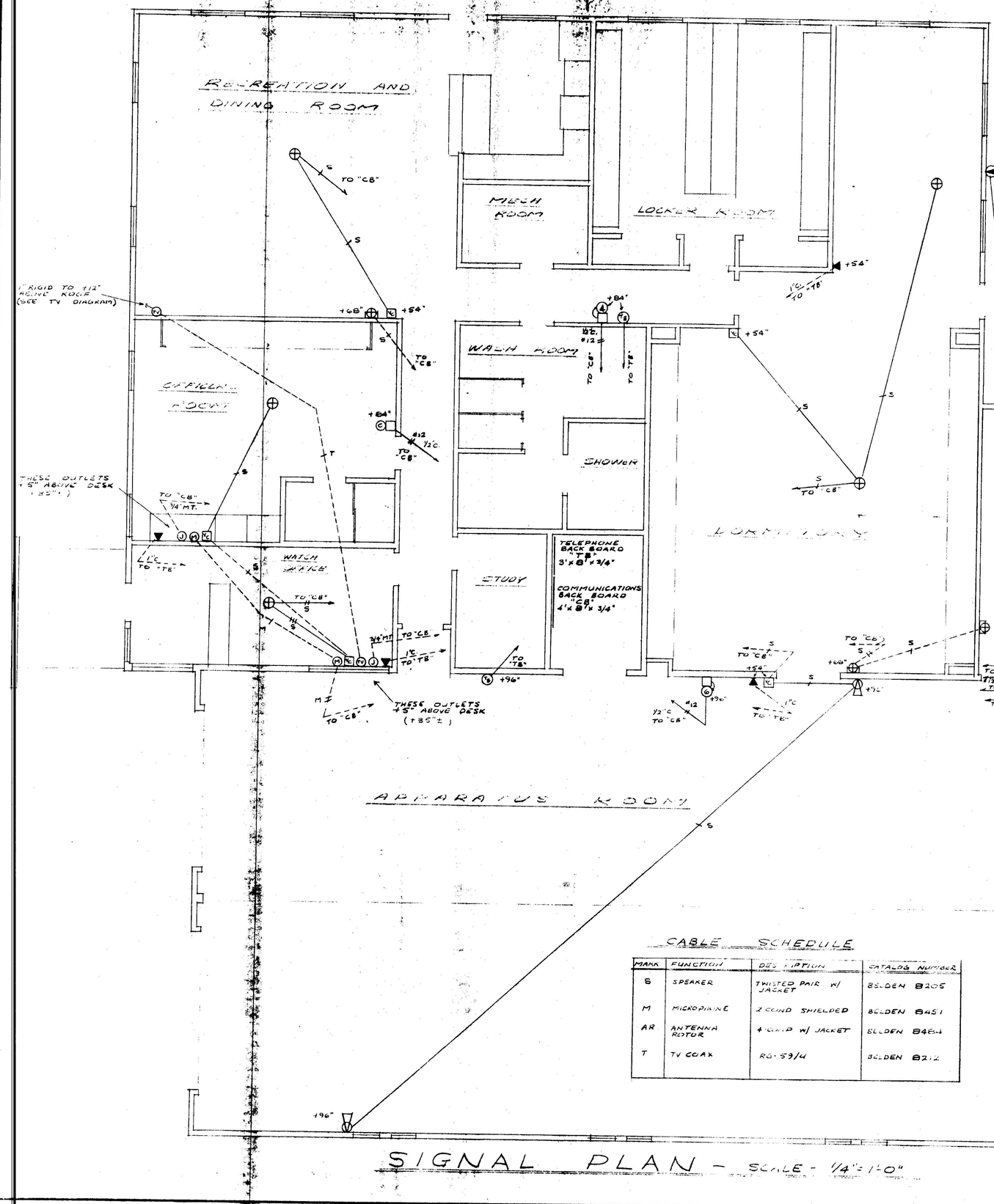
FIRE STATION
CITY OF SAN JOSE

MILLER, ALLEN & ASSOCIATES
ENGINEERS
San Jose, Calif.

DRAWN BY
CHECKED

E-5

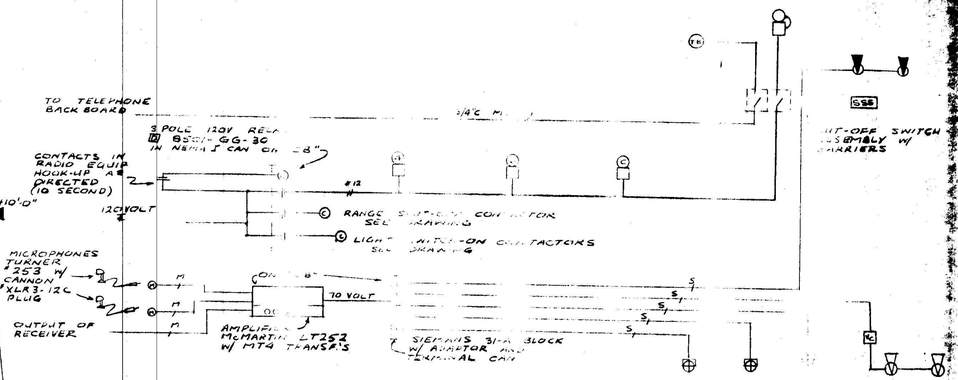
479



CABLE SCHEDULE

MARK	FUNCTION	DESCRIPTION	CATALOG NUMBER
S	SPEAKER	TWISTED PAIR W/ JACKET	BELDEN 8205
M	MICROPHONE	2 COND SHIELDED	BELDEN 8451
AR	ANTENNA ROTOR	4 COND W/ JACKET	BELDEN 8464
T	TV COAX	RG-59/U	BELDEN 8212

SIGNAL PLAN — SCALE - 1/4"=1'0"

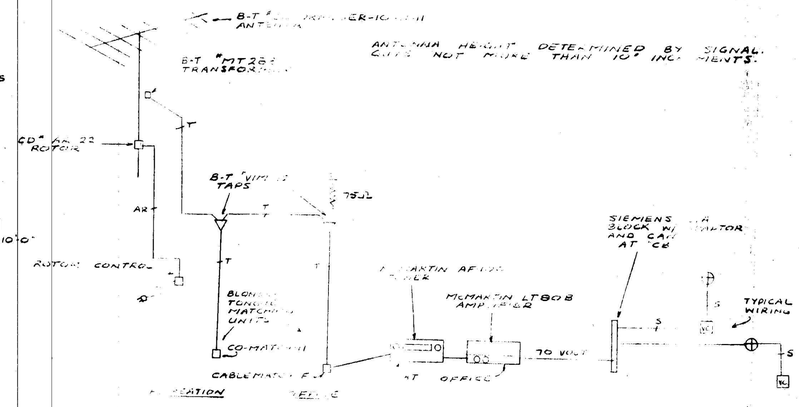


ALARM SYSTEM DIAGRAM

SIGNAL LEGEND

- 6" BELL, 120 VOLT, EDWARDS 3405
- 4" BELL, 120 VOLT, EDWARDS 3405
- EDWARDS 668 FLUSH CASE AND 2 LAMPS 991 FLUSH TRANSFORMER IN 2 GANG BOX W/ SIERRA S-721 PLATE
- WP HORN SPEAKER W/ INTEGRAL TAP TRANSFORMER UNIVERSITY CIRCUIT TAP AT 6.25 WATTS.
- FLUSH WP SPEAKER, UNIVERSITY P-S-8 W/ 5434 TRANSFORMER SET TAP AT 2.5 WATTS. TERMINATES CEILING UNIT W/ 4" SQ BOX.
- FLUSH WALL SPEAKER, MOTOROLA 50-350633 SPEAKER, STANCOR A-8105 TRANSF., CLAROSTAT 8 WATT CONTROL AND ONE "25-05" KNOB. TAP AT 1.25 WATTS.
- VC VOLUME CONTROL — LOWELL #10LC-1
- SSS 3 S.P.S.T. "4701" SWITCHES IN 3 GANG BOX W/ BARRIERS.
- M MIKE RECEPTACLE, CANNON XLR3-12C IN 4" SQ BOX
- TV TELEVISION OUTLET 4⅛" SQ X - SEE TV DIAGRAM
- CEILING SPEAKER - UTAH PA25 W/ STANCOR A-8105 TRANSF. IN LOWELL PB75A BOX W/ R88 GRILL
- PHONE OUTLET, 4" SQ BOX W/ 1 GANG RING AND PLATE
- PB PHONE BELL OUTLET, 4" SQ BOX W/ 1 GANG RING
- J JUNCTION BOX - 4"x1½" DEEP W/ 1 GANG RING + PLATE

ALL CONDUIT FOR [illegible] 3/4" UNLESS NOTED.



MUSIC SYSTEM DIAGRAM

HEDLEY, JAMES & ASSOCIATES
ARCHITECTS
CITY OF MILPITAS, CALIFORNIA
FIRE STATION #1

JOB NO. G7422
DATE
DRAWN
CHECKED
APPROVED

KITCHEN
LOCKER RM
EF-2
8x8 DUCT DOWN TO HOOD & FILTER
FUTURE DORMITORY
RECREATION & DINING RM.
18x18 THRU ROOF
24x24 THRU ROOF
LINEN
LINEN
750CFM (4)
2500CFM (11)
300CFM (2)
1220CFM (5)
300CFM (3)
900CFM (8)
36x6
900CFM (7)
600CFM
FIRE DMPRS. (SEE NOTE 6 ON SHEET M-2) (7)
PASSAGE
WASH ROOM
220CFM (6)
300CFM (2)
OFFICERS ROOM
300CFM (9)
DRYING ROOM
SHOWER
DORMITORY
EF-1
12x12 PLENUM
200CFM (5)
450CFM (7)
WATCH OFFICE
STUDY
200CFM (6)
JANITOR'S CLO.
GAS FIRED UNIT HEATER F-3
APPARATUS ROOM

FLOOR PLAN
SCALE 1/4"=1'-0"

BELMONA TOP WITH METAL ANGLES TO VENT PIPE AND FITTING.
EXISTING MODEL ... 13"x10" COMBUSTION AIR INLET W/BIRDSCREEN
10'-0"
DAMPER W/LOCKING QUADRANT
BIRD SCREEN
1080 CFM
12x24
24"
18x18
13x18
RECREATION & DINING RM
(1) F.A. FILTER-
F.A. EXHAUST THRU SIDE OF ENCLOSURE
(2) R.A. FILTERS
2500CFM
24"x48"
FB-1
EF-1
EF-2
18"
6"
LOCKER RM
9"x18" - 1/2" MESH #16 GA. GALV. SCREENED OPENINGS
FIRE DMPR. W/ BOTTOM INLET GEN. CONTR. TO BUILD 1 HR FIRE SEPARATION & SUPPORT DUCTS & R.A. DUCT
WATER HEATER BY PLBG. CONTR.

SECTION A
SCALE 1/4"=1'-0"

1080 CFM (13)
16 1/4 x 21 1/2
F-2
16 1/4 x 21 1/2
1080 CFM (12)
EQUIPMENT ROOM
(7) NOTE DRYING TOWER

CHECKED
APPROVED

FIRE STATION
FOR THE CITY OF MILPITAS, CALIFORNIA

SHEET NO.
NO. OF SHEETS

481

FURNACE SCHEDULE

MARK	MAKE	MODEL	TYPE	FAN MOTOR HP	FAN MOTOR RPM	FAN MOTOR POWER	CAPACITY INPUT	CAPACITY OUTPUT	FAN PERFORMANCE CFM	FAN PERFORMANCE ESP(1)	FAN PERFORMANCE RPM(2)	FAN PERFORMANCE BHP	WEIGHT	GAS CONN.	FLUE SIZE	REMARKS	CONTROLS
F-1	TRANE	FGU-200	UPFLOW BELT DRIVE RESIDENTIAL FURNACE	1	3450	115/230/60/1	200MBH	160 MBH	2500	0.8	828	1.2	310 LBS.	1/2"IPS	8"OVAL	OVERSIZED MOTOR & DRIVE DISCARD T.A. FILTERS	HONEYWELL T87DA WITH Q412A SUBBASE
F-2	TRANE	RFH121GB	HORIZONTAL GAS FURNACE	1/3	—	115/60/1	140MBH	100 MBH	1080	0.2	730	—	280 LBS.	1/2" IPS	6" ø		HONEYWELL T87F WITH Q539H SUBASE
F-3	TRANE	GPA-250	DOWNFLOW UNIT HEATER	1/3	1140	115/60/1	150MBH	200MBH	3300	0	448	—		1/2"IPS	9"OVAL		HONEYWELL T87F WITH Q539H SUBASE

(1) ESP WITHOUT INTERNAL FILTERS
(2) CHANGE RPM SETTING UNTIL 100% OF NAMEPLATE AMPS x VOLTS ARE DRAWN. HAVE CLEAN FILTERS & DRY COIL WHEN SETTING RPM
3. MECHANICAL CONTRACTOR PROVIDE & INSTALL ALL LOW VOLTAGE CONTROLS, RUNNING ALL WIRE IN CONDUIT

COOLING COIL SCHEDULE

MARK	COIL CHARACTERISTICS: MAKE	MODEL	FIN SERIES	ROWS	SIZE (INCHES)	AREA (SQ. FT)	AIR SIDE PERFORMANCE: FLOW RATE (FT³/MIN)	FACE VELOCITY (FT/MIN)	PRESSURE DROP (INCHES H₂O): WET COIL	PRESSURE DROP: DRY COIL	ENTERING AIR: DRY BULB (°F)	ENTERING AIR: WET BULB (°F)	ENTERING AIR: DEW POINT (°F)	ENTERING AIR: ENTHALPY (BTU/LB)	LEAVING AIR: DRY BULB (°F)	LEAVING AIR: WET BULB (°F)	LEAVING AIR: DEW POINT (°F)	LEAVING AIR: ENTHALPY (BTU/LB)	HEAT TRANSFER RATE (BTU/HR)	HEAT TRANSFER RATE (TONS)	TUBE SIDE: FLUID	TUBE SIDE: SAT. SUC. TEMP. (°F)	TUBE SIDE: LIQ. TEMP TO T.X.V. (°F)	REMARKS
AC-1	TRANE	EUT0	18	2	(2)18x22	7.0	2,500	357	0.31	0.22	80.0	64.0	54.7	29.13	60.2	56.4	54.0	24.03	56,600	4.72	R-22	38.6	105°	REPLACE T.X. VALVE WITH 5-TON VALVE

CONDENSING UNIT SCHEDULE

MARK	MAKE	MODEL	WEIGHT (POUNDS)	NOMINAL CAPACITY (TONS)	ELECTRICAL DATA: COMPRESSOR: POWER	COMPRESSOR: F.L.A.	COMPRESSOR: L.R.A.	CONDENSER FAN: HP	CONDENSER FAN: POWER	CONDENSER FAN: F.L.A.	CONDENSER FAN: L.R.A.	CONDENSER FAN: HP	PERFORMANCE: CAPACITY (BTU/HR)	PERFORMANCE: (TONS)	PERFORMANCE: SAT. SUC. TEMP. (°F)	PERFORMANCE: AMBIENT AIR TEMP (°F)	REFRIGERANT	REMARKS
CU-1	TRANE	RAS63	315	5	60/3	24.3	118	5	208/230/3	2.0	7.2	1/3	56,600	4.72	38.6	95	R-22	

AIR FILTER SCHEDULE

MARK	MAKE	MODEL	FLOW FT³/MIN	PRESSURE LOSS (INCHES OF WATER)	EFFICIENCY D.S.T.M.	Nº OF FILTERS	ACCESS	GAUGE	
AF-1	BURKE	PYRACONIC 55	2500	0.17 (CLEAN) 0.70 (FINAL)	50% TO 55%	2	FRONT (VIA R.A. GRILLE)	DWYER Nº 25	
AF-2	BURKE	PYRACONIC 55	1000	0.10 (CLEAN) 0.70 (FINAL)	50% TO 55%	1	TOP (VIA WRAP-AROUND ACCESS PANEL)	SHARES FB-1'S	

ROOF EXHAUST SCHEDULE

MARK	MAKE	MODEL	ACCESSORIES: BIRDSCREEN	ACCESSORIES: BACK DRAFT DAMPER	DRIVE	MOTOR: HP	MOTOR: RPM	MOTOR: POWER	MOTOR: TYPE	FAN: CFM	FAN: SP	CONTROL
EF-1	CENTAIRE	C-1237-B	YES	YES	BELT	1/12	—	115/60/1	—	500	1/8"	TO RUN CONTINUOUSLY. PROVIDE LOCAL DISCONNECT.
EF-2	CENTAIRE	C-815	YES	YES	DIRECT	1/25	1570	115/60/1	2-SPEED	375	1/8"	2-SPEED SWITCH ON WALL ABOVE RANGE

DIFFUSER & GRILLE SCHEDULE

MARK	MAKE	SIZE	MODEL	ACCESS.	FINISH	DEFL.	FUNCTION	LOCATION
1	TUTTLE&BAILEY	12x6	A-557	A-70 & D	RL	20°	SUPPLY	SIDEWALL
2		14x6	A-557	A-70 & D	RL	20°		
3		14x10	A-557	A-70 & D	RL	20°		
4		20x8	A-557	A-70 & D	RL	0° TO 55°	SUPPLY	SIDEWALL
5		24x18	A-45VD	—	RL		TRANSFER	DOOR
6		1206	T-8	—	WHITE	—	EXHAUST	CEILING
7		36x6	A-10D	—		—	TRANSFER	SIDEWALL
8		36x10	A-5T	—		—		CEILING
9		30x6	A-10D	—		—		SIDEWALL
10		30x10	A-5T	—		—	TRANSFER	CEILING
11		48x24	T-10FD	—	WHITE	0°	RETURN	SIDEWALL
12	TUTTLE&BAILEY	16x20	AN-557	—	RL	0° TO 55°	SUPPLY	FURNACE DISCHARGE
13	KRUEGER	32x24	X-42-1	BIRDSCREEN	STD	—	F.A. INTAKE	SIDEWALL

NOTES

1. EXPOSED SUPPLY & RETURN DUCT SHALL BE GALVANIZED SHEET METAL INTERNALLY LINED WITH 1" THICK DUCT LINER, 24 GAUGE.
2. FRESH AIR, COMBUSTION AIR & EXHAUST DUCTS SHALL BE NON-INSULATED GALVANIZED SHEET METAL, 24 GAUGE.
3. ALL SUPPLY & TRANSFER DUCTS IN FURRED CEILINGS SHALL BE FIBERGLASS DUCT SYSTEM, EQUIVALENT TO SUSTIN-PACON, OR APPROVED EQUAL.
4. CONDENSATE FROM AIR CONDITIONING COIL SHALL BE TRAPPED (2" DEEP MINIMUM) AND TAKEN TO SANITARY VIA INDIRECT WASTE, SUCH AS FLOOR DRAIN, ETC.
5. TURNING VANES ARE REQUIRED WHERE SHOWN AND ABOVE EACH CEILING TRANSFER GRILLE. EXTERIOR IS RESTRICTIVE BEHIND LOCKER ROOM GRILLE.
6. INSTALL TESTED MODEL FIRE DAMPERS WHERE SHOWN IN ACCORDANCE WITH MFG'S INSTALLATION & IN ACCORDANCE WITH STATE FIRE MARSHALL APPROVAL. DAMPER MUST BE LABELED OR CERTIFIED. SUBMIT DRAWING & METHOD OF INSTALLATION OF F.D. TO CITY FIRE MARSHALL FOR APPROVAL.
7. ALL DUCT DIMENSIONS ARE INSIDE CLEAR AND DO NOT INCLUDE INSULATION, IS ADDED.

FIRE STATION
NO. 3, CITY OF
CALISTOGA

APPENDIX H- SWPPP DOCUMENT

Storm Water Pollution Prevention Plan

For:

MILPITAS FIRE STATION NO. 2
APN 088-02-026

Prepared for:
CITY OF MILPITAS
455 E. CALAVERAS BLVD
MILPITAS, CA 95035
STEVEN ERICKSON– 408.586.3301

Contractor:
TBD
TBD
TBD
TBD – TBD

Project Site Location/Address:
1263 YOSEMITE DRIVE
MILPITAS, CA 95035

Qualified SWPPP Practitioner (QSP):
TBD
TBD
TBD
TBD – TBD
QSP #TBD

Qualified SWPPP Developer (QSD):
Siegfried Engineering, Inc.
3428 Brookside Road
Stockton, CA 95219
PAUL SCHNEIDER, P.E. – 209.943.2021
QSD #00575

SWPPP Preparation Date:
02/04/2020

Estimated Project Dates:
START OF CONSTRUCTION: 04/15/2020
COMPLETION OF CONSTRUCTION: 12/31/2021

WDID No.: TBD

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SWPPP Attachments

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Attachment B ..... Submitted Permit Registration Documents (PRDs)
Attachment C ..... SWPPP Amendment Log
Attachment D ..... Notice of Non-Compliance
Attachment E ..... Discharge Reporting Log
Attachment F ..... NAL/NEL Exceedance Site Evaluations
Attachment G ..... Submitted Changes to PRDs
Attachment H ..... Construction Schedule
Attachment I ..... CASQA BMP Consideration Checklist
Attachment J ..... CASQA BMP Handbook Fact Sheets
Attachment K ..... Construction Site Inspection Report Form
Attachment L ..... Program for Maintenance, Inspection, and Repair of Construction Site BMPs
Attachment M ..... Site Specific Rain Event Action Plan
Attachment N ..... Training Log
Attachment O ..... Responsible Parties
Attachment P ..... Contractors and Subcontractors
Attachment Q ..... Construction Site Monitoring Program
Attachment R ..... Annual Certificate of Compliance

SWPPP Certification by Legally Responsible Person (LRP)

Legally Responsible Person (LRP)
Certification of the
Storm Water Pollution Prevention Plan

Project Name: **MILPITAS FIRE STATION NO. 2**

APN: **088-02-026**

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

LRP Signature	Date
Steven Erickson,	408.586.3301
LRP Name and Title	Telephone Number

SWPPP Certification by Qualified SWPPP Developer (QSD)

Qualified SWPPP Developer (QSD)
Certification of the
Storm Water Pollution Prevention Plan

Project Name: **MILPITAS FIRE STATION NO. 2**

APN: **088-02-026**

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

QSD Signature	Date
Paul Schneider, P.E., QSD, QSP	209.943.2021
QSD Name and Title	Telephone Number
California Registered Professional Civil Engineer	C 62498 (QSD #00575)
Type of Registration	Registration Number

Section 100
SWPPP Requirements

100.1 Introduction

The Project is located on the north west side of Yosemite Drive and Park Victoria Drive in Milpitas, CA 95035. Please refer to the site and vicinity maps included in Attachment B.

In general, the SWPPP has been prepared to comply with the State of California General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (State Water Resources Control Board Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ). Please refer to Attachment A for a copy of the General Permit.

More specifically, the SWPPP has been prepared to address the following objectives:

1. All pollutants and their sources, including sources of sediment associated with construction, construction site erosion and all other activities associated with construction activity are controlled;
2. Where not otherwise required to be under a Regional Water Quality Control Board (RWQCB) permit, all non-storm water discharges are identified and either eliminated, controlled, or treated;
3. Site BMPs are effective and result in the reduction or elimination of pollutants in storm water discharges and authorized non-storm water discharges from construction activity to the Best Available Technology/Best Control Technology (BAT/BCT) standard;
4. Calculations and design details as well as BMP controls for site run-on are complete and correct, and
5. Stabilization BMPs installed to reduce or eliminate pollutants after construction are completed.

100.2 Permit Registration Documents (PRDs)

The PRDs were submitted on

The submitted PRDs, copies of which are in Attachment B, include the documents listed below:

1. Notice of Intent (NOI);
2. Risk Assessment (Construction Site Sediment and Receiving Water Risk Determination);
3. Site Map;
4. Annual Fee; and
5. Signed Certification Statement.

100.3 SWPPP Availability and Implementation

The Contractor will ensure that the SWPPP is available at the construction site during working hours while construction is occurring and that the SWPPP is made available upon request by a State or Municipal inspector. Additionally, in the event that the original SWPPP is retained by a crewmember in a construction vehicle and is not currently at the construction site, the Contractor will ensure that current copies of the BMPs and maps and/or drawings are left with the field crew and that the original SWPPP is made available via a request by radio/telephone. The SWPPP will be implemented concurrently with the start of ground disturbing activities.

100.4 SWPPP Amendments

This SWPPP will be amended:

- Whenever there is a change in construction or operations which may affect the discharge of pollutants to surface waters, groundwater(s), or a municipal separate storm sewer system (MS4).
- If any condition of the Permits is violated or the general objective of reducing or eliminating pollutants in storm water discharges has not been achieved. If the RWQCB determines that a Permit violation has occurred, the SWPPP shall be amended and implemented within 14-calendar days after notification by the RWQCB.
- Annually, prior to the defined rainy season.
- When deemed necessary by the Owner/Contractor.

The following items will be included in each amendment:

- Who requested the amendment.
- The location of proposed change.
- The reason for change.
- The original BMP proposed, if any.
- The new BMP proposed.

The amendments for this SWPPP, along with the QSD's Certification, can be found in Attachment C.

100.5 Retention of Records

The Contractor will maintain a paper or electronic copy of all required records for a minimum of three years from the date generated or date submitted, whichever is last. Records include, but are not limited to, the following items:

1. Site inspections;
2. Compliance certifications;
3. Discharge reports; and
4. Approved SWPPP document and amendments.

These records will be available at the construction site until construction is completed. The Contractor will furnish the Regional Water Quality Control Board (RWQCB), State Water Resources Control Board (SWRCB), or United States Environmental Protection Agency (EPA), within a reasonable time, any requested information to determine the compliance with the General Permit.

100.6 Required Non-Compliance Reporting

If a reportable discharge or other violation of the General Permit occurs, or if the Project receives a written notice of non-compliance, the Contractor will immediately notify the Owner; will properly document the discharge, violation, or notice; and will file a written report to the Owner within 7 days of the discharge, violation, or notice. Corrective measures will be implemented immediately following the discharge, violation, or notice. A sample Notice of Non-Compliance (NONC) form is provided in Attachment D. All discharges will be documented on a Discharge Reporting Log using the example form in Attachment E.

The report to the Owner will contain the following items:

- The date, time, location, nature of operation, and type of unauthorized discharge, including the cause or nature of the notice or order,

- The control measures (BMPs) deployed before the discharge event, or prior to receiving notice or order,

- The date of deployment and type of control measures (BMPs) deployed after the discharge event, or after receiving the notice or order, including additional measures installed or planned to reduce or prevent re-occurrence, and

- An implementation and maintenance schedule for any affected BMPs.

Exceedances and violations will also be reported electronically using the Storm Water Multiple Application and Report Tracking System (SMARTS) within 30 days and include the following:

1. Numeric Action Level (NAL) exceedances (for Risk Level 2);
2. Numeric Effluent Limitation (NEL) Violation Report (for Risk Level 2);
3. Self-reporting of any other discharge violations or to comply with RWQCB enforcement actions; and
4. Discharges which contain a hazardous substance in excess of reportable quantities established in Title 40 of the Code of Federal Regulations (CFR), §§ 117.3 and 302.4, unless a separate NPDES Permit has been issued to regulate those discharges.

The results of any NAL exceedance site evaluations along with other non-compliance events are included in Attachment F.

100.7 Annual Report

By September 1 of each year, the Contractor will prepare, certify, and electronically submit an Annual Report, in accordance with Section XVI of the General Permit. The Annual Report shall include the following data collection items and reporting elements:

1. Sampling and analysis results including laboratory reports, analytical methods and reporting limits, and chain of custody forms (for Risk Level 2);
2. Corrective actions and compliance activities, including those not implemented;
3. Violations of the General Permit;
4. Date, time, place, and name(s) of the inspector(s) for all sampling, inspections, and field measurement activities;
5. Visual observation and sample collection exception records; and
6. Training documentation of all personnel responsible for General Permit compliance activities.

The Annual Certification of Compliance Form is included in Attachment R.

100.8 Changes to Permit Coverage

Any changes to the submitted permit coverage (e.g. change in Project size, change in Project ownership, or change in Project Risk Level) will be documented. Subsequent revisions to the PRDs, including any applicable recertification of the NOI (in the case of a change in Project Risk Level), will be submitted electronically via SMARTS and will be included in Attachment G.

100.9 Notice of Termination

A Notice of Termination (NOT), along with a final site map and photographs, will be submitted electronically via SMARTS when the construction project is complete and within 90 days of meeting all General Permit requirements for termination and final stabilization. These requirements include the following:

1. The site will not pose any additional sediment discharge risk than it did prior to construction activity;
2. All construction related equipment, materials, and any temporary BMPs no longer needed are removed from the site; and
3. Post-construction storm water management measures are installed and a long-term maintenance plan that is designed for a minimum of five years has been developed.

Additionally, the NOT will demonstrate through photographs, Revised Universal Soil Loss Equation (RUSLE) results, or results of testing and analysis that the Project meets all of the requirements of Section II.D.1 of

the General Permit by one of the following methods:

A. The 70% final cover method (no computational proof required); or
B. The RUSLE/RUSLE2 method (computational proof required); or
C. A Custom method where the discharger demonstrates that the Project site complies with final stabilization.

Section 200
Project Information

200.1 Project and Site Description

This project consists of the redevelopment of a one (1) acre site (43,635 square-feet) at 1263 Yosemite Drive in Milpitas. The project consists of a new 10,300 square-foot building, parking areas with permeable concrete, concrete walkways, trash enclosure and landscaped areas. Construction activities for this project will involve grading, installing new site utilities, paving, as well as the new building.

The following are estimates of the construction site:

- Construction site area: 1 acres
- Percentage impervious area before construction: 61.8%
- Runoff coefficient before construction: 0.68
- Percentage impervious area after construction: 65%
- Runoff coefficient after construction: 0.41

200.2 Storm Water Run-On from Offsite Areas

There is no anticipated storm water run-on from offsite areas.

200.3 Sediment and Receiving Water Risk Determination

Based upon the Risk Determination Worksheet included in Attachment B, the Project risk levels are as follows:

- Sediment Risk: Low
- Receiving Water Risk: High
- Combined Risk: Level 2

The Sediment Risk was determined by using: (1) the EPA Rainfall Erosivity Calculator to obtain an R

Factor value, 69.65, and (2) the GIS Map Method to obtain a K Factor Value = 0.24 and LS Factor = 0.52. The product of these values, which represents a Watershed Erosion Estimate, is approximately 8.69 tons/acre. Based upon the Risk Determination Worksheet included in Attachment B, Projects with a Watershed Erosion Estimate less than 15 tons/acre are classified as having a Low Sediment Risk. Having High Receiving Water Risk combined with the Low Sediment Risk puts this project as a Combined Risk of Level 2.

The Receiving Water Risk was determined from answering the following watershed characteristics questions (from the Risk Determination Worksheet included in Attachment B):

2. Does the disturbed area discharge (either directly or indirectly) to a 303(d)-listed waterbody impaired by sediment?

   ANSWER: Yes

3. Does the disturbed area discharge to a waterbody with designated beneficial uses of spawn & cold & migratory?

   ANSWER: Yes

According to the Risk Determination Worksheet included in Attachment B, Projects that cannot answer "No" to both of the two watershed characteristics questions shown above are classified as having a High Receiving Water Risk.

As a result, the SWPPP is required to comply with Attachment D (Risk Level 2 Requirements) of the General Permit.

The requirements for preparing and implementing Rain Event Action Plans are provided in Section 400.2. If needed, refer to Section 100.8 for the requirements for a change in Project Risk Level.

200.4 Construction Schedule

- Estimated Construction Start: 04/15/2020
- Install stabilized construction entrance on: 04/15/2020
- Prepare soil stabilization and sediment control implementation plan prior to rainy season, submit to the Owner by 04/15/2020
- SWPPP measures to be installed between 04/15/2020 and 04/22/2020
- Rough and finished grading between 05/30/2020 and 07/10/2020
- Install temporary concrete washout: 07/02/2018
- Underground wet and dry utilities to be installed between 06/05/2020 and 07/03/2020

- Implement final erosion control of substantially completed areas: 07/31/20
- Estimated Construction End: 12/31/2021

The Project construction schedule is also included in Attachment H.

200.5 Potential Construction Site Pollutant Sources

The following is a list of construction materials that will be used and activities that will be performed that will have the potential to contribute pollutants, other than sediment, to storm water runoff (control practices for each activity are identified in Sections 300.2 and 300.3:

- Vehicle fluids, including oil, grease, petroleum, and coolants
- Asphaltic emulsions associated with asphalt-concrete paving operations
- Cement materials associated with PCC concrete paving operations and drainage structures
- Base and subbase material
- Joint and curing compounds
- Concrete curing compounds
- Paints
- Solvents, thinners, acids
- Sandblasting materials
- Mortar mix
- Raw landscaping materials and wastes (topsoil, plant material, herbicides, fertilizers, mulch, pesticides)
- BIVIP materials (sandbags, liquid copolymer)
- Treated lumber (materials and waste)
- PCC rubble
- Masonry block rubble

- General lifter

Construction activities that have the potential to contribute sediment to storm water discharges include:

- Clear and grub operations
- Grading operations
- Soil import and/or export operations
- Utility excavation operations
- Landscape operations

Attachment I lists all of the Best Management Practices (BMPs) that have been selected for implementation in this project. Implementation and location of BMPs are shown on the site maps in Attachment B. Narrative descriptions of BMPs to be used during the project are listed by category in each of the following SWPPP sections. Attachment J includes the fact sheets of all BMPs selected for this project.

200.6 Identification of Non-Storm Water Discharges

An inventory of construction activities and potential non-storm water discharges is provided in Section 200.5. The CASQA BMP Consideration Checklist in Attachment I and the following list indicates the BMPs that have been selected to control non-storm water pollution on the construction site. Implementation and locations of some non-storm water control BMPs are shown on the site maps in Attachment B. A narrative description of each BMP follows.

- NS-1, Water Conservation Practices
- NS-2, Dewatering Operations
- NS-3, Paving and Grinding Operations
- NS-6, Illicit Connection/Illegal Discharge Detection and Reporting
- NS-7, Potable Water/Irrigation
- NS-12, Concrete Curing

Section 300
Best Management Practices

300.1 Schedule for BMP Implementation

BMPs will be implemented, modified, and maintained to reflect the phase of construction and the weather conditions. The schedule for deployment of BMPs is provided in Section 200.4.

300.2 Erosion Control and Sediment Control

Erosion Control

Erosion control, also referred to as soil stabilization, consists of source control measures that are designed to prevent soil particles from detaching and becoming transported in storm water runoff. Erosion control BMPs protect the soil surface by covering and/or binding soil particles. This project will incorporate erosion control measures required by the contract documents, and other measures selected by the Contractor. This project will implement the following practices for effective temporary and final erosion control during construction:

1) Preserve existing vegetation where required and when feasible.

2) Apply temporary erosion control to remaining active and non-active areas as required by the California Stormwater BMPs Handbook - Construction, and the contract documents. Reapply as necessary to maintain effectiveness.

3) Implement temporary erosion control measures at regular intervals throughout the defined rainy season to achieve and maintain the contract's disturbed soil area requirements. Implement erosion control prior to the defined rainy season.

4) Stabilize non-active areas as soon as feasible after the cessation of construction activities.

5) Control erosion in concentrated flow paths by applying erosion control blankets, erosion control seeding, and lining swales as required in the contract documents.

6) Apply seed to areas deemed substantially complete by the Owner during the defined rainy season.

7) At completion of construction, apply permanent erosion control to all remaining disturbed soil areas.

Sufficient erosion control materials will be maintained on-site to allow implementation in conformance with Permit requirements and described in this SWPPP. This includes implementation requirements for active areas and non-active areas that require deployment before the onset of rain.

Implementation and locations of temporary erosion control BMPs are shown on the site maps in Attachment B and/or described in this section. The CASQA BMP Consideration Checklist in Attachment I indicates the

BMPs that will be implemented to control erosion on the construction site.

- EC-1, Scheduling
- EC-2, Preservation of Existing Vegetation
- EC-8, Wood Mulch

Sediment Control

Sediment controls are structural measures that are intended to complement and enhance the selected erosion control measures and reduce sediment discharges from active construction areas. Sediment controls are designed to intercept and settle out soil particles that have been detached and transported by the force of water. This project will incorporate sediment control measures required by the contract documents, and other measures selected by the Owner/Developer/Contractor.

Sufficient quantities of temporary sediment control materials will be maintained on-site throughout the duration of the project, to allow implementation of temporary sediment controls in the event of predicted rain, and for rapid response to failures or emergencies, in conformance with other Permit requirements and as described in this SWPPP. This includes implementation requirements for active areas and non-active areas before the onset of rain.

Implementation and locations of temporary sediment control BMPs are shown on the site maps in Attachment B. The CASQA BMP Consideration Checklist in Attachment I indicates all of the BMPs that will be implemented to control sediment on the construction site; these are:

- SE-5, Fiber Rolls (see detail on plan)
- SE-I0, Storm Drain Inlet Protection (see detail on plan)

Tracking Control

The following BMPs have been selected to reduce sediment tracking from the construction site onto private or public roads:

- TC-I, Stabilized Construction Entrance/ Exit (see detail on plan)
- TC-3, Entrance/Outlet Tire Wash (see detail on plan)

Wind Erosion Control

The following BMPs have been selected to control dust from the construction site:

- WE1, Wind Erosion Control

300.3 Non-Storm Water and Material Management

Non-Storm Water Control

An inventory of construction activities and potential non-storm water discharges is provided in Section 200.5. The CASQA BMP Consideration Checklist in Attachment I and the following list indicates the BMPs that have been selected to control non-storm water pollution on the construction site. Implementation and locations of some non-storm water control BMPs are shown on the site maps in Attachment B. A narrative description of each BMP follows.

- NS-1, Water Conservation Practices
- NS-2, Dewatering Operations
- NS-3, Paving and Grinding Operations
- NS-6, Illicit Connection/Illegal Discharge Detection and Reporting
- NS-7, Potable Water/Irrigation
- NS-12, Concrete Curing

Material Management Control

An inventory of construction activities, materials, and wastes is provided in Section 200.5. The CASQA BMP Consideration Checklist in Attachment I and the following list indicates the BMP's that have been selected to handle materials and control construction site wastes. A narrative description of each BMP follows.

- WM-1, Material Delivery and Storage
- WM-2, Material Use
- WM-3, Stockpile Management
- WM-4, Spill Prevention and Control
- WM-5, Solid Waste Management
- WM-6, Hazardous Waste Management
- WM-8, Concrete Waste Management
- WM-9, Sanitary/Septic Waste Management

300.4 Post-Construction Storm Water Management Measures

The following is the post-construction BMP that is to be used at this construction site after all construction is complete:

- Bioretention areas are proposed to treat captured stormwater runoff.

The location of the post-construction BMP is shown on the site map in Attachment B.

Section 400
BMP Inspection, Maintenance, and Rain Event Action Plans

As indicated in Section 200, the Project Combined Risk is Level 2. As a result, a Rain Event Action Plan is required. This section (Section 400, BMP Inspection, Maintenance, and Rain Event Action Plans) is required as part of a Combined Risk Level 2 project.

400.1 BMP Inspection and Maintenance

Inspections will be conducted as follows:

- On a weekly basis prior to a forecast storm;
- After a rain event that causes runoff from the construction site;
- At 24-hour intervals during a rain event; and
- At any other time(s) or intervals of time specified in the contract documents

Completed inspection checklists will be submitted to the Owner within 24 hours of inspection. Copies of the completed checklists will be kept on-site with the SWPPP. Inspections will include the following information:

1. The date of inspection;
2. Weather information;
3. Site Information;
4. Observations;
5. Descriptions of the inspected BMPs and any deficiencies;
6. The corrective actions that were taken; and
7. The name, title, and signature of the inspector.

A tracking or follow-up procedure will follow any inspection that identifies deficiencies in BMPs; corrective actions will begin to be implemented within 72 hours. A program for Maintenance, Inspection and Repair of BMPs is shown in Attachment L.

400.2 Rain Event Action Plans

The Qualified SWPPP Practitioner (QSP) will develop a Rain Event Action Plan (REAP) 48-hours in advance of any precipitation event forecast to have a 50% or greater chance of producing precipitation in the project area. The REAP will be maintained on-site and will be implemented 24 hours in advance of any predicted precipitation event.

The REAP will be designed to protect all exposed portions of project sites and to ensure that the discharger has adequate materials, staff, and time to implement erosion and sediment control measures that are

intended to reduce the amount of sediment and other pollutants that could be generated during the rain event.

At minimum, the REAP will include the following site and phase-specific information:

1. Site Address;
2. Calculated Risk Level (2 or 3);
3. Site Stormwater Manager Information including the name, company, and 24-hour emergency telephone number;
4. Erosion and Sediment Control Provider information including the name, company, and 24-hour emergency telephone number;
5. Stormwater Sampling Agent information including the name, company, and 24-hour emergency telephone number;
6. Activities associated with each construction phase;
7. Trades active on the construction site during each construction phase;
8. Trade contractor information; and
9. Suggested actions for each project phase.

A site-specific REAP template is provided in Attachment M.

Section 500
Training

All elements of the SWPPP were prepared by a QSD and will be implemented by a QSP.

Section 600.1 shows the name of the QSP. This person has received the required training:

- Contact TBD (QSP #TBD) at TBD for a resume of training.

The training log showing formal and informal training of various Contractor personnel is shown in Attachment N.

Section 600
Responsible Parties and Operators

600.1 Responsible Parties

The Legally Responsible Person (LRP) for this Project is:

STEVEN ERICKSON
408.586.3301
City of Milpitas
455 E. Calaveras Blvd
Milpitas, CA 95035

The Qualified SWPPP Developer (QSD) assigned to this Project is:

PAUL SCHNEIDER, P.E. (QSD #00575)
209.943.2021
Siegfried Engineering, Inc.
3428 Brookside Road
Stockton, CA 95219

The Qualified SWPPP Practitioner (QSP) assigned to this Project is:

TBD (QSP #TBD)
TBD
TBD
TBD
TBD

The QSP shall have primary responsibility and significant authority for the implementation, maintenance, inspection and amendments to the approved SWPPP. The QSP will be available at all times throughout the duration of the project. Duties of the QSP include but are not limited to:

- Ensuring full compliance with the SWPPP and the Permit
- Implementing all elements of the SWPPP, including but not limited to:
  - Implementation of prompt and effective erosion and sediment control measures.
  - Implementing all non-storm water management, and materials and waste management activities such as: monitoring discharges (dewatering, diversion devices); general site clean-up; vehicle

and equipment cleaning, fueling and maintenance; spill control; ensuring that no materials other than storm water are discharged in quantities which will have an adverse effect on receiving waters or storm drain systems; etc.

- Pre-storm inspections
- Storm event inspections
- Post-storm inspections
- Routine inspections as specified in the project's specifications or described in the SWPPP
- Preparing a REAP for each phase of the Project, if determined to be necessary as a result of a change in the Project Combined Risk Level
- Preparing annual compliance certification
- Ensuring elimination of all unauthorized discharges
- The QSP shall be assigned authority by the Owner/Developer/Contractor to mobilize crews in order to make immediate repairs to the control measures
- Coordinate with the Owner/Developer/Contractor to assure all of the necessary corrections/repairs are made immediately, and that the project complies with the SWPPP, the Permit and approved plans at all times
- Submitting Notices of Discharge and reports of Illicit Connections or Illegal Discharges

A copy of all written agreements or other mechanisms that provides authority from the LRP to sign permit-related documents will be included in Attachment O.

600.2 Contractor List

All contractors, subcontractors, and individuals who will be directed by the QSP will be notified of the requirement for storm water management measures during the project. A list of their names will be maintained on-site. This list will include telephone numbers, work addresses, the specific areas of responsibility of each subcontractor, and emergency contact numbers. If subcontractors change during the project, the list will be updated accordingly.

A sample subcontractor notification letter and log is included in the SWPPP as Attachment P.

Section 700
Construction Site Monitoring Program

700.1 Visual Monitoring (Inspections)

The Contractor will visually monitor and inspect the site according to the following schedule:

Type of Monitoring	Frequency
Non-Storm Water Inspection	Quarterly for each drainage area.
Qualifying rain event: Pre-rain inspection	All drainage areas, BMPs, and storm water containments within two business days prior to each predicted qualifying rain event.
Qualifying rain event: Post-rain inspection	All discharge locations within two business days after each qualifying rain event. Visually observe discharge of contained storm water when discharged.
During rain inspection	Weekly and every 24 hours during extended storm events.
BMP	Weekly and every 24 hours during extended storm events.

A qualifying rain event is any precipitation event forecast that has a 50% or greater chance of producing precipitation in the Project area. Likely precipitation events can be determined by the National Oceanic and Atmospheric Administration (NOAA) National Weather Service website.

The results of all inspections and assessments will be documented, a copy will be provided to the Owner within 24 hours of the inspection, and copies of the completed inspection checklists will be maintained on-site with the SWPPP. Site inspections conducted for monitoring purposes will be performed using the inspection checklist provided in Attachment K. A sample Visual Inspection Field Log Sheet is provided in Attachment Q.

The name and contact number of the assigned inspector is listed below:

Assigned inspector: **TBD, QSP** Contact phone: **TBD**

700.2 Water Quality Sampling and Analysis

The Contractor will conduct water quality sampling and analysis according to the following schedule:

Type of Monitoring	Frequency
Non-visible pollutants: spill/BMP failure based on pollutant source assessment	Within first two hours of discharge from site. Collect samples of runoff affected by the spilled or released

	material(s) and runoff unaffected by the spilled or released material(s).
Contained rain water	At time of discharge.
Non-storm water	At locations where discharged off the site.
Particle size	When sediment basins are used. If needed to justify site specific sediment risk using RUSLE.

700.3 Sample Collection and Handling

700.3.1 Sample Collection Preparation

Prior to the rainy season, all sampling personnel and alternates will review the Construction Site Monitoring Program. Qualifications of designated Contractor personnel describing environmental sampling training and experience are provided in Attachment N.

An adequate stock of supplies and equipment for monitoring will be available on the Project site or provided by the pre-approved laboratory prior to a sampling event. Monitoring supplies and equipment will be stored in a cool-temperature environment that will not come into contact with rain or direct sunlight. Sampling personnel will be available to collect samples in accordance will the sampling schedule.

Supplies maintained at the project site will include, but will not be limited to, surgical gloves, sample collection equipment, coolers, appropriate number and volume of sample bottles, identification labels, re-sealable storage bags, paper towels, personal rain gear, ice, Sampling Activity Log forms, and Chain of Custody (COC) forms (for Risk Level 2). The Contractor will obtain and maintain the field-testing instruments, as identified in Section 700.3.5, for analyzing samples in the field by Contractor sampling personnel.

Samples on the project site will be collected by the following or another pre-approved laboratory;

Torrent Laboratory, Inc.
483 Sinclair Frontage Road
Milpitas, CA 95035
408.263.5258

The chosen laboratory will obtain and maintain the field-testing instruments, as identified in Section 700.3.5, for analyzing samples in the field by their sampling personnel.

700.3.2 Sample Collection Procedures

Grab samples will be collected, preserved, and shipped in accordance with the Surface Water Ambient Monitoring Program (SWAMP) 2008 Quality Assurance Program Plan (QAPrP). Only personnel trained in proper water quality sampling will collect samples.

Upstream samples will be collected to represent the condition of the water body upgradient of the construction site. Downstream samples will be collected to represent the water body mixed with direct flow from the construction site. Samples will not be collected directly from ponded, sluggish, or stagnant water.

Upstream and downstream samples will be collected using one of the following methods:

- Placing a sample bottle directly into the stream flow in or near the main current upstream of sampling personnel, and allowing the sample bottle to fill completely;

OR,

- Placing a decontaminated or 'sterile' bailer or other 'sterile' collection device in or near the main current to collect the sample, and then transferring the collected water to appropriate sample bottles, allowing the sample bottles to fill completely.

Run-on samples, if applicable, will be collected to identify potential sedimentation/siltation and/or turbidity that originates off the project site and contributes to direct discharges from the construction site to the 303(d) listed water body. Run-on samples will be collected downgradient and within close proximity of the point of run-on to the project by pooling or ponding water and allowing the ponded water to spill over into sample bottles directly in the stream of water.

To maintain sample integrity and prevent cross-contamination, sampling collection personnel will:

- Wear a clean pair of surgical gloves prior to the collection and handling of each sample at each location.
- Use laboratory-provided sample containers (for laboratory analysis samples).
- Never sample near a running vehicle.
- Not park vehicles in the immediate sample collection area (even non-running vehicles).
- Not contaminate the inside of the sample bottle by not allowing it to come into contact with any material other than the water sample.
- Discard sample bottles or sample lids that have been dropped onto the ground prior to sample collection.
- Not leave the cooler lid open for an extended period of time once samples are placed inside.
- Not touch the exposed end of a sampling tube, if applicable.
- Avoid allowing rainwater to drip from rain gear or other surfaces into sample bottles.

- Not eat, smoke, or drink during sample collection.
- Not breathe, sneeze, or cough in the direction of an open sample bottle or container.
- Minimize the exposure of the samples to direct sunlight, as sunlight may cause biochemical transformation of the sample to take place.
- Decontaminate sampling equipment prior to sample collection using a TSP-soapy water wash, distilled water rinse, and final rinse with distilled water.
- Dispose of decontamination water/soaps appropriately; i.e., not discharge to the storm drain system or receiving water.

700.3.3 Sample Handling Procedures

Immediately following collection, sample bottles for laboratory analytical testing will be capped, labeled, documented on a Chain of Custody (COC) form provided by the analytical laboratory, sealed in a re-sealable plastic storage bag, placed in an ice-chilled cooler, at as near to 4 degrees Celsius as practicable, and delivered within 24 hours to the following California state-certified laboratory:

Laboratory Name: Torrent Laboratory, Inc.

Address: 483 Sinclair Frontage Road, Milpitas, CA 95035

Telephone Number: 408.263.5258

Immediately following collection, samples for field analysis will be tested in accordance with the field instrument manufacturer's instructions and results recorded on the Visual Inspection Field Log Sheet in Attachment Q.

700.3.4 Sample Documentation Procedures

All original data documented on sample bottle identification labels, Chain of Custody forms, Visual Inspection Field Log Sheets, and Inspection Checklists will be recorded using waterproof ink. These will be considered accountable documents. If an error is made on an accountable document, the individual will make corrections by lining through the error and entering the correct information. The erroneous information will not be obliterated. All corrections will be initialed and dated. Copies of the Visual Inspection Field Log Sheet and Chain of Custody form are provided in Attachment Q. Sampling and field analysis activities will be documented using the following:

- Sample Bottle Identification Labels: Sampling personnel will attach an identification label to each sample bottle. At a minimum, the following information will be recorded on the label, as appropriate:
    - Project name

- Project number

- Unique sample identification number and location [Project Number]-[Six digit sample collection date]-[Location] *(Example:* 0G5304-081801-Upstream)

  Quality assurance/quality control (QA/QC) samples shall be identified similarly using a unique sample number or designation *(Example:* 0G5304-081801-DUP1)

- Collection date/time (No time applied to QA/QC samples)

- Analysis constituent

- Sampling Activity Logs: A log of sampling events will identify:

  - Sampling date

  - Separate times for sample collection of upstream, downstream, run-on, and QA/QC samples recorded to the nearest minute

  - Unique sample identification number and location

  - Analysis constituent

  - Names of sampling personnel

  - Weather conditions (including precipitation amount)

  - Field analysis results

  - Other pertinent data

- Chain of Custody (COC) forms: All samples to be analyzed by a laboratory will be accompanied by a COC form provided by the laboratory. Only the sample collectors will sign the COC form over to the lab. COC procedures will be strictly adhered to for QA/QC purposes.

- Storm Water Quality Construction Inspection Checklists: When applicable, the Contractor's storm water inspector will document on the checklist that samples for sedimentation/siltation and/or turbidity were taken during a rain event.

700.3.5 Sample Analysis

All laboratory analyses will be conducted in accordance with the analytical procedures specified in 40 Code of Federal Regulations (CFR) Part 136, unless other analytical procedures have been specified in the General

Permit or by the RWQCB.

For samples collected for field analysis, collection, analysis and equipment calibration will be in accordance with the field instrument manufacturer's specifications.

The following field instrument(s) will be used to analyze the following constituents:

Field Instrument	Constituent

- The instrument(s) will be maintained in accordance with manufacturer's instructions.
- The instrument(s) will be calibrated before each sampling and analysis event.
- Maintenance and calibration records will be maintained on-site with the SWPPP.

A list of potential non-visible pollutants commonly associated with construction activities is shown below:

Activity	Potential Pollutant Source	Laboratory Analysis
Water line flushing	Chlorinated water	Residual chlorine
Portable toilets	Bacteria, disinfection	Total/fecal coliform
Concrete & Masonry	Acid Wash Curing compounds Concrete rinse water	pH pH, alkalinity, Volatile organics compounds (VOCs) pH
Painting	Resins Thinners Paint strippers Solvents Adhesives Sealants	Semi-volatile organic compounds (SVOCs) Phenols, VOCs VOCs Phenols, VOCs Phenols, SVOCs SVOCs

Cleaning	Detergents	Methylene Blue Activated Substances (MBAS), phosphates
	Bleaches	Residual chlorine
	Solvents	VOCs
Landscaping	Pesticides/Herbicides	Check with analytical laboratory
	Fertilizers	$NO_3/NH_3/P$
	Lime and gypsum	Acidity/alkalinity
	Aluminum sulfate, sulfur	Total dissolved solids (TDS), alkalinity
Treated Wood	Copper, arsenic, selenium	Metals
Soil amendments & dust control	Lime, gypsum	pH
	Plant gums	Biochemical oxygen demand (BOD)
	Magnesium chloride	Alkalinity, TDS
	Calcium chloride	Alkalinity, TDS
	Natural brines	Alkalinity, TDS
	Lignosulfonates	Alkalinity, TDS

700.4 Quality Assurance and Quality Control

For an initial verification of laboratory or field analysis, duplicate samples will be collected at a rate of 10 percent or 1 duplicate per sampling event. The duplicate sample will be collected, handled, and analyzed using the same protocols as primary samples. A duplicate sample will be collected at each location immediately after the primary sample has been collected. Duplicates will be collected where contamination is likely, not on the background sample. Duplicate samples will not influence any evaluations or conclusions; however, they will be used as a check on laboratory quality assurance.

700.5 Report Requirements and Records Retention

A copy of all water quality analytical results and Quality Assurance/Quality Control (QA/QC) data will be submitted to the Owner within 5 days of sampling (for field analyses) and within 30 days (for laboratory analyses). See Section 100.6 for non-compliance reporting requirements.

Lab reports and COCs will be reviewed for consistency between lab methods, sample identifications, dates, and times for both primary samples and QA/QC samples. All data, including COC forms (for Risk Level 2) and Visual Inspection Field Log Sheets, shall be kept on-site with the SWPPP.

700.6 Data Evaluation

An evaluation of the water quality sample analytical results, including figures with sample locations, will be submitted to the Owner with the water quality analytical results and the QA/QC data.

Should the runoff/downgradient sample show an increased level of the tested analyte relative to the background sample, the BMPs, site conditions, and surrounding influences will be assessed to determine the probable cause for the increase. As determined by the site and data evaluation, appropriate BMPs will be repaired or modified to mitigate discharges of non-visual pollutant concentrations. Any revisions to the BMPs will be recorded as an amendment to the SWPPP.

700.7 Change of Conditions

Whenever SWPPP monitoring indicates a change in site conditions that might affect the appropriateness of sampling locations or introduce additional non-visible pollutants of concern, testing protocols will be revised accordingly. All such revisions will be recorded as amendments to the SWPPP.

Attachment A
Construction General Permit

Linda S. Adams
Secretary for
Environmental Protection

State Water Resources Control Board
Division of Water Quality
1001 I Street • Sacramento, California 95814 • (916) 341-5455
Mailing Address: P.O. Box 100 • Sacramento, California • 95812-0100
Fax (916) 341-5463 • http://www.waterboards.ca.gov

Arnold Schwarzenegger
Governor

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I. BACKGROUND

A. History

In 1972, the Federal Water Pollution Control Act (also referred to as the Clean Water Act [CWA]) was amended to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The 1987 amendments to the CWA added Section 402(p), which establishes a framework for regulating municipal and industrial storm water discharges under the NPDES Program. On November 16, 1990, the U.S. Environmental Protection Agency (USEPA) published final regulations that established storm water permit application requirements for specified categories of industries. The regulations provide that discharges of storm water to waters of the United States from construction projects that encompass five or more acres of soil disturbance are effectively prohibited unless the discharge is in compliance with an NPDES Permit. Regulations (Phase II Rule) that became final on December 8, 1999 lowered the permitting threshold from five acres to one acre.

While federal regulations allow two permitting options for storm water discharges (Individual Permits and General Permits), the State Water Board has elected to adopt only one statewide General Permit at this time that will apply to most storm water discharges associated with construction activity.

On August 19, 1999, the State Water Board reissued the General Construction Storm Water Permit (Water Quality Order 99-08-DWQ). On December 8, 1999 the State Water Board amended Order 99-08-DWQ to apply to sites as small as one acre.

The General Permit accompanying this fact sheet regulates storm water runoff from construction sites. Regulating many storm water discharges under one permit will greatly reduce the administrative burden associated with permitting individual storm water discharges. To obtain coverage under this General Permit, dischargers shall electronically file the Permit Registration Documents (PRDs), which includes a Notice of Intent (NOI), Storm Water Pollution Prevention Plan (SWPPP), and other compliance related documents required by this General Permit and mail the appropriate permit fee to the State Water Board. It is expected that as the storm water program develops, the Regional Water Quality Control Boards (Regional Water Boards) may issue General Permits or Individual Permits containing more specific permit provisions. When this occurs, this General Permit will no longer regulate those dischargers.

B. Legal Challenges and Court Decisions

1. Early Court Decisions

Shortly after the passage of the CWA, the USEPA promulgated regulations exempting most storm water discharges from the NPDES permit requirements. (See 40 C.F.R. § 125.4 (1975); see also *Natural Resources Defense Council v. Costle* (D.C. Cir. 1977) 568 F.2d 1369, 1372 (*Costle*); *Defenders of Wildlife v. Browner* (9th Cir. 1999) 191 F.3d 1159, 1163 (*Defenders of Wildlife*).) When environmental groups challenged this exemption in federal court, the District of Columbia Court of Appeals invalidated the regulation, holding that the USEPA "does not have authority to exempt categories of point sources from the permit requirements of [CWA] § 402." (*Costle*, 568 F.2d at 1377.) The *Costle* court rejected the USEPA's argument that effluent-based storm sewer regulation was administratively infeasible because of the variable nature of storm water pollution and the number of affected storm sewers throughout the country. (*Id.* at 1377-82.) Although the court acknowledged the practical problems relating to storm sewer regulation, the court found the USEPA had the flexibility under the CWA to design regulations that would overcome these problems. (*Id.* at 1379-83.) In particular, the court pointed to general permits and permits based on requiring best management practices (BMPs).

During the next 15 years, the USEPA made numerous attempts to reconcile the statutory requirement of point source regulation with the practical problem of regulating possibly millions of diverse point source discharges of storm water. (See *Defenders of Wildlife*, 191 F.3d at 1163; see also Gallagher, Clean Water Act in Environmental Law Handbook (Sullivan, edit., 2003)
p. 300 (Environmental Law Handbook); Eisen, *Toward a Sustainable Urbanism: Lessons from Federal Regulation of Urban Storm Water Runoff* (1995) 48 Wash. U.J. Urb. & Contemp. L.1, 40-41 [Regulation of Urban Storm Water Runoff].)

In 1987, Congress amended the CWA to require NPDES permits for storm water discharges. (See CWA § 402(p), 33 U.S.C. § 1342(p); *Defenders of Wildlife,* 191 F.3d at 1163; *Natural Resources Defense Council v. USEPA* (9th Cir. 1992) 966 F.2d 1292, 1296.) In these amendments, enacted as part of the Water Quality Act of 1987, Congress distinguished between industrial and municipal storm water discharges. With respect to industrial storm water discharges, Congress provided that NPDES permits "shall meet all applicable provisions of this section and section 1311 [requiring the USEPA to establish effluent limitations under specific timetables]." (CWA § 402(p)(3)(A), 33 U.S.C. § 1342(p)(3)(A); see also *Defenders of Wildlife,* 191 F.3d at 1163-64.)

In 1990, USEPA adopted regulations specifying what activities were considered “industrial” and thus required discharges of storm water associated with those activities to obtain coverage under NPDES permits. (55 Fed. Reg. 47,990 (1990); 40 C.F.R. § 122.26(b)(14).) Construction activities, deemed a subset of the industrial activities category, must also be regulated by an NPDES permit. (40 C.F.R. § 122.26(b)(14)(x)). In 1999, USEPA issued regulations for “Phase II” of storm water regulation, which required most small construction sites (1-5 acres) to be regulated under the NPDES program. (64 Fed. Reg. 68,722; 40 C.F.R. § 122.26(b)(15)(i).)

2. Court Decisions on Public Participation

Two recent federal court opinions have vacated USEPA rules that denied meaningful public review of NPDES permit conditions. On January 14, 2003, the Ninth Circuit Court of Appeals held that certain aspects of USEPA’s Phase II regulations governing MS4s were invalid primarily because the general permit did not contain express requirements for public participation. (*Environmental Defense Center v. USEPA* (9th Cir. 2003) 344 F.3d 832.) Specifically, the court determined that applications for general permit coverage (including the Notice of Intent (NOI) and Storm Water Management Program (SWMP)) must be made available to the public, the applications must be reviewed and determined to meet the applicable standard by the permitting authority before coverage commences, and there must be a process to accommodate public hearings. (*Id.* at 852-54.) Similarly, on February 28, 2005, the Second Circuit Court of Appeals held that the USEPA's confined animal feeding operation (CAFO) rule violated the CWA because it allowed dischargers to write their own nutrient management plans without public review. (*Waterkeeper Alliance v. USEPA* (2d Cir. 2005) 399 F.3d 486.) Although neither decision involved the issuance of construction storm water permits, the State Water Board’s Office of Chief Counsel has recommended that the new General Permit address the courts’ rulings where feasible[1].

[1] In *Texas Independent Producers and Royalty Owners Assn. v. USEPA* (7th Cir. 2005) 410 F.3d 964, the Seventh Circuit Court of Appeals held that the USEPA’s construction general permit was not required to provide the public with the opportunity for a public hearing on the Notice of Intent or Storm Water Pollution Prevention Plan. The Seventh Circuit briefly discussed why it agreed with the Ninth Circuit’s dissent in *Environmental Defense Center*, but generally did not discuss the substantive holdings in *Environmental Defense Center* and *Waterkeeper Alliance*, because neither court addressed the initial question of whether the plaintiffs had standing to challenge the permits at issue. However, notwithstanding the Seventh Circuit’s decision, it is not binding or controlling on the State Water Board because California is located within the Ninth Circuit.

The CWA and the USEPA's regulations provide states with the discretion to formulate permit terms, including specifying best management practices (BMPs), to achieve strict compliance with federal technology-based and water quality-based standards. (*Natural Resources Defense Council v. USEPA* (9th Cir. 1992) 966 F.2d 1292, 1308.) Accordingly, this General Permit has developed specific BMPs as well as numeric action levels (NALs) and numeric effluent limitations (NELs) in order to achieve these minimum federal standards. In addition, the General Permit requires a SWPPP and REAP (another dynamic, site-specific plan) to be developed but has removed all language requiring the discharger to implement these plans – instead, the discharger is required to comply with specific requirements. By requiring the dischargers to implement these specific BMPs, NALs, and NELs, this General Permit ensures that the dischargers do not "write their own permits." As a result this General Permit does not require each discharger's SWPPP and REAP to be reviewed and approved by the Regional Water Boards.

This General Permit also requires dischargers to electronically file all permit-related compliance documents. These documents include, but are not limited to, NOIs, SWPPPs, annual reports, Notice of Terminations (NOTs), and numeric action level (NAL) exceedance reports. Electronically submitted compliance information is immediately available to the public, as well as the Regional Water Quality Control Board (Regional Water Board) offices, via the Internet. In addition, this General Permit enables public review and hearings on permit applications when appropriate. Under this General Permit, the public clearly has a meaningful opportunity to participate in the permitting process.

C. Blue Ribbon Panel of Experts and Feasibility of Numeric Effluent Limitations

In 2005 and 2006, the State Water Board convened an expert panel (panel) to address the feasibility of numeric effluent limitations (NELs) in California's storm water permits. Specifically, the panel was asked to address:

"Is it technically feasible to establish numeric effluent limitations, or some other quantifiable limit, for inclusion in storm water permits? How would such limitations or criteria be established, and what information and data would be required?"

"The answers should address industrial general permits, construction general permits, and area-wide municipal permits. The answers should also address both technology-based limitations or criteria and water quality-based limitations or criteria. In evaluating establishment of any objective criteria, the panel should address all of the following:

The ability of the State Water Board to establish appropriate objective limitations or criteria;

How compliance determinations would be made;

The ability of dischargers and inspectors to monitor for compliance; and

The technical and financial ability of dischargers to comply with the limitations or criteria."

Through a series of public participation processes (State Water Board meetings, State Water Board workshops, and the solicitation of written comments), a number of water quality, public process and overall program effectiveness problems were identified. Some of these problems are addressed through this General Permit.

D. Summary of Panel Findings on Construction Activities

The panel's final report can be downloaded and viewed through links at www.waterboards.ca.gov or by clicking here[2].

The panel made the following observations:

"Limited field studies indicate that traditional erosion and sediment controls are highly variable in performance, resulting in highly variable turbidity levels in the site discharge."

"Site-to-site variability in runoff turbidity from undeveloped sites can also be quite large in many areas of California, particularly in more arid regions with less natural vegetative cover and steep slopes."

"Active treatment technologies involving the use of polymers with relatively large storage systems now exist that can provide much more consistent and very low discharge turbidity. However, these technologies have as yet only been applied to larger construction sites, generally five acres or greater. Furthermore, toxicity has been observed at some locations, although at the vast majority of sites, toxicity has not occurred. There is also the potential for an accidental large release of such chemicals with their use."

"To date most of the construction permits have focused on TSS and turbidity, but have not addressed other, potentially significant pollutants such as phosphorus and an assortment of chemicals used at construction sites."

"Currently, there is no required training or certification program for contractors, preparers of soil erosion and sediment control Storm Water Pollution Prevention Plans, or field inspectors."

"The quality of storm water discharges from construction sites that effectively employ BMPs likely varies due to site conditions such as climate, soil, and topography."

"The States of Oregon and Washington have recently adopted similar concepts to the Action Levels described earlier."

In addition, the panel made the following conclusions:

"It is the consensus of the Panel that active treatment technologies make Numeric Limits technically feasible for pollutants commonly associated with storm water discharges from construction sites (e.g. TSS and turbidity) for larger construction sites. Technical practicalities and cost-effectiveness may make these technologies less feasible for smaller sites, including small drainages within a larger site, as these technologies have seen limited use at small construction sites. If chemical addition is not permitted, then Numeric Limits are not likely feasible."

"The Board should consider Numeric Limits or Action Levels for other pollutants of relevance to construction sites, but in particular pH. It is of particular concern where fresh concrete or wash water from cement mixers/equipment is exposed to storm water."

"The Board should consider the phased implementation of Numeric Limits and Action Levels, commensurate with the capacity of the dischargers and support industry to respond."

[2] http://www.waterboards.ca.gov/stormwtr/docs/numeric/swpanel_final_report.pdf

E. How the Panel's Findings are Used in this General Permit

The State Water Board carefully considered the findings of the panel and related public comments. The State Water Board also reviewed and considered the comments regarding statewide storm water policy and the reissuance of the Industrial General Permit. From the input received the State Water Board identified some permit and program performance gaps that are addressed in this General Permit. The Summary of Significant Changes (below) in this General Permit are a direct result of this process.

F. Summary of Significant Changes in This General Permit

The State Water Board has significant changes to Order 99-08-DWQ. This General Permit differs from Order 99-08-DWQ in the following significant ways:

Rainfall Erosivity Waiver: this General Permit includes the option allowing a small construction site (>1 and <5 acres) to self-certify if the rainfall erosivity value (R value) for their site's given location and time frame compute to be less than or equal to 5.

Technology-Based Numeric Action Levels: this General Permit includes NALs for pH and turbidity.

Technology-Based Numeric Effluent Limitations: this General Permit contains daily average NELs for pH during any construction phase where there is a high risk of pH discharge and daily average NELs turbidity for all discharges in Risk Level 3. The daily average NEL for turbidity is set at 500 NTU to represent the minimum technology that sites need to employ (to meet the traditional Best Available Technology Economically Achievable (BAT)/ Best Conventional Pollutant Control Technology (BCT) standard) and the traditional, numeric receiving water limitations for turbidity.

Risk-Based Permitting Approach: this General Permit establishes three levels of risk possible for a construction site. Risk is calculated in two parts: 1) Project Sediment Risk, and 2) Receiving Water Risk.

Minimum Requirements Specified: this General Permit imposes more minimum BMPs and requirements that were previously only required as elements of the SWPPP or were suggested by guidance.

Project Site Soil Characteristics Monitoring and Reporting: this General Permit provides the option for dischargers to monitor and report the soil characteristics at their project location. The primary purpose of this requirement is to provide better risk determination and eventually better program evaluation.

Effluent Monitoring and Reporting: this General Permit requires effluent monitoring and reporting for pH and turbidity in storm water discharges. The purpose of this monitoring is to determine compliance with the NELs and evaluate whether NALs included in this General Permit are exceeded.

Receiving Water Monitoring and Reporting: this General Permit requires some Risk Level 3 dischargers to monitor receiving waters and conduct bioassessments.

Post-Construction Storm Water Performance Standards: this General Permit specifies runoff reduction requirements for all sites not covered by a Phase I or Phase II MS4 NPDES permit, to avoid, minimize and/or mitigate post-construction storm water runoff impacts.

Rain Event Action Plan: this General Permit requires certain sites to develop and implement a Rain Event Action Plan (REAP) that must be designed to protect all exposed portions of the site within 48 hours prior to any likely precipitation event.

Annual Reporting: this General Permit requires all projects that are enrolled for more than one continuous three-month period to submit information and annually certify that their site is in compliance

with these requirements. The primary purpose of this requirement is to provide information needed for overall program evaluation and pubic information.

Certification/Training Requirements for Key Project Personnel: this General Permit requires that key personnel (e.g., SWPPP preparers, inspectors, etc.) have specific training or certifications to ensure their level of knowledge and skills are adequate to ensure their ability to design and evaluate project specifications that will comply with General Permit requirements.

Linear Underground/Overhead Projects: this General Permit includes requirements for all Linear Underground/Overhead Projects (LUPs).

II. RATIONALE

A. General Permit Approach

A general permit for construction activities is an appropriate permitting approach for the following reasons:

1. A general permit is an efficient method to establish the essential regulatory requirements for a broad range of construction activities under differing site conditions;

2. A general permit is the most efficient method to handle the large number of construction storm water permit applications;

3. The application process for coverage under a general permit is far less onerous than that for individual permit and hence more cost effective;

4. A general permit is consistent with USEPA's four-tier permitting strategy, the purpose of which is to use the flexibility provided by the CWA in designing a workable and efficient permitting system; and

5. A general permit is designed to provide coverage for a group of related facilities or operations of a specific industry type or group of industries. It is appropriate when the discharge characteristics are sufficiently similar, and a standard set of permit requirements can effectively provide environmental protection and comply with water quality standards for discharges. In most cases, the general permit will provide sufficient and appropriate management requirements to protect the quality of receiving waters from discharges of storm water from construction sites.

There may be instances where a general permit is not appropriate for a specific construction project. A Regional Water Board may require any discharger otherwise covered under the General Permit to apply for and obtain an Individual Permit or apply for coverage under a more specific General Permit. The Regional Water Board must determine that this General Permit does not provide adequate assurance that water quality will be protected, or that there is a site-specific reason why an individual permit should be required.

B. Construction Activities Covered

1. **Construction activity subject to this General Permit:**

Any construction or demolition activity, including, but not limited to, clearing, grading, grubbing, or excavation, or any other activity that results in a land disturbance of equal to or greater than one acre.

Construction activity that results in land surface disturbances of less than one acre if the construction activity is part of a larger common plan of development or sale of one or more acres of disturbed land surface.

Construction activity related to residential, commercial, or industrial development on lands currently used for agriculture including, but not limited to, the construction of buildings related to agriculture that are considered industrial pursuant to USEPA regulations, such as dairy barns or food processing facilities.

Construction activity associated with LUPs including, but not limited to, those activities necessary for the installation of underground and overhead linear facilities (e.g., conduits, substructures, pipelines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities) and include, but are not limited to, underground utility mark-out, potholing, concrete

and asphalt cutting and removal, trenching, excavation, boring and drilling, access road and pole/tower pad and cable/wire pull station, substation construction, substructure installation, construction of tower footings and/or foundations, pole and tower installations, pipeline installations, welding, concrete and/or pavement repair or replacement, and stockpile/borrow locations.

Discharges of sediment from construction activities associated with oil and gas exploration, production, processing, or treatment operations or transmission facilities.[3]

Storm water discharges from dredge spoil placement that occur outside of U.S. Army Corps of Engineers jurisdiction[4] (upland sites) and that disturb one or more acres of land surface from construction activity are covered by this General Permit. Construction projects that intend to disturb one or more acres of land within the jurisdictional boundaries of a CWA § 404 permit should contact the appropriate Regional Water Board to determine whether this permit applies to the project.

2. Linear Underground/Overhead Projects (LUPs) subject to this General Permit:

Underground/overhead facilities typically constructed as LUPs include, but are not limited to, any conveyance, pipe, or pipeline for the transportation of any gaseous, liquid (including water, wastewater for domestic municipal services), liquescent, or slurry substance; any cable line or wire for the transmission of electrical energy; any cable line or wire for communications (e.g., telephone, telegraph, radio or television messages); and associated ancillary facilities. Construction activities associated with LUPs include, but are not limited to, those activities necessary for the installation of underground and overhead linear facilities (e.g., conduits, substructures, pipelines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities) and include, but are not limited to, underground utility mark-out, potholing, concrete and asphalt cutting and removal, trenching, excavation, boring and drilling, access road and pole/tower pad and cable/wire pull station, substation construction, substructure installation, construction of tower footings and/or foundations, pole and tower installations, pipeline installations, welding, concrete and/or pavement repair or replacement, and stockpile/borrow locations.

Water Quality Order 2003-0007-DWQ regulated construction activities associated with small LUPs that resulted in land disturbances greater than one acre, but less than five acres. These projects were considered non-traditional construction projects. Attachment A of this Order now regulates all construction activities from LUPs resulting in land disturbances greater than one acre.

3. Common Plan of Development or Sale

USEPA regulations include the term “common plan of development or sale” to ensure that acreage within a common project does not artificially escape the permit requirements because construction activities are phased, split among smaller parcels, or completed by different owners/developers. In the absence of an exact definition of “common plan of development or sale,” the State Water Board is required to exercise its regulatory discretion in providing a common sense interpretation of the term as it applies to construction projects and permit coverage. An overbroad interpretation of the term would render meaningless the clear “one acre” federal permitting threshold and would potentially trigger permitting of

[3] Pursuant to the Ninth Circuit Court of Appeals’ decision in *NRDC v. EPA* (9th Cir. 2008) 526 F.3d 591, and subsequent denial of the USEPA’s petition for reconsideration in November 2008, oil and gas construction activities discharging storm water contaminated only with sediment are no longer exempt from the NPDES program.

[4] A construction site that includes a dredge and/or fill discharge to any water of the United States (e.g., wetland, channel, pond, or marine water) requires a CWA Section 404 permit from the U.S. Army Corps of Engineers and a CWA Section 401 Water Quality Certification from the Regional Water Board or State Water Board.

almost any construction activity that occurs within an area that had previously received area-wide utility or road improvements.

Construction projects generally receive grading and/or building permits (Local Permits) from local authorities prior to initiating construction activity. These Local Permits spell out the scope of the project, the parcels involved, the type of construction approved, etc. Referring to the Local Permit helps define "common plan of development or sale." In cases such as tract home development, a Local Permit will include all phases of the construction project including rough grading, utility and road installation, and vertical construction. All construction activities approved in the Local Permit are part of the common plan and must remain under the General Permit until construction is completed. For custom home construction, Local Permits typically only approve vertical construction as the rough grading, utilities, and road improvements were already independently completed under the a previous Local Permit. In the case of a custom home site, the homeowner must submit plans and obtain a distinct and separate Local Permit from the local authority in order to proceed. It is not the intent of the State Water Board to require permitting for an individual homeowner building a custom home on a private lot of less than one acre if it is subject to a separate Local Permit. Similarly, the installation of a swimming pool, deck, or landscaping that disturbs less than one acre that was not part of any previous Local Permit are not required to be permitted.

The following are several examples of construction activity of less than one acre that would require permit coverage:

a. A landowner receives a building permit(s) to build tract homes on a 100-acre site split into 200 one-third acre parcels, (the remaining acreage consists of streets and parkways) which are sold to individual homeowners as they are completed. The landowner completes and sells all the parcels except for two. Although the remaining two parcels combined are less than one acre, the landowner must continue permit coverage for the two parcels.

b. One of the parcels discussed above is sold to another owner who intends to complete the construction as already approved in the Local Permit. The new landowner must file Permit Registration Documents (PRDs) to complete the construction even if the new landowner is required to obtain a separate Local Permit.

c. Landowner in (1) above purchases 50 additional one half-acre parcels adjacent to the original 200-acre project. The landowner seeks a Local Permit (or amendment to existing Local permit) to build on 20 parcels while leaving the remaining 30 parcels for future development. The landowner must amend PRDs to include the 20 parcels 14 days prior to commencement of construction activity on those parcels.

C. Construction Activities Not Covered

1. Traditional Construction Projects Not Covered

This General Permit does not apply to the following construction activity:

a. Routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of the facility.

b. Disturbances to land surfaces solely related to agricultural operations such as disking, harrowing, terracing and leveling, and soil preparation.

c. Discharges of storm water from areas on tribal lands; construction on tribal lands is regulated by a federal permit.

d. Discharges of storm water within the Lake Tahoe Hydrologic Unit. The Lahontan Regional Water Board has adopted its own permit to regulate storm water discharges from construction activity in the Lake Tahoe Hydrologic Unit (Regional Water Board 6SLT). Owners of construction projects in this watershed must apply for the Lahontan Regional Water Board permit rather than the statewide Construction General Permit. Construction projects within the Lahontan region must also comply with the Lahontan Region Project Guideline for Erosion Control (R6T-2005-0007 Section), which can be found at **http://www.waterboards.ca.gov/lahontan/Adopted_Orders/2005/r6t_2005_0007.pdf**

e. Construction activity that disturbs less than one acre of land surface, unless part of a larger common plan of development or the sale of one or more acres of disturbed land surface.

f. Construction activity covered by an individual NPDES Permit for storm water discharges.

g. Landfill construction activity that is subject to the Industrial General Permit.

h. Construction activity that discharges to Combined Sewer Systems.

i. Conveyances that discharge storm water runoff combined with municipal sewage.

j. Discharges of storm water identified in CWA § 402(*l*)(2), 33 U.S.C. § 1342(*l*)(2).

2. **Linear Projects Not Covered**

a. LUP construction activity does not include linear routine maintenance projects. Routine maintenance projects are projects associated with operations and maintenance activities that are conducted on existing lines and facilities and within existing right-of-way, easements, franchise agreements, or other legally binding agreements of the discharger. Routine maintenance projects include, but are not limited to projects that are conducted to:

i. Maintain the original purpose of the facility or hydraulic capacity.

ii. Update existing lines[5] and facilities to comply with applicable codes, standards, and regulations regardless if such projects result in increased capacity.

iii. Repairing leaks.

Routine maintenance does not include construction of new[6] lines or facilities resulting from compliance with applicable codes, standards, and regulations.

Routine maintenance projects do not include those areas of maintenance projects that are outside of an existing right-of-way, franchise, easements, or agreements. When a project must secure new areas,

[5]Update existing lines includes replacing existing lines with new materials or pipes.
[6]New lines are those that are not associated with existing facilities and are not part of a project to update or replace existing lines.

those areas may be subject to this General Permit based on the area of disturbed land outside the original right-of-way, easement, or agreement.

b. LUP construction activity does not include field activities associated with the planning and design of a project (e.g., activities associated with route selection).

c. Tie-ins conducted immediately adjacent to "energized" or "pressurized" facilities by the discharger are not considered construction activities where all other LUP construction activities associated with the tie-in are covered by an NOI and SWPPP of a third party or municipal agency.

3. **EPA's Small Construction Rainfall Erosivity Waiver**

EPA's Storm Water Phase II Final Rule provides the option for a Small Construction Rainfall Erosivity Waiver. This waiver applies to small construction sites between 1 and 5 acres, and allows permitting authorities to waive those sites that do not have adverse water quality impacts.

Dischargers eligible for this waiver are exempt from Construction General Permit Coverage. In order to obtain the waiver, the discharger must certify to the State Water Board that small construction activity will occur only when the rainfall erosivity factor is less than 5 ("R" in the Revised Universal Soil Loss Equation). The period of construction activity begins at initial earth disturbance and ends with final stabilization. Where vegetation will be used for final stabilization, the date of installation of a practice that provides interim non-vegetative stabilization can be used for the end of the construction period. The operator must agree (as a condition waiver eligibility) to periodically inspect and properly maintain the area until the criteria for final stabilization as defined in the General Permit have been met. If use of this interim stabilization eligibility condition was relied on to qualify for the waiver, signature on the waiver with a certification statement constitutes acceptance of and commitment to complete the final stabilization process. The discharger must submit a waiver certification to the State Board prior to commencing construction activities.

USEPA funded a cooperative agreement with Texas A&M University to develop an online rainfall erosivity calculator. Dischargers can access the calculator from EPA's website at: www.epa.gov/npdes/stormwater/cgp. Use of the calculator allows the discharger to determine potential eligibility for the rainfall erosivity waiver. It may also be useful in determining the time periods during which construction activity could be waived from permit coverage.

D. Obtaining and Terminating Permit Coverage

The appropriate Legally Responsible Person (LRP) must obtain coverage under this General Permit. To obtain coverage, the LRP or the LRP's Approved Signatory must file Permit Registration Documents (PRDs) prior to the commencement of construction activity. Failure to obtain coverage under this General Permit for storm water discharges to waters of the United States is a violation of the CWA and the California Water Code.

To obtain coverage under this General Permit, LRPs must electronically file the PRDs, which include a Notice of Intent (NOI), Storm Water Pollution Prevention Plan (SWPPP), and other documents required by this General Permit, and mail the appropriate permit fee to the State Water Board. It is expected that as the storm water program develops, the Regional Water Boards may issue General Permits or Individual Permits that contain more specific permit provisions. When this occurs, this General Permit will no longer regulate those dischargers that obtain coverage under Individual Permits.

Any information provided to the Regional Water Board shall comply with the Homeland Security Act and any other federal law that concerns security in the United States; any information that does not comply should not be submitted.

The application requirements of the General Permit establish a mechanism to clearly identify the responsible parties, locations, and scope of operations of dischargers covered by the General Permit and to document the discharger's knowledge of the General Permit's requirements.

This General Permit provides a grandfathering exception to existing dischargers subject to Water Quality Order No. 99-08-DWQ. Construction projects covered under Water Quality Order No. 99-08-DWQ shall obtain permit coverage at Risk Level 1. LUP projects covered under Water Quality Order No. 2003-0007-DWQ shall obtain permit coverage at LUP Type 1. The Regional Water Boards have the authority to require Risk Determination to be performed on projects currently covered under Water Quality Order No. 99-08-DWQ and 2003-0007-DWQ where they deem necessary.

LRPs must file a Notice of Termination (NOT) with the Regional Water Board when construction is complete and final stabilization has been reached or ownership has been transferred. The discharger must certify that all State and local requirements have been met in accordance with this General Permit. In order for construction to be found complete, the discharger must install post-construction storm water management measures and establish a long-term maintenance plan. This requirement is intended to ensure that the post-construction conditions at the project site do not cause or contribute to direct or indirect water quality impacts (i.e., pollution and/or hydromodification) upstream and downstream. Specifically, the discharger must demonstrate compliance with the post-construction standards set forth in this General Permit (Section XIII). The discharger is responsible for all compliance issues including all annual fees until the NOT has been filed and approved by the local Regional Water Board.

E. Discharge Prohibitions

This General Permit authorizes the discharge of storm water to surface waters from construction activities that result in the disturbance of one or more acres of land, provided that the discharger satisfies all permit conditions set forth in the Order. This General Permit prohibits the discharge of pollutants other than storm water and non-storm water discharges authorized by this General Permit or another NPDES permit. This General Permit also prohibits all discharges which contain a hazardous substance in excess of reportable quantities established in 40 C.F.R. §§ 117.3 and 302.4, unless a separate NPDES Permit has been issued to regulate those discharges. In addition, this General Permit incorporates discharge prohibitions contained in water quality control plans, as implemented by the nine Regional Water Boards. Discharges to Areas of Special Biological Significance (ASBS) are prohibited unless covered by an exception that the State Water Board has approved.

Non-storm water discharges include a wide variety of sources, including improper dumping, spills, or leakage from storage tanks or transfer areas. Non-storm water discharges may contribute significant pollutant loads to receiving waters. Measures to control spills, leakage, and dumping, and to prevent illicit connections during construction must be addressed through structural as well as non-structural BMPs. The State Water Board recognizes, however, that certain non-storm water discharges may be necessary for the completion of construction projects. Authorized non-storm water discharges may include those from de-chlorinated potable water sources such as: fire hydrant flushing, irrigation of vegetative erosion control measures, pipe flushing and testing, water to control dust, uncontaminated ground water dewatering, and other discharges not subject to a separate general NPDES permit adopted by a region. Therefore this General Permit authorizes such discharges provided they meet the following conditions.

These authorized non-storm water discharges must:

1. be infeasible to eliminate;

2. comply with BMPs as described in the SWPPP;

3. filter or treat, using appropriate technology, all dewatering discharges from sedimentation basins;

4. meet the NELs and NALs for pH and turbidity; and

5. not cause or contribute to a violation of water quality standards.

Additionally, authorized non-storm water discharges must not be used to clean up failed or inadequate construction or post-construction BMPs designed to keep materials onsite. Authorized non-storm water dewatering discharges may require a permit because some Regional Water Boards have adopted General Permits for dewatering discharges.

This General Permit prohibits the discharge of storm water that causes or threatens to cause pollution, contamination, or nuisance.

F. Effluent Standards for All Types of Discharges

1. Technology-Based Effluent Limitations

Permits for storm water discharges associated with construction activity must meet all applicable provisions of Sections 301 and 402 of the CWA. These provisions require controls of pollutant discharges that utilize best available technology economically achievable (BAT) for toxic pollutants and non conventional pollutants and best conventional pollutant control technology (BCT) for conventional pollutants. Additionally, these provisions require controls of pollutant discharges to reduce pollutants and any more stringent controls necessary to meet water quality standards. The USEPA has already established such limitations, known as effluent limitation guidelines (ELGs), for some industrial categories. This is not the case with construction discharges. In instances where there are no ELGs the permit writer is to use best professional judgment (BPJ) to establish requirements that the discharger must meet using BAT/BCT technology. This General Permit contains both narrative effluent limitations and new numeric effluent limitations for pH and turbidity, set using the best professional judgment (BPJ) equivalent to BAT and BCT (respectively).

BAT/BCT technologies not only include passive systems such as conventional runoff and sediment control, but also treatment systems such as coagulation/flocculation using sand filtration, when appropriate. Such technologies allow for effective treatment of soil particles less 0.02 mm (medium silt) in diameter. The discharger must install structural controls, as necessary, such as erosion and sediment controls that meet BAT and BCT to achieve compliance with water quality standards. The narrative effluent limitations constitute compliance with the requirements of the CWA.

The numeric effluent limitations for pH and turbidity are based upon BPJ, which authorizes the State Water Board to issue a permit containing "such conditions as the Administrator determines are necessary to carry out the provisions of this Chapter" (CWA § 402(a)(1), 33 U.S.C. § 1342(a)(1).) Because the USEPA has not yet issued an effluent limit guideline for storm water, the State Water Board must use BPJ to consider the appropriate technology for the category or class of point sources, based upon all available information and any unique factors relating to the sources. In addition, the permitting authority must consider a number of factors including the cost of achieving effluent reductions in relation to the effluent reduction benefits, the age of the equipment and facilities, the processes employed and any required process changes, engineering aspects of the control technologies, non-water quality environmental impacts (including energy requirements), and other such other factors as the State Water Board deems appropriate (CWA 304(b)(1)(B)).

Because the permit is an NPDES permit, there is no legal requirement to address the factors set forth in Water Code sections 13241 and 13263, unless the permit is more stringent than what federal law requires. (See *City of Burbank v. State Water Resources Control Bd.* (2005) 35 Cal.4th 613, 618, 627.) None of the requirements in this permit are more stringent than the minimum federal requirements, which include technology-based requirements achieving BAT/BCT and strict compliance with water quality standards. The inclusion of numeric effluent limitations (NELs) in the permit do not cause the permit to be

more stringent than current federal law. NELs and best management practices are simply two different methods of achieving the same federal requirement: strict compliance with state water quality standards. Federal law authorizes both narrative and numeric effluent limitations to meet state water quality standards. The use of NELs to achieve compliance with water quality standards is not a more stringent requirement than the use of BMPs. (State Water Board Order No. WQ 2006-0012 (*Boeing*).) Accordingly, the State Water Board does not need to take into account the factors in Water Code sections 13241 and 13263.

The State Water Board has concluded that the establishment of BAT/BCT will not create or aggravate other environmental problems through increases in air pollution, solid waste generation, or energy consumption. While there may be a slight increase in non-water quality impacts due to the implementation of additional monitoring or the construction of additional BMPs, these impacts will be negligible in comparison with the construction activities taking place on site and would be justified by the water quality benefits associated with compliance.

Considerations related to the processes employed and the changes necessitated by the adoption of the BAT/BCT effluent limits have been assessed throughout the stakeholder process (e.g., the Blue Ribbon Panel and the March 2007 preliminary draft) and are discussed in detail in Section I.C of this Fact Sheet. The following sections set forth the engineering aspects of the control technologies and the rationale for the determination of the numeric effluents for pH and turbidity.

In consideration of the costs for the establishment of BAT and BCT limits for pH and turbidity, existing requirements for the control of storm water pollution from construction sites have been established by USEPA and the previous Construction General Permit (State Water Board Order No. 99-08-DWQ) issued by the State Water Board. The General Permit establishes one, consistent set of performance standards for all levels and types of discharges (i.e., risk, linear utility, and ATS).The only difference is that for each level or type of discharge there may be more or less specific effluent limitations (e.g., the addition of numeric effluent limitations for turbidity applies to level/type 3 discharges). And the numeric effluent limitations themselves represent a minimum technology standard. In other words, the additional numeric effluent limitations, compared to the existing permit's narrative effluent limitations, do not increase compliance requirements; rather, they simply represent a point where one can quantitatively measure compliance with the lower end of the range of required technologies. Therefore, the compliance costs associated with the BAT/BCT numeric effluent limitations in this permit only differ by the costs required to measure compliance with the NELs when compared to the baseline compliance costs to comply with the limitations already established through EPA regulations and the existing Construction General Permit.

The State Water Board estimates these measurement costs to be approximately $1000 per construction site for the duration of the project. This represents the estimated cost of purchasing (or renting) monitoring equipment, in this case a turbidimeter (~$600) and a pH meter (~$400). In some cases the costs may be higher or lower. Costs could be lower if the discharger chooses to design and implement the project in a manner where effluent monitoring is likely to be avoided (e.g., no exposure during wet weather seasons, no discharge due to containment, etc.). Costs could be more if the project is subject to many effluent monitoring events or if the discharger exceeds NALs and/or NELs, resulting in additional monitoring requirements.

i. ***pH NEL***

Given the potential contaminants, the minimum standard method for control of pH in runoff requires the use of preventive measures such as avoiding concrete pours during rainy weather, covering concrete and directing flow away from fresh concrete if a pour occurs during rain, covering scrap drywall and stucco materials when stored outside and potentially exposed to rain, and other housekeeping measures. If necessary, pH-impaired storm water from construction sites can be treated in a filter or settling pond or basin, with additional natural or chemical treatment required to meet pH limits set forth in this permit. The basin or pond acts as a collection point and holds storm water for a sufficient period for the contaminants to be settled out, either naturally or artificially, and allows any additional treatment to take place. The State Water Board considers these techniques to be equivalent to BCT. In determining the pH

concentration limit for discharges, the State Water Board used BPJ to set these limitations.

The chosen limits were established by calculating three standard deviations above and below the mean pH of runoff from highway construction sites[7] in California. Proper implementation of BMPs should result in discharges that are within the range of 6.0 to 9.0 pH Units.

ii. ***Turbidity NEL***

The Turbidity NEL of 500 NTU is a technology-based numeric effluent limitation and was developed using three different analyses aimed at finding the appropriate threshold to set the technology-based limit to ensure environmental protection, effluent quality and cost-effectiveness. The analyses fell into three, main types: (1) an ecoregion-specific dataset developed by Simon et. al. (2004) [8]; (2) Statewide Regional Water Quality Control Board enforcement data; and (3) published, peer-reviewed studies and reports on in-situ performance of best management practices in terms of erosion and sediment control on active construction sites.

A 1:3 relationship between turbidity (expressed as NTU) and suspended sediment concentration (expressed as mg/L) is assumed based on a review of suspended sediment and turbidity data from three gages used in the USGS National Water Quality Assessment Program:

USGS 11074000 SANTA ANA R BL PRADO DAM CA
USGS 11447650 SACRAMENTO R A FREEPORT CA
USGS 11303500 SAN JOAQUIN R NR VERNALIS CA

The turbidity NEL represents a feasible and cost effective performance standard that is demonstrated to be achievable. Although data has been collected to demonstrate that lower effluent levels may be achievable at some sites, staff cannot conclude at this time that a lower NEL is achievable within all the ecoregions of the state. The NEL represents staff determination that the NEL is the most practicable based on available data. The turbidity NEL represents a bridge between the narrative effluent limitations and receiving water limitations. The NEL limit may be considered an interim performance standard as additional data becomes available for evaluation during the next permit cycle. To support this NEL, State Water Board staff analyzed construction site discharge information (monitoring data, estimates) and receiving water monitoring information.

Since the turbidity NEL represents an appropriate threshold level expected at a site, compliance with this value does not necessarily represent compliance with either the narrative effluent limitations (as enforced through the BAT/BCT standard) or the receiving water limitations. In the San Diego region, some inland surface waters have a receiving water objective for turbidity equal to 20 NTU. Obviously a discharge up to, but not exceeding, the turbidity NEL of 500 NTU may still cause or contribute to the exceedance of the 20 NTU standard. Most of the waters of the State are protected by turbidity objectives based on background conditions**.**

Table 1 - Regional Water Board Basin Plans, Water Quality Objectives for Turbidity

REGIONAL WATER BOARD	WQ Objective	Background/Natural Turbidity	Maximum Increase
1	Based on background	All levels	20%

[7] Caltrans Construction Sites Runoff Characterization Study, 2002. Available at: http://www.dot.ca.gov/hq/env/stormwater/pdf/CTSW-RT-02-055.pdf.
[8] Simon, A., W.D. Dickerson, and A. Heins. 2004. Suspended-sediment transport rates at the 1.5-year recurrence interval for ecoregions of the United States: transport conditions at the bankfull and effective discharge. Geomorphology 58: pp. 243-262.

2	Based on background	> 50 NTU	10%
3	Based on background	0-50 JTU 50-100 JTU > 100 JTU	20% 10 NTU 10%
4	Based on background	0-50 NTU > 50 NTU	20% 10%
5	Based on background	0-5 NTU 5-50 NTU 50-100 NTU >100 NTU	1 NTU 20% 10 NTU 10%
6	Based on background	All levels	10%
7	Based on background	N/A	N/A
8	Based on background	0-50 NTU 50-100 NTU >100 NTU	20% 10 NTU 10%
9	Inland Surface Waters, 20 NTU All others, based on background	0-50 NTU 50-100 NTU >100 NTU	20% 10 NTU 10%

Table 2 shows the suspended sediment concentrations at the 1.5 year flow recurrence interval for the 12 ecoregions in California from Simon et. al (2004).

Table 2 - Results of Ecoregion Analysis

Ecoregion	Percent of California Land Area	Median Suspended Sediment Concentration (mg/L)
1	9.1	874
4	0.2	120
5	8.8	35.6
6	20.7	1530
7	7.7	122
8	3.0	47.4
9	9.4	284
13	5.2	143
14	21.7	5150
78	8.1	581
80	2.4	199
81	3.7	503
Area-weighted average		1633

If a 1:3 relationship between turbidity and suspended sediment is assumed, the median turbidity is 544 NTU.

The following table is composed of turbidity readings measured in NTUs from administrative civil liberty (ACL) actions for construction sites from 2003 - 2009. This data was derived from the complete listing of construction-related ACLs for the six year period. All ACLs were reviewed and those that included turbidimeter readings at the point of storm water discharge were selected for this dataset.

Table 3 – ACL Sampling Data taken by Regional Water Board Staff

WDID#	Region	Discharger	Turbidity (NTU)
5S34C331884	5S	Bradshaw Interceptor Section 6B	1800
5S05C325110	5S	Bridalwood Subdivision	1670
5S48C336297	5S	Cheyenne at Browns Valley	1629
5R32C314271	5R	Grizzly Ranch Construction	1400
6A090406008	6T	El Dorado County Department of Transportation, Angora Creek	97.4
5S03C346861	5S	TML Development, LLC	1600
6A31C325917	6T	Northstar Village	See Subdata Set

Subdata Set - Turbidity for point of storm water runoff discharge at Northstar Village

Date	Turbidity (NTU)	Location
10/5/2006	900	Middle Martis Creek
11/2/2006	190	Middle Martis Creek
01/04/2007	36	West Fork, West Martis Creek
02/08/2007	180	Middle Martis Creek
02/09/2007	130	Middle Martis Creek
02/09/2007	290	Middle Martis Creek
02/09/2007	100	West Fork, West Martis Creek
02/10/2007	28	Middle Martis Creek
02/10/2007	23	Middle Martis Creek
02/10/2007	32	Middle Martis Creek
02/10/2007	12	Middle Martis Creek
02/10/2007	60	West Fork, West Martis Creek
02/10/2007	34	West Fork, West Martis Creek

A 95% confidence interval for mean turbidity in an ACL order was constructed. The data set used was a small sample size, so the 500 NTU (the value derived as the NEL for this General Permit) needed to be verified as a possible population mean. In this case, the population refers to a hypothetical population of turbidity measurements of which our sample of 20 represents. A t-distribution was assumed due to the small sample size:

Mean: 512.23 NTU
Standard Deviation: 686.85
Margin of Error: 321.45
Confidence Interval: 190.78 NTU (Low)
833.68 NTU (High)

Based on a constructed 95% confidence interval, an ACL order turbidity measurement will be between 190.78 – 833.68 NTU. 500 NTU falls within this range. Using the same data set, a small-sample hypothesis test was also performed to test if the ACL turbidity data set contains enough information to cast doubt on choosing a 500 NTU as a mean. 500 NTU was again chosen due to its proposed use as an acceptable NEL value. The test was carried out using a 95% confidence interval. Results indicated that the ACL turbidity data set *does not* contain significant sample evidence to reject the claim of 500 NTU as an acceptable mean for the ACL turbidity population.

There are not many published, peer-reviewed studies and reports on in-situ performance of best management practices in terms of erosion and sediment control on active construction sites. The most often cited study is a report titled, "Improving the Cost Effectiveness of Highway Construction Site Erosion and Pollution Control" (Horner, Guedry, and Kortenhof 1990, http://www.wsdot.wa.gov/Research/Reports/200/200.1.htm). In a comment letter summarizing this report sent to the State Water Board, the primary author, Dr. Horner, states:

"The most effective erosion control product was wood fiber mulch applied at two different rates along with a bonding agent and grass seed in sufficient time before the tests to achieve germination. Plots treated in this way reduced influent turbidity by more than 97 percent and discharged effluent exhibiting mean and maximum turbidity values of 21 and 73 NTU, respectively. Some other mulch and blanket materials performed nearly as well. These tests demonstrated the control ability of widely available BMPs over a very broad range of erosion potential."

Other technologies studied in this report produced effluent quality at or near 100 NTU. It is the BPJ of the State Water Board staff that erosion control, while preferred, is not always an option on construction sites and that technology performance in a controlled study showing effluent quality directly leaving a BMP is always easier and cheaper to control than effluent being discharged from the project (edge of property, etc.). As a result, it is the BPJ of the State Water Board staff that it is not cost effective or feasible, at this time, for all risk level and type 3 sites in California to achieve effluent discharges with turbidity values that are less than 100 NTU.

To summarize, the analysis showed that: (1) results of the Simon et. al dataset reveals turbidity values in background receiving water in California's ecoregions range from 16 NTU to 1716 NTU (with a mean of 544 NTU); (2) based on a constructed 95% confidence interval, construction sites will be subject to administrative civil liability (ACL) when their turbidity measurement falls between 190.78 – 833.68 NTU; and (3) sites with highly controlled discharges employing and maintaining good erosion control practices can discharge effluent from the BMP with turbidity values less than 100 NTU. Therefore, the appropriate threshold to set the technology-based limit to ensure environmental protection, effluent quality, and cost-effectiveness ranges from 100 NTU to over 1700 NTU. To keep this parameter and the costs of compliance as low as possible, State Water Board staff has determined, using its BPJ, that it is most cost effective to set the numeric effluent limitation for turbidity at 500 NTU.

a. Compliance Storm Event

In response to public comments on the last draft and the recommendations of the expert panel, this General Permit contains "compliance storm event" exceptions from the technology-based NELs. The rationale is that technology-based requirements are developed assuming a certain design storm (defined as the storm producing a rainfall amount for a specified BMPs capacity). Compliance thresholds are needed for storm events above and beyond the design storms assumed to determine the technology-based NELs. For Risk Level 3 project sites applicable to NELs, this General Permit establishes a compliance storm event as the equivalent rainfall in a 5-year, 24-hour storm. This compliance storm was chosen due to its relative infrequent occurrence and the fact that the runoff volume associated with it is not as large as a 10-year, 24-hour storm event. The discharger shall determine this value using Western

Regional Climate Center Precipitation Frequency Maps[9] for 5-year 24-hour storm events in Northern and Southern California (note that these are expressed in tenths of inches – divide by 10 to get inches).

b. TMDLs and Waste Load Allocations

Dischargers located within the watershed of a CWA § 303(d) impaired water body, for which a TMDL for sediment has been adopted by the Regional Water Board or USEPA, must comply with the approved TMDL if it identifies "construction activity" or land disturbance as a source of sediment. If it does, the TMDL should include a specific waste load allocation for this activity/source. The discharger, in this case, may be required by a separate Regional Water Board order to implement additional BMPs, conduct additional monitoring activities, and/or comply with an applicable waste load allocation and implementation schedule. If a specific waste load allocation has been established that would apply to a specific discharge, the Regional Water Board may adopt an order requiring specific implementation actions necessary to meet that allocation. In the instance where an approved TMDL has specified a general waste load allocation to construction storm water discharges, but no specific requirements for construction sites have been identified in the TMDL, dischargers must consult with the state TMDL authority[10] to confirm that adherence to a SWPPP that meets the requirements of the General Permit will be consistent with the approved TMDL.

2. Determining Compliance with Effluent Standards

a. Technology-Based Numeric Action Levels (NALs)

This General Permit contains technology-based NALs for pH and turbidity, and requirements for effluent monitoring at all Risk level 2 & 3, and LUP Type 2 & 3 sites. Numeric action levels are essentially numeric benchmark values for certain parameters that, if exceeded in effluent sampling, trigger the discharger to take actions. Exceedance of an NAL does not itself constitute a violation of the General Permit. If the discharger fails to take the corrective action required by the General Permit, though, that may consititute a violation.

The primary purpose of NALs is to assist dischargers in evaluating the effectiveness of their on-site measures. Construction sites need to employ many different systems that must work together to achieve compliance with the permit's requirements. The NALs chosen should indicate whether the systems are working as intended.

Another purpose of NALs is to provide information regarding construction activities and water quality impacts. This data will provide the State and Regional Water Boards and the rest of the storm water community with more information about levels and types of pollutants present in runoff and how effective the dischargers BMPs are at reducing pollutants in effluent. The State Water Board also hopes to learn more about the linkage between effluent and receiving water quality. In addition, these requirements will provide information on the mechanics needed to establish compliance monitoring programs at construction sites in future permit deliberations.

i. *pH*

[9] http://www.wrcc.dri.edu/pcpnfreq/nca5y24.gif & http://www.wrcc.dri.edu/pcpnfreq/sca5y24.gif .
[10] http://www.waterboards.ca.gov/tmdl/tmdl.html.

The chosen limits were established by calculating one standard deviation above and below the mean pH of runoff from highway construction sites[11] in California. Proper implementation of BMPs should result in discharges that are within the range of 6.5 to 8.5 pH Units.

The Caltrans study included 33 highway construction sites throughout California over a period of four years, which included 120 storm events. All of these sites had BMPs in place that would be generally implemented at all types of construction sites in California.

ii. ***Turbidity***

BPJ was used to develop an NAL that can be used as a learning tool to help dischargers improve their site controls, and to provide meaningful information on the effectiveness of storm water controls. A statewide turbidity NAL has been set at 250 NTU.

G. Receiving Water Limitations

Construction-related activities that cause or contribute to an exceedance of water quality standards must be addressed. The dynamic nature of construction activity gives the discharger the ability to quickly identify and monitor the source of the exceedances. This is because when storm water mobilizes sediment, it provides visual cues as to where corrective actions should take place and how effective they are once implemented.

This General Permit requires that storm water discharges and authorized non-storm water discharges must not contain pollutants that cause or contribute to an exceedance of any applicable water quality objective or water quality standards. The monitoring requirements in this General Permit for sampling and analysis procedures will help determine whether BMPs installed and maintained are preventing pollutants in discharges from the construction site that may cause or contribute to an exceedance of water quality standards.

Water quality standards consist of designated beneficial uses of surface waters and the adoption of ambient criteria necessary to protect those uses. When adopted by the State Water Board or a Regional Water Board, the ambient criteria are termed "water quality objectives." If storm water runoff from construction sites contains pollutants, there is a risk that those pollutants could enter surface waters and cause or contribute to an exceedance of water quality standards. For that reason, dischargers should be aware of the applicable water quality standards in their receiving waters. (The best method to ensure compliance with receiving water limitations is to implement BMPs that prevent pollutants from contact with storm water or from leaving the construction site in runoff.)

In California, water quality standards are published in the Basin Plans adopted by each Regional Water Board, the California Toxics Rule (CTR), the National Toxics Rule (NTR), and the Ocean Plan.

Dischargers can determine the applicable water quality standards by contacting Regional Water Board staff or by consulting one of the following sources. The actual Basin Plans that contain the water quality standards can be viewed at the website of the appropriate Regional Water Board. (http://www.waterboards.ca.gov/regions.html), the State Water Board site for statewide plans (http://www.waterboards.ca.gov/plnspols/index.html), or the USEPA regulations for the NTR and CTR (40 C.F.R. §§ 131.36-38). Basin Plans and statewide plans are also available by mail from the appropriate Regional Water Board or the State Water Board. The USEPA regulations are available at http://www.epa.gov/. Additional information concerning water quality standards can be accessed through http://www.waterboards.ca.gov/stormwtr/gen_const.html.

[11] Caltrans Construction Sites Runoff Characterization Study, 2002. Available at: http://www.dot.ca.gov/hq/env/stormwater/pdf/CTSW-RT-02-055.pdf.

H. Training Qualifications and Requirements

The Blue Ribbon Panel (BRP) made the following observation about the lack of industry-specific training requirements:

"Currently, there is no required training or certification program for contractors, preparers of soil erosion and sediment control Storm Water Pollution Prevention Plans, or field inspectors."

Order 99-08-DWQ required that all dischargers train their employees on how to comply with the permit, but it did not specificy a curriculum or certification program. This has resulted in inconsistent implementation by all affected parties - the dischargers, the local governments where the construction activity occurs, and the regulators required to enforce 99-08-DWQ. This General Permit requires Qualified SWPPP Developers and practitioners to obtain appropriate training, and makes this curriculum mandatory two years after adoption, to allow time for course completion. The State and Regional Water Board are working with many stakeholders to develop the curriculum and mechanisms needed to develop and deliver the courses.

To ensure that the preparation, implementation, and oversight of the SWPPP is sufficient for effective pollution prevention, the Qualified SWPPP Developer and Qualified SWPPP Practitioners responsible for creating, revising, overseeing, and implementing the SWPPP must attend a State Water Board-sponsored or approved Qualified SWPPP Developer and Qualified SWPPP Practitioner training course.

I. Sampling, Monitoring, Reporting and Record Keeping

1. Traditional Construction Monitoring Requirements

This General Permit requires visual monitoring at all sites, and effluent water quality at all Risk Level 2 & 3 sites. It requires receiving water monitoring at some Risk Level 3 sites. All sites are required to submit annual reports, which contain various types of information, depending on the site characteristics and events. A summary of the monitoring and reporting requirements is found in Table 4.

Table 4 - Required Monitoring Elements for Risk Levels

	Visual	Non-visible Pollutant	Effluent	Receiving Water
Risk Level 1	three types required for all Risk Levels: non-storm water, pre-rain and post-rain	As needed for all Risk Levels (see below)	where applicable	not required
Risk Level 2			pH, turbidity	not required
Risk Level 3			(if NEL exceeded) pH, turbidity and SSC	(if NEL exceeded) pH, turbidity and SSC. Bioassessment for sites 30 acres or larger.

a. Visual

All dischargers are required to conduct quarterly, non-storm water visual inspections. For these inspections, the discharger must visually observe each drainage area for the presence of (or indications of prior) unauthorized and authorized non-storm water discharges and their sources. For storm-related inspections, dischargers must visually observe storm water discharges at all discharge locations within two business days after a qualifying event. For this requirement, a qualifying rain event is one producing precipitation of ½ inch or more of discharge. Dischargers must conduct a post-storm event inspection to

(1) identify whether BMPs were adequately designed, implemented, and effective, and (2) identify any additional BMPs necessary and revise the SWPPP accordingly. Dischargers must maintain on-site records of all visual observations, personnel performing the observations, observation dates, weather conditions, locations observed, and corrective actions taken in response to the observations.

b. Non-Visible Pollutant Monitoring

This General Permit requires that all dischargers develop a sampling and analysis strategy for monitoring pollutants that are not visually detectable in storm water. Monitoring for non-visible pollutants must be required at any construction site when the exposure of construction materials occurs and where a discharge can cause or contribute to an exceedance of a water quality objective.

Of significant concern for construction discharges are the pollutants found in materials used in large quantities at construction sites throughout California and exposed throughout the rainy season, such as cement, flyash, and other recycled materials or by-products of combustion. The water quality standards that apply to these materials will depend on their composition. Some of the more common storm water pollutants from construction activity are not CTR pollutants. Examples of non-visible pollutants include glyphosate (herbicides), diazinon and chlorpyrifos (pesticides), nutrients (fertilizers), and molybdenum (lubricants). The use of diazinon and chlorpyrifos is a common practice among landscaping professionals and may trigger sampling and analysis requirements if these materials come into contact with storm water. High pH values from cement and gypsum, high pH and SSC from wash waters, and chemical/fecal contamination from portable toilets, also are not CTR pollutants. Although some of these constituents do have numeric water quality objectives in individual Basin Plans, many do not and are subject only to narrative water quality standards (i.e. not causing toxicity). Dischargers are encouraged to discuss these issues with Regional Water Board staff and other storm water quality professionals.

The most effective way to avoid the sampling and analysis requirements, and to ensure permit compliance, is to avoid the exposure of construction materials to precipitation and storm water runoff. Materials that are not exposed do not have the potential to enter storm water runoff, and therefore receiving waters sampling is not required. Preventing contact between storm water and construction materials is one of the most important BMPs at any construction site.

Preventing or eliminating the exposure of pollutants at construction sites is not always possible. Some materials, such as soil amendments, are designed to be used in a manner that will result in exposure to storm water. In these cases, it is important to make sure that these materials are applied according to the manufacturer's instructions and at a time when they are unlikely to be washed away. Other construction materials can be exposed when storage, waste disposal or the application of the material is done in a manner not protective of water quality. For these situations, sampling is required unless there is capture and containment of all storm water that has been exposed. In cases where construction materials may be exposed to storm water, but the storm water is contained and is not allowed to run off the site, sampling will only be required when inspections show that the containment failed or is breached, resulting in potential exposure or discharge to receiving waters.

The discharger must develop a list of potential pollutants based on a review of potential sources, which will include construction materials soil amendments, soil treatments, and historic contamination at the site. The discharger must review existing environmental and real estate documentation to determine the potential for pollutants that could be present on the construction site as a result of past land use activities.

Good sources of information on previously existing pollution and past land uses include:

i. Environmental Assessments;

ii. Initial Studies;

iii. Phase 1 Assessments prepared for property transfers; and

iv. Environmental Impact Reports or Environmental Impact Statements prepared under the requirements of the National Environmental Policy Act or the California Environmental Quality Act.

In some instances, the results of soil chemical analyses may be available and can provide additional information on potential contamination.

The potential pollutant list must include all non-visible pollutants that are known or should be known to occur on the construction site including, but not limited to, materials that:

i. are being used in construction activities;

ii. are stored on the construction site;

iii. were spilled during construction operations and not cleaned up;

iv. were stored (or used) in a manner that created the potential for a release of the materials during past land use activities;

v. were spilled during previous land use activities and not cleaned up; or

vi. were applied to the soil as part of past land use activities.

C. **Effluent Monitoring**

Federal regulations[12] require effluent monitoring for discharges subject to NALs and NELs. Subsequently, all Risk Level 2 and 3 dischargers must perform sampling and analysis of effluent discharges to characterize discharges associated with construction activity from the entire area disturbed by the project. Dischargers must collect samples of stored or contained storm water that is discharged subsequent to a storm event producing precipitation of ½ inch or more at the time of discharge.

Table 5 - Storm Water Effluent Monitoring Requirements by Risk Level

	Frequency	Effluent Monitoring (Section E, below)
Risk Level 1	when applicable	non-visible pollutant parameters (if applicable)
Risk Level 2	Minimum of 3 samples per day during qualifying rain event characterizing discharges associated with construction activity from the entire project disturbed area.	pH, turbidity, and non-visible pollutant parameters (if applicable)
Risk Level 3	Minimum of 3 samples per day during qualifying rain event characterizing discharges associated with construction activity from the entire project disturbed area.	If NEL exceeded: pH, turbidity and suspended sediment concentration (SSC)., Plus non-visible pollutant parameters if applicable

Risk Level 1 dischargers must analyze samples for:

[12] 40 C.F.R. § 122.44.

i. any parameters indicating the presence of pollutants identified in the pollutant source assessment required in Attachment C contained in the General Permit.

Risk Level 2 dischargers must analyze samples for:

i. pH and turbidity;

ii. any parameters indicating the presence of pollutants identified in the pollutant source assessment required in Attachment D contained in the General Permit, and

iii. any additional parameters for which monitoring is required by the Regional Water Board.

Risk Level 3 dischargers must analyze samples for:

i. pH, turbidity and SSC;

ii. any parameters indicating the presence of pollutants identified in the pollutant source assessment required in Attachment E contained in the General Permit, and

iii. any additional parameters for which monitoring is required by the Regional Water Board.

2. **Linear Monitoring and Sampling Requirements**

Attachment A, establishes minimum monitoring and reporting requirements for all LUPs. It establishes different monitoring requirements depending on project complexity and risk to water quality. The monitoring requirements for Type 1 LUPs are less than Type 2 & 3 projects because Type 1 projects have a lower potential to impact water quality.

A discharger shall prepare a monitoring program prior to the start of construction and immediately implement the program at the start of construction for LUPs. The monitoring program must be implemented at the appropriate level to protect water quality at all times throughout the life of the project.

a. **Type 1 LUP Monitoring Requirements**

A discharger must conduct daily visual inspections of Type 1 LUPs during working hours while construction activities are occurring. Inspections are to be conducted by qualified personnel and can be conducted in conjunction with other daily activities. Inspections will be conducted to ensure the BMPs are adequate, maintained, and in place at the end of the construction day. The discharger will revise the SWPPP, as appropriate, based on the results of the daily inspections. Inspections can be discontinued in non-active construction areas where soil disturbing activities have been completed and final stabilization has been achieved (e.g., trench has been paved, substructures have been installed, and successful final vegetative cover or other stabilization criteria have been met).

A discharger shall implement the monitoring program for inspecting Type 1 LUPs. This program requires temporary and permanent stabilization BMPs after active construction is completed. Inspection activities will continue until adequate permanent stabilization has been established and will continue in areas where re-vegetation is chosen until minimum vegetative coverage has been established. Photographs shall be taken during site inspections and submitted to the State Water Board.

b. Type 2 & 3 LUP Monitoring Requirements

A discharger must conduct daily visual inspections of Type 2 & 3 LUPs during working hours while construction activities are occurring. Inspections are to be conducted by qualified personnel and can be in conjunction with other daily activities.

All dischargers of Type 2 & 3 LUPs are required to conduct inspections by qualified personnel of the construction site during normal working hours prior to all anticipated storm events and after actual storm events. During extended storm events, the discharger shall conduct inspections during normal working hours for each 24-hour period. Inspections can be discontinued in non-active construction areas where soil disturbing activities have been completed and final stabilization has been achieved (e.g., trench has been paved, substructures installed, and successful vegetative cover or other stabilization criteria have been met).

The goals of these inspections are (1) to identify areas contributing to a storm water discharge; (2) to evaluate whether measures to reduce pollutant loadings identified in the SWPPP are adequate and properly installed and functioning in accordance with the terms of the General Permit; and (3) to determine whether additional control practices or corrective maintenance activities are needed. Equipment, materials, and workers must be available for rapid response to failures and emergencies. All corrective maintenance to BMPs shall be performed as soon as possible, depending upon worker safety.

All dischargers shall develop and implement a monitoring program for inspecting Type 2 & 3 LUPs that require temporary and permanent stabilization BMPs after active construction is completed. Inspections will be conducted to ensure the BMPs are adequate and maintained. Inspection activities will continue until adequate permanent stabilization has been established and will continue in areas where revegetation is chosen until minimum vegetative coverage has been established.

A log of inspections conducted before, during, and after the storm events must be maintained in the SWPPP. The log will provide the date and time of the inspection and who conducted the inspection. Photographs must be taken during site inspections and submitted to the State Water Board.

c. Sampling Requirements for all LUP Project Types

LUPs are also subject to sampling and analysis requirements for visible pollutants (i.e., sedimentation/siltation, turbidity) and for non-visible pollutants.

Sampling for visible pollutants is required for Type 2 & 3 LUPs.

Non-visible pollutant monitoring is required for pollutants associated with construction sites and activities that (1) are not visually detectable in storm water discharges, and (2) are known or should be known to occur on the construction site, and (3) could cause or contribute to an exceedance of water quality objectives in the receiving waters. Sample collection for non-visible pollutants must only be required (1) during a storm event when pollutants associated with construction activities may be discharged with storm water runoff due to a spill, or in the event there was a breach, malfunction, failure, and/or leak of any BMP, and (2) when the discharger has failed to adequately clean the area of material and pollutants. Failure to implement appropriate BMPs will trigger the same sampling requirements as those required for a breach, malfunction and/or leak, or when the discharger has failed to implement appropriate BMPs prior to the next storm event.

Additional monitoring parameters may be required by the Regional Water Boards.

It is not anticipated that many LUPs will be required to collect samples for pollutants not visually detected in runoff due to the nature and character of the construction site and activities as previously described in this fact sheet. Most LUPs are constructed in urban areas with public access (e.g., existing roadways, road shoulders, parking areas, etc.). This raises a concern regarding the potential contribution of pollutants from vehicle use and/or from normal activities of the public (e.g., vehicle washing, landscape fertilization, pest spraying, etc.) in runoff from the project site. Since the dischargers are not the land

owners of the project area and are not able to control the presence of these pollutants in the storm water that runs through their projects, it is not the intent of this General Permit to require dischargers to sample for these pollutants. This General Permit does not require the discharger to sample for these types of pollutants except where the discharger has brought materials onsite that contain these pollutants and when a condition (e.g., breach, failure, etc.) described above occurs.

3. Receiving Water Monitoring

In order to ensure that receiving water limitations are met, discharges subject to numeric effluent limitations (i.e., Risk Level 3, LUP Type 3, and ATS with direct discharges into receiving waters) must also monitor the downstream receiving water(s) for turbidity, SSC, and pH (if applicable) when an NEL is exceeded.

a. Bioassessment Monitoring

This General Permit requires a bioassessment of receiving waters for dischargers of Risk Level 3 or LUP Type 3 construction projects equal to or larger than 30 acres with direct discharges into receiving waters. Benthic macroinvertebrate samples will be taken upstream and downstream of the site's discharge point in the receiving water. Bioassessments measure the quality of the stream by analyzing the aquatic life present. Higher levels of appropriate aquatic species tend to indicate a healthy stream; whereas low levels of organisms can indicate stream degradation. Active construction sites have the potential to discharge large amounts of sediment and pollutants into receiving waters. Requiring a bioassessment for large project sites, with the most potential to impact water quality, provides a snapshot of the health of the receiving water prior to initiation of construction activities. This snapshot can be used in comparison to the health of the receiving water after construction has commenced.

Each ecoregion (biologically and geographically related area) in the State has a specific yearly peak time where stream biota is in a stable and abundant state. This time of year is called an Index Period. The bioassessment requirements in this General Permit, requires benthic macroinvertebrate sampling within a sites index period. The State Water Board has developed a map designating index periods for the ecoregions in the State (see State Water Board Website).

This General Permit requires the bioassessment methods to be in accordance with the Surface Water Ambient Monitoring Program (SWAMP) in order to provide data consistency within the state as well as generate useable biological stream data.

Table 6 - Receiving Water Monitoring Requirements

	Receiving Water Monitoring Parameters
Risk Level 1 /LUP Type 1	not required
Risk Level 2 / LUP Type 2	not required
Risk Level 3 / LUP Type 3	If NEL exceeded: pH (if applicable), turbidity, and SSC. Bioassessment for sites 30 acres or larger.

4. Reporting Requirements

a. NEL Violation Report

All Risk Level 3 and LUP Type 3 dischargers must electronically submit all storm event sampling results to the State and Regional Water Boards, via SMARTS, no later than 5 days after the conclusion of the storm event. The purpose of the electronic filing of the NEL Violation Report is to 1) inform stakeholder agencies and organizations and the general public, and 2) notify the State and Regional Water Boards of

the exceedance so that they can determine whether any follow-up (e.g., inspection, enforcement, etc.) is necessary to bring the site into compliance.

In the event that an applicable NEL has been exceeded during a storm event equal to or larger than the Compliance Storm Event, Risk level 3/LUP Type 3 dischargers shall report the on-site rain gauge reading and nearby governmental rain gauge readings for verification. Specifically, the NEL Exceedance Report is required to contain:

- the analytical method(s), method reporting unit(s), and method detection limit(s) of each analytical parameter (analytical results that are less than the method detection limit are to be reported as "less than the method detection limit or <MDL");
- the date, place, and time of sampling;
- any visual observation (inspections);
- any measurements, including precipitation; and
- a description of the current BMPs associated with the effluent sample that exceeded the NEL and any proposed corrective actions taken.

b. **NAL Exceedance Report**

All Risk Level 3 and LUP Type 3 dischargers must electronically submit all storm event sampling results to the State and Regional Water Boards, via the electronic data system, no later than 5 days after the conclusion of the storm event. In the event that any effluent sample exceeds an applicable NAL, all Risk Level 2 and LUP Type 2 dischargers must electronically submit all storm event sampling results to the State and Regional Water Boards no later than 10 days after the conclusion of the storm event. The Regional Water Boards have the authority to require the submittal of an NAL Exceedance Report.

Specifically, the NAL Exceedance Report is required to contain:

- the analytical method(s), method reporting unit(s), and method detection limit(s) of each analytical parameter (analytical results that are less than the method detection limit are to be reported as "less than the method detection limit or <MDL");
- the date, place, and time of sampling;
- any visual observation (inspections);
- any measurements, including precipitation; and
- a description of the current BMPs associated with the effluent sample that exceeded the NAL and any proposed corrective actions taken.

c. **Annual Report**

All dischargers must prepare and electronically submit an annual report no later than September 1 of each year using the Storm water Multi-Application Reporting and Tracking System (SMARTS). The Annual Report must include a summary and evaluation of all sampling and analysis results, original laboratory reports, chain of custody forms, a summary of all corrective actions taken during the compliance year, and identification of any compliance activities or corrective actions that were not implemented.

5. Record Keeping

According to 40 C.F.R. Parts 122.21(p) and 122.41(j), the discharger is required to retain paper or electronic copies of all records required by this General Permit for a period of at least three years from the date generated or the date submitted to the State Water Board or Regional Water Boards. A discharger must retain records for a period beyond three years as directed by Regional Water Board.

J. Risk Determination

1. Traditional Projects

a. Overall Risk Determination

There are two major requirements related to site planning and risk determination in this General Permit. The project's overall risk is broken up into two elements – (1) project sediment risk (the relative amount of sediment that can be discharged, given the project and location details) and (2) receiving water risk (the risk sediment discharges pose to the receiving waters).

Project Sediment Risk:
Project Sediment Risk is determined by multiplying the R, K, and LS factors from the Revised Universal Soil Loss Equation (RUSLE) to obtain an estimate of project-related bare ground soil loss expressed in tons/acre. The RUSLE equation is as follows:

A = (R)(K)(LS)(C)(P)

Where: A = the rate of sheet and rill erosion
R = rainfall-runoff erosivity factor
K = soil erodibility factor
LS = length-slope factor
C = cover factor (erosion controls)
P = management operations and support practices (sediment controls)

The C and P factors are given values of 1.0 to simulate bare ground conditions.

There is a map option and a manual calculation option for determining soil loss. For the map option, the R factor for the project is calculated using the online calculator at http://cfpub.epa.gov/npdes/stormwater/LEW/lewCalculator.cfm. The product of K and LS are shown on Figure 1. To determine soil loss in tons per acre, the discharger multiplies the R factor times the value for K times LS from the map.

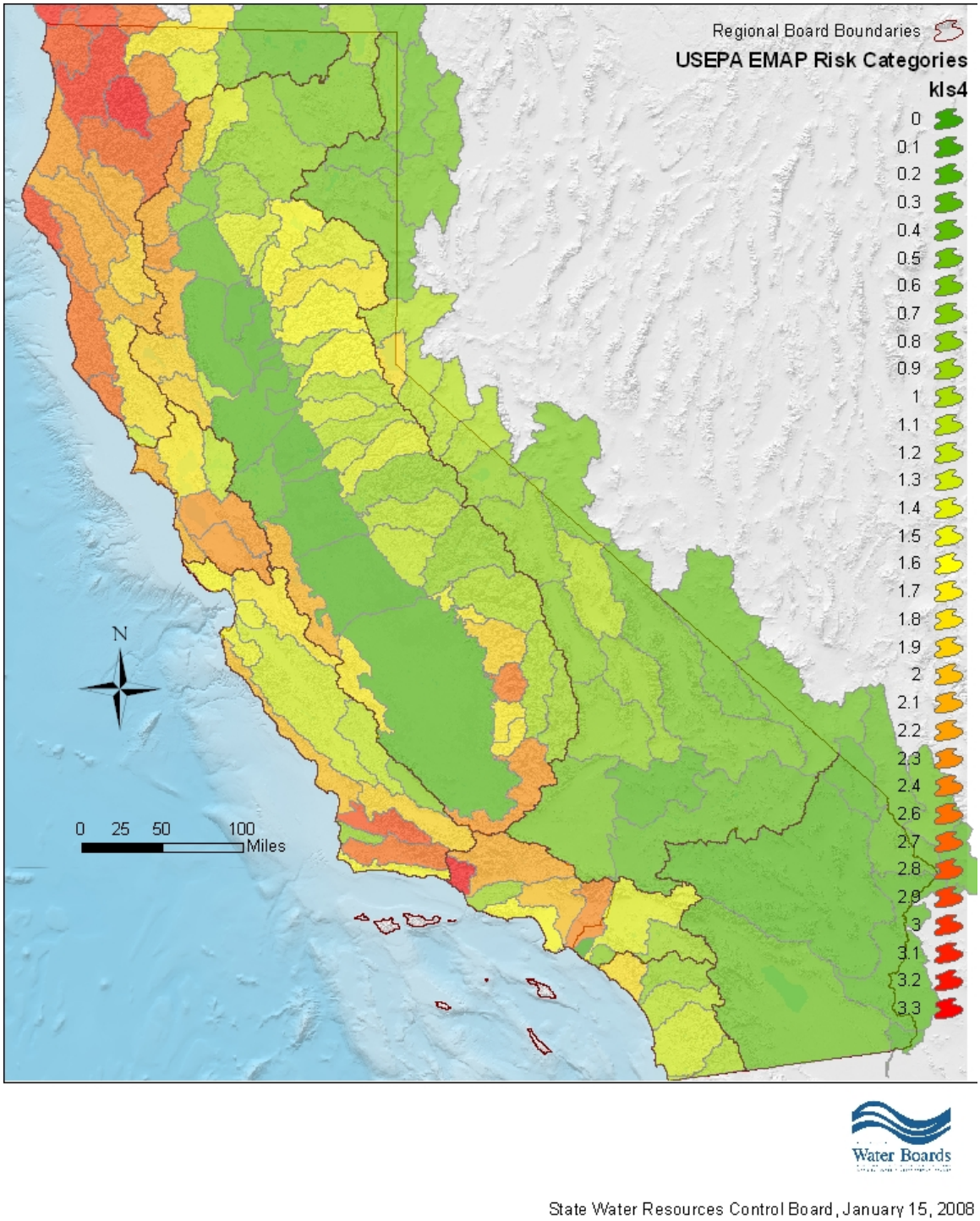

Figure 1 -Statewide Map of K * LS

For the manual calculation option, the R factor for the project is calculated using the online calculator at http://cfpub.epa.gov/npdes/stormwater/LEW/lewCalculator.cfm. The K and LS factors are determined using Appendix 1.

Soil loss of less than 15 tons/acre is considered **low** sediment risk.
Soil loss between 15 and 75 tons/acre is **medium** sediment risk.
Soil loss over 75 tons/acre is considered **high** sediment risk.

The soil loss values and risk categories were obtained from mean and standard deviation RKLS values from the USEPA EMAP program. High risk is the mean RKLS value plus two standard deviations. Low risk is the mean RKLS value minus two standard deviations.

Receiving Water Risk:
Receiving water risk is based on whether a project drains to a sediment-sensitive waterbody. A sediment-sensitive waterbody is either

on the most recent 303d list for waterbodies impaired for sediment;
has a USEPA-approved Total Maximum Daily Load implementation plan for sediment; **or**
has the beneficial uses of COLD, SPAWN, and MIGRATORY.

A project that meets at least one of the three criteria has a high receiving water risk. A list of sediment-sensitive waterbodies will be posted on the State Water Board's website. It is anticipated that an interactive map of sediment sensitive water bodies in California will be available in the future.

The Risk Levels have been altered by eliminating the possibility of a Risk Level 4, and expanding the constraints for Risk Levels 1, 2, and 3. Therefore, projects with high receiving water risk and high sediment risk will be considered a Risk Level 3 risk to water quality.

In response to public comments, the Risk Level requirements have also been changed such that Risk Level 1 projects will be subject to minimum BMP and visual monitoring requirements, Risk Level 2 projects will be subject to NALs and some additional monitoring requirements, and Risk Level 3 projects will be subject to NELs, and more rigorous monitoring requirements such as receiving water monitoring and in some cases bioassessment.

Table 7 - Combined Risk Level Matrix

Combined Risk Level Matrix				
Receiving Water Risk		Sediment Risk		
		Low	Medium	High
	Low	Level 1	Level 2	
	High	Level 2		Level 3

b. Effluent Standards

All dischargers are subject to the narrative effluent limitations specified in the General Permit. The narrative effluent limitations require storm water discharges associated with construction activity to meet all applicable provisions of Sections 301 and 402 of the CWA. These provisions require controls of pollutant discharges that utilize BAT and BCT to reduce pollutants and any more stringent controls necessary to meet water quality standards.

Risk Level 2, and 3 dischargers are subject to numeric effluent standards comparable to the project's risk to water quality. Risk Level 2 dischargers that pose a medium risk to water quality are subject to technology-based NALs for pH and turbidity. Risk Level 3 dischargers that pose a high risk to water quality are subject to technology-based NALs and technology-based NELs for pH and turbidity.

c. Good Housekeeping

Proper handling and managing of construction materials can help minimize threats to water quality. The discharger must consider good housekeeping measures for: construction materials, waste management, vehicle storage & maintenance, landscape materials, and potential pollutant sources. Examples include; conducting an inventory of products used, implementing proper storage & containment, and properly cleaning all leaks from equipment and vehicles.

d. Non-Storm Water Management

Non-storm water discharges directly connected to receiving waters or the storm drain system have the potential to negatively impact water quality. The discharger must implement measures to control all non-storm water discharges during construction, and from dewatering activities associated with construction. Examples include; properly washing vehicles in contained areas, cleaning streets, and minimizing irrigation runoff.

e. Erosion Control

The best way to minimize the risk of creating erosion and sedimentation problems during construction is to disturb as little of the land surface as possible by fitting the development to the terrain. When development is tailored to the natural contours of the land, little grading is necessary and, consequently, erosion potential is lower.[14] Other effective erosion control measures include: preserving existing vegetation where feasible, limiting disturbance, and stabilizing and re-vegetating disturbed areas as soon as possible after grading or construction activities. Particular attention must be paid to large, mass-graded sites where the potential for soil exposure to the erosive effects of rainfall and wind is great and where there is potential for significant sediment discharge from the site to surface waters. Until permanent vegetation is established, soil cover is the most cost-effective and expeditious method to protect soil particles from detachment and transport by rainfall. Temporary soil stabilization can be the single most important factor in reducing erosion at construction sites. The discharger is required to consider measures such as: covering disturbed areas with mulch, temporary seeding, soil stabilizers, binders, fiber rolls or blankets, temporary vegetation, and permanent seeding. These erosion control measures are only examples of what should be considered and should not preclude new or innovative approaches currently available or being developed. Erosion control BMPs should be the primary means of preventing storm water contamination, and sediment control techniques should be used to capture any soil that becomes eroded.[13]

Risk Level 3 dischargers pose a higher risk to water quality and are therefore additionally required to ensure that post-construction soil loss is equivalent to or less than the pre-construction levels.

f. Sediment Control

Sediment control BMPs should be the secondary means of preventing storm water contamination. When erosion control techniques are ineffective, sediment control techniques should be used to capture any soil that becomes eroded. The discharger is required to consider perimeter control measures such as: installing silt fences or placing straw wattles below slopes. These sediment control measures are only examples of what should be considered and should not preclude new or innovative approaches currently available or being developed.

Because Risk Level 2 and 3 dischargers pose a higher risk to water quality, additional requirements for the application of sediment controls are imposed on these projects. This General Permit also authorizes the Regional Water Boards to require Risk Level 3 dischargers to implement additional site-specific

[13] U.S. Environmental Protection Agency. 2007. Developing Your Storm Water Pollution Prevention Plan: A Guide for Construction Sites.

sediment control requirements if the implementation of other erosion or sediment controls are not adequately protecting the receiving waters.

g. Run-on and Runoff Control

Inappropriate management of run-on and runoff can result in excessive physical impacts to receiving waters from sediment and increased flows. The discharger is required to manage all run-on and runoff from a project site. Examples include: installing berms and other temporary run-on and runoff diversions.

Risk Level 1 dischargers with lower risks to impact water quality are not subject to the run-on and runoff control requirements unless an evaluation deems them necessary or visual inspections show that such controls are required.

h. Inspection, Maintenance and Repair

All measures must be periodically inspected, maintained and repaired to ensure that receiving water quality is protected. Frequent inspections coupled with thorough documentation and timely repair is necessary to ensure that all measures are functioning as intended.

i. Rain Event Action Plan (REAP)

A Rain Event Action Plan (REAP) is a written document, specific for each rain event. A REAP should be designed that when implemented it protects all exposed portions of the site within 48 hours of any likely precipitation event forecast of 50% or greater probability.

This General Permit requires Risk Level 2 and 3 dischargers to develop and implement a REAP designed to protect all exposed portions of their sites within 48 hours prior to any likely precipitation event. The REAP requirement is designed to ensure that the discharger has adequate materials, staff, and time to implement erosion and sediment control measures that are intended to reduce the amount of sediment and other pollutants generated from the active site. A REAP must be developed when there is likely a forecast of 50% or greater probability of precipitation in the project area. (The National Oceanic and Atmospheric Administration (NOAA) defines a chance of precipitation as a probability of precipitation of 30% to 50% chance of producing precipitation in the project area.[14] NOAA defines the probability of precipitation (PoP) as the likelihood of occurrence (expressed as a percent) of a measurable amount (0.01 inch or more) of liquid precipitation (or the water equivalent of frozen precipitation) during a specified period of time at any given point in the forecast area.) Forecasts are normally issued for 12-hour time periods. Descriptive terms for uncertainty and aerial coverage are used as follows:

Table 8 -National Oceanic and Atmospheric Administration (NOAA) Definition of Probability of Precipitation (PoP)

PoP	Expressions of Uncertainty	Aerial Coverage
0%	none used	none used
10%	none used	isolated
20%	slight chance	isolated
30-50%	chance	scattered

[14] http://www.crh.noaa.gov/lot/severe/wxterms.php.

60-70%	likely	numerous
80-100%	none used	none used

The discharger must obtain the precipitation forecast information from the National Weather Service Forecast Office (http://www.srh.noaa.gov/).

2. **Linear Projects**

a. **Linear Risk Determination**

LUPs vary in complexity and water quality concerns based on the type of project. This General Permit has varying application requirements based on the project's risk to water quality. Factors that lead to the characterization of the project include location, sediment risk, and receiving water risk.

Based on the location and complexity of a project area or project section area, LUPs are separated into project types. As described below, LUPs have been categorized into three project types.

i. ***Type 1 LUPs***

Type 1 LUPs are those construction projects where:

(1) 70 percent or more of the construction activity occurs on a paved surface and where areas disturbed during construction will be returned to preconstruction conditions or equivalent protection established at the end of the construction activities for the day, or

(2) greater than 30 percent of construction activities occur within the non-paved shoulders or land immediately adjacent to paved surfaces, or where construction occurs on unpaved improved roads, including their shoulders or land immediately adjacent to them where:

Areas disturbed during construction will be returned to pre-construction conditions or equivalent protection established at the end of the construction activities for the day to minimize the potential for erosion and sediment deposition, and

Areas where established vegetation was disturbed during construction will be stabilized and re-vegetated by the end of project. When required, adequate temporary stabilization Best Management Practices (BMPs) will be installed and maintained until vegetation is established to meet minimum cover requirements established in this General Permit for final stabilization.

Type 1 LUPs typically do not have a high potential to impact storm water quality because (1) these construction activities are not typically conducted during a rain event, (2) these projects are normally constructed over a short period of time[15], minimizing the duration that pollutants could potentially be exposed to rainfall; and (3) disturbed soils such as those from trench excavation are required to be hauled away, backfilled into the trench, and/or covered (e.g., metal plates, pavement, plastic covers over spoil piles) at the end of the construction day.

[15] Short period of time refers to a project duration of weeks to months, but typically less than one year in duration.

Type 1 LUPs are determined during the risk assessment found in Attachment A.1 to be 1) low sediment risk and low receiving water risk; 2) low sediment risk and medium receiving water risk; and 3) medium sediment risk and low receiving water risk.

This General Permit requires the discharger to ensure a SWPPP is developed for these construction activities that is specific to project type, location and characteristics.

ii. ***Type 2 LUPs:***

Type 2 projects are determined to have a combination of High, Medium, and Low project sediment risk along with High, Medium, and Low receiving water risk. Like Type 1 projects, Type 2 projects are typically constructed over a short period of time. However, these projects have a higher potential to impact water quality because they:

(1) typically occur outside the more urban/developed areas;

(2) have larger areas of soil disturbance that are not closed or restored at the end of the day;

(3) may have onsite stockpiles of soil, spoil and other materials;

(4) cross or occur in close proximity to a wide variety of sensitive resources that may include, but are not limited to, steep topography and/or water bodies; and

(5) have larger areas of disturbed soils that may be exposed for a longer time interval before final stabilization, cleanup and/or reclamation occurs.

This General Permit requires the discharger to develop and implement a SWPPP for these construction activities that are specific for project type, location and characteristics.

iii. ***Type 3 LUPs:***

Type 3 projects are determined to have a combination of High and Medium project sediment risk along with High and Medium receiving water risk. Similar to Type 2 projects, Type 3 projects have a higher potential to impact water quality because they:

(1) typically occur outside of the more urban/developed areas;

(2) have larger areas of soil disturbance that are not closed or restored at the end of the day;

(3) may have onsite stockpiles of soil, spoil and other materials;

(4) cross or occur in close proximity to a wide variety of sensitive resources that may include, but are not limited to, steep topography and/or water bodies; and

(5) have larger areas of disturbed soils that may be exposed for a longer time interval before final stabilization, cleanup and/or reclamation occurs.

This General Permit requires the discharger to develop and implement a SWPPP for these construction activities that are specific for project type, location, and characteristics.

b. **Linear Effluent Standards**

All LUPs are subject to the narrative effluent limitations specified in the General Permit.

Type 2 and 3 LUPs are subject to NELs comparable to the project type's risk to water quality. Type 2 projects that pose an intermediate risk to water quality are subject to technology-based NALs for pH and turbidity. Type 3 projects posing a high risk to water quality are subject to technology-based NALs and NELs for pH and turbidity.

c. Linear Good Housekeeping

Improper use and handling of construction materials could potentially cause a threat to water quality. In order to ensure proper site management of these construction materials, all LUP dischargers must comply with a minimum set of Good Housekeeping measures specified in Attachment A of this General Permit.

d. Linear Non-Storm Water Management

In order to ensure control of all non-storm water discharges during construction, all LUP dischargers must comply with the Non-Storm Water Management measures specified in Attachment A of this General Permit.

e. Linear Erosion Control

This General Permit requires all LUP dischargers to implement effective wind erosion control measures, and soil cover for inactive areas. Type 3 LUPs posing a higher risk to water quality are additionally required to ensure the post-construction soil loss is equivalent to or less than the pre-construction levels.

f. Linear Sediment Control

In order to ensure control and containment of all sediment discharges, all LUP dischargers must comply with the general Sediment Control measures specified in Attachment A or this General Permit. Additional requirements for sediment controls are imposed on Type 2 & 3 LUPs due to their higher risk to water quality.

g. Linear Run-on and Runoff Control

Discharges originating outside of a project's perimeter and flowing onto the property can adversely affect the quantity and quality of discharges originating from a project site. In order to ensure proper management of run-on and runoff, all LUPs must comply with the run-on and runoff control measures specified in Attachment A of this General Permit. Due to the lower risk of impacting water quality, Type 1 LUPs are not required to implement run-on and runoff controls unless deemed necessary by the discharger.

h. Linear Inspection, Maintenance and Repair

Proper inspection, maintenance, and repair activities are important to ensure the effectiveness of on-site measures to control water quality. In order to ensure that inspection, maintenance, and repair activities are adequately performed, the all LUP dischargers a re required to comply with the Inspection, Maintenance, and Repair requirements specified in Attachment A of this General Permit.

K. ATS[16] Requirements

There are instances on construction sites where traditional erosion and sediment controls do not effectively control accelerated erosion. Under such circumstances, or under circumstances where storm water discharges leaving the site may cause or contribute to an exceedance of a water quality standard, the use of an Active Treatment System (ATS) may be necessary. Additionally, it may be appropriate to use an ATS when site constraints inhibit the ability to construct a correctly sized sediment basin, when clay and/or highly erosive soils are present, or when the site has very steep or long slope lengths.[17]

Although treatment systems have been in use in some form since the mid-1990s, the ATS industry in California is relatively young, and detailed regulatory standards have not yet been developed. Many developers are using these systems to treat storm water discharges from their construction sites. The new ATS requirements set forth in this General Permit are based on those in place for small wastewater treatment systems, ATS regulations from the Central Valley Regional Water Quality Control Board (September 2005 memorandum "2005/2006 Rainy Season – Monitoring Requirements for Storm Water Treatment Systems that Utilize Chemical Additives to Enhance Sedimentation"), the Construction Storm Water Program at the State of Washington's Department of Ecology, as well as recent advances in technology and knowledge of coagulant performance and aquatic safety.

The effective design of an ATS requires a detailed survey and analysis of site conditions. With proper planning, ATS performance can provide exceptional water quality discharge and prevent significant impacts to surface water quality, even under extreme environmental conditions.

These systems can be very effective in reducing the sediment in storm water runoff, but the systems that use additives/polymers to enhance sedimentation also pose a potential risk to water quality (e.g., operational failure, equipment failure, additive/polymer release, etc.). The State Water Board is concerned about the potential acute and chronic impacts that the polymers and other chemical additives may have on fish and aquatic organisms if released in sufficient quantities or concentrations. In addition to anecdotal evidence of polymer releases causing aquatic toxicity in California, the literature supports this concern.[18] For example, cationic polymers have been shown to bind with the negatively charged gills of fish, resulting in mechanical suffocation.[19] Due to the potential toxicity impacts, which may be caused by the release of additives/polymers into receiving waters, this General Permit establishes residual polymer monitoring and toxicity testing requirements have been established in this General Permit for discharges from construction sites that utilize an ATS in order to protect receiving water quality and beneficial uses.

The primary treatment process in an ATS is coagulation/flocculation. ATS's operate on the principle that the added coagulant is bound to suspended sediment, forming floc, which is gravitationally settled in tanks or a basin, or removed by sand filters. A typical installation utilizes an injection pump upstream from the clarifier tank, basin, or sand filters, which is electronically metered to both flow rate and suspended solids level of the influent, assuring a constant dose. The coagulant mixes and reacts with the influent, forming a dense floc. The floc may be removed by gravitational setting in a clarifier tank or basin, or by filtration. Water from the clarifier tank, basin, or sand filters may be routed through cartridge(s) and/or bag filters for final polishing. Vendor-specific systems use various methods of dose control, sediment/floc removal, filtration, etc., that are detailed in project-specific documentation. The

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[16] An ATS is a treatment system that employs chemical coagulation, chemical flocculation, or electrocoagulation in order to reduce turbidity caused by fine suspended sediment.
[17] Pitt, R., S. Clark, and D. Lake. 2006. Construction Site Erosion and Sediment Controls: Planning, Design, and Performance. DEStech Publications. Lancaster, PA. 370pp.
[18] RomØen, K., B. Thu, and Ø. Evensen. 2002. Immersion delivery of plasmid DNA II. A study of the potentials of a chitosan based delivery system in rainbow trout (*Oncorhynchus mykiss*) fry. *Journal of Controlled Release* **85**: 215-225.
[19] Bullock, G., V. Blazer, S. Tsukuda, and S. Summerfelt. 2000. Toxicity of acidified chitosan for cultured rainbow trout (*Oncorhynchus mykiss*). *Aquaculture* **185**:273-280.

particular coagulant/flocculant to be used for a given project is determined based on the water chemistry of the site because the coagulants are specific in their reactions with various types of sediments. Appropriate selection of dosage must be carefully matched to the characteristics of each site.

ATS's are operated in two differing modes, either Batch or Flow-Through. Batch treatment can be defined as Pump-Treat-Hold-Test-Release. In Batch treatment, water is held in a basin or tank, and is not discharged until treatment is complete. Batch treatment involves holding or recirculating the treated water in a holding basin or tank(s) until treatment is complete or the basin or storage tank(s) is full. In Flow-Through treatment, water is pumped into the ATS directly from the runoff collection system or storm water holding pond, where it is treated and filtered as it flows through the system, and is then directly discharged. "Flow-Through Treatment" is also referred to as "Continuous Treatment."

1. **Effluent Standards**

This General Permit establishes NELs for discharges from construction sites that utilize an ATS. These systems lend themselves to NELs for turbidity and pH because of their known reliable treatment. Advanced systems have been in use in some form since the mid-1990s. An ATS is considered reliable, can consistently produce a discharge of less than 10 NTU, and has been used successfully at many sites in several states since 1995 to reduce turbidity to very low levels.[20]

This General Permit contains "compliance storm event" exceptions from the technology-based NELs for ATS discharges. The rationale is that technology-based requirements are developed assuming a certain design storm. In the case of ATS the industry-standard design storm is 10-year, 24-hour (as stated in Attachment F of this General Permit), so the compliance storm event has been established as the 10-year 24-hour event as well to provide consistency.

2. **Training**

Operator training is critical to the safe and efficient operation and maintenance of the ATS, and to ensure that all State Water Board monitoring and sampling requirements are met. The General Permit requires that all ATS operators have training specific to using ATS's liquid coagulants.

L. Post-Construction Requirements

Under past practices, new and redevelopment construction activities have resulted in modified natural watershed and stream processes. This is caused by altering the terrain, modifying the vegetation and soil characteristics, introducing impervious surfaces such as pavement and buildings, increasing drainage density through pipes and channels, and altering the condition of stream channels through straightening, deepening, and armoring. These changes result in a drainage system where sediment transport capacity is increased and sediment supply is decreased. A receiving channel's response is dependent on dominant channel materials and its stage of adjustment.

Construction activity can lead to impairment of beneficial uses in two main ways. First, during the actual construction process, storm water discharges can negatively affect the chemical, biological, and physical properties of downstream receiving waters. Due to the disturbance of the landscape, the most likely pollutant is sediment, however pH and other non-visible pollutants are also of great concern. Second, after most construction activities are completed at a construction site, the finished project may result in significant modification of the site's response to precipitation. New development and redevelopment

[20] Currier, B., G. Minton, R. Pitt, L. Roesner, K. Schiff, M. Stenstrom, E. Strassler, and E. Strecker. 2006. The Feasibility of Numeric Effluent Limits Applicable to Discharges of Storm Water Associated with Municipal, Industrial and Construction Activities.

projects have almost always resulted in permanent post-construction water quality impacts because more precipitation ends up as runoff and less precipitation is intercepted, evapotranspired, and infiltrated.

General Permit 99-08-DWQ required the SWPPP to include a description of all post-construction BMPs on a site and a maintenance schedule. An effective storm water management strategy must address the full suite of storm events (water quality, channel protection, overbank flood protection, extreme flood protection) (Figure 2).

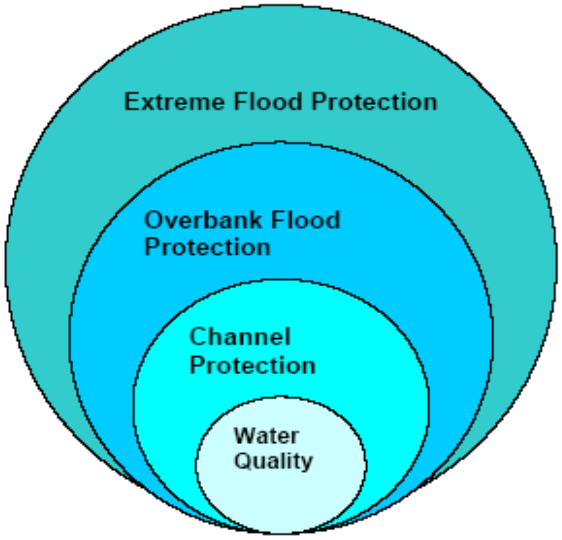

Figure 2 - Suite of Storm Events

The post-construction storm water performance standards in this General Permit specifically address water quality and channel protection events. Overbank flood protection and extreme flood protection events are traditionally dealt with in local drainage and flood protection ordinances. However, measures in this General Permit to address water quality and channel protection also reduce overbank and extreme flooding impacts. This General Permit aims to match post-construction runoff to pre-construction runoff for the 85th percentile storm event, which not only reduces the risk of impact to the receiving water's channel morphology but also provides some protection of water quality.

This General Permit clarifies that its runoff reduction requirements only apply to projects that lie outside of jurisdictions covered by a Standard Urban Storm water Management Plan (SUSMP) (or other more protective) post-construction requirements in either Phase I or Phase II permits.

Figures 3 and 4, below, show the General Permit enrollees (to Order 99-08-DWQ, as of March 10, 2008) overlaid upon a map with SUSMP (or more protective) areas in blue and purple. Areas without blue or purple indicate where the General Permit's runoff reduction requirements would actually apply.

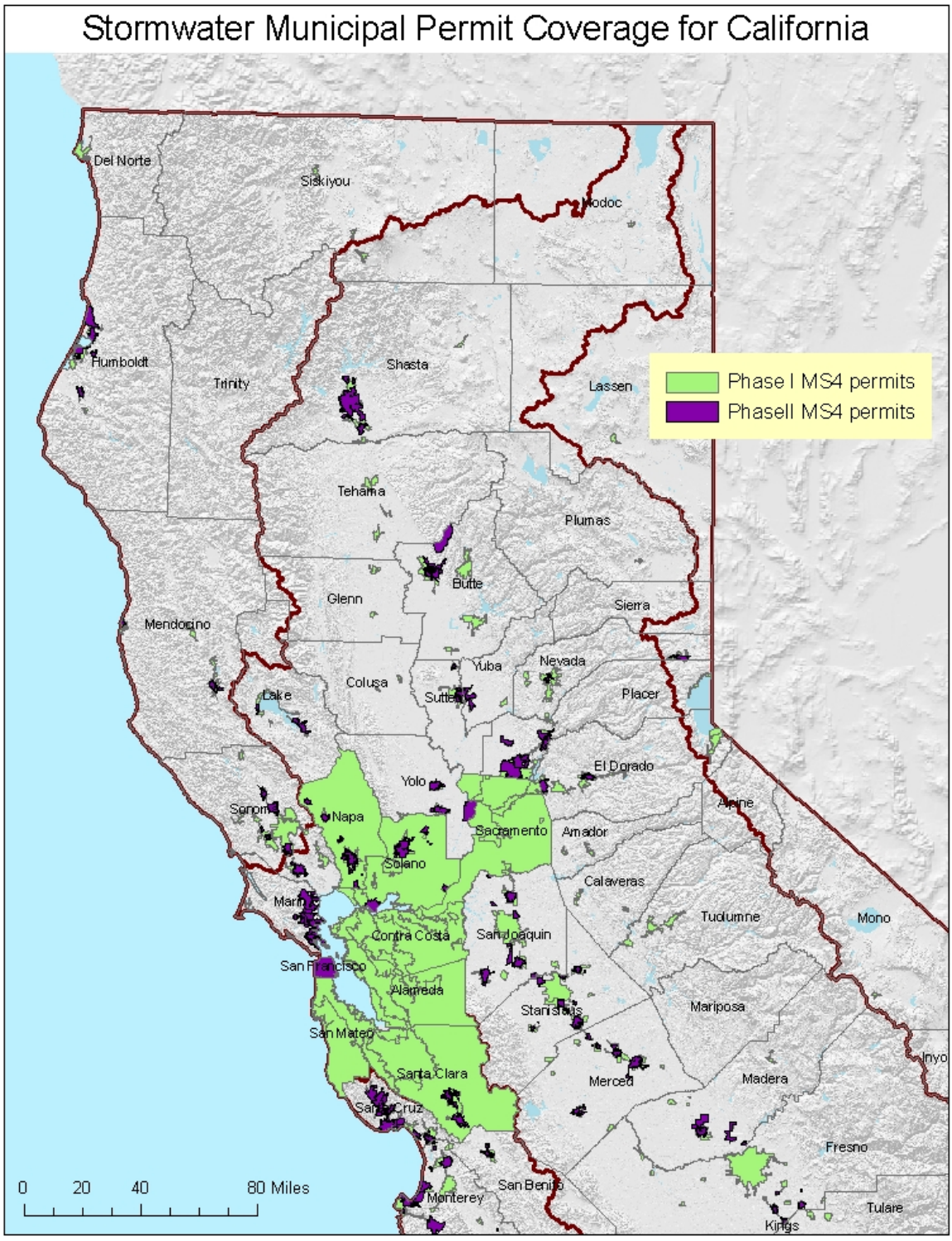

Figure 3 - Northern CA (2009) Counties / Cities With SUSMP-Plus Coverage

Figure 4 - Southern CA (2009) Counties / Cities With SUSMP-Plus Coverage

Water Quality:
This General Permit requires dischargers to replicate the pre-project runoff water balance (defined as the amount of rainfall that ends up as runoff) for the smallest storms up to the 85th percentile storm event, or the smallest storm event that generates runoff, whichever is larger. Contemporary storm water management generally routes these flows directly to the drainage system, increasing pollutant loads and potentially causing adverse effects on receiving waters. These smaller water quality events happen much more frequently than larger events and generate much higher pollutant loads on an annual basis. There are other adverse hydrological impacts that result from not designing according to the site's pre-construction water balance. In Maryland, Klein[21] noted that baseflow decreases as the extent of urbanization increases. Ferguson and Suckling[22] noted a similar relation in watersheds in Georgia. On Long Island, Spinello and Simmons[23] noted substantial decreases in base flow in intensely urbanized watersheds.

The permit emphasizes runoff reduction through on-site storm water reuse, interception, evapo-transpiration and infiltration through non-structural controls and conservation design measures (e.g., downspout disconnection, soil quality preservation/enhancement, interceptor trees). Employing these measures close to the source of runoff generation is the easiest and most cost-effective way to comply with the pre-construction water balance standard. Using low-tech runoff reduction techniques close to the source is consistent with a number of recommendations in the literature.[24] In many cases, BMPs implemented close to the source of runoff generation cost less than end-of the pipe measures.[25] Dischargers are given the option of using Appendix 2 to calculate the required runoff volume or a watershed process-based, continuous simulation model such as the EPA's Storm Water Management Model (SWMMM) or Hydrologic Simulation Program Fortran (HSPF). Such methods used by the discharger will be reviewed by the Regional Water Board upon NOT application.

Channel Protection:
In order to address channel protection, a basic understanding of fluvial geomorphic concepts is necessary. A dominant paradigm in fluvial geomorphology holds that streams adjust their channel dimensions (width and depth) in response to long-term changes in sediment supply and bankfull discharge (1.5 to 2 year recurrence interval). The bankfull stage corresponds to the discharge at which channel maintenance is the most effective, that is, the discharge at which the moving sediment, forming or removing bars, forming or changing bends and meanders, and generally doing work that results in the average morphologic characteristics of channels.[26] Lane (1955 as cited in Rosgen 1996[27]) showed the generalized relationship between sediment load, sediment size, stream discharge and stream slope in Figure 5. A change in any one of these variables sets up a series of mutual adjustments in the companion variables with a resulting direct change in the physical characteristics of the stream channel.

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[21] Klein 1979 as cited in Delaware Department of Natural Resources (DDNR). 2004. Green Technology: The Delaware Urban Runoff Management Approach. Dover, DE. 117 pp.
[22] Ferguson and Suckling 1990 as cited Delaware Department of Natural Resources (DDNR). 2004. Green Technology: The Delaware Urban Runoff Management Approach. Dover, DE. 117 pp.
[23] Center for Watershed Protection (CWP). 2000. The Practice of Watershed Protection: Techniques for protecting our nation's streams, lakes, rivers, and estuaries. Ellicott City, MD. 741 pp.
[24] Bay Area Storm Water Management Agencies Association (BASMAA). 1997. Start at the Source: Residential Site Planning and Design Guidance Manual for Storm Water Quality Protection. Palo Alto, CA;
McCuen, R.H. 2003 Smart Growth: hydrologic perspective. Journal of Professional Issues in Engineering Education and Practice. Vol (129), pp.151-154;
Moglen, G.E. and S. Kim. 2007. Impervious imperviousness-are threshold based policies a good idea? Journal of the American Planning Association, Vol 73 No. 2. pp 161-171.
[25] Delaware Department of natural Resources (DDNR). 2004. Green technology: The Delaware urban Runoff Management Approcah. Dover, DE. 117 pp.
[26] Dunne, T and L.B. Leopold. 1978. Water in Environmental Planning. San Francisco W.H. Freeman and Company
[27] Rosgen. D.L. 1996. Applied River Morphology. Pagosa Springs. Wildland Hydrology

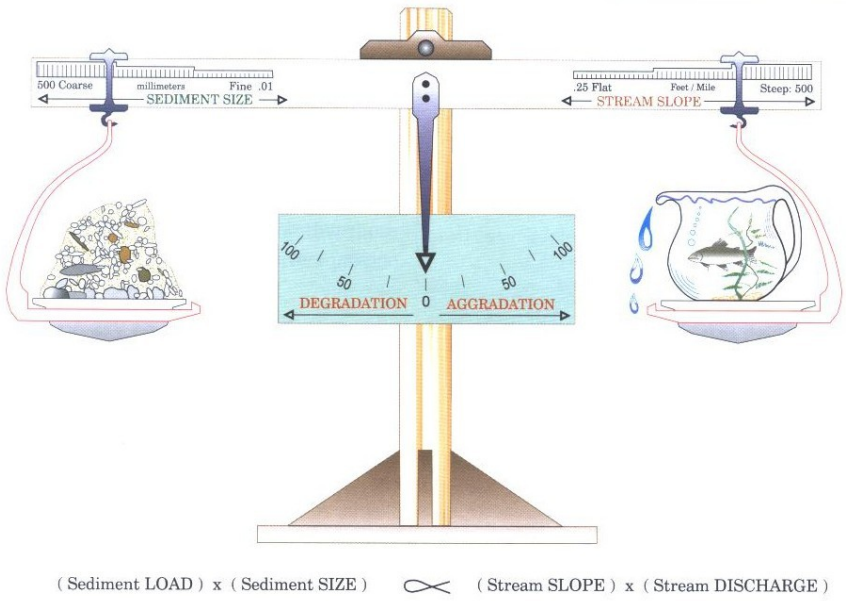

Figure 5 - Schematic of the Lane Relationship

After Lane (1955) as cited in Rosgen (1996)

Stream slope multiplied by stream discharge (the right side of the scale) is essentially an approximation of stream power, a unifying concept in fluvial geomorphology (Bledsoe 1999). Urbanization generally increases stream power and affects the resisting forces in a channel (sediment load and sediment size represented on the left side of the scale).

During construction, sediment loads can increase from 2 to 40,000 times over pre-construction levels.[28] Most of this sediment is delivered to stream channels during large, episodic rain events.[29] This increased sediment load leads to an initial aggradation phase where stream depths may decrease as sediment fills the channel, leading to a decrease in channel capacity and increase in flooding and overbank deposition. A degradation phase initiates after construction is completed.

Schumm et. al (1984) developed a channel evolution model that describes the series of adjustments from initial downcutting, to widening, to establishing new floodplains at lower elevations (Figure 6).

[28] Goldman S.J., K. Jackson, and T.A. Bursztynsky. 1986. Erosion and Sediment Control Handbook. McGraw Hill. San Francisco.
[29] Wolman 1967 as cited in Paul, M.P. and J.L. Meyer. 2001. Streams in the Urban Landscape. *Annu. Rev.Ecol. Syst.* 32: 333-365.

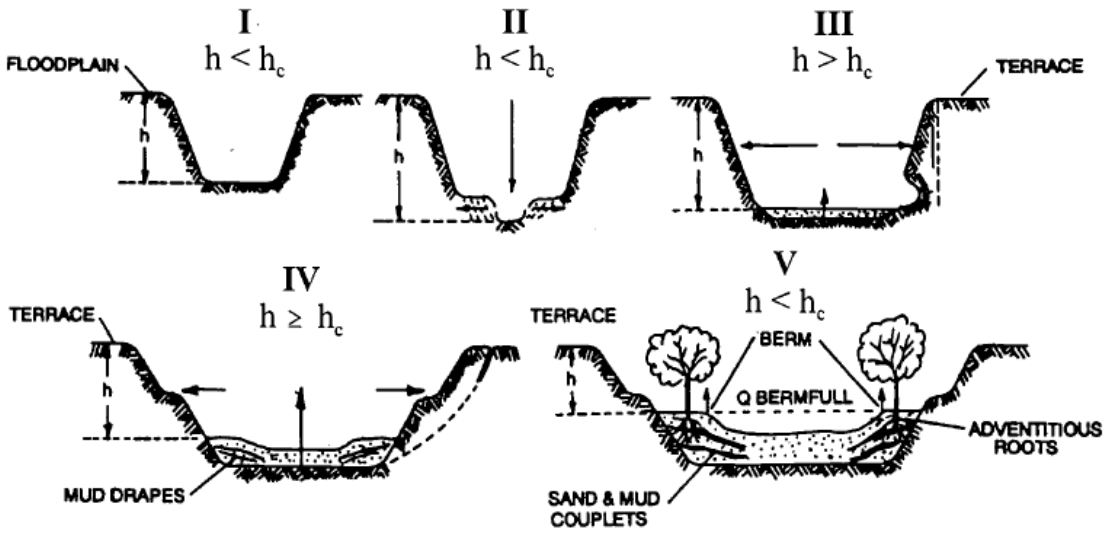

Figure 6 - Channel Changes Associated with Urbanization

After Incised Channel Evolution Sequence in Schumm et. al 1984

Channel incision (Stage II) and widening (Stages III and to a lesser degree, Stage IV) are due to a number of fundamental changes on the landscape. Connected impervious area and compaction of pervious surfaces increase the frequency and volume of bankfull discharges.[30] Increased drainage density (miles of stream length per square mile of watershed) also negatively impacts receiving stream channels.[31] Increased drainage density and hydraulic efficiency leads to an increase in the frequency and volume of bankfull discharges because the time of concentration is shortened. Flows from engineered pipes and channels are also often "sediment starved" and seek to replenish their sediment supply from the channel.

Encroachment of stream channels can also lead to an increase in stream slope, which leads to an increase in stream power. In addition, watershed sediment loads and sediment size (with size generally represented as the median bed and bank particle size, or d_{50}) decrease during urbanization.[32] This means that even if pre- and post-development stream power are the same, more erosion will occur in the post-development stage because the smaller particles are less resistant (provided they are non-cohesive).

[30] Booth, D. B. and C. R. Jackson. 1997. Urbanization of Aquatic Systems: Degradation Thresholds, Storm Water Detection, and the Limits of Mitigation. Journal of the American Water Resources Association Vol. 33, No.5, pp. 1077-1089.

[31] May, C.W. 1998. Cumulative effects of urbanization on small streams in the Puget Sound Lowland ecoregion. Conference proceedings from Puget Sound Research '98 held March 12, 13 1998 in Seattle, WA;
Santa Clara Valley Urban Runoff Pollution Prevention Program. 2002. Hydromodification Management Plan Literature Review. 80 pp.

[32] Finkenbine, J.K., D.S. Atwater, and D.S. Mavinic. 2000. Stream health after urbanization. *J. Am. Water Resour. Assoc.* 36:1149-60;
Pizzuto, J.E. W.S. Hession, and M. McBride. 2000. Comparing gravel-bed rivers in paired urban and rural catchments of southeastern Pennsylvania. *Geology* 28:79-82.

As shown in Stages II and III, the channel deepens and widens to accommodate the increased stream power [33]and decrease in sediment load and sediment size. Channels may actually narrow as entrained sediment from incision is deposited laterally in the channel. After incised channels begin to migrate laterally (Stage III), bank erosion begins, which leads to general channel widening.[34] At this point, a majority of the sediment that leaves a drainage area comes from within the channel, as opposed to the background and construction related hillslope contribution. Stage IV is characterized by more aggradation and localized bank instability. Stage V represents a new quasi-equilibrium channel morphology in balance with the new flow and sediment supply regime. In other words, stream power is in balance with sediment load and sediment size.

The magnitude of the channel morphology changes discussed above varies along a stream network as well as with the age of development, slope, geology (sand-bedded channels may cycle through the evolution sequence in a matter of decades whereas clay-dominated channels may take much longer), watershed sediment load and size, type of urbanization, and land use history. It is also dependent on a channel's stage in the channel evolution sequence when urbanization occurs. Management strategies must take into account a channel's stage of adjustment and account for future changes in the evolution of channel form (Stein and Zaleski 2005). [35]

Traditional structural water quality BMPs (e.g. detention basins and other devices used to store volumes of runoff) unless they are highly engineered to provide adequate flow duration control, do not adequately protect receiving waters from accelerated channel bed and bank erosion, do not address post-development increases in runoff volume, and do not mitigate the decline in benthic macroinvertebrate communities in the receiving waters[36] suggest that structural BMPs are not as effective in protecting aquatic communities as a continuous riparian buffer of native vegetation. This is supported by the findings of Zucker and White[37], where instream biological metrics were correlated with the extent of forested buffers.

This General Permit requires dischargers to maintain pre-development drainage densities and times of concentration in order to protect channels and encourages dischargers to implement setbacks to reduce channel slope and velocity changes that can lead to aquatic habitat degradation.

There are a number of other approaches for modeling fluvial systems, including statistical and physical models and simpler stream power models.[38] The use of these models in California is described in Stein and Zaleski (2005).[39] Rather than prescribe a specific one-size-fits-all modeling method in this permit, the State Water Board intends to develop a stream power and channel evolution model-based framework to assess channels and develop a hierarchy of suitable analysis methods and management strategies. In time, this framework may become a State Water Board water quality control policy.

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[33] Hammer 1973 as cited in Delaware Department of Natural Resources (DDNR). 2004. Green Technology: The Delaware Urban Runoff Management Approach. Dover, DE. 117 pp;
Booth, D.B. 1990. Stream Channel Incision Following Drainage Basin Urbanization. *Water Resour. Bull.* 26:407-417.

[34] Trimble, S.W. 1997. Contribution of Stream Channel Erosion to Sediment Yield from an Urbanizing Watershed. *Science*: Vol. 278 (21), pp. 1442-1444.

[35] Stein, E.S. and S. Zaleski. 2005.Managing runoff to protect natural stream: the latest developments on investigation and management of hydromodification in California. Southern California Coastal Water Research Project Technical Report 475. 26 pp.

[36] Horner, R.R. 2006. Investigation of the Feasibility and Benefits of Low-Impact Site Design Practices (LID) for the San Diego Region. Available at: http://www.projectcleanwater.org/pdf/permit/case-study_lid.pdf.

[37] Delaware Department of Natural Resources (DDNR). 2004. Green Technology: The Delaware Urban Runoff Management Approach. Dover, DE. 117 pp.

[38] Finlayson, D.P. and D.R. Montgomery. 2003. Modeling large-scale fluvial erosion in geographic information systems. Geomorphology (53), pp. 147-164).

[39] Stein, E.S. and S. Zaleski. 2005.Managing runoff to protect natural stream: the latest developments on investigation and management of hydromodification in California. Southern California Coastal Water Research Project Technical Report 475. 26 pp.

Permit Linkage to Overbank and Extreme Flood Protection
Site design BMPs (e.g. rooftop and impervious disconnection, vegetated swales, setbacks and buffers) filter and settle out pollutants and provide for more infiltration than is possible for traditional centralized structural BMPs placed at the lowest point in a site. They provide source control for runoff and lead to a reduction in pollutant loads. When implemented, they also help reduce the magnitude and volume of larger, less frequent storm events (e.g., 10-yr, 24-hour storm and larger), thereby reducing the need for expensive flood control infrastructure. Nonstructural BMPs can also be a landscape amenity, instead of a large isolated structure requiring substantial area for ancillary access, buffering, screening and maintenance facilities.[25] The multiple benefits of using non-structural benefits will be critically important as the state's population increases and imposes strains upon our existing water resources.

Maintaining predevelopment drainage densities and times of concentration will help reduce post-development peak flows and volumes in areas not covered under a municipal permit. The most effective way to preserve drainage areas and maximize time of concentration is to implement landform grading, incorporate site design BMPs and implement distributed structural BMPs (e.g., bioretention cells, rain gardens, rain cisterns).

M. Storm Water Pollution Prevention Plans

USEPA's Construction General Permit requires that qualified personnel conduct inspections. USEPA defines qualified personnel as "a person knowledgeable in the principles and practice of erosion and sediment controls who possesses the skills to assess conditions at the construction site that could impact storm water quality and to assess the effectiveness of any sediment and erosion control measures selected to control the quality of storm water discharges from the construction activity."[40] USEPA also suggests that qualified personnel prepare SWPPPs and points to numerous states that require certified professionals to be on construction sites at all times. States that currently have certification programs are Washington, Georgia, Florida, Delaware, Maryland, and New Jersey. The Permit 99-08-DWQ did not require that qualified personnel prepare SWPPPs or conduct inspections. However, to ensure that water quality is being protected, this General Permit requires that all SWPPPs be written, amended, and certified by a Qualified SWPPP Developer. A Qualified SWPPP Developer must possess one of the eight certifications and or registrations specified in this General Permit and effective two years after the adoption date of this General Permit, must have attended a State Water Board-sponsored or approved Qualified SWPPP Developer training course. Table 9 provides an overview of the criteria used in determining qualified certification titles for a QSD and QSP.

40 US Environmental Protection Agency. Stormwater Pollution Prevention Plans for Construction Activities. <http://cfpub.epa.gov/npdes/stormwater/swppp.cfm> and <http://www.epa.gov/npdes/pubs/sw_swppp_guide.pdf>.

Table 9 - Qualified SWPPP Developer/ Qualified SWPPP Practitioner Certification Criteria

Certification/ Title	Registered By	QSD/QSP	Certification Criteria
Professional Civil Engineer	California	Both	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites
Professional Geologist or Engineering Geologist	California	Both	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites
Landscape Architect	California	Both	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites
Professional Hydrologist	American Institute of Hydrology	Both	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites
Certified Professional in Erosion and Sediment Control™ (CPESC)	Enviro Cert International Inc.	Both	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites 5. Continuing Education
Certified Inspector of Sediment and Erosion Control™ (CISEC)	Certified Inspector of Sediment and Erosion Control, Inc.	QSP	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites 5. Continuing Education
Certified Erosion, Sediment and Storm Water Inspector™ (CESSWI)	Enviro Cert International Inc.	QSP	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites 5. Continuing Education
Certified Professional in Storm Water Quality™ (CPSWQ)	Enviro Cert International Inc.	Both	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites 5. Continuing Education

The previous versions of the General Permit required development and implementation of a SWPPP as the primary compliance mechanism. The SWPPP has two major objectives: (1) to help identify the sources of sediment and other pollutants that affect the quality of storm water discharges; and (2) to describe and ensure the implementation of BMPs to reduce or eliminate sediment and other pollutants in storm water and non-storm water discharges. The SWPPP must include BMPs that address source control, BMPs that address pollutant control, and BMPs that address treatment control.

This General Permit shifts some of the measures that were covered by this general requirement to specific permit requirements, each individually enforceable as a permit term. This General Permit emphasizes the use of appropriately selected, correctly installed and maintained pollution reduction BMPs. This approach provides the flexibility necessary to establish BMPs that can effectively address source control of pollutants during changing construction activities. These specific requirements also improve both the clarity and the enforceability of the General Permit so that the dischargers understand, and the public can determine whether the discharges are in compliance with, permit requirements.

The SWPPP must be implemented at the appropriate level to protect water quality at all times throughout the life of the project. The SWPPP must remain on the site during construction activities, commencing with the initial mobilization and ending with the termination of coverage under the General Permit. For LUPs the discharger shall make the SWPPP available at the construction site during working hours while construction is occurring and shall be made available upon request by a State or Municipal inspector. When the original SWPPP is retained by a crewmember in a construction vehicle and is not currently at the construction site, current copies of the BMPs and map/drawing will be left with the field crew and the original SWPPP shall be made available via a request by radio or telephone. Once construction activities are complete, until stabilization is achieved, the SWPPP shall be available from the SWPPP contact listed in the PRDs

A SWPPP must be appropriate for the type and complexity of a project and will be developed and implemented to address project specific conditions. Some projects may have similarities or complexities, yet each project is unique in its progressive state that requires specific description and selection of BMPs needed to address all possible generated pollutants

N. Regional Water Board Authorities

Because this General Permit will be issued to thousands of construction sites across the State, the Regional Water Boards retain discretionary authority over certain issues that may arise from the discharges in their respective regions. This General Permit does not grant the Regional Water Boards any authority they do not otherwise have; rather, it merely emphasizes that the Regional Water Boards can take specific actions related to this General Permit. For example, the Regional Water Boards will be enforcing this General Permit and may need to adjust some requirements for a discharger based on the discharger's compliance history.

Linda S. Adams
Secretary for
Environmental Protection

State Water Resources Control Board

Division of Water Quality
1001 I Street • Sacramento, California 95814 • (916) 341-5455
Mailing Address: P.O. Box 100 • Sacramento, California • 95812-0100
Fax (916) 341-5463 • http://www.waterboards.ca.gov

Arnold Schwarzenegger
Governor

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
GENERAL PERMIT FOR
STORM WATER DISCHARGES
ASSOCIATED WITH CONSTRUCTION AND LAND DISTURBANCE
ACTIVITIES

ORDER NO. 2009-0009-DWQ
NPDES NO**. CAS000002**

This Order was adopted by the State Water Resources Control Board on:	**September 2, 2009**
This Order shall become effective on:	**July 1, 2010**
This Order shall expire on:	**September 2, 2014**

IT IS HEREBY ORDERED, that this Order supersedes Order No. 99-08-DWQ [as amended by Order No. 2010-0014-DWQ] except for enforcement purposes. The Discharger shall comply with the requirements in this Order to meet the provisions contained in Division 7 of the California Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the federal Clean Water Act and regulations and guidelines adopted thereunder.

I, Jeanine Townsend, Clerk to the Board, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the State Water Resources Control Board, on September 2, 2009.

AYE: Vice Chair Frances Spivy-Weber
Board Member Arthur G. Baggett, Jr.
Board Member Tam M. Doduc

NAY: Chairman Charles R. Hoppin

ABSENT: None

ABSTAIN: None

Jeanine Townsend
Clerk to the Board

Linda S. Adams
Secretary for
Environmental Protection

State Water Resources Control Board

Division of Water Quality
1001 I Street • Sacramento, California 95814 • (916) 341-5455
Mailing Address: P.O. Box 100 • Sacramento, California • 95812-0100
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Arnold Schwarzenegger
Governor

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION AND LAND DISTURBANCE ACTIVITIES

ORDER NO. 2010-0014-DWQ
NPDES NO. CAS000002

Order No. 2009-0009-DWQ was adopted by the State Water Resources Control Board on:	**September 2, 2009**
Order No. 2009-0009-DWQ became effective on:	**July 1, 2010**
Order No. 2009-0009-DWQ shall expire on:	**September 2, 2014**
This Order, which amends Order No. 2009-0009-DWQ, was adopted by the State Water Resources Control Board on:	**November 16, 2010**
This Order shall become effective on:	**February 14, 2011**

IT IS HEREBY ORDERED that this Order amends Order No. 2009-0009-DWQ. Additions to Order No. 2009-0009-DWQ are reflected in blue-underline text and deletions are reflected in red-strikeout text.

IT IS FURTHER ORDERED that staff are directed to prepare and post a conformed copy of Order No. 2009-0009-DWQ incorporating the revisions made by this Order.

I, Jeanine Townsend, Clerk to the Board, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the State Water Resources Control Board, on **November 16, 2010.**

AYE: Chairman Charles R. Hoppin
Vice Chair Frances Spivy-Weber
Board Member Arthur G. Baggett, Jr.
Board Member Tam M. Doduc

NAY: None

ABSENT: None

ABSTAIN: None

Jeanine Townsend
Clerk to the Board

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Attachment C – Risk Level 1 Requirements
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Attachment F – Active Treatment System (ATS) Requirements

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Appendix 1 – Risk Determination Worksheet
Appendix 2 – Post-Construction Water Balance Performance Standard
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Appendix 4 – Adopted/Implemented Sediment TMDLs
Appendix 5 – Glossary
Appendix 6 – Acronyms
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STATE WATER RESOURCES CONTROL BOARD
ORDER NO. 2009-0009-DWQ
[AS AMENDED BY ORDER NO. 2010-0014-DWQ]
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
GENERAL PERMIT NO. CAS000002

WASTE DISCHARGE REQUIREMENTS
FOR
DISCHARGES OF STORM WATER RUNOFF ASSOCIATED WITH CONSTRUCTION AND LAND DISTURBANCE ACTIVITIES

I. FINDINGS

A. General Findings

The State Water Resources Control Board (State Water Board) finds that:

1. The federal Clean Water Act (CWA) prohibits certain discharges of storm water containing pollutants except in compliance with a National Pollutant Discharge Elimination System (NPDES) permit (Title 33 United States Code (U.S.C.) §§ 1311 and 1342(p); also referred to as Clean Water Act (CWA) §§ 301 and 402(p)). The U.S. Environmental Protection Agency (U.S. EPA) promulgates federal regulations to implement the CWA's mandate to control pollutants in storm water runoff discharges. (Title 40 Code of Federal Regulations (C.F.R.) Parts 122, 123, and 124). The federal statutes and regulations require discharges to surface waters comprised of storm water associated with construction activity, including demolition, clearing, grading, and excavation, and other land disturbance activities (except operations that result in disturbance of less than one acre of total land area and which are not part of a larger common plan of development or sale), to obtain coverage under an NPDES permit. The NPDES permit must require implementation of Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) to reduce or eliminate pollutants in storm water runoff. The NPDES permit must also include additional requirements necessary to implement applicable water quality standards.

2. This General Permit authorizes discharges of storm water associated with construction activity so long as the dischargers comply with all requirements, provisions, limitations and prohibitions in the permit. In addition, this General Permit regulates the discharges of storm water associated with construction activities from all Linear

Underground/Overhead Projects resulting in the disturbance of greater than or equal to one acre (Attachment A).

3. This General Permit regulates discharges of pollutants in storm water associated with construction activity (storm water discharges) to waters of the United States from construction sites that disturb one or more acres of land surface, or that are part of a common plan of development or sale that disturbs more than one acre of land surface.

4. This General Permit does not preempt or supersede the authority of local storm water management agencies to prohibit, restrict, or control storm water discharges to municipal separate storm sewer systems or other watercourses within their jurisdictions.

5. This action to adopt a general NPDES permit is exempt from the provisions of Chapter 3 of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21100, et seq.), pursuant to Section 13389 of the California Water Code.

6. Pursuant to 40 C.F.R. § 131.12 and State Water Board Resolution No. 68-16,[1] which incorporates the requirements of § 131.12 where applicable, the State Water Board finds that discharges in compliance with this General Permit will not result in the lowering of water quality standards, and are therefore consistent with those provisions. Compliance with this General Permit will result in improvements in water quality.

7. This General Permit serves as an NPDES permit in compliance with CWA § 402 and will take effect on July 1, 2010 by the State Water Board provided the Regional Administrator of the U.S. EPA has no objection. If the U.S. EPA Regional Administrator objects to its issuance, the General Permit will not become effective until such objection is withdrawn.

8. Following adoption and upon the effective date of this General Permit, the Regional Water Quality Control Boards (Regional Water Boards) shall enforce the provisions herein.

9. Regional Water Boards establish water quality standards in Basin Plans. The State Water Board establishes water quality standards in various statewide plans, including the California Ocean Plan. U.S. EPA establishes water quality standards in the National Toxic Rule (NTR) and the California Toxic Rule (CTR).

[1] Resolution No. 68-16 generally requires that existing water quality be maintained unless degradation is justified based on specific findings.

10. This General Permit does not authorize discharges of fill or dredged material regulated by the U.S. Army Corps of Engineers under CWA § 404 and does not constitute a waiver of water quality certification under CWA § 401.

11. The primary storm water pollutant at construction sites is excess sediment. Excess sediment can cloud the water, which reduces the amount of sunlight reaching aquatic plants, clog fish gills, smother aquatic habitat and spawning areas, and impede navigation in our waterways. Sediment also transports other pollutants such as nutrients, metals, and oils and greases.

12. Construction activities can impact a construction site's runoff sediment supply and transport characteristics. These modifications, which can occur both during and after the construction phase, are a significant cause of degradation of the beneficial uses established for water bodies in California. Dischargers can avoid these effects through better construction site design and activity practices.

13. This General Permit recognizes four distinct phases of construction activities. The phases are Grading and Land Development Phase, Streets and Utilities Phase, Vertical Construction Phase, and Final Landscaping and Site Stabilization Phase. Each phase has activities that can result in different water quality effects from different water quality pollutants. This General Permit also recognizes inactive construction as a category of construction site type.

14. Compliance with any specific limits or requirements contained in this General Permit does not constitute compliance with any other applicable requirements.

15. Following public notice in accordance with State and Federal laws and regulations, the State Water Board heard and considered all comments and testimony in a public hearing on 06/03/2009. The State Water Board has prepared written responses to all significant comments.

16. Construction activities obtaining coverage under the General Permit may have multiple discharges subject to requirements that are specific to general, linear, and/or active treatment system discharge types.

17. The State Water Board may reopen the permit if the U.S. EPA adopts a final effluent limitation guideline for construction activities.

B. Activities Covered Under the General Permit

18. Any construction or demolition activity, including, but not limited to, clearing, grading, grubbing, or excavation, or any other activity that results in a land disturbance of equal to or greater than one acre.

19. Construction activity that results in land surface disturbances of less than one acre if the construction activity is part of a larger common plan of development or the sale of one or more acres of disturbed land surface.

20. Construction activity related to residential, commercial, or industrial development on lands currently used for agriculture including, but not limited to, the construction of buildings related to agriculture that are considered industrial pursuant to U.S. EPA regulations, such as dairy barns or food processing facilities.

21. Construction activity associated with Linear Underground/Overhead Utility Projects (LUPs) including, but not limited to, those activities necessary for the installation of underground and overhead linear facilities (e.g., conduits, substructures, pipelines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities) and include, but are not limited to, underground utility mark-out, potholing, concrete and asphalt cutting and removal, trenching, excavation, boring and drilling, access road and pole/tower pad and cable/wire pull station, substation construction, substructure installation, construction of tower footings and/or foundations, pole and tower installations, pipeline installations, welding, concrete and/or pavement repair or replacement, and stockpile/borrow locations.

22. Discharges of sediment from construction activities associated with oil and gas exploration, production, processing, or treatment operations or transmission facilities.[2]

23. Storm water discharges from dredge spoil placement that occur outside of U.S. Army Corps of Engineers jurisdiction (upland sites) and that disturb one or more acres of land surface from construction activity are covered by this General Permit. Construction sites that intend to disturb one or more acres of land within the jurisdictional boundaries of

[2] Pursuant to the Ninth Circuit Court of Appeals' decision in *NRDC v. EPA* (9th Cir. 2008) 526 F.3d 591, and subsequent denial of the U.S. EPA's petition for reconsideration in November 2008, oil and gas construction activities discharging storm water contaminated only with sediment are no longer exempt from the NPDES program.

a CWA § 404 permit should contact the appropriate Regional Water Board to determine whether this permit applies to the site.

C. Activities Not Covered Under the General Permit

24. Routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of the facility.

25. Disturbances to land surfaces solely related to agricultural operations such as disking, harrowing, terracing and leveling, and soil preparation.

26. Discharges of storm water from areas on tribal lands; construction on tribal lands is regulated by a federal permit.

27. Construction activity and land disturbance involving discharges of storm water within the Lake Tahoe Hydrologic Unit. The Lahontan Regional Water Board has adopted its own permit to regulate storm water discharges from construction activity in the Lake Tahoe Hydrologic Unit (Regional Water Board 6SLT). Owners of construction sites in this watershed must apply for the Lahontan Regional Water Board permit rather than the statewide Construction General Permit.

28. Construction activity that disturbs less than one acre of land surface, and that is not part of a larger common plan of development or the sale of one or more acres of disturbed land surface.

29. Construction activity covered by an individual NPDES Permit for storm water discharges.

30. Discharges from small (1 to 5 acre) construction activities with an approved Rainfall Erosivity Waiver authorized by U.S. EPA Phase II regulations certifying to the State Board that small construction activity will occur only when the Rainfall Erosivity Factor is less than 5 (“R” in the Revised Universal Soil Loss Equation).

31. Landfill construction activity that is subject to the Industrial General Permit.

32. Construction activity that discharges to Combined Sewer Systems.

33. Conveyances that discharge storm water runoff combined with municipal sewage.

34. Discharges of storm water identified in CWA § 402(*l*)(2), 33 U.S.C. § 1342(*l*)(2).

35. Discharges occurring in basins that are not tributary or hydrologically connected to waters of the United States (for more information contact your Regional Water Board).

D. Obtaining and Modifying General Permit Coverage

36. This General Permit requires all dischargers to electronically file all Permit Registration Documents (PRDs), Notices of Termination (NOT), changes of information, annual reporting, and other compliance documents required by this General Permit through the State Water Board's Storm water Multi-Application and Report Tracking System (SMARTS) website.

37. Any information provided to the Regional Water Board shall comply with the Homeland Security Act and any other federal law that concerns security in the United States; any information that does not comply should not be submitted.

38. This General Permit grants an exception from the Risk Determination requirements for existing sites covered under Water Quality Orders No. 99-08-DWQ, and No. 2003-0007-DWQ. For certain sites, adding additional requirements may not be cost effective. Construction sites covered under Water Quality Order No. 99-08-DWQ shall obtain permit coverage at the Risk Level 1. LUPs covered under Water Quality Order No. 2003-0007-DWQ shall obtain permit coverage as a Type 1 LUP. The Regional Water Boards have the authority to require Risk Determination to be performed on sites currently covered under Water Quality Orders No. 99-08-DWQ and No. 2003-0007-DWQ where they deem it necessary. The State Water Board finds that there are two circumstances when it may be appropriate for the Regional Water Boards to require a discharger that had filed an NOI under State Water Board Order No. 99-08-DWQ to recalculate the site's risk level. These circumstances are: (1) when the discharger has a demonstrated history of noncompliance with State Water Board Order No. 99-08-DWQ or; (2) when the discharger's site poses a significant risk of causing or contributing to an exceedance of a water quality standard without the implementation of the additional Risk Level 2 or 3 requirements.

E. Prohibitions

39. All discharges are prohibited except for the storm water and non-storm water discharges specifically authorized by this General Permit or another NPDES permit. Non-storm water discharges include a wide variety of sources, including improper dumping, spills, or leakage from storage tanks or transfer areas. Non-storm water discharges may

contribute significant pollutant loads to receiving waters. Measures to control spills, leakage, and dumping, and to prevent illicit connections during construction must be addressed through structural as well as non-structural Best Management Practices (BMPs)[3]. The State Water Board recognizes, however, that certain non-storm water discharges may be necessary for the completion of construction.

40. This General Permit prohibits all discharges which contain a hazardous substance in excess of reportable quantities established in 40 C.F.R. §§ 117.3 and 302.4, unless a separate NPDES Permit has been issued to regulate those discharges.

41. This General Permit incorporates discharge prohibitions contained in water quality control plans, as implemented by the State Water Board and the nine Regional Water Boards.

42. Pursuant to the Ocean Plan, discharges to Areas of Special Biological Significance (ASBS) are prohibited unless covered by an exception that the State Water Board has approved.

43. This General Permit prohibits the discharge of any debris[4] from construction sites. Plastic and other trash materials can cause negative impacts to receiving water beneficial uses. The State Water Board encourages the use of more environmentally safe, biodegradable materials on construction sites to minimize the potential risk to water quality.

F. Training

44. In order to improve compliance with and to maintain consistent enforcement of this General Permit, all dischargers are required to appoint two positions - the Qualified SWPPP Developer (QSD) and the Qualified SWPPP Practitioner (QSP) - who must obtain appropriate training. Together with the key stakeholders, the State and Regional Water Boards are leading the development of this curriculum through a collaborative organization called The Construction General Permit (CGP) Training Team.

45. The Professional Engineers Act (Bus. & Prof. Code section 6700, et seq.) requires that all engineering work must be performed by a California licensed engineer.

[3] BMPs are scheduling of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the United States. BMPs also include treatment requirements, operating procedures, and practice to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

[4] Litter, rubble, discarded refuse, and remains of destroyed inorganic anthropogenic waste.

G. Determining and Reducing Risk

46. The risk of accelerated erosion and sedimentation from wind and water depends on a number of factors, including proximity to receiving water bodies, climate, topography, and soil type.

47. This General Permit requires dischargers to assess the risk level of a site based on both sediment transport and receiving water risk. This General Permit contains requirements for Risk Levels 1, 2 and 3, and LUP Risk Type 1, 2, and 3 (Attachment A). Risk levels are established by determining two factors: first, calculating the site's sediment risk; and second, receiving water risk during periods of soil exposure (i.e. grading and site stabilization). Both factors are used to determine the site-specific Risk Level(s). LUPs can be determined to be Type 1 based on the flowchart in Attachment A.1.

48. Although this General Permit does not mandate specific setback distances, dischargers are encouraged to set back their construction activities from streams and wetlands whenever feasible to reduce the risk of impacting water quality (e.g., natural stream stability and habitat function). Because there is a reduced risk to receiving waters when setbacks are used, this General Permit gives credit to setbacks in the risk determination and post-construction storm water performance standards. The risk calculation and runoff reduction mechanisms in this General Permit are expected to facilitate compliance with any Regional Water Board and local agency setback requirements, and to encourage voluntary setbacks wherever practicable.

49. Rain events can occur at any time of the year in California. Therefore, a Rain Event Action Plan (REAP) is necessary for Risk Level 2 and 3 traditional construction projects (LUPs exempt) to ensure that active construction sites have adequate erosion and sediment controls implemented prior to the onset of a storm event, even if construction is planned only during the dry season.

50. Soil particles smaller than 0.02 millimeters (mm) (i.e., finer than medium silt) do not settle easily using conventional measures for sediment control (i.e., sediment basins). Given their long settling time, dislodging these soils results in a significant risk that fine particles will be released into surface waters and cause unacceptable downstream impacts. If operated correctly, an Active Treatment System (ATS[5]) can prevent or reduce the release of fine particles from construction sites.

[5] An ATS is a treatment system that employs chemical coagulation, chemical flocculation, or electro coagulation in order to reduce turbidity caused by fine suspended sediment.

Use of an ATS can effectively reduce a site's risk of impacting receiving waters.

51. Dischargers located in a watershed area where a Total Maximum Daily Load (TMDL) has been adopted or approved by the Regional Water Board or U.S. EPA may be required by a separate Regional Water Board action to implement additional BMPs, conduct additional monitoring activities, and/or comply with an applicable waste load allocation and implementation schedule. Such dischargers may also be required to obtain an individual Regional Water Board permit specific to the area.

H. Effluent Standards

52. The State Water Board convened a blue ribbon panel of storm water experts that submitted a report entitled, “The Feasibility of Numeric Effluent Limits Applicable to Discharges of Storm Water Associated with Municipal, Industrial and Construction Activities,” dated June 19, 2006. The panel concluded that numeric limits or action levels are technically feasible to control construction storm water discharges, provided that certain conditions are considered. The panel also concluded that numeric effluent limitations (NELs) are feasible for discharges from construction sites that utilize an ATS. The State Water Board has incorporated the expert panel’s suggestions into this General Permit, which includes both numeric action levels (NALs) and NELs for pH and turbidity, and special numeric limits for ATS discharges.

Numeric Effluent Limitations

53. Discharges of storm water from construction activities may become contaminated from alkaline construction materials resulting in high pH (greater than pH 7). Alkaline construction materials include, but are not limited to, hydrated lime, concrete, mortar, cement kiln dust (CKD), Portland cement treated base (CTB), fly ash, recycled concrete, and masonry work. This General Permit includes an NEL for pH (6.0-9.0) that applies only at sites that exhibit a "high risk of high pH discharge." A "high risk of high pH discharge" can occur during the complete utilities phase, the complete vertical build phase, and any portion of any phase where significant amounts of materials are placed directly on the land at the site in a manner that could result in significant alterations to the background pH of any discharges.

54. For Risk Level 3 discharges, this General Permit establishes technology-based, numeric effluent limitations (NELs) for turbidity of 500 NTU. Exceedances of the turbidity NEL constitutes a violation of this General Permit.

55. This General Permit establishes a 5 year, 24 hour (expressed in inches of rainfall) Compliance Storm Event exemption from the technology-based NELs for Risk Level 3 dischargers.

Determining Compliance with Numeric Limitations

56. This General Permit sets a pH NAL of 6.5 to 8.5, and a turbidity NAL of 250 NTU. The purpose of the NAL and its associated monitoring requirement is to provide operational information regarding the performance of the measures used at the site to minimize the discharge of pollutants and to protect beneficial uses and receiving waters from the adverse effects of construction-related storm water discharges. The NALs in this General Permit for pH and turbidity are not directly enforceable and do not constitute NELs.

57. This General Permit requires dischargers with NAL exceedances to immediately implement additional BMPs and revise their Storm Water Pollution Prevention Plans (SWPPPs) accordingly to either prevent pollutants and authorized non-storm water discharges from contaminating storm water, or to substantially reduce the pollutants to levels consistently below the NALs. NAL exceedances are reported in the State Water Boards SMARTS system, and the discharger is required to provide an NAL Exceedance Report when requested by a Regional Water Board.

58. If run-on is caused by a forest fire or any other natural disaster, then NELs do not apply.

59. Exceedances of the NELs are a violation of this Permit. This General Permit requires dischargers with NEL exceedances to implement additional monitoring, BMPs, and revise their SWPPPs accordingly. Dischargers are required to notify the State and Regional Water Boards of the violation through the State Water Boards SMARTs system, and provide an NEL Violation Report sharing additional information concerning the NEL exceedance.

I. Receiving Water Limitations

60. This General Permit requires all enrolled dischargers to determine the receiving waters potentially affected by their discharges and to comply with all applicable water quality standards, including any more stringent standards applicable to a water body.

J. Sampling, Monitoring, Reporting and Record Keeping

61. Visual monitoring of storm water and non-storm water discharges is required for all sites subject to this General Permit.

62. Records of all visual monitoring inspections are required to remain on-site during the construction period and for a minimum of three years.

63. For all Risk Level 3 and Risk Level 2 sites, this General Permit requires effluent monitoring for pH and turbidity. Sampling, analysis and monitoring requirements for effluent monitoring for pH and turbidity are contained in this General Permit.

64. Risk Level 3 sites in violation of the Numeric Effluent Limitations contained in this General Permit and with direct discharges to receiving water are required to conduct receiving water monitoring.

65. For Risk Level 3 sites larger than 30 acres and with direct discharges to receiving waters, this General Permit requires bioassessment sampling before and after site completion to determine if significant degradation to the receiving water's biota has occurred. Bioassessment sampling guidelines are contained in this General Permit.

66. A summary and evaluation of the sampling and analysis results will be submitted in the Annual Reports.

67. This General Permit contains sampling, analysis and monitoring requirements for non-visible pollutants at all sites subject to this General Permit.

68. Compliance with the General Permit relies upon dischargers to electronically self-report any discharge violations and to comply with any Regional Water Board enforcement actions.

69. This General Permit requires that all dischargers maintain a paper or electronic copy of all required records for three years from the date generated or date submitted, whichever is last. These records must be available at the construction site until construction is completed. For LUPs, these documents may be retained in a crew member's vehicle and made available upon request.

K. Active Treatment System (ATS) Requirements

70. Active treatment systems add chemicals to facilitate flocculation, coagulation and filtration of suspended sediment particles. The uncontrolled release of these chemicals to the environment can negatively affect the beneficial uses of receiving waters and/or degrade water quality (e.g., acute and chronic toxicity). Additionally, the batch storage and treatment of storm water through an ATS' can potentially

cause physical impacts on receiving waters if storage volume is inadequate or due to sudden releases of the ATS batches and improperly designed outfalls.

71. If designed, operated and maintained properly an ATS can achieve very high removal rates of suspended sediment (measured as turbidity), albeit at sometimes significantly higher costs than traditional erosion/sediment control practices. As a result, this General Permit establishes NELs consistent with the expected level of typical ATS performance.

72. This General Permit requires discharges of storm water associated with construction activity that undergo active treatment to comply with special operational and effluent limitations to ensure that these discharges do not adversely affect the beneficial uses of the receiving waters or cause degradation of their water quality.

73. For ATS discharges, this General Permit establishes technology-based NELs for turbidity.

74. This General Permit establishes a 10 year, 24 hour (expressed in inches of rainfall) Compliance Storm Event exemption from the technology-based numeric effluent limitations for ATS discharges. Exceedances of the ATS turbidity NEL constitutes a violation of this General Permit.

L. Post-Construction Requirements

75. This General Permit includes performance standards for post-construction that are consistent with State Water Board Resolution No. 2005-0006, "Resolution Adopting the Concept of Sustainability as a Core Value for State Water Board Programs and Directing Its Incorporation," and 2008-0030, “Requiring Sustainable Water Resources Management.“ The requirement for all construction sites to match pre-project hydrology will help ensure that the physical and biological integrity of aquatic ecosystems are sustained. This “runoff reduction” approach is analogous in principle to Low Impact Development (LID) and will serve to protect related watersheds and waterbodies from both hydrologic-based and pollution impacts associated with the post-construction landscape.

76. LUP projects are not subject to post-construction requirements due to the nature of their construction to return project sites to pre-construction conditions.

M. Storm Water Pollution Prevention Plan Requirements

77. This General Permit requires the development of a site-specific SWPPP. The SWPPP must include the information needed to demonstrate compliance with all requirements of this General Permit, and must be kept on the construction site and be available for review. The discharger shall ensure that a QSD develops the SWPPP.

78. To ensure proper site oversight, this General Permit requires a Qualified SWPPP Practitioner to oversee implementation of the BMPs required to comply with this General Permit.

N. Regional Water Board Authorities

79. Regional Water Boards are responsible for implementation and enforcement of this General Permit. A general approach to permitting is not always suitable for every construction site and environmental circumstances. Therefore, this General Permit recognizes that Regional Water Boards must have some flexibility and authority to alter, approve, exempt, or rescind permit authority granted under this General Permit in order to protect the beneficial uses of our receiving waters and prevent degradation of water quality.

IT IS HEREBY ORDERED that all dischargers subject to this General Permit shall comply with the following conditions and requirements (including all conditions and requirements as set forth in Attachments A, B, C, D, E and F)[6]:

II. CONDITIONS FOR PERMIT COVERAGE

A. Linear Underground/Overhead Projects (LUPs)

1. Linear Underground/Overhead Projects (LUPs) include, but are not limited to, any conveyance, pipe, or pipeline for the transportation of any gaseous, liquid (including water and wastewater for domestic municipal services), liquescent, or slurry substance; any cable line or wire for the transmission of electrical energy; any cable line or wire for communications (e.g. telephone, telegraph, radio or television messages); and associated ancillary facilities. Construction activities associated with LUPs include, but are not limited to, (a) those activities necessary for the installation of underground and overhead linear facilities (e.g., conduits, substructures, pipelines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment, and associated ancillary facilities); and include, but are not limited to, (b) underground utility mark-out, potholing, concrete and asphalt cutting and removal, trenching, excavation, boring and drilling, access road and pole/tower pad and cable/wire pull station, substation construction, substructure installation, construction of tower footings and/or foundations, pole and tower installations, pipeline installations, welding, concrete and/ or pavement repair or replacement, and stockpile/borrow locations.

2. The Legally Responsible Person is responsible for obtaining coverage under the General Permit where the construction of pipelines, utility lines, fiber-optic cables, or other linear underground/overhead projects will occur across several properties unless the LUP construction activities are covered under another construction storm water permit.

3. Only LUPs shall comply with the conditions and requirements in Attachment A, A.1 & A.2 of this Order. The balance of this Order is not applicable to LUPs except as indicated in Attachment A.

[6] These attachments are part of the General Permit itself and are not separate documents that are capable of being updated independently by the State Water Board.

B. Obtaining Permit Coverage Traditional Construction Sites

1. The Legally Responsible Person (LRP) (see Special Provisions, Electronic Signature and Certification Requirements, Section IV.I.1) must obtain coverage under this General Permit.

2. To obtain coverage, the LRP must electronically file Permit Registration Documents (PRDs) prior to the commencement of construction activity. Failure to obtain coverage under this General Permit for storm water discharges to waters of the United States is a violation of the CWA and the California Water Code.

3. PRDs shall consist of:

   a. Notice of Intent (NOI)
   b. Risk Assessment (Section VIII)
   c. Site Map
   d. Storm Water Pollution Prevention Plan (Section XIV)
   e. Annual Fee
   f. Signed Certification Statement

   Any information provided to the Regional Water Board shall comply with the Homeland Security Act and any other federal law that concerns security in the United States; any information that does not comply should not be submitted.

   Attachment B contains additional PRD information. Dischargers must electronically file the PRDs, and mail the appropriate annual fee to the State Water Board.

4. This permit is effective on July 1, 2010.

   a. **Dischargers Obtaining Coverage On or After July 1, 2010:** All dischargers requiring coverage on or after July 1, 2010, shall electronically file their PRDs prior to the commencement of construction activities, and mail the appropriate annual fee no later than seven days prior to the commencement of construction activities. Permit coverage shall not commence until the PRDs and the annual fee are received by the State Water Board, and a WDID number is assigned and sent by SMARTS.

   b. **Dischargers Covered Under 99-08-DWQ and 2003-0007-DWQ:** Existing dischargers subject to State Water Board Order No. 99-08-DWQ (existing dischargers) will continue coverage under 99-08-DWQ until July 1, 2010. After July 1, 2010, all NOIs subject to State Water Board Order No. 99-08-DWQ will be terminated.

Existing dischargers shall electronically file their PRDs no later than July 1, 2010. If an existing discharger's site acreage subject to the annual fee has changed, it shall mail a revised annual fee no less than seven days after receiving the revised annual fee notification, **or else lose permit coverage**. All existing dischargers shall be exempt from the risk determination requirements in Section VIII of this General Permit until two years after permit adoption. All existing dischargers are therefore subject to Risk Level 1 requirements regardless of their site's sediment and receiving water risks. However, a Regional Board retains the authority to require an existing discharger to comply with the Section VIII risk determination requirements.

5. The discharger is only considered covered by this General Permit upon receipt of a Waste Discharger Identification (WDID) number assigned and sent by the State Water Board Storm water Multi-Application and Report Tracking System (SMARTS). In order to demonstrate compliance with this General Permit, the discharger must obtain a WDID number and must present documentation of a valid WDID upon demand.

6. During the period this permit is subject to review by the U.S. EPA, the prior permit (State Water Board Order No. 99-08-DWQ) remains in effect. Existing dischargers under the prior permit will continue to have coverage under State Water Board Order No. 99-08-DWQ until this General Permit takes effect on July 1, 2010. Dischargers who complete their projects and electronically file an NOT prior to July 1, 2010, are not required to obtain coverage under this General Permit.

7. Small Construction Rainfall Erosivity Waiver

   EPA's Small Construction Erosivity Waiver applies to sites between one and five acres demonstrating that there are no adverse water quality impacts.

   Dischargers eligible for a Rainfall Erosivity Waiver based on low erosivity potential shall complete the electronic Notice of Intent (NOI) and Sediment Risk form through the State Water Board's SMARTS system, certifying that the construction activity will take place during a period when the value of the rainfall erosivity factor is less than five. Where the LRP changes or another LRP is added during construction, the new LRP must also submit a waiver certification through the SMARTS system.

   If a small construction site continues beyond the projected completion date given on the waiver certification, the LRP shall recalculate the

rainfall erosivity factor for the new project duration and submit this information through the SMARTS system. If the new R factor is below five (5), the discharger shall update through SMARTS all applicable information on the waiver certification and retain a copy of the revised waiver onsite. The LRP shall submit the new waiver certification 30 days prior to the projected completion date listed on the original waiver form to assure exemption from permitting requirements is uninterrupted. If the new R factor is five (5) or above, the LRP shall be required to apply for coverage under this Order.

8. In the case of a public emergency that requires immediate construction activities, a discharger shall submit a brief description of the emergency construction activity within five days of the onset of construction, and then shall submit all PRDs within thirty days.

C. Revising Permit Coverage for Change of Acreage or New Ownership

1. The discharger may reduce or increase the total acreage covered under this General Permit when a portion of the site is complete and/or conditions for termination of coverage have been met (See Section II.D Conditions for Termination of Coverage); when ownership of a portion of the site is sold to a different entity; or when new acreage, subject to this General Permit, is added to the site.

2. Within 30 days of a reduction or increase in total disturbed acreage, the discharger shall electronically file revisions to the PRDs that include:

   a. A revised NOI indicating the new project size;

   b. A revised site map showing the acreage of the site completed, acreage currently under construction, acreage sold/transferred or added, and acreage currently stabilized in accordance with the Conditions for Termination of Coverage in Section II.D below.

   c. SWPPP revisions, as appropriate; and

   d. Certification that any new landowners have been notified of applicable requirements to obtain General Permit coverage. The certification shall include the name, address, telephone number, and e-mail address of the new landowner.

   e. If the project acreage has increased, dischargers shall mail payment of revised annual fees within 14 days of receiving the revised annual fee notification.

3. The discharger shall continue coverage under the General Permit for any parcel that has not achieved "Final Stabilization" as defined in Section II.D.

4. When an LRP with active General Permit coverage transfers its LRP status to another person or entity that qualifies as an LRP, the existing LRP shall inform the new LRP of the General Permit's requirements. In order for the new LRP to continue the construction activity on its parcel of property, the new LRP, or the new LRP's approved signatory, must submit PRDs in accordance with this General Permit's requirements.

D. Conditions for Termination of Coverage

1. Within 90 days of when construction is complete or ownership has been transferred, the discharger shall electronically file a Notice of Termination (NOT), a final site map, and photos through the State Water Boards SMARTS system. Filing a NOT certifies that all General Permit requirements have been met. The Regional Water Board will consider a construction site complete only when all portions of the site have been transferred to a new owner, or all of the following conditions have been met:

   a. For purposes of "final stabilization," the site will not pose any additional sediment discharge risk than it did prior to the commencement of construction activity;

   b. There is no potential for construction-related storm water pollutants to be discharged into site runoff;

   c. Final stabilization has been reached;

   d. Construction materials and wastes have been disposed of properly;

   e. Compliance with the Post-Construction Standards in Section XIII of this General Permit has been demonstrated;

   f. Post-construction storm water management measures have been installed and a long-term maintenance plan[7] has been established; and

   g. All construction-related equipment, materials and any temporary BMPs no longer needed are removed from the site.

[7] For the purposes of this requirement a long-term maintenance plan will be designed for a minimum of five years, and will describe the procedures to ensure that the post-construction storm water management measures are adequately maintained.

2. The discharger shall certify that final stabilization conditions are satisfied in their NOT. Failure to certify shall result in continuation of permit coverage and annual billing.

3. The NOT must demonstrate through photos, RUSLE or RUSLE2, or results of testing and analysis that the site meets all of the conditions above (Section II.D.1) and the final stabilization condition (Section II.D.1.a) is attained by one of the following methods:

   a. "70% final cover method," no computational proof required

      OR:

   b. "RUSLE or RUSLE2 method," computational proof required

      OR:

   c. "Custom method", the discharger shall demonstrate in some other manner than a or b, above, that the site complies with the "final stabilization" requirement in Section II.D.1.a.

III. DISCHARGE PROHIBITIONS

A. Dischargers shall not violate any discharge prohibitions contained in applicable Basin Plans or statewide water quality control plans. Waste discharges to Areas of Special Biological Significance (ASBS) are prohibited by the California Ocean Plan, unless granted an exception issued by the State Water Board.

B. All discharges are prohibited except for the storm water and non-storm water discharges specifically authorized by this General Permit or another NPDES permit.

C. Authorized non-storm water discharges may include those from de-chlorinated potable water sources such as: fire hydrant flushing, irrigation of vegetative erosion control measures, pipe flushing and testing, water to control dust, uncontaminated ground water from dewatering, and other discharges not subject to a separate general NPDES permit adopted by a Regional Water Board. The discharge of non-storm water is authorized under the following conditions:

1. The discharge does not cause or contribute to a violation of any water quality standard;

2. The discharge does not violate any other provision of this General Permit;

3. The discharge is not prohibited by the applicable Basin Plan;

4. The discharger has included and implemented specific BMPs required by this General Permit to prevent or reduce the contact of the non-storm water discharge with construction materials or equipment.

5. The discharge does not contain toxic constituents in toxic amounts or (other) significant quantities of pollutants;

6. The discharge is monitored and meets the applicable NALs and NELs; and

7. The discharger reports the sampling information in the Annual Report.

If any of the above conditions are not satisfied, the discharge is not authorized by this General Permit. The discharger shall notify the Regional Water Board of any anticipated non-storm water discharges not already authorized by this General Permit or another NPDES permit, to determine whether a separate NPDES permit is necessary.

D. Debris resulting from construction activities are prohibited from being discharged from construction sites.

E. When soil contamination is found or suspected and a responsible party is not identified, or the responsible party fails to promptly take the appropriate action, the discharger shall have those soils sampled and tested to ensure proper handling and public safety measures are implemented. The discharger shall notify the appropriate local, State, and federal agency(ies) when contaminated soil is found at a construction site, and will notify the appropriate Regional Water Board.

IV. SPECIAL PROVISIONS

A. Duty to Comply

1. The discharger shall comply with all of the conditions of this General Permit. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA) and the Porter-Cologne Water Quality Control Act and is grounds for enforcement action and/or removal from General Permit coverage.

2. The discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this General Permit has not yet been modified to incorporate the requirement.

B. General Permit Actions

1. This General Permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the discharger for a General Permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not annul any General Permit condition.

2. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the CWA for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this General Permit, this General Permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition and the dischargers so notified.

C. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this General Permit.

D. Duty to Mitigate

The discharger shall take all responsible steps to minimize or prevent any discharge in violation of this General Permit, which has a reasonable likelihood of adversely affecting human health or the environment.

E. Proper Operation and Maintenance

The discharger shall at all times properly operate and maintain any facilities and systems of treatment and control (and related appurtenances) which are installed or used by the discharger to achieve compliance with the conditions of this General Permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance may require the operation of backup or auxiliary facilities or similar systems installed by a discharger when necessary to achieve compliance with the conditions of this General Permit.

F. Property Rights

This General Permit does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor does it authorize any infringement of Federal, State, or local laws or regulations.

G. Duty to Maintain Records and Provide Information

1. The discharger shall maintain a paper or electronic copy of all required records, including a copy of this General Permit, for three years from the date generated or date submitted, whichever is last. These records shall be available at the construction site until construction is completed.

2. The discharger shall furnish the Regional Water Board, State Water Board, or U.S. EPA, within a reasonable time, any requested information to determine compliance with this General Permit. The discharger shall also furnish, upon request, copies of records that are required to be kept by this General Permit.

H. Inspection and Entry

The discharger shall allow the Regional Water Board, State Water Board, U.S. EPA, and/or, in the case of construction sites which discharge through a municipal separate storm sewer, an authorized representative of the municipal operator of the separate storm sewer system receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the discharger's premises at reasonable times where a regulated construction activity is being conducted or where records must be kept under the conditions of this General Permit;

2. Access and copy at reasonable times any records that must be kept under the conditions of this General Permit;

3. Inspect at reasonable times the complete construction site, including any off-site staging areas or material storage areas, and the erosion/sediment controls; and

4. Sample or monitor at reasonable times for the purpose of ensuring General Permit compliance.

I. Electronic Signature and Certification Requirements

1. All Permit Registration Documents (PRDs) and Notices of Termination (NOTs) shall be electronically signed, certified, and submitted via SMARTS to the State Water Board. Either the Legally Responsible Person (LRP), as defined in Appendix 5 – Glossary, or a person legally authorized to sign and certify PRDs and NOTs on behalf of the LRP (the LRP's Approved Signatory, as defined in Appendix 5 - Glossary) must submit all information electronically via SMARTS.

2. Changes to Authorization. If an Approved Signatory's authorization is no longer accurate, a new authorization satisfying the requirements of paragraph (a) of this section must be submitted via SMARTS prior to or together with any reports, information or applications to be signed by an Approved Signatory.

3. All Annual Reports, or other information required by the General Permit (other than PRDs and NOTs) or requested by the Regional Water Board, State Water Board, U.S. EPA, or local storm water management agency shall be certified and submitted by the LRP or the LRP's Approved Signatory.

J. Certification

Any person signing documents under Section IV.I above, shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

K. Anticipated Noncompliance

The discharger shall give advance notice to the Regional Water Board and local storm water management agency of any planned changes in the construction activity, which may result in noncompliance with General Permit requirements.

L. Bypass

Bypass[8] is prohibited. The Regional Water Board may take enforcement action against the discharger for bypass unless:

1. Bypass was unavoidable to prevent loss of life, personal injury or severe property damage;[9]

2. There were no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated waste, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that could occur during normal periods of equipment downtime or preventative maintenance;

3. The discharger submitted a notice at least ten days in advance of the need for a bypass to the Regional Water Board; or

4. The discharger may allow a bypass to occur that does not cause effluent limitations to be exceeded, but only if it is for essential maintenance to assure efficient operation. In such a case, the above bypass conditions are not applicable. The discharger shall submit notice of an unanticipated bypass as required.

M. Upset

1. A discharger that wishes to establish the affirmative defense of an upset[10] in an action brought for noncompliance shall demonstrate,

[8] The intentional diversion of waste streams from any portion of a treatment facility

[9] Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

[10] An exceptional incident in which there is unintentional and temporary noncompliance the technology based numeric effluent limitations because of factors beyond the reasonable control of the discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An upset occurred and that the discharger can identify the cause(s) of the upset

b. The treatment facility was being properly operated by the time of the upset

c. The discharger submitted notice of the upset as required; and

d. The discharger complied with any remedial measures required

2. No determination made before an action of noncompliance occurs, such as during administrative review of claims that noncompliance was caused by an upset, is final administrative action subject to judicial review.

3. In any enforcement proceeding, the discharger seeking to establish the occurrence of an upset has the burden of proof

N. Penalties for Falsification of Reports

Section 309(c)(4) of the CWA provides that any person who knowingly makes any false material statement, representation, or certification in any record or other document submitted or required to be maintained under this General Permit, including reports of compliance or noncompliance shall upon conviction, be punished by a fine of not more than $10,000 or by imprisonment for not more than two years or by both.

O. Oil and Hazardous Substance Liability

Nothing in this General Permit shall be construed to preclude the institution of any legal action or relieve the discharger from any responsibilities, liabilities, or penalties to which the discharger is or may be subject to under Section 311 of the CWA.

P. Severability

The provisions of this General Permit are severable; and, if any provision of this General Permit or the application of any provision of this General Permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this General Permit shall not be affected thereby.

Q. Reopener Clause

This General Permit may be modified, revoked and reissued, or terminated for cause due to promulgation of amended regulations, receipt of U.S. EPA guidance concerning regulated activities, judicial decision, or in accordance with 40 Code of Federal Regulations (CFR) 122.62, 122.63, 122.64, and 124.5.

R. Penalties for Violations of Permit Conditions

1. Section 309 of the CWA provides significant penalties for any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the CWA or any permit condition or limitation implementing any such section in a permit issued under Section 402. Any person who violates any permit condition of this General Permit is subject to a civil penalty not to exceed $37,500[11] per calendar day of such violation, as well as any other appropriate sanction provided by Section 309 of the CWA.

2. The Porter-Cologne Water Quality Control Act also provides for civil and criminal penalties, which in some cases are greater than those under the CWA.

S. Transfers

This General Permit is not transferable.

T. Continuation of Expired Permit

This General Permit continues in force and effect until a new General Permit is issued or the SWRCB rescinds this General Permit. Only those dischargers authorized to discharge under the expiring General Permit are covered by the continued General Permit.

[11] May be further adjusted in accordance with the Federal Civil Penalties Inflation Adjustment Act.

V. EFFLUENT STANDARDS

A. Narrative Effluent Limitations

1. Storm water discharges and authorized non-storm water discharges regulated by this General Permit shall not contain a hazardous substance equal to or in excess of reportable quantities established in 40 C.F.R. §§ 117.3 and 302.4, unless a separate NPDES Permit has been issued to regulate those discharges.

2. Dischargers shall minimize or prevent pollutants in storm water discharges and authorized non-storm water discharges through the use of controls, structures, and management practices that achieve BAT for toxic and non-conventional pollutants and BCT for conventional pollutants.

B. Numeric Effluent Limitations (NELs)

Table 1- Numeric Effluent Limitations, Numeric Action Levels, Test Methods, Detection Limits, and Reporting Units

Parameter	Test Method	Discharge Type	Min. Detection Limit	Units	Numeric Action Level	Numeric Effluent Limitation
pH	Field test with calibrated portable instrument	Risk Level 2	0.2	pH units	lower NAL = 6.5 upper NAL = 8.5	N/A
		Risk Level 3			lower NAL = 6.5 upper NAL = 8.5	lower NEL = 6.0 upper NEL = 9.0
Turbidity	EPA 0180.1 and/or field test with calibrated portable instrument	Risk Level 2	1	NTU	250 NTU	N/A
		Risk Level 3			250 NTU	500 NTU

1. Numeric Effluent Limitations (NELs):

   a. **Storm Event, Daily Average pH Limits –** For Risk Level 3 dischargers, the pH of storm water and non-storm water discharges

shall be within the ranges specified in Table 1 during any site phase where there is a "high risk of pH discharge."[12]

b. **Storm Event Daily Average Turbidity Limit –** For Risk Level 3 dischargers, the turbidity of storm water and non-storm water discharges shall not exceed 500 NTU.

2. If daily average sampling results are outside the range of pH NELs (i.e., is below the lower NEL for pH or exceeds the upper NEL for pH) or exceeds the turbidity NEL (as listed in Table 1), the discharger is in violation of this General Permit and shall electronically file monitoring results in violation within 5 business days of obtaining the results.

3. **Compliance Storm Event**:

   Discharges of storm water from Risk Level 3 sites shall comply with applicable NELs (above) unless the storm event causing the discharges is determined after the fact to be equal to or larger than the Compliance Storm Event (expressed in inches of rainfall). The Compliance Storm Event for Risk Level 3 discharges is the 5 year, 24 hour storm (expressed in tenths of an inch of rainfall), as determined by using these maps:

   http://www.wrcc.dri.edu/pcpnfreq/nca5y24.gif
   http://www.wrcc.dri.edu/pcpnfreq/sca5y24.gif

   Compliance storm event verification shall be done by reporting on-site rain gauge readings as well as nearby governmental rain gauge readings.

4. Dischargers shall not be required to comply with NELs if the site receives run-on from a forest fire or any other natural disaster.

C. Numeric Action Levels (NALs)

1. For Risk Level 2 and 3 dischargers, the lower storm event average NAL for pH is 6.5 pH units and the upper storm event average NAL for pH is 8.5 pH units. The discharger shall take actions as described below if the discharge is outside of this range of pH values.

[12] A period of high risk of pH discharge is defined as a project's complete utilities phase, complete vertical build phase, and any portion of any phase where significant amounts of materials are placed directly on the land at the site in a manner that could result in significant alterations of the background pH of the discharges.

2. For Risk Level 2 and 3 dischargers, the NAL storm event daily average for turbidity is 250 NTU. The discharger shall take actions as described below if the discharge is outside of this range of turbidity values.

3. Whenever the results from a storm event daily average indicate that the discharge is below the lower NAL for pH, exceeds the upper NAL for pH, or exceeds the turbidity NAL (as listed in Table 1), the discharger shall conduct a construction site and run-on evaluation to determine whether pollutant source(s) associated with the site's construction activity may have caused or contributed to the NAL exceedance and shall immediately implement corrective actions if they are needed.

4. The site evaluation shall be documented in the SWPPP and specifically address whether the source(s) of the pollutants causing the exceedance of the NAL:

    a. Are related to the construction activities and whether additional BMPs are required to (1) meet BAT/BCT requirements; (2) reduce or prevent pollutants in storm water discharges from causing exceedances of receiving water objectives; and (3) determine what corrective action(s) were taken or will be taken and with a description of the schedule for completion.

        AND/OR:

    b. Are related to the run-on associated with the construction site location and whether additional BMPs measures are required to (1) meet BAT/BCT requirements; (2) reduce or prevent pollutants in storm water discharges from causing exceedances of receiving water objectives; and (3) what corrective action(s) were taken or will be taken with a description of the schedule for completion.

VI. RECEIVING WATER LIMITATIONS

A. The discharger shall ensure that storm water discharges and authorized non-storm water discharges to any surface or ground water will not adversely affect human health or the environment.

B. The discharger shall ensure that storm water discharges and authorized non-storm water discharges will not contain pollutants in quantities that threaten to cause pollution or a public nuisance.

C. The discharger shall ensure that storm water discharges and authorized non-storm water discharges will not contain pollutants that cause or contribute to an exceedance of any applicable water quality objectives or water quality standards (collectively, WQS) contained in a Statewide Water Quality Control Plan, the California Toxics Rule, the National Toxics Rule, or the applicable Regional Water Board's Water Quality Control Plan (Basin Plan).

D. Dischargers located within the watershed of a CWA § 303(d) impaired water body, for which a TMDL has been approved by the U.S. EPA, shall comply with the approved TMDL if it identifies "construction activity" or land disturbance as a source of the pollution.

VII. TRAINING QUALIFICATIONS AND CERTIFICATION REQUIREMENTS

A. General

The discharger shall ensure that all persons responsible for implementing requirements of this General Permit shall be appropriately trained in accordance with this Section. Training should be both formal and informal, occur on an ongoing basis, and should include training offered by recognized governmental agencies or professional organizations. Those responsible for preparing and amending SWPPPs shall comply with the requirements in this Section VII.

The discharger shall provide documentation of all training for persons responsible for implementing the requirements of this General Permit in the Annual Reports.

B. SWPPP Certification Requirements

1. **Qualified SWPPP Developer:** The discharger shall ensure that SWPPPs are written, amended and certified by a Qualified SWPPP Developer (QSD). A QSD shall have one of the following registrations or certifications, and appropriate experience, as required for:

   a. A California registered professional civil engineer;

   b. A California registered professional geologist or engineering geologist;

   c. A California registered landscape architect;

   d. A professional hydrologist registered through the American Institute of Hydrology;

   e. A Certified Professional in Erosion and Sediment Control (CPESC) ™ registered through Enviro Cert International, Inc.;

   f. A Certified Professional in Storm Water Quality (CPSWQ) ™ registered through Enviro Cert International, Inc.; or

   g. A professional in erosion and sediment control registered through the National Institute for Certification in Engineering Technologies (NICET).

Effective two years after the adoption date of this General Permit, a QSD shall have attended a State Water Board-sponsored or approved QSD training course.

2. The discharger shall list the name and telephone number of the currently designated Qualified SWPPP Developer(s) in the SWPPP.

3. **Qualified SWPPP Practitioner:** The discharger shall ensure that all BMPs required by this General Permit are implemented by a Qualified SWPPP Practitioner (QSP). A QSP is a person responsible for non-storm water and storm water visual observations, sampling and analysis. Effective two years from the date of adoption of this General Permit, a QSP shall be either a QSD or have one of the following certifications:

   a. A certified erosion, sediment and storm water inspector registered through Enviro Cert International, Inc.; or

   b. A certified inspector of sediment and erosion control registered through Certified Inspector of Sediment and Erosion Control, Inc.

   Effective two years after the adoption date of this General Permit, a QSP shall have attended a State Water Board-sponsored or approved QSP training course.

4. The LRP shall list in the SWPPP, the name of any Approved Signatory, and provide a copy of the written agreement or other mechanism that provides this authority from the LRP in the SWPPP.

5. The discharger shall include, in the SWPPP, a list of names of all contractors, subcontractors, and individuals who will be directed by the Qualified SWPPP Practitioner. This list shall include telephone numbers and work addresses. Specific areas of responsibility of each subcontractor and emergency contact numbers shall also be included.

6. The discharger shall ensure that the SWPPP and each amendment will be signed by the Qualified SWPPP Developer. The discharger shall include a listing of the date of initial preparation and the date of each amendment in the SWPPP.

VIII. RISK DETERMINATION

The discharger shall calculate the site's sediment risk and receiving water risk during periods of soil exposure (i.e. grading and site stabilization) and use the calculated risks to determine a Risk Level(s) using the methodology in

Appendix 1. For any site that spans two or more planning watersheds,[13] the discharger shall calculate a separate Risk Level for each planning watershed. The discharger shall notify the State Water Board of the site's Risk Level determination(s) and shall include this determination as a part of submitting the PRDs. If a discharger ends up with more than one Risk Level determination, the Regional Water Board may choose to break the project into separate levels of implementation.

IX. RISK LEVEL 1 REQUIREMENTS

Risk Level 1 Dischargers shall comply with the requirements included in Attachment C of this General Permit.

X. RISK LEVEL 2 REQUIREMENTS

Risk Level 2 Dischargers shall comply with the requirements included in Attachment D of this General Permit.

XI. RISK LEVEL 3 REQUIREMENTS

Risk Level 3 Dischargers shall comply with the requirements included in Attachment E of this General Permit.

XII. ACTIVE TREATMENT SYSTEMS (ATS)

Dischargers choosing to implement an ATS on their site shall comply with all of the requirements in Attachment F of this General Permit.

[13] Planning watershed: defined by the Calwater Watershed documents as a watershed that ranges in size from approximately 3,000 to 10,000 acres http://cain.ice.ucdavis.edu/calwater/calwfaq.html, http://gis.ca.gov/catalog/BrowseRecord.epl?id=22175 .

XIII. POST-CONSTRUCTION STANDARDS

A. All dischargers shall comply with the following runoff reduction requirements unless they are located within an area subject to post-construction standards of an active Phase I or II municipal separate storm sewer system (MS4) permit that has an approved Storm Water Management Plan.

1. This provision shall take effect three years from the adoption date of this permit, or later at the discretion of the Executive Officer of the Regional Board.

2. The discharger shall demonstrate compliance with the requirements of this section by submitting with their NOI a map and worksheets in accordance with the instructions in Appendix 2. The discharger shall use non-structural controls unless the discharger demonstrates that non-structural controls are infeasible or that structural controls will produce greater reduction in water quality impacts.

3. The discharger shall, through the use of non-structural and structural measures as described in Appendix 2, replicate the pre-project water balance (for this permit, defined as the volume of rainfall that ends up as runoff) for the smallest storms up to the 85th percentile storm event (or the smallest storm event that generates runoff, whichever is larger). Dischargers shall inform Regional Water Board staff at least 30 days prior to the use of any structural control measure used to comply with this requirement. Volume that cannot be addressed using non-structural practices shall be captured in structural practices and approved by the Regional Water Board. When seeking Regional Board approval for the use of structural practices, dischargers shall document the infeasibility of using non-structural practices on the project site, or document that there will be fewer water quality impacts through the use of structural practices.

4. For sites whose disturbed area exceeds two acres, the discharger shall preserve the pre-construction drainage density (miles of stream length per square mile of drainage area) for all drainage areas within the area serving a first order stream[14] or larger stream and ensure that post-project time of runoff concentration is equal or greater than pre-project time of concentration.

[14] A first order stream is defined as a stream with no tributaries.

B. All dischargers shall implement BMPs to reduce pollutants in storm water discharges that are reasonably foreseeable after all construction phases have been completed at the site (Post-construction BMPs).

XIV. SWPPP REQUIREMENTS

A. The discharger shall ensure that the Storm Water Pollution Prevention Plans (SWPPPs) for all traditional project sites are developed and amended or revised by a QSD. The SWPPP shall be designed to address the following objectives:

1. All pollutants and their sources, including sources of sediment associated with construction, construction site erosion and all other activities associated with construction activity are controlled;

2. Where not otherwise required to be under a Regional Water Board permit, all non-storm water discharges are identified and either eliminated, controlled, or treated;

3. Site BMPs are effective and result in the reduction or elimination of pollutants in storm water discharges and authorized non-storm water discharges from construction activity to the BAT/BCT standard;

4. Calculations and design details as well as BMP controls for site run-on are complete and correct, and

5. Stabilization BMPs installed to reduce or eliminate pollutants after construction are completed.

B. To demonstrate compliance with requirements of this General Permit, the QSD shall include information in the SWPPP that supports the conclusions, selections, use, and maintenance of BMPs.

C. The discharger shall make the SWPPP available at the construction site during working hours while construction is occurring and shall be made available upon request by a State or Municipal inspector. When the original SWPPP is retained by a crewmember in a construction vehicle and is not currently at the construction site, current copies of the BMPs and map/drawing will be left with the field crew and the original SWPPP shall be made available via a request by radio/telephone.

XV. REGIONAL WATER BOARD AUTHORITIES

A. In the case where the Regional Water Board does not agree with the discharger's self-reported risk level (e.g., they determine themselves to be a Level 1 Risk when they are actually a Level 2 Risk site), Regional Water Boards may either direct the discharger to reevaluate the Risk Level(s) for their site or terminate coverage under this General Permit.

B. Regional Water Boards may terminate coverage under this General Permit for dischargers who fail to comply with its requirements or where they determine that an individual NPDES permit is appropriate.

C. Regional Water Boards may require dischargers to submit a Report of Waste Discharge / NPDES permit application for Regional Water Board consideration of individual requirements.

D. Regional Water Boards may require additional Monitoring and Reporting Program Requirements, including sampling and analysis of discharges to sediment-impaired water bodies.

E. Regional Water Boards may require dischargers to retain records for more than the three years required by this General Permit.

XVI. ANNUAL REPORTING REQUIREMENTS

A. All dischargers shall prepare and electronically submit an Annual Report no later than September 1 of each year.

B. The discharger shall certify each Annual Report in accordance with the Special Provisions.

C. The discharger shall retain an electronic or paper copy of each Annual Report for a minimum of three years after the date the annual report is filed.

D. The discharger shall include storm water monitoring information in the Annual Report consisting of:

1. a summary and evaluation of all sampling and analysis results, including copies of laboratory reports;

2. the analytical method(s), method reporting unit(s), and method detection limit(s) of each analytical parameter (analytical results that are less than the method detection limit shall be reported as "less than the method detection limit");

3. a summary of all corrective actions taken during the compliance year;

4. identification of any compliance activities or corrective actions that were not implemented;

5. a summary of all violations of the General Permit;

6. the names of individual(s) who performed the facility inspections, sampling, visual observation (inspections), and/or measurements;

7. the date, place, time of facility inspections, sampling, visual observation (inspections), and/or measurements, including precipitation (rain gauge); and

8. the visual observation and sample collection exception records and reports specified in Attachments C, D, and E.

E. The discharger shall provide training information in the Annual Report consisting of:

1. documentation of all training for individuals responsible for all activities associated with compliance with this General Permit;

2. documentation of all training for individuals responsible for BMP installation, inspection, maintenance, and repair; and

3. documentation of all training for individuals responsible for overseeing, revising, and amending the SWPPP.

ATTACHMENT A
Linear Underground/ Overhead Requirements

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All Linear Underground/Overhead project dischargers who submit permit registration documents (PRDs) indicating their intention to be regulated under the provisions of this General Permit shall comply with the following:

A. DEFINITION OF LINEAR UNDERGROUND/OVERHEAD PROJECTS

1. Linear Underground/Overhead Projects (LUPs) include, but are not limited to, any conveyance, pipe, or pipeline for the transportation of any gaseous, liquid (including water and wastewater for domestic municipal services), liquiescent, or slurry substance; any cable line or wire for the transmission of electrical energy; any cable line or wire for communications (e.g., telephone, telegraph, radio, or television messages); and associated ancillary facilities. Construction activities associated with LUPs include, but are not limited to, (a) those activities necessary for the installation of underground and overhead linear facilities (e.g., conduits, substructures, pipelines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment, and associated ancillary facilities); and include, but are not limited to, (b) underground utility mark-out, potholing, concrete and asphalt cutting and removal, trenching, excavation, boring and drilling, access road and pole/tower pad and cable/wire pull station, substation construction, substructure installation, construction of tower footings and/or foundations, pole and tower installations, pipeline installations, welding, concrete and/ or pavement repair or replacement, and stockpile/borrow locations.

2. LUP evaluation shall consist of two tasks:

a. Confirm that the project or project section(s) qualifies as an LUP. The State Water Board website contains a project determination guidance flowchart. http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

b. Identify which Type(s) (1, 2 or 3 described in Section I below) are applicable to the project or project sections based on project sediment and receiving water risk. (See Attachment A.1)

3. A Legally Responsible Person (LRP) for a Linear Underground/Overhead project is required to obtain CGP coverage under one or more permit registration document (PRD) electronic submittals to the State Water Board's Storm Water Multi-Application and Report Tracking (SMARTs) system. Attachment A.1 contains a flow chart to be used when determining if a linear project qualifies for coverage and to determine LUP Types. Since a LUP may be constructed within both developed and undeveloped locations and portions of LUPs may be constructed by different contractors, LUPs may be broken into logical permit sections. Sections may be determined based on portions of a project conducted by one contractor. Other situations may also occur, such as the time period in which the sections of a project will be constructed (e.g. project phases), for which separate permit coverage is possible. For projects that are broken into separate sections, a description of how each section relates to the overall project and the definition of the boundaries between sections shall be clearly stated.

4. Where construction activities transverse or enter into different Regional Water Board jurisdictions, LRPs shall obtain permit coverage for each Regional Water Board area involved prior to the commencement of construction activities.

5. Small Construction Rainfall Erosivity Waiver

EPA's Small Construction Erosivity Waiver applies to sites between one and five acres demonstrating that there are no adverse water quality impacts.

Dischargers eligible for a Rainfall Erosivity Waiver based on low erosivity potential shall complete the electronic Notice of Intent (NOI) and Sediment Risk form through the State Water Board's SMARTS system, certifying that the construction activity will take place during a period when the value of the rainfall erosivity factor is less than five. Where the LRP changes or another LRP is added during construction, the new LRP must also submit a waiver certification through the SMARTS system.

If a small linear construction site continues beyond the projected completion date given on the waiver certification, the LRP shall recalculate the rainfall erosivity factor for the new project duration and submit this information through the SMARTS system. If the new R factor is below five (5), the discharger shall update through SMARTS all applicable information on the waiver certification and retain a copy of the revised waiver onsite. The LRP shall submit the new waiver certification 30 days prior to the projected completion date listed on the original waiver form to assure exemption from permitting requirements is uninterrupted. If the new R factor is five (5) or above, the LRP shall be required to apply for coverage under this Order.

B. LINEAR PROJECT PERMIT REGISTRATION DOCUMENTS (PRDs)

Any information provided to the Regional Water Board shall comply with the Homeland Security Act and any other federal law that concerns security in the United States; any information that does not comply should not be submitted. PRDs shall consist of the following:

1. Notice of Intent (NOI)

Prior to construction activities, the LRP of a proposed linear underground/overhead project shall utilize the processes and methods provided in Attachment A.2, Permit Registration Documents (PRDs) – General Instructions for Linear Underground/Overhead Projects to comply with the Construction General Permit.

2. Site Maps

LRPs submitting PRDs shall include at least 3 maps. The first map will be a zoomed[1] 1000-1500 ft vicinity map that shows the starting point of the project. The second will be a zoomed map of 1000-1500 ft showing the ending location of the project. The third will be a larger view vicinity map, 1000 ft to 2000 ft, displaying the entire project location depending on the project size, and indicating the LUP type (1, 2 or 3) areas within the total project footprint.

3. Drawings

LRPs submitting PRDs shall include a construction drawing(s) or other appropriate drawing(s) or map(s) that shows the locations of storm drain

[1] An image with a close-up/enhanced detailed view of site features that show minute details such as streets and neighboring structures.
Or: An image with a close-up/enhanced detailed view of the site's surrounding infrastructure.
Or: An image with a close up detailed view of the project and its surroundings.

inlets and waterbodies[2] that may receive discharges from the construction activities and that shows the locations of BMPs to be installed for all those BMPs that can be illustrated on the revisable drawing(s) or map(s). If storm drain inlets, waterbodies, and/or BMPs cannot be adequately shown on the drawing(s) or map(s) they should be described in detail within the SWPPP.

4. Storm Water Pollution Prevention Plan (SWPPP)

LUP dischargers shall comply with the SWPPP Preparation, Implementation, and Oversight requirements in Section K of this Attachment.

5. Contact information

LUP dischargers shall include contact information for all contractors (or subcontractors) responsible for each area of an LUP project. This should include the names, telephone numbers, and addresses of contact personnel. Specific areas of responsibility of each contact, and emergency contact numbers should also be included.

6. In the case of a public emergency that requires immediate construction activities, a discharger shall submit a brief description of the emergency construction activity within five days of the onset of construction, and then shall submit all PRDs within thirty days.

C. LINEAR PROJECT TERMINATION OF COVERAGE REQUIREMENTS

The LRP may terminate coverage of an LUP when construction activities are completed by submitting an electronic notice of termination (NOT) through the State Water Board's SMARTS system. Termination requirements are different depending on the complexity of the LUP. An LUP is considered complete when: (a) there is no potential for construction-related storm water pollution; (b) all elements of the SWPPP have been completed; (c) construction materials and waste have been disposed of properly; (d) the site is in compliance with all local storm water management requirements; and (e) the LRP submits a notice of termination (NOT) and has received approval for termination from the appropriate Regional Water Board office.

1. LUP Stabilization Requirements

The LUP discharger shall ensure that all disturbed areas of the construction site are stabilized prior to termination of coverage under this General Permit. Final stabilization for the purposes of submitting an NOT

[2] Includes basin(s) that the MS4 storm sewer systems may drain to for Hydromodification or Hydrological Conditional of Concerns under the MS4 permits.

is satisfied when all soil disturbing activities are completed and one of the following criteria is met:

a. In disturbed areas that were vegetated prior to construction activities of the LUP, the area disturbed must be re-established to a uniform vegetative cover equivalent to 70 percent coverage of the preconstruction vegetative conditions. Where preconstruction vegetation covers less than 100 percent of the surface, such as in arid areas, the 70 percent coverage criteria is adjusted as follows: if the preconstruction vegetation covers 50 percent of the ground surface, 70 percent of 50 percent (.70 X .50=.35) would require 35 percent total uniform surface coverage; or

b. Where no vegetation is present prior to construction, the site is returned to its original line and grade and/or compacted to achieve stabilization; or

c. Equivalent stabilization measures have been employed. These measures include, but are not limited to, the use of such BMPs as blankets, reinforced channel liners, soil cement, fiber matrices, geotextiles, or other erosion resistant soil coverings or treatments.

2. LUP Termination of Coverage Requirements

The LRP shall file an NOT through the State Water Board's SMARTS system. By submitting an NOT, the LRP is certifying that construction activities for an LUP are complete and that the project is in full compliance with requirements of this General Permit and that it is now compliant with soil stabilization requirements where appropriate. Upon approval by the appropriate Regional Water Board office, permit coverage will be terminated.

3. Revising Coverage for Change of Acreage

When the LRP of a portion of an LUP construction project changes, or when a phase within a multi-phase project is completed, the LRP may reduce the total acreage covered by this General Permit. In reducing the acreage covered by this General Permit, the LRP shall electronically file revisions to the PRDs that include:

a. a revised NOI indicating the new project size;

b. a revised site map showing the acreage of the project completed, acreage currently under construction, acreage sold, transferred or added, and acreage currently stabilized.

c. SWPPP revisions, as appropriate; and

d. certification that any new LRPs have been notified of applicable requirements to obtain General Permit coverage. The certification shall include the name, address, telephone number, and e-mail address (if known) of the new LRP.

If the project acreage has increased, dischargers shall mail payment of revised annual fees within 14 days of receiving the revised annual fee notification.

D. DISCHARGE PROHIBITIONS

1. LUP dischargers shall not violate any discharge prohibitions contained in applicable Basin Plans or statewide water quality control plans. Waste discharges to Areas of Special Biological Significance (ASBS) are prohibited by the California Ocean Plan, unless granted an exception issued by the State Water Board.

2. LUP dischargers are prohibited from discharging non-storm water that is not otherwise authorized by this General Permit. Non-storm water discharges authorized by this General Permit[3] may include, fire hydrant flushing, irrigation of vegetative erosion control measures, pipe flushing and testing, water to control dust, street cleaning, dewatering,[4] uncontaminated groundwater from dewatering, and other discharges not subject to a separate general NPDES permit adopted by a Regional Water Board. Such discharges are allowed by this General Permit provided they are not relied upon to clean up failed or inadequate construction or post-construction BMPs designed to keep materials on site. These authorized non-storm water discharges:

[3] Dischargers must identify all authorized non-storm water discharges in the LUP's SWPPP and identify BMPs that will be implemented to either eliminate or reduce pollutants in non-storm water discharges. Regional Water Boards may direct the discharger to discontinue discharging such non-storm water discharges if determined that such discharges discharge significant pollutants or threaten water quality.
[4] Dewatering activities may be prohibited or need coverage under a separate permit issued by the Regional Water Boards. Dischargers shall check with the appropriate Regional Water Boards for any required permit or basin plan conditions prior to initial dewatering activities to land, storm drains, or waterbodies.

a. Shall not cause or contribute to a violation of any water quality standard;

b. Shall not violate any other provision of this General Permit;

c. Shall not violate any applicable Basin Plan;

d. Shall comply with BMPs as described in the SWPPP;

e. Shall not contain toxic constituents in toxic amounts or (other) significant quantities of pollutants;

f. Shall be monitored and meets the applicable NALs and NELs; and

g. Shall be reported by the discharger in the Annual Report.

If any of the above conditions are not satisfied, the discharge is not authorized by this General Permit. The discharger shall notify the Regional Water Board of any anticipated non-storm water discharges not authorized by this General Permit to determine the need for a separate NPDES permit.

Additionally, some LUP dischargers may be required to obtain a separate permit if the applicable Regional Water Board has adopted a General Permit for dewatering discharges. Wherever feasible, alternatives, that do not result in the discharge of non-storm water, shall be implemented in accordance with this Attachment's Section K.2 - SWPPP Implementation Schedule.

3. LUP dischargers shall ensure that trench spoils or any other soils disturbed during construction activities that are contaminated[5] are not discharged with storm water or non-storm water discharges into any storm drain or water body except pursuant to an NPDES permit.

When soil contamination is found or suspected and a responsible party is not identified, or the responsible party fails to promptly take the appropriate action, the LUP discharger shall have those soils sampled and tested to ensure that proper handling and public safety measures are

[5] Contaminated soil contains pollutants in concentrations that exceed the appropriate thresholds that various regulatory agencies set for those substances. Preliminary testing of potentially contaminated soils will be based on odor, soil discoloration, or prior history of the site's chemical use and storage and other similar factors. When soil contamination is found or suspected and a responsible party is not identified, or the responsible party fails to promptly take the appropriate action, the discharger shall have those soils sampled and tested to ensure proper handling and public safety measures are implemented. The legally responsible person will notify the appropriate local, State, or federal agency(ies) when contaminated soil is found at a construction site, and will notify the Regional Water Board by submitting an NOT at the completion of the project.

implemented. The LUP discharger shall notify the appropriate local, State, and federal agency(ies) when contaminated soil is found at a construction site, and will notify the appropriate Regional Water Board.

4. Discharging any pollutant-laden water that will cause or contribute to an exceedance of the applicable Regional Water Board's Basin Plan from a dewatering site or sediment basin into any receiving water or storm drain is prohibited.

5. Debris[6] resulting from construction activities are prohibited from being discharged from construction project sites.

E. SPECIAL PROVISIONS

1. Duty to Comply

a. The LUP discharger must comply with all of the conditions of this General Permit. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA) and the Porter-Cologne Water Quality Control Act and is grounds for enforcement action and/or removal from General Permit coverage.

b. The LUP discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this General Permit has not yet been modified to incorporate the requirement.

2. General Permit Actions

a. This General Permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the discharger for a General Permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not annul any General Permit condition.

[6] Litter, rubble, discarded refuse, and remains of something destroyed.

b. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the CWA for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this General Permit, this General Permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition and the dischargers so notified.

3. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for an LUP discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this General Permit.

4. Duty to Mitigate

The LUP discharger shall take all responsible steps to minimize or prevent any discharge in violation of this General Permit, which has a reasonable likelihood of adversely affecting human health or the environment.

5. Proper Operation and Maintenance

The LUP discharger shall at all times properly operate and maintain any facilities and systems of treatment and control (and related appurtenances) which are installed or used by the discharger to achieve compliance with the conditions of this General Permit and with the requirements of the Storm Water Pollution Prevention Plan (SWPPP). Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance may require the operation of backup or auxiliary facilities or similar systems installed by a discharger when necessary to achieve compliance with the conditions of this General Permit.

6. Property Rights

This General Permit does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor does it authorize any infringement of Federal, State, or local laws or regulations.

7. Duty to Maintain Records and Provide Information

a. The LUP discharger shall maintain a paper or electronic copy of all required records, including a copy of this General Permit, for three years from the date generated or date submitted, whichever is last. These records shall be kept at the construction site or in a crew

member's vehicle until construction is completed, and shall be made available upon request.

b. The LUP discharger shall furnish the Regional Water Board, State Water Board, or USEPA, within a reasonable time, any requested information to determine compliance with this General Permit. The LUP discharger shall also furnish, upon request, copies of records that are required to be kept by this General Permit.

8. Inspection and Entry

The LUP discharger shall allow the Regional Water Board, State Water Board, USEPA, and/or, in the case of construction sites which discharge through a municipal separate storm sewer, an authorized representative of the municipal operator of the separate storm sewer system receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

a. Enter upon the discharger's premises at reasonable times where a regulated construction activity is being conducted or where records must be kept under the conditions of this General Permit;

b. Access and copy at reasonable times any records that must be kept under the conditions of this General Permit;

c. Inspect at reasonable times the complete construction site, including any off-site staging areas or material storage areas, and the erosion/sediment controls; and

d. Sample or monitor at reasonable times for the purpose of ensuring General Permit compliance.

9. Electronic Signature and Certification Requirements

a. All Permit Registration Documents (PRDs) and Notices of Termination (NOTs) shall be electronically signed, certified, and submitted via SMARTS to the State Water Board. Either the Legally Responsible Person (LRP), as defined in Appendix 5 – Glossary, or a person legally authorized to sign and certify PRDs and NOTs on behalf of the LRP (the LRP's Approved Signatory, as defined in Appendix 5 - Glossary) must submit all information electronically via SMARTS.

b. Changes to Authorization. If an Approved Signatory's authorization is no longer accurate, a new authorization satisfying the requirements of paragraph (a) of this section must be submitted via SMARTS prior to or

together with any reports, information or applications to be signed by an Approved Signatory.

c. All SWPPP revisions, annual reports, or other information required by the General Permit (other than PRDs and NOTs) or requested by the Regional Water Board, State Water Board, USEPA, or local storm water management agency shall be certified and submitted by the LRP or the LRP's Approved Signatory.

10. Certification

Any person signing documents under Section E.9 above, shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

11. Anticipated Noncompliance

The LUP discharger shall give advance notice to the Regional Water Board and local storm water management agency of any planned changes in the construction activity, which may result in noncompliance with General Permit requirements.

12. Penalties for Falsification of Reports

Section 309(c)(4) of the CWA provides that any person who knowingly makes any false material statement, representation, or certification in any record or other document submitted or required to be maintained under this General Permit, including reports of compliance or noncompliance shall upon conviction, be punished by a fine of not more than $10,000 or by imprisonment for not more than two years or by both.

13. Oil and Hazardous Substance Liability

Nothing in this General Permit shall be construed to preclude the institution of any legal action or relieve the discharger from any responsibilities, liabilities, or penalties to which the LUP discharger is or may be subject to under Section 311 of the CWA.

14. Severability

The provisions of this General Permit are severable; and, if any provision of this General Permit or the application of any provision of this General Permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this General Permit shall not be affected thereby.

15. Reopener Clause

This General Permit may be modified, revoked and reissued, or terminated for cause due to promulgation of amended regulations, receipt of USEPA guidance concerning regulated activities, judicial decision, or in accordance with 40 Code of Federal Regulations (CFR) 122.62, 122.63, 122.64, and 124.5.

16. Penalties for Violations of Permit Conditions

a. Section 309 of the CWA provides significant penalties for any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the CWA or any permit condition or limitation implementing any such section in a permit issued under Section 402. Any person who violates any permit condition of this General Permit is subject to a civil penalty not to exceed $37,500[7] per calendar day of such violation, as well as any other appropriate sanction provided by Section 309 of the CWA.

b. The Porter-Cologne Water Quality Control Act also provides for civil and criminal penalties, which in some cases are greater than those under the CWA.

17. Transfers

This General Permit is not transferable. A new LRP of an ongoing construction activity must submit PRDs in accordance with the requirements of this General Permit to be authorized to discharge under this General Permit. An LRP who is a property owner with active General Permit coverage who sells a fraction or all the land shall inform the new property owner(s) of the requirements of this General Permit.

18. Continuation of Expired Permit

This General Permit continues in force and effect until a new General Permit is issued or the SWRCB rescinds this General Permit. Only those

[7] May be further adjusted in accordance with the Federal Civil Penalties Inflation Adjustment Act

dischargers authorized to discharge under the expiring General Permit are covered by the continued General Permit.

F. EFFLUENT STANDARDS

1. Narrative Effluent Limitations

a. LUP dischargers shall ensure that storm water discharges and authorized non-storm water discharges regulated by this General Permit do not contain a hazardous substance equal to or in excess of reportable quantities established in 40 C.F.R. §§ 117.3 and 302.4, unless a separate NPDES Permit has been issued to regulate those discharges.

b. LUP dischargers shall minimize or prevent pollutants in storm water discharges and authorized non-storm water discharges through the use of structural or non-structural controls, structures, and management practices that achieve BAT for toxic and non-conventional pollutants and BCT for conventional pollutants.

2. Numeric Effluent Limitations (NELs)

Table 1. Numeric Effluent Limitations, Numeric Action Levels, Test Methods, Detection Limits, and Reporting Units

Parameter	Test Method	Discharge Type	Min. Detection Limit	Units	Numeric Action Level	Numeric Effluent Limitation
pH	Field test with calibrated portable instrument	LUP Type 2	0.2	pH units	lower NAL = 6.5 upper NAL = 8.5	N/A
		LUP Type 3			lower NAL = 6.5 upper NAL = 8.5	lower NEL = 6.0 upper NEL = 9.0
Turbidity	EPA 0180.1 and/or field test with calibrated portable instrument	LUP Type 2	1	NTU	250 NTU	N/A
		LUP Type 3			250 NTU	500 NTU

a. Numeric Effluent Limitations (NELs):

i **Storm Event, Daily Average pH Limits –** For LUP Type 3 dischargers, the daily average pH of storm water and non-storm water discharges shall be within the ranges specified in Table 1 during any project phase where there is a "high risk of pH discharge."[8]

ii **Storm Event Daily Average Turbidity Limit –** For LUP Type 3 dischargers, the daily average turbidity of storm water and non-storm water discharges shall not exceed 500 NTU.

[8] A period of high risk of pH discharge is defined as a project's complete utilities phase, complete vertical build phase, and any portion of any phase where significant amounts of materials are placed directly on the land at the site in a manner that could result in significant alterations of the background pH of the discharges.

b. If a daily average sample result is outside the range of pH NELs (i.e., is below the lower NEL for pH or exceeds the upper NEL for pH) or exceeds the turbidity NEL (as listed in Table 1), the discharger is in violation of this General Permit and shall electronically file the results in violation within 5 business days of obtaining the results.

c. Compliance Storm Event:

Discharges of storm water from LUP Type 3 sites shall comply with applicable NELs (above) unless the storm event causing the discharges is determined after the fact to be equal to or larger than the Compliance Storm Event (expressed in inches of rainfall). The Compliance Storm Event for LUP Type 3 discharges is the 5-year, 24-hour storm (expressed in tenths of an inch of rainfall), as determined by using these maps:

http://www.wrcc.dri.edu/pcpnfreq/nca5y24.gif
http://www.wrcc.dri.edu/pcpnfreq/sca5y24.gif

Compliance storm event verification shall be done by reporting on-site rain gauge readings as well as nearby governmental rain gauge readings.

d. Dischargers shall not be required to comply with NELs if the site receives run-on from a forest fire or any other natural disaster.

3. Numeric Action Levels (NALs)

a. For LUP Type 2 and 3 dischargers, the lower storm event daily average NAL for pH is 6.5 pH units and the upper storm event daily average NAL for pH is 8.5 pH units. The LUP discharger shall take actions as described below if the storm event daily average discharge is outside of this range of pH values.

b. For LUP Type 2 and 3 dischargers, the storm event daily average NAL for turbidity is 250 NTU. The discharger shall take actions as described below if the storm event daily average discharge is outside of this range of turbidity values.

c. Whenever daily average analytical effluent monitoring results indicate that the discharge is below the lower NAL for pH, exceeds the upper NAL for pH, or exceeds the turbidity NAL (as listed in Table 1), the LUP discharger shall conduct a construction site and run-on evaluation to determine whether pollutant source(s) associated with the site's construction activity may have caused or contributed to the NAL

exceedance and shall immediately implement corrective actions if they are needed.

d. The site evaluation will be documented in the SWPPP and specifically address whether the source(s) of the pollutants causing the exceedance of the NAL:

i Are related to the construction activities and whether additional BMPs or SWPPP implementation measures are required to (1) meet BAT/BCT requirements; (2) reduce or prevent pollutants in storm water discharges from causing exceedances of receiving water objectives; and (3) determine what corrective action(s) were taken or will be taken and with a description of the schedule for completion.

AND/OR:

ii Are related to the run-on associated with the construction site location and whether additional BMPs or SWPPP implementation measures are required to (1) meet BAT/BCT requirements; (2) reduce or prevent pollutants in storm water discharges from causing exceedances of receiving water objectives; and (3) decide what corrective action(s) were taken or will be taken, including a description of the schedule for completion.

G. RECEIVING WATER LIMITATIONS

1. LUP dischargers shall ensure that storm water discharges and authorized non-storm water discharges to any surface or ground water will not adversely affect human health or the environment.

2. LUP dischargers shall ensure that storm water discharges and authorized non-storm water discharges will not contain pollutants in quantities that threaten to cause pollution or a public nuisance.

3. LUP dischargers shall ensure that storm water discharges and authorized non-storm water discharges will not contain pollutants that cause or contribute to an exceedance of any applicable water quality objectives or water quality standards (collectively, WQS) contained in a Statewide Water Quality Control Plan, the California Toxics Rule, the National Toxics Rule, or the applicable Regional Water Board's Water Quality Control Plan (Basin Plan).

H. TRAINING QUALIFICATIONS

1. General

All persons responsible for implementing requirements of this General Permit shall be appropriately trained. Training should be both formal and informal, occur on an ongoing basis, and should include training offered by recognized governmental agencies or professional organizations. Persons responsible for preparing, amending and certifying SWPPPs shall comply with the requirements in this Section H.

2. SWPPP Certification Requirements

a. **Qualified SWPPP Developer:** The LUP discharger shall ensure that all SWPPPs be written, amended and certified by a Qualified SWPPP Developer (QSD). A QSD shall have one of the following registrations or certifications, and appropriate experience, as required for:

i A California registered professional civil engineer;

ii A California registered professional geologist or engineering geologist;

iii A California registered landscape architect;

iv A professional hydrologist registered through the American Institute of Hydrology;

v A certified professional in erosion and sediment control (CPESC) ™ registered through Enviro Cert International, Inc;

vi A certified professional in storm water quality (CPSWQ)™ registered through Enviro Cert International, Inc.; or

vii A certified professional in erosion and sediment control registered through the National Institute for Certification in Engineering Technologies (NICET).

Effective two years after the adoption date of this General Permit, a QSD shall have attended a State Water Board-sponsored or approved QSD training course.

b. The LUP discharger shall ensure that the SWPPP is written and amended, as needed, to address the specific circumstances for each construction site covered by this General Permit prior to commencement of construction activity for any stage.

c. The LUP discharger shall list the name and telephone number of the currently designated Qualified SWPPP Developer(s) in the SWPPP.

d. **Qualified SWPPP Practitioner:** The LUP discharger shall ensure that all elements of any SWPPP for each project will be implemented by a Qualified SWPPP Practitioner (QSP). A QSP is a person responsible for non-storm water and storm water visual observations, sampling and analysis, and for ensuring full compliance with the permit and implementation of all elements of the SWPPP. Effective two years from the date of adoption of this General Permit, a QSP shall be either a QSD or have one of the following certifications:

   i A certified erosion, sediment and storm water inspector registered through Certified Professional in Erosion and Sediment Control, Inc.; or

   ii A certified inspector of sediment and erosion control registered through Certified Inspector of Sediment and Erosion Control, Inc.

   Effective two years after the adoption date of this General Permit, a QSP shall have attended a State Water Board-sponsored or approved QSP training course.

e. The LUP discharger shall ensure that the SWPPP include a list of names of all contractors, subcontractors, and individuals who will be directed by the Qualified SWPPP Practitioner, and who is ultimately responsible for implementation of the SWPPP. This list shall include telephone numbers and work addresses. Specific areas of responsibility of each subcontractor and emergency contact numbers shall also be included.

f. The LUP discharger shall ensure that the SWPPP and each amendment be signed by the Qualified SWPPP Developer. The LUP discharger shall include a listing of the date of initial preparation and the dates of each amendment in the SWPPP.

I. TYPES OF LINEAR PROJECTS

This attachment establishes three types (Type 1, 2 & 3) of complexity for areas within an LUP or project section based on threat to water quality. Project area Types are determined through Attachment A.1.

The Type 1 requirements below establish the baseline requirements for all LUPs subject to this General Permit. Additional requirements for Type 2 and Type 3 LUPs are labeled.

1. Type 1 LUPs*:*

LUP dischargers with areas of a LUP designated as Type 1 shall comply with the requirements in this Attachment. Type 1 LUPs are:

a. Those construction areas where 70 percent or more of the construction activity occurs on a paved surface and where areas disturbed during construction will be returned to preconstruction conditions or equivalent protection established at the end of the construction activities for the day; or

b. Where greater than 30 percent of construction activities occur within the non-paved shoulders or land immediately adjacent to paved surfaces, or where construction occurs on unpaved improved roads, including their shoulders or land immediately adjacent to them where:

   i Areas disturbed during construction will be returned to preconstruction conditions or equivalent protection is established at the end of the construction activities for the day to minimize the potential for erosion and sediment deposition, and

   ii Areas where established vegetation was disturbed during construction will be stabilized and re-vegetated by the end of project. When required, adequate temporary stabilization BMPs will be installed and maintained until vegetation is established to meet minimum cover requirements established in this General Permit for final stabilization.

c. Where the risk determination is as follows:

   i Low sediment risk, low receiving water risk, or

   ii Low sediment risk, medium receiving water risk, or

   iii Medium sediment risk, low receiving water risk

2. Type 2 LUPs:

Type 2 LUPs are determined by the Combined Risk Matrix in Attachment A.1. Type 2 LUPs have the specified combination of risk:

d. High sediment risk, low receiving water risk, or

e. Medium sediment risk, medium receiving water risk, or

f. Low sediment risk, high receiving water risk

Receiving water risk is either considered “Low” for those areas of the project that are not in close proximity to a sensitive receiving watershed, “Medium” for those areas of the project within a sensitive receiving watershed yet outside of the flood plain of a sensitive receiving water body, and “High” where the soil disturbance is within close proximity to a sensitive receiving water body. Project sediment risk is calculated based on the Risk Factor Worksheet in Attachment C of this General Permit.

3. Type 3 LUPs:

Type 3 LUPs are determined by the Combined Risk Matrix in Attachment A.1. Type 3 LUPs have the specified combination of risk:

a. High sediment risk, high receiving water risk, or

b. High sediment risk, medium receiving water risk, or

c. Medium sediment risk, high receiving water risk

Receiving water risk is either considered “Medium” for those areas of the project within a sensitive receiving watershed yet outside of the flood plain of a sensitive receiving water body, or “High” where the soil disturbance is within close proximity to a sensitive receiving water body. Project sediment risk is calculated based on the Risk Factor Worksheet in Attachment C.

J. LUP TYPE-SPECIFIC REQUIREMENTS

1. Effluent Standards

a. Narrative – LUP dischargers shall comply with the narrative effluent standards below.

i Storm water discharges and authorized non-storm water discharges regulated by this General Permit shall not contain a hazardous substance equal to or in excess of reportable quantities

established in 40 C.F.R. §§ 117.3 and 302.4, unless a separate NPDES Permit has been issued to regulate those discharges.

ii LUP dischargers shall minimize or prevent pollutants in storm water discharges and authorized non-storm water discharges through the use of controls, structures, and management practices that achieve BAT for toxic and non-conventional pollutants and BCT for conventional pollutants.

b. Numeric – LUP Type 1 dischargers are not subject to a numeric effluent standard

c. Numeric –LUP Type 2 dischargers are subject to a pH NAL of 6.5-8.5, and a turbidity NAL of 250 NTU.

d. Numeric – LUP Type 3 dischargers are subject to a pH NAL of 6.5-8.5, and a turbidity NAL of 250 NTU. In addition, LUP Type 3 dischargers are subject to a pH NEL of 6.0-9.0 and a turbidity NEL of 500 NTU.

2. Good Site Management "Housekeeping"

a. LUP dischargers shall implement good site management (i.e., "housekeeping") measures for construction materials that could potentially be a threat to water quality if discharged. At a minimum, the good housekeeping measures shall consist of the following:

i Identify the products used and/or expected to be used and the end products that are produced and/or expected to be produced. This does not include materials and equipment that are designed to be outdoors and exposed to environmental conditions (i.e. poles, equipment pads, cabinets, conductors, insulators, bricks, etc.).

ii Cover and berm loose stockpiled construction materials that are not actively being used (i.e. soil, spoils, aggregate, fly-ash, stucco, hydrated lime, etc.).

iii Store chemicals in watertight containers (with appropriate secondary containment to prevent any spillage or leakage) or in a storage shed (completely enclosed).

iv Minimize exposure of construction materials to precipitation (not applicable to materials designed to be outdoors and exposed to the environment).

v Implement BMPs to control the off-site tracking of loose construction and landscape materials.

b. LUP dischargers shall implement good housekeeping measures for waste management, which, at a minimum, shall consist of the following:

i Prevent disposal of any rinse or wash waters or materials on impervious or pervious site surfaces or into the storm drain system.

ii Ensure the containment of sanitation facilities (e.g., portable toilets) to prevent discharges of pollutants to the storm water drainage system or receiving water.

iii Clean or replace sanitation facilities and inspecting them regularly for leaks and spills.

iv Cover waste disposal containers at the end of every business day and during a rain event.

v Prevent discharges from waste disposal containers to the storm water drainage system or receiving water.

vi Contain and securely protect stockpiled waste material from wind and rain at all times unless actively being used.

vii Implement procedures that effectively address hazardous and non-hazardous spills.

viii Develop a spill response and implementation element of the SWPPP prior to commencement of construction activities. The SWPPP shall require that:

(1) Equipment and materials for cleanup of spills shall be available on site and that spills and leaks shall be cleaned up immediately and disposed of properly; and

(2) Appropriate spill response personnel are assigned and trained.

ix Ensure the containment of concrete washout areas and other washout areas that may contain additional pollutants so there is no discharge into the underlying soil and onto the surrounding areas.

c. LUP dischargers shall implement good housekeeping for vehicle storage and maintenance, which, at a minimum, shall consist of the following:

i Prevent oil, grease, or fuel from leaking into the ground, storm drains or surface waters.

ii Implement appropriate BMPs whenever equipment or vehicles are fueled, maintained or stored.

iii Clean leaks immediately and disposing of leaked materials properly.

d. LUP dischargers shall implement good housekeeping for landscape materials, which, at a minimum, shall consist of the following:

i Contain stockpiled materials such as mulches and topsoil when they are not actively being used.

ii Contain fertilizers and other landscape materials when they are not actively being used.

iii Discontinue the application of any erodible landscape material at least 2 days before a forecasted rain event[9] or during periods of precipitation.

iv Applying erodible landscape material at quantities and application rates according to manufacture recommendations or based on written specifications by knowledgeable and experienced field personnel.

v Stacking erodible landscape material on pallets and covering or storing such materials when not being used or applied.

e. LUP dischargers shall conduct an assessment and create a list of potential pollutant sources and identify any areas of the site where additional BMPs are necessary to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. This potential pollutant list shall be kept with the SWPPP and shall identify all non-visible pollutants which are known, or should be known, to occur on the construction site. At a minimum, when developing BMPs, LUP dischargers shall do the following:

i Consider the quantity, physical characteristics (e.g., liquid, powder, solid), and locations of each potential pollutant source handled, produced, stored, recycled, or disposed of at the site.

[9] 50% or greater chance of producing precipitation.

ii Consider the degree to which pollutants associated with those materials may be exposed to and mobilized by contact with storm water.

iii Consider the direct and indirect pathways that pollutants may be exposed to storm water or authorized non-storm water discharges. This shall include an assessment of past spills or leaks, non-storm water discharges, and discharges from adjoining areas.

iv Ensure retention of sampling, visual observation, and inspection records.

v Ensure effectiveness of existing BMPs to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges.

f. LUP dischargers shall implement good housekeeping measures on the construction site to control the air deposition of site materials and from site operations.

3. Non-Storm Water Management

a. LUP dischargers shall implement measures to control all non-storm water discharges during construction.

b. LUP dischargers shall wash vehicles in such a manner as to prevent non-storm water discharges to surface waters or MS4 drainage systems.

c. LUP dischargers shall clean streets in such a manner as to prevent unauthorized non-storm water discharges from reaching surface water or MS4 drainage systems.

4. Erosion Control

a. LUP dischargers shall implement effective wind erosion control.

b. LUP dischargers shall provide effective soil cover for inactive[10] areas and all finished slopes, and utility backfill.

[10] Areas of construction activity that have been disturbed and are not scheduled to be re-disturbed for at least 14 days

c. LUP dischargers shall limit the use of plastic materials when more sustainable, environmentally friendly alternatives exist. Where plastic materials are deemed necessary, the discharger shall consider the use of plastic materials resistant to solar degradation.

5. Sediment Controls

a. LUP dischargers shall establish and maintain effective perimeter controls as needed, and implement effective BMPs for all construction entrances and exits to sufficiently control erosion and sediment discharges from the site.

b. On sites where sediment basins are to be used, LUP dischargers shall, at minimum, design sediment basins according to the guidance provided in CASQA's Construction BMP Handbook.

c. **Additional LUP Type 2 & 3 Requirement:** LUP Type 2 & 3 dischargers shall apply linear sediment controls along the toe of the slope, face of the slope, and at the grade breaks of exposed slopes to comply with sheet flow lengths[11] in accordance with Table 2 below.

Table 2 – Critical Slope/Sheet Flow Length Combinations

Slope Percentage	Sheet flow length not to exceed
0-25%	20 feet
25-50%	15 feet
Over 50%	10 feet

d. **Additional LUP Type 2 & 3 Requirement:** LUP Type 2 & 3 dischargers shall ensure that construction activity traffic to and from the project is limited to entrances and exits that employ effective controls to prevent off-site tracking of sediment.

e. **Additional LUP Type 2 & 3 Requirement:** LUP Type 2 & 3 dischargers shall ensure that all storm drain inlets and perimeter controls, runoff control BMPs, and pollutant controls at entrances and exits (e.g. tire washoff locations) are maintained and protected from activities that reduce their effectiveness.

f. **Additional LUP Type 2 & 3 Requirement:** LUP Type 2 & 3 dischargers shall inspect all immediate access roads. At a minimum daily and prior to any rain event, the discharger shall remove any

[11] Sheet flow length is the length that shallow, low velocity flow travels across a site.

sediment or other construction activity-related materials that are deposited on the roads (by vacuuming or sweeping).

g. **Additional LUP Type 3 Requirement:** The Regional Water Board may require LUP Type 3 dischargers to implement additional site-specific sediment control requirements if the implementation of the other requirements in this section are not adequately protecting the receiving waters.

6. Run-on and Run-off Controls

a. LUP dischargers shall effectively manage all run-on, all runoff within the site and all runoff that discharges off the site. Run-on from off site-shall be directed away from all disturbed areas or shall collectively be in compliance with the effluent limitations in this Attachment.

b. Run-on and runoff controls are not required for Type 1 LUPs unless the evaluation of quantity and quality of run-on and runoff deems them necessary or visual inspections show that the site requires such controls.

7. Inspection, Maintenance and Repair

a. All inspection, maintenance repair and sampling activities at the discharger's LUP location shall be performed or supervised by a QSP representing the discharger. The QSP may delegate any or all of these activities to an employee trained to do the task(s) appropriately, but shall ensure adequate deployment.

b. LUP dischargers shall conduct visual inspections and observations daily during working hours (not recorded). At least once each 24-hour period during extended storm events, **LUP Type 2 & 3 dischargers** shall conduct visual inspections to identify and record BMPs that need maintenance to operate effectively, that have failed, or that could fail to operate as intended. Inspectors shall be the QSP or be trained by the QSP.

c. Upon identifying failures or other shortcomings, as directed by the QSP, LUP dischargers shall begin implementing repairs or design changes to BMPs within 72 hours of identification and complete the changes as soon as possible.

d. For each pre- and post-rain event inspection required, LUP dischargers shall complete an inspection checklist, using a form provided by the State Water Board or Regional Water Board or in an alternative format that includes the information described below.

e. The LUP discharger shall ensure that the checklist remains on-site or with the SWPPP. At a minimum, an inspection checklist should include:

i Inspection date and date the inspection report was written.

ii Weather information, including presence or absence of precipitation, estimate of beginning of qualifying storm event, duration of event, time elapsed since last storm, and approximate amount of rainfall in inches.

iii Site information, including stage of construction, activities completed, and approximate area of the site exposed.

iv A description of any BMPs evaluated and any deficiencies noted.

v If the construction site is safely accessible during inclement weather, list the observations of all BMPs: erosion controls, sediment controls, chemical and waste controls, and non-storm water controls. Otherwise, list the results of visual inspections at all relevant outfalls, discharge points, downstream locations and any projected maintenance activities.

vi Report the presence of noticeable odors or of any visible sheen on the surface of any discharges.

vii Any corrective actions required, including any necessary changes to the SWPPP and the associated implementation dates.

viii Photographs taken during the inspection, if any.

ix Inspector's name, title, and signature.

K. STORM WATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENTS

1. Objectives

SWPPPs for all LUPs shall be developed and amended or revised by a QSD. The SWPPP shall be designed to address the following objectives:

a. All pollutants and their sources, including sources of sediment, associated with construction activities associated with LUP activity are controlled;

b. All non-storm water discharges are identified and either eliminated, controlled, or treated;

c. BMPs are effective and result in the reduction or elimination of pollutants in storm water discharges and authorized non-storm water discharges from LUPs during construction; and

d. Stabilization BMPs installed to reduce or eliminate pollutants after construction is completed are effective and maintained.

2. SWPPP Implementation Schedule

a. LUPs for which PRDs have been submitted to the State Water Board shall develop a site/project location SWPPP prior to the start of land-disturbing activity in accordance with this Section and shall implement the SWPPP concurrently with commencement of soil-disturbing activities.

b. For an ongoing LUP involving a change in the LRP, the new LRP shall review the existing SWPPP and amend it, if necessary, or develop a new SWPPP within 15 calendar days to conform to the requirements set forth in this General Permit.

3. Availability

The SWPPP shall be available at the construction site during working hours while construction is occurring and shall be made available upon request by a State or Municipal inspector. When the original SWPPP is retained by a crewmember in a construction vehicle and is not currently at the construction site, copies of the BMPs and map/drawing will be left with the field crew and the original SWPPP shall be made available via a request by radio/telephone.

L. REGIONAL WATER BOARD AUTHORITIES

1. Regional Water Boards shall administer the provisions of this General Permit. Administration of this General Permit may include, but is not limited to, requesting the submittal of SWPPPs, reviewing SWPPPs, reviewing monitoring and sampling and analysis reports, conducting compliance inspections, gathering site information by any medium including sampling, photo and video documentation, and taking enforcement actions.

2. Regional Water Boards may terminate coverage under this General Permit for dischargers who fail to comply with its requirements or where they determine that an individual NPDES permit is appropriate.

3. Regional Water Boards may issue separate permits for discharges of storm water associated with construction activity to individual dischargers, categories of dischargers, or dischargers in a geographic area. Upon issuance of such permits by a Regional Water Board, dischargers subject to those permits shall no longer be regulated by this General Permit.

4. Regional Water Boards may direct the discharger to reevaluate the LUP Type(s) for the project (or elements/areas of the project) and impose the appropriate level of requirements.

5. Regional Water Boards may terminate coverage under this General Permit for dischargers who negligently or with willful intent incorrectly determine or report their LUP Type (e.g., they determine themselves to be a LUP Type 1 when they are actually a Type 2).

6. Regional Water Boards may review PRDs and reject or accept applications for permit coverage or may require dischargers to submit a Report of Waste Discharge / NPDES permit application for Regional Water Board consideration of individual requirements.

7. Regional Water Boards may impose additional requirements on dischargers to satisfy TMDL implementation requirements or to satisfy provisions in their Basin Plans.

8. Regional Water Boards may require additional Monitoring and Reporting Program Requirements, including sampling and analysis of discharges to sediment-impaired water bodies.

9. Regional Water Boards may require dischargers to retain records for more than the three years required by this General Permit.

10. Based on an LUP's threat to water quality and complexity, the Regional Water Board may determine on a case-by-case basis that an LUP, or a portion of an LUP, is not eligible for the linear project requirements contained in this Attachment, and require that the discharger comply with all standard requirements in this General Permit.

11. The Regional Water Board may require additional monitoring and reporting program requirements including sampling and analysis of discharges to CWA § 303(d)-listed water bodies. Additional requirements imposed by the Regional Water Board shall be consistent with the overall monitoring effort in the receiving waters.

M. MONITORING AND REPORTING REQUIREMENTS

Table 3. LUP Summary of Monitoring Requirements

LUP Type	Visual Inspections				Sample Collection		
	Daily Site BMP	Pre-storm Event / Baseline	Daily Storm BMP	Post Storm	Storm Water Discharge	Receiving Water	Non-Visible (when applicable)
1	X						X
2	X	X	X	X	X		X
3	X	X	X	X	X	X	X

1. Objectives

LUP dischargers shall prepare a monitoring and reporting program (M&RP) prior to the start of construction and immediately implement the program at the start of construction for LUPs. The monitoring program must be implemented at the appropriate level to protect water quality at all times throughout the life of the project. The M&RP must be a part of the SWPPP, included as an appendix or separate SWPPP chapter.

2. M&RP Implementation Schedule

a. LUP dischargers shall implement the requirements of this Section at the time of commencement of construction activity. LUP dischargers are responsible for implementing these requirements until construction activity is complete and the site is stabilized.

b. LUP dischargers shall revise the M&RP when:

i Site conditions or construction activities change such that a change in monitoring is required to comply with the requirements and intent of this General Permit.

ii The Regional Water Board requires the discharger to revise its M&RP based on its review of the document. Revisions may include, but not be limited to, conducting additional site inspections, submitting reports, and certifications. Revisions shall be submitted via postal mail or electronic e-mail.

iii The Regional Water Board may require additional monitoring and reporting program requirements including sampling and analysis of discharges to CWA § 303(d)-listed water bodies. Additional requirements imposed by the Regional Water Board shall be consistent with the overall monitoring effort in the receiving waters.

3. LUP Type 1 Monitoring and Reporting Requirements

a. LUP Type 1 Inspection Requirements

i LUP Type 1 dischargers shall ensure that all inspections are conducted by trained personnel. The name(s) and contact number(s) of the assigned inspection personnel should be listed in the SWPPP.

ii LUP Type 1 dischargers shall ensure that all visual inspections are conducted daily during working hours and in conjunction with other daily activities in areas where active construction is occurring.

iii LUP Type 1 dischargers shall ensure that photographs of the site taken before, during, and after storm events are taken during inspections, and submitted through the State Water Board's SMARTS website once every three rain events.

iv LUP Type 1 dischargers shall conduct daily visual inspections to verify that:

(1) Appropriate BMPs for storm water and non-storm water are being implemented in areas where active construction is occurring (including staging areas);

(2) Project excavations are closed, with properly protected spoils, and that road surfaces are cleaned of excavated material and construction materials such as chemicals by either removing or storing the material in protective storage containers at the end of every construction day;

(3) Land areas disturbed during construction are returned to pre-construction conditions or an equivalent protection is used at the end of each workday to eliminate or minimize erosion and the possible discharge of sediment or other pollutants during a rain event.

v Inspections may be discontinued in non-active construction areas where soil-disturbing activities are completed and final soil stabilization is achieved (e.g., paving is completed, substructures

are installed, vegetation meets minimum cover requirements for final stabilization, or other stabilization requirements are met).

vi Inspection programs are required for LUP Type 1 projects where temporary and permanent stabilization BMPs are installed and are to be monitored after active construction is completed. Inspection activities shall continue until adequate permanent stabilization is established and, in areas where re-vegetation is chosen, until minimum vegetative coverage is established in accordance with Section C.1 of this Attachment.

b. LUP Type 1 Monitoring Requirements for Non-Visible Pollutants

LUP Type 1 dischargers shall implement sampling and analysis requirements to monitor non-visible pollutants associated with (1) construction sites; (2) activities producing pollutants that are not visually detectable in storm water discharges; and (3) activities which could cause or contribute to an exceedance of water quality objectives in the receiving waters.

i Sampling and analysis for non-visible pollutants is only required where the LUP Type 1 discharger believes pollutants associated with construction activities have the potential to be discharged with storm water runoff due to a spill or in the event there was a breach, malfunction, failure and/or leak of any BMP. Also, failure to implement BMPs may require sample collection.

(1) Visual observations made during the monitoring program described above will help the LUP Type 1 discharger determine when to collect samples.

(2) The LUP Type 1 discharger is not required to sample if one of the conditions described above (e.g., breach or spill) occurs and the site is cleaned of material and pollutants and/or BMPs are implemented prior to the next storm event.

ii LUP Type 1 dischargers shall collect samples down-gradient from all discharge locations where the visual observations were made triggering the monitoring, and which can be safely accessed. For sites where sampling and analysis is required, personnel trained in water quality sampling procedures shall collect storm water samples.

iii If sampling for non-visible pollutant parameters is required, LUP Type 1 dischargers shall ensure that samples be analyzed for parameters indicating the presence of pollutants identified in the pollutant source assessment required in Section J.2.a.i.

iv LUP Type 1 dischargers shall collect samples during the first two hours of discharge from rain events that occur during business hours and which generate runoff.

v LUP Type 1 dischargers shall ensure that a sufficiently large sample of storm water that has not come into contact with the disturbed soil or the materials stored or used on-site (uncontaminated sample[12]) will be collected for comparison with the discharge sample. Samples shall be collected during the first two hours of discharge from rain events that occur during daylight hours and which generate runoff.

vi LUP Type 1 dischargers shall compare the uncontaminated sample to the samples of discharge using field analysis or through laboratory analysis. Analyses may include, but are not limited to, indicator parameters such as: pH, specific conductance, dissolved oxygen, conductivity, salinity, and Total Dissolved Solids (TDS).

vii For laboratory analyses, all sampling, sample preservation, and other analyses must be conducted according to test procedures pursuant to 40 C.F.R. Part 136. LUP Type 1 dischargers shall ensure that field samples are collected and analyzed according to manufacturer specifications of the sampling devices employed. Portable meters shall be calibrated according to manufacturer's specification.

viii LUP Type 1 dischargers shall ensure that all field and/or analytical data are kept in the SWPPP document.

c. <u>LUP Type 1 Visual Observation Exceptions</u>

i LUP Type 1 dischargers shall be prepared to collect samples and conduct visual observation (inspections) to meet the minimum visual observation requirements of this Attachment. The Type 1 LUP discharger is not required to physically collect samples or conduct visual observation (inspections) under the following conditions:

(1) During dangerous weather conditions such as flooding and electrical storms;

(2) Outside of scheduled site business hours.

(3) When access to the site is unsafe due to storm events.

[12] Sample collected at a location unaffected by contruction activities.

ii If the LUP Type 1 discharger does not collect the required samples or visual observation (inspections) due to these exceptions, an explanation why the sampling or visual observation (inspections) were not conducted shall be included in both the SWPPP and the Annual Report.

d. Particle Size Analysis for Risk Justification

LUP Type 1 dischargers utilizing justifying an alternative project risk shall report a soil particle size analysis used to determine the RUSLE K-Factor. ASTM D-422 (Standard Test Method for Particle-Size Analysis of Soils), as revised, shall be used to determine the percentages of sand, very fine sand, silt, and clay on the site.

4. LUP Type 2 & 3 Monitoring and Reporting Requirements

a. LUP Type 2 & 3 Inspection Requirements

i LUP Type 2 & 3 dischargers shall ensure that all inspections are conducted by trained personnel. The name(s) and contact number(s) of the assigned inspection personnel should be listed in the SWPPP.

ii LUP Type 2 & 3 dischargers shall ensure that all visual inspections are conducted daily during working hours and in conjunction with other daily activities in areas where active construction is occurring.

iii LUP Type 2 & 3 dischargers shall ensure that photographs of the site taken before, during, and after storm events are taken during inspections, and submitted through the State Water Board's SMARTS website once every three rain events.

iv LUP Type 2 & 3 dischargers shall conduct daily visual inspections to verify that appropriate BMPs for storm water and non-storm water are being implemented and in place in areas where active construction is occurring (including staging areas).

v LUP Type 2 & 3 dischargers shall conduct inspections of the construction site prior to anticipated storm events, during extended storm events, and after actual storm events to identify areas contributing to a discharge of storm water associated with construction activity. Pre-storm inspections are to ensure that BMPs are properly installed and maintained; post-storm inspections are to assure that BMPs have functioned adequately. During

extended storm events, inspections shall be required during normal working hours for each 24-hour period.

vi Inspections may be discontinued in non-active construction areas where soil-disturbing activities are completed and final soil stabilization is achieved (e.g., paving is completed, substructures are installed, vegetation meets minimum cover requirements for final stabilization, or other stabilization requirements are met).

vii LUP Type 2 & 3 dischargers shall implement a monitoring program for inspecting projects that require temporary and permanent stabilization BMPs after active construction is complete. Inspections shall ensure that the BMPs are adequate and maintained. Inspection activities shall continue until adequate permanent stabilization is established and, in vegetated areas, until minimum vegetative coverage is established in accordance with Section C.1 of this Attachment.

viii If possible, LUP Type 2 & 3 dischargers shall install a rain gauge on-site at an accessible and secure location with readings made during all storm event inspections. When readings are unavailable, data from the closest rain gauge with publically available data may be used.

ix LUP Type 2 & 3 dischargers shall Include and maintain a log of the inspections conducted in the SWPPP. The log will provide the date and time of the inspection and who conducted the inspection.

b. LUP Type 2 & 3 Storm Water Effluent Monitoring Requirements

Table 4. LUP Type 2 & 3 Effluent Monitoring Requirements

LUP Type	Frequency	Effluent Monitoring
2	Minimum of 3 samples per day characterizing discharges associated with construction activity from the project active areas of construction.	Turbidity, pH, and non-visible pollutant parameters (if applicable)
3	Minimum of 3 samples per day characterizing discharges associated with construction activity from the project active areas of construction.	turbidity, pH, suspended sediment concentrations (SSC)[13] (only if turbidity NEL exceeded), plus non-visible pollutant parameters (if applicable)

i LUP Type 2 & 3 dischargers shall collect storm water grab samples from sampling locations characterizing discharges associated with

[13] Suspended Sediment Concentration monitoring is required for any Type 3 area that exceeds its turbidity NEL.

activity from the LUP active areas of construction. At a minimum, 3 samples shall be collected per day of discharge.

ii LUP Type 2 & 3 dischargers shall collect samples of stored or contained storm water that is discharged subsequent to a storm event producing precipitation of ½ inch or more at the time of discharge.

iii LUP Type 2 & 3 dischargers shall ensure that storm water grab sample(s) obtained be representative of the flow and characteristics of the discharge.

iv LUP Type 2 & 3 dischargers shall analyze their effluent samples for:

(1) pH and turbidity
(2) Any additional parameter for which monitoring is required by the Regional Water Board.

v LUP Type 3 dischargers that have violated the turbidity daily average NEL shall analyze subsequent effluent samples for turbidity and SSC.

c. LUP Type 2 & 3 Storm Water Effluent Sampling Locations

i LUP Type 2 & 3 dischargers shall perform sampling and analysis of storm water discharges to characterize discharges associated with construction activity from the entire disturbed project or area.

ii LUP Type 2 & 3 dischargers may monitor and report run-on from surrounding areas if there is reason to believe run-on may contribute to exceedance of NALs or NELs (applicable to Type 3).

iii LUP Type 2 & 3 dischargers shall select analytical test methods from the list provided in Table 5 below.

iv LUP Type 2 & 3 dischargers shall ensure that all storm water sample collection preservation and handling shall be conducted in accordance with the “Storm Water Sample Collection and Handling Instructions” below.

d. LUP Type 3 Receiving Water Monitoring Requirements

i In the event that an LUP Type 3 discharger violates an applicable NEL contained in this General Permit and has a direct discharge to receiving waters, the LUP discharger shall subsequently sample Receiving Waters (RWs) for turbidity, pH (if applicable) and SSC.

ii LUP Type 3 dischargers that meet the project criteria in Appendix 3 of this General Permit and have more than 30 acres of soil disturbance in the project area or project section area designated as Type 3, shall comply with the Bioassessment requirements prior to commencement of construction activity.

iii LUP Type 3 dischargers shall obtain RW samples in accordance with the requirements of the Receiving Water Sampling Locations section (Section M.4.d of this Attachment).

e. LUP Type 3 Receiving Water Sampling Locations

i **Upstream/up-gradient RW samples**: LUP Type 3 dischargers shall obtain any required upstream/up-gradient receiving water samples from a representative and accessible location as close as possible to and upstream from the effluent discharge point.

ii **Downstream/down-gradient RW samples**: LUP Type 3 dischargers shall obtain any required downstream/down-gradient receiving water samples from a representative and accessible location as close as possible to and downstream from the effluent discharge point.

iii If two or more discharge locations discharge to the same receiving water, LUP Type 3 dischargers may sample the receiving water at a single upstream and downstream location.

f. LUP Type 2 & 3 Monitoring Requirements for Non-Visible Pollutants

LUP Type 2 & 3 dischargers shall implement sampling and analysis requirements to monitor non-visible pollutants associated with (1) construction sites; (2) activities producing pollutants that are not visually detectable in storm water discharges; and (3) activities which could cause or contribute to an exceedance of water quality objectives in the receiving waters.

i Sampling and analysis for non-visible pollutants is only required where LUP Type 2 & 3 dischargers believe pollutants associated with construction activities have the potential to be discharged with storm water runoff due to a spill or in the event there was a breach, malfunction, failure and/or leak of any BMP. Also, failure to implement BMPs may require sample collection.

(1) Visual observations made during the monitoring program described above will help LUP Type 2 & 3 dischargers determine when to collect samples.

(2) LUP Type 2 & 3 dischargers are not required to sample if one of the conditions described above (e.g., breach or spill) occurs and the site is cleaned of material and pollutants and/or BMPs are implemented prior to the next storm event.

ii LUP Type 2 & 3 dischargers shall collect samples down-gradient from the discharge locations where the visual observations were made triggering the monitoring and which can be safely accessed. For sites where sampling and analysis is required, personnel trained in water quality sampling procedures shall collect storm water samples.

iii If sampling for non-visible pollutant parameters is required, LUP Type 2 & 3 dischargers shall ensure that samples be analyzed for parameters indicating the presence of pollutants identified in the pollutant source assessment required in Section J.2.a.i.

iv LUP Type 2 & 3 dischargers shall collect samples during the first two hours of discharge from rain events that occur during business hours and which generate runoff.

v LUP Type 2 & 3 dischargers shall ensure that a sufficiently large sample of storm water that has not come into contact with the disturbed soil or the materials stored or used on-site (uncontaminated sample[14]) will be collected for comparison with the discharge sample. Samples shall be collected during the first two hours of discharge from rain events that occur during daylight hours and which generate runoff.

vi LUP Type 2 & 3 dischargers shall compare the uncontaminated sample to the samples of discharge using field analysis or through laboratory analysis. Analyses may include, but are not limited to, indicator parameters such as: pH, specific conductance, dissolved oxygen, conductivity, salinity, and Total Dissolved Solids (TDS).

vii For laboratory analyses, all sampling, sample preservation, and other analyses must be conducted according to test procedures pursuant to 40 C.F.R. Part 136. LUP Type 2 & 3 dischargers shall ensure that field samples are collected and analyzed according to manufacturer specifications of the sampling devices employed. Portable meters shall be calibrated according to manufacturer's specification.

viii LUP Type 2 & 3 dischargers shall ensure that all field and/or analytical data are kept in the SWPPP document.

[14] Sample collected at a location unaffected by construction activities

g. LUP Type 2 & 3 Visual Observation and Sample Collection Exceptions

i LUP Type 2 & 3 dischargers shall be prepared to collect samples and conduct visual observation (inspections) to meet the minimum visual observation requirements of this Attachment. Type 2 & 3 LUP dischargers are not required to physically collect samples or conduct visual observation (inspections) under the following conditions:

(1) During dangerous weather conditions such as flooding and electrical storms;

(2) Outside of scheduled site business hours.

(3) When access to the site is unsafe due to storm events.

ii If the LUP Type 2 or 3 discharger does not collect the required samples or visual observation (inspections) due to these exceptions, an explanation why the sampling or visual observation (inspections) were not conducted shall be included in both the SWPPP and the Annual Report.

h. LUP Type 2 & 3 Storm Water Sample Collection and Handling Instructions

LUP Type 2 & 3 dischargers shall refer to Table 5 below for test Methods, detection Limits, and reporting Units. During storm water sample collection and handling, the LUP Type 2 & 3 discharger shall:

i Identify the parameters required for testing and the number of storm water discharge points that will be sampled. Request the laboratory to provide the appropriate number of sample containers, types of containers, sample container labels, blank chain of custody forms, and sample preservation instructions.

ii Determine how to ship the samples to the laboratory. The testing laboratory should receive samples within 48 hours of the physical sampling (unless otherwise required by the laboratory). The options are to either deliver the samples to the laboratory, arrange to have the laboratory pick them up, or ship them overnight to the laboratory.

iii Use only the sample containers provided by the laboratory to collect and store samples. Use of any other type of containers could contaminate your samples.

iv Prevent sample contamination, by not touching, or putting anything into the sample containers before collecting storm water samples.

v Not overfilling sample containers. Overfilling can change the analytical results.

vi Tightly screw the cap of each sample container without stripping the threads of the cap.

vii Complete and attach a label to each sample container. The label shall identify the date and time of sample collection, the person taking the sample, and the sample collection location or discharge point. The label should also identify any sample containers that have been preserved.

viii Carefully pack sample containers into an ice chest or refrigerator to prevent breakage and maintain temperature during shipment. Remember to place frozen ice packs into the shipping container. Samples should be kept as close to 4° C (39° F) as possible until arriving at the laboratory. Do not freeze samples.

ix Complete a Chain of Custody form for each set of samples. The Chain of Custody form shall include the discharger's name, address, and phone number, identification of each sample container and sample collection point, person collecting the samples, the date and time each sample container was filled, and the analysis that is required for each sample container.

x Upon shipping/delivering the sample containers, obtain both the signatures of the persons relinquishing and receiving the sample containers.

xi Designate and train personnel to collect, maintain, and ship samples in accordance with the above sample protocols and good laboratory practices.

xii Refer to the Surface Water Ambient Monitoring Program's (SWAMP) Quality Assurance Management Plan (QAMP) for more information on sampling collection and analysis. See http://www.waterboards.ca.gov/water_issues/programs/swamp/[15]

QAMP Link:
http://www.waterboards.ca.gov/water_issues/programs/swamp/qamp.shtml

[15] Additional information regarding QAMP can be found at http://mpsl.mlml.calstate.edu/swqacompare.htm.

Table 5. Test Methods, Detection Limits, Reporting Units and Applicable NALs/NELs

Parameter	Test Method	Discharge Type	Min. Detection Limit	Reporting Units	Numeric Action Levels	Numeric Effluent Limitation (LUP Type 3)
pH	Field test with calibrated portable instrument	Type 2 & 3	0.2	pH units	Lower = 6.5 upper = 8.5	Lower = 6.0 upper = 9.0
Turbidity	EPA 0180.1 and/or field test with calibrated portable instrument	Type 2 & 3	1	NTU	250 NTU	500 NTU
SSC	ASTM Method D 3977-97[16]	Type 3 if NEL is exceeded	5	Mg/L	N/A	N/A
Bioassessment	(STE) Level I of (SAFIT),[17] fixed-count of 600 org/sample	Type 3 LUPs > 30 acres	N/A	N/A	N/A	N/A

i. LUP Type 2 & 3 Monitoring Methods

i The LUP Type 2 or 3 discharger's project M&RP shall include a description of the following items:

(1) Visual observation locations, visual observation procedures, and visual observation follow-up and tracking procedures.

(2) Sampling locations, and sample collection and handling procedures. This shall include detailed procedures for sample collection, storage, preservation, and shipping to the testing lab to assure that consistent quality control and quality assurance is maintained. Dischargers shall attach to the monitoring program a copy of the Chain of Custody form used when handling and shipping samples.

[16] ASTM, 1999, Standard Test Method for Determining Sediment Concentration in Water Samples: American Society of Testing and Materials, D 3977-97, Vol. 11.02, pp. 389-394

[17] The current SAFIT STEs (28 November 2006) list requirements for both the Level I and Level II taxonomic effort, and are located at: http://www.swrcb.ca.gov/swamp/docs/safit/ste_list.pdf. When new editions are published by SAFIT, they will supersede all previous editions. All editions will be posted at the State Water Board's SWAMP website.

(3) Identification of the analytical methods and related method detection limits (if applicable) for each parameter required in Section M.4.f above.

ii LUP Type 2 & 3 dischargers shall ensure that all sampling and sample preservation be in accordance with the current edition of "Standard Methods for the Examination of Water and Wastewater" (American Public Health Association). All monitoring instruments and equipment (including a discharger's own field instruments for measuring pH and turbidity) shall be calibrated and maintained in accordance with manufacturers' specifications to ensure accurate measurements. All laboratory analyses shall be conducted according to test procedures under 40 CFR Part 136, unless other test procedures have been specified in this General Permit or by the Regional Water Board. With the exception of field analysis conducted by the discharger for turbidity and pH, all analyses shall be sent to and conducted at a laboratory certified for such analyses by the State Department of Health Services (SSC exception). The LUP discharger shall conduct its own field analysis of pH and may conduct its own field analysis of turbidity if the discharger has sufficient capability (qualified and trained employees, properly calibrated and maintained field instruments, etc.) to adequately perform the field analysis.

j. LUP Type 2 & 3 Analytical Methods

LUP Type 2 & 3 dischargers shall refer to Table 5 above for test Methods, detection Limits, and reporting Units.

i **pH**: LUP Type 2 & 3 dischargers shall perform pH analysis on-site with a calibrated pH meter or pH test kit. The LUP discharger shall record pH monitoring results on paper and retain these records in accordance with Section M.4.o, below.

ii **Turbidity**: LUP Type 2 & 3 dischargers shall perform turbidity analysis using a calibrated turbidity meter (turbidimeter), either on-site or at an accredited lab. Acceptable test methods include Standard Method 2130 or USEPA Method 180.1. The results shall be recorded in the site log book in Nephelometric Turbidity Units (NTU).

iii **Suspended sediment concentration (SSC)**: LUP Type 3 dischargers exceeding their NEL, shall perform SSC analysis using ASTM Method D3977-97.

iv **Bioassessment**: LUP Type 3 dischargers shall perform bioassessment sampling and analysis according to Appendix 3 of this General Permit.

k. Watershed Monitoring Option

If an LUP Type 2 or 3 discharger is part of a qualified regional watershed-based monitoring program the LUP Type 2 or 3 discharger may be eligible for relief from the monitoring requirements in this Attachment. The Regional Water Board may approve proposals to substitute an acceptable watershed-based monitoring program if it determines that the watershed-based monitoring program will provide information to determine each discharger's compliance with the requirements of this General Permit.

l. Particle Size Analysis for Risk Justification

LUP Type 2 & 3 dischargers justifying an alternative project risk shall report a soil particle size analysis used to determine the RUSLE K-Factor. ASTM D-422 (Standard Test Method for Particle-Size Analysis of Soils), as revised, shall be used to determine the percentages of sand, very fine sand, silt, and clay on the site.

m. NAL Exceedance Report

i In the event that any effluent sample exceeds an applicable NAL, the Regional Water Boards may require LUP Type 2 & 3 dischargers to submit NAL Exceedance Reports.

ii LUP Type 2 & 3 dischargers shall certify each NAL Exceedance Report in accordance with the Special Provisions for Construction Activity.

iii LUP Type 2 & 3 dischargers shall retain an electronic or paper copy of each NAL Exceedance Report for a minimum of three years after the date the exceedance report is filed.

iv LUP Type 2 & 3 dischargers shall include in the NAL Exceedance Report:

(1) the analytical method(s), method reporting unit(s), and method detection limit(s) of each analytical parameter (analytical results that are less than the method detection limit shall be reported as "less than the method detection limit"); and
(2) the date, place, time of sampling, visual observation (inspections), and/or measurements, including precipitation.

(3) Description of the current BMPs associated with the effluent sample that exceeded the NAL and the proposed corrective actions taken.

n. NEL Violation Report

i All LUP Type 3 dischargers shall electronically submit all storm event sampling results to the State Water Board no later than 5 days after the conclusion of the storm event.

ii In the event that a LUP Type 3 discharger has violated an applicable NEL, the discharger shall submit an NEL Violation Report to the State Water Board no later than 24 hours after the NEL exceedance has been identified.

iii The LUP Type 3 discharger shall certify each NEL Violation Report in accordance with the Special Provisions for Construction Activity.

iv The LUP Type 3 discharger shall retain an electronic or paper copy of each NEL Violation Report for a minimum of three years after the date the violation report is filed.

v The LUP Type 3 discharger shall include in the NEL Violation Report:

(1) the analytical method(s), method reporting unit(s), and method detection limit(s) of each analytical parameter (analytical results that are less than the method detection limit shall be reported as "less than the method detection limit"); and
(2) the date, place, time of sampling, visual observation (inspections), and/or measurements, including precipitation.
(3) Description of the current on-site BMPs, and the proposed corrective actions taken to manage the NEL exceedance.

vi Compliance Storm Exemption:
In the event that an applicable NEL has been exceeded during a storm event equal to or larger than the Compliance Storm Event (see Section F.2.c of this Attachment), the LUP Type 3 discharger shall report the on-site rain gauge and nearby governmental rain gauge readings for verification.

o. Monitoring Records

LUP Type 2 & 3 dischargers shall ensure that records of all storm water monitoring information and copies of all reports (including Annual Reports) required by this General Permit be retained for a period of at least three years. LUP Type 2 & 3 dischargers may retain records off-

site and make them available upon request. These records shall include:

i The date, place, time of facility inspections, sampling, visual observation (inspections), and/or measurements, including precipitation (rain gauge);

ii The individual(s) who performed the facility inspections, sampling, visual observation (inspections), and or measurements;

iii The date and approximate time of analyses;

iv The individual(s) who performed the analyses;

v A summary of all analytical results from the last three years, the method detection limits and reporting units, the analytical techniques or methods used, and all chain of custody forms;

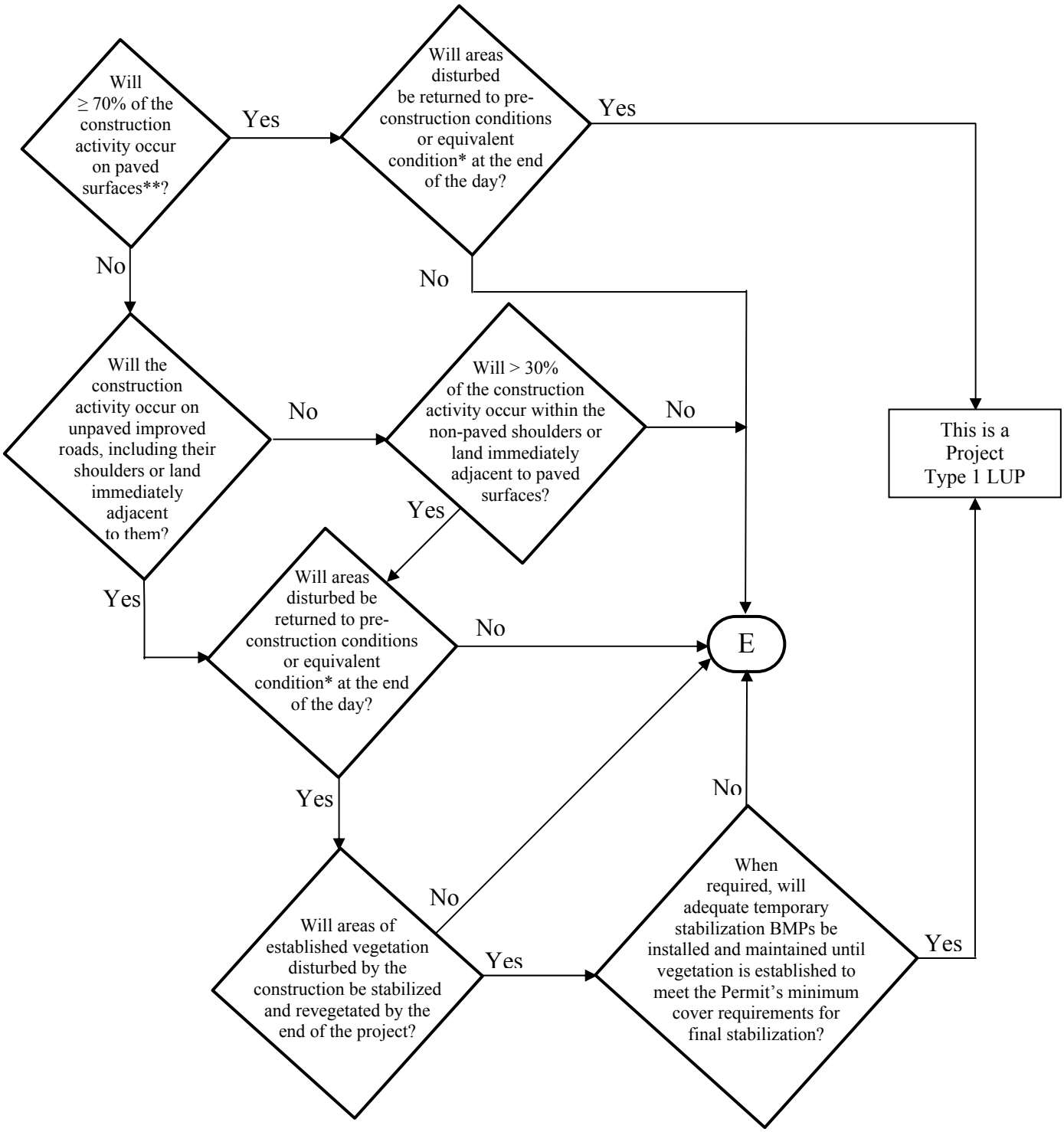
vi Quality assurance/quality control records and results;

vii Non-storm water discharge inspections and visual observation (inspections) and storm water discharge visual observation records (see Section M.4.a above);

viii Visual observation and sample collection exception records (see Section M.4.g above); and

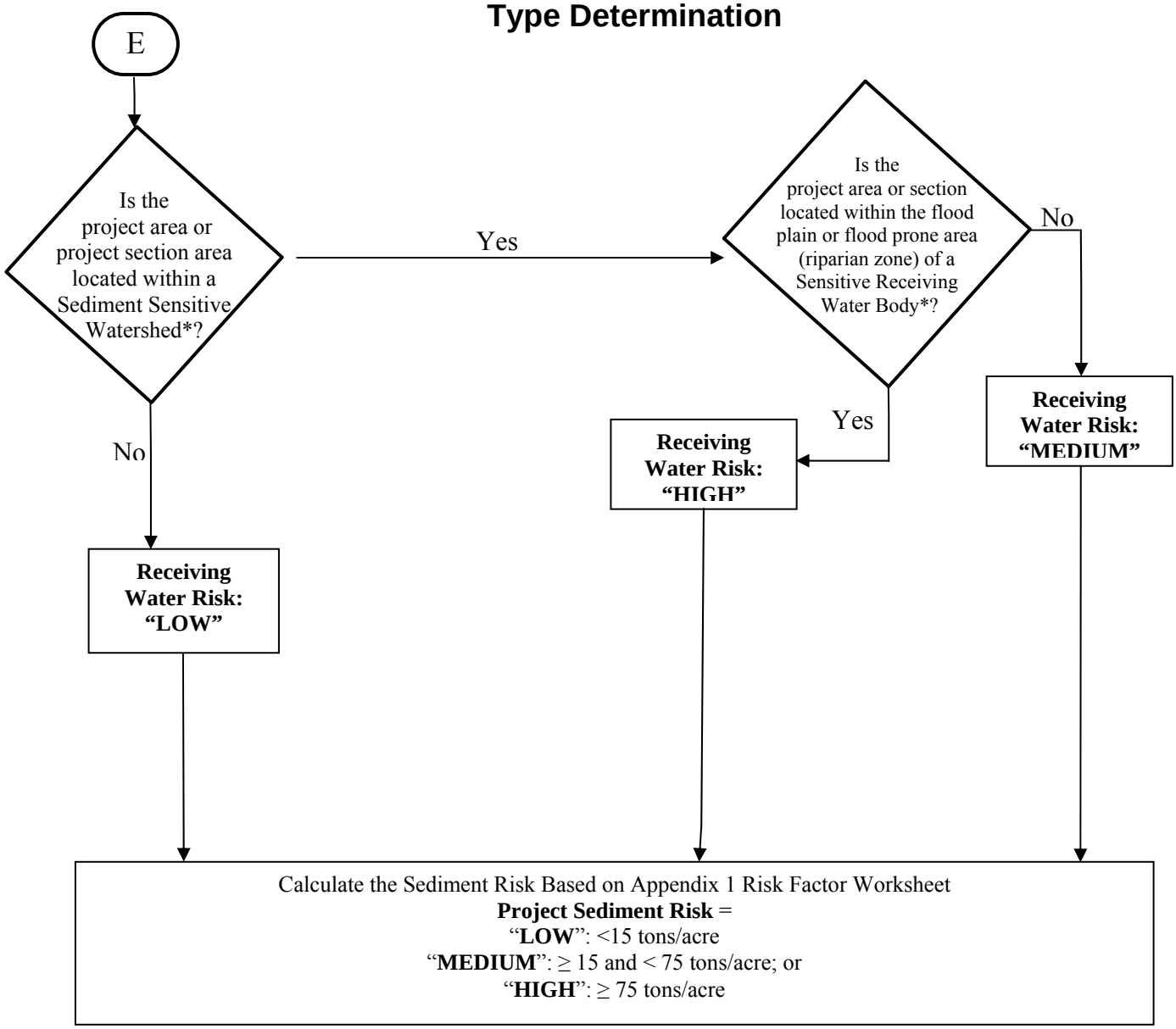
ix The records of any corrective actions and follow-up activities that resulted from analytical results, visual observation (inspections), or inspections.

ATTACHMENT A.1
LUP Project Area or Project Section Area Type Determination



*See Definition of Terms
** Or: "Will < 30% of the soil disturbance occur on unpaved surfaces?

ATTACHMENT A.1
LUP Project Area or Project Section Area Type Determination



* See Definition of Terms

PROJECT SEDIMENT RISK

RECEIVING WATER RISK	LOW	MEDIUM	HIGH
LOW	Type 1	Type 1	Type 2
MEDIUM	Type 1	Type 2	Type 3
HIGH	Type 2	Type 3	Type 3

ATTACHMENT A.1
Definition of Terms

1. **Equivalent Condition** – Means disturbed soils such as those from trench excavation are required to be hauled away, backfilled into the trench, and/or covered (e.g., metal plates, pavement, plastic covers over spoil piles) at the end of the construction day.
2. **Linear Construction Activity** – Linear construction activity consists of underground/ overhead facilities that typically include, but are not limited to, any conveyance, pipe or pipeline for the transportation of any gaseous, liquid (including water, wastewater for domestic municipal services), liquescent, or slurry substance; any cable line or wire for the transmission of electrical energy; any cable line or wire for communications (e.g., telephone, telegraph, radio or television messages); and associated ancillary facilities. Construction activities associated with LUPs include, but are not limited to those activities necessary for the installation of underground and overhead linear facilities (e.g., conduits, substructures, pipelines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities) and include, but are not limited to, underground utility mark-out, potholing, concrete and asphalt cutting and removal, trenching, excavation, boring and drilling, access road and pole/ tower pad and cable/ wire pull station, substation construction, substructure installation, construction of tower footings and/or foundations, pole and tower installations, pipeline installations, welding, concrete and/or pavement repair or replacement, and stockpile/ borrow locations.
3. **Sediment Sensitive Receiving Water Body –** Defined as a water body segment that is listed on EPA's approved CWA 303(d) list for sedimentation/siltation, turbidity, or is designated with beneficial uses of SPAWN, MIGRATORY, and COLD.
4. **Sediment Sensitive Watershed –** Defined as a watershed draining into a receiving water body listed on EPA's approved CWA 303(d) list for sedimentation/siltation, turbidity, or a water body designated with beneficial uses of SPAWN, MIGRATORY, and COLD.

ATTACHMENT A.2
PERMIT REGISTRATION DOCUMENTS (PRDs)
GENERAL INSTRUCTIONS FOR LINEAR UNDERGROUND/OVERHEAD PROJECTS TO COMPLY WITH THE CONSTRUCTION GENERAL PERMIT

GENERAL INSTRUCTIONS

Who Must Submit

This permit is effective on July 1, 2010.

The Legally Responsible Person (LRP) for construction activities associated with linear underground/overhead project (LUP) must electronically apply for coverage under this General Permit on or after July 1, 2010. If it is determined that the LUP construction activities require an NPDES permit, the Legally Responsible Person[1] (LRP) shall submit PRDs for this General Permit in accordance with the following:

LUPs associated with Private or Municipal Development Projects

1. For LUPs associated with pre-development and pre-redevelopment construction activities:

   The LRP must obtain coverage[2] under this General Permit for its pre-development and pre-redevelopment construction activities where the total disturbed land area of these construction activities is greater than 1 acre.

2. For LUPs associated with new development and redevelopment construction projects:

   The LRP must obtain coverage under this General Permit for LUP construction activities associated with new development and redevelopment projects where the total disturbed land area of the LUP is greater than 1 acre. Coverage under this permit is not required where the same LUP construction activities are covered by another NPDES permit.

LUPs not associated with private or municipal new development or redevelopment projects:

The LRP must obtain coverage under this General Permit on or after July 1, 2010 for its LUP construction activities where the total disturbed land area is greater than 1 acre.

PRD Submittal Requirements

Prior to the start of construction activities a LRP must submit PRDs and fees to the State Water Board for each LUP.

New and Ongoing LUPs

Dischargers of new LUPs that commence construction activities after the adoption date of this General Permit shall file PRDs prior to the commencement of construction and implement the SWPPP upon the start of construction.

[1] person possessing the title of the land on which the construction activities will occur for the regulated site
[2] obtain coverage means filing PRDs for the project.

PERMIT REGISTRATION DOCUMENTS (PRDs)
GENERAL INSTRUCTIONS (CONTINUED)

Dischargers of ongoing LUPs that are currently covered under State Water Board Order No. 2003-0007 (Small LUP General Permit) shall electronically file Permit Registration Documents no later than July 1, 2010. After July 1, 2010, all NOIs subject to State Water Board Order No. 2003-0007-DWQ will be terminated. All existing dischargers shall be exempt from the risk determination requirements in Attachment A. All existing dischargers are therefore subject to LUP Type 1 requirements regardless of their project's sediment and receiving water risks. However, a Regional Board retains the authority to require an existing discharger to comply with the risk determination requirements in Attachment A.

Where to Apply

The Permit Registration Documents (PRDs) can be found at www.waterboards.ca.gov/water_issues/programs/stormwater/

Fees

The annual fee for storm water permits are established through the State of California Code of Regulations.

When Permit Coverage Commences

To obtain coverage under the General Permit, the LRP must include the complete PRDs and the annual fee. All PRDs deemed incomplete will be rejected with an explanation as to what is required to complete submittal. Upon receipt of complete PRDs and associated fee, each discharger will be sent a waste discharger's identification (WDID) number.

Projects and Activities Not Defined As Construction Activity

1. LUP construction activity does not include routine maintenance projects to maintain original line and grade, hydraulic capacity, or original purpose of the facility. Routine maintenance projects are projects associated with operations and maintenance activities that are conducted on existing lines and facilities and within existing right-of-way, easements, franchise agreements or other legally binding agreements of the discharger. Routine maintenance projects include, but are not limited to projects that are conducted to:

    - Maintain the original purpose of the facility, or hydraulic capacity.
    - Update existing lines[3] and facilities to comply with applicable codes, standards and regulations regardless if such projects result in increased capacity.
    - Repairing leaks.

    Routine maintenance does not include construction of new[4] lines or facilities resulting from compliance with applicable codes, standards and regulations.

[3] Update existing lines includes replacing existing lines with new materials or pipes.
[4] New lines are those that are not associated with existing facilities and are not part of a project to update or replace existing li

PERMIT REGISTRATION DOCUMENTS (PRDs)
GENERAL INSTRUCTIONS (CONTINUED)

Routine maintenance projects do not include those areas of maintenance projects that are outside of an existing right-of-way, franchise, easements, or agreements. When a project must acquire new areas, those areas may be subject to this General Permit based on the area of disturbed land outside the original right-of-way, easement, or agreement.

2. LUP construction activity does not include field activities associated with the planning and design of a project (e.g., activities associated with route selection).

3. Tie-ins conducted immediately adjacent to "energized" or "pressurized" facilities by the discharger are not considered small construction activities where all other LUP construction activities associated with the tie-in are covered by a NOI and SWPPP of a third party or municipal agency.

Calculating Land Disturbance Areas of LUPs

The total land area disturbed for LUPs is the sum of the:

- Surface areas of trenches, laterals and ancillary facilities, plus
- Area of the base of stockpiles on unpaved surfaces, plus
- Surface area of the borrow area, plus
- Areas of paved surfaces constructed for the project, plus
- Areas of new roads constructed or areas of major reconstruction to existing roads (e.g. improvements to two-track surfaces or road widening) for the sole purpose of accessing construction activities or as part of the final project, plus
- Equipment and material storage, staging, and preparation areas (laydown areas) not on paved surfaces, plus
- Soil areas outside the surface area of trenches, laterals and ancillary facilities that will be graded, and/or disturbed by the use of construction equipment, vehicles and machinery during construction activities.

Stockpiling Areas

Stockpiling areas, borrow areas and the removal of soils from a construction site may or may not be included when calculating the area of disturbed soil for a site depending on the following conditions:

- For stockpiling of soils onsite or immediately adjacent to a LUP site and the stockpile is not on a paved surface, the area of the base of the stockpile is to be included in the disturbed area calculation.

- The surface area of borrow areas that are onsite or immediately adjacent to a project site are to be included in the disturbed area calculation.

- For soil that is hauled offsite to a location owned or operated by the discharger that is not a paved surface, the area of the base of the stockpile is to be included in the disturbed area calculation except when the offsite location is already subject to a separate storm water permit.

PERMIT REGISTRATION DOCUMENTS (PRDs)
GENERAL INSTRUCTIONS (CONTINUED)

- For soil that is brought to the project from an off-site location owned or operated by the discharger the surface area of the borrow pit is to be included in the disturbed area calculation except when the offsite location is already subject to a separate storm water permit.

- Trench spoils on a paved surface that are either returned to the trench or excavation or hauled away from the project daily for disposal or reuse will not be included in the disturbed area calculation.

If you have any questions concerning submittal of PRDs, please call the State Water Board at (866) 563-3107.

ATTACHMENT B
PERMIT REGISTRATION DOCUMENTS (PRDs) TO COMPLY WITH THE TERMS OF THE GENERAL PERMIT TO DISCHARGE STORM WATER ASSOCIATED WITH CONSTRUCTION ACTIVITY

GENERAL INSTRUCTIONS

A. All Linear Construction Projects shall comply with the PRD requirements in Attachment A.2 of this Order.

B. Who Must Submit

Discharges of storm water associated with construction that results in the disturbance of one acre or more of land must apply for coverage under the General Construction Storm Water Permit (General Permit). Any construction activity that is a part of a larger common plan of development or sale must also be permitted, regardless of size. (For example, if 0.5 acre of a 20-acre subdivision is disturbed by the construction activities of discharger A and the remaining 19.5 acres is to be developed by discharger B, discharger A must obtain a General Storm Water Permit for the 0.5 acre project).

Other discharges from construction activities that are covered under this General Permit can be found in the General Permit Section II.B.

It is the LRP's responsibility to obtain coverage under this General Permit by electronically submitting complete PRDs (Permit Registration Documents).

In all cases, the proper procedures for submitting the PRDs must be completed before construction can commence.

C. Construction Activity Not Covered By This General Permit

Discharges from construction that are not covered under this General Permit can be found in the General Permit Sections II.A &B..

D. Annual Fees and Fee Calculation

Annual fees are calculated based upon the total area of land to be disturbed not the total size of the acreage owned. However, the calculation includes all acres to be disturbed during the duration of the project. For example, if 10 acres are scheduled to be disturbed the first year and 10 in each subsequent year for 5 years, the annual fees would be based upon 50 acres of disturbance. The State Water Board will evaluate adding acreage to an existing Permit Waste Discharge Identification (WDID) number on a case-by-case basis. In general, any acreage to be considered must be contiguous to the permitted land area and the existing

SWPPP must be appropriate for the construction activity and topography of the acreage under consideration. As acreage is built out and stabilized or sold, the Change of Information (COI) form enables the applicant to remove those acres from inclusion in the annual fee calculation. Checks should be made payable to: State Water Board.

The Annual fees are established through regulations adopted by the State Water Board. The total annual fee is the current base fee plus applicable surcharges for all construction sites submitting an NOI, based on the total acreage to be disturbed during the life of the project. Annual fees are subject to change by regulation.

Dischargers that apply for and satisfy the Small Construction Erosivity Wavier requirements shall pay a fee of $200.00 plus an applicable surcharge, see the General Permit Section II.B.7.

E. When to Apply

LRP's proposing to conduct construction activities subject to this General Permit must submit their PRDs prior to the commencement of construction activity.

F. Requirements for Completing Permit Registration Documents (PRDs)

All dischargers required to comply with this General Permit shall electronically submit the required PRDs for their type of construction as defined below.

G. Standard PRD Requirements (All Dischargers)

1. Notice of Intent
2. Risk Assessment (Standard or Site-Specific)
3. Site Map
4. SWPPP
5. Annual Fee
6. Certification

H. Additional PRD Requirements Related to Construction Type

1. Discharger in unincorporated areas of the State (not covered under an adopted Phase I or II SUSMP requirements) and that are not a linear project shall also submit a completed:
   a. Post-Construction Water Balance Calculator (Appendix 2).

2. Dischargers who are proposing to implement ATS shall submit:
   a. Complete ATS Plan in accordance with Attachment F at least 14 days prior to the planned operation of the ATS and a paper copy shall be available onsite during ATS operation.

b. Certification proof that design done by a professional in accordance with Attachment F.

3. Dischargers who are proposing an alternate Risk Justification:
   a. Particle Size Analysis.

I. Exceptions to Standard PRD Requirements

Construction sites with an R value less than 5 as determined in the Risk Assessment are not required to submit a SWPPP.

J. Description of PRDs

1. Notice of Intent (NOI)

2. Site Map(s) Includes:
   a. The project's surrounding area (vicinity)
   b. Site layout
   c. Construction site boundaries
   d. Drainage areas
   e. Discharge locations
   f. Sampling locations
   g. Areas of soil disturbance (temporary or permanent)
   h. Active areas of soil disturbance (cut or fill)
   i. Locations of all runoff BMPs
   j. Locations of all erosion control BMPs
   k. Locations of all sediment control BMPs
   l. ATS location (if applicable)
   m. Locations of sensitive habitats, watercourses, or other features which are not to be disturbed
   n. Locations of all post-construction BMPs
   o. Locations of storage areas for waste, vehicles, service, loading/unloading of materials, access (entrance/exits) points to construction site, fueling, and water storage, water transfer for dust control and compaction practices

3. **SWPPPs**
   A site-specific SWPPP shall be developed by each discharger and shall be submitted with the PRDs.

4. **Risk Assessment**
   All dischargers shall use the Risk Assessment procedure as describe in the General Permit Appendix 1.

   a. The Standard Risk Assessment includes utilization of the following:
      i. Receiving water Risk Assessment interactive map

ii. EPA Rainfall Erosivity Factor Calculator Website
iii. Sediment Risk interactive map
iv. Sediment sensitive water bodies list

b. The Site-Specific Risk Assessment includes the completion of the hand calculated R value Risk Calculator

5. **Post-Construction Water Balance Calculator**
All dischargers subject to this requirement shall complete the Water Balance Calculator (in Appendix 2) in accordance with the instructions.

6. **ATS Design Document and Certification**
All dischargers using ATS must submit electronically their system design (as well as any supporting documentation) and proof that the system was designed by a qualified ATS design professional (See Attachment F).

To obtain coverage under the General Permit PRDs must be included and completed. If any of the required items are missing, the PRD submittal is considered incomplete and will be rejected. Upon receipt of a complete PRD submittal, the State Water Board will process the application package in the order received and assign a (WDID) number.

Questions?

If you have any questions on completing the PRDs please email stormwater@waterboards.ca.gov or call (866) 563-3107.

ATTACHMENT C
RISK LEVEL 1 REQUIREMENTS

A. Effluent Standards

[These requirements are the same as those in the General Permit order.]

1. Narrative – Risk Level 1 dischargers shall comply with the narrative effluent standards listed below:

   a. Storm water discharges and authorized non-storm water discharges regulated by this General Permit shall not contain a hazardous substance equal to or in excess of reportable quantities established in 40 C.F.R. §§ 117.3 and 302.4, unless a separate NPDES Permit has been issued to regulate those discharges.

   b. Dischargers shall minimize or prevent pollutants in storm water discharges and authorized non-storm water discharges through the use of controls, structures, and management practices that achieve BAT for toxic and non-conventional pollutants and BCT for conventional pollutants.

2. Numeric – Risk Level 1 dischargers are not subject to a numeric effluent standard.

B. Good Site Management "Housekeeping"

1. Risk Level 1 dischargers shall implement good site management (i.e., "housekeeping") measures for construction materials that could potentially be a threat to water quality if discharged. At a minimum, Risk Level 1 dischargers shall implement the following good housekeeping measures:

   a. Conduct an inventory of the products used and/or expected to be used and the end products that are produced and/or expected to be produced. This does not include materials and equipment that are designed to be outdoors and exposed to environmental conditions (i.e. poles, equipment pads, cabinets, conductors, insulators, bricks, etc.).

   b. Cover and berm loose stockpiled construction materials that are not actively being used (i.e. soil, spoils, aggregate, fly-ash, stucco, hydrated lime, etc.).

c. Store chemicals in watertight containers (with appropriate secondary containment to prevent any spillage or leakage) or in a storage shed (completely enclosed).

d. Minimize exposure of construction materials to precipitation. This does not include materials and equipment that are designed to be outdoors and exposed to environmental conditions (i.e. poles, equipment pads, cabinets, conductors, insulators, bricks, etc.).

e. Implement BMPs to prevent the off-site tracking of loose construction and landscape materials.

2. Risk Level 1 dischargers shall implement good housekeeping measures for waste management, which, at a minimum, shall consist of the following:

a. Prevent disposal of any rinse or wash waters or materials on impervious or pervious site surfaces or into the storm drain system.

b. Ensure the containment of sanitation facilities (e.g., portable toilets) to prevent discharges of pollutants to the storm water drainage system or receiving water.

c. Clean or replace sanitation facilities and inspecting them regularly for leaks and spills.

d. Cover waste disposal containers at the end of every business day and during a rain event.

e. Prevent discharges from waste disposal containers to the storm water drainage system or receiving water.

f. Contain and securely protect stockpiled waste material from wind and rain at all times unless actively being used.

g. Implement procedures that effectively address hazardous and non-hazardous spills.

h. Develop a spill response and implementation element of the SWPPP prior to commencement of construction activities. The SWPPP shall require that:

i. Equipment and materials for cleanup of spills shall be available on site and that spills and leaks shall be cleaned up immediately and disposed of properly; and

ii. Appropriate spill response personnel are assigned and trained.

i. Ensure the containment of concrete washout areas and other washout areas that may contain additional pollutants so there is no discharge into the underlying soil and onto the surrounding areas.

3. Risk Level 1 dischargers shall implement good housekeeping for vehicle storage and maintenance, which, at a minimum, shall consist of the following:

   a. Prevent oil, grease, or fuel to leak in to the ground, storm drains or surface waters.

   b. Place all equipment or vehicles, which are to be fueled, maintained and stored in a designated area fitted with appropriate BMPs.

   c. Clean leaks immediately and disposing of leaked materials properly.

4. Risk Level 1 dischargers shall implement good housekeeping for landscape materials, which, at a minimum, shall consist of the following:

   a. Contain stockpiled materials such as mulches and topsoil when they are not actively being used.

   b. Contain fertilizers and other landscape materials when they are not actively being used.

   c. Discontinue the application of any erodible landscape material within 2 days before a forecasted rain event or during periods of precipitation.

   d. Apply erodible landscape material at quantities and application rates according to manufacture recommendations or based on written specifications by knowledgeable and experienced field personnel.

   e. Stack erodible landscape material on pallets and covering or storing such materials when not being used or applied.

5. Risk Level 1 dischargers shall conduct an assessment and create a list of potential pollutant sources and identify any areas of the site where additional BMPs are necessary to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. This potential pollutant list shall be kept with the SWPPP and shall identify

all non-visible pollutants which are known, or should be known, to occur on the construction site. At a minimum, when developing BMPs, Risk Level 1 dischargers shall do the following:

a. Consider the quantity, physical characteristics (e.g., liquid, powder, solid), and locations of each potential pollutant source handled, produced, stored, recycled, or disposed of at the site.

b. Consider the degree to which pollutants associated with those materials may be exposed to and mobilized by contact with storm water.

c. Consider the direct and indirect pathways that pollutants may be exposed to storm water or authorized non-storm water discharges. This shall include an assessment of past spills or leaks, non-storm water discharges, and discharges from adjoining areas.

d. Ensure retention of sampling, visual observation, and inspection records.

e. Ensure effectiveness of existing BMPs to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges.

6. Risk Level 1 dischargers shall implement good housekeeping measures on the construction site to control the air deposition of site materials and from site operations. Such particulates can include, but are not limited to, sediment, nutrients, trash, metals, bacteria, oil and grease and organics.

C. Non-Storm Water Management

1. Risk Level 1 dischargers shall implement measures to control all non-storm water discharges during construction.

2. Risk Level 1 dischargers shall wash vehicles in such a manner as to prevent non-storm water discharges to surface waters or MS4 drainage systems.

3. Risk Level 1 dischargers shall clean streets in such a manner as to prevent unauthorized non-storm water discharges from reaching surface water or MS4 drainage systems.

D. Erosion Control

1. Risk Level 1 dischargers shall implement effective wind erosion control.

2. Risk Level 1 dischargers shall provide effective soil cover for inactive[1] areas and all finished slopes, open space, utility backfill, and completed lots.

3. Risk Level 1 dischargers shall limit the use of plastic materials when more sustainable, environmentally friendly alternatives exist. Where plastic materials are deemed necessary, the discharger shall consider the use of plastic materials resistant to solar degradation.

E. Sediment Controls

1. Risk Level 1 dischargers shall establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from the site.

2. On sites where sediment basins are to be used, Risk Level 1 dischargers shall, at minimum, design sediment basins according to the method provided in CASQA's Construction BMP Guidance Handbook.

F. Run-on and Runoff Controls

Risk Level 1 dischargers shall effectively manage all run-on, all runoff within the site and all runoff that discharges off the site. Run-on from off site shall be directed away from all disturbed areas or shall collectively be in compliance with the effluent limitations in this General Permit.

G. Inspection, Maintenance and Repair

1. Risk Level 1 dischargers shall ensure that all inspection, maintenance repair and sampling activities at the project location shall be performed or supervised by a Qualified SWPPP Practitioner (QSP) representing the discharger. The QSP may delegate any or all of these activities to an employee trained to do the task(s) appropriately, but shall ensure adequate deployment.

2. Risk Level 1 dischargers shall perform weekly inspections and observations, and at least once each 24-hour period during extended

[1] Inactive areas of construction are areas of construction activity that have been disturbed and are not scheduled to be re-disturbed for at least 14 days.

storm events, to identify and record BMPs that need maintenance to operate effectively, that have failed, or that could fail to operate as intended. Inspectors shall be the QSP or be trained by the QSP.

3. Upon identifying failures or other shortcomings, as directed by the QSP, Risk Level 1 dischargers shall begin implementing repairs or design changes to BMPs within 72 hours of identification and complete the changes as soon as possible.

4. For each inspection required, Risk Level 1 dischargers shall complete an inspection checklist, using a form provided by the State Water Board or Regional Water Board or in an alternative format.

5. Risk Level 1 dischargers shall ensure that checklists shall remain onsite with the SWPPP and at a minimum, shall include:

   a. Inspection date and date the inspection report was written.

   b. Weather information, including presence or absence of precipitation, estimate of beginning of qualifying storm event, duration of event, time elapsed since last storm, and approximate amount of rainfall in inches.

   c. Site information, including stage of construction, activities completed, and approximate area of the site exposed.

   d. A description of any BMPs evaluated and any deficiencies noted.

   e. If the construction site is safely accessible during inclement weather, list the observations of all BMPs: erosion controls, sediment controls, chemical and waste controls, and non-storm water controls. Otherwise, list the results of visual inspections at all relevant outfalls, discharge points, downstream locations and any projected maintenance activities.

   f. Report the presence of noticeable odors or of any visible sheen on the surface of any discharges.

   g. Any corrective actions required, including any necessary changes to the SWPPP and the associated implementation dates.

   h. Photographs taken during the inspection, if any.

   i. Inspector's name, title, and signature.

H. Rain Event Action Plan

Not required for Risk Level 1 dischargers.

I. Risk Level 1 Monitoring and Reporting Requirements

Table 1- Summary of Monitoring Requirements

Risk Level	Visual Inspections					Sample Collection	
	Quarterly Non-storm Water Discharge	Pre-storm Event		Daily Storm BMP	Post Storm	Storm Water Discharge	Receiving Water
		Baseline	REAP				
1	X	X		X	X		

1. **Construction Site Monitoring Program Requirements**

   a. Pursuant to Water Code Sections 13383 and 13267, all dischargers subject to this General Permit shall develop and implement a written site-specific Construction Site Monitoring Program (CSMP) in accordance with the requirements of this Section. The CSMP shall include all monitoring procedures and instructions, location maps, forms, and checklists as required in this section. The CSMP shall be developed prior to the commencement of construction activities, and revised as necessary to reflect project revisions. The CSMP shall be a part of the Storm Water Pollution Prevention Plan (SWPPP), included as an appendix or separate SWPPP chapter.

   b. Existing dischargers registered under the State Water Board Order No. 99-08-DWQ shall make and implement necessary revisions to their Monitoring Programs to reflect the changes in this General Permit in a timely manner, but no later than July 1, 2010. Existing dischargers shall continue to implement their existing Monitoring Programs in compliance with State Water Board Order No. 99-08-DWQ until the necessary revisions are completed according to the schedule above.

   c. When a change of ownership occurs for all or any portion of the construction site prior to completion or final stabilization, the new discharger shall comply with these requirements as of the date the ownership change occurs.

2. **Objectives**

   The CSMP shall be developed and implemented to address the following objectives:

   a. To demonstrate that the site is in compliance with the Discharge Prohibitions;

b. To determine whether non-visible pollutants are present at the construction site and are causing or contributing to exceedances of water quality objectives;

c. To determine whether immediate corrective actions, additional Best Management Practice (BMP) implementation, or SWPPP revisions are necessary to reduce pollutants in storm water discharges and authorized non-storm water discharges; and

d. To determine whether BMPs included in the SWPPP are effective in preventing or reducing pollutants in storm water discharges and authorized non-storm water discharges.

3. **Risk Level 1 - Visual Monitoring (Inspection) Requirements for Qualifying Rain Events**

a. Risk Level 1 dischargers shall visually observe (inspect) storm water discharges at all discharge locations within two business days (48 hours) after each qualifying rain event.

b. Risk Level 1 dischargers shall visually observe (inspect) the discharge of stored or contained storm water that is derived from and discharged subsequent to a qualifying rain event producing precipitation of ½ inch or more at the time of discharge. Stored or contained storm water that will likely discharge after operating hours due to anticipated precipitation shall be observed prior to the discharge during operating hours.

c. Risk Level 1 dischargers shall conduct visual observations (inspections) during business hours only.

d. Risk Level 1 dischargers shall record the time, date and rain gauge reading of all qualifying rain events.

e. Within 2 business days (48 hours) prior to each qualifying rain event, Risk Level 1 dischargers shall visually observe (inspect):

i. All storm water drainage areas to identify any spills, leaks, or uncontrolled pollutant sources. If needed, the discharger shall implement appropriate corrective actions.

ii. All BMPs to identify whether they have been properly implemented in accordance with the SWPPP. If needed, the discharger shall implement appropriate corrective actions.

iii. Any storm water storage and containment areas to detect leaks and ensure maintenance of adequate freeboard.

f. For the visual observations (inspections) described in e.i and e.iii above, Risk Level 1 dischargers shall observe the presence or absence of floating and suspended materials, a sheen on the surface, discolorations, turbidity, odors, and source(s) of any observed pollutants.

g. Within two business days (48 hours) after each qualifying rain event, Risk Level 1 dischargers shall conduct post rain event visual observations (inspections) to (1) identify whether BMPs were adequately designed, implemented, and effective, and (2) identify additional BMPs and revise the SWPPP accordingly.

h. Risk Level 1 dischargers shall maintain on-site records of all visual observations (inspections), personnel performing the observations, observation dates, weather conditions, locations observed, and corrective actions taken in response to the observations.

4. **Risk Level 1 – Visual Observation Exemptions**

a. Risk Level 1 dischargers shall be prepared to conduct visual observation (inspections) until the minimum requirements of Section I.3 above are completed. Risk Level 1 dischargers are not required to conduct visual observation (inspections) under the following conditions:

i. During dangerous weather conditions such as flooding and electrical storms.

ii. Outside of scheduled site business hours.

b. If no required visual observations (inspections) are collected due to these exceptions, Risk Level 1 dischargers shall include an explanation in their SWPPP and in the Annual Report documenting why the visual observations (inspections) were not conducted.

5. **Risk Level 1 – Monitoring Methods**

Risk Level 1 dischargers shall include a description of the visual observation locations, visual observation procedures, and visual observation follow-up and tracking procedures in the CSMP.

6. **Risk Level 1 – Non-Storm Water Discharge Monitoring Requirements**

a. Visual Monitoring Requirements:

i. Risk Level 1 dischargers shall visually observe (inspect) each drainage area for the presence of (or indications of prior) unauthorized and authorized non-storm water discharges and their sources.

ii. Risk Level 1 dischargers shall conduct one visual observation (inspection) quarterly in each of the following periods: January-March, April-June, July-September, and October-December. Visual observation (inspections) are only required during daylight hours (sunrise to sunset).

iii. Risk Level 1 dischargers shall ensure that visual observations (inspections) document the presence or evidence of any non-storm water discharge (authorized or unauthorized), pollutant characteristics (floating and suspended material, sheen, discoloration, turbidity, odor, etc.), and source. Risk Level 1 dischargers shall maintain on-site records indicating the personnel performing the visual observation (inspections), the dates and approximate time each drainage area and non-storm water discharge was observed, and the response taken to eliminate unauthorized non-storm water discharges and to reduce or prevent pollutants from contacting non-storm water discharges.

7. **Risk Level 1 – Non-Visible Pollutant Monitoring Requirements**

a. Risk Level 1 dischargers shall collect one or more samples during any breach, malfunction, leakage, or spill observed during a visual inspection which could result in the discharge of pollutants to surface waters that would not be visually detectable in storm water.

b. Risk Level 1 dischargers shall ensure that water samples are large enough to characterize the site conditions.

c. Risk Level 1 dischargers shall collect samples at all discharge locations that can be safely accessed.

d. Risk Level 1 dischargers shall collect samples during the first two hours of discharge from rain events that occur during business hours and which generate runoff.

e. Risk Level 1 dischargers shall analyze samples for all non-visible pollutant parameters (if applicable) - parameters indicating the

presence of pollutants identified in the pollutant source assessment required (Risk Level 1 dischargers shall modify their CSMPs to address these additional parameters in accordance with any updated SWPPP pollutant source assessment).

f. Risk Level 1 dischargers shall collect a sample of storm water that has not come in contact with the disturbed soil or the materials stored or used on-site (uncontaminated sample) for comparison with the discharge sample.

g. Risk Level 1 dischargers shall compare the uncontaminated sample to the samples of discharge using field analysis or through laboratory analysis.[2]

h. Risk Level 1 dischargers shall keep all field /or analytical data in the SWPPP document.

8. **Risk Level 1 – Particle Size Analysis for Project Risk Justification**

Risk Level 1 dischargers justifying an alternative project risk shall report a soil particle size analysis used to determine the RUSLE K-Factor. ASTM D-422 (Standard Test Method for Particle-Size Analysis of Soils), as revised, shall be used to determine the percentages of sand, very fine sand, silt, and clay on the site.

9. **Risk Level 1 – Records**

Risk Level 1 dischargers shall retain records of all storm water monitoring information and copies of all reports (including Annual Reports) for a period of at least three years. Risk Level 1 dischargers shall retain all records on-site while construction is ongoing. These records include:

a. The date, place, time of facility inspections, sampling, visual observation (inspections), and/or measurements, including precipitation.

b. The individual(s) who performed the facility inspections, sampling, visual observation (inspections), and or measurements.

c. The date and approximate time of analyses.

d. The individual(s) who performed the analyses.

[2] For laboratory analysis, all sampling, sample preservation, and analyses must be conducted according to test procedures under 40 CFR Part 136. Field discharge samples shall be collected and analyzed according to the specifications of the manufacturer of the sampling devices employed.

e. A summary of all analytical results from the last three years, the method detection limits and reporting units, and the analytical techniques or methods used.

f. Rain gauge readings from site inspections.

g. Quality assurance/quality control records and results.

h. Non-storm water discharge inspections and visual observation (inspections) and storm water discharge visual observation records (see Sections I.3 and I.6 above).

i. Visual observation and sample collection exception records (see Section I.4 above).

j. The records of any corrective actions and follow-up activities that resulted from analytical results, visual observation (inspections), or inspections.

ATTACHMENT D
RISK LEVEL 2 REQUIREMENTS

A. Effluent Standards

[These requirements are the same as those in the General Permit order.]

1. Narrative – Risk Level 2 dischargers shall comply with the narrative effluent standards listed below:

   a. Storm water discharges and authorized non-storm water discharges regulated by this General Permit shall not contain a hazardous substance equal to or in excess of reportable quantities established in 40 C.F.R. §§ 117.3 and 302.4, unless a separate NPDES Permit has been issued to regulate those discharges.

   b. Dischargers shall minimize or prevent pollutants in storm water discharges and authorized non-storm water discharges through the use of controls, structures, and management practices that achieve BAT for toxic and non-conventional pollutants and BCT for conventional pollutants.

2. Numeric – Risk level 2 dischargers are subject to a pH NAL of 6.5-8.5, and a turbidity NAL of 250 NTU.

B. Good Site Management "Housekeeping"

1. Risk Level 2 dischargers shall implement good site management (i.e., "housekeeping") measures for construction materials that could potentially be a threat to water quality if discharged. At a minimum, Risk Level 2 dischargers shall implement the following good housekeeping measures:

   a. Conduct an inventory of the products used and/or expected to be used and the end products that are produced and/or expected to be produced. This does not include materials and equipment that are designed to be outdoors and exposed to environmental conditions (i.e. poles, equipment pads, cabinets, conductors, insulators, bricks, etc.).

   b. Cover and berm loose stockpiled construction materials that are not actively being used (i.e. soil, spoils, aggregate, fly-ash, stucco, hydrated lime, etc.).

c. Store chemicals in watertight containers (with appropriate secondary containment to prevent any spillage or leakage) or in a storage shed (completely enclosed).

d. Minimize exposure of construction materials to precipitation. This does not include materials and equipment that are designed to be outdoors and exposed to environmental conditions (i.e. poles, equipment pads, cabinets, conductors, insulators, bricks, etc.).

e. Implement BMPs to prevent the off-site tracking of loose construction and landscape materials.

2. Risk Level 2 dischargers shall implement good housekeeping measures for waste management, which, at a minimum, shall consist of the following:

a. Prevent disposal of any rinse or wash waters or materials on impervious or pervious site surfaces or into the storm drain system.

b. Ensure the containment of sanitation facilities (e.g., portable toilets) to prevent discharges of pollutants to the storm water drainage system or receiving water.

c. Clean or replace sanitation facilities and inspecting them regularly for leaks and spills.

d. Cover waste disposal containers at the end of every business day and during a rain event.

e. Prevent discharges from waste disposal containers to the storm water drainage system or receiving water.

f. Contain and securely protect stockpiled waste material from wind and rain at all times unless actively being used.

g. Implement procedures that effectively address hazardous and non-hazardous spills.

h. Develop a spill response and implementation element of the SWPPP prior to commencement of construction activities. The SWPPP shall require:

i. Equipment and materials for cleanup of spills shall be available on site and that spills and leaks shall be cleaned up immediately and disposed of properly.

ii. Appropriate spill response personnel are assigned and trained.

i. Ensure the containment of concrete washout areas and other washout areas that may contain additional pollutants so there is no discharge into the underlying soil and onto the surrounding areas.

3. Risk Level 2 dischargers shall implement good housekeeping for vehicle storage and maintenance, which, at a minimum, shall consist of the following:

   a. Prevent oil, grease, or fuel to leak in to the ground, storm drains or surface waters.

   b. Place all equipment or vehicles, which are to be fueled, maintained and stored in a designated area fitted with appropriate BMPs.

   c. Clean leaks immediately and disposing of leaked materials properly.

4. Risk Level 2 dischargers shall implement good housekeeping for landscape materials, which, at a minimum, shall consist of the following:

   a. Contain stockpiled materials such as mulches and topsoil when they are not actively being used.

   b. Contain all fertilizers and other landscape materials when they are not actively being used.

   c. Discontinue the application of any erodible landscape material within 2 days before a forecasted rain event or during periods of precipitation.

   d. Apply erodible landscape material at quantities and application rates according to manufacture recommendations or based on written specifications by knowledgeable and experienced field personnel.

   e. Stack erodible landscape material on pallets and covering or storing such materials when not being used or applied.

5. Risk Level 2 dischargers shall conduct an assessment and create a list of potential pollutant sources and identify any areas of the site where additional BMPs are necessary to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. This potential pollutant list shall be kept with the SWPPP and shall identify

all non-visible pollutants which are known, or should be known, to occur on the construction site. At a minimum, when developing BMPs, Risk Level 2 dischargers shall do the following:

a. Consider the quantity, physical characteristics (e.g., liquid, powder, solid), and locations of each potential pollutant source handled, produced, stored, recycled, or disposed of at the site.

b. Consider the degree to which pollutants associated with those materials may be exposed to and mobilized by contact with storm water.

c. Consider the direct and indirect pathways that pollutants may be exposed to storm water or authorized non-storm water discharges. This shall include an assessment of past spills or leaks, non-storm water discharges, and discharges from adjoining areas.

d. Ensure retention of sampling, visual observation, and inspection records.

e. Ensure effectiveness of existing BMPs to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges.

6. Risk Level 2 dischargers shall implement good housekeeping measures on the construction site to control the air deposition of site materials and from site operations. Such particulates can include, but are not limited to, sediment, nutrients, trash, metals, bacteria, oil and grease and organics.

7. **Additional Risk Level 2 Requirement:** Risk Level 2 dischargers shall document all housekeeping BMPs in the SWPPP and REAP(s) in accordance with the nature and phase of the construction project. Construction phases at traditional land development projects include Grading and Land Development Phase, Streets and Utilities, or Vertical Construction for traditional land development projects.

C. Non-Storm Water Management

1. Risk Level 2 dischargers shall implement measures to control all non-storm water discharges during construction.

2. Risk Level 2 dischargers shall wash vehicles in such a manner as to prevent non-storm water discharges to surface waters or MS4 drainage systems.

3. Risk Level 2 dischargers shall clean streets in such a manner as to prevent unauthorized non-storm water discharges from reaching surface water or MS4 drainage systems.

D. Erosion Control

1. Risk Level 2 dischargers shall implement effective wind erosion control.

2. Risk Level 2 dischargers shall provide effective soil cover for inactive[1] areas and all finished slopes, open space, utility backfill, and completed lots.

3. Risk Level 2 dischargers shall limit the use of plastic materials when more sustainable, environmentally friendly alternatives exist. Where plastic materials are deemed necessary, the discharger shall consider the use of plastic materials resistant to solar degradation.

E. Sediment Controls

1. Risk Level 2 dischargers shall establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from the site.

2. On sites where sediment basins are to be used, Risk Level 2 dischargers shall, at minimum, design sediment basins according to the method provided in CASQA's Construction BMP Guidance Handbook.

3. **Additional Risk Level 2 Requirement:** Risk Level 2 dischargers shall implement appropriate erosion control BMPs (runoff control and soil stabilization) in conjunction with sediment control BMPs for areas under active[2] construction.

4. **Additional Risk Level 2 Requirement:** Risk Level 2 dischargers shall apply linear sediment controls along the toe of the slope, face of the slope, and at the grade breaks of exposed slopes to comply with sheet flow lengths[3] in accordance with Table 1.

[1] Inactive areas of construction are areas of construction activity that have been disturbed and are not scheduled to be re-disturbed for at least 14 days.
[2] Active areas of construction are areas undergoing land surface disturbance. This includes construction activity during the preliminary stage, mass grading stage, streets and utilities stage and the vertical construction stage.
[3] Sheet flow length is the length that shallow, low velocity flow travels across a site.

Table 1 - Critical Slope/Sheet Flow Length Combinations

Slope Percentage	Sheet flow length not to exceed
0-25%	20 feet
25-50%	15 feet
Over 50%	10 feet

5. **Additional Risk Level 2 Requirement:** Risk Level 2 dischargers shall ensure that construction activity traffic to and from the project is limited to entrances and exits that employ effective controls to prevent offsite tracking of sediment.

6. **Additional Risk Level 2 Requirement:** Risk Level 2 dischargers shall ensure that all storm drain inlets and perimeter controls, runoff control BMPs, and pollutant controls at entrances and exits (e.g. tire washoff locations) are maintained and protected from activities that reduce their effectiveness.

7. **Additional Risk Level 2 Requirement:** Risk Level 2 dischargers shall inspect on a daily basis all immediate access roads daily. At a minimum daily (when necessary) and prior to any rain event, the discharger shall remove any sediment or other construction activity-related materials that are deposited on the roads (by vacuuming or sweeping).

F. Run-on and Run-off Controls

Risk Level 2 dischargers shall effectively manage all run-on, all runoff within the site and all runoff that discharges off the site. Run-on from off site shall be directed away from all disturbed areas or shall collectively be in compliance with the effluent limitations in this General Permit.

G. Inspection, Maintenance and Repair

1. Risk Level 2 dischargers shall ensure that all inspection, maintenance repair and sampling activities at the project location shall be performed or supervised by a Qualified SWPPP Practitioner (QSP) representing the discharger. The QSP may delegate any or all of these activities to an employee appropriately trained to do the task(s).

2. Risk Level 2 dischargers shall perform weekly inspections and observations, and at least once each 24-hour period during extended storm events, to identify and record BMPs that need maintenance to operate effectively, that have failed, or that could fail to operate as intended. Inspectors shall be the QSP or be trained by the QSP.

3. Upon identifying failures or other shortcomings, as directed by the QSP, Risk Level 2 dischargers shall begin implementing repairs or design changes to BMPs within 72 hours of identification and complete the changes as soon as possible.

4. For each inspection required, Risk Level 2 dischargers shall complete an inspection checklist, using a form provided by the State Water Board or Regional Water Board or in an alternative format.

5. Risk Level 2 dischargers shall ensure that checklists shall remain onsite with the SWPPP and at a minimum, shall include:

   a. Inspection date and date the inspection report was written.

   b. Weather information, including presence or absence of precipitation, estimate of beginning of qualifying storm event, duration of event, time elapsed since last storm, and approximate amount of rainfall in inches.

   c. Site information, including stage of construction, activities completed, and approximate area of the site exposed.

   d. A description of any BMPs evaluated and any deficiencies noted.

   e. If the construction site is safely accessible during inclement weather, list the observations of all BMPs: erosion controls, sediment controls, chemical and waste controls, and non-storm water controls. Otherwise, list the results of visual inspections at all relevant outfalls, discharge points, downstream locations and any projected maintenance activities.

   f. Report the presence of noticeable odors or of any visible sheen on the surface of any discharges.

   g. Any corrective actions required, including any necessary changes to the SWPPP and the associated implementation dates.

   h. Photographs taken during the inspection, if any.

   i. Inspector's name, title, and signature.

H. Rain Event Action Plan

1. **Additional Risk Level 2 Requirement:** The discharger shall ensure a QSP develop a Rain Event Action Plan (REAP) 48 hours prior to any

likely precipitation event. A likely precipitation event is any weather pattern that is forecast to have a 50% or greater probability of producing precipitation in the project area. The discharger shall ensure a QSP obtain a printed copy of precipitation forecast information from the National Weather Service Forecast Office (e.g., by entering the zip code of the project's location at http://www.srh.noaa.gov/forecast).

2. **Additional Risk Level 2 Requirement:** The discharger shall ensure a QSP develop the REAPs for all phases of construction (i.e., Grading and Land Development, Streets and Utilities, Vertical Construction, Final Landscaping and Site Stabilization).

3. **Additional Risk Level 2 Requirement:** The discharger shall ensure a QSP ensure that the REAP include, at a minimum, the following site information:

   a. Site Address
   b. Calculated Risk Level (2 or 3)
   c. Site Storm Water Manager Information including the name, company, and 24-hour emergency telephone number
   d. Erosion and Sediment Control Provider information including the name, company, and 24-hour emergency telephone number
   e. Storm Water Sampling Agent information including the name, company, and 24-hour emergency telephone number

4. **Additional Risk Level 2 Requirement:** The discharger shall ensure a QSP include in the REAP, at a minimum, the following project phase information:

   a. Activities associated with each construction phase
   b. Trades active on the construction site during each construction phase
   c. Trade contractor information
   d. Suggested actions for each project phase

5. **Additional Risk Level 2 Requirement:** The discharger shall ensure a QSP develop additional REAPs for project sites where construction activities are indefinitely halted or postponed (Inactive Construction). At a minimum, Inactive Construction REAPs must include:

   a. Site Address
   b. Calculated Risk Level (2 or 3)
   c. Site Storm Water Manager Information including the name, company, and 24-hour emergency telephone number

d. Erosion and Sediment Control Provider information including the name, company, and 24-hour emergency telephone number
e. Storm Water Sampling Agent information including the name, company, and 24-hour emergency telephone number
f. Trades active on site during Inactive Construction
g. Trade contractor information
h. Suggested actions for inactive construction sites

6. **Additional Risk Level 2 Requirement:** The discharger shall ensure a QSP begin implementation and make the REAP available onsite no later than 24 hours prior to the likely precipitation event.

7. **Additional Risk Level 2 Requirement:** The discharger shall ensure a QSP maintain onsite a paper copy of each REAP onsite in compliance with the record retention requirements of the Special Provisions in this General Permit.

I. Risk Level 2 Monitoring and Reporting Requirements

Table 2- Summary of Monitoring Requirements

Risk Level	Visual Inspections					Sample Collection	
	Quarterly Non-storm Water Discharge	Pre-storm Event		Daily Storm BMP	Post Storm	Storm Water Discharge	Receiving Water
		Baseline	REAP				
2	X	X	X	X	X	X	

1. Construction Site Monitoring Program Requirements

   a. Pursuant to Water Code Sections 13383 and 13267, all dischargers subject to this General Permit shall develop and implement a written site-specific Construction Site Monitoring Program (CSMP) in accordance with the requirements of this Section. The CSMP shall include all monitoring procedures and instructions, location maps, forms, and checklists as required in this section. The CSMP shall be developed prior to the commencement of construction activities, and revised as necessary to reflect project revisions. The CSMP shall be a part of the Storm Water Pollution Prevention Plan (SWPPP), included as an appendix or separate SWPPP chapter.

   b. Existing dischargers registered under the State Water Board Order No. 99-08-DWQ shall make and implement necessary revisions to their Monitoring Program to reflect the changes in this General Permit in a timely manner, but no later than July 1, 2010. Existing dischargers shall continue to implement their existing Monitoring Programs in compliance with State Water Board Order No. 99-08-DWQ until the necessary revisions are completed according to the schedule above.

   c. When a change of ownership occurs for all or any portion of the construction site prior to completion or final stabilization, the new discharger shall comply with these requirements as of the date the ownership change occurs.

2. **Objectives**

   The CSMP shall be developed and implemented to address the following objectives:

a. To demonstrate that the site is in compliance with the Discharge Prohibitions and applicable Numeric Action Levels (NALs)/Numeric Effluent Limitations (NELs) of this General Permit.

b. To determine whether non-visible pollutants are present at the construction site and are causing or contributing to exceedances of water quality objectives.

c. To determine whether immediate corrective actions, additional Best Management Practice (BMP) implementation, or SWPPP revisions are necessary to reduce pollutants in storm water discharges and authorized non-storm water discharges.

d. To determine whether BMPs included in the SWPPP/Rain Event Action Plan (REAP) are effective in preventing or reducing pollutants in storm water discharges and authorized non-storm water discharges.

3. **Risk Level 2 – Visual Monitoring (Inspection) Requirements for Qualifying Rain Events**

a. Risk Level 2 dischargers shall visually observe (inspect) storm water discharges at all discharge locations within two business days (48 hours) after each qualifying rain event.

b. Risk Level 2 dischargers shall visually observe (inspect) the discharge of stored or contained storm water that is derived from and discharged subsequent to a qualifying rain event producing precipitation of ½ inch or more at the time of discharge. Stored or contained storm water that will likely discharge after operating hours due to anticipated precipitation shall be observed prior to the discharge during operating hours.

c. Risk Level 2 dischargers shall conduct visual observations (inspections) during business hours only.

d. Risk Level 2 dischargers shall record the time, date and rain gauge reading of all qualifying rain events.

e. Within 2 business days (48 hours) prior to each qualifying rain event, Risk Level 2 dischargers shall visually observe (inspect):

i. all storm water drainage areas to identify any spills, leaks, or uncontrolled pollutant sources. If needed, the discharger shall implement appropriate corrective actions.

ii. all BMPs to identify whether they have been properly implemented in accordance with the SWPPP/REAP. If needed, the discharger shall implement appropriate corrective actions.

iii. any storm water storage and containment areas to detect leaks and ensure maintenance of adequate freeboard.

f. For the visual observations (inspections) described in c.i and c.iii above, Risk Level 2 dischargers shall observe the presence or absence of floating and suspended materials, a sheen on the surface, discolorations, turbidity, odors, and source(s) of any observed pollutants.

g. Within two business days (48 hours) after each qualifying rain event, Risk Level 2 dischargers shall conduct post rain event visual observations (inspections) to (1) identify whether BMPs were adequately designed, implemented, and effective, and (2) identify additional BMPs and revise the SWPPP accordingly.

h. Risk Level 2 dischargers shall maintain on-site records of all visual observations (inspections), personnel performing the observations, observation dates, weather conditions, locations observed, and corrective actions taken in response to the observations.

4. **Risk Level 2 – Water Quality Sampling and Analysis**

a. Risk Level 2 dischargers shall collect storm water grab samples from sampling locations, as defined in Section I.5. The storm water grab sample(s) obtained shall be representative of the flow and characteristics of the discharge.

b. At minimum, Risk Level 2 dischargers shall collect 3 samples per day of the qualifying event.

c. Risk Level 2 dischargers shall ensure that the grab samples collected of stored or contained storm water are from discharges subsequent to a qualifying rain event (producing precipitation of ½ inch or more at the time of discharge).

<u>Storm Water Effluent Monitoring Requirements</u>

d. Risk Level 2 dischargers shall analyze their effluent samples for:

i. pH and turbidity.

ii. Any additional parameters for which monitoring is required by the Regional Water Board.

5. **Risk Level 2 – Storm Water Discharge Water Quality Sampling Locations**

Effluent Sampling Locations

a. Risk Level 2 dischargers shall perform sampling and analysis of storm water discharges to characterize discharges associated with construction activity from the entire project disturbed area.

b. Risk Level 2 dischargers shall collect effluent samples at all discharge points where storm water is discharged off-site.

c. Risk Level 2 dischargers shall ensure that storm water discharge collected and observed represent[4] the effluent in each drainage area based on visual observation of the water and upstream conditions.

d. Risk Level 2 dischargers shall monitor and report site run-on from surrounding areas if there is reason to believe run-on may contribute to an exceedance of NALs or NELs.

e. Risk Level 2 dischargers who deploy an ATS on their site, or a portion on their site, shall collect ATS effluent samples and measurements from the discharge pipe or another location representative of the nature of the discharge.

f. Risk Level 2 dischargers shall select analytical test methods from the list provided in Table 3 below.

g. All storm water sample collection preservation and handling shall be conducted in accordance with Section I.7 “Storm Water Sample Collection and Handling Instructions” below.

6. **Risk Level 2 – Visual Observation and Sample Collection Exemptions**

a. Risk Level 2 dischargers shall be prepared to collect samples and conduct visual observation (inspections) until the minimum requirements of Sections I.3 and I.4 above are completed. Risk

[4] For example, if there has been concrete work recently in an area, or drywall scrap is exposed to the rain, a pH sample shall be taken of drainage from the relevant work area. Similarly, if sediment laden water is flowing through some parts of a silt fence, samples shall be taken of the sediment-laden water even if most water flowing through the fence is clear.

Level 2 dischargers are not required to physically collect samples or conduct visual observation (inspections) under the following conditions:

i. During dangerous weather conditions such as flooding and electrical storms.

ii. Outside of scheduled site business hours.

b. If no required samples or visual observation (inspections) are collected due to these exceptions, Risk Level 2 dischargers shall include an explanation in their SWPPP and in the Annual Report documenting why the sampling or visual observation (inspections) were not conducted.

7. **Risk Level 2 – Storm Water Sample Collection and Handling Instructions**

a. Risk Level 2 dischargers shall refer to Table 3 below for test methods, detection limits, and reporting units.

b. Risk Level 2 dischargers shall ensure that testing laboratories will receive samples within 48 hours of the physical sampling (unless otherwise required by the laboratory), and shall use only the sample containers provided by the laboratory to collect and store samples.

c. Risk Level 2 dischargers shall designate and train personnel to collect, maintain, and ship samples in accordance with the Surface Water Ambient Monitoring Program's (SWAMP) 2008 Quality Assurance Program Plan (QAPrP).[5]

8. **Risk Level 2 – Monitoring Methods**

a. Risk Level 2 dischargers shall include a description of the following items in the CSMP:

i. Visual observation locations, visual observation procedures, and visual observation follow-up and tracking procedures.

ii. Sampling locations, and sample collection and handling procedures. This shall include detailed procedures for sample

[5] Additional information regarding SWAMP's QAPrP and QAMP can be found at http://www.waterboards.ca.gov/water_issues/programs/swamp/.
QAPrP:http://www.waterboards.ca.gov/water_issues/programs/swamp/docs/qapp/swamp_qapp_master090108a.pdf.
QAMP: http://www.waterboards.ca.gov/water_issues/programs/swamp/qamp.shtml.

collection, storage, preservation, and shipping to the testing lab to assure that consistent quality control and quality assurance is maintained. Dischargers shall attach to the monitoring program an example Chain of Custody form used when handling and shipping samples.

iii. Identification of the analytical methods and related method detection limits (if applicable) for each parameter required in Section I.4 above.

b. Risk Level 2 dischargers shall ensure that all sampling and sample preservation are in accordance with the current edition of "Standard Methods for the Examination of Water and Wastewater" (American Public Health Association). All monitoring instruments and equipment (including a discharger's own field instruments for measuring pH and turbidity) should be calibrated and maintained in accordance with manufacturers' specifications to ensure accurate measurements. Risk Level 2 dischargers shall ensure that all laboratory analyses are conducted according to test procedures under 40 CFR Part 136, unless other test procedures have been specified in this General Permit or by the Regional Water Board. With the exception of field analysis conducted by the discharger for turbidity and pH, all analyses should be sent to and conducted at a laboratory certified for such analyses by the State Department of Health Services. Risk Level 2 dischargers shall conduct their own field analysis of pH and may conduct their own field analysis of turbidity if the discharger has sufficient capability (qualified and trained employees, properly calibrated and maintained field instruments, etc.) to adequately perform the field analysis.

9. **Risk Level 2 – Analytical Methods**

a. Risk Level 2 dischargers shall refer to Table 3 below for test methods, detection limits, and reporting units.

b. **pH**: Risk Level 2 dischargers shall perform pH analysis on-site with a calibrated pH meter or a pH test kit. Risk Level 2 dischargers shall record pH monitoring results on paper and retain these records in accordance with Section I.14, below.

c. **Turbidity**: Risk Level 2 dischargers shall perform turbidity analysis using a calibrated turbidity meter (turbidimeter), either on-site or at an accredited lab. Acceptable test methods include Standard Method 2130 or USEPA Method 180.1. The results will be recorded in the site log book in Nephelometric Turbidity Units (NTU).

10. **Risk Level 2 - Non-Storm Water Discharge Monitoring Requirements**

    a. Visual Monitoring Requirements:

        i. Risk Level 2 dischargers shall visually observe (inspect) each drainage area for the presence of (or indications of prior) unauthorized and authorized non-storm water discharges and their sources.

        ii. Risk Level 2 dischargers shall conduct one visual observation (inspection) quarterly in each of the following periods: January-March, April-June, July-September, and October-December. Visual observation (inspections) are only required during daylight hours (sunrise to sunset).

        iii. Risk Level 2 dischargers shall ensure that visual observations (inspections) document the presence or evidence of any non-storm water discharge (authorized or unauthorized), pollutant characteristics (floating and suspended material, sheen, discoloration, turbidity, odor, etc.), and source. Risk Level 2 dischargers shall maintain on-site records indicating the personnel performing the visual observation (inspections), the dates and approximate time each drainage area and non-storm water discharge was observed, and the response taken to eliminate unauthorized non-storm water discharges and to reduce or prevent pollutants from contacting non-storm water discharges.

    b. Effluent Sampling Locations:

        i. Risk Level 2 dischargers shall sample effluent at all discharge points where non-storm water and/or authorized non-storm water is discharged off-site.

        ii. Risk Level 2 dischargers shall send all non-storm water sample analyses to a laboratory certified for such analyses by the State Department of Health Services.

        iii. Risk Level 2 dischargers shall monitor and report run-on from surrounding areas if there is reason to believe run-on may contribute to an exceedance of NALs.

11. **Risk Level 2 – Non-Visible Pollutant Monitoring Requirements**

a. Risk Level 2 dischargers shall collect one or more samples during any breach, malfunction, leakage, or spill observed during a visual inspection which could result in the discharge of pollutants to surface waters that would not be visually detectable in storm water.

b. Risk Level 2 dischargers shall ensure that water samples are large enough to characterize the site conditions.

c. Risk Level 2 dischargers shall collect samples at all discharge locations that can be safely accessed.

d. Risk Level 2 dischargers shall collect samples during the first two hours of discharge from rain events that occur during business hours and which generate runoff.

e. Risk Level 2 dischargers shall analyze samples for all non-visible pollutant parameters (if applicable) - parameters indicating the presence of pollutants identified in the pollutant source assessment required (Risk Level 2 dischargers shall modify their CSMPs to address these additional parameters in accordance with any updated SWPPP pollutant source assessment).

f. Risk Level 2 dischargers shall collect a sample of storm water that has not come in contact with the disturbed soil or the materials stored or used on-site (uncontaminated sample) for comparison with the discharge sample.

g. Risk Level 2 dischargers shall compare the uncontaminated sample to the samples of discharge using field analysis or through laboratory analysis.[6]

h. Risk Level 2 dischargers shall keep all field /or analytical data in the SWPPP document.

12. **Risk Level 2 – Watershed Monitoring Option**

Risk Level 2 dischargers who are part of a qualified regional watershed-based monitoring program may be eligible for relief from the requirements in Sections I.5. The Regional Water Board may approve proposals to substitute an acceptable watershed-based monitoring program by determining if the watershed-based monitoring program

[6] For laboratory analysis, all sampling, sample preservation, and analyses must be conducted according to test procedures under 40 CFR Part 136. Field discharge samples shall be collected and analyzed according to the specifications of the manufacturer of the sampling devices employed.

will provide substantially similar monitoring information in evaluating discharger compliance with the requirements of this General Permit.

13. **Risk Level 2 – Particle Size Analysis for Project Risk Justification**

Risk Level 2 dischargers justifying an alternative project risk shall report a soil particle size analysis used to determine the RUSLE K-Factor. ASTM D-422 (Standard Test Method for Particle-Size Analysis of Soils), as revised, shall be used to determine the percentages of sand, very fine sand, silt, and clay on the site.

14. **Risk Level 2 – Records**

Risk Level 2 dischargers shall retain records of all storm water monitoring information and copies of all reports (including Annual Reports) for a period of at least three years. Risk Level 2 dischargers shall retain all records on-site while construction is ongoing. These records include:

a. The date, place, time of facility inspections, sampling, visual observation (inspections), and/or measurements, including precipitation.

b. The individual(s) who performed the facility inspections, sampling, visual observation (inspections), and or measurements.

c. The date and approximate time of analyses.

d. The individual(s) who performed the analyses.

e. A summary of all analytical results from the last three years, the method detection limits and reporting units, the analytical techniques or methods used, and the chain of custody forms.

f. Rain gauge readings from site inspections;

g. Quality assurance/quality control records and results.

h. Non-storm water discharge inspections and visual observation (inspections) and storm water discharge visual observation records (see Sections I.3 and I.10 above).

i. Visual observation and sample collection exception records (see Section I.6 above).

j. The records of any corrective actions and follow-up activities that resulted from analytical results, visual observation (inspections), or inspections.

15. **Risk Level 2 – NAL Exceedance Report**

a. In the event that any effluent sample exceeds an applicable NAL, Risk Level 2 dischargers shall electronically submit all storm event sampling results to the State Water Board no later than 10 days after the conclusion of the storm event. The Regional Boards have the authority to require the submittal of an NAL Exceedance Report.

b. Risk Level 2 dischargers shall certify each NAL Exceedance Report in accordance with the Special Provisions for Construction Activity.

c. Risk Level 2 dischargers shall retain an electronic or paper copy of each NAL Exceedance Report for a minimum of three years after the date the annual report is filed.

d. Risk Level 2 dischargers shall include in the NAL Exceedance Report:

i. The analytical method(s), method reporting unit(s), and method detection limit(s) of each analytical parameter (analytical results that are less than the method detection limit shall be reported as “less than the method detection limit”).

ii. The date, place, time of sampling, visual observation (inspections), and/or measurements, including precipitation.

iii. A description of the current BMPs associated with the effluent sample that exceeded the NAL and the proposed corrective actions taken.

Table 3 – Risk Level 2 Test Methods, Detection Limits, Reporting Units and Applicable NALs/NELs

Parameter	Test Method / Protocol	Discharge Type	Min. Detection Limit	Reporting Units	Numeric Action Level
pH	Field test with calibrated portable instrument	Risk Level 2 Discharges	0.2	pH units	lower NAL = 6.5 upper NAL = 8.5
Turbidity	EPA 0180.1 and/or field test with calibrated portable instrument	Risk Level 2 Discharges other than ATS	1	NTU	250 NTU
		For ATS discharges	1	NTU	N/A

ATTACHMENT E
RISK LEVEL 3 REQUIREMENTS

A. Effluent Standards

[These requirements are the same as those in the General Permit order.]

1. Narrative – Risk Level 3 dischargers shall comply with the narrative effluent standards listed below:

   a. Storm water discharges and authorized non-storm water discharges regulated by this General Permit shall not contain a hazardous substance equal to or in excess of reportable quantities established in 40 C.F.R. §§ 117.3 and 302.4, unless a separate NPDES Permit has been issued to regulate those discharges.

   b. Dischargers shall minimize or prevent pollutants in storm water discharges and authorized non-storm water discharges through the use of controls, structures, and management practices that achieve BAT for toxic and non-conventional pollutants and BCT for conventional pollutants.

2. Numeric –Risk Level 3 dischargers are subject to a pH NAL of 6.5-8.5, and a turbidity NAL of 250 NTU. In addition, Risk Level 3 dischargers are subject to a pH NEL of 6.0-9.0 and a turbidity NEL of 500 NTU.

B. Good Site Management "Housekeeping"

1. Risk Level 3 dischargers shall implement good site management (i.e., "housekeeping") measures for construction materials that could potentially be a threat to water quality if discharged. At a minimum, Risk Level 3 dischargers shall implement the following good housekeeping measures:

   a. Conduct an inventory of the products used and/or expected to be used and the end products that are produced and/or expected to be produced. This does not include materials and equipment that are designed to be outdoors and exposed to environmental conditions (i.e. poles, equipment pads, cabinets, conductors, insulators, bricks, etc.).

   b. Cover and berm loose stockpiled construction materials that are not actively being used (i.e. soil, spoils, aggregate, fly-ash, stucco, hydrated lime, etc.).

c. Store chemicals in watertight containers (with appropriate secondary containment to prevent any spillage or leakage) or in a storage shed (completely enclosed).

d. Minimize exposure of construction materials to precipitation. This does not include materials and equipment that are designed to be outdoors and exposed to environmental conditions (i.e. poles, equipment pads, cabinets, conductors, insulators, bricks, etc.).

e. Implement BMPs to prevent the off-site tracking of loose construction and landscape materials.

2. Risk Level 3 dischargers shall implement good housekeeping measures for waste management, which, at a minimum, shall consist of the following:

a. Prevent disposal of any rinse or wash waters or materials on impervious or pervious site surfaces or into the storm drain system.

b. Ensure the containment of sanitation facilities (e.g., portable toilets) to prevent discharges of pollutants to the storm water drainage system or receiving water.

c. Clean or replace sanitation facilities and inspecting them regularly for leaks and spills.

d. Cover waste disposal containers at the end of every business day and during a rain event.

e. Prevent discharges from waste disposal containers to the storm water drainage system or receiving water.

f. Contain and securely protecting stockpiled waste material from wind and rain at all times unless actively being used.

g. Implement procedures that effectively address hazardous and non-hazardous spills.

h. Develop a spill response and implementation element of the SWPPP prior to commencement of construction activities. The SWPPP shall require that:

i. Equipment and materials for cleanup of spills shall be available on site and that spills and leaks shall be cleaned up immediately and disposed of properly; and

ii. Appropriate spill response personnel are assigned and trained.

i. Ensure the containment of concrete washout areas and other washout areas that may contain additional pollutants so there is no discharge into the underlying soil and onto the surrounding areas.

3. Risk Level 3 dischargers shall implement good housekeeping for vehicle storage and maintenance, which, at a minimum, shall consist of the following:

   a. Prevent oil, grease, or fuel to leak in to the ground, storm drains or surface waters.

   b. Place all equipment or vehicles, which are to be fueled, maintained and stored in a designated area fitted with appropriate BMPs.

   c. Clean leaks immediately and disposing of leaked materials properly.

4. Risk Level 3 dischargers shall implement good housekeeping for landscape materials, which, at a minimum, shall consist of the following:

   a. Contain stockpiled materials such as mulches and topsoil when they are not actively being used.

   b. Contain fertilizers and other landscape materials when they are not actively being used.

   c. Discontinuing the application of any erodible landscape material within 2 days before a forecasted rain event or during periods of precipitation.

   d. Applying erodible landscape material at quantities and application rates according to manufacture recommendations or based on written specifications by knowledgeable and experienced field personnel.

   e. Stacking erodible landscape material on pallets and covering or storing such materials when not being used or applied.

5. Risk Level 3 dischargers shall conduct an assessment and create a list of potential pollutant sources and identify any areas of the site where additional BMPs are necessary to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. This potential pollutant list shall be kept with the SWPPP and shall identify

all non-visible pollutants which are known, or should be known, to occur on the construction site. At a minimum, when developing BMPs, Risk Level 3 dischargers shall do the following:

a. Consider the quantity, physical characteristics (e.g., liquid, powder, solid), and locations of each potential pollutant source handled, produced, stored, recycled, or disposed of at the site.

b. Consider the degree to which pollutants associated with those materials may be exposed to and mobilized by contact with storm water.

c. Consider the direct and indirect pathways that pollutants may be exposed to storm water or authorized non-storm water discharges. This shall include an assessment of past spills or leaks, non-storm water discharges, and discharges from adjoining areas.

d. Ensure retention of sampling, visual observation, and inspection records.

e. Ensure effectiveness of existing BMPs to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges.

6. Risk Level 3 dischargers shall implement good housekeeping measures on the construction site to control the air deposition of site materials and from site operations. Such particulates can include, but are not limited to, sediment, nutrients, trash, metals, bacteria, oil and grease and organics.

7. **Additional Risk Level 3 Requirement:** Risk Level 3 dischargers shall document all housekeeping BMPs in the SWPPP and REAP(s) in accordance with the nature and phase of the construction project. Construction phases at traditional land development projects include Grading and Land Development Phase, Streets and Utilities, or Vertical Construction for traditional land development projects.

C. Non-Storm Water Management

1. Risk Level 3 dischargers shall implement measures to control all non-storm water discharges during construction.

2. Risk Level 3 dischargers shall wash vehicles in such a manner as to prevent non-storm water discharges to surface waters or MS4 drainage systems.

3. Risk Level 3 dischargers shall clean streets in such a manner as to prevent unauthorized non-storm water discharges from reaching surface water or MS4 drainage systems.

D. Erosion Control

1. Risk Level 3 dischargers shall implement effective wind erosion control.

2. Risk Level 3 dischargers shall provide effective soil cover for inactive[1] areas and all finished slopes, open space, utility backfill, and completed lots.

3. Dischargers shall limit the use of plastic materials when more sustainable, environmentally friendly alternatives exist. Where plastic materials are deemed necessary, the discharger shall consider the use of plastic materials resistant to solar degradation.

E. Sediment Controls

1. Risk Level 3 dischargers shall establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from the site.

2. On sites where sediment basins are to be used, Risk Level 3 dischargers shall, at minimum, design sediment basins according to the method provided in CASQA's Construction BMP Guidance Handbook.

3. **Additional Risk Level 3 Requirement:** Risk Level 3 dischargers shall implement appropriate erosion control BMPs (runoff control and soil stabilization) in conjunction with sediment control BMPs for areas under active[2] construction.

4. **Additional Risk Level 3 Requirement:** Risk Level 3 dischargers shall apply linear sediment controls along the toe of the slope, face of the slope, and at the grade breaks of exposed slopes to comply with sheet flow lengths[3] in accordance with Table 1.

[1] Inactive areas of construction are areas of construction activity that have been disturbed and are not scheduled to be re-disturbed for at least 14 days.
[2] Active areas of construction are areas undergoing land surface disturbance. This includes construction activity during the preliminary stage, mass grading stage, streets and utilities stage and the vertical construction stage
[3] Sheet flow length is the length that shallow, low velocity flow travels across a site.

Table 1 - Critical Slope/Sheet Flow Length Combinations

Slope Percentage	Sheet flow length not to exceed
0-25%	20 feet
25-50%	15 feet
Over 50%	10 feet

5. **Additional Risk Level 3 Requirement:** Risk Level 3 dischargers shall ensure that construction activity traffic to and from the project is limited to entrances and exits that employ effective controls to prevent offsite tracking of sediment.

6. **Additional Risk Level 3 Requirement:** Risk Level 3 dischargers shall ensure that all storm drain inlets and perimeter controls, runoff control BMPs, and pollutant controls at entrances and exits (e.g. tire washoff locations) are maintained and protected from activities that reduce their effectiveness.

7. **Additional Risk Level 3 Requirement:** Risk Level 3 dischargers shall inspect on a daily basis all immediate access roads daily. At a minimum daily (when necessary) and prior to any rain event, the discharger shall remove any sediment or other construction activity-related materials that are deposited on the roads (by vacuuming or sweeping).

8. **Additional Risk Level 3 Requirement:** The Regional Water Board may require Risk Level 3 dischargers to implement additional site-specific sediment control requirements if the implementation of the other requirements in this section are not adequately protecting the receiving waters.

F. Run-on and Run-off Controls

Risk Level 3 dischargers shall effectively manage all run-on, all runoff within the site and all runoff that discharges off the site. Run-on from off site shall be directed away from all disturbed areas or shall collectively be in compliance with the effluent limitations in this General Permit.

G. Inspection, Maintenance and Repair

1. Risk Level 3 dischargers shall ensure that all inspection, maintenance repair and sampling activities at the project location shall be performed or supervised by a Qualified SWPPP Practitioner (QSP) representing the discharger. The QSP may delegate any or all of these activities to an employee appropriately trained to do the task(s).

2. Risk Level 3 dischargers shall perform weekly inspections and observations, and at least once each 24-hour period during extended storm events, to identify and record BMPs that need maintenance to operate effectively, that have failed, or that could fail to operate as intended. Inspectors shall be the QSP or be trained by the QSP.

3. Upon identifying failures or other shortcomings, as directed by the QSP, Risk Level 3 dischargers shall begin implementing repairs or design changes to BMPs within 72 hours of identification and complete the changes as soon as possible.

4. For each inspection required, Risk Level 3 dischargers shall complete an inspection checklist, using a form provided by the State Water Board or Regional Water Board or in an alternative format.

5. Risk Level 3 dischargers shall ensure that checklists shall remain onsite with the SWPPP and at a minimum, shall include:

    a. Inspection date and date the inspection report was written.

    b. Weather information, including presence or absence of precipitation, estimate of beginning of qualifying storm event, duration of event, time elapsed since last storm, and approximate amount of rainfall in inches.

    c. Site information, including stage of construction, activities completed, and approximate area of the site exposed.

    d. A description of any BMPs evaluated and any deficiencies noted.

    e. If the construction site is safely accessible during inclement weather, list the observations of all BMPs: erosion controls, sediment controls, chemical and waste controls, and non-storm water controls. Otherwise, list the results of visual inspections at all relevant outfalls, discharge points, downstream locations and any projected maintenance activities.

    f. Report the presence of noticeable odors or of any visible sheen on the surface of any discharges.

    g. Any corrective actions required, including any necessary changes to the SWPPP and the associated implementation dates.

    h. Photographs taken during the inspection, if any.

i. Inspector's name, title, and signature.

H. Rain Event Action Plan

1. **Additional Risk Level 3 Requirement:** The discharger shall ensure a QSP develop a Rain Event Action Plan (REAP) 48 hours prior to any likely precipitation event. A likely precipitation event is any weather pattern that is forecast to have a 50% or greater probability of producing precipitation in the project area. The QSP shall obtain a printed copy of precipitation forecast information from the National Weather Service Forecast Office (e.g., by entering the zip code of the project's location at http://www.srh.noaa.gov/forecast).

2. **Additional Risk Level 3 Requirement:** The discharger shall ensure a QSP develop the REAPs for all phases of construction (i.e., Grading and Land Development, Streets and Utilities, Vertical Construction, Final Landscaping and Site Stabilization).

3. **Additional Risk Level 3 Requirement:** The discharger shall ensure a QSP ensure that the REAP include, at a minimum, the following site information:

   a. Site Address.
   b. Calculated Risk Level (2 or 3).
   c. Site Storm Water Manager Information including the name, company, and 24-hour emergency telephone number.
   d. Erosion and Sediment Control Provider information including the name, company, and 24-hour emergency telephone number.
   e. Storm Water Sampling Agent information including the name, company, and 24-hour emergency telephone number.

4. **Additional Risk Level 3 Requirement:** The QSP shall include in the REAP, at a minimum, the following project phase information:

   a. Activities associated with each construction phase.
   b. Trades active on the construction site during each construction phase.
   c. Trade contractor information.
   d. Suggested actions for each project phase.

5. **Additional Risk Level 3 Requirement:** The QSP shall develop additional REAPs for project sites where construction activities are indefinitely halted or postponed (Inactive Construction). At a minimum, Inactive Construction REAPs must include:

a. Site Address.
b. Calculated Risk Level (2 or 3).
c. Site Storm Water Manager Information including the name, company, and 24-hour emergency telephone number.
d. Erosion and Sediment Control Provider information including the name, company, and 24-hour emergency telephone number.
e. Storm Water Sampling Agent information including the name, company, and 24-hour emergency telephone number.
f. Trades active on site during Inactive Construction.
g. Trade contractor information.
h. Suggested actions for inactive construction sites.

6. **Additional Risk Level 3 Requirement:** The discharger shall ensure a QSP begin implementation and make the REAP available onsite no later than 24 hours prior to the likely precipitation event.

7. **Additional Risk Level 3 Requirement:** The discharger shall ensure a QSP maintain onsite a paper copy of each REAP onsite in compliance with the record retention requirements of the Special Provisions in this General Permit.

I. Risk Level 3 Monitoring and Reporting Requirements

Table 2- Summary of Monitoring Requirements

Risk Level	Visual Inspections					Sample Collection	
	Quarterly Non-storm Water Discharge	Pre-storm Event		Daily Storm BMP	Post Storm	Storm Water Discharge	Receiving Water
		Baseline	REAP				
3	X	X	X	X	X	X	X[4]

1. Construction Site Monitoring Program Requirements

   a. Pursuant to Water Code Sections 13383 and 13267, all dischargers subject to this General Permit shall develop and implement a written site-specific Construction Site Monitoring Program (CSMP) in accordance with the requirements of this Section. The CSMP shall include all monitoring procedures and instructions, location maps, forms, and checklists as required in this section. The CSMP shall be developed prior to the commencement of construction activities, and revised as necessary to reflect project revisions. The CSMP shall be a part of the Storm Water Pollution Prevention Plan (SWPPP), included as an appendix or separate SWPPP chapter.

   b. Existing dischargers registered under the State Water Board Order No. 99-08-DWQ shall make and implement necessary revisions to their Monitoring Program to reflect the changes in this General Permit in a timely manner, but no later than July 1, 2010. Existing dischargers shall continue to implement their existing Monitoring Program in compliance with State Water Board Order No. 99-08-DWQ until the necessary revisions are completed according to the schedule above.

   c. When a change of ownership occurs for all or any portion of the construction site prior to completion or final stabilization, the new discharger shall comply with these requirements as of the date the ownership change occurs.

2. **Objectives**

   The CSMP shall be developed and implemented to address the following objectives:

[4] When NEL exceeded

a. To demonstrate that the site is in compliance with the Discharge Prohibitions and applicable Numeric Action Levels (NALs)/Numeric Effluent Limitations (NELs) of this General Permit.

b. To determine whether non-visible pollutants are present at the construction site and are causing or contributing to exceedances of water quality objectives.

c. To determine whether immediate corrective actions, additional Best Management Practice (BMP) implementation, or SWPPP revisions are necessary to reduce pollutants in storm water discharges and authorized non-storm water discharges.

d. To determine whether BMPs included in the SWPPP/Rain Event Action Plan (REAP) are effective in preventing or reducing pollutants in storm water discharges and authorized non-storm water discharges.

3. **Risk Level 3 – Visual Monitoring (Inspection) Requirements for Qualifying Rain Events**

a. Risk Level 3 dischargers shall visually observe (inspect) storm water discharges at all discharge locations within two business days (48 hours) after each qualifying rain event.

b. Risk Level 3 dischargers shall visually observe (inspect) the discharge of stored or contained storm water that is derived from and discharged subsequent to a qualifying rain event producing precipitation of ½ inch or more at the time of discharge. Stored or contained storm water that will likely discharge after operating hours due to anticipated precipitation shall be observed prior to the discharge during operating hours.

c. Risk Level 3 dischargers shall conduct visual observations (inspections) during business hours only.

d. Risk Level 3 dischargers shall record the time, date and rain gauge reading of all qualifying rain events.

e. Within 2 business days (48 hours) prior to each qualifying rain event, Risk Level 3 dischargers shall visually observe (inspect):

i. all storm water drainage areas to identify any spills, leaks, or uncontrolled pollutant sources. If needed, the discharger shall implement appropriate corrective actions.

ii. all BMPs to identify whether they have been properly implemented in accordance with the SWPPP/REAP. If needed, the discharger shall implement appropriate corrective actions.

iii. any storm water storage and containment areas to detect leaks and ensure maintenance of adequate freeboard.

f. For the visual observations (inspections) described in c.i. and c.iii above, Risk Level 3 dischargers shall observe the presence or absence of floating and suspended materials, a sheen on the surface, discolorations, turbidity, odors, and source(s) of any observed pollutants.

g. Within two business days (48 hours) after each qualifying rain event, Risk Level 3 dischargers shall conduct post rain event visual observations (inspections) to (1) identify whether BMPs were adequately designed, implemented, and effective, and (2) identify additional BMPs and revise the SWPPP accordingly.

h. Risk Level 3 dischargers shall maintain on-site records of all visual observations (inspections), personnel performing the observations, observation dates, weather conditions, locations observed, and corrective actions taken in response to the observations.

4. **Risk Level 3 – Water Quality Sampling and Analysis**

a. Risk Level 3 dischargers shall collect storm water grab samples from sampling locations, as defined in Section I.5. The storm water grab sample(s) obtained shall be representative of the flow and characteristics of the discharge.

b. At minimum, Risk Level 3 dischargers shall collect 3 samples per day of the qualifying event.

c. Risk Level 3 dischargers shall ensure that the grab samples collected of stored or contained storm water are from discharges subsequent to a qualifying rain event (producing precipitation of ½ inch or more at the time of discharge).

<u>Storm Water Effluent Monitoring Requirements</u>

d. Risk Level 3 dischargers shall analyze their effluent samples for:

i. pH and turbidity.

ii. Any additional parameters for which monitoring is required by the Regional Water Board.

e. Risk 3 dischargers shall electronically submit all storm event sampling results to the State Water Board no later than 5 days after the conclusion of the storm event.

f. Risk Level 3 discharger sites that have violated the turbidity daily average NEL shall analyze subsequent effluent samples for all the parameters specified in Section I.4.e, above, and Suspended Sediment Concentration (SSC).

Receiving Water Monitoring Requirements

g. In the event that a Risk Level 3 discharger violates an NEL contained in this General Permit and has a direct discharge into receiving waters, the Risk Level 3 discharger shall subsequently sample receiving waters (RWs) for all parameter(s) required in Section I.4.e above for the duration of coverage under this General Permit.

h. Risk Level 3 dischargers disturbing 30 acres or more of the landscape and with direct discharges into receiving waters shall conduct or participate in benthic macroinvertebrate bioassessment of RWs prior to commencement of construction activity (See Appendix 3).

i. Risk Level 3 dischargers shall obtain RW samples in accordance with the Receiving Water sampling location section (Section I.5), below.

5. **Risk Level 3 – Storm Water Discharge Water Quality Sampling Locations**

Effluent Sampling Locations

a. Risk Level 3 dischargers shall perform sampling and analysis of storm water discharges to characterize discharges associated with construction activity from the entire project disturbed area.

b. Risk Level 3 dischargers shall collect effluent samples at all discharge points where storm water is discharged off-site.

c. Risk Level 3 dischargers shall ensure that storm water discharge collected and observed represent[5] the effluent in each drainage area based on visual observation of the water and upstream conditions.

d. Risk Level 3 dischargers shall monitor and report site run-on from surrounding areas if there is reason to believe run-on may contribute to an exceedance of NALs or NELs.

e. Risk Level 3 dischargers who deploy an ATS on their site, or a portion on their site, shall collect ATS effluent samples and measurements from the discharge pipe or another location representative of the nature of the discharge.

f. Risk Level 3 dischargers shall select analytical test methods from the list provided in Table 3 below.

g. All storm water sample collection preservation and handling shall be conducted in accordance with Section I.7 "Storm Water Sample Collection and Handling Instructions" below.

Receiving Water Sampling Locations

h. **Upstream/up-gradient RW samples**: Risk Level 3 dischargers shall obtain any required upstream/up-gradient receiving water samples from a representative and accessible location as close as possible and upstream from the effluent discharge point.

i. **Downstream/down-gradient RW samples**: Risk Level 3 dischargers shall obtain any required downstream/down-gradient receiving water samples from a representative and accessible location as close as possible and downstream from the effluent discharge point.

j. If two or more discharge locations discharge to the same receiving water, Risk Level 3 dischargers may sample the receiving water at a single upstream and downstream location.

[5] For example, if there has been concrete work recently in an area, or drywall scrap is exposed to the rain, a pH sample shall be taken of drainage from the relevant work area. Similarly, if sediment-laden water is flowing through some parts of a silt fence, samples shall be taken of the sediment laden water even if most water flowing through the fence is clear.

6. **Risk Level 3 – Visual Observation and Sample Collection Exemptions**

   a. Risk Level 3 dischargers shall be prepared to collect samples and conduct visual observation (inspections) until the minimum requirements of Sections I.3 and I.4 above are completed. Risk Level 3 dischargers are not required to physically collect samples or conduct visual observation (inspections) under the following conditions:

      i. During dangerous weather conditions such as flooding and electrical storms.

      ii. Outside of scheduled site business hours.

   b. If no required samples or visual observation (inspections) are collected due to these exceptions, Risk Level 3 dischargers shall include an explanation in their SWPPP and in the Annual Report documenting why the sampling or visual observation (inspections) were not conducted.

7. **Risk Level 3 – Storm Water Sample Collection and Handling Instructions**

   a. Risk Level 3 dischargers shall refer to Table 3 below for test methods, detection limits, and reporting units.

   b. Risk Level 3 dischargers shall ensure that testing laboratories will receive samples within 48 hours of the physical sampling (unless otherwise required by the laboratory), and shall use only the sample containers provided by the laboratory to collect and store samples.

   c. Risk Level 3 dischargers shall designate and train personnel to collect, maintain, and ship samples in accordance with the Surface Water Ambient Monitoring Program's (SWAMP) 2008 Quality Assurance Program Plan (QAPrP).[6]

[6] Additional information regarding SWAMP's QAPrP and QAMP can be found at http://www.waterboards.ca.gov/water_issues/programs/swamp/.
QAPrP:http://www.waterboards.ca.gov/water_issues/programs/swamp/docs/qapp/swamp_qapp_master090108a.pdf
QAMP: http://www.waterboards.ca.gov/water_issues/programs/swamp/qamp.shtml

8. **Risk Level 3 – Monitoring Methods**

   a. Risk Level 3 dischargers shall include a description of the following items in the CSMP:

      i. Visual observation locations, visual observation procedures, and visual observation follow-up and tracking procedures.

      ii. Sampling locations, and sample collection and handling procedures. This shall include detailed procedures for sample collection, storage, preservation, and shipping to the testing lab to assure that consistent quality control and quality assurance is maintained. Dischargers shall attach to the monitoring program an example Chain of Custody form used when handling and shipping samples.

      iii. Identification of the analytical methods and related method detection limits (if applicable) for each parameter required in Section I.4 above.

   b. Risk Level 3 dischargers shall ensure that all sampling and sample preservation are in accordance with the current edition of "Standard Methods for the Examination of Water and Wastewater" (American Public Health Association). All monitoring instruments and equipment (including a discharger's own field instruments for measuring pH and turbidity) should be calibrated and maintained in accordance with manufacturers' specifications to ensure accurate measurements. Risk Level 3 dischargers shall ensure that all laboratory analyses are conducted according to test procedures under 40 CFR Part 136, unless other test procedures have been specified in this General Permit or by the Regional Water Board. With the exception of field analysis conducted by the discharger for turbidity and pH, all analyses should be sent to and conducted at a laboratory certified for such analyses by the State Department of Health Services (SSC exception). Risk Level 3 dischargers shall conduct their own field analysis of pH and may conduct their own field analysis of turbidity if the discharger has sufficient capability (qualified and trained employees, properly calibrated and maintained field instruments, etc.) to adequately perform the field analysis.

9. **Risk Level 3 – Analytical Methods**

   a. Risk Level 3 dischargers shall refer to Table 3 below for test methods, detection limits, and reporting units.

b. **pH**: Risk Level 3 dischargers shall perform pH analysis on-site with a calibrated pH meter or a pH test kit. Risk Level 3 dischargers shall record pH monitoring results on paper and retain these records in accordance with Section I.14, below.

c. **Turbidity**: Risk Level 3 dischargers shall perform turbidity analysis using a calibrated turbidity meter (turbidimeter), either on-site or at an accredited lab. Acceptable test methods include Standard Method 2130 or USEPA Method 180.1. The results will be recorded in the site log book in Nephelometric Turbidity Units (NTU).

d. **Suspended sediment concentration (SSC)**: Risk Level 3 dischargers shall perform SSC analysis using ASTM Method D3977-97.

e. **Bioassessment**: Risk Level 3 dischargers shall perform bioassessment sampling and analysis according to Appendix 3 of this General Permit.

10. **Risk Level 3 - Non-Storm Water Discharge Monitoring Requirements**

a. Visual Monitoring Requirements:

i. Risk Level 3 dischargers shall visually observe (inspect) each drainage area for the presence of (or indications of prior) unauthorized and authorized non-storm water discharges and their sources.

ii. Risk Level 3 dischargers shall conduct one visual observation (inspection) quarterly in each of the following periods: January-March, April-June, July-September, and October-December. Visual observation (inspections) are only required during daylight hours (sunrise to sunset).

iii. Risk Level 3 dischargers shall ensure that visual observations (inspections) document the presence or evidence of any non-storm water discharge (authorized or unauthorized), pollutant characteristics (floating and suspended material, sheen, discoloration, turbidity, odor, etc.), and source. Risk Level 3 dischargers shall maintain on-site records indicating the personnel performing the visual observation (inspections), the dates and approximate time each drainage area and non-storm water discharge was observed, and the response taken to eliminate unauthorized non-storm water discharges and to

reduce or prevent pollutants from contacting non-storm water discharges.

b. Effluent Sampling Locations:

i. Risk Level 3 dischargers shall sample effluent at all discharge points where non-storm water and/or authorized non-storm water is discharged off-site.

ii. Risk Level 3 dischargers shall send all non-storm water sample analyses to a laboratory certified for such analyses by the State Department of Health Services.

iii. Risk Level 3 dischargers shall monitor and report run-on from surrounding areas if there is reason to believe run-on may contribute to an exceedance of NALs or NELs.

11. **Risk Level 3 – Non-Visible Pollutant Monitoring Requirements**

a. Risk Level 3 dischargers shall collect one or more samples during any breach, malfunction, leakage, or spill observed during a visual inspection which could result in the discharge of pollutants to surface waters that would not be visually detectable in storm water.

b. Risk Level 3 dischargers shall ensure that water samples are large enough to characterize the site conditions.

c. Risk Level 3 dischargers shall collect samples at all discharge locations that can be safely accessed.

d. Risk Level 3 dischargers shall collect samples during the first two hours of discharge from rain events that occur during business hours and which generate runoff.

e. Risk Level 3 dischargers shall analyze samples for all non-visible pollutant parameters (if applicable) - parameters indicating the presence of pollutants identified in the pollutant source assessment required (Risk Level 3 dischargers shall modify their CSMPs to address these additional parameters in accordance with any updated SWPPP pollutant source assessment).

f. Risk Level 3 dischargers shall collect a sample of storm water that has not come in contact with the disturbed soil or the materials stored or used on-site (uncontaminated sample) for comparison with the discharge sample.

g. Risk Level 3 dischargers shall compare the uncontaminated sample to the samples of discharge using field analysis or through laboratory analysis.[7]

h. Risk Level 3 dischargers shall keep all field /or analytical data in the SWPPP document.

12. **Risk Level 3 – Watershed Monitoring Option**

Risk Level 3 dischargers who are part of a qualified regional watershed-based monitoring program may be eligible for relief from the requirements in Sections I.5. The Regional Water Board may approve proposals to substitute an acceptable watershed-based monitoring program by determining if the watershed-based monitoring program will provide substantially similar monitoring information in evaluating discharger compliance with the requirements of this General Permit.

13. **Risk Level 3 – Particle Size Analysis for Project Risk Justification**

Risk Level 3 dischargers justifying an alternative project risk shall report a soil particle size analysis used to determine the RUSLE K-Factor. ASTM D-422 (Standard Test Method for Particle-Size Analysis of Soils), as revised, shall be used to determine the percentages of sand, very fine sand, silt, and clay on the site.

14. **Risk Level 3 – Records**

Risk Level 3 dischargers shall retain records of all storm water monitoring information and copies of all reports (including Annual Reports) for a period of at least three years. Risk Level 3 dischargers shall retain all records on-site while construction is ongoing. These records include:

a. The date, place, time of facility inspections, sampling, visual observation (inspections), and/or measurements, including precipitation.

b. The individual(s) who performed the facility inspections, sampling, visual observation (inspections), and or measurements.

c. The date and approximate time of analyses.

[7] For laboratory analysis, all sampling, sample preservation, and analyses must be conducted according to test procedures under 40 CFR Part 136. Field discharge samples shall be collected and analyzed according to the specifications of the manufacturer of the sampling devices employed.

d. The individual(s) who performed the analyses.

e. A summary of all analytical results from the last three years, the method detection limits and reporting units, the analytical techniques or methods used, and the chain of custody forms.

f. Rain gauge readings from site inspections.

g. Quality assurance/quality control records and results.

h. Non-storm water discharge inspections and visual observation (inspections) and storm water discharge visual observation records (see Sections I.3 and I.10 above).

i. Visual observation and sample collection exception records (see Section I.6 above).

j. The records of any corrective actions and follow-up activities that resulted from analytical results, visual observation (inspections), or inspections.

15. **Risk Level 3 – NAL Exceedance Report**

a. In the event that any effluent sample exceeds an applicable NAL, Risk Level 3 dischargers shall electronically submit all storm event sampling results to the State Water Board no later than 10 days after the conclusion of the storm event. The Regional Boards have the authority to require the submittal of an NAL Exceedance Report.

b. Risk Level 3 dischargers shall certify each NAL Exceedance Report in accordance with the Special Provisions for Construction Activity In this General Permit.

c. Risk Level 3 dischargers shall retain an electronic or paper copy of each NAL Exceedance Report for a minimum of three years after the date the annual report is filed.

d. Risk Level 3 dischargers shall include in the NAL Exceedance Report:

i. The analytical method(s), method reporting unit(s), and method detection limit(s) of each analytical parameter (analytical results that are less than the method detection limit shall be reported as “less than the method detection limit”).

ii. The date, place, time of sampling, visual observation (inspections), and/or measurements, including precipitation.

iii. A description of the current BMPs associated with the effluent sample that exceeded the NAL and the proposed corrective actions taken.

16. **Risk Level 3 – NEL Violation Report**

a. Risk Level 3 dischargers shall electronically submit all storm event sampling results to the State Water Board no later than 5 days after the conclusion of the storm event.

b. In the event that a discharger has violated an applicable NEL, Risk Level 3 dischargers shall submit an NEL Violation Report to the State Water Board within 24 hours after the NEL exceedance has been identified.

c. Risk Level 3 dischargers shall certify each NEL Violation Report in accordance with the Special Provisions for Construction Activity in this General Permit.

d. Risk Level 3 dischargers shall retain an electronic or paper copy of each NEL Violation Report for a minimum of three years after the date the annual report is filed.

e. Risk Level 3 dischargers shall include in the NEL Violation Report:

i. The analytical method(s), method reporting unit(s), and method detection limit(s) of each analytical parameter (analytical results that are less than the method detection limit shall be reported as “less than the method detection limit”);

ii. The date, place, time of sampling, visual observation (inspections), and/or measurements, including precipitation; and

iii. A Description of the current onsite BMPs, and the proposed corrective actions taken to manage the NEL exceedance.

f. Compliance Storm Exemption - In the event that an applicable NEL has been exceeded during a storm event equal to or larger than the Compliance Storm Event, Risk level 3 discharger shall report the on-site rain gauge reading and nearby governmental rain gauge readings for verification.

17. **Risk Level 3 – Bioassessment**

a. Risk Level 3 dischargers with a total project-related ground disturbance exceeding 30 acres shall:

i. Conduct bioassessment monitoring, as described in Appendix 3.

ii. Include the collection and reporting of specified in stream biological data and physical habitat.

iii. Use the bioassessment sample collection and Quality Assurance & Quality Control (QA/QC) protocols developed by the State of California's Surface Water Ambient Monitoring Program (SWAMP).[8]

b. Risk Level 3 dischargers qualifying for bioassessment, where construction commences out of an index period for the site location shall:

i. Receive Regional Board approval for the sampling exception.

ii. Conduct bioassessment monitoring, as described in Appendix 3.

iii. Include the collection and reporting of specified instream biological data and physical habitat.

iv. Use the bioassessment sample collection and Quality Assurance & Quality Control (QA/QC) protocols developed by the State of California's Surface Water Ambient Monitoring Program (SWAMP).

OR

v. Make a check payable to: Cal State Chico Foundation (SWAMP Bank Account) or San Jose State Foundation (SWAMP Bank Account) and include the WDID# on the check for the amount calculated for the exempted project.

vi. Send a copy of the check to the Regional Water Board office for the site's region.

vii. Invest $**7,500.00 X The number of samples required** into the SWAMP program as compensation (upon regional board approval).

[8] http://www.waterboards.ca.gov/water_issues/programs/swamp/.

Table 3 – Risk Level 3 Test Methods, Detection Limits, Reporting Units and Applicable NALs/NELs

Parameter	Test Method / Protocol	Discharge Type	Min. Detection Limit	Reporting Units	Numeric Action Level	Numeric Effluent Limitation
pH	Field test with calibrated portable instrument	Risk Level 3 Discharges	0.2	pH units	lower NAL = 6.5 upper NAL = 8.5	lower NEL = 6.0 upper NEL = 9.0
Turbidity	EPA 0180.1 and/or field test with calibrated portable instrument	Risk Level 3 Discharges other than ATS	1	NTU	250 NTU	500 NTU
		For ATS discharges	1	NTU	N/A	10 NTU for Daily Weighted Average & 20 NTU for Any Single Sample
SSC	ASTM Method D 3977-97[9]	Risk Level 3 (if NEL exceeded)	5	mg/L	N/A	N/A
Bioassessment	(STE) Level I of (SAFIT),[10] fixed-count of 600 org/sample	Risk Level 3 projects> 30 acres	N/A	N/A	N/A	N/A

[9] ASTM, 1999, Standard Test Method for Determining Sediment Concentration in Water Samples: American Society of Testing and Materials, D 3977-97, Vol. 11.02, pp. 389-394.

[10] The current SAFIT STEs (28 November 2006) list requirements for both the Level I and Level II taxonomic effort, and are located at: http://www.swrcb.ca.gov/swamp/docs/safit/ste_list.pdf. When new editions are published by SAFIT, they will supersede all previous editions. All editions will be posted at the State Water Board's SWAMP website.

ATTACHMENT F:
Active Treatment System (ATS) Requirements

Table 1 – Numeric Effluent Limitations, Numeric Action Levels, Test Methods, Detection Limits, and Reporting Units

Parameter	Test Method	Discharge Type	Min. Detection Limit	Units	Numeric Action Level	Numeric Effluent Limitation
Turbidity	EPA 0180.1 and/or field test with a calibrated portable instrument	For ATS discharges	1	NTU	N/A	10 NTU for Daily Flow-Weighted Average & 20 NTU for Any Single Sample

A. Dischargers choosing to implement an Active Treatment System (ATS) on their site shall comply with all of the requirements in this Attachment.

B. The discharger shall maintain a paper copy of each ATS specification onsite in compliance with the record retention requirements in the Special Provisions of this General Permit.

C. ATS Design, Operation and Submittals

1. The ATS shall be designed and approved by a Certified Professional in Erosion and Sediment Control (CPESC), a Certified Professional in Storm Water Quality (CPSWQ); a California registered civil engineer; or any other California registered engineer.

2. The discharger shall ensure that the ATS is designed in a manner to preclude the accidental discharge of settled floc[1] during floc pumping or related operations.

3. The discharger shall design outlets to dissipate energy from concentrated flows.

4. The discharger shall install and operate an ATS by assigning a lead person (or project manager) who has either a minimum of five years construction storm

[1] Floc is defined as a clump of solids formed by the chemical action in ATS systems.

water experience or who is a licensed contractors specifically holding a California Class A Contractors license.[2]

5. The discharger shall prepare an ATS Plan that combines the site-specific data and treatment system information required to safely and efficiently operate an ATS. The ATS Plan shall be electronically submitted to the State Water Board at least 14 days prior to the planned operation of the ATS and a paper copy shall be available onsite during ATS operation. At a minimum, the ATS Plan shall include:

   a. ATS Operation and Maintenance Manual for All Equipment.

   b. ATS Monitoring, Sampling & Reporting Plan, including Quality Assurance/Quality Control (QA/QC).

   c. ATS Health and Safety Plan.

   d. ATS Spill Prevention Plan.

6. The ATS shall be designed to capture and treat (within a 72-hour period) a volume equivalent to the runoff from a 10-year, 24-hour storm event using a watershed runoff coefficient of 1.0.

D. Treatment – Chemical Coagulation/Flocculation

1. Jar tests shall be conducted using water samples selected to represent typical site conditions and in accordance with ASTM D2035-08 (2003).

2. The discharger shall conduct, at minimum, six site-specific jar tests (per polymer with one test serving as a control) for each project to determine the proper polymer and dosage levels for their ATS.

3. Single field jar tests may also be conducted during a project if conditions warrant, for example if construction activities disturb changing types of soils, which consequently cause change in storm water and runoff characteristics.

E. Residual Chemical and Toxicity Requirements

1. The discharger shall utilize a residual chemical test method that has a method detection limit (MDL) of 10% or less than the maximum allowable threshold

[2] Business and Professions Code Division 3, Chapter 9, Article 4, Class A Contractor: A general engineering contractor is a contractor whose principal contracting business is in connection with fixed works requiring specialized engineering knowledge and skill. [http://www.cslb.ca.gov/General-Information/library/licensing-classifications.asp].

concentration[3] (MATC) for the specific coagulant in use and for the most sensitive species of the chemical used.

2. The discharger shall utilize a residual chemical test method that produces a result within one hour of sampling.

3. The discharger shall have a California State certified laboratory validate the selected residual chemical test. Specifically the lab will review the test protocol, test parameters, and the detection limit of the coagulant. The discharger shall electronically submit this documentation as part of the ATS Plan.

4. If the discharger cannot utilize a residual chemical test method that meets the requirements above, the discharger shall operate the ATS in Batch Treatment[4] mode.

5. A discharger planning to operate in Batch Treatment mode shall perform toxicity testing in accordance with the following:

   a. The discharger shall initiate acute toxicity testing on effluent samples representing effluent from each batch prior to discharge[5]. All bioassays shall be sent to a laboratory certified by the Department of Health Services (DHS) Environmental Laboratory Accreditation Program (ELAP). The required field of testing number for Whole Effluent Toxicity (WET) testing is E113.[6]

   b. Acute toxicity tests shall be conducted with the following species and protocols. The methods to be used in the acute toxicity testing shall be those outlined for a 96-hour acute test in "Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms, USEPA-841-R-02-012" for Fathead minnow, *Pimephales promelas* (fathead minnow). Acute toxicity for *Oncorhynchus mykiss* (Rainbow Trout) may be used as a substitute for testing fathead minnows.

   c. All toxicity tests shall meet quality assurance criteria and test acceptability criteria in the most recent versions of the EPA test method for WET testing.

   d. The discharger shall electronically report all acute toxicity testing.

[3] The Maximum Allowable Threshold Concentration (MATC) is the allowable concentration of residual, or dissolved, coagulant/flocculant in effluent. The MATC shall be coagulant/flocculant-specific, and based on toxicity testing conducted by an independent, third-party laboratory. A typical MATC would be:
The MATC is equal to the geometric mean of the NOEC (No Observed Effect Concentration) and LOEC (Lowest Observed Effect Concentration) Acute and Chronic toxicity results for most sensitive species determined for the specific coagulant. The most sensitive species test shall be used to determine the MATC.

[4] Batch Treatment mode is defined as holding or recirculating the treated water in a holding basin or tank(s) until treatment is complete or the basin or storage tank(s) is full.

[5] This requirement only requires that the test be initiated prior to discharge.

[6] http://www.dhs.ca.gov/ps/ls/elap/pdf/FOT_Desc.pdf.

F. Filtration

1. The ATS shall include a filtration step between the coagulant treatment train and the effluent discharge. This is commonly provided by sand, bag, or cartridge filters, which are sized to capture suspended material that might pass through the clarifier tanks.

2. Differential pressure measurements shall be taken to monitor filter loading and confirm that the final filter stage is functioning properly.

G. Residuals Management

1. Sediment shall be removed from the storage or treatment cells as necessary to ensure that the cells maintain their required water storage (i.e., volume) capability.

2. Handling and disposal of all solids generated during ATS operations shall be done in accordance with all local, state, and federal laws and regulations.

H. ATS Instrumentation

1. The ATS shall be equipped with instrumentation that automatically measures and records effluent water quality data and flow rate.

2. The minimum data recorded shall be consistent with the Monitoring and Reporting requirements below, and shall include:

   a. Influent Turbidity

   b. Effluent Turbidity

   c. Influent pH

   d. Effluent pH

   e. Residual Chemical

   f. Effluent Flow rate

   g. Effluent Flow volume

3. Systems shall be equipped with a data recording system, such as data loggers or webserver-based systems, which records each measurement on a frequency no longer than once every 15 minutes.

4. Cumulative flow volume shall be recorded daily. The data recording system shall have the capacity to record a minimum of seven days continuous data.

5. Instrumentation systems shall be interfaced with system control to provide auto shutoff or recirculation in the event that effluent measurements exceed turbidity or pH.

6. The system shall also assure that upon system upset, power failure, or other catastrophic event, the ATS will default to a recirculation mode or safe shut down.

7. Instrumentation (flow meters, probes, valves, streaming current detectors, controlling computers, etc.) shall be installed and maintained per manufacturer's recommendations, which shall be included in the QA/QC plan.

8. The QA/QC plan shall also specify calibration procedures and frequencies, instrument method detection limit or sensitivity verification, laboratory duplicate procedures, and other pertinent procedures.

9. The instrumentation system shall include a method for controlling coagulant dose, to prevent potential overdosing. Available technologies include flow/turbidity proportional metering, periodic jar testing and metering pump adjustment, and ionic charge measurement controlling the metering pump.

I. ATS Effluent Discharge

1. ATS effluent shall comply with all provisions and prohibitions in this General Permit, specifically the NELs.

2. NELs for discharges from an ATS:

   a. Turbidity of all ATS discharges shall be less than 10 NTU for daily flow-weighted average of all samples and 20 NTU for any single sample.

   b. Residual Chemical shall be < 10% of MATC[7] for the most sensitive species of the chemical used.

3. If an analytical effluent sampling result is outside the range of pH NELs (i.e., is below the lower NEL for pH or exceeds the upper NEL for pH) or exceeds the turbidity NEL (as listed in Table 1), the discharger is in violation of this General

[7] The Maximum Allowable Threshold Concentration (MATC) is the allowable concentration of residual, or dissolved, coagulant/flocculant in effluent. The MATC shall be coagulant/flocculant-specific, and based on toxicity testing conducted by an independent, third-party laboratory. The MATC is equal to the geometric mean of the NOEC (No Observed Effect Concentration) and LOEC (Lowest Observed Effect Concentration) Acute and Chronic toxicity results for most sensitive species determined for the specific coagulant. The most sensitive species test shall be used to determine the MATC.

Permit and shall electronically file the results in violation within 24-hours of obtaining the results.

4. If ATS effluent is authorized to discharge into a sanitary sewer system, the discharger shall comply with any pre-treatment requirements applicable for that system. The discharger shall include any specific criteria required by the municipality in the ATS Plan.

5. Compliance Storm Event:

   Discharges of storm water from ATS shall comply with applicable NELs (above) unless the storm event causing the discharges is determined after the fact to be equal to or larger than the Compliance Storm Event (expressed in inches of rainfall). The Compliance Storm Event for ATS discharges is the 10 year, 24 hour storm, as determined using these maps:

   http://www.wrcc.dri.edu/pcpnfreq/nca10y24.gif
   http://www.wrcc.dri.edu/pcpnfreq/sca10y24.gif

   This exemption is dependent on the submission of rain gauge data verifying the storm event is equal to or larger than the Compliance Storm.

J. Operation and Maintenance Plan

1. Each Project shall have a site-specific Operation and Maintenance (O&M) Manual covering the procedures required to install, operate and maintain the ATS.[8]

2. The O&M Manual shall only be used in conjunction with appropriate project-specific design specifications that describe the system configuration and operating parameters.

3. The O&M Manual shall have operating manuals for specific pumps, generators, control systems,and other equipment.

K. Sampling and Reporting Quality Assurance/ Quality Check (QA/QC) Plan

4. A project-specific QA/QC Plan shall be developed for each project. The QA/QC Plan shall include at a minimum:

   a. Calibration – Calibration methods and frequencies for all system and field instruments shall be specified.

[8] The manual is typically in a modular format covering generalized procedures for each component that is utilized in a particular system.

b. Method Detection Limits (MDLs) – The methods for determining MDLs shall be specified for each residual coagulant measurement method. Acceptable minimum MDLs for each method, specific to individual coagulants, shall be specified.

c. Laboratory Duplicates – Requirements for monthly laboratory duplicates for residual coagulant analysis shall be specified.

L. Personnel Training

1. Operators shall have training specific to using an ATS and liquid coagulants for storm water discharges in California.

2. The training shall be in the form of a formal class with a certificate and requirements for testing and certificate renewal.

3. Training shall include a minimum of eight hours classroom and 32 hours field training. The course shall cover the following topics:

   a. Coagulation Basics –Chemistry and physical processes

   b. ATS System Design and Operating Principles

   c. ATS Control Systems

   d. Coagulant Selection – Jar testing, dose determination, etc.

   e. Aquatic Safety/Toxicity of Coagulants, proper handling and safety

   f. Monitoring, Sampling, and Analysis

   g. Reporting and Recordkeeping

   h. Emergency Response

M. Active Treatment System (ATS) Monitoring Requirements

Any discharger who deploys an ATS on their site shall conduct the following:

1. Visual Monitoring

   a. A designated responsible person shall be on site daily at all times during treatment operations.

b. Daily on-site visual monitoring of the system for proper performance shall be conducted and recorded in the project data log.

   i. The log shall include the name and phone number of the person responsible for system operation and monitoring.

   ii. The log shall include documentation of the responsible person's training.

2. Operational and Compliance Monitoring

   a. Flow shall be continuously monitored and recorded at not greater than 15-minute intervals for total volume treated and discharged.

   b. Influent and effluent pH must be continuously monitored and recorded at not greater than 15-minute intervals.

   c. Influent and effluent turbidity (expressed in NTU) must be continuously monitored and recorded at not greater than 15-minute intervals.

   d. The type and amount of chemical used for pH adjustment, if any, shall be monitored and recorded.

   e. Dose rate of chemical used in the ATS system (expressed in mg/L) shall be monitored and reported 15-minutes after startup and every 8 hours of operation.

   f. Laboratory duplicates – monthly laboratory duplicates for residual coagulant analysis must be performed and records shall be maintained onsite.

   g. Effluent shall be monitored and recorded for residual chemical/additive levels.

   h. If a residual chemical/additive test does not exist and the ATS is operating in a batch treatment mode of operation refer to the toxicity monitoring requirements below.

3. Toxicity Monitoring

   A discharger operating in batch treatment mode shall perform toxicity testing in accordance with the following:

   a. The discharger shall initiate acute toxicity testing on effluent samples representing effluent from each batch prior to discharge.[9] All bioassays shall be sent to a laboratory certified by the Department of Health Services (DHS)

[9] This requirement only requires that the test be initiated prior to discharge.

Environmental Laboratory Accreditation Program (ELAP). The required field of testing number for Whole Effluent Toxicity (WET) testing is E113.[10]

b. Acute toxicity tests shall be conducted with the following species and protocols. The methods to be used in the acute toxicity testing shall be those outlined for a 96-hour acute test in "Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms, USEPA-841-R-02-012" for Fathead minnow, *Pimephales promelas or* Rainbow trout *Oncorhynchus mykiss* may be used as a substitute for fathead minnow.

c. All toxicity tests shall meet quality assurance criteria and test acceptability criteria in the most recent versions of the EPA test method for WET testing.[11]

4. Reporting and Recordkeeping

At a minimum, every 30 days a LRP representing the discharger shall access the State Water Boards Storm Water Mulit-Application and Report Tracking system (SMARTS) and electronically upload field data from the ATS. Records must be kept for three years after the project is completed .

5. Non-compliance Reporting

a. Any indications of toxicity or other violations of water quality objectives shall be reported to the appropriate regulatory agency as required by this General Permit.

b. Upon any measurements that exceed water quality standards, the system operator shall immediately notify his supervisor or other responsible parties, who shall notify the Regional Water Board.

c. If any monitoring data exceeds any applicable NEL in this General Permit, the discharger shall electronically submit a NEL Violation Report to the State Water Board within 24 hours after the NEL exceedance has been identified.

i. ATS dischargers shall certify each NEL Violation Report in accordance with the Special Provisions for Construction Activity in this General Permit.

ii. ATS dischargers shall retain an electronic or paper copy of each NEL Violation Report for a minimum of three years after the date the annual report is filed.

iii. ATS dischargers shall include in the NEL Violation Report:

[10] http://www.dhs.ca.gov/ps/ls/elap/pdf/FOT_Desc.pdf.
[11] http://www.epa.gov/waterscience/methods/wet/.

(1) The analytical method(s), method reporting unit(s), and method detection limit(s) of each analytical parameter (analytical results that are less than the method detection limit shall be reported as “less than the method detection limit”);

(2) The date, place, time of sampling, visual observation (inspections), and/or measurements, including precipitation; and

(3) A description of the current onsite BMPs, and the proposed corrective actions taken to manage the NEL exceedance.

iv. Compliance Storm Exemption - In the event that an applicable NEL has been exceeded during a storm event equal to or larger than the Compliance Storm Event, ATS dischargers shall report the on-site rain gauge reading and nearby governmental rain gauge readings for verification.

Risk Determination Worksheet

Step 1	Determine Sediment Risk via one of the options listed: 1. GIS Map Method - EPA Rainfall Erosivity Calculator & GIS map 2. Individual Method - EPA Rainfall Erosivity Calculator & Individual Data
Step 2	Determine Receiving Water Risk via one of the options listed: 1. GIS map of Sediment Sensitive Watersheds provided (in development) 2. List of Sediment Sensitive Watersheds provided
Step 3	Determine Combined Risk Level

Sediment Risk Factor Worksheet	Entry

A) R Factor

Analyses of data indicated that when factors other than rainfall are held constant, soil loss is directly proportional to a rainfall factor composed of total storm kinetic energy (E) times the maximum 30-min intensity (I30) (Wischmeier and Smith, 1958). The numerical value of R is the average annual sum of EI30 for storm events during a rainfall record of at least 22 years. "Isoerodent" maps were developed based on R values calculated for more than 1000 locations in the Western U.S. Refer to the link below to determine the R factor for the project site.

http://cfpub.epa.gov/npdes/stormwater/LEW/lewCalculator.cfm

R Factor Value	0

B) K Factor (weighted average, by area, for all site soils)

The soil-erodibility factor K represents: (1) susceptibility of soil or surface material to erosion, (2) transportability of the sediment, and (3) the amount and rate of runoff given a particular rainfall input, as measured under a standard condition. Fine-textured soils that are high in clay have low K values (about 0.05 to 0.15) because the particles are resistant to detachment. Coarse-textured soils, such as sandy soils, also have low K values (about 0.05 to 0.2) because of high infiltration resulting in low runoff even though these particles are easily detached. Medium-textured soils, such as a silt loam, have moderate K values (about 0.25 to 0.45) because they are moderately susceptible to particle detachment and they produce runoff at moderate rates. Soils having a high silt content are especially susceptible to erosion and have high K values, which can exceed 0.45 and can be as large as 0.65. Silt-size particles are easily detached and tend to crust, producing high rates and large volumes of runoff. Use Site-specific data must be submitted.

Site-specific K factor guidance

K Factor Value	0

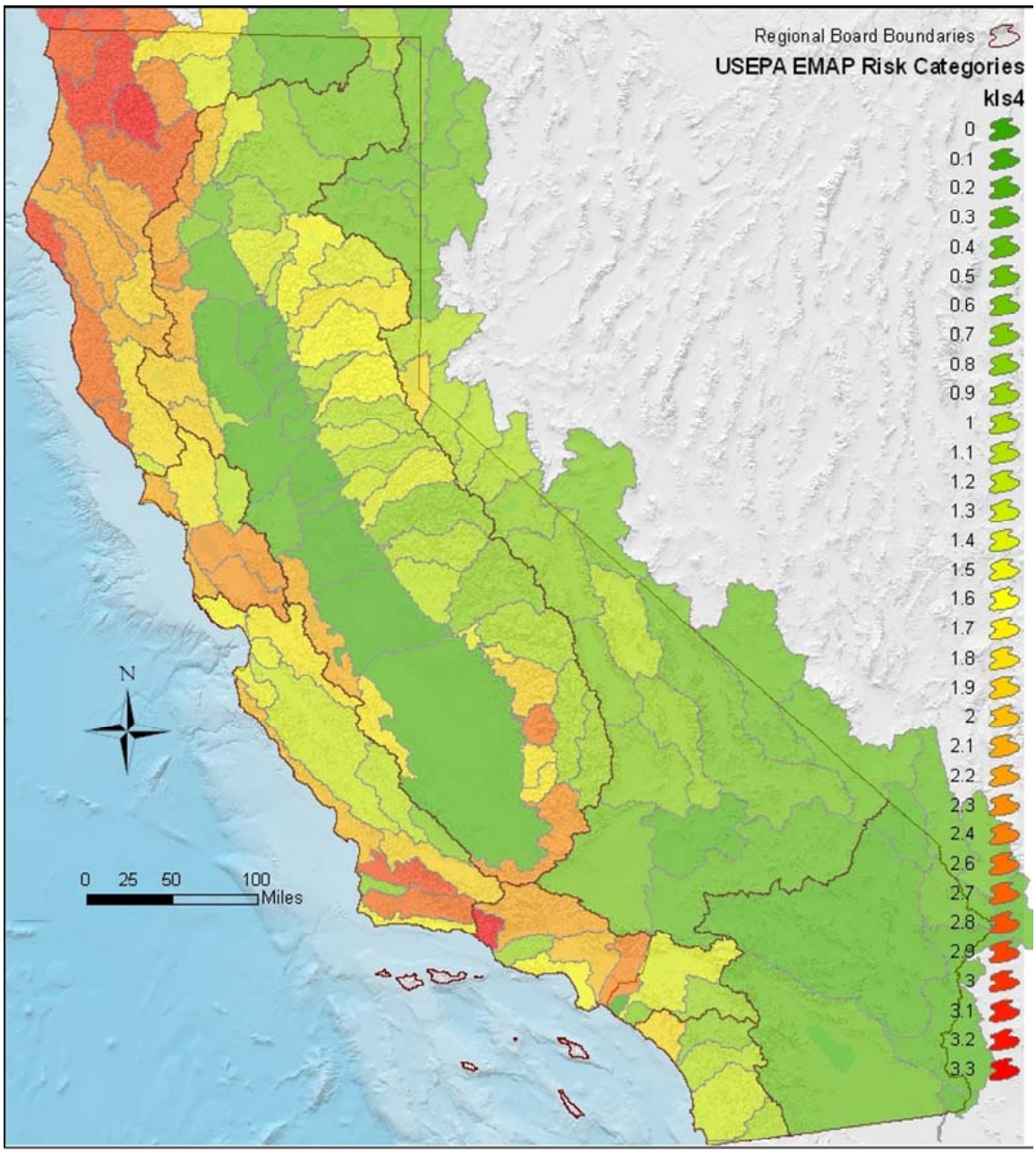
C) LS Factor (weighted average, by area, for all slopes)

The effect of topography on erosion is accounted for by the LS factor, which combines the effects of a hillslope-length factor, L, and a hillslope-gradient factor, S. Generally speaking, as hillslope length and/or hillslope gradient increase, soil loss increases. As hillslope length increases, total soil loss and soil loss per unit area increase due to the progressive accumulation of runoff in the downslope direction. As the hillslope gradient increases, the velocity and erosivity of runoff increases. Use the LS table located in separate tab of this spreadsheet to determine LS factors. Estimate the weighted LS for the site prior to construction.

LS Table

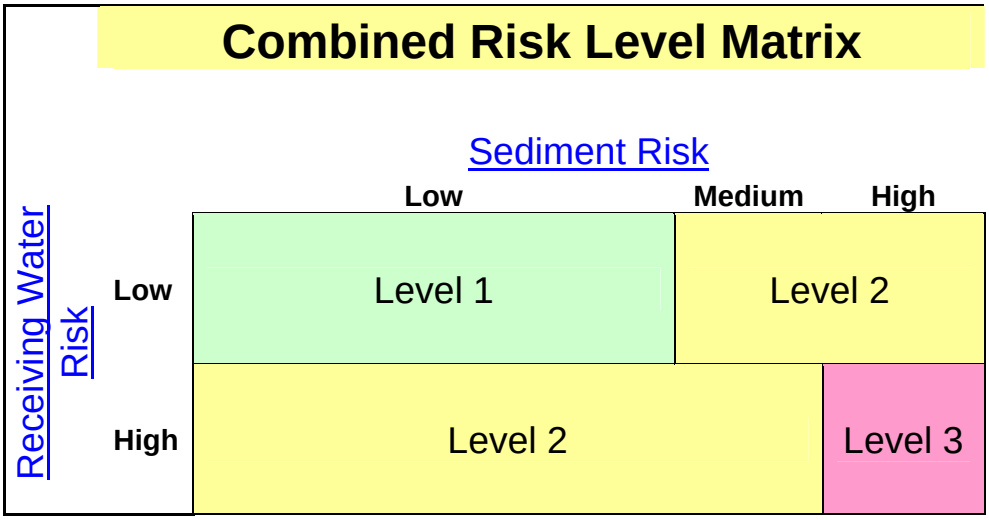
LS Factor Value	0
Watershed Erosion Estimate (=RxKxLS) in tons/acre	0
Site Sediment Risk Factor Low Sediment Risk: < 15 tons/acre Medium Sediment Risk: >=15 and <75 tons/acre High Sediment Risk: >= 75 tons/acre	**Low**

For the GIS Map Method, the R factor for the project is calculated using the online calculator at (see cell to right). The product of K and LS are shown on the figure below. To determine soil loss in tons per acre, multiply the R factor times the value for K times LS from the map.
http://cfpub.epa.gov/npdes/stormwater/LEW/lewCalculator.cfm



Receiving Water (RW) Risk Factor Worksheet	Entry	Score
A. Watershed Characteristics	**yes/no**	
A.1. Does the disturbed area discharge (either directly or indirectly) to a **303(d)-listed waterbody impaired by sediment**? (For help with impaired waterbodies please check the attached worksheet or visit the link below) or has a **USEPA approved TMDL implementation plan for sediment**?: 2006 Approved Sediment-impared WBs Worksheet http://www.waterboards.ca.gov/water_issues/programs/tmdl/303d_lists2006_epa.shtml **OR**	**Yes**	**High**
A.2. Does the disturbed area discharge to a waterbody with designated beneficial uses of SPAWN & COLD & MIGRATORY? http://www.ice.ucdavis.edu/geowbs/asp/wbguse.asp		

Combined Risk Level Matrix



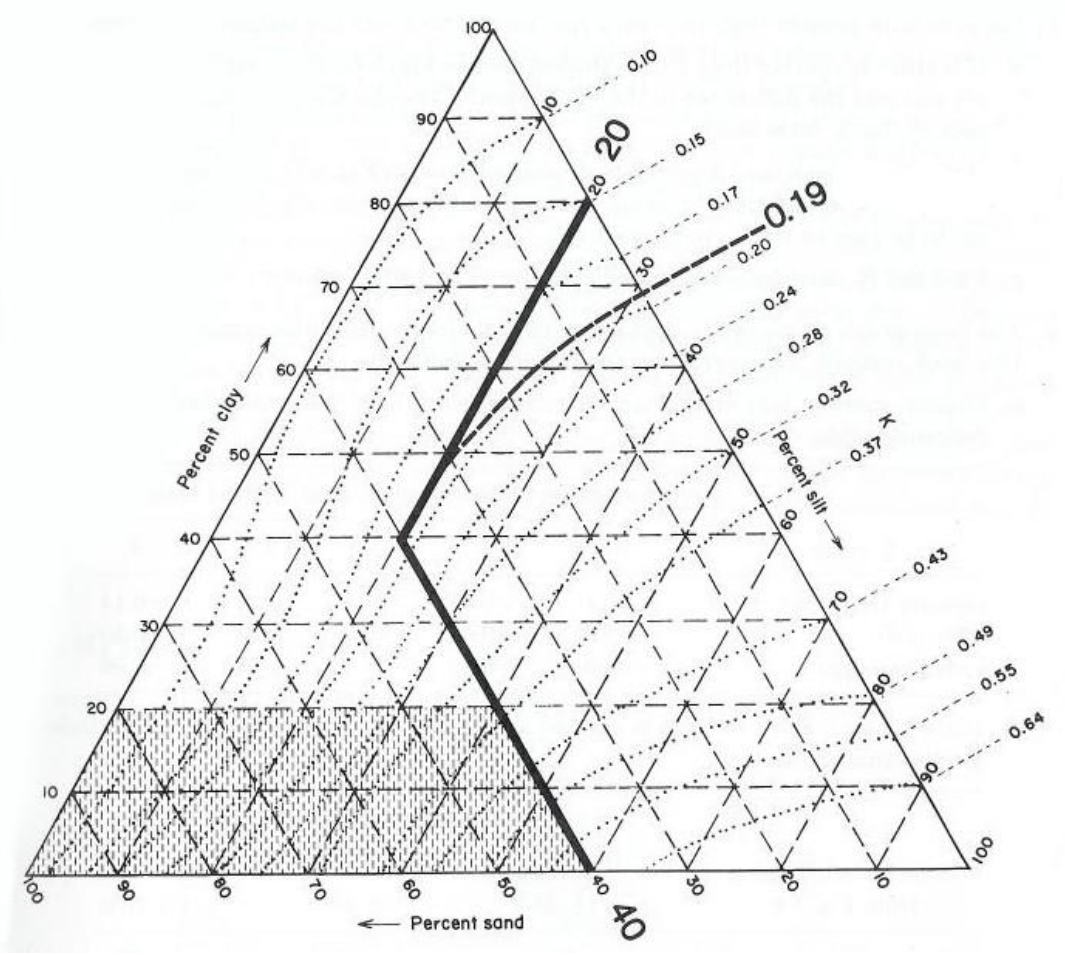
Project Sediment Risk: Low

Project RW Risk: High

Project Combined Risk: Level 2

Soil Erodibility Factor (K)

The K factor can be determined by using the nomograph method, which requires that a particle size analysis (ASTM D-422) be done to determine the percentages of sand, very fine sand, silt and clay. Use the figure below to determine appropriate K value.



Erickson triangular nomograph used to estimate soil erodibility (K) factor.
The figure above is the USDA nomograph used to determine the K factor for a soil, based on its texture (% silt plus very fine sand, % sand, % organic matter, soil structure, and permeability).
Nomograph from Erickson 1977 as referenced in Goldman et. al., 1986.

Average Watershed Slope (%)

Sheet Flow Length (ft)	0.2	0.5	1.0	2.0	3.0	4.0	5.0	6.0	8.0	10.0	12.0	14.0	16.0	20.0	
<3	0.05	0.07	0.09	0.13	0.17	0.20	0.23	0.26	0.32	0.35	0.36	0.38	0.39	0.41	
6	0.05	0.07	0.09	0.13	0.17	0.20	0.23	0.26	0.32	0.37	0.41	0.45	0.49	0.56	
9	0.05	0.07	0.09	0.13	0.17	0.20	0.23	0.26	0.32	0.38	0.45	0.51	0.56	0.67	
12	0.05	0.07	0.09	0.13	0.17	0.20	0.23	0.26	0.32	0.39	0.47	0.55	0.62	0.76	
15	0.05	0.07	0.09	0.13	0.17	0.20	0.23	0.26	0.32	0.40	0.49	0.58	0.67	0.84	
25	0.05	0.07	0.10	0.16	0.21	0.26	0.31	0.36	0.45	0.57	0.71	0.85	0.98	1.24	
50	0.05	0.08	0.13	0.21	0.30	0.38	0.46	0.54	0.70	0.91	1.15	1.40	1.64	2.10	
75	0.05	0.08	0.14	0.25	0.36	0.47	0.58	0.69	0.91	1.20	1.54	1.87	2.21	2.86	
100	0.05	0.09	0.15	0.28	0.41	0.55	0.68	0.82	1.10	1.46	1.88	2.31	2.73	3.57	
150	0.05	0.09	0.17	0.33	0.50	0.68	0.86	1.05	1.43	1.92	2.51	3.09	3.68	4.85	
200	0.06	0.10	0.18	0.37	0.57	0.79	1.02	1.25	1.72	2.34	3.07	3.81	4.56	6.04	
250	0.06	0.10	0.19	0.40	0.64	0.89	1.16	1.43	1.99	2.72	3.60	4.48	5.37	7.16	
300	0.06	0.10	0.20	0.43	0.69	0.98	1.28	1.60	2.24	3.09	4.09	5.11	6.15	8.23	1
400	0.06	0.11	0.22	0.48	0.80	1.14	1.51	1.90	2.70	3.75	5.01	6.30	7.60	10.24	1
600	0.06	0.12	0.24	0.56	0.96	1.42	1.91	2.43	3.52	4.95	6.67	8.45	10.26	13.94	1
800	0.06	0.12	0.26	0.63	1.10	1.65	2.25	2.89	4.24	6.03	8.17	10.40	12.69	17.35	2
1000	0.06	0.13	0.27	0.69	1.23	1.86	2.55	3.30	4.91	7.02	9.57	12.23	14.96	20.57	2

LS Factors for Construction Sites. *Table from Renard et. al., 1997.*

APPENDIX 2:
Post-Construction Water Balance Performance Standard Spreadsheet

The discharger shall submit with their Notice of Intent (NOI) the following information to demonstrate compliance with the New and Re-Development Water Balance Performance Standard.

Map Instructions

The discharger must submit a small-scale topographic map of the site to show the existing contour elevations, pre- and post-construction drainage divides, and the total length of stream in each watershed area. Recommended scales include 1 in. = 20 ft., 1 in. = 30 ft., 1 in. = 40 ft., or 1 in = 50 ft. The suggested contour interval is usually 1 to 5 feet, depending upon the slope of the terrain. The contour interval may be increased on steep slopes. Other contour intervals and scales may be appropriate given the magnitude of land disturbance.

Spreadsheet Instructions

The intent of the spreadsheet is to help dischargers calculate the project-related increase in runoff volume and select impervious area and runoff reduction credits to reduce the project-related increase in runoff volume to pre-project levels.

The discharger has the option of using the spreadsheet (**Appendix 2.1)** or a more sophisticated, watershed process-based model (e.g. Storm Water Management Model, Hydrological Simulation Program Fortran) to determine the project-related increase in runoff volume.

In* Appendix 4.1**, ***you must complete the worksheet for each land use/soil type combination for each project sub-watershed.

Steps 1 through 9 pertain specifically to the Runoff Volume Calculator:

Step 1: Enter the county where the project is located in cell H3.

Step 2: Enter the soil type in cell H6.

Step 3: Enter the existing pervious (dominant) land use type in cell H7.

Step 4: Enter the proposed pervious (dominant) land use type in cell H8.

Step 5: Enter the total project site area in cell H11 or J11.

Step 6: Enter the sub-watershed area in cell H12 or J12.

Step 7: Enter the existing rooftop area in cell H17 or J17, the existing non-rooftop impervious area in cell H18 or J18, the proposed rooftop area in cell H19 or J19, and the proposed non-rooftop impervious area in cell H20 or J20

Step 8: Work through each of the impervious area reduction credits and claim credits where applicable. Volume that cannot be addressed using non-structural practices must be captured in structural practices and approved by the Regional Water Board.

Step 9: Work through each of the impervious volume reduction credits and claim credits where applicable. Volume that cannot be addressed using non-structural practices must be captured in structural practices and approved by the Regional Water Board.

Non-structural Practices Available for Crediting

- ***Porous Pavement***
- ***Tree Planting***
- ***Downspout Disconnection***
- ***Impervious Area Disconnection***
- ***Green Roof***
- ***Stream Buffer***
- ***Vegetated Swales***
- ***Rain Barrels and Cisterns***
- ***Landscaping Soil Quality***

Post-Construction Water Balance Calculator

User may make changes from any cell that is orange or brown in color (similar to the cells to the immediate right). Cells in green are calculated for you.

(Step 1a) If you know the 85th percentile storm event for your location enter it in the box below

(Step 1b) If you can not answer 1a then select the county where the project is located (click on the cell to the right for drop-down): This will determine the average 85th percentile 24 hr. storm event for your site, which will appear under precipitation to left.

SACRAMENTO

(Step 1c) If you would like a more percise value select the location closest to your site. If you do not recgonize any of these locations, leave this drop-down menu at location. The average value for the County will be used.

SACRAMENTO FAA ARPT

Project Information

Project Name:	***Optional***
Waste Discharge Identification (WDID):	***Optional***
Date:	***Optional***
Sub Drainage Area Name (from map):	***Optional***

Runoff Curve Numbers

Existing Pervious Runoff Curve Number	**82**
Proposed Development Pervious Runoff Curve Number	**74**

Design Storm

Based on the County you indicated above, we have included the 85 percentile average 24 hr event - P85 (in)^ for your area.	**0.62**	**in**
The Amount of rainfall needed for runoff to occur (Existing runoff curve number -P from existing RCN (in)^)	**0.44**	**In**
P used for calculations (in) (the greater of the above two criteria)	**0.62**	**In**

^Available at www.cabmphandbooks.com

Pre-Project Runoff Volume (cu ft)	**247**	**Cu.Ft.**
Project-Related Runoff Volume Increase w/o credits (cu ft)	**0**	**Cu.Ft.**
Project-Related Volume Increase with Credits (cu ft)	**0**	**Cu.Ft.**

You have achieved your minimum requirements

Runoff Calculations

(Step 2) Indicate the Soil Type (dropdown menu to right):

Group C Soils

Low infiltration. Sandy clay loam. Infiltration rate 0.05 to 0.15 inch/hr when wet.

(Step 3) Indicate the existing **dominant** non-built land Use Type (dropdown menu to right):

Wood & Grass: <50% ground cover

(Step 4) Indicate the proposed **dominant** non-built land Use Type (dropdown menu to right):

Lawn, Grass, or Pasture covering more than 75% of the open space

	Complete Either Sq Ft	Acres	Acres
(Step 5) Total Project Site Area:		5.00	5.00
(Step 6) Sub-watershed Area:		5.00	5.00
Percent of total project :		100%	

(Step 7) Sub-watershed Conditions	Complete Either Sq Ft	Acres	Calculated Acres
Sub-watershed Area (acres)			5.00
Existing Rooftop Impervious Coverage		0	0.00
Existing Non-Rooftop Impervious Coverage		0	0.00
Proposed Rooftop Impervious Coverage		0	0.00
Proposed Non-Rooftop Impervious Coverage		0	0.00

Credits	Acres	Square Feet
Porous Pavement	0.00	0
Tree Planting	0.00	0
Downspout Disconnection	0.00	0
Impervious Area Disconnection	0.00	0
Green Roof	0.00	0
Stream Buffer	0.00	0
Vegetated Swales	0.00	0
Subtotal	0.00	0
Subtotal Runoff Volume Reduction Credit	0 Cu. Ft.	

(Step 9) Impervious Volume Reduction Credits	Volume (cubic feet)
Rain Barrels/Cisterns	0 Cu. Ft.
Soil Quality	0 Cu. Ft.
Subtotal Runoff Volume Reduction	0 Cu. Ft.
Total Runoff Volume Reduction Credit	0 Cu. Ft.

Porous Pavement Credit Worksheet

Please fill out a porous pavement credit worksheet for each project sub-watershed.

For the PROPOSED Development:

Proposed Porous Pavement	Runoff Reduction*	Fill in either Acres or SqFt		Equivalent Acres
		In SqFt.	In Acres	
Area of **Brick without Grout** on less than 12 inches of base with at least 20% void space over soil	0.45			0.00
Area of **Brick without Grout** on more than 12 inches of base with at least 20% void space over soil	0.90			0.00
Area of **Cobbles** less than 12 inches deep and over soil	0.30			0.00
Area of **Cobbles** less than 12 inches deep and over soil	0.60			0.00
Area of **Reinforced Grass Pavement** on less than 12 inches of base with at least 20% void space over soil	0.45			0.00
Area of **Reinforced Grass Pavement** on at least 12 inches of base with at least 20% void space over soil	0.90			0.00
Area of **Porous Gravel Pavement** on less than 12 inches of base with at least 20% void space over soil	0.38			0.00
Area of **Porous Gravel Pavement** on at least 12 inches of base with at least 20% void space over soil	0.75			0.00
Area of **Poured Porous Concrete or Asphalt Pavement** with less than 4 inches of gravel base (washed stone)	0.40			0.00
Area of **Poured Porous Concrete or Asphalt Pavement** with 4 to 8 inches of gravel base (washed stone)	0.60			0.00
Area of **Poured Porous Concrete or Asphalt Pavement** with 8 to 12 inches of gravel base (washed stone)	0.80			0.00
Area of **Poured Porous Concrete or Asphalt Pavement** with 12 or more inches of gravel base (washed stone)	1.00			0.00

*=1-Rv**

Return to Calculator

**Using Site Design Techniques to meet Development Standards for Stormwater Quality (BASMAA 2003)

**NCDENR Stormwater BMP Manual (2007)

Tree Planting Credit Worksheet
Please fill out a tree canopy credit worksheet for each project sub-watershed.

Tree Canopy Credit Criteria	Number of Trees Planted	Credit (acres)
Number of proposed evergreen trees to be planted (credit = number of trees x 0.005)*	0	0.00
Number of proposed deciduous trees to be planted (credit = number of trees x 0.0025)*		0.00
	Square feet Under Canopy	
Square feet under an existing tree canopy, that will remain on the property, with an average diameter at 4.5 ft above grade (i.e., diameter at breast height or DBH) is LESS than 12 in diameter.		0.00
Square feet under an existing tree canopy that will remain on the property, with an average diameter at 4.5 ft above grade (i.e., diameter at breast height or DBH) is 12 in diameter or GREATER.		0.00
Please describe below how the project will ensure that these trees will be maintained.		

0

Return to Calculator

* credit amount based on credits from Stormwater Quality Design Manual for the Sacramento and South Placer Regions

Downspout Disconnection Credit Worksheet

Please fill out a downspout disconnection credit worksheet for each project subwatershed. If you answer yes to all questions, all rooftop area draining to each downspout will be subtracted from your proposed rooftop impervious coverage.

Downspout Disconnection Credit Criteria		
Do downspouts and any extensions extend at least six feet from a basement and two feet from a crawl space or concrete slab?	○ Yes	◉ No
Is the area of rooftop connecting to each disconnected downspout 600 square feet or less?	○ Yes	◉ No
Is the roof runoff from the design storm event fully contained in a raised bed or planter box or does it drain as sheet flow to a landscaped area large enough to contain the roof runoff from the design storm event?	○ Yes	◉ No
The Stream Buffer and/or Vegetated Swale credits **will not** be taken in this sub-watershed area?	○ Yes	◉ No

Percentage of existing	0.00	Acres	of rooftop surface has disconnected downspouts	
Percentage of the proposed	0.00	Acres	of rooftop surface has disconnected downspouts	50

Return to Calculator

Impervious Area Disconnection Credit Worksheet

Please fill out an impervious area disconnection credit worksheet for each project sub-watershed. If you answer yes to all questions, all non-rooftop impervious surface area will be subtracted from your proposed non-rooftop impervious coverage.

Non-Rooftop Disconnection Credit Criteria	Response
Is the maximum contributing impervious flow path length less than 75 feet or, if equal or greater than 75 feet, is a storage device (e.g. French drain, bioretention area, gravel trench) implemented to achieve the required disconnection length?	◉ Yes ○ No
Is the impervious area to any one discharge location less than 5,000 square feet?	◉ Yes ○ No
The Stream Buffer credit **will not** be taken in this sub-watershed area?	◉ Yes ○ No

Percentage of existing	0.00	Acres non-rooftop surface area disconnected	
Percentage of the proposed	0.00	Acres non-rooftop surface area disconnected	70

Return to Calculator

Green Roof Credit Worksheet

Please fill out a greenroof credit worksheet for each project sub-watershed. If you answer yes to all questions, 70% of the greenroof area will be subtracted from your proposed rooftop impervious coverage.

Green Roof Credit Criteria				Response
Is the roof slope less than 15% or does it have a grid to hold the substrate in place until it forms a thick vegetation mat?				◉ Yes ○ No
Has a professional engineer assessed the necessary load reserves and designed a roof structure to meet state and local codes?				◉ Yes ○ No
Is the irrigation needed for plant establishment and/or to sustain the green roof during extended dry periods, is the source from stored, recycled, reclaimed, or reused water?				◉ Yes ○ No
Percentage of existing	0.00	Acres	rooftop surface area in greenroof	
Percentage of the proposed	0.00	Acres	rooftop surface area in greenroof	

Return to Calculator

Stream Buffer Credit Worksheet

Please fill out a stream buffer credit worksheet for each project sub-watershed. If you answer yes to all questions, you may subtract all impervious surface draining to each stream buffer that has not been addressed using the Downspout and/or Impervious Area Disconnection credits.

Stream Buffer Credit Criteria				Response
Does runoff enter the floodprone width* or within 500 feet (whichever is larger) of a stream channel as sheet flow**?				○ Yes ◉ No
Is the contributing overland slope 5% or less, or if greater than 5%, is a level spreader used?				○ Yes ◉ No
Is the buffer area protected from vehicle or other traffic barriers to reduce compaction?				○ Yes ◉ No
Will the stream buffer be maintained in an ungraded and uncompacted condition and will the vegetation be maintained in a natural condition?				○ Yes ◉ No
Percentage of existing	0.00	Acres	impervious surface area draining into a stream buffer:	
Percentage of the proposed	0.00	Acres	impervious surface area that will drain into a stream buffer:	
Please describe below how the project will ensure that the buffer areas will remain in ungraded and uncompacted condition and that the vegetation will be maintained in a natural condition.				

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* floodprone width is the width at twice the bankfull depth.
** the maximum contributing length shall be 75 feet for impervious area

Vegetated Swale Credit Worksheet

Please fill out a vegetated swale worksheet for each project subwatershed. If you answer yes to all questions, you may subtract all impervious surface draining to each stream buffer that has not been addressed using the Downspout Disconnection credit.

Vegetated Swale Credit Criteria

Have all vegetated swales been designed in accordance with Treatment Control BMP 30 (TC-30 - Vegetated Swale) from the California Stormwater BMP Handbook, New Development and Redevelopment (available at www.cabmphandbooks.com)?	○ Yes ◉ No
Is the maximum flow velocity for runoff from the design storm event less than or equal to 1.0 foot per second?	○ Yes ◉ No

Percentage of existing	0.00	Acres of impervious area draining to a vegetated swale	
Percentage of the proposed	0.00	Acres of impervious area draining to a vegetated swale	

Return to Calculator

Rain Barrel/Cistern Credit Worksheet

Please fill out a rain barrel/cistern worksheet for each project sub-watershed.

Rain Barrel/Cistern Credit Criteria	Response
Total number of rain barrel(s)/cisterns	
Average capacity of rain barrel(s)/cistern(s) (in gallons)	
Total capacity rain barrel(s)/cistern(s) (in cu ft) [1]	0

[1] accounts for 10% loss

Return to Calculator

Please fill out a soil quality worksheet for each project sub-watershed.

	Response
Will the landscaped area be lined with an impervious membrane?	
Will the soils used for landscaping meet the ideal bulk densities listed in Table 1 below? [1]	○ Yes ◉ No
If you answered yes to the question above, and you know the area-weighted bulk density within the top 12 inches for soils used for landscaping (in g/cm^3)* , fill in the cell to the right and skip to cell G11. If not select from the drop-down menu in G10.	1.3
If you answered yes to the question above, but you do not know the exact bulk density, which of the soil types in the drop down menu to the right best describes the top 12 inches for soils used for landscaping (in g/cm^3).	Sandy loams, loams
What is the average depth of your landscaped soil media meeting the above criteria (inches)?	12
What is the total area of the landscaped areas meeting the above criteria (in acres)?	2.97

Return to Calculator

Table 1

Sands, loamy sands	<1.6
Sandy loams, loams	<1.4
Sandy clay loams, loams, clay loams	<1.4
Silts, silt loams	<1.3
Silt loams, silty clay loams	<1.1
Sandy clays, silty clays, some clay loams (35-45% clay)	<1.1
Clays (>45% clay)	<1.1

Porosity (%) 50.94%

Mineral grains in many soils are mainly quartz and feldspar, so 2.65 a good average for particle density. To determine percent porosity, use the formula: Porosity (%) = (1-Bulk Density/2.65) X 100

[1] USDA NRCS. "Soil Quality Urban Technical Note No.2-Urban Soil Compaction". March 2000. http://soils.usda.gov/sqi/management/files/sq_utn_2.pdf

* To determine how to calculate density see: http://www.globe.gov/tctg/bulkden.pdf?sectionID=94

APPENDIX 3
Bioassessment Monitoring Guidelines

Bioassessment monitoring is required for projects that meet all of the following criteria:

1. The project is rated Risk Level 3 or LUP Type 3
2. The project directly discharges runoff to a freshwater wadeable stream (or streams) that is either: (a) listed by the State Water Board or USEPA as impaired due to sediment, and/or (b) tributary to any downstream water body that is listed for sediment; and/or have the beneficial use SPAWN & COLD & MIGRATORY
3. Total project-related ground disturbance exceeds 30 acres.

For all such projects, the discharger shall conduct bioassessment monitoring, as described in this section, to assess the effect of the project on the biological integrity of receiving waters.
Bioassessment shall include:

1. The collection and reporting of specified instream biological data
2. The collection and reporting of specified instream physical habitat data

<u>Bioassessment Exception</u>
If a site qualifies for bioassessment, but construction commences out of an index period for the site location, the discharger shall:

1. Receive Regional Water Board approval for the sampling exception
2. Make a check payable to: Cal State Chico Foundation (SWAMP Bank Account) or San Jose State Foundation (SWAMP Bank Account) and include the WDID# on the check for the amount calculated for the exempted project.
3. Send a copy of the check to the Regional Water Board office for the site's region
4. Invest **7,500.00 X The number of samples required** into the SWAMP program as compensation (upon Regional Water Board approval).
5. Conduct bioassessment monitoring, as described in Appendix 4
6. Include the collection and reporting of specified instream biological data and physical habitat
7. Use the bioassessment sample collection and Quality Assurance & Quality Control (QA/QC) protocols developed by the State of California's Surface Water Ambient Monitoring Program (SWAMP)

<u>Site Locations and Frequency</u>
Macroinvertebrate samples shall be collected both before ground disturbance is initiated and after the project is completed. The "after" sample(s) shall be collected after at least one winter season resulting in surface runoff has transpired after project-related ground disturbance has ceased. "Before" and "after" samples shall be collected both upstream and downstream of the project's

discharge. Upstream samples should be taken immediately before the sites outfall and downstream samples should be taken immediately after the outfall (when safe to collect the samples). Samples should be collected for each freshwater wadeable stream that is listed as impaired due to sediment, or tributary to a water body that is listed for sediment. Habitat assessment data shall be collected concurrently with all required macroinvertebrate samples.

Index Period (Timing of Sample Collection)
Macroinvertebrate sampling shall be conducted during the time of year (i.e., the "index period") most appropriate for bioassessment sampling, depending on ecoregion. This map is posted on the State Water Board's Website: http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml

Field Methods for Macroinvertebrate Collections
In collecting macroinvertebrate samples, the discharger shall use the "Reachwide Benthos (Multi-habitat) Procedure" specified in *Standard Operating Procedures for Collecting Benthic Macroinvertebrate Samples and Associated Physical and Chemical Data for Ambient Bioassessments in California* (Ode 2007).[1]

Physical - Habitat Assessment Methods
The discharger shall conduct, concurrently with all required macroinvertebrate collections, the "Full" suite of physical habitat characterization measurements as specified in *Standard Operating Procedures for Collecting Benthic Macroinvertebrate Samples and Associated Physical and Chemical Data for Ambient Bioassessments in California* (Ode 2007), and as summarized in the Surface Water Ambient Monitoring Program's *Stream Habitat Characterization Form — Full Version*.

Laboratory Methods
Macroinvertebrates shall be identified and classified according to the Standard Taxonomic Effort (STE) Level I of the Southwestern Association of Freshwater Invertebrate Taxonomists (SAFIT),[2] and using a fixed-count of 600 organisms per sample.

Quality Assurance
The discharger or its consultant(s) shall have and follow a quality assurance (QA) plan that covers the required bioassessment monitoring. The QA plan shall include, or be supplemented to include, a specific requirement for external QA checks (i.e., verification of taxonomic identifications and correction of data where

[1] This document is available on the Internet at: ~~http://www.swrcb.ca.gov/swamp/docs/phab_sopr6.pdf~~. http://swamp.mpsl.mlml.calstate.edu/wp-content/uploads/2009/04/swamp_sop_bioassessment_collection_020107.pdf.

[2] The current SAFIT STEs (28 November 2006) list requirements for both the Level I and Level II taxonomic effort, and are located at: ~~http://www.swrcb.ca.gov/swamp/docs/safit/ste_list.pdf~~ http://www.safit.org/Docs/ste_list.pdf. When new editions are published by SAFIT, they will supersede all previous editions. All editions will be posted at the State Water Board's SWAMP website.

errors are identified). External QA checks shall be performed on one of the discharger's macroinvertebrate samples collected per calendar year, or ten percent of the samples per year (whichever is greater). QA samples shall be randomly selected. The external QA checks shall be paid for by the discharger, and performed by the California Department of Fish and Game's Aquatic Bioassessment Laboratory. An alternate laboratory with equivalent or better expertise and performance may be used if approved in writing by State Water Board staff.

Sample Preservation and Archiving

The original sample material shall be stored in 70 percent ethanol and retained by the discharger until: 1) all QA analyses specified herein and in the relevant QA plan are completed; and 2) any data corrections and/or re-analyses recommended by the external QA laboratory have been implemented. The remaining subsampled material shall be stored in 70 percent ethanol and retained until completeness checks have been performed according to the relevant QA plan. The identified organisms shall be stored in 70 percent ethanol, in separate glass vials for each final ID taxon. (For example, a sample with 45 identified taxa would be archived in a minimum of 45 vials, each containing all individuals of the identified taxon.) Each of the vials containing identified organisms shall be labeled with taxonomic information (i.e., taxon name, organism count) and collection information (i.e., site name/site code, waterbody name, date collected, method of collection). The identified organisms shall be archived (i.e., retained) by the discharger for a period of not less than three years from the date that all QA steps are completed, and shall be checked at least once per year and "topped off" with ethanol to prevent desiccation. The identified organisms shall be relinquished to the State Water Board upon request by any State Water Board staff.

Data Submittal

The macroinvertebrate results (i.e., taxonomic identifications consistent with the specified SAFIT STEs, and number of organisms within each taxa) shall be submitted to the State Water Board in electronic format. The State Water Board's Surface Water Ambient Monitoring Program (SWAMP) is currently developing standardized formats for reporting bioassessment data. All bioassessment data collected after those formats become available shall be submitted using the SWAMP formats. Until those formats are available, the biological data shall be submitted in MS-Excel (or equivalent) format.[3]

The physical/habitat data shall be reported using the standard format titled *SWAMP Stream Habitat Characterization Form — Full Version*.[4]

[3] Any version of Excel, 2000 or later, may be used.
[4] Available at: http://www.waterboards.ca.gov/water_issues/programs/swamp/docs/reports/fieldforms_fullversion052908.pdf

Invasive Species Prevention

In conducting the required bioassessment monitoring, the discharger and its consultants shall take precautions to prevent the introduction or spread of aquatic invasive species. At minimum, the discharger and its consultants shall follow the recommendations of the California Department of Fish and Game to minimize the introduction or spread of the New Zealand mudsnail.[5]

[5] Instructions for controlling the spread of NZ mudsnails, including decontamination methods, can be found at: http://www.dfg.ca.gov/invasives/mudsnail/
More information on AIS More information on AIS
http://www.waterboards.ca.gov/water_issues/programs/swamp/ais/

Appendix 4 Sediment TMDLs

Implemented Sediment TMDLs in California. Construction was listed as a source in all fo these TMDLs in relation to road construction. Although construction was mentioned as a source, it was not given a specific allocation amount. The closest allocation amount would be for the road activity management WLA. **Implementation Phase** – Adoption process by the Regional Board, the State Water Resources Control Board, the Office of Administrative Law, and the US Environmental Protection Agency completed and TMDL being implemented.

A. Region	Type	Name	Pollutant Stressor	Potential Sources	TMDL Completion Date	Watershed Acres	WLA tons mi^2 yr
1 R1.epa.albionfinaltmdl	R	Albion River	Sedimentation	Road Construction	2001	43 acres	See A (table 6)

B Region	Type	Name	Pollutant Stressor	Potential Sources	TMDL Completion Date	Watershed Acres	WLA tons mi^2 yr
1 R1.epa.EelR-middle.mainSed.temp	R	Middle Main Eel River and Tributaries (from Dos Rios to the South Fork)	Sedimentation Road	Construction	2005-2006 521	mi^2	100

C Region	Type	Name	Pollutant Stressor	Potential Sources	TMDL Completion Date	Watershed Acres	WLA tons mi^2 yr
1 R1.epa.EelRsouth.sed.temp	R	South Fork Eel River	Sedimentation	Road Construction	12 1999	See chart	473

D Region	Type	Name	Pollutant Stressor	Potential Sources	TMDL Completion Date	Watershed Acres	WLA tons mi^2 yr
1 R1.epa.bigfinaltmdl	R Big	River	Sedimentation	Road Construction	12 2001	181 mi^2 watershed drainage	TMDL = loading capacity = nonpoint sources + background =

							393 t mi2 yr

E Region	**Type**	**Name**	**Pollutant Stressor**	**Potential Sources**	**TMDL Completion Date**	**Watershed Acres**	**WLA** tons mi^2 yr
1 R1.epa.EelR-lower.Sed.temp-121807-signed	R	Lower Eel River	Sedimentation	Road Construction	12 2007	300 square-mile watershed	898

F Region	**Type**	**Name**	**Pollutant Stressor**	**Potential Sources**	**TMDL Completion Date**	**Watershed Acres**	**WLA** tons mi^2 yr
1 R1.epa.EelR-middle.Sed.temp-	R	Middle Fork Eel River	Sedimentation	Road Construction	12 2003	753 mi^2 (approx. 482,000 acres)	82

G Region	**Type**	**Name**	**Pollutant Stressor**	**Potential Sources**	**TMDL Completion Date**	**Watershed Acres** Mi^2	**WLA** tons mi^2 yr
1 R1.epa.EelRnorth-Sed.temp.final-121807-signed	R	North Fork Eel River	Sedimentation	Road Construction	12 30 2002	289 (180,020 acres)	20

H Region	**Type**	**Name**	**Pollutant Stressor**	**Potential Sources**	**TMDL Completion Date**	**Watershed Acres** Mi^2	**WLA** tons mi^2 yr
1 R1.epa.EelR-upper.mainSed.temp-	R	Upper Main Eel River and Tributaries (including Tomki Creek, Outlet Creek and Lake Pillsbury)	Sedimentation	Road Construction	12 29 2004	688 (approx. 440,384 acres)	14

I Region	Type	Name	Pollutant Stressor	Potential Sources	TMDL Completion Date	Watershed Acres	WLA tons mi^2 yr
1 R1.epa.gualalafinaltmdl	R	Gualala River	Sedimentation	Road Construction	Not sure	300 (191,145 acres)	7

J Region	Type	Name	Pollutant Stressor	Potential Sources	TMDL Completion Date	Watershed Acres mi^2	WLA tons mi^2 yr
1 R1.epa.Mad-sed.turbidity	R	Mad River	Sedimentation	Road Construction	12 21 2007	480	174

K Region	Type	Name	Pollutant Stressor	Potential Sources	TMDL Completion Date	Watershed Acres mi^2	WLA tons mi^2 yr
1 R1.epa.mattole.sediment	R	Mattole River	Sedimentation	Road Construction	12 30 2003	296	27 or 520+27 = 547

L Region	Type	Name	Pollutant Stressor	Potential Sources	TMDL Completion Date	Watershed Acres mi^2	WLA tons mi^2 yr
1 R1.epa.navarro.sed.temp	R	Navarro River	Sedimentation	Road Construction	Not sure	315 (201,600 acres).	50

M Region	Type	Name	Pollutant Stressor	Potential Sources	TMDL Completion Date	Watershed Acres mi^2	WLA tons mi^2 yr
1 R1.epa.noyo.sediment	R	Noyo River	Sedimentation	Road Construction	12 16 1999	113 (72,323 acres)	68 (three areas measured) Table 16 in the TMDL

N Region	**Type**	**Name**	**Pollutant Stressor**	**Potential Sources**	**TMDL Completion Date**	**Watershed Acres** mi^2	**WLA** tons mi^2 yr
1 R1.epa.RedwoodCk.sed	Cr	Redwood Creek	Sedimentation	Road Construction	12 30 1998	278	1900 Total allocation

O Region	**Type**	**Name**	**Pollutant Stressor**	**Potential Sources**	**TMDL Completion Date**	**Watershed Acres** mi^2	**WLA – Roads** tons mi^2 yr
1 R1.epa.tenmile.sed	R	Ten Mile River	Sedimentation	Road Construction	2000	120	9

P Region	**Type**	**Name**	**Pollutant Stressor**	**Potential Sources**	**TMDL Completion Date**	**Watershed Acres** mi^2	**WLA management** tons mi^2 yr
1 R1.epa.trinity.sed	R	Trinity River	Sedimentation	Road Construction	12 20 2001	2000 of 3000 covered in this TMDL	See rows below
1	Cr	Horse Linto Creek	Sedimentation	Road Construction	12 20 2001	64	528
1	Cr	Mill creek and Tish Tang	Sedimentation	Road Construction	12 20 2001	39	210
1	Cr	Willow Creek	Sedimentation	Road Construction	12 20 2001	43	94
1	Cr	Campbell Creek and Supply Creek	Sedimentation	Road Construction	12 20 2001	11	1961
1	Cr	Lower Mainstem and Coon Creek	Sedimentation	Road Construction	12 20 2001	32	63
1 R		Reference Subwatershed [1]	Sedimentation	Road Construction	12 20 2001	434	24
1	Cr	Canyon Creek	Sedimentation	Road	12 20 2001	64	326

				Construction			
1 R		Upper Tributaries[2]	Sedimentation	Road Construction	12 20 2001	72	67
1 R		Middle Tributaries[3]	Sedimentation	Road Construction	12 20 2001	54	53
1 R		Lower Tributaries[4]	Sedimentation	Road Construction	12 20 2001	96	55
1	Cr	Weaver and Rush Creeks	Sedimentation	Road Construction	12 20 2001	72	169
1 Cr		Deadwood Creek Hoadley Gulch Poker Bar	Sedimentation	Road Construction	12 20 2001	47	68
1	L	Lewiston Lake	Sedimentation	Road Construction	12 20 2001	25	49
1 Cr		Grassvalley Creek	Sedimentation	Road Construction	12 20 2001	37	44
1	Cr	Indian Creek	Sedimentation	Road Construction	12 20 2001	34	81
1	Cr	Reading and Browns Creek	Sedimentation	Road Construction	12 20 2001	104	66
1 Cr		Reference Subwatersheds[5]	Sedimentation	Road Construction	12 20 2001	235	281
1	L, Cr	Westside tributaries[6]	Sedimentation	Road Construction	12 20 2001	93	105
1 R,	Cr, G	Upper trinity[7]	Sedimentation	Road Construction	12 20 2001	161	690
1 R,	Cr, G	East Fork Tributaries[8]	Sedimentation	Road Construction	12 20 2001	115	65
1	R, L	Eastside Tributaries[9]	Sedimentation	Road Construction	12 20 2001	89	60

1 New River, Big French, Manzanita, North Fork, East Fork, North Fork
2 Dutch, Soldier, Oregon gulch, Conner Creek
3 Big Bar, Prairie Creek, Little French Creek
4 Swede, Italian, Canadian, Cedar Flat, Mill, McDonald, Hennessy, Quimby, Hawkins, Sharber
5 Stuarts Fork, Swift Creek, Coffee Creek
6 Stuart Arm, Stoney Creek, Mule Creek, East Fork, Stuart Fork, West Side Trinity Lake, Hatchet Creek, Buckeye Creek,
7 Upper Trinity River, Tangle Blue, Sunflower, Graves, Bear Upper Trinity Mainstream, Ramshorn Creek, Ripple Creek, Minnehaha Creek, Snowslide Gulch, Scorpion Creek
8 East Fork Trinity, Cedar Creek, Squirrel Gulch

9 East Side Tributaries, Trinity Lake

Q Region	**Type**	**Name**	**Pollutant Stressor**	**Potential Sources**	**TMDL Completion Date**	**Watershed Acres** mi^2	**WLA** tons mi^2 yr
1 R1.epa.trinity.so.sed	R, Cr	South Fork Trinity River and Hayfork Creek	Sedimentation	Road Construction	12 1998	Not given, 19 miles long	33 (road total)

R Region	**Type**	**Name**	**Pollutant Stressor**	**Potential Sources**	**TMDL Completion Date**	**Watershed Acres** mi^2	**WLA** tons mi^2 yr
1 R1.epa.vanduzen.sed	R, Cr	Van Duzen River and Yager Creek	Sedimentation	Various	12 16 1999	429	1353 total allocation
1		Upper Basin	Sedimentation	Road Construction			7
1		Middle Basin	Sedimentation	Road Construction			22
1		Lower Basin	Sedimentation	Road Construction			20

S Region	**Type**	**Name**	**Pollutant Stressor**	**Potential Sources**	**TMDL Completion Date**	**Watershed Acres** mi^2	**WLA** tons mi^2 yr
6 R6.blackwood.sed Cr		Blackwood Creek (Placer County)	Bedded Sediment	Various	9 2007	11	17272 total

T Region	**Type**	**Name**	**Pollutant Stressor**	**Potential Sources**	**TMDL Completion Date**	**Watershed Acres** mi^2	**WLA** tons mi^2 yr
6 R6.SquawCk.sed R		Squaw Creek (Placer County)	Sedimentation /controllable sources	Various – basin plan amendment	4 13 2006	8.2	10,900

Adopted TMDLs for Construction Sediment Sources

Region	Type	Name	Pollutant Stressor	Potential Sources	**TMDL Completion Date**	**Watershed Area** mi^2	Waste load Allocation tons mi^2 yr
8 R		Newport Bay San Diego Creek Watershed	Sedimentation	Construction Land Development	1999 2.24	(1432 acres)	125,000 tons per Year (no more than 13,000 tons per year from construction sites)

Appendix 4 Non Sediment TMDLs

Region 1 Lost River-DIN and CBOD

Region 1 Source: Cal Trans Construction TMDL Completion Date: 12 30 2008 TMDL Type: River, Lake Watershed Area= 2996 mi^2	**Pollutant Stressors/WLA**	
	Dissolved inorganic nitrogen (DIN) (metric tons/yr)	**Carbonaceous biochemical oxygen demand (CBOD) (metric tons/yr)**
Lost River from the Oregon border to Tule Lake	.1 .2	
Tule Lake Refuge	.1	.2
Lower Klamath Refuge	.1	.2

Region 2 San Francisco Bay-Mercury

Region 2 Source:Non-Urban Stormwater Runoff TMDL Type: Bay	**Name**	**Pollutant Stressor/WLA**	**TMDL Completion Date**
	San Francisco Bay	Mercury 25 kg/year	08 09 2006

Region 4 Machado Lake Nutrients - Resolution No. 2008-006 (Effective Date - March 11, 2009)

General Construction Stormwater Permit WLAs	Years After Effective Date	Total Phosphorus (mg/L)	Total Nitrogen (TKN + NO3-N + NO2-N) (mg/L)
Interim WLAs[1]	At Effective Date	1.25	3.50
Interim WLAs[2] 5	years	1.25	2.45
Final WLAs[2]	9.5 years	0.10	1.00

[1] The compliance points for effective date interim WLAs are measured in the lake.
[2] No compliance points are specified for general construction stormwater permits for the year 5 interim WLAs and final WLAs

Region 4 Ballona Creek-Metals and Selenium – Resolution No. 2007-015 (Effective Date October 29, 2008)

Wet Weather WLAs

Region 4 Source: NPDES General Construction TMDL Completion Date: 10 29 2008 TMDL Type: Creek	Copper (Cu)		Lead (Pb)		Selenium (Se)		Zinc (Zn)	
	g/day	g/day/acre	g/day	g/day/acre	g/day	g/day/acre	g/day	g/day/acre
Ballona Creek	4.94E-07 x Daily storm volume (L)	2.20E-10 x Daily storm volume (L)	1.62E-06 x Daily storm volume (L)	7.20E-10 x Daily storm volume (L)	1.37E-07 x Daily storm volume (L)	6.10E-11 x Daily storm volume (L)	3.27E-06 x Daily storm volume (L)	1.45E-09 x Daily storm volume (L)

Wet-weather WLA Implementation

- Within seven years of the effective date of the TMDL, the construction industry will submit the results of BMP effectiveness studies to determine BMPs that will achieve compliance with the final waste load allocations assigned to construction storm water permittees.
- Regional Board staff will bring the recommended BMPs before the Regional Board for consideration within eight years of the effective date of the TMDL.
- General construction storm water permittees will be considered in compliance with final waste load allocations if they implement these Regional Board approved BMPs. All permittees must implement the approved BMPs within nine years of the effective date of the TMDL. If no effectiveness studies are conducted and no BMPs are approved by the Regional Board within eight years of the effective date of the TMDL, each general construction storm water permit holder will be subject to site-specific BMPs and monitoring requirements to demonstrate compliance with final waste load allocations.

Dry-weather WLAs

A waste load allocation of zero is assigned to all general construction storm water permits during dry weather.

Dry-weather WLA Implementation

Non-storm water flows authorized by the General Permit for Storm Water Discharges Associated with Construction Activity (Water Quality Order No. 99-08 DWQ), or any successor order, are exempt from the dry-weather waste load allocation equal to zero as long as they comply with the provisions of sections C.3 and A.9 of the Order No. 99-08 DWQ, which state that these authorized non-storm discharges shall be:

(1) infeasible to eliminate
(2) comply with BMPs as described in the Storm Water Pollution Prevention Plan prepared by the permittee, and
(3) not cause or contribute to a violation of water quality standards, or comparable provisions in any successor order.
Unauthorized non-storm water flows are already prohibited by Order No. 99-08 DWQ.

Region 4 Los Angeles River and Tributaries-Metals– Resolution No. 2007-014
(Effective Date October 29, 2008)

Wet Weather WLAs

	Cadmium (Cd)		Copper (Cu)		Lead (Pb)		Zinc (Zn)	
	kg/day	g/day/acre	kg/day	g/day/acre	kg/day	g/day/acre	kg/day	g/day/acre
5.9x10	$^{-11}$ x Daily storm volume (L)	$7.6x10^{-12}$ x Daily storm volume (L)	$3.2x10^{-10}$ x Daily storm volume (L)	$4.2x10^{-11}$ x Daily storm volume (L)	$1.2x10^{-9}$ x Daily storm volume (L)	$1.5x10^{-10}$ x Daily storm volume (L)	$3.01x10^{-9}$ x Daily storm volume (L)	$3.9x10^{-10}$ x Daily storm volume (L)

Wet-weather WLA Implementation

- Within seven years of the effective date of the TMDL, the construction industry will submit the results of BMP effectiveness studies to determine BMPs that will achieve compliance with the final waste load allocations assigned to construction storm water permittees.
- Regional Board staff will bring the recommended BMPs before the Regional Board for consideration within eight years of the effective date of the TMDL.
- General construction storm water permittees will be considered in compliance with final waste load allocations if they implement these Regional Board approved BMPs. All permittees must implement the approved BMPs within nine years of the effective date of the TMDL. If no effectiveness studies are conducted and no BMPs are approved by the Regional Board within eight years of the effective date of the TMDL, each general construction storm water permit holder will be subject to site-specific BMPs and monitoring requirements to demonstrate compliance with final waste load allocations.

Dry-weather WLAs

A waste load allocation of zero is assigned to all general construction storm water permits during dry weather.

Dry-weather WLA Implementation

Non-storm water flows authorized by the General Permit for Storm Water Discharges Associated with Construction Activity (Water Quality Order No. 99-08 DWQ), or any successor order, are exempt from the dry-weather waste load allocation equal to zero as

long as they comply with the provisions of sections C.3 and A.9 of the Order No. 99-08 DWQ, which state that these authorized non-storm discharges shall be:

(1) infeasible to eliminate
(2) comply with BMPs as described in the Storm Water Pollution Prevention Plan prepared by the permittee, and
(3) not cause or contribute to a violation of water quality standards, or comparable provisions in any successor order.

Unauthorized non-storm water flows are already prohibited by Order No. 99-08 DWQ.

Region 4 Calleguas Creek Metals TMDL – Resolution No. 2006-012
(Effective Date - March 26, 2007)

Interim Limits and Final WLAs for Total Recoverable Copper, Nickel, and Selenium

Interim limits and waste load allocations are applied to receiving water.

A. Interim Limits

Constituents	Calleguas and Conejo Creek			Revolon Slough		
	Dry CMC (ug/L)	Dry CCC (ug/L)	Wet CMC (ug/L)	Dry CMC (ug/L)	Dry CCC (ug/L)	Wet CMC (ug/L)
Copper*	23	19	204	23	19	204
Nickel	15	13	(a)	15	13	(a)
Selenium	(b)	(b)	(b)	14	13	(a)

(a) The current loads do not exceed the TMDL under wet conditions; interim limits are not required.
(b) Selenium allocations have not been developed for this reach as it is not on the 303(d) list.
(c) Attainment of interim limits will be evaluated in consideration of background loading data, if available.

B. Final WLAs for Total Recoverable Copper, Nickel, and Selenium

Dry-Weather WLAs in Water Column

Flow Range	Calleguas and Conejo Creek			Revolon Slough		
	Low Flow	Average Flow	Elevated Flow	Low Flow	Average Flow	Elevated Flow
Copper1 (lbs/day)	0.04*WER - 0.02	0.12*WER - 0.02	0.18*WER - 0.03	0.03*WER - 0.01	0.06*WER - 0.03	0.13*WER - 0.02
Nickel (lbs/day)	0.100	0.120	0.440	0.050	0.069	0.116
Selenium (lbs/day)	(a)	(a)	(a)	0.004	0.003	0.004

[1] If site-specific WERs are approved by the Regional Board, TMDL waste load allocations shall be implemented in accordance with the approved WERs using the equations set forth above. Regardless of the final WERs, total copper loading shall not exceed current loading.

(a) Selenium allocations have not been developed for this reach as it is not on the 303(d) list.

Wet-Weather WLAs in Water Column

Constituent	Calleguas Creek	Revolon Slough
Copper[1] (lbs/day)	(0.00054*Q^2*0.032*Q - 0.17)*WER - 0.06	(0.0002*Q2+0.0005*Q)*WER
Nickel[2] (lbs/day)	0.014*Q^2+0.82*Q	0.027*Q^2+0.47*Q
Selenium[2] (lbs/day)	(a)	0.027*Q^2+0.47*Q

[1] If site-specific WERs are approved by the Regional Board, TMDL waste load allocations shall be implemented in accordance with the approved WERs using the equations set forth above. Regardless of the final WERs, total copper loading shall not exceed current loading.

[2] Current loads do not exceed loading capacity during wet weather. Sum of all loads cannot exceed loads presented in the table

(a) Selenium allocations have not been developed for this reach as it is not on the 303(d) list.

Q: Daily storm volume.

Interim Limits and Final WLAs for Mercury in Suspended Sediment

Flow Range	Calleguas Creek		Revolon Slough	
	Interim (lbs/yr)	Final (lbs/yr)	Interim (lbs/yr)	Final (lbs/yr)
0-15,000 MGY	3.3	0.4	1.7	0.1
15,000-25,000 MGY	10.5	1.6	4	0.7
Above 25,000 MGY	64.6	9.3	10.2	1.8

MGY: million gallons per year.

In accordance with current practice, a group concentration-based WLA has been developed for all permitted stormwater discharges, including municipal separate storm sewer systems (MS4s), Caltrans, general industrial and construction stormwater permits, and Naval Air Weapons Station Point Mugu. Dischargers will have a required 25%, 50% and 100% reduction in the difference between the current loadings and the load allocations at 5, 10 and 15 years after the effective date, respectively. Achievement of required reductions will be evaluated based on progress towards BMP implementation as outlined in the urban water quality management plans (UWQMPs). If the interim reductions are not met, the dischargers will submit a report to the Executive Officer detailing why the reductions were not met and the steps that will be taken to meet the required reductions.

Region 4 Calleguas Creek-OC Pesticides, PCBs, and Siltation (Resolution 2005-010)
Effective Date - March 24, 2006

Interim Requirements

Region 4 Calleguas Creek	**Pollutant Stressor**	**WLA Daily Max (µg/L)**	**WLA Monthly Ave (µg/L)**
Source: Minor NPDES point sources/WDRs TMDL Completion Date: 3 24 2006 TMDL Type:Creek	Chlordane 1.2		0.59
	4,4-DDD 1.7		0.84
	4,4-DDE 1.2		0.59
	4,4-DDT 1.2		0.59
	Dieldrin 0.28		0.14
	PCB's 0.34		0.17
	Toxaphene 0.33		0.16

Region 4 Calleguas Creek-Calleguas Creek Toxicicity (Resolution 2005-009)
Effective Date - March 24, 2006

Minor sources include NPDES permittees other than POTWs and MS4s, discharging to the Calleguas Creek Watershed. A wasteload of 1.0 TUc is allocated to the minor point sources discharging to the Calleguas Creek Watershed. Additionally, the following wasteloads for chlorpyrifos and diazinon are established. Final WLAs apply as of March 24, 2006.

Chlorpyrifos WLAs, ug/L
Final WLA
(4 day)
0.014
Diazinon WLAs, ug/L
Final WLA
Acute and Chronic
0.10

Region 4 Calleguas Creek-Salts (Resolution 2007-016)
Effective Date – December 2, 2008

Final Dry Weather Pollutant WLA (mg/L)					
Region 4 Calleaguas Creek Source Permitted Stormwater Dischargers TMDL Completion Date: 12 2 2008 TMDL Type:Creek	**Critical Condition Flow Rate (mgd)**	**Chloride (lb/day)**	**TDS (lb/day)**	**Sulfate (lb/day)**	**Boron (lb/day)**
Simi	1.39	1738 9849 289	7 12		
Las Posas	0.13	157 887 261 N/A			
Conejo	1.26	1576 8931 262	7 N/A		
Camarillo	0.06	72	406 119 N/A		
Pleasant Valley (Calleguas)	0.12	150 850 250 N/A			
Pleasant Valley (Revolon)	0.25	314	1778	523	2
Dry Weather Interim Pollutant WLA (mg/L)					
	Chloride (mg/L)	**TDS (mg/L)**		**Sulfate (mg/L)**	**Boron (mg/L)**

Simi 230.0		1720.0	1289.0	1.3
Las Posas	230	1720	1289	1.3
Conejo 230		1720	1289	1.3
Camarillo 230		1720	1289	1.3
Pleasant Valley (Calleguas)	230	1720	1289	1.3
Pleasant Valley (Revolon)	230	1720	1289	1.3

- Dry- weather waste load allocations apply in the receiving water at the base of each subwatershed. Dry weather allocations apply when instream flow rates are below the 86th percentile flow and there has been no measurable precipitation in the previous 24 hours.
- Because wet weather flows transport a large mass of salts at low concentrations, these dischargers meet water quality objectives during wet weather. No wet weather allocations are assigned.

Ballona Creek Toxic Pollutants (Resolution No. 2005-008)
Effective Date - January 11, 2006

Each storm water permittee enrolled under the general construction or industrial storm water permits will receive an individual waste load allocation on a per acre basis, based on the acreage of their facility.

Metals per Acre WLAs for Individual General Construction or Industrial Storm Water Permittees (g/yr/ac)

Cadmium	Copper	Lead	Silver	Zinc
0.1	3 4 0.1			13

Organics per Acre WLAs for Individual General Construction or Industrial Storm Water Permittees (mg/yr/ac)

Chlordane	DDTs	Total PCBs	Total PAHs
0.04	0.14	2	350

Waste load allocations will be incorporated into the State Board general permit upon renewal or into a watershed specific general construction storm water permit developed by the Regional Board.

Within seven years of the effective date of the TMDL, the construction industry will submit the results of BMP effectiveness studies to determine BMPs that will achieve compliance with the waste load allocations assigned to construction storm water permittees. Regional Board staff will bring the recommended BMPs before the Regional Board for consideration within eight years of the

effective date of the TMDL. General construction storm water permittees will be considered in compliance with waste load allocations if they implement these Regional Board approved BMPs.

All general construction permittees must implement the approved BMPs within nine years of the effective date of the TMDL. If no effectiveness studies are conducted and no BMPs are approved by the Regional Board within eight years of the effective date of the TMDL, each general construction storm water permit holder will be subject to site-specific BMPs and monitoring requirements to demonstrate compliance with waste load allocations.

Region 4 Marina Del Rey Harbor Toxic Pollutants TMDL (Resolution No. 2005-012)
Effective Date March 22, 2006

Each storm water permittee enrolled under the general construction or industrial storm water permits will receive an individual waste load allocation on a per acre basis, based on the acreage of their facility.

Metals per Acre WLAs for Individual General Construction or Industrial Storm Water Permittees (g/yr/ac)

Copper	Lead	Zinc
2.3	3.1	10

Organics per acre WLAs for Individual General Construction or Industrial Storm Water Permittees (mg/yr/ac)

Chlordane	Total PCBs
0.03	1.5

Waste load allocations will be incorporated into the State Board general permit upon renewal or into a watershed specific general construction storm water permit developed by the Regional Board.

Within seven years of the effective date of the TMDL, the construction industry will submit the results of BMP effectiveness studies to determine BMPs that will achieve compliance with the waste load allocations assigned to construction storm water permittees. Regional Board staff will bring the recommended BMPs before the Regional Board for consideration within eight years of the effective date of the TMDL. General construction storm water permittees will be considered in compliance with waste load allocations if they implement these Regional Board approved BMPs.

All general construction permittees must implement the approved BMPs within nine years of the effective date of the TMDL. If no effectiveness studies are conducted and no BMPs are approved by the Regional Board within eight years of the effective date of

the TMDL, each general construction storm water permit holder will be subject to site-specific BMPs and monitoring requirements to demonstrate compliance with waste load allocations.

Region 4 San Gabriel River and Tributaries-Metals and Selenium (EPA-established TMDL – Effective date: 3/26/07)

Wet-weather allocations

Waterbody	Copper	Lead	Zinc
San Gabriel River Reach 2*		0.8 kg/d	
Coyote Creek**	0.513 kg/d	2.07 kg/d	3.0 kg/d

*Mass-based allocations are based on a flow of 260 cfs (daily storm volume = 6.4×10^8 liters)

**Mass-based allocations are based on a flow of 156 cfs (daily storm volume = 3.8×10^8 liters)

Dry-weather allocations

The dry-weather copper waste load allocation for general construction storm water permittees that discharge to San Gabriel Reach 1, Coyote Creek, and the Estuary is zero.

The dry-weather selenium allocation for general construction storm water permittees that discharge to San Jose Creek Reach 1 and Reach 2 is 5 µg/L (total recoverable metals).

Region 4 Upper Santa Clara River Chloride TMDL Adopted by Resolution No 2006-016 Effective Date June 12, 2008

"Other NPDES dischargers" have a chloride WLA equal to 100 mg/L.

This TMDL was revised by Resolution No 2008-012, which, when it becomes effective, includes the following conditional WLAs for "Other minor NPDES discharges":

Reach	Concentration-based Conditional WLA for Chloride (mg/L)*
6	150 (12-month Average), 230 (Daily Maximum)
5	150 (12-month Average), 230 (Daily Maximum)
4B	117 (3-month Average), 230 (Daily Maximum)

*The conditional WLAs for chloride for all point sources shall apply only when chloride load reductions and/or chloride export projects are in operation by the Santa Clarita Valley Sanitation District according to the implementation plan for the TMDL. If these conditions are not met, WLAs shall be based on existing water quality objectives for chloride of 100 mg/L.

Region 4 The Harbor Beaches of Ventura County-Bacteria (Adopted by Resolution No. 2007-017)
Effective Date – December 18, 2008

Current and future enrollees in the Statewide Construction Activity Storm Water General Permit in the Channel Islands Harbor subwatershed are assigned WLAs of zero (0) days of allowable exceedances of the single sample limits and the rolling 30-day geometric mean limits.

Single Sample Limits are:
a. Total coliform density shall not exceed 10,000/100 ml.
b. Fecal coliform density shall not exceed 400/100 ml.
c. Enterococcus density shall not exceed 104/100 ml.
d. Total coliform density shall not exceed 1,000/100 ml, if the ratio of fecal-to-total coliform exceeds 0.1.

Rolling 30-day Geometric Mean Limits are:
a. Total coliform density shall not exceed 1,000/100 ml.
b. Fecal coliform density shall not exceed 200/100 ml.
c. Enterococcus density shall not exceed 35/100 ml.

Los Angeles Harbor Bacteria TMDL (Adopted by Resolution No. 2004-001)
Effective Date – March 10, 2005

Current and future enrollees in the Statewide Construction Activity Storm Water General Permit in the watershed are assigned WLAs of zero (0) days of allowable exceedances of the single sample limits and the rolling 30-day geometric mean.

Single Sample Limits are:
a. Total coliform density shall not exceed 10,000/100 ml.
b. Fecal coliform density shall not exceed 400/100 ml.
c. Enterococcus density shall not exceed 104/100 ml.
d. Total coliform density shall not exceed 1,000/100 ml, if the ratio of fecal-to-total coliform exceeds 0.1.

Rolling 30-day Geometric Mean Limits are:
a. Total coliform density shall not exceed 1,000/100 ml.
b. Fecal coliform density shall not exceed 200/100 ml.
c. Enterococcus density shall not exceed 35/100 ml.

Ballona Creek Bacteria TMDL (Adopted by Resolution No. 2006-011)
Effective Date – April 27, 2007

Current and future enrollees in the Statewide Construction Activity Storm Water General Permit in the watershed are assigned WLAs of zero (0) days of allowable exceedances of the single sample limits and the rolling 30-day geometric mean.

Single Sample Limits are:
a. Total coliform density shall not exceed 10,000/100 ml.
b. Fecal coliform density shall not exceed 400/100 ml.
c. Enterococcus density shall not exceed 104/100 ml.
d. Total coliform density shall not exceed 1,000/100 ml, if the ratio of fecal-to-total coliform exceeds 0.1.

Rolling 30-day Geometric Mean Limits are:
a. Total coliform density shall not exceed 1,000/100 ml.
b. Fecal coliform density shall not exceed 200/100 ml.
c. Enterococcus density shall not exceed 35/100 ml.

Region 4 Resolution No. 03-009 Los Angeles River and Tributaries-Nutrients

Minor Point Sources
Waste loads are allocated to minor point sources enrolled under NPDES or WDR permits including but not limited to Tapia WRP, Whittier Narrows WRP, Los Angeles Zoo WRP, industrial and construction stormwater, and municipal storm water and urban runoff from municipal separate storm sewer systems (MS4s)

Region 4 Minor Point Sources for NPDES/WDR Permits TMDL Effective Date: 3 23 2004 TMDL Type: River	Pollutant Stressor/WLA				
	Total Ammonia (NH_3)		**Nitrate-nitrogen (NO_3-N)**	**Nitrite-nitrogen (NO_2-N)**	**NO_3-N + NO_3-N**
	1 Hr Ave mg/l	30 Day Ave mg/l	30 Day Ave mg/l		30 Day Ave mg/l
LA River Above Los Angeles-Glendale WRP (LAG)	4.7 1.6 8.0			1.0	8.0
LA River Below LAG	8.7	2.4	8.0	1.0	8.0
Los Angeles Tributaries 10.1		2.3	8.0	1.0	8.0

Malibu Creek Attachment A to Resolution No. 2004-019R-Bacteria

Effective date: 1 24 2006. The WLAs for permittees under the NPDES General Stormwater Construction Permit are zero (0) days of allowable exceedances for the single sample limits and the rolling 30-day geometric mean.

Single Sample Limits are:
a. Total coliform density shall not exceed 10,000/100 ml.
b. Fecal coliform density shall not exceed 400/100 ml.
c. Enterococcus density shall not exceed 104/100 ml.
d. Total coliform density shall not exceed 1,000/100 ml, if the ratio of fecal-to-total coliform exceeds 0.1.

Rolling 30-day Geometric Mean Limits are:
a. Total coliform density shall not exceed 1,000/100 ml.
b. Fecal coliform density shall not exceed 200/100 ml.
c. Enterococcus density shall not exceed 35/100 ml.

Region 4 Marina del Rey Harbor, Mothers' Beach and Back Basins
Attachment A to Resolution No. 2003-012-Bacteria

Effective date: 3 18 2004. Discharges from general construction storm water permits are not expected to be a significant source of bacteria. Therefore, the WLAs for these discharges are zero (0) days of allowable exceedances for the single sample limits and the rolling 30-day geometric mean. Any future enrollees under a general NPDES permit, general industrial storm water permit or general construction storm water permit within the MdR Watershed will also be subject to a WLA of zero days of allowable exceedances.

Single Sample Limits are:
a. Total coliform density shall not exceed 10,000/100 ml.
b. Fecal coliform density shall not exceed 400/100 ml.
c. Enterococcus density shall not exceed 104/100 ml.
d. Total coliform density shall not exceed 1,000/100 ml, if the ratio of fecal-to-total coliform exceeds 0.1.

Rolling 30-day Geometric Mean Limits are:
a. Total coliform density shall not exceed 1,000/100 ml.
b. Fecal coliform density shall not exceed 200/100 ml.
c. Enterococcus density shall not exceed 35/100 ml.

Santa Clara River Nutrients TMDL (Adopted by Resolution No. 2003-011
Effective Date - March 23, 2004

Concentration-based wasteloads are allocated to municipal, industrial and construction stormwater sources regulated under NPDES permits. For stormwater permittees discharging into Reach 7, the thirty-day WLA for ammonia as nitrogen is 1.75 mg/L and the one-hour WLA for ammonia as nitrogen is 5.2 mg/L; the thirty-day average WLA for nitrate plus nitrite as nitrogen is 6.8 mg/L. For stormwater permittees discharging into Reach 3, the thirty-day WLA for ammonia as nitrogen is 2.0 mg/L and the one-hour WLA for ammonia as nitrogen is 4.2 mg/L; the thirty-day average WLA for nitrate plus nitrite nitrogen is 8.1 mg/L.

Region 8 RESOLUTION NO. R8-2007- 0024

Total Maximum Daily Loads (TMDLs) for San Diego Creek,
Upper and Lower Newport Bay, Orange County, California

Region 8 NPDES Construction Permit TMDL Completion Date: 1 24 1995 TMDL Type: River. Cr, Bay	Organochlorine Compounds							
	Total DDT		**Chlordane**		**Total PCBs**		**Toxaphene**	
	g/day	g/yr	g/day	g/yr	g/day	g/yr	g/day	g/yr
San Diego Creek	.27	99.8	**.18***	**64.3***	**.09***	**31.5***	.004 1.5	
Upper Newport Bay	.11	40.3 .06		23.4 .06		23.2	**X**	**X**
Lower Newport Bay	.04	14.9	.02 8.6 .17	60.7			**X**	**X**

*Red= Informational WLA only, not for enforcement purposes

Organochlorine Compounds TMDLs Implementation Tasks and Schedule

Regional Board staff shall develop a SWPPP Improvement Program that identifies the Regional Board's expectations with respect to the content of SWPPPs, including documentation regarding the selection and implementation of BMPs, and a sampling and analysis plan. The Improvement Program shall include specific guidance regarding the development and implementation of monitoring plans, including the constituents to be monitored, sampling frequency and analytical protocols. The SWPPP Improvement Program shall be completed by (*the date of OAL approval of this BPA*). ***No later than two months*** from completion of the Improvement Program, Board staff shall assure that the requirements of the Program are communicated to interested parties, including dischargers with existing authorizations under the General Construction Permit. Existing, authorized dischargers shall revise their project SWPPPs as needed to address the Program requirements as soon as possible but ***no later than (three months of completion of the SWPPP Improvement Program)***. Applicable SWPPPs that do not adequately address the Program requirements shall be considered inadequate and enforcement by the Regional Board shall proceed accordingly. The Caltrans and Orange County MS4 permits shall be revised as needed to assure that the permittees communicate the Regional Board's SWPPP expectations, based on the SWPPP Improvement Program, with the Standard Conditions of Approval.

APPENDIX 5:
Glossary

Active Areas of Construction
All areas subject to land surface disturbance activities related to the project including, but not limited to, project staging areas, immediate access areas and storage areas. All previously active areas are still considered active areas until final stabilization is complete. [The construction activity Phases used in this General Permit are the Preliminary Phase, Grading and Land Development Phase, Streets and Utilities Phase, and the Vertical Construction Phase.]

Active Treatment System (ATS)
A treatment system that employs chemical coagulation, chemical flocculation, or electrocoagulation to aid in the reduction of turbidity caused by fine suspended sediment.

Acute Toxicity Test
A chemical stimulus severe enough to rapidly induce a negative effect; in aquatic toxicity tests, an effect observed within 96 hours or less is considered acute.

Air Deposition
Airborne particulates from construction activities.

Approved Signatory
A person who has been authorized by the Legally Responsible Person to sign, certify, and electronically submit Permit Registration Documents, Notices of Termination, and any other documents, reports, or information required by the General Permit, the State or Regional Water Board, or U.S. EPA. The Approved Signatory must be one of the following:

1. For a corporation or limited liability company: a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (a) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation or limited liability company; or (b) the manager of the facility if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

2. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

3. For a municipality, State, Federal, or other public agency: a principal executive officer, ranking elected official, city manager, council president, or any other authorized public employee with managerial responsibility over the

construction or land disturbance project (including, but not limited to, project manager, project superintendent, or resident engineer);

4. For the military: any military officer or Department of Defense civilian, acting in an equivalent capacity to a military officer, who has been designated;

5. For a public university: an authorized university official;

6. For an individual: the individual, because the individual acts as both the Legally Responsible Person and the Approved Signatory; or

7. For any type of entity not listed above (e.g. trusts, estates, receivers): an authorized person with managerial authority over the construction or land disturbance project.

Beneficial Uses
As defined in the California Water Code, beneficial uses of the waters of the state that may be protected against quality degradation include, but are not limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.

Best Available Technology Economically Achievable (BAT)
As defined by USEPA, BAT is a technology-based standard established by the Clean Water Act (CWA) as the most appropriate means available on a national basis for controlling the direct discharge of toxic and nonconventional pollutants to navigable waters. The BAT effluent limitations guidelines, in general, represent the best existing performance of treatment technologies that are economically achievable within an industrial point source category or subcategory.

Best Conventional Pollutant Control Technology (BCT)
As defined by USEPA, BCT is a technology-based standard for the discharge from existing industrial point sources of conventional pollutants including biochemical oxygen demand (BOD), total suspended sediment (TSS), fecal coliform, pH, oil and grease.

Best Professional Judgment (BPJ)
The method used by permit writers to develop technology-based NPDES permit conditions on a case-by-case basis using all reasonably available and relevant data.

Best Management Practices (BMPs)
BMPs are scheduling of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants. BMPs also include treatment requirements, operating procedures,

and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Chain of Custody (COC)
Form used to track sample handling as samples progress from sample collection to the analytical laboratory. The COC is then used to track the resulting analytical data from the laboratory to the client. COC forms can be obtained from an analytical laboratory upon request.

Coagulation
The clumping of particles in a discharge to settle out impurities, often induced by chemicals such as lime, alum, and iron salts.

Common Plan of Development
Generally a contiguous area where multiple, distinct construction activities may be taking place at different times under one plan. A plan is generally defined as any piece of documentation or physical demarcation that indicates that construction activities may occur on a common plot. Such documentation could consist of a tract map, parcel map, demolition plans, grading plans or contract documents. Any of these documents could delineate the boundaries of a common plan area. However, broad planning documents, such as land use master plans, conceptual master plans, or broad-based CEQA or NEPA documents that identify potential projects for an agency or facility are not considered common plans of development.

Daily Average Discharge
The discharge of a pollutant measured during any 24-hour period that reasonably represents a calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged during the day. For pollutants with limitations expressed in other units of measurement (e.g., concentration) the daily discharge is calculated as the average measurement of the pollutant throughout the day (40 CFR 122.2). In the case of pH, the pH must first be converted from a log scale.

Debris
Litter, rubble, discarded refuse, and remains of destroyed inorganic anthropogenic waste.

Direct Discharge
A discharge that is routed directly to waters of the United States by means of a pipe, channel, or ditch (including a municipal storm sewer system), or through surface runoff.

Discharger
The Legally Responsible Person (see definition) or entity subject to this General Permit.

Dose Rate (for ATS)
In exposure assessment, dose (e.g. of a chemical) per time unit (e.g. mg/day), sometimes also called dosage.

Drainage Area
The area of land that drains water, sediment, pollutants, and dissolved materials to a common outlet.

Effluent
Any discharge of water by a discharger either to the receiving water or beyond the property boundary controlled by the discharger.

Effluent Limitation
Any numeric or narrative restriction imposed on quantities, discharge rates, and concentrations of pollutants which are discharged from point sources into waters of the United States, the waters of the contiguous zone, or the ocean.

Erosion
The process, by which soil particles are detached and transported by the actions of wind, water, or gravity.

Erosion Control BMPs
Vegetation, such as grasses and wildflowers, and other materials, such as straw, fiber, stabilizing emulsion, protective blankets, etc., placed to stabilize areas of disturbed soils, reduce loss of soil due to the action of water or wind, and prevent water pollution.

Field Measurements
Testing procedures performed in the field with portable field-testing kits or meters.

Final Stabilization
All soil disturbing activities at each individual parcel within the site have been completed in a manner consistent with the requirements in this General Permit.

First Order Stream
Stream with no tributaries.

Flocculants
Substances that interact with suspended particles and bind them together to form flocs.

Good Housekeeping BMPs
BMPs designed to reduce or eliminate the addition of pollutants to construction site runoff through analysis of pollutant sources, implementation of proper handling/disposal practices, employee education, and other actions.

Grading Phase (part of the Grading and Land Development Phase)
Includes reconfiguring the topography and slope including; alluvium removals; canyon cleanouts; rock undercuts; keyway excavations; land form grading; and stockpiling of select material for capping operations.

Hydromodification
Hydromodification is the alteration of the hydrologic characteristics of coastal and non-coastal waters, which in turn could cause degradation of water resources. Hydromodification can cause excessive erosion and/or sedimentation rates, causing excessive turbidity, channel aggradation and/or degradation.

Identified Organisms
Organisms within a sub-sample that is specifically identified and counted.

Inactive Areas of Construction
Areas of construction activity that are not active and those that have been active and are not scheduled to be re-disturbed for at least 14 days.

Index Period
The period of time during which bioassessment samples must be collected to produce results suitable for assessing the biological integrity of streams and rivers. Instream communities naturally vary over the course of a year,and sampling during the index period ensures that samples are collected during a time frame when communities are stable so that year-to-year consistency is obtained. The index period approach provides a cost-effective alternative to year-round sampling. Furthermore, sampling within the appropriate index period will yield results that are comparable to the assessment thresholds or criteria for a given region, which are established for the same index period. Because index periods differ for different parts of the state, it is essential to know the index period for your area.

K Factor
The soil erodibility factor used in the Revised Universal Soil Loss Equation (RUSLE). It represents the combination of detachability of the soil, runoff potential of the soil, and the transportability of the sediment eroded from the soil.

Legally Responsible Person
The Legally Responsible Person (LRP) will typically be the project proponent. The categories of persons or entities that are eligible to serve as the LRP are set forth below. For any construction or land disturbance project where multiple persons or entities are eligible to serve as the LRP, those persons or entities

shall select a single LRP. In exceptional circumstances, a person or entity that qualifies as the LRP may provide written authorization to another person or entity to serve as the LRP. In such a circumstance, the person or entity that provides the authorization retains all responsibility for compliance with the General Permit. Except as provided in category 2(d), a contractor who does not satisfy the requirements of any of the categories below is not qualified to be an LRP.

The following persons or entities may serve as an LRP:

1. A person, company, agency, or other entity that possesses a real property interest (including, but not limited to, fee simple ownership, easement, leasehold, or other rights of way) in the land upon which the construction or land disturbance activities will occur for the regulated site.

2. In addition to the above, the following persons or entities may also serve as an LRP:

    a. For linear underground/overhead projects, the utility company, municipality, or other public or private company or agency that owns or operates the LUP;

    b. For land controlled by an estate or similar entity, the person who has day-to-day control over the land (including, but not limited to, a bankruptcy trustee, receiver, or conservator);

    c. For pollution investigation and remediation projects, any potentially responsible party that has received permission to conduct the project from the holder of a real property interest in the land; or

    d. For U.S. Army Corp of Engineers projects, the U.S. Army Corps of Engineers may provide written authorization to its bonded contractor to serve as the LRP, provided, however, that the U.S. Army Corps of Engineers is also responsible for compliance with the general permit, as authorized by the Clean Water Act or the Federal Facilities Compliance Act.

Likely Precipitation Event
Any weather pattern that is forecasted to have a 50% or greater chance of producing precipitation in the project area. The discharger shall obtain likely precipitation forecast information from the National Weather Service Forecast Office (e.g., by entering the zip code of the project's location at http://www.srh.noaa.gov/forecast).

Maximum Allowable Threshold Concentration (MATC)
The allowable concentration of residual, or dissolved, coagulant/flocculant in effluent. The MATC shall be coagulant/flocculant-specific, and based on toxicity

testing conducted by an independent, third-party laboratory. A typical MATC would be:

The MATC is equal to the geometric mean of the NOEC (No Observed Effect Concentration) and LOEC (Lowest Observed Effect Concentration) Acute and Chronic toxicity results for most sensitive species determined for the specific coagulant. The most sensitive species test shall be used to determine the MATC.

Natural Channel Evolution
The physical trend in channel adjustments following a disturbance that causes the river to have more energy and degrade or aggrade more sediment. Channels have been observed to pass through 5 to 9 evolution types. Once they pass though the suite of evolution stages, they will rest in a new state of equilibrium.

Non-Storm Water Discharges
Discharges are discharges that do not originate from precipitation events. They can include, but are not limited to, discharges of process water, air conditioner condensate, non-contact cooling water, vehicle wash water, sanitary wastes, concrete washout water, paint wash water, irrigation water, or pipe testing water.

Non-Visible Pollutants
Pollutants associated with a specific site or activity that can have a negative impact on water quality, but cannot be seen though observation (ex: chlorine). Such pollutants being discharged are not authorized.

Numeric Action Level (NAL)
Level is used as a warning to evaluate if best management practices are effective and take necessary corrective actions. Not an effluent limit.

Original Sample Material
The material (i.e., macroinvertebrates, organic material, gravel, etc.) remaining after the subsample has been removed for identification.

pH
Unit universally used to express the intensity of the acid or alkaline condition of a water sample. The pH of natural waters tends to range between 6 and 9, with neutral being 7. Extremes of pH can have deleterious effects on aquatic systems.

Post-Construction BMPs
Structural and non-structural controls which detain, retain, or filter the release of pollutants to receiving waters after final stabilization is attained.

Preliminary Phase (Pre-Construction Phase - Part of the Grading and Land Development Phase)
Construction stage including rough grading and/or disking, clearing and grubbing operations, or any soil disturbance prior to mass grading.

Project

Qualified SWPPP Developer
Individual who is authorized to develop and revise SWPPPs.

Qualified SWPPP Practitioner
Individual assigned responsibility for non-storm water and storm water visual observations, sampling and analysis, and responsibility to ensure full compliance with the permit and implementation of all elements of the SWPPP, including the preparation of the annual compliance evaluation and the elimination of all unauthorized discharges.

Qualifying Rain Event
Any event that produces 0.5 inches or more precipitation with a 48 hour or greater period between rain events.

R Factor
Erosivity factor used in the Revised Universal Soil Loss Equation (RUSLE). The R factor represents the erosivity of the climate at a particular location. An average annual value of R is determined from historical weather records using erosivity values determined for individual storms. The erosivity of an individual storm is computed as the product of the storm's total energy, which is closely related to storm amount, and the storm's maximum 30-minute intensity.

Rain Event Action Plan (REAP)
Written document, specific for each rain event, that when implemented is designed to protect all exposed portions of the site within 48 hours of any likely precipitation event.

Remaining Sub sampled Material
The material (e.g., organic material, gravel, etc.) that remains after the organisms to be identified have been removed from the subsample for identification. (Generally, no macroinvertebrates are present in the remaining subsampled material, but the sample needs to be checked and verified using a complete Quality Assurance (QA) plan)

Routine Maintenance
Activities intended to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

Runoff Control BMPs
Measures used to divert runon from offsite and runoff within the site.

Run-on
Discharges that originate offsite and flow onto the property of a separate project site.

Revised Universal Soil Loss Equation (RUSLE)
Empirical model that calculates average annual soil loss as a function of rainfall and runoff erosivity, soil erodibility, topography, erosion controls, and sediment controls.

Sampling and Analysis Plan
Document that describes how the samples will be collected, under what conditions, where and when the samples will be collected, what the sample will be tested for, what test methods and detection limits will be used, and what methods/procedures will be maintained to ensure the integrity of the sample during collection, storage, shipping and testing (i.e., quality assurance/quality control protocols).

Sediment
Solid particulate matter, both mineral and organic, that is in suspension, is being transported, or has been moved from its site of origin by air, water, gravity, or ice and has come to rest on the earth's surface either above or below sea level.

Sedimentation
Process of deposition of suspended matter carried by water, wastewater, or other liquids, by gravity. It is usually accomplished by reducing the velocity of the liquid below the point at which it can transport the suspended material.

Sediment Control BMPs
Practices that trap soil particles after they have been eroded by rain, flowing water, or wind. They include those practices that intercept and slow or detain the flow of storm water to allow sediment to settle and be trapped (e.g., silt fence, sediment basin, fiber rolls, etc.).

Settleable Solids (SS)
Solid material that can be settled within a water column during a specified time frame. It is typically tested by placing a water sample into an Imhoff settling cone and then allowing the solids to settle by gravity for a given length of time. Results are reported either as a volume (mL/L) or a mass (mg/L) concentration.

Sheet Flow
Flow of water that occurs overland in areas where there are no defined channels where the water spreads out over a large area at a uniform depth.

Site

Soil Amendment
Any material that is added to the soil to change its chemical properties, engineering properties, or erosion resistance that could become mobilized by storm water.

Streets and Utilities Phase
Construction stage including excavation and street paving, lot grading, curbs, gutters and sidewalks, public utilities, public water facilities including fire hydrants, public sanitary sewer systems, storm sewer system and/or other drainage improvements.

Structural Controls
Any structural facility designed and constructed to mitigate the adverse impacts of storm water and urban runoff pollution

Suspended Sediment Concentration (SSC)
The measure of the concentration of suspended solid material in a water sample by measuring the dry weight of all of the solid material from a known volume of a collected water sample. Results are reported in mg/L.

Total Suspended Solids (TSS)
The measure of the suspended solids in a water sample includes inorganic substances, such as soil particles and organic substances, such as algae, aquatic plant/animal waste, particles related to industrial/sewage waste, etc. The TSS test measures the concentration of suspended solids in water by measuring the dry weight of a solid material contained in a known volume of a sub-sample of a collected water sample. Results are reported in mg/L.

Toxicity
The adverse response(s) of organisms to chemicals or physical agents ranging from mortality to physiological responses such as impaired reproduction or growth anomalies.

Turbidity
The cloudiness of water quantified by the degree to which light traveling through a water column is scattered by the suspended organic and inorganic particles it contains. The turbidity test is reported in Nephelometric Turbidity Units (NTU) or Jackson Turbidity Units (JTU).

Vertical Construction Phase
The Build out of structures from foundations to roofing, including rough landscaping.

Waters of the United States
Generally refers to surface waters, as defined by the federal Environmental Protection Agency in 40 C.F.R. § 122.2.[1]

Water Quality Objectives (WQO)
Water quality objectives are defined in the California Water Code as limits or levels of water quality constituents or characteristics, which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area.

[1] The application of the definition of "waters of the United States" may be difficult to determine; there are currently several judicial decisions that create some confusion. If a landowner is unsure whether the discharge must be covered by this General Permit, the landowner may wish to seek legal advice.

APPENDIX 6:
Acronym List

ASBS	Areas of Special Biological Significance
ASTM	American Society of Testing and Materials; Standard Test Method for Particle-Size Analysis of Soils
ATS	Active Treatment System
BASMAA	Bay Area Storm water Management Agencies Association
BAT	Best Available Technology Economically Achievable
BCT	Best Conventional Pollutant Control Technology
BMP	Best Management Practices
BOD	Biochemical Oxygen Demand
BPJ	Best Professional Judgment
CAFO	Confined Animal Feeding Operation
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CGP	NPDES General Permit for Storm Water Discharges Associated with Construction Activities
CIWQS	California Integrated Water Quality System
CKD	Cement Kiln Dust
COC	Chain of Custody
CPESC	Certified Professional in Erosion and Sediment Control
CPSWQ	Certified Professional in Storm Water Quality
CSMP	Construction Site Monitoring Program
CTB	Cement Treated Base
CTR	California Toxics Rule
CWA	Clean Water Act
CWC	California Water Code
CWP	Center for Watershed Protection
DADMAC	Diallyldimethyl-ammonium chloride
DDNR	Delaware Department of Natural Resources
DFG	Department of Fish and Game
DHS	Department of Health Services
DWQ	Division of Water Quality
EC	Electrical Conductivity
ELAP	Environmental Laboratory Accreditation Program
EPA	Environmental Protection Agency
ESA	Environmentally Sensitive Area
ESC	Erosion and Sediment Control
HSPF	Hydrologic Simulation Program Fortran
JTU	Jackson Turbidity Units
LID	Low Impact Development
LOEC	Lowest Observed Effect Concentration
LRP	Legally Responsible Person
LUP	Linear Underground/Overhead Projects

MATC	Maximum Allowable Threshold Concentration
MDL	Method Detection Limits
MRR	Monitoring and Reporting Requirements
MS4	Municipal Separate Storm Sewer System
MUSLE	Modified Universal Soil Loss Equation
NAL	Numeric Action Level
NEL	Numeric Effluent Limitation
NICET	National Institute for Certification in Engineering Technologies
NOAA	National Oceanic and Atmospheric Administration
NOEC	No Observed Effect Concentration
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NTR	National Toxics Rule
NTU	Nephelometric Turbidity Units
O&M	Operation and Maintenance
PAC	Polyaluminum chloride
PAM	Polyacrylamide
PASS	Polyaluminum chloride Silica/sulfate
POC	Pollutants of Concern
PoP	Probability of Precipitation
POTW	Publicly Owned Treatment Works
PRDs	Permit Registration Documents
PWS	Planning Watershed
QAMP	Quality Assurance Management Plan
QA/QC	Quality Assurance/Quality Control
REAP	Rain Event Action Plan
Regional Board	Regional Water Quality Control Board
ROWD	Report of Waste Discharge
RUSLE	Revised Universal Soil Loss Equation
RW	Receiving Water
SMARTS	Storm water Multi Application Reporting and Tracking System
SS	Settleable Solids
SSC	Suspended Sediment Concentration
SUSMP	Standard Urban Storm Water Mitigation Plan
SW	Storm Water
SWARM	Storm Water Annual Report Module
SWAMP	Surface Water Ambient Monitoring Program
SWMM	Storm Water Management Model
SWMP	Storm Water Management Program
SWPPP	Storm Water Pollution Prevention Plan
TC	Treatment Control
TDS	Total Dissolved Solids

TMDL	Total Maximum Daily Load
TSS	Total Suspended Solids
USACOE	U.S. Army Corps of Engineers
USC	United States Code
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
WDID	Waste Discharge Identification Number
WDR	Waste Discharge Requirements
WLA	Waste Load Allocation
WET	Whole Effluent Toxicity
WRCC	Western Regional Climate Center
WQBEL	Water Quality Based Effluent Limitation
WQO	Water Quality Objective
WQS	Water Quality Standard

APPENDIX 7:
State and Regional Water Resources Control Board Contacts

NORTH COAST REGION (1)
5550 Skylane Blvd, Ste. A
Santa Rose, CA 95403
(707) 576-2220 FAX: (707)523-0135

SAN FRANCISCO BAY REGION (2)
1515 Clay Street, Ste. 1400
Oakland, CA 94612
(510) 622-2300 FAX: (510) 622-2640

CENTRAL COAST REGION (3)
895 Aerovista Place, Ste 101
San Luis Obispo, CA 93401
(805) 549-3147 FAX: (805) 543-0397

LOS ANGELES REGION (4)
320 W. 4th Street, Ste. 200
Los Angeles, CA 90013
(213) 576-6600 FAX: (213) 576-6640

CENTRAL VALLEY REGION (5S)
11020 Sun Center Dr., #200
Rancho Cordova, CA 95670-6114
(916) 464-3291 FAX: (916) 464-4645

FRESNO BRANCH OFFICE (5F)
1685 E St.
Fresno, CA 93706
(559) 445-5116 FAX: (559) 445-5910

REDDING BRANCH OFFICE (5R)
415 Knollcrest Drive, Ste. 100
Redding, CA 96002
(530) 224-4845 FAX: (530) 224-4857

LAHONTAN REGION (6 SLT)
2501 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150
(530) 542-5400 FAX: (530) 544-2271

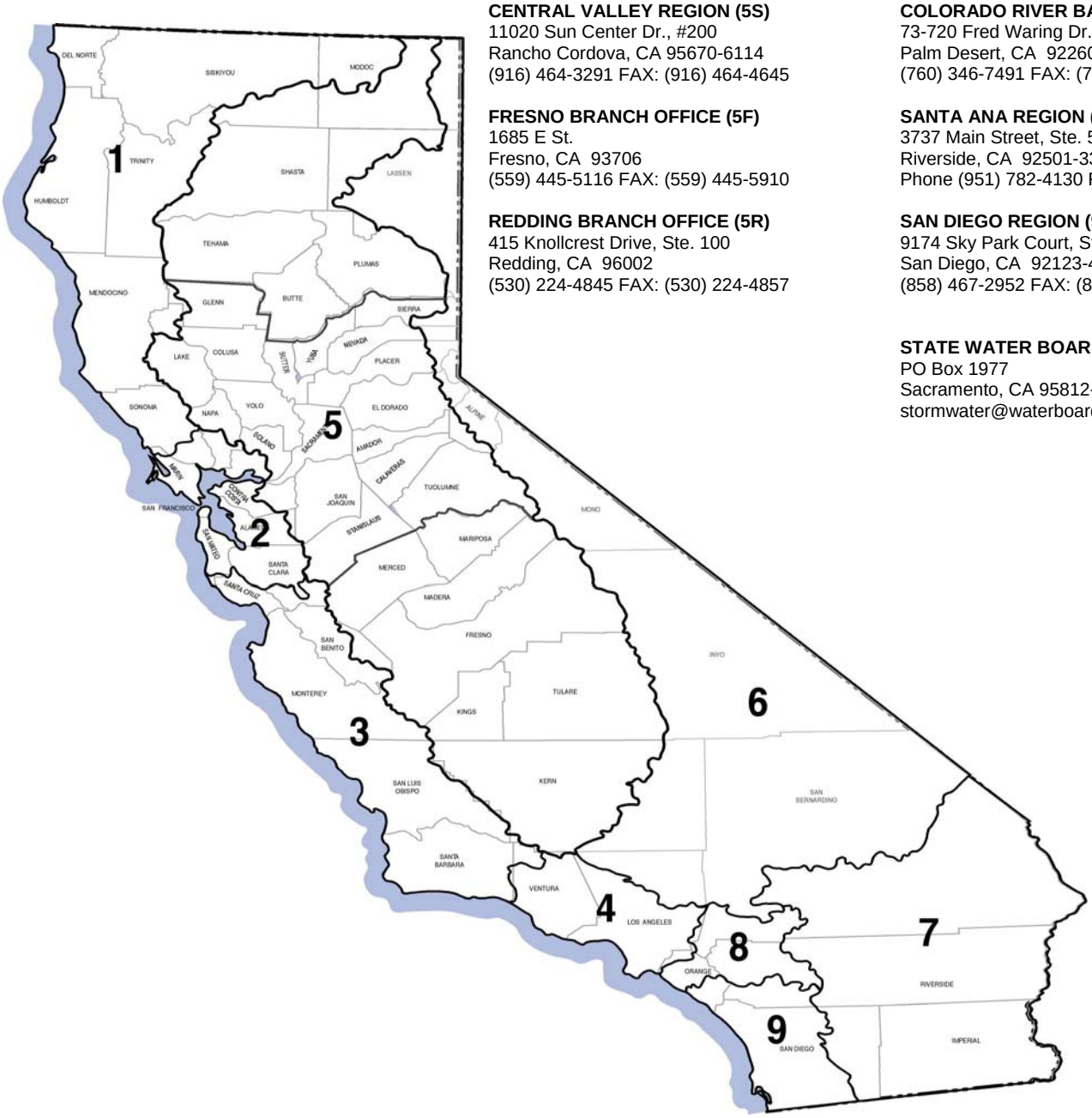
VICTORVILLE OFFICE (6V)
14440 Civic Drive, Ste. 200
Victorville, CA 92392-2383
(760) 241-6583 FAX: (760) 241-7308

COLORADO RIVER BASIN REGION (7)
73-720 Fred Waring Dr., Ste. 100
Palm Desert, CA 92260
(760) 346-7491 FAX: (760) 341-6820

SANTA ANA REGION (8)
3737 Main Street, Ste. 500
Riverside, CA 92501-3339
Phone (951) 782-4130 FAX: (951) 781-6288

SAN DIEGO REGION (9)
9174 Sky Park Court, Ste. 100
San Diego, CA 92123-4340
(858) 467-2952 FAX: (858) 571-6972

STATE WATER BOARD
PO Box 1977
Sacramento, CA 95812-1977
stormwater@waterboards.ca.gov



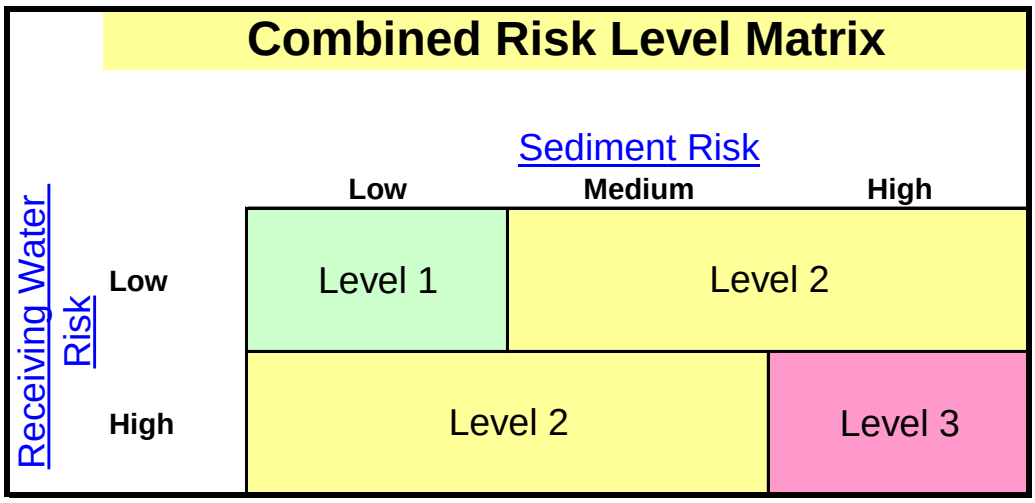
Attachment B

Permit Registration Documents (PRDs)

	A	B	C
1	**Sediment Risk Factor Worksheet**		**Entry**
2	**A) R Factor**		
3	Analyses of data indicated that when factors other than rainfall are held constant, soil loss is directly proportional to a rainfall factor composed of total storm kinetic energy (E) times the maximum 30-min intensity (I30) (Wischmeier and Smith, 1958). The numerical value of R is the average annual sum of EI30 for storm events during a rainfall record of at least 22 years. "Isoerodent" maps were developed based on R values calculated for more than 1000 locations in the Western U.S. Refer to the link below to determine the R factor for the project site.		
4	http://cfpub.epa.gov/npdes/stormwater/LEW/lewCalculator.cfm		
5	**R Factor Value**		69.65
6	**B) K Factor (weighted average, by area, for all site soils)**		
7	The soil-erodibility factor K represents: (1) susceptibility of soil or surface material to erosion, (2) transportability of the sediment, and (3) the amount and rate of runoff given a particular rainfall input, as measured under a standard condition. Fine-textured soils that are high in clay have low K values (about 0.05 to 0.15) because the particles are resistant to detachment. Coarse-textured soils, such as sandy soils, also have low K values (about 0.05 to 0.2) because of high infiltration resulting in low runoff even though these particles are easily detached. Medium-textured soils, such as a silt loam, have moderate K values (about 0.25 to 0.45) because they are moderately susceptible to particle detachment and they produce runoff at moderate rates. Soils having a high silt content are especially susceptible to erosion and have high K values, which can exceed 0.45 and can be as large as 0.65. Silt-size particles are easily detached and tend to crust, producing high rates and large volumes of runoff. Use Site-specific data must be submitted.		
8	0.28		
9	**K Factor Value**		0.24
10	**C) LS Factor (weighted average, by area, for all slopes)**		
11	The effect of topography on erosion is accounted for by the LS factor, which combines the effects of a hillslope-length factor, L, and a hillslope-gradient factor, S. Generally speaking, as hillslope length and/or hillslope gradient increase, soil loss increases. As hillslope length increases, total soil loss and soil loss per unit area increase due to the progressive accumulation of runoff in the downslope direction. As the hillslope gradient increases, the velocity and erosivity of runoff increases. Use the LS table located in separate tab of this spreadsheet to determine LS factors. Estimate the weighted LS for the site prior to construction.		
12	LS Table		
13	**LS Factor Value**		0.52
14			
15	**Watershed Erosion Estimate (=RxKxLS) in tons/acre**		8.69232
16	**Site Sediment Risk Factor**		**Low**
17	Low Sediment Risk: < 15 tons/acre		
18	Medium Sediment Risk: >=15 and <75 tons/acre		
19	High Sediment Risk: >= 75 tons/acre		
20			

Receiving Water (RW) Risk Factor Worksheet	Entry	Score
A. Watershed Characteristics	**yes/no**	
A.1. Does the disturbed area discharge (either directly or indirectly) to a **303(d)-listed waterbody impaired by sediment**? For help with impaired waterbodies please check the attached worksheet or visit the link below:	**Yes**	**High**
2006 Approved Sediment-impared WBs Worksheet		
http://www.waterboards.ca.gov/water_issues/programs/tmdl/303d_lists2006_epa.shtml		
OR		
A.2. Does the disturbed area discharge to a waterbody with designated beneficial uses of SPAWN & COLD & MIGRATORY?		
http://www.ice.ucdavis.edu/geowbs/asp/wbquse.asp		

Combined Risk Level Matrix



Project Sediment Risk:	**Low**
Project RW Risk:	**High**
Project Combined Risk:	**Level 2**

Attachment C

SWPPP Amendment Log

SWPPP Amendment No.

Project Name: Milpitas Fire Station No. 2

APN: 088-02-026

QSD Certification of the
Storm Water Pollution Prevention Plan Amendment

"I certify under a penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

QSD Signature	Date
Paul Schneider, P.E.	209.943.2021
QSD Name and Title	Telephone Number
California Registered Professional Civil Engineer	C 62498 (QSD #00575)
Type of Registration	Registration Number

Amendment Log

Project Name: Milpitas Fire Station No. 2

APN: 088-02-026

Amendment No.	Date	Brief Description of Amendment	Prepared By

Attachment D

Notice of Non-Compliance

To: Owner Date:

Subject: Notice of Non-Compliance

Project Name:	Milpitas Fire Station No. 2
APN:	088-02-026

In accordance with the NPDES Statewide Permit for Storm Water Discharges Associated with Construction Activity, the following instance of discharge is noted:

Date, time, and location of discharge

Nature of the operation that caused the discharge

Initial assessment of any impact cause by the discharge

Existing BMP(s) in place prior to discharge event

Date of deployment and type of BMPs deployed after the discharge.

Steps taken or planned to reduce, eliminate and/or prevent recurrence of the discharge

Implementation and maintenance schedule for any affected BMPs

If further information or a modification to the above schedule is required, notify the contact person below.

Name of Contact Person	*Title*
Company	*Telephone Number*
Signature	*Date*

Attachment E

Discharge Reporting Log

Project Name: Milpitas Fire Station No. 2

APN: 088-02-026

Date	Material(s) Discharged	Estimated Quantity	Observed By

Attachment F

NAL/NEL Exceedance Site Evaluations

Attachment G

Submitted Changes to PRDs

Attachment H

Construction Schedule

- Estimated Construction Start: 04/15/2020
- Install stabilized construction entrance on: 04/15/2020
- Prepare soil stabilization and sediment control implementation plan prior to rainy season, submit to the Owner by 04/15/2020
- SWPPP measures to be installed between 04/15/2020 and 04/22/2020
- Rough and finished grading between 05/30/2020 and 07/10/2020
- Install temporary concrete washout: 07/02/2018
- Underground wet and dry utilities to be installed between 06/05/2020 and 07/03/2020
- Implement final erosion control of substantially completed areas: 07/31/20
- Estimated Construction End: 12/31/2021

Attachment I

CASQA BMP Consideration Checklist

CONSTRUCTION SITE BMPs CONSIDERATION CHECKLIST					
The BMPs listed here should be considered for every project. Those BMPs that are not included in the SWPPP must be checked as "Not Used" with a brief statement describing why it is not being used.					
EROSION CONTROL BMPs					
BMP No.	**BMP**	**CONSIDERED FOR PROJECT**	**CHECK IF USED**	**CHECK IF NOT USED**	**IF NOT USED, STATE REASON**
EC-1	Scheduling	X			
EC-2	Preservation of Existing Vegetation	X			
EC-3	Hydraulic Mulch			X	Wood mulch is being considered.
EC-4	Hydroseeding		X		
EC-5	Soil Binders			X	Not needed.
EC-6	Straw Mulch			X	Wood mulch is being considered.
EC-7	Geotextiles & Mats			X	Storm drain inlet protection is being considered.
EC-8	Wood Mulching	X			
EC-9	Earth Dikes & Drainage Swales			X	Not needed.
EC-10	Velocity Dissipation Devices			X	Not needed; relatively flat terrain.
EC-11	Slope Drains			X	Not needed; relatively flat terrain.
EC-12	Streambank Stabilization			X	Not needed; no stream disturbance.
EC-14	Compost Blanket			X	Not needed; relatively flat terrain.
EC-15	Soil Preparation/ Roughening			X	Not needed; relatively flat terrain.
EC-16	Non-Vegetative Stabilization			X	Not needed; relatively flat terrain.

CONSTRUCTION SITE BMPs
CONSIDERATION CHECKLIST

The BMPs listed here should be considered for every project. Those BMPs that are not included in the SWPPP must be checked as "Not Used" with a brief statement describing why it is not being used.

BMP No.	BMP	CONSIDERED FOR PROJECT	CHECK IF USED	CHECK IF NOT USED	IF NOT USED, STATE REASON
SEDIMENT CONTROL BMPs					
SE-1	Silt Fence			X	
SE-2	Sediment Basin			X	Bioretention is being considered.
SE-3	Sediment Trap			X	Not needed
SE-4	Check Dam			X	Not needed; relatively flat terrain.
SE-5	Fiber Rolls		X		
SE-6	Gravel Bag Berm			X	Fiber rolls are being considered.
SE-7	Street Sweeping and Vacuuming			X	Not needed.
SE-8	Sand Bag Barrier			X	Fiber rolls are being considered.
SE-9	Straw Bale Barrier			X	Fiber rolls are being considered.
SE-10	Storm Drain Inlet Protection		X		
SE-11	Active Treatment Systems			X	Not needed.
SE-12	Temporary Silt Dike			X	Fiber rolls are being considered.
SE-13	Compost Socks and Berms			X	Fiber rolls are being considered.
SE-14	Biofilter Bags			X	Storm drain inlet protection is being considered.
WIND EROSION CONTROL BMPs					
WE-1	Wind Erosion Control		X		
TRACKING CONTROL BMPs					
TC-1	Stabilized Construction Entrance/Exit		X		
TC-2	Stabilized Construction Roadway			X	Not needed.
TC-3	Entrance/Outlet Tire Wash		X		

CONSTRUCTION SITE BMPs
CONSIDERATION CHECKLIST

The BMPs listed here should be considered for every project. Those BMPs that are not included in the SWPPP must be checked as "Not Used" with a brief statement describing why it is not being used.

NON-STORM WATER MANAGEMENT BMPs

BMP No.	BMP	CONSIDERED FOR PROJECT	CHECK IF USED	CHECK IF NOT USED	IF NOT USED, STATE REASON
NS-1	Water Conservation Practices	X			
NS-2	Dewatering Operations			X	
NS-3	Paving and Grinding Operations	X			
NS-4	Temporary Stream Crossing			X	Not applicable.
NS-5	Clear Water Diversion			X	Not applicable.
NS-6	Illicit Connection/ Discharge	X			
NS-7	Potable Water/Irrigation	X			
NS-8	Vehicle and Equipment Cleaning			X	Not applicable.
NS-9	Vehicle and Equipment Fueling			X	Not applicable.
NS-10	Vehicle and Equipment Maintenance			X	Not applicable.
NS-11	Pile Driving Operations			X	Not applicable.
NS-12	Concrete Curing	X			
NS-13	Concrete Finishing			X	Not applicable.
NS-14	Material and Equipment Use Over Water			X	Not applicable.
NS-15	Demolition Adjacent to Water			X	Not applicable.
NS-16	Temporary Batch Plants			X	Not applicable.

CONSTRUCTION SITE BMPs
CONSIDERATION CHECKLIST

The BMPs listed here should be considered for every project. Those BMPs that are not included in the SWPPP must be checked as "Not Used" with a brief statement describing why it is not being used.

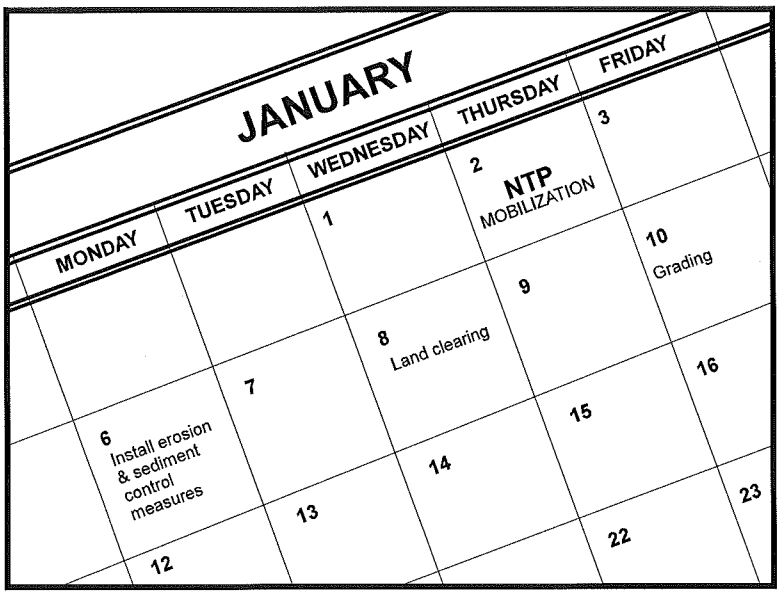
WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs

BMP No.	BMP	CONSIDERED FOR PROJECT	CHECK IF USED	CHECK IF NOT USED	IF NOT USED, STATE REASON
WM-1	Material Delivery and Storage	X			
WM-2	Material Use	X			
WM-3	Stockpile Management	X			
WM-4	Spill Prevention and Control	X			
WM-5	Solid Waste Management	X			
WM-6	Hazardous Waste Management	X			
WM-7	Contaminated Soil Management			X	Not applicable.
WM-8	Concrete Waste Management	X			
WM-9	Sanitary/Septic Waste Management	X			
WM-10	Liquid Waste Management			X	Not applicable.

Attachment J

CASQA BMP Handbook Fact Sheets

Scheduling EC-1



Categories

EC	Erosion Control	☑
SE	Sediment Control	☒
TC	Tracking Control	☒
WE	Wind Erosion Control	☒
NS	Non-Stormwater Management Control	
WM	Waste Management and Materials Pollution Control	

Legend:

☑ **Primary Objective**

☒ **Secondary Objective**

Targeted Constituents

Sediment	☑
Nutrients	
Trash	
Metals	
Bacteria	
Oil and Grease	
Organics	

Potential Alternatives

None

Description and Purpose

Scheduling is the development of a written plan that includes sequencing of construction activities and the implementation of BMPs such as erosion control and sediment control while taking local climate (rainfall, wind, etc.) into consideration. The purpose is to reduce the amount and duration of soil exposed to erosion by wind, rain, runoff, and vehicle tracking, and to perform the construction activities and control practices in accordance with the planned schedule.

Suitable Applications

Proper sequencing of construction activities to reduce erosion potential should be incorporated into the schedule of every construction project especially during rainy season. Use of other, more costly yet less effective, erosion and sediment control BMPs may often be reduced through proper construction sequencing.

Limitations

- Environmental constraints such as nesting season prohibitions reduce the full capabilities of this BMP.

Implementation

- Avoid rainy periods. Schedule major grading operations during dry months when practical. Allow enough time before rainfall begins to stabilize the soil with vegetation or physical means or to install sediment trapping devices.
- Plan the project and develop a schedule showing each phase

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of construction. Clearly show how the rainy season relates to soil disturbing and re-stabilization activities. Incorporate the construction schedule into the SWPPP.

- Include on the schedule, details on the rainy season implementation and deployment of:
  - Erosion control BMPs
  - Sediment control BMPs
  - Tracking control BMPs
  - Wind erosion control BMPs
  - Non-stormwater BMPs
  - Waste management and materials pollution control BMPs
- Include dates for activities that may require non-stormwater discharges such as dewatering, sawcutting, grinding, drilling, boring, crushing, blasting, painting, hydro-demolition, mortar mixing, pavement cleaning, etc.
- Work out the sequencing and timetable for the start and completion of each item such as site clearing and grubbing, grading, excavation, paving, foundation pouring utilities installation, etc., to minimize the active construction area during the rainy season.
  - Sequence trenching activities so that most open portions are closed before new trenching begins.
  - Incorporate staged seeding and re-vegetation of graded slopes as work progresses.
  - Schedule establishment of permanent vegetation during appropriate planting time for specified vegetation.
- Non-active areas should be stabilized as soon as practical after the cessation of soil disturbing activities or one day prior to the onset of precipitation.
- Monitor the weather forecast for rainfall.
- When rainfall is predicted, adjust the construction schedule to allow the implementation of soil stabilization and sediment treatment controls on all disturbed areas prior to the onset of rain.
- Be prepared year round to deploy erosion control and sediment control BMPs. Erosion may be caused during dry seasons by un-seasonal rainfall, wind, and vehicle tracking. Keep the site stabilized year round, and retain and maintain rainy season sediment trapping devices in operational condition.
- Apply permanent erosion control to areas deemed substantially complete during the project's defined seeding window.

Costs

Construction scheduling to reduce erosion may increase other construction costs due to reduced economies of scale in performing site grading. The cost effectiveness of scheduling techniques should be compared with the other less effective erosion and sedimentation controls to achieve a cost effective balance.

Inspection and Maintenance

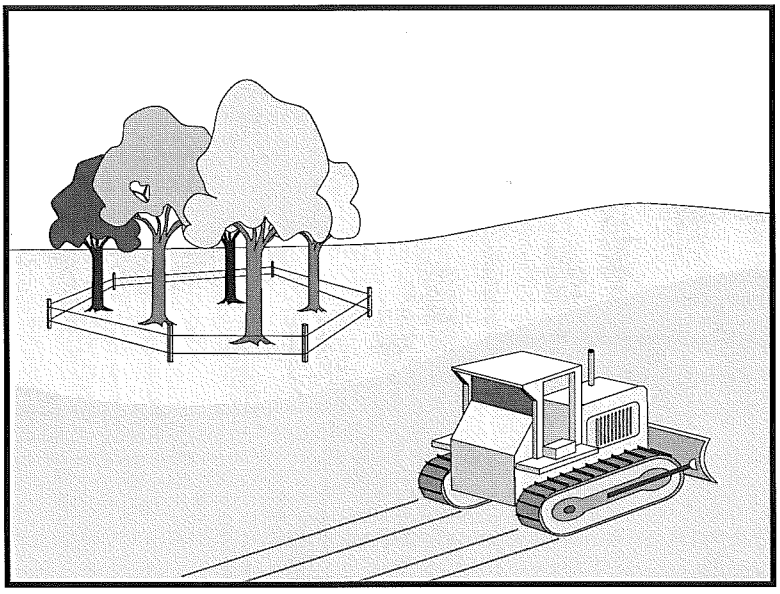
- Verify that work is progressing in accordance with the schedule. If progress deviates, take corrective actions.
- Amend the schedule when changes are warranted.
- Amend the schedule prior to the rainy season to show updated information on the deployment and implementation of construction site BMPs.

References

Stormwater Quality Handbooks Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), November 2000.

Stormwater Management for Construction Activities Developing Pollution Prevention Plans and Best Management Practices (EPA 832-R-92-005), U.S. Environmental Protection Agency, Office of Water, September 1992.

Preservation Of Existing Vegetation EC-2



Categories		
EC	Erosion Control	☑
SE	Sediment Control	
TC	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	
WM	Waste Management and Materials Pollution Control	

Legend:
☑ **Primary Objective**
☒ **Secondary Objective**

Targeted Constituents	
Sediment	☑
Nutrients	
Trash	
Metals	
Bacteria	
Oil and Grease	
Organics	

Potential Alternatives

None

Description and Purpose

Carefully planned preservation of existing vegetation minimizes the potential of removing or injuring existing trees, vines, shrubs, and grasses that protect soil from erosion.

Suitable Applications

Preservation of existing vegetation is suitable for use on most projects. Large project sites often provide the greatest opportunity for use of this BMP. Suitable applications include the following:

- Areas within the site where no construction activity occurs, or occurs at a later date. This BMP is especially suitable to multi year projects where grading can be phased.
- Areas where natural vegetation exists and is designated for preservation. Such areas often include steep slopes, watercourse, and building sites in wooded areas.
- Areas where local, state, and federal government require preservation, such as vernal pools, wetlands, marshes, certain oak trees, etc. These areas are usually designated on the plans, or in the specifications, permits, or environmental documents.
- Where vegetation designated for ultimate removal can be temporarily preserved and be utilized for erosion control and sediment control.

Limitations

- Requires forward planning by the owner/developer,

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contractor, and design staff.

- Limited opportunities for use when project plans do not incorporate existing vegetation into the site design.
- For sites with diverse topography, it is often difficult and expensive to save existing trees while grading the site satisfactory for the planned development.

Implementation

The best way to prevent erosion is to not disturb the land. In order to reduce the impacts of new development and redevelopment, projects may be designed to avoid disturbing land in sensitive areas of the site (e.g., natural watercourses, steep slopes), and to incorporate unique or desirable existing vegetation into the site's landscaping plan. Clearly marking and leaving a buffer area around these unique areas during construction will help to preserve these areas as well as take advantage of natural erosion prevention and sediment trapping.

Existing vegetation to be preserved on the site must be protected from mechanical and other injury while the land is being developed. The purpose of protecting existing vegetation is to ensure the survival of desirable vegetation for shade, beautification, and erosion control. Mature vegetation has extensive root systems that help to hold soil in place, thus reducing erosion. In addition, vegetation helps keep soil from drying rapidly and becoming susceptible to erosion. To effectively save existing vegetation, no disturbances of any kind should be allowed within a defined area around the vegetation. For trees, no construction activity should occur within the drip line of the tree.

Timing

- Provide for preservation of existing vegetation prior to the commencement of clearing and grubbing operations or other soil disturbing activities in areas where no construction activity is planned or will occur at a later date.

Design and Layout

- Mark areas to be preserved with temporary fencing. Include sufficient setback to protect roots.
  - Orange colored plastic mesh fencing works well.
  - Use appropriate fence posts and adequate post spacing and depth to completely support the fence in an upright position.
- Locate temporary roadways, stockpiles, and layout areas to avoid stands of trees, shrubs, and grass.
- Consider the impact of grade changes to existing vegetation and the root zone.
- Maintain existing irrigation systems where feasible. Temporary irrigation may be required.
- Instruct employees and subcontractors to honor protective devices. Prohibit heavy equipment, vehicular traffic, or storage of construction materials within the protected area.

Costs

There is little cost associated with preserving existing vegetation if properly planned during the project design, and these costs may be offset by aesthetic benefits that enhance property values. During construction, the cost for preserving existing vegetation will likely be less than the cost of applying erosion and sediment controls to the disturbed area. Replacing vegetation inadvertently destroyed during construction can be extremely expensive, sometimes in excess of $10,000 per tree.

Inspection and Maintenance

During construction, the limits of disturbance should remain clearly marked at all times. Irrigation or maintenance of existing vegetation should be described in the landscaping plan. If damage to protected trees still occurs, maintenance guidelines described below should be followed:

- Verify that protective measures remain in place. Restore damaged protection measures immediately.
- Serious tree injuries shall be attended to by an arborist.
- Damage to the crown, trunk, or root system of a retained tree shall be repaired immediately.
- Trench as far from tree trunks as possible, usually outside of the tree drip line or canopy. Curve trenches around trees to avoid large roots or root concentrations. If roots are encountered, consider tunneling under them. When trenching or tunneling near or under trees to be retained, place tunnels at least 18 in. below the ground surface, and not below the tree center to minimize impact on the roots.
- Do not leave tree roots exposed to air. Cover exposed roots with soil as soon as possible. If soil covering is not practical, protect exposed roots with wet burlap or peat moss until the tunnel or trench is ready for backfill.
- Cleanly remove the ends of damaged roots with a smooth cut.
- Fill trenches and tunnels as soon as possible. Careful filling and tamping will eliminate air spaces in the soil, which can damage roots.
- If bark damage occurs, cut back all loosened bark into the undamaged area, with the cut tapered at the top and bottom and drainage provided at the base of the wood. Limit cutting the undamaged area as much as possible.
- Aerate soil that has been compacted over a trees root zone by punching holes 12 in. deep with an iron bar, and moving the bar back and forth until the soil is loosened. Place holes 18 in. apart throughout the area of compacted soil under the tree crown.
- Fertilization
  - Fertilize stressed or damaged broadleaf trees to aid recovery.
  - Fertilize trees in the late fall or early spring.

- Apply fertilizer to the soil over the feeder roots and in accordance with label instructions, but never closer than 3 ft to the trunk. Increase the fertilized area by one-fourth of the crown area for conifers that have extended root systems.

- Retain protective measures until all other construction activity is complete to avoid damage during site cleanup and stabilization.

References

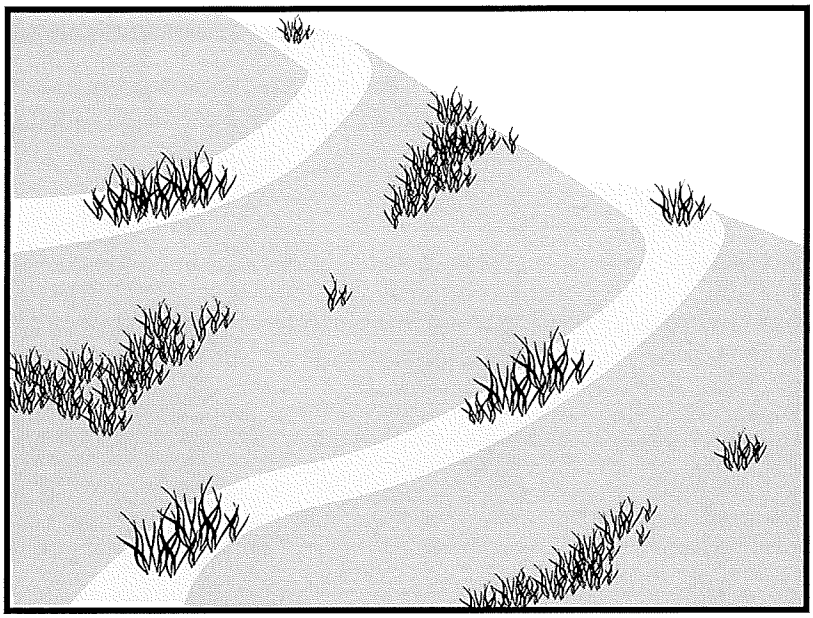
County of Sacramento Tree Preservation Ordinance, September 1981.

Stormwater Quality Handbooks Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), November 2000.

Stormwater Management of the Puget Sound Basin, Technical Manual, Publication #91-75, Washington State Department of Ecology, February 1992.

Water Quality Management Plan for The Lake Tahoe Region, Volume II, Handbook of Management Practices, Tahoe Regional Planning Agency, November 1988.

Hydroseeding EC-4



Categories		
EC	Erosion Control	☑
SE	Sediment Control	
TC	Tracking Control	
WE	Wind Erosion Control	☒
NS	Non-Stormwater Management Control	
WM	Waste Management and Materials Pollution Control	

Legend:
☑ **Primary Category**
☒ **Secondary Category**

Targeted Constituents	
Sediment	☑
Nutrients	
Trash	
Metals	
Bacteria	
Oil and Grease	
Organics	

Potential Alternatives

EC-3 Hydraulic Mulch
EC-5 Soil Binders
EC-6 Straw Mulch
EC-7 Geotextiles and Mats
EC-8 Wood Mulching
EC-14 Compost Blanket
EC-16 Non-Vegetative Stabilization

Description and Purpose

Hydroseeding typically consists of applying a mixture of a hydraulic mulch, seed, fertilizer, and stabilizing emulsion with a hydraulic mulcher, to temporarily protect exposed soils from erosion by water and wind. Hydraulic seeding, or hydroseeding, is simply the method by which temporary or permanent seed is applied to the soil surface.

Suitable Applications

Hydroseeding is suitable for disturbed areas requiring temporary protection until permanent stabilization is established, for disturbed areas that will be re-disturbed following an extended period of inactivity, or to apply permanent stabilization measures. Hydroseeding without mulch or other cover (e.g. EC-7, Erosion Control Blanket) is not a stand-alone erosion control BMP and should be combined with additional measures until vegetation establishment.

Typical applications for hydroseeding include:

- Disturbed soil/graded areas where permanent stabilization or continued earthwork is not anticipated prior to seed germination.
- Cleared and graded areas exposed to seasonal rains or temporary irrigation.
- Areas not subject to heavy wear by construction equipment or high traffic.

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Limitations

- Availability of hydroseeding equipment may be limited just prior to the rainy season and prior to storms due to high demand.
- Hydraulic seed should be applied with hydraulic mulch or a stand-alone hydroseed application should be followed by one of the following:
  - Straw mulch (see Straw Mulch EC-6)
  - Rolled erosion control products (see Geotextiles and Mats EC-7)
  - Application of Compost Blanket (see Compost Blanket EC-14)

  Hydraulic seed may be used alone only on small flat surfaces when there is sufficient time in the season to ensure adequate vegetation establishment and coverage to provide adequate erosion control.
- Hydraulic seed without mulch does not provide immediate erosion control.
- Temporary seeding may not be appropriate for steep slopes (i.e., slopes readily prone to rill erosion or without sufficient topsoil).
- Temporary seeding may not be appropriate in dry periods without supplemental irrigation.
- Temporary vegetation may have to be removed before permanent vegetation is applied.
- Temporary vegetation may not be appropriate for short term inactivity (i.e. less than 3-6 months).

Implementation

In order to select appropriate hydraulic seed mixtures, an evaluation of site conditions should be performed with respect to:

- Soil conditions
- Site topography and exposure (sun/wind)
- Season and climate
- Vegetation types
- Maintenance requirements
- Sensitive adjacent areas
- Water availability
- Plans for permanent vegetation

The local office of the U.S.D.A. Natural Resources Conservation Service (NRCS) is an excellent source of information on appropriate seed mixes.

The following steps should be followed for implementation:

- Where appropriate or feasible, soil should be prepared to receive the seed by disking or otherwise scarifying (See EC-15, Soil Preparation) the surface to eliminate crust, improve air and water infiltration and create a more favorable environment for germination and growth.

- Avoid use of hydraulic seed in areas where the BMP would be incompatible with future earthwork activities.
- Hydraulic seed can be applied using a multiple step or one step process.
  - In a multiple step process, hydraulic seed is applied first, followed by mulch or a Rolled Erosion Control Product (RECP).
  - In the one step process, hydraulic seed is applied with hydraulic mulch in a hydraulic matrix. When the one step process is used to apply the mixture of fiber, seed, etc., the seed rate should be increased to compensate for all seeds not having direct contact with the soil.
- All hydraulically seeded areas should have mulch, or alternate erosion control cover to keep seeds in place and to moderate soil moisture and temperature until the seeds germinate and grow.
- All seeds should be in conformance with the California State Seed Law of the Department of Agriculture. Each seed bag should be delivered to the site sealed and clearly marked as to species, purity, percent germination, dealer's guarantee, and dates of test. The container should be labeled to clearly reflect the amount of Pure Live Seed (PLS) contained. All legume seed should be pellet inoculated. Inoculant sources should be species specific and should be applied at a rate of 2 lb of inoculant per 100 lb seed.
- Commercial fertilizer should conform to the requirements of the California Food and Agricultural Code, which can be found at http://www.leginfo.ca.gov/.html/fac_table_of_contents.html. Fertilizer should be pelleted or granular form.
- Follow up applications should be made as needed to cover areas of poor coverage or germination/vegetation establishment and to maintain adequate soil protection.
- Avoid over spray onto roads, sidewalks, drainage channels, existing vegetation, etc.
- Additional guidance on the comparison and selection of temporary slope stabilization methods is provided in Appendix F of the Handbook.

Costs

Average cost for installation and maintenance may vary from as low as $1,900 per acre for flat slopes and stable soils, to $4,000 per acre for moderate to steep slopes and/or erosive soils. Cost of seed mixtures vary based on types of required vegetation.

BMP	Installed Cost per Acre
Hydraulic Seed	$1,900-$4,000

Source: Caltrans Soil Stabilization BMP Research for Erosion and Sediment Controls, July 2007

Inspection and Maintenance

- BMPs must be inspected in accordance with General Permit requirements for the associated project type and risk level. It is recommended that at a minimum, BMPs be inspected weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events.
- Areas where erosion is evident should be repaired and BMPs re-applied as soon as possible. Care should be exercised to minimize the damage to protected areas while making repairs, as any area damaged will require re-application of BMPs.
- Where seeds fail to germinate, or they germinate and die, the area must be re-seeded, fertilized, and mulched within the planting season, using not less than half the original application rates.
- Irrigation systems, if applicable, should be inspected daily while in use to identify system malfunctions and line breaks. When line breaks are detected, the system must be shut down immediately and breaks repaired before the system is put back into operation.
- Irrigation systems should be inspected for complete coverage and adjusted as needed to maintain complete coverage.

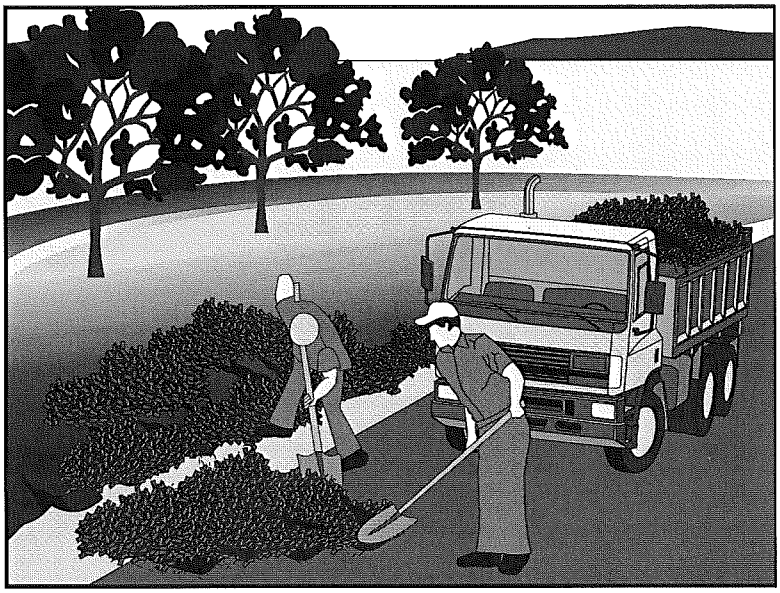
References

Soil Stabilization BMP Research for Erosion and Sediment Controls: Cost Survey Technical Memorandum, State of California Department of Transportation (Caltrans), July 2007.

Stormwater Quality Handbooks Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), March 2003.

Guidance Document: Soil Stabilization for Temporary Slopes, State of California Department of Transportation (Caltrans), November 1999.

Wood Mulching EC-8



Categories		
EC	Erosion Control	☑
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WE	Wind Erosion Control	☒
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Legend:
☑ **Primary Objective**
☒ **Secondary Objective**

Targeted Constituents	
Sediment	☑
Nutrients	
Trash	
Metals	
Bacteria	
Oil and Grease	
Organics	

Potential Alternatives

EC-3 Hydraulic Mulch
EC-4 Hydroseeding
EC-5 Soil Binders
EC-6 Straw Mulch
EC-7 Geotextiles and Mats

Description and Purpose

Wood mulching consists of applying a mixture of shredded wood mulch, bark or compost to disturbed soils. The primary function of wood mulching is to reduce erosion by protecting bare soil from rainfall impact, increasing infiltration, and reducing runoff.

Suitable Applications

Wood mulching is suitable for disturbed soil areas requiring temporary protection until permanent stabilization is established.

Limitations

- Not suitable for use on slopes steeper than 3:1 (H:V). Best suited to flat areas or gentle slopes or 5:1 (H:V) or flatter.
- Wood mulch and compost may introduce unwanted species.
- Not suitable for areas exposed to concentrated flows.
- May need to be removed prior to further earthwork.

Implementation

Mulch Selection

There are many types of mulches. Selection of the appropriate type of mulch should be based on the type of application, site conditions, and compatibility with planned or future uses.

Application Procedures

Prior to application, after existing vegetation has been

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removed, roughen embankment and fill areas by rolling with a device such as a punching type roller or by track walking. The construction application procedures for mulches vary significantly depending upon the type of mulching method specified. Two methods are highlighted here:

- Green Material: This type of mulch is produced by the recycling of vegetation trimmings such as grass, shredded shrubs, and trees. Methods of application are generally by hand although pneumatic methods are available.
  - Green material can be used as a temporary ground cover with or without seeding.
  - The green material should be evenly distributed on site to a depth of not more than 2 in.
- Shredded Wood: Suitable for ground cover in ornamental or revegetated plantings.
  - Shredded wood/bark is conditionally suitable. See note under limitations.
  - Distribute by hand or use pneumatic methods.
  - Evenly distribute the mulch across the soil surface to a depth of 2 to 3 in.
- Avoid mulch placement onto roads, sidewalks, drainage channels, existing vegetation, etc.

Costs

Average annual cost for installation and maintenance (3-4 months useful life) is around $4,000 per acre, but cost can increase if the source is not close to the project site.

Inspection and Maintenance

- Inspect BMPs prior to forecast rain, daily during extended rain events, after rain events, weekly during the rainy season, and at two-week intervals during the non-rainy season.
- Areas where erosion is evident shall be repaired and BMPs reapplied as soon as possible. Care should be exercised to minimize the damage to protected areas while making repairs, as any area damaged will require reapplication of BMPs.
- Regardless of the mulching technique selected, the key consideration in inspection and maintenance is that the mulch needs to last long enough to achieve erosion control objectives. If the mulch is applied as a stand alone erosion control method over disturbed areas (without seed), it should last the length of time the site will remain barren or until final re-grading and revegetation.
- Where vegetation is not the ultimate cover, such as ornamental and landscape applications of bark or wood chips, inspection and maintenance should focus on longevity and integrity of the mulch.
- Reapply mulch when bare earth becomes visible.

References

Controlling Erosion of Construction Sites Agriculture Information Bulletin #347, U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) (formerly Soil Conservation Service – SCS).

Guides for Erosion and Sediment Control in California, USDA Soils Conservation Service, January 1991.

Manual of Standards of Erosion and Sediment Control Measures, Association of Bay Area Governments, May 1995.

Proposed Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters, Work Group Working Paper, USEPA, April 1992.

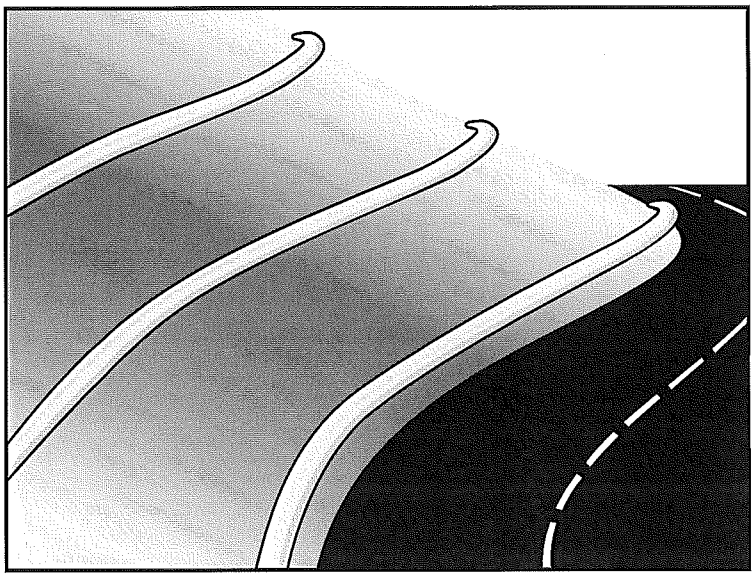
Sedimentation and Erosion Control, An Inventory of Current Practices Draft, U.S. EPA, April 1990.

Soil Erosion by Water Agricultural Information Bulletin #513, U.S. Department of Agriculture, Soil Conservation Service.

Stormwater Quality Handbooks Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), November 2000.

Water Quality Management Plan for the Lake Tahoe Region, Volume II, Handbook of Management Practices, Tahoe Regional Planning Agency, November 1988.

Fiber Rolls SE-5



Categories

EC	Erosion Control	☒
SE	Sediment Control	☑
TC	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	
WM	Waste Management and Materials Pollution Control	

Legend:
☑ **Primary Category**
☒ **Secondary Category**

Description and Purpose

A fiber roll consists of straw, coir, or other biodegradable materials bound into a tight tubular roll wrapped by netting, which can be photodegradable or natural. Additionally, gravel core fiber rolls are available, which contain an imbedded ballast material such as gravel or sand for additional weight when staking the rolls are not feasible (such as use as inlet protection). When fiber rolls are placed at the toe and on the face of slopes along the contours, they intercept runoff, reduce its flow velocity, release the runoff as sheet flow, and provide removal of sediment from the runoff (through sedimentation). By interrupting the length of a slope, fiber rolls can also reduce sheet and rill erosion until vegetation is established.

Targeted Constituents

Sediment	☑
Nutrients	
Trash	
Metals	
Bacteria	
Oil and Grease	
Organics	

Potential Alternatives

SE-1 Silt Fence

SE-6 Gravel Bag Berm

SE-8 Sandbag Barrier

SE-14 Biofilter Bags

Suitable Applications

Fiber rolls may be suitable:

- Along the toe, top, face, and at grade breaks of exposed and erodible slopes to shorten slope length and spread runoff as sheet flow.
- At the end of a downward slope where it transitions to a steeper slope.
- Along the perimeter of a project.
- As check dams in unlined ditches with minimal grade.
- Down-slope of exposed soil areas.
- At operational storm drains as a form of inlet protection.

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- Around temporary stockpiles.

Limitations

- Fiber rolls are not effective unless trenched in and staked.
- Not intended for use in high flow situations.
- Difficult to move once saturated.
- If not properly staked and trenched in, fiber rolls could be transported by high flows.
- Fiber rolls have a very limited sediment capture zone.
- Fiber rolls should not be used on slopes subject to creep, slumping, or landslide.
- Rolls typically function for 12-24 months depending upon local conditions.

Implementation

Fiber Roll Materials

- Fiber rolls should be prefabricated.
- Fiber rolls may come manufactured containing polyacrylamide (PAM), a flocculating agent within the roll. Fiber rolls impregnated with PAM provide additional sediment removal capabilities and should be used in areas with fine, clayey or silty soils to provide additional sediment removal capabilities. Monitoring may be required for these installations.
- Fiber rolls are made from weed free rice straw, flax, or a similar agricultural material bound into a tight tubular roll by netting.
- Typical fiber rolls vary in diameter from 9 in. to 20 in. Larger diameter rolls are available as well.

Installation

- Locate fiber rolls on level contours spaced as follows:
  - Slope inclination of 4:1 (H:V) or flatter: Fiber rolls should be placed at a maximum interval of 20 ft.
  - Slope inclination between 4:1 and 2:1 (H:V): Fiber Rolls should be placed at a maximum interval of 15 ft. (a closer spacing is more effective).
  - Slope inclination 2:1 (H:V) or greater: Fiber Rolls should be placed at a maximum interval of 10 ft. (a closer spacing is more effective).
- Prepare the slope before beginning installation.
- Dig small trenches across the slope on the contour. The trench depth should be ¼ to 1/3 of the thickness of the roll, and the width should equal the roll diameter, in order to provide area to backfill the trench.

- It is critical that rolls are installed perpendicular to water movement, and parallel to the slope contour.
- Start building trenches and installing rolls from the bottom of the slope and work up.
- It is recommended that pilot holes be driven through the fiber roll. Use a straight bar to drive holes through the roll and into the soil for the wooden stakes.
- Turn the ends of the fiber roll up slope to prevent runoff from going around the roll.
- Stake fiber rolls into the trench.
  - Drive stakes at the end of each fiber roll and spaced 4 ft maximum on center.
  - Use wood stakes with a nominal classification of 0.75 by 0.75 in. and minimum length of 24 in.
- If more than one fiber roll is placed in a row, the rolls should be overlapped, not abutted.
- See typical fiber roll installation details at the end of this fact sheet.

Removal

- Fiber rolls can be left in place or removed depending on the type of fiber roll and application (temporary vs. permanent installation). Typically, fiber rolls encased with plastic netting are used for a temporary application because the netting does not biodegrade. Fiber rolls used in a permanent application are typically encased with a biodegradeable material and are left in place. Removal of a fiber roll used in a permanent application can result in greater disturbance.
- Temporary installations should only be removed when up gradient areas are stabilized per General Permit requirements, and/or pollutant sources no longer present a hazard. But, they should also be removed before vegetation becomes too mature so that the removal process does not disturb more soil and vegetation than is necessary.

Costs

Material costs for regular fiber rolls range from $20 - $30 per 25 ft roll.

Material costs for PAM impregnated fiber rolls range between 7.00-$9.00 per linear foot, based upon vendor research.

Inspection and Maintenance

- BMPs must be inspected in accordance with General Permit requirements for the associated project type and risk level. It is recommended that at a minimum, BMPs be inspected weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events.
- Repair or replace split, torn, unraveling, or slumping fiber rolls.
- If the fiber roll is used as a sediment capture device, or as an erosion control device to maintain sheet flows, sediment that accumulates in the BMP should be periodically removed

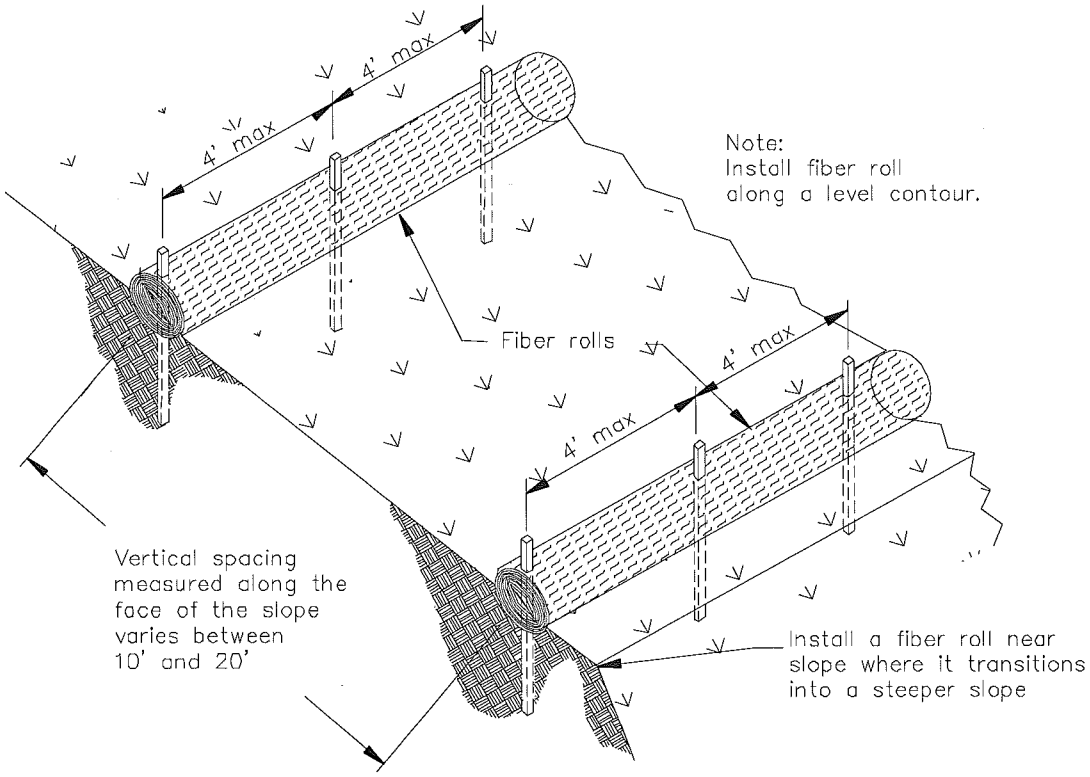
in order to maintain BMP effectiveness. Sediment should be removed when sediment accumulation reaches one-third the designated sediment storage depth.

- If fiber rolls are used for erosion control, such as in a check dam, sediment removal should not be required as long as the system continues to control the grade. Sediment control BMPs will likely be required in conjunction with this type of application.
- Repair any rills or gullies promptly.

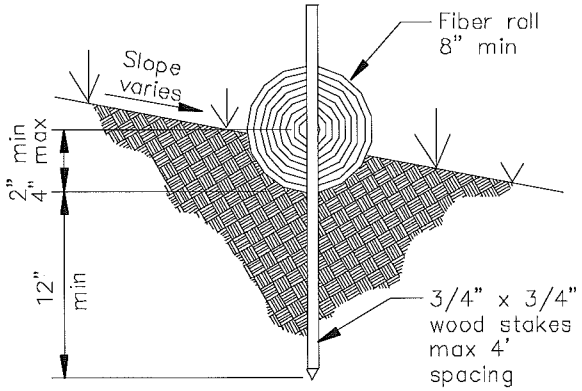
References

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), March 2003.

Erosion and Sediment Control Manual, Oregon Department of Environmental Quality, February 2005.

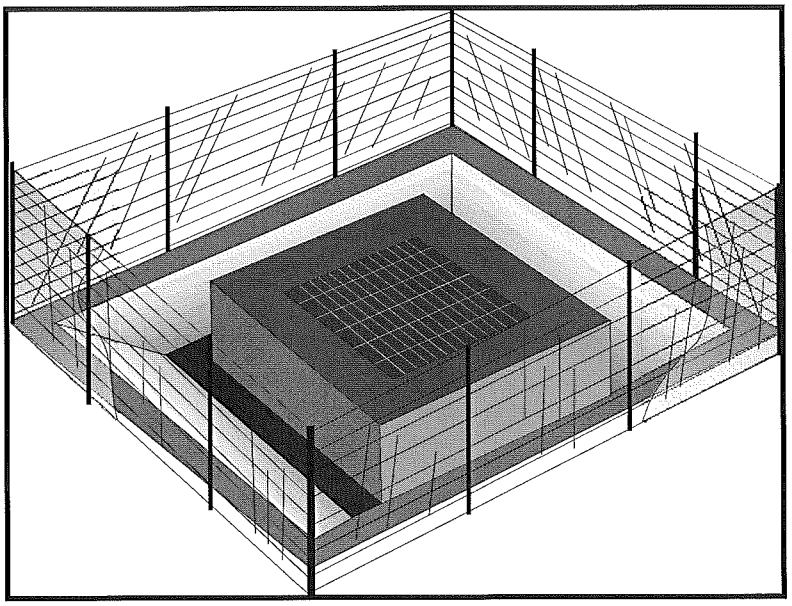


TYPICAL FIBER ROLL INSTALLATION
N.T.S.



ENTRENCHMENT DETAIL
N.T.S.

Storm Drain Inlet Protection SE-10



Categories

EC	Erosion Control	
SE	Sediment Control	☑
TC	Tracking Control	
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Legend:

☑ **Primary Category**

☒ **Secondary Category**

Targeted Constituents

Sediment	☑
Nutrients	
Trash	☒
Metals	
Bacteria	
Oil and Grease	
Organics	

Potential Alternatives

SE-1 Silt Fence

SE-5 Fiber Rolls

SE-6 Gravel Bag Berm

SE-8 Sandbag Barrier

SE-14 Biofilter Bags

Description and Purpose

Storm drain inlet protection consists of a sediment filter or an impounding area in, around or upstream of a storm drain, drop inlet, or curb inlet. Storm drain inlet protection measures temporarily pond runoff before it enters the storm drain, allowing sediment to settle. Some filter configurations also remove sediment by filtering, but usually the ponding action results in the greatest sediment reduction. Temporary geotextile storm drain inserts attach underneath storm drain grates to capture and filter storm water.

Suitable Applications

Every storm drain inlet receiving runoff from unstabilized or otherwise active work areas should be protected. Inlet protection should be used in conjunction with other erosion and sediment controls to prevent sediment-laden stormwater and non-stormwater discharges from entering the storm drain system.

Limitations

- Drainage area should not exceed 1 acre.
- In general straw bales should not be used as inlet protection.
- Requires an adequate area for water to pond without encroaching into portions of the roadway subject to traffic.

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- Sediment removal may be inadequate to prevent sediment discharges in high flow conditions or if runoff is heavily sediment laden. If high flow conditions are expected, use other onsite sediment trapping techniques in conjunction with inlet protection.
- Frequent maintenance is required.
- Limit drainage area to 1 acre maximum. For drainage areas larger than 1 acre, runoff should be routed to a sediment-trapping device designed for larger flows. See BMPs SE-2, Sediment Basin, and SE-3, Sediment Traps.
- Excavated drop inlet sediment traps are appropriate where relatively heavy flows are expected, and overflow capability is needed.

Implementation

General

Inlet control measures presented in this handbook should not be used for inlets draining more than one acre. Runoff from larger disturbed areas should be first routed through SE-2, Sediment Basin or SE-3, Sediment Trap and/or used in conjunction with other drainage control, erosion control, and sediment control BMPs to protect the site. Different types of inlet protection are appropriate for different applications depending on site conditions and the type of inlet. Alternative methods are available in addition to the methods described/shown herein such as prefabricated inlet insert devices, or gutter protection devices.

Design and Layout

Identify existing and planned storm drain inlets that have the potential to receive sediment-laden surface runoff. Determine if storm drain inlet protection is needed and which method to use.

- The key to successful and safe use of storm drain inlet protection devices is to know where runoff that is directed toward the inlet to be protected will pond or be diverted as a result of installing the protection device.
  - Determine the acceptable location and extent of ponding in the vicinity of the drain inlet. The acceptable location and extent of ponding will influence the type and design of the storm drain inlet protection device.
  - Determine the extent of potential runoff diversion caused by the storm drain inlet protection device. Runoff ponded by inlet protection devices may flow around the device and towards the next downstream inlet. In some cases, this is acceptable; in other cases, serious erosion or downstream property damage can be caused by these diversions. The possibility of runoff diversions will influence whether or not storm drain inlet protection is suitable; and, if suitable, the type and design of the device.
- The location and extent of ponding, and the extent of diversion, can usually be controlled through appropriate placement of the inlet protection device. In some cases, moving the inlet protection device a short distance upstream of the actual inlet can provide more efficient sediment control, limit ponding to desired areas, and prevent or control diversions.

- Six types of inlet protection are presented below. However, it is recognized that other effective methods and proprietary devices exist and may be selected.
  - Silt Fence: Appropriate for drainage basins with less than a 5% slope, sheet flows, and flows under 0.5 cfs.
  - Excavated Drop Inlet Sediment Trap: An excavated area around the inlet to trap sediment (SE-3).
  - Gravel bag barrier: Used to create a small sediment trap upstream of inlets on sloped, paved streets. Appropriate for sheet flow or when concentrated flow may exceed 0.5 cfs, and where overtopping is required to prevent flooding.
  - Block and Gravel Filter: Appropriate for flows greater than 0.5 cfs.
  - Temporary Geotextile Storm drain Inserts: Different products provide different features. Refer to manufacturer details for targeted pollutants and additional features.
  - Biofilter Bag Barrier: Used to create a small retention area upstream of inlets and can be located on pavement or soil. Biofilter bags slowly filter runoff allowing sediment to settle out. Appropriate for flows under 0.5 cfs.
- Select the appropriate type of inlet protection and design as referred to or as described in this fact sheet.
- Provide area around the inlet for water to pond without flooding structures and property.
- Grates and spaces around all inlets should be sealed to prevent seepage of sediment-laden water.
- Excavate sediment sumps (where needed) 1 to 2 ft with 2:1 side slopes around the inlet.

Installation

- ***DI Protection Type 1 - Silt Fence*** - Similar to constructing a silt fence; see BMP SE-1, Silt Fence. Do not place fabric underneath the inlet grate since the collected sediment may fall into the drain inlet when the fabric is removed or replaced and water flow through the grate will be blocked resulting in flooding. See typical Type 1 installation details at the end of this fact sheet.
  1. Excavate a trench approximately 6 in. wide and 6 in. deep along the line of the silt fence inlet protection device.
  2. Place 2 in. by 2 in. wooden stakes around the perimeter of the inlet a maximum of 3 ft apart and drive them at least 18 in. into the ground or 12 in. below the bottom of the trench. The stakes should be at least 48 in.
  3. Lay fabric along bottom of trench, up side of trench, and then up stakes. See SE-1, Silt Fence, for details. The maximum silt fence height around the inlet is 24 in.
  4. Staple the filter fabric (for materials and specifications, see SE-1, Silt Fence) to wooden stakes. Use heavy-duty wire staples at least 1 in. in length.

5. Backfill the trench with gravel or compacted earth all the way around.

- ***DI Protection Type 2 - Excavated Drop Inlet Sediment Trap*** - Install filter fabric fence in accordance with DI Protection Type 1. Size excavated trap to provide a minimum storage capacity calculated at the rate 67 yd^3/acre of drainage area. See typical Type 2 installation details at the end of this fact sheet.

- ***DI Protection Type 3 - Gravel bag*** - Flow from a severe storm should not overtop the curb. In areas of high clay and silts, use filter fabric and gravel as additional filter media. Construct gravel bags in accordance with SE-6, Gravel Bag Berm. Gravel bags should be used due to their high permeability. See typical Type 3 installation details at the end of this fact sheet.

  1. Construct on gently sloping street.
  2. Leave room upstream of barrier for water to pond and sediment to settle.
  3. Place several layers of gravel bags – overlapping the bags and packing them tightly together.
  4. Leave gap of one bag on the top row to serve as a spillway. Flow from a severe storm (e.g., 10 year storm) should not overtop the curb.

- ***DI Protection Type 4 – Block and Gravel Filter*** - Block and gravel filters are suitable for curb inlets commonly used in residential, commercial, and industrial construction. See typical Type 4 installation details at the end of this fact sheet.

  1. Place hardware cloth or comparable wire mesh with 0.5 in. openings over the drop inlet so that the wire extends a minimum of 1 ft beyond each side of the inlet structure. If more than one strip is necessary, overlap the strips. Place woven geotextile over the wire mesh.
  2. Place concrete blocks lengthwise on their sides in a single row around the perimeter of the inlet, so that the open ends face outward, not upward. The ends of adjacent blocks should abut. The height of the barrier can be varied, depending on design needs, by stacking combinations of blocks that are 4 in., 8 in., and 12 in. wide. The row of blocks should be at least 12 in. but no greater than 24 in. high.
  3. Place wire mesh over the outside vertical face (open end) of the concrete blocks to prevent stone from being washed through the blocks. Use hardware cloth or comparable wire mesh with 0.5 in. opening.
  4. Pile washed stone against the wire mesh to the top of the blocks. Use 0.75 to 3 in.

- ***DI Protection Type 5 – Temporary Geotextile Insert (proprietary)*** – Many types of temporary inserts are available. Most inserts fit underneath the grate of a drop inlet or inside of a curb inlet and are fastened to the outside of the grate or curb. These inserts are removable and many can be cleaned and reused. Installation of these inserts differs between manufacturers. Please refer to manufacturer instruction for installation of proprietary devices.

- ***DI Protection Type 6 - Biofilter bags*** – Biofilter bags may be used as a substitute for gravel bags in low-flow situations. Biofilter bags should conform to specifications detailed in SE-14, Biofilter bags.

  1. Construct in a gently sloping area.
  2. Biofilter bags should be placed around inlets to intercept runoff flows.
  3. All bag joints should overlap by 6 in.
  4. Leave room upstream for water to pond and for sediment to settle out.
  5. Stake bags to the ground as described in the following detail. Stakes may be omitted if bags are placed on a paved surface.

Costs

- Average annual cost for installation and maintenance of DI Type 1-4 and 6 (one year useful life) is $200 per inlet.
- Temporary geotextile inserts are proprietary and cost varies by region. These inserts can often be reused and may have greater than 1 year of use if maintained and kept undamaged. Average cost per insert ranges from $50-75 plus installation, but costs can exceed $100. This cost does not include maintenance.

Inspection and Maintenance

- BMPs must be inspected in accordance with General Permit requirements for the associated project type and risk level. It is recommended that at a minimum, BMPs be inspected weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events.
- Silt Fences. If the fabric becomes clogged, torn, or degrades, it should be replaced. Make sure the stakes are securely driven in the ground and are in good shape (i.e., not bent, cracked, or splintered, and are reasonably perpendicular to the ground). Replace damaged stakes. At a minimum, remove the sediment behind the fabric fence when accumulation reaches one-third the height of the fence or barrier height.
- Gravel Filters. If the gravel becomes clogged with sediment, it should be carefully removed from the inlet and either cleaned or replaced. Since cleaning gravel at a construction site may be difficult, consider using the sediment-laden stone as fill material and put fresh stone around the inlet. Inspect bags for holes, gashes, and snags, and replace bags as needed. Check gravel bags for proper arrangement and displacement.
- Sediment that accumulates in the BMP should be periodically removed in order to maintain BMP effectiveness. Sediment should be removed when the sediment accumulation reaches one-third of the barrier height.
- Inspect and maintain temporary geotextile insert devices according to manufacturer's specifications.
- Remove storm drain inlet protection once the drainage area is stabilized.

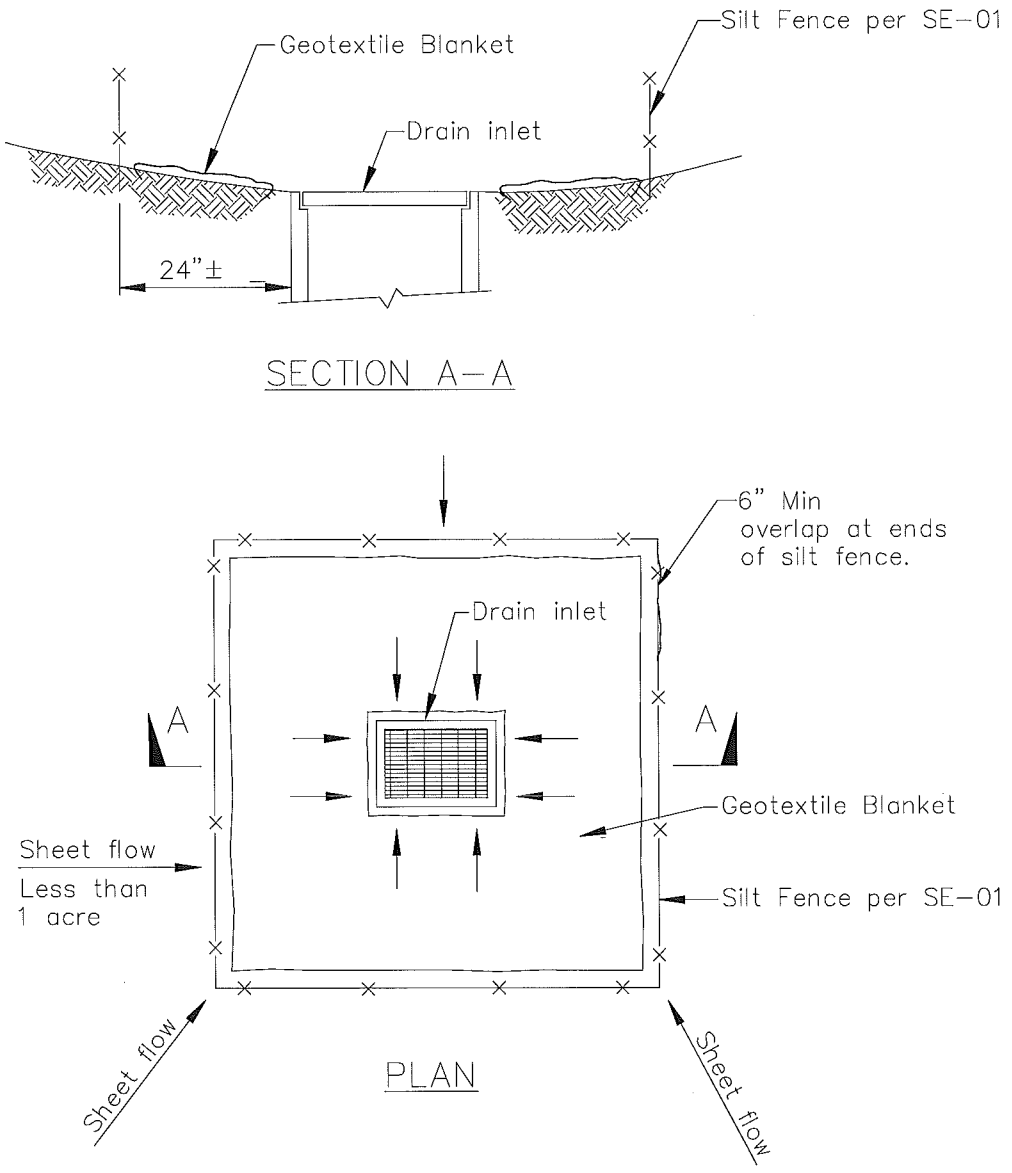
- Clean and regrade area around the inlet and clean the inside of the storm drain inlet, as it should be free of sediment and debris at the time of final inspection.

References

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), March 2003.

Stormwater Management Manual for The Puget Sound Basin, Washington State Department of Ecology, Public Review Draft, 1991.

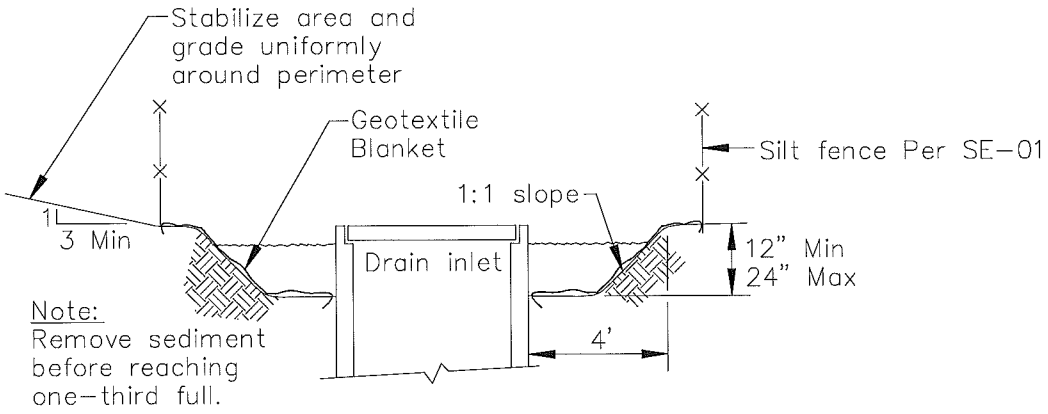
Erosion and Sediment Control Manual, Oregon Department of Environmental Quality, February 2005.



DI PROTECTION TYPE 1
NOT TO SCALE

NOTES:

1. For use in areas where grading has been completed and final soil stabilization and seeding are pending.
2. Not applicable in paved areas.
3. Not applicable with concentrated flows.



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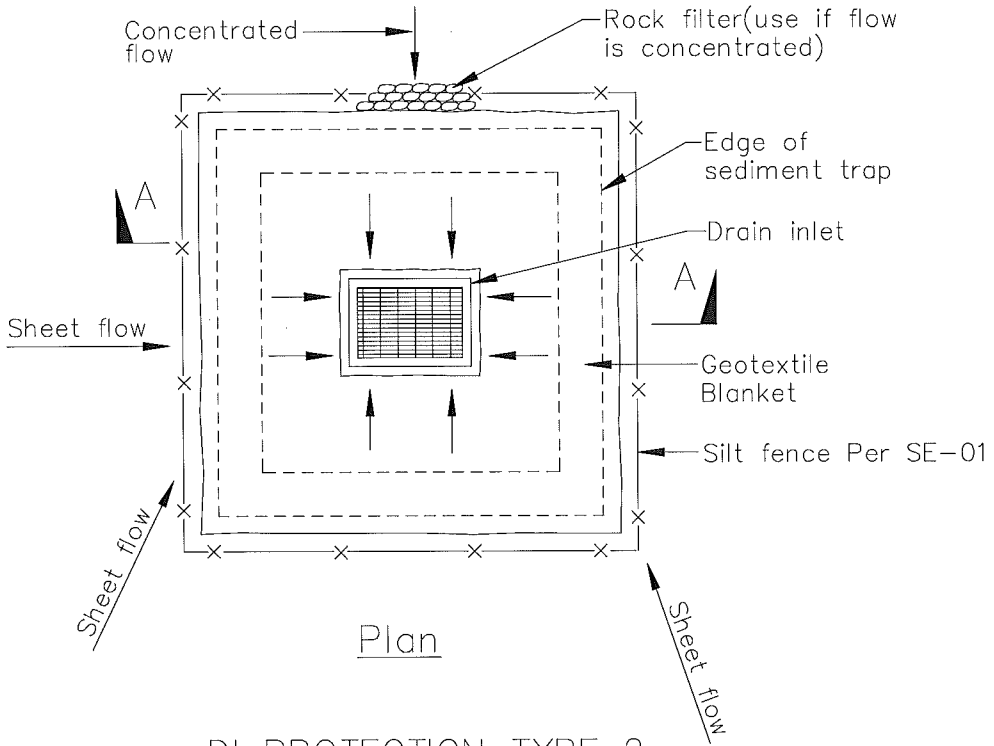
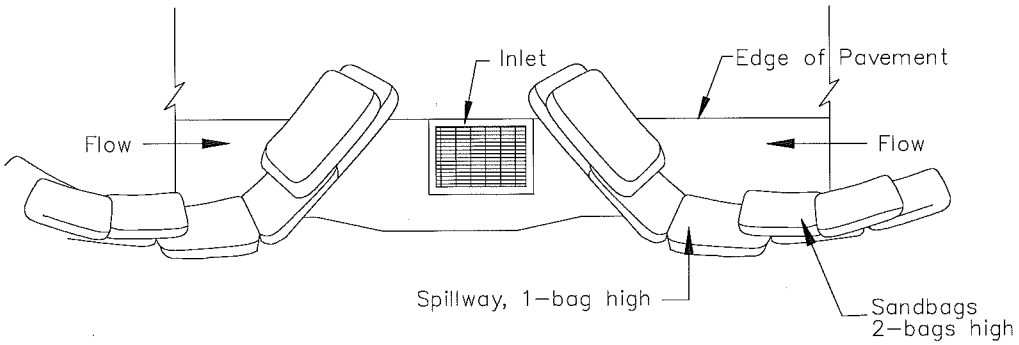


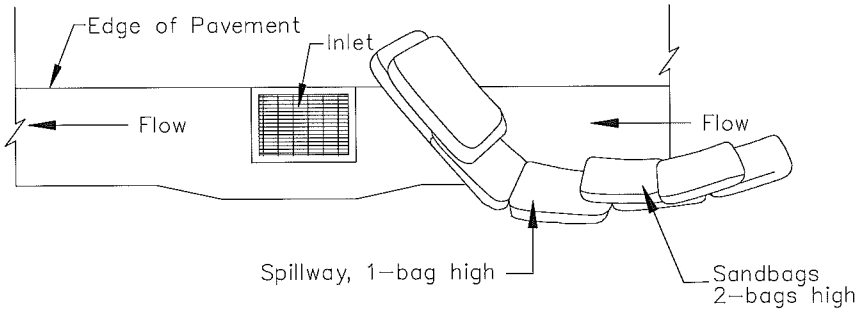
Plan

DI PROTECTION TYPE 2
NOT TO SCALE

Notes
1. For use in cleared and grubbed and in graded areas.
2. Shape basin so that longest inflow area faces longest length of trap.
3. For concentrated flows, shape basin in 2:1 ratio with length oriented towards direction of flow.



TYPICAL PROTECTION FOR INLET ON SUMP

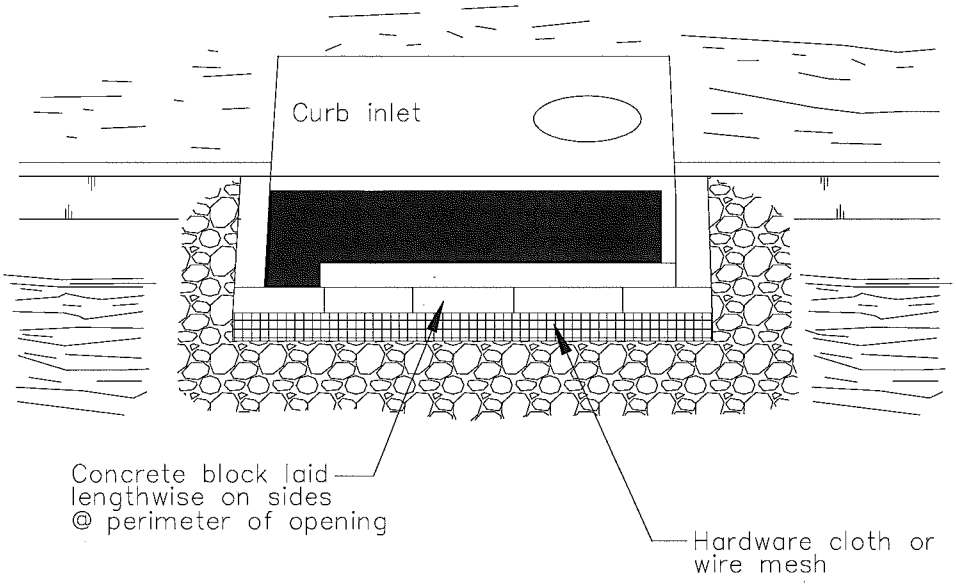


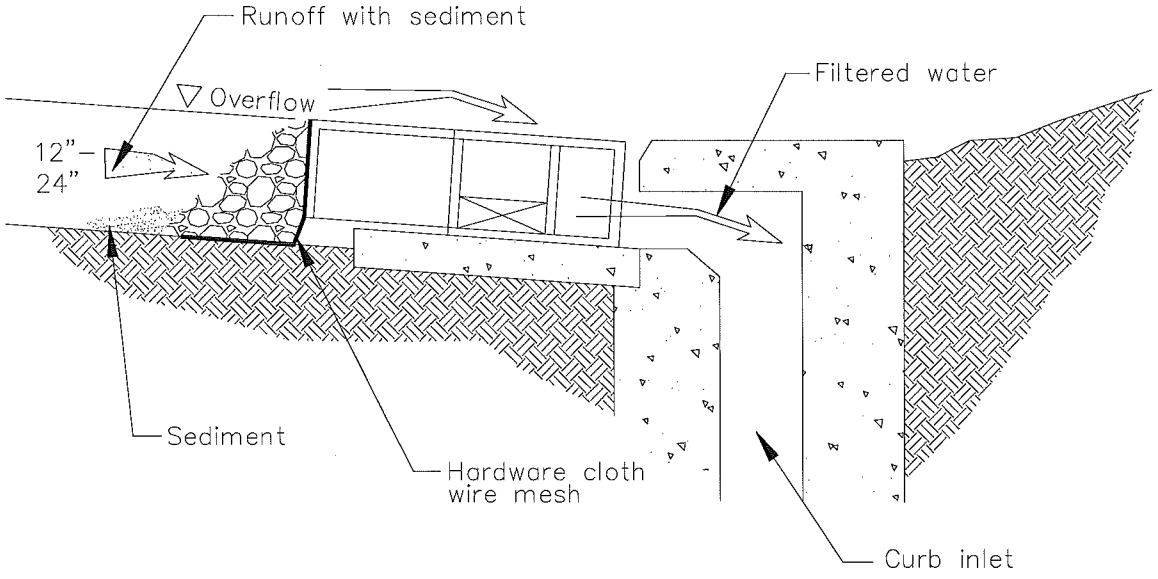
TYPICAL PROTECTION FOR INLET ON GRADE

NOTES:

1. Intended for short–term use.
2. Use to inhibit non–storm water flow.
3. Allow for proper maintenance and cleanup.
4. Bags must be removed after adjacent operation is completed
5. Not applicable in areas with high silts and clays without filter fabric.

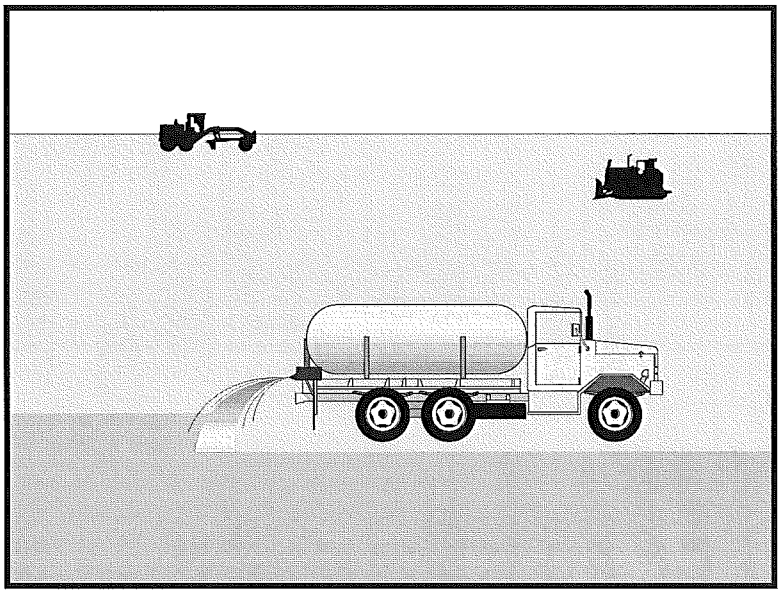
DI PROTECTION TYPE 3
NOT TO SCALE





DI PROTECTION – TYPE 4
NOT TO SCALE

Wind Erosion Control WE-1



Categories

EC	Erosion Control	
SE	Sediment Control	☒
TC	Tracking Control	
WE	Wind Erosion Control	☑
NS	Non-Stormwater Management Control	
WM	Waste Management and Materials Pollution Control	

Legend:

☑ **Primary Category**

☒ **Secondary Category**

Targeted Constituents

Sediment	☑
Nutrients	
Trash	
Metals	
Bacteria	
Oil and Grease	
Organics	

Potential Alternatives

EC-5 Soil Binders

Description and Purpose

Wind erosion or dust control consists of applying water or other chemical dust suppressants as necessary to prevent or alleviate dust nuisance generated by construction activities. Covering small stockpiles or areas is an alternative to applying water or other dust palliatives.

California's Mediterranean climate, with a short "wet" season and a typically long, hot "dry" season, allows the soils to thoroughly dry out. During the dry season, construction activities are at their peak, and disturbed and exposed areas are increasingly subject to wind erosion, sediment tracking and dust generated by construction equipment. Site conditions and climate can make dust control more of an erosion problem than water based erosion. Additionally, many local agencies, including Air Quality Management Districts, require dust control and/or dust control permits in order to comply with local nuisance laws, opacity laws (visibility impairment) and the requirements of the Clean Air Act. Wind erosion control is required to be implemented at all construction sites greater than 1 acre by the General Permit.

Suitable Applications

Most BMPs that provide protection against water-based erosion will also protect against wind-based erosion and dust control requirements required by other agencies will generally meet wind erosion control requirements for water quality protection. Wind erosion control BMPs are suitable during the following construction activities:

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- Construction vehicle traffic on unpaved roads
- Drilling and blasting activities
- Soils and debris storage piles
- Batch drop from front-end loaders
- Areas with unstabilized soil
- Final grading/site stabilization

Limitations

- Watering prevents dust only for a short period (generally less than a few hours) and should be applied daily (or more often) to be effective.
- Over watering may cause erosion and track-out.
- Oil or oil-treated subgrade should not be used for dust control because the oil may migrate into drainageways and/or seep into the soil.
- Chemical dust suppression agents may have potential environmental impacts. Selected chemical dust control agents should be environmentally benign.
- Effectiveness of controls depends on soil, temperature, humidity, wind velocity and traffic.
- Chemical dust suppression agents should not be used within 100 feet of wetlands or water bodies.
- Chemically treated subgrades may make the soil water repellant, interfering with long-term infiltration and the vegetation/re-vegetation of the site. Some chemical dust suppressants may be subject to freezing and may contain solvents and should be handled properly.
- In compacted areas, watering and other liquid dust control measures may wash sediment or other constituents into the drainage system.
- If the soil surface has minimal natural moisture, the affected area may need to be pre-wetted so that chemical dust control agents can uniformly penetrate the soil surface.

Implementation

Dust Control Practices

Dust control BMPs generally stabilize exposed surfaces and minimize activities that suspend or track dust particles. The following table presents dust control practices that can be applied to varying site conditions that could potentially cause dust. For heavily traveled and disturbed areas, wet suppression (watering), chemical dust suppression, gravel asphalt surfacing, temporary gravel construction entrances, equipment wash-out areas, and haul truck covers can be employed as dust control applications. Permanent or temporary vegetation and mulching can be employed for areas of occasional or no construction traffic. Preventive measures include minimizing surface areas to be disturbed, limiting onsite vehicle traffic to 15 mph or less, and controlling the number and activity of vehicles on a site at any given time.

Chemical dust suppressants include: mulch and fiber based dust palliatives (e.g. paper mulch with gypsum binder), salts and brines (e.g. calcium chloride, magnesium chloride), non-petroleum based organics (e.g. vegetable oil, lignosulfonate), petroleum based organics (e.g. asphalt emulsion, dust oils, petroleum resins), synthetic polymers (e.g. polyvinyl acetate, vinyls, acrylic), clay additives (e.g. bentonite, montimorillonite) and electrochemical products (e.g. enzymes, ionic products).

Site Condition	Dust Control Practices							
	Permanent Vegetation	Mulching	Wet Suppression (Watering)	Chemical Dust Suppression	Gravel or Asphalt	Temporary Gravel Construction Entrances/Equipment Wash Down	Synthetic Covers	Minimize Extent of Disturbed Area
Disturbed Areas not Subject to Traffic	X	X	X	X	X			X
Disturbed Areas Subject to Traffic			X	X	X	X		X
Material Stockpiles		X	X	X			X	X
Demolition			X			X	X	
Clearing/ Excavation			X	X				X
Truck Traffic on Unpaved Roads			X	X	X	X	X	
Tracking					X	X		

Additional preventive measures include:

- Schedule construction activities to minimize exposed area (see EC-1, Scheduling).
- Quickly treat exposed soils using water, mulching, chemical dust suppressants, or stone/gravel layering.
- Identify and stabilize key access points prior to commencement of construction.
- Minimize the impact of dust by anticipating the direction of prevailing winds.
- Restrict construction traffic to stabilized roadways within the project site, as practicable.
- Water should be applied by means of pressure-type distributors or pipelines equipped with a spray system or hoses and nozzles that will ensure even distribution.
- All distribution equipment should be equipped with a positive means of shutoff.
- Unless water is applied by means of pipelines, at least one mobile unit should be available at all times to apply water or dust palliative to the project.
- If reclaimed waste water is used, the sources and discharge must meet California Department of Health Services water reclamation criteria and the Regional Water Quality

Control Board (RWQCB) requirements. Non-potable water should not be conveyed in tanks or drain pipes that will be used to convey potable water and there should be no connection between potable and non-potable supplies. Non-potable tanks, pipes, and other conveyances should be marked, "NON-POTABLE WATER - DO NOT DRINK."

- Pave or chemically stabilize access points where unpaved traffic surfaces adjoin paved roads.
- Provide covers for haul trucks transporting materials that contribute to dust.
- Provide for rapid clean up of sediments deposited on paved roads. Furnish stabilized construction road entrances and wheel wash areas.
- Stabilize inactive areas of construction sites using temporary vegetation or chemical stabilization methods.

For chemical stabilization, there are many products available for chemically stabilizing gravel roadways and stockpiles. If chemical stabilization is used, the chemicals should not create any adverse effects on stormwater, plant life, or groundwater and should meet all applicable regulatory requirements.

Costs

Installation costs for water and chemical dust suppression vary based on the method used and the length of effectiveness. Annual costs may be high since some of these measures are effective for only a few hours to a few days.

Inspection and Maintenance

- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities.
- BMPs must be inspected in accordance with General Permit requirements for the associated project type and risk level. It is recommended that at a minimum, BMPs be inspected weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events.
- Check areas protected to ensure coverage.
- Most water-based dust control measures require frequent application, often daily or even multiple times per day. Obtain vendor or independent information on longevity of chemical dust suppressants.

References

Best Management Practices and Erosion Control Manual for Construction Sites, Flood Control District of Maricopa County, Arizona, September 1992.

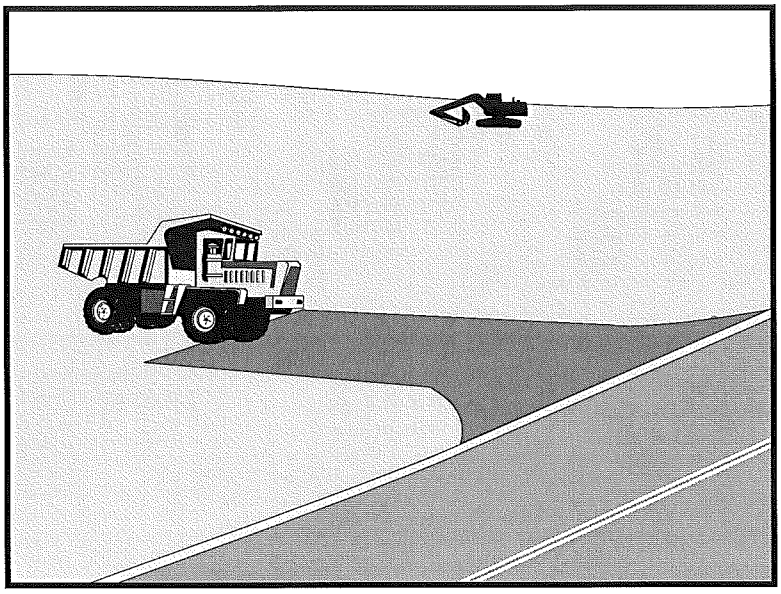
California Air Pollution Control Laws, California Air Resources Board, updated annually.

Construction Manual, Chapter 4, Section 10, "Dust Control"; Section 17, "Watering"; and Section 18, "Dust Palliative", California Department of Transportation (Caltrans), July 2001.

Prospects for Attaining the State Ambient Air Quality Standards for Suspended Particulate Matter (PM10), Visibility Reducing Particles, Sulfates, Lead, and Hydrogen Sulfide, California Air Resources Board, April 1991.

Stormwater Quality Handbooks Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), March 2003.

Stabilized Construction Entrance/Exit TC-1



Categories		
EC	Erosion Control	☒
SE	Sediment Control	☒
TC	Tracking Control	☑
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	
WM	Waste Management and Materials Pollution Control	

Legend:
☑ **Primary Objective**
☒ **Secondary Objective**

Targeted Constituents	
Sediment	☑
Nutrients	
Trash	
Metals	
Bacteria	
Oil and Grease	
Organics	

Potential Alternatives

None

Description and Purpose

A stabilized construction access is defined by a point of entrance/exit to a construction site that is stabilized to reduce the tracking of mud and dirt onto public roads by construction vehicles.

Suitable Applications

Use at construction sites:

- Where dirt or mud can be tracked onto public roads.
- Adjacent to water bodies.
- Where poor soils are encountered.
- Where dust is a problem during dry weather conditions.

Limitations

- Entrances and exits require periodic top dressing with additional stones.
- This BMP should be used in conjunction with street sweeping on adjacent public right of way.
- Entrances and exits should be constructed on level ground only.
- Stabilized construction entrances are rather expensive to construct and when a wash rack is included, a sediment trap of some kind must also be provided to collect wash water

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runoff.

Implementation

General

A stabilized construction entrance is a pad of aggregate underlain with filter cloth located at any point where traffic will be entering or leaving a construction site to or from a public right of way, street, alley, sidewalk, or parking area. The purpose of a stabilized construction entrance is to reduce or eliminate the tracking of sediment onto public rights of way or streets. Reducing tracking of sediments and other pollutants onto paved roads helps prevent deposition of sediments into local storm drains and production of airborne dust.

Where traffic will be entering or leaving the construction site, a stabilized construction entrance should be used. NPDES permits require that appropriate measures be implemented to prevent tracking of sediments onto paved roadways, where a significant source of sediments is derived from mud and dirt carried out from unpaved roads and construction sites.

Stabilized construction entrances are moderately effective in removing sediment from equipment leaving a construction site. The entrance should be built on level ground. Advantages of the Stabilized Construction Entrance/Exit is that it does remove some sediment from equipment and serves to channel construction traffic in and out of the site at specified locations. Efficiency is greatly increased when a washing rack is included as part of a stabilized construction entrance/exit.

Design and Layout

- Construct on level ground where possible.
- Select 3 to 6 in. diameter stones.
- Use minimum depth of stones of 12 in. or as recommended by soils engineer.
- Construct length of 50 ft minimum, and 30 ft minimum width.
- Rumble racks constructed of steel panels with ridges and installed in the stabilized entrance/exit will help remove additional sediment and to keep adjacent streets clean.
- Provide ample turning radii as part of the entrance.
- Limit the points of entrance/exit to the construction site.
- Limit speed of vehicles to control dust.
- Properly grade each construction entrance/exit to prevent runoff from leaving the construction site.
- Route runoff from stabilized entrances/exits through a sediment trapping device before discharge.
- Design stabilized entrance/exit to support heaviest vehicles and equipment that will use it.

Stabilized Construction Entrance/Exit TC-1

- Select construction access stabilization (aggregate, asphaltic concrete, concrete) based on longevity, required performance, and site conditions. Do not use asphalt concrete (AC) grindings for stabilized construction access/roadway.
- If aggregate is selected, place crushed aggregate over geotextile fabric to at least 12 in. depth, or place aggregate to a depth recommended by a geotechnical engineer. A crushed aggregate greater than 3 in. but smaller than 6 in. should be used.
- Designate combination or single purpose entrances and exits to the construction site.
- Require that all employees, subcontractors, and suppliers utilize the stabilized construction access.
- Implement SE-7, Street Sweeping and Vacuuming, as needed.
- All exit locations intended to be used for more than a two-week period should have stabilized construction entrance/exit BMPs.

Inspection and Maintenance

- Inspect and verify that activity–based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMPs are under way, inspect weekly during the rainy season and of two-week intervals in the non-rainy season to verify continued BMP implementation.
- Inspect local roads adjacent to the site daily. Sweep or vacuum to remove visible accumulated sediment.
- Remove aggregate, separate and dispose of sediment if construction entrance/exit is clogged with sediment.
- Keep all temporary roadway ditches clear.
- Check for damage and repair as needed.
- Replace gravel material when surface voids are visible.
- Remove all sediment deposited on paved roadways within 24 hours.
- Remove gravel and filter fabric at completion of construction

Costs

Average annual cost for installation and maintenance may vary from $1,200 to $4,800 each, averaging $2,400 per entrance. Costs will increase with addition of washing rack, and sediment trap. With wash rack, costs range from $1,200 - $6,000 each, averaging $3,600 per entrance.

References

Manual of Standards of Erosion and Sediment Control Measures, Association of Bay Area Governments, May 1995.

National Management Measures to Control Nonpoint Source Pollution from Urban Areas, USEPA Agency, 2002.

Proposed Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters, Work Group Working Paper, USEPA, April 1992.

Stormwater Quality Handbooks Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), November 2000.

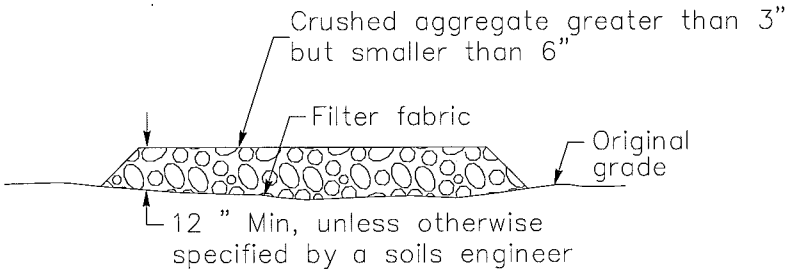
Stormwater Management of the Puget Sound Basin, Technical Manual, Publication #91-75, Washington State Department of Ecology, February 1992.

Virginia Erosion and Sedimentation Control Handbook, Virginia Department of Conservation and Recreation, Division of Soil and Water Conservation, 1991.

Guidance Specifying Management Measures for Nonpoint Pollution in Coastal Waters, EPA 840-B-9-002, USEPA, Office of Water, Washington, DC, 1993.

Water Quality Management Plan for the Lake Tahoe Region, Volume II, Handbook of Management Practices, Tahoe Regional Planning Agency, November 1988.

Stabilized Construction Entrance/Exit TC-1



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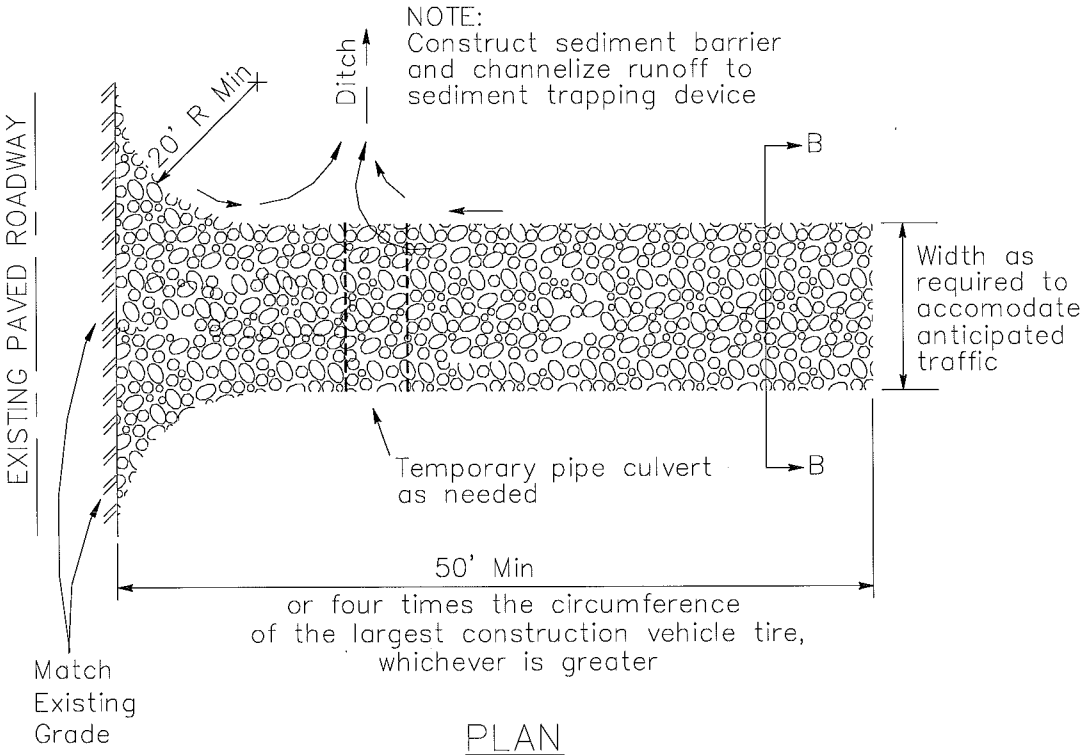

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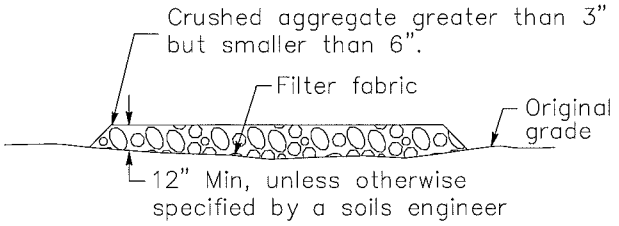
Stabilized Construction Entrance/Exit TC-1



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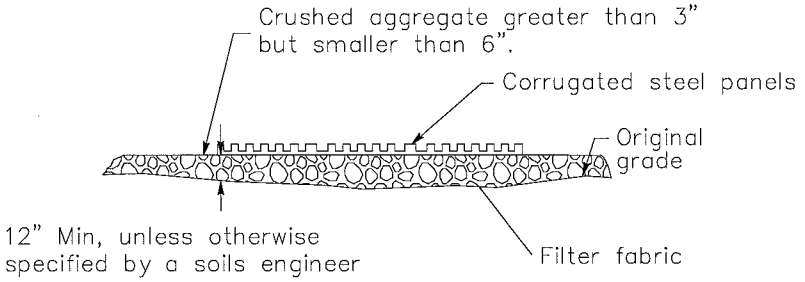

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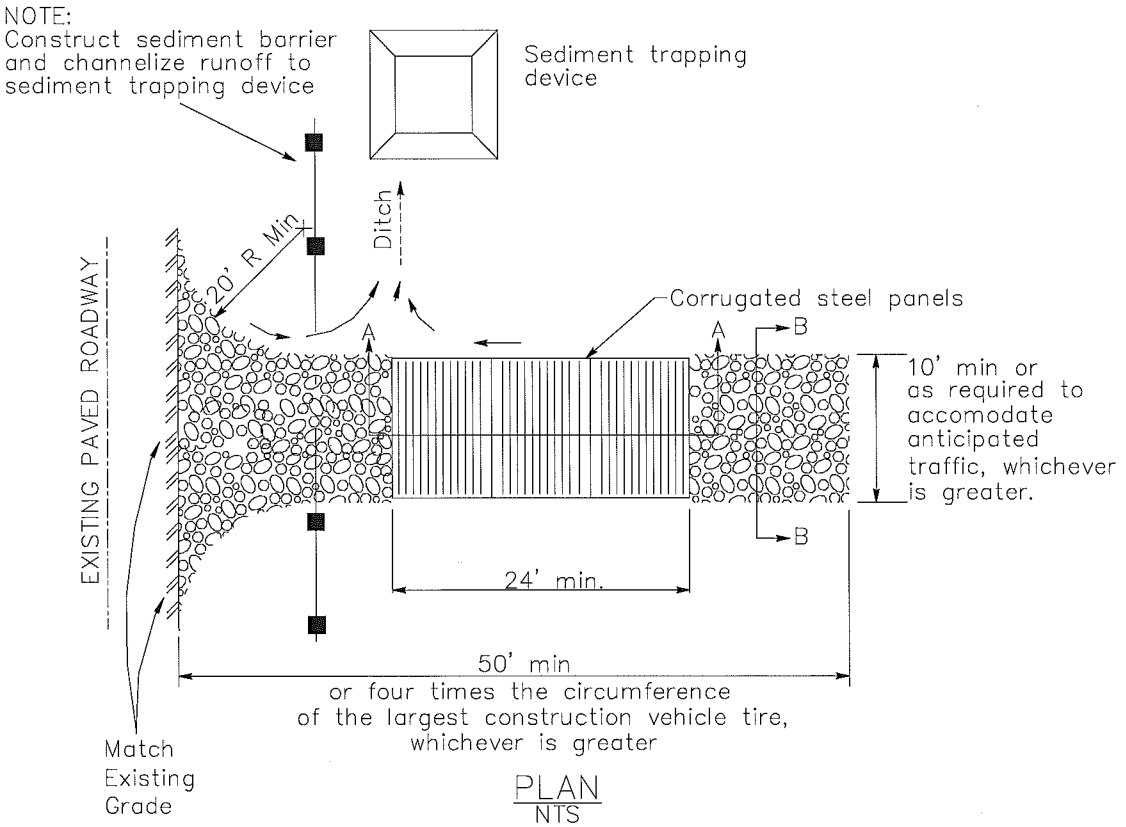

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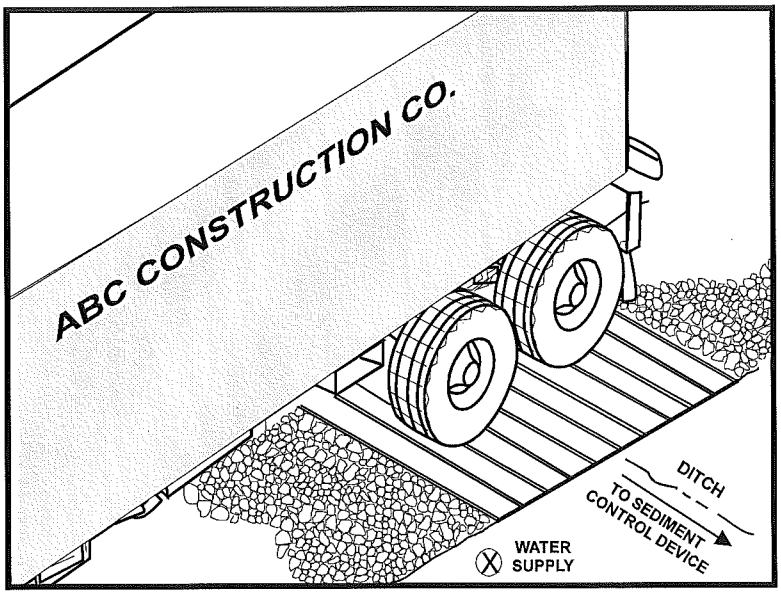
Entrance/Outlet Tire Wash TC-3



Categories

EC	Erosion Control	
SE	Sediment Control	☒
TC	Tracking Control	☑
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	
WM	Waste Management and Materials Pollution Control	

Legend:

☑ **Primary Objective**

☒ **Secondary Objective**

Targeted Constituents

Sediment	☑
Nutrients	
Trash	
Metals	
Bacteria	
Oil and Grease	
Organics	

Potential Alternatives

TC-1 Stabilized Construction Entrance/Exit

Description and Purpose

A tire wash is an area located at stabilized construction access points to remove sediment from tires and under carriages and to prevent sediment from being transported onto public roadways.

Suitable Applications

Tire washes may be used on construction sites where dirt and mud tracking onto public roads by construction vehicles may occur.

Limitations

- The tire wash requires a supply of wash water.
- A turnout or doublewide exit is required to avoid having entering vehicles drive through the wash area.
- Do not use where wet tire trucks leaving the site leave the road dangerously slick.

Implementation

- Incorporate with a stabilized construction entrance/exit. See TC-1, Stabilized Construction Entrance/Exit.
- Construct on level ground when possible, on a pad of coarse aggregate greater than 3 in. but smaller than 6 in. A geotextile fabric should be placed below the aggregate.
- Wash rack should be designed and constructed/manufactured for anticipated traffic loads.

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- Provide a drainage ditch that will convey the runoff from the wash area to a sediment trapping device. The drainage ditch should be of sufficient grade, width, and depth to carry the wash runoff.
- Use hoses with automatic shutoff nozzles to prevent hoses from being left on.
- Require that all employees, subcontractors, and others that leave the site with mud caked tires and undercarriages to use the wash facility.
- Implement SC-7, Street Sweeping and Vacuuming, as needed.

Costs

Costs are low for installation of wash rack.

Inspection and Maintenance

- Inspect and verify that activity–based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect weekly during the rainy season and of two-week intervals in the non-rainy season to verify continued BMP implementation.
- Inspect BMPs subject to non-stormwater discharge daily while non-stormwater discharges occur.
- Remove accumulated sediment in wash rack and/or sediment trap to maintain system performance.
- Inspect routinely for damage and repair as needed.

References

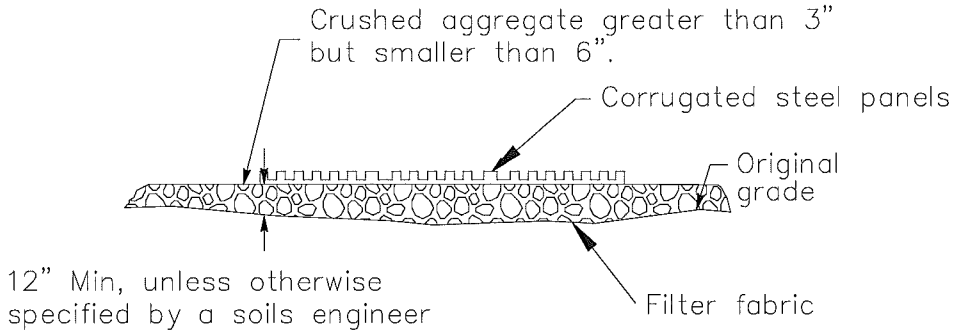
Blueprint for a Clean Bay: Best Management Practices to Prevent Stormwater Pollution from Construction Related Activities; Santa Clara Valley Nonpoint Source Pollution Control Program, 1995.

Coastal Nonpoint Pollution Control Program; Program Development and Approval Guidance, Working Group, Working Paper; USEPA, April 1992.

Manual of Standards of Erosion and Sediment Control Measures, Association of Bay Area Governments, May 1995.

Stormwater Quality Handbooks Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), November 2000.

Stormwater Management for Construction Activities, Developing Pollution Prevention Plans and Best Management Practices, EPA 832-R-92005; USEPA, April 1992.



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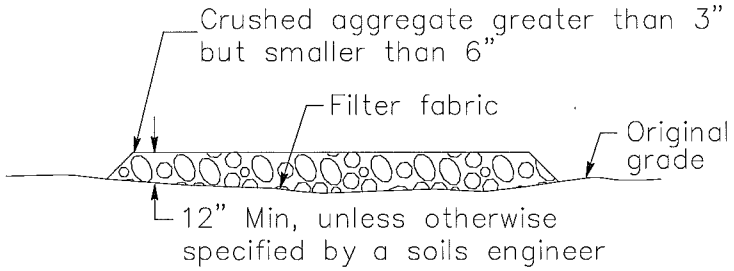
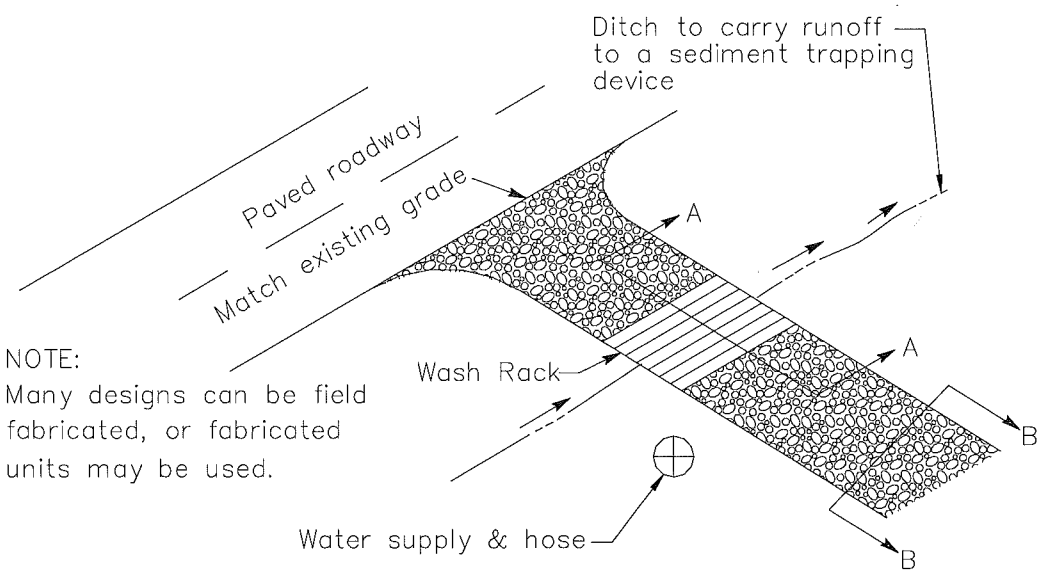
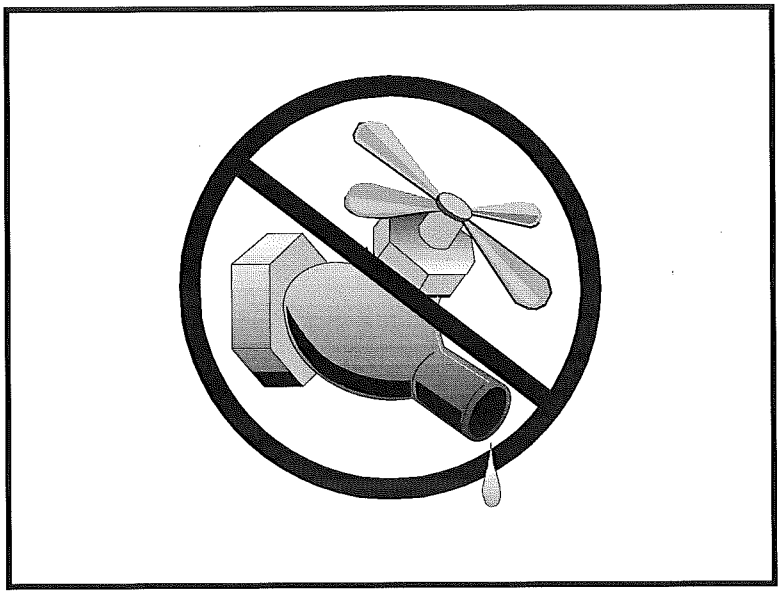


SECTION B–B
NTS



TYPICAL TIRE WASH
NOT TO SCALE

Water Conservation Practices NS-1



Categories		
EC	Erosion Control	☒
SE	Sediment Control	☒
TC	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	☑
WM	Waste Management and Materials Pollution Control	

Legend:
☑ **Primary Objective**
☒ **Secondary Objective**

Targeted Constituents	
Sediment	☑
Nutrients	
Trash	
Metals	
Bacteria	
Oil and Grease	
Organics	

Potential Alternatives

None

Description and Purpose

Water conservation practices are activities that use water during the construction of a project in a manner that avoids causing erosion and the transport of pollutants offsite. These practices can reduce or eliminate non-stormwater discharges.

Suitable Applications

Water conservation practices are suitable for all construction sites where water is used, including piped water, metered water, trucked water, and water from a reservoir.

Limitations

- None identified.

Implementation

- Keep water equipment in good working condition.
- Stabilize water truck filling area.
- Repair water leaks promptly.
- Washing of vehicles and equipment on the construction site is discouraged.
- Avoid using water to clean construction areas. If water must be used for cleaning or surface preparation, surface should be swept and vacuumed first to remove dirt. This will minimize amount of water required.
- Direct construction water runoff to areas where it can soak

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into the ground or be collected and reused.

- Authorized non-stormwater discharges to the storm drain system, channels, or receiving waters are acceptable with the implementation of appropriate BMPs.
- Lock water tank valves to prevent unauthorized use.

Costs

The cost is small to none compared to the benefits of conserving water.

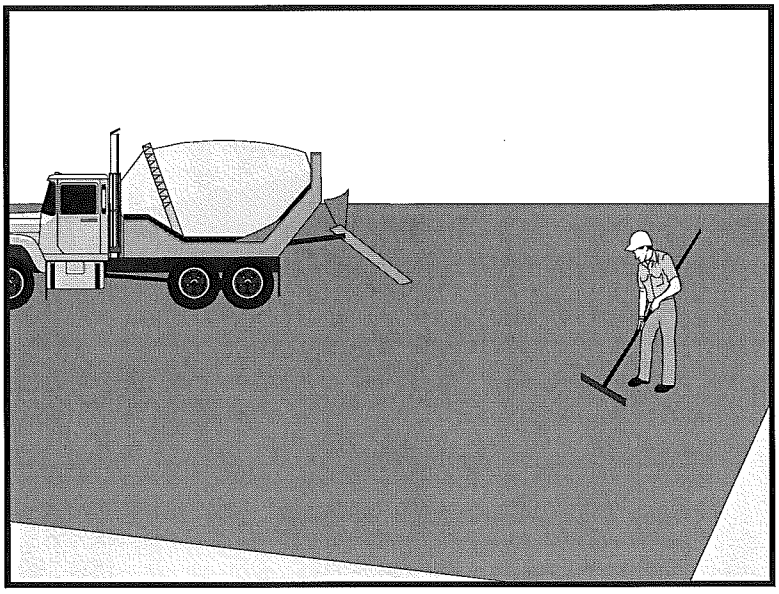
Inspection and Maintenance

- Inspect and verify that activity based BMPs are in place prior to the commencement of authorized non-stormwater discharges.
- Inspect BMPs subject to non-stormwater discharges daily while non-stormwater discharges are occuring.
- Repair water equipment as needed to prevent unintended discharges.
  - Water trucks
  - Water reservoirs (water buffalos)
  - Irrigation systems
  - Hydrant connections

References

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), November 2000.

Paving and Grinding Operations NS-3



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Legend:
☑ **Primary Category**
☒ **Secondary Category**

Targeted Constituents	
Sediment	☑
Nutrients	
Trash	
Metals	
Bacteria	
Oil and Grease	☑
Organics	

Potential Alternatives

None

Description and Purpose

Prevent or reduce the discharge of pollutants from paving operations, using measures to prevent runon and runoff pollution, properly disposing of wastes, and training employees and subcontractors.

The General Permit incorporates Numeric Effluent Limits (NEL) and Numeric Action Levels (NAL) for pH and turbidity (see Section 2 of this handbook to determine your project's risk level and if you are subject to these requirements).

Many types of construction materials associated with paving and grinding operations, including mortar, concrete, and cement and their associated wastes have basic chemical properties that can raise pH levels outside of the permitted range. Additional care should be taken when managing these materials to prevent them from coming into contact with stormwater flows, which could lead to exceedances of the General Permit requirements.

Suitable Applications

These procedures are implemented where paving, surfacing, resurfacing, or sawcutting, may pollute stormwater runoff or discharge to the storm drain system or watercourses.

Limitations

- Paving opportunities may be limited during wet weather.
- Discharges of freshly paved surfaces may raise pH to environmentally harmful levels and trigger permit violations.

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Implementation

General

- Avoid paving during the wet season when feasible.
- Reschedule paving and grinding activities if rain is forecasted.
- Train employees and sub-contractors in pollution prevention and reduction.
- Store materials away from drainage courses to prevent stormwater runon (see WM-1, Material Delivery and Storage).
- Protect drainage courses, particularly in areas with a grade, by employing BMPs to divert runoff or to trap and filter sediment.
- Stockpile material removed from roadways away from drain inlets, drainage ditches, and watercourses. These materials should be stored consistent with WM-3, Stockpile Management.
- Disposal of PCC (Portland cement concrete) and AC (asphalt concrete) waste should be in conformance with WM-8, Concrete Waste Management.

Saw Cutting, Grinding, and Pavement Removal

- Shovel or vacuum saw-cut slurry and remove from site. Cover or barricade storm drains during saw cutting to contain slurry.
- When paving involves AC, the following steps should be implemented to prevent the discharge of grinding residue, uncompacted or loose AC, tack coats, equipment cleaners, or unrelated paving materials:
  - AC grindings, pieces, or chunks used in embankments or shoulder backing should not be allowed to enter any storm drains or watercourses. Install inlet protection and perimeter controls until area is stabilized (i.e. cutting, grinding or other removal activities are complete and loose material has been properly removed and disposed of)or permanent controls are in place. Examples of temporary perimeter controls can be found in EC-9, Earth Dikes and Drainage Swales; SE-1, Silt Fence; SE-5, Fiber Rolls, or SE-13 Compost Socks and Berms
  - Collect and remove all broken asphalt and recycle when practical. Old or spilled asphalt should be recycled or disposed of properly.
- Do not allow saw-cut slurry to enter storm drains or watercourses. Residue from grinding operations should be picked up by a vacuum attachment to the grinding machine, or by sweeping, should not be allowed to flow across the pavement, and should not be left on the surface of the pavement. See also WM-8, Concrete Waste Management, and WM-10, Liquid Waste Management.
- Pavement removal activities should not be conducted in the rain.
- Collect removed pavement material by mechanical or manual methods. This material may be recycled for use as shoulder backing or base material.

- If removed pavement material cannot be recycled, transport the material back to an approved storage site.

Asphaltic Concrete Paving

- If paving involves asphaltic cement concrete, follow these steps:
  - Do not allow sand or gravel placed over new asphalt to wash into storm drains, streets, or creeks. Vacuum or sweep loose sand and gravel and properly dispose of this waste by referring to WM-5, Solid Waste Management.
  - Old asphalt should be disposed of properly. Collect and remove all broken asphalt from the site and recycle whenever possible.

Portland Cement Concrete Paving

- Do not wash sweepings from exposed aggregate concrete into a storm drain system. Collect waste materials by dry methods, such as sweeping or shoveling, and return to aggregate base stockpile or dispose of properly. Allow aggregate rinse to settle. Then, either allow rinse water to dry in a temporary pit as described in WM-8, Concrete Waste Management, or pump the water to the sanitary sewer if authorized by the local wastewater authority.

Sealing Operations

- During chip seal application and sweeping operations, petroleum or petroleum covered aggregate should not be allowed to enter any storm drain or water courses. Apply temporary perimeter controls until structure is stabilized (i.e. all sealing operations are complete and cured and loose materials have been properly removed and disposed).
- Inlet protection (SE-10, Storm Drain Inlet Protection) should be used during application of seal coat, tack coat, slurry seal, and fog seal.
- Seal coat, tack coat, slurry seal, or fog seal should not be applied if rainfall is predicted to occur during the application or curing period.

Paving Equipment

- Leaks and spills from paving equipment can contain toxic levels of heavy metals and oil and grease. Place drip pans or absorbent materials under paving equipment when not in use. Clean up spills with absorbent materials and dispose of in accordance with the applicable regulations. See NS-10, Vehicle and Equipment Maintenance, WM-4, Spill Prevention and Control, and WM-10, Liquid Waste Management.
- Substances used to coat asphalt transport trucks and asphalt spreading equipment should not contain soap and should be non-foaming and non-toxic.
- Paving equipment parked onsite should be parked over plastic to prevent soil contamination.
- Clean asphalt coated equipment offsite whenever possible. When cleaning dry, hardened asphalt from equipment, manage hardened asphalt debris as described in WM-5, Solid Waste Management. Any cleaning onsite should follow NS-8, Vehicle and Equipment Cleaning.

Thermoplastic Striping

- Thermoplastic striper and pre-heater equipment shutoff valves should be inspected to ensure that they are working properly to prevent leaking thermoplastic from entering drain inlets, the stormwater drainage system, or watercourses.
- Pre-heaters should be filled carefully to prevent splashing or spilling of hot thermoplastic. Leave six inches of space at the top of the pre-heater container when filling thermoplastic to allow room for material to move.
- Do not pre-heat, transfer, or load thermoplastic near drain inlets or watercourses.
- Clean truck beds daily of loose debris and melted thermoplastic. When possible, recycle thermoplastic material.

Raised/Recessed Pavement Marker Application and Removal

- Do not transfer or load bituminous material near drain inlets, the stormwater drainage system, or watercourses.
- Melting tanks should be loaded with care and not filled to beyond six inches from the top to leave room for splashing.
- When servicing or filling melting tanks, ensure all pressure is released before removing lids to avoid spills.
- On large-scale projects, use mechanical or manual methods to collect excess bituminous material from the roadway after removal of markers.

Costs

- All of the above are low cost measures.

Inspection and Maintenance

- Inspect and verify that activity-based BMPs are in place prior to the commencement of paving and grinding operations.
- BMPs must be inspected in accordance with General Permit requirements for the associated project type and risk level. It is recommended that at a minimum, BMPs be inspected weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events.
- Sample stormwater runoff required by the General Permit.
- Keep ample supplies of drip pans or absorbent materials onsite.
- Inspect and maintain machinery regularly to minimize leaks and drips.

References

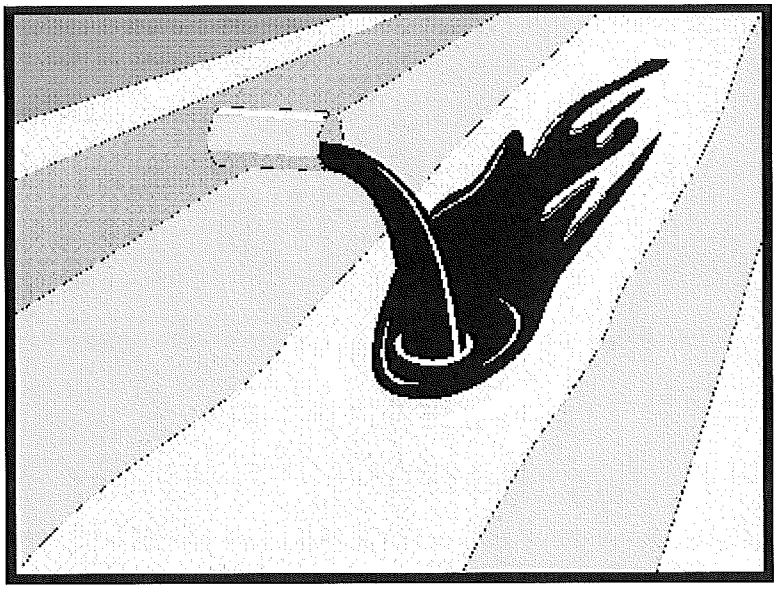
Blueprint for a Clean Bay: Best Management Practices to Prevent Stormwater Pollution from Construction Related Activities; Santa Clara Valley Nonpoint Source Pollution Control Program, 1995.

Hot Mix Asphalt-Paving Handbook AC 150/5370-14, Appendix I, U.S. Army Corps of Engineers, July 1991.

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), March 2003.

Erosion and Sediment Control Manual, Oregon Department of Environmental Quality, February 2005.

Illicit Connection/Discharge NS-6



Categories		
EC	Erosion Control	
SE	Sediment Control	
TC	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	☑
WM	Waste Management and Materials Pollution Control	

Legend:
☑ **Primary Objective**
☒ **Secondary Objective**

Targeted Constituents	
Sediment	
Nutrients	☑
Trash	☑
Metals	☑
Bacteria	☑
Oil and Grease	☑
Organics	☑

Potential Alternatives

None

Description and Purpose

Procedures and practices designed for construction contractors to recognize illicit connections or illegally dumped or discharged materials on a construction site and report incidents.

Suitable Applications

This best management practice (BMP) applies to all construction projects. Illicit connection/discharge and reporting is applicable anytime an illicit connection or discharge is discovered or illegally dumped material is found on the construction site.

Limitations

Illicit connections and illegal discharges or dumping, for the purposes of this BMP, refer to discharges and dumping caused by parties other than the contractor. If pre-existing hazardous materials or wastes are known to exist onsite, they should be identified in the SWPPP and handled as set forth in the SWPPP.

Implementation

Planning

- Review the SWPPP. Pre-existing areas of contamination should be identified and documented in the SWPPP.
- Inspect site before beginning the job for evidence of illicit connections, illegal dumping or discharges. Document any pre-existing conditions and notify the owner.
- Inspect site regularly during project execution for evidence

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of illicit connections, illegal dumping or discharges.

- Observe site perimeter for evidence for potential of illicitly discharged or illegally dumped material, which may enter the job site.

Identification of Illicit Connections and Illegal Dumping or Discharges

- **General** – unlabeled and unidentifiable material should be treated as hazardous.
- **Solids** - Look for debris, or rubbish piles. Solid waste dumping often occurs on roadways with light traffic loads or in areas not easily visible from the traveled way.
- **Liquids** - signs of illegal liquid dumping or discharge can include:
  - Visible signs of staining or unusual colors to the pavement or surrounding adjacent soils
  - Pungent odors coming from the drainage systems
  - Discoloration or oily substances in the water or stains and residues detained within ditches, channels or drain boxes
  - Abnormal water flow during the dry weather season
- **Urban Areas** - Evidence of illicit connections or illegal discharges is typically detected at storm drain outfall locations or at manholes. Signs of an illicit connection or illegal discharge can include:
  - Abnormal water flow during the dry weather season
  - Unusual flows in sub drain systems used for dewatering
  - Pungent odors coming from the drainage systems
  - Discoloration or oily substances in the water or stains and residues detained within ditches, channels or drain boxes
  - Excessive sediment deposits, particularly adjacent to or near active offsite construction projects
- **Rural Areas** - Illicit connections or illegal discharges involving irrigation drainage ditches are detected by visual inspections. Signs of an illicit discharge can include:
  - Abnormal water flow during the non-irrigation season
  - Non-standard junction structures
  - Broken concrete or other disturbances at or near junction structures

Reporting

Notify the owner of any illicit connections and illegal dumping or discharge incidents at the time of discovery. For illicit connections or discharges to the storm drain system, notify the local stormwater management agency. For illegal dumping, notify the local law enforcement agency.

Cleanup and Removal

The responsibility for cleanup and removal of illicit or illegal dumping or discharges will vary by location. Contact the local stormwater management agency for further information.

Costs

Costs to look for and report illicit connections and illegal discharges and dumping are low. The best way to avoid costs associated with illicit connections and illegal discharges and dumping is to keep the project perimeters secure to prevent access to the site, to observe the site for vehicles that should not be there, and to document any waste or hazardous materials that exist onsite before taking possession of the site.

Inspection and Maintenance

- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect weekly during the rainy season and at two-week intervals in the non-rainy season to verify continued BMP implementation.
- Inspect the site regularly to check for any illegal dumping or discharge.
- Prohibit employees and subcontractors from disposing of non-job related debris or materials at the construction site.
- Notify the owner of any illicit connections and illegal dumping or discharge incidents at the time of discovery.

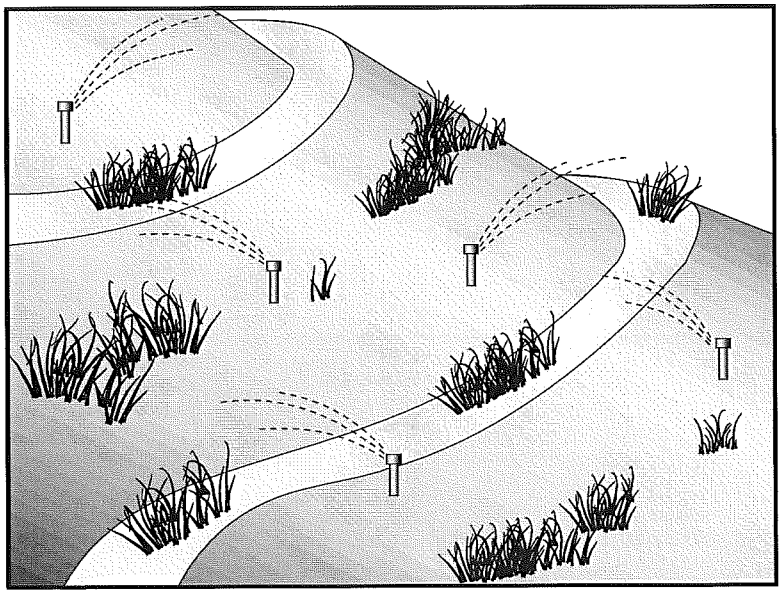
References

Blueprint for a Clean Bay: Best Management Practices to Prevent Stormwater Pollution from Construction Related Activities; Santa Clara Valley Nonpoint Source Pollution Control Program, 1995.

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), November 2000.

Stormwater Management for Construction Activities, Developing Pollution Prevention Plans and Best Management Practices, EPA 832-R-92005; USEPA, April 1992.

Potable Water/Irrigation NS-7



Categories		
EC	Erosion Control	
SE	Sediment Control	
TC	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	☑
WM	Waste Management and Materials Pollution Control	

Legend:
☑ **Primary Objective**
☒ **Secondary Objective**

Targeted Constituents	
Sediment	☑
Nutrients	☑
Trash	
Metals	☑
Bacteria	
Oil and Grease	
Organics	☑

Potential Alternatives

None

Description and Purpose

Potable Water/Irrigation consists of practices and procedures to manage the discharge of potential pollutants generated during discharges from irrigation water lines, landscape irrigation, lawn or garden watering, planned and unplanned discharges from potable water sources, water line flushing, and hydrant flushing.

Suitable Applications

Implement this BMP whenever potable water or irrigation water discharges occur at or enter a construction site.

Limitations

None identified.

Implementation

- Direct water from offsite sources around or through a construction site, where feasible, in a way that minimizes contact with the construction site.
- Discharges from water line flushing should be reused for landscaping purposes where feasible.
- Shut off the water source to broken lines, sprinklers, or valves as soon as possible to prevent excess water flow.
- Protect downstream stormwater drainage systems and watercourses from water pumped or bailed from trenches excavated to repair water lines.
- Inspect irrigated areas within the construction limits for

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excess watering. Adjust watering times and schedules to ensure that the appropriate amount of water is being used and to minimize runoff. Consider factors such as soil structure, grade, time of year, and type of plant material in determining the proper amounts of water for a specific area.

Costs

Cost to manage potable water and irrigation are low and generally considered to be a normal part of related activities.

Inspection and Maintenance

- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect weekly during the rainy season and at two-week intervals in the non-rainy season to verify continued BMP implementation.
- Inspect BMPs subject to non-stormwater discharges daily while non-stormwater discharges occur.
- Repair broken water lines as soon as possible.
- Inspect irrigated areas regularly for signs of erosion and/or discharge.

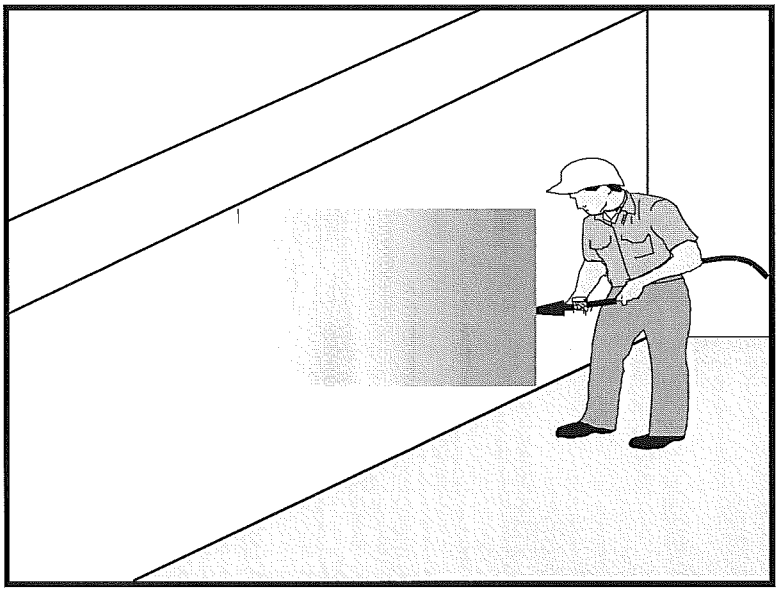
References

Blueprint for a Clean Bay: Best Management Practices to Prevent Stormwater Pollution from Construction Related Activities; Santa Clara Valley Nonpoint Source Pollution Control Program, 1995.

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), November 2000.

Stormwater Management for Construction Activities, Developing Pollution Prevention Plans and Best Management Practices, EPA 832-R-92005; USEPA, April 1992.

Concrete Curing NS-12



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☒ **Secondary Category**

Targeted Constituents

Sediment	☑
Nutrients	
Trash	
Metals	☑
Bacteria	
Oil and Grease	☑
Organics	

Potential Alternatives

None

Description and Purpose

Concrete curing is used in the construction of structures such as bridges, retaining walls, pump houses, large slabs, and structured foundations. Concrete curing includes the use of both chemical and water methods.

Concrete and its associated curing materials have basic chemical properties that can raise the pH of water to levels outside of the permitted range. Discharges of stormwater and non-stormwater exposed to concrete during curing may have a high pH and may contain chemicals, metals, and fines. The General Permit incorporates Numeric Effluent Limits (NEL) and Numeric Action Levels (NAL) for pH (see Section 2 of this handbook to determine your project's risk level and if you are subject to these requirements).

Proper procedures and care should be taken when managing concrete curing materials to prevent them from coming into contact with stormwater flows, which could result in a high pH discharge.

Suitable Applications

Suitable applications include all projects where Portland Cement Concrete (PCC) and concrete curing chemicals are placed where they can be exposed to rainfall, runoff from other areas, or where runoff from the PCC will leave the site.

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Limitations

- Runoff contact with concrete waste can raise pH levels in the water to environmentally harmful levels and trigger permit violations.

Implementation

Chemical Curing

- Avoid over spray of curing compounds.
- Minimize the drift by applying the curing compound close to the concrete surface. Apply an amount of compound that covers the surface, but does not allow any runoff of the compound.
- Use proper storage and handling techniques for concrete curing compounds. Refer to WM-1, Material Delivery and Storage.
- Protect drain inlets prior to the application of curing compounds.
- Refer to WM-4, Spill Prevention and Control.

Water Curing for Bridge Decks, Retaining Walls, and other Structures

- Direct cure water away from inlets and watercourses to collection areas for evaporation or other means of removal in accordance with all applicable permits. See WM-8 Concrete Waste Management.
- Collect cure water at the top of slopes and transport to a concrete waste management area in a non-erosive manner. See EC-9 Earth Dikes and Drainage Swales, EC-10, Velocity Dissipation Devices, and EC-11, Slope Drains.
- Utilize wet blankets or a similar method that maintains moisture while minimizing the use and possible discharge of water.

Education

- Educate employees, subcontractors, and suppliers on proper concrete curing techniques to prevent contact with discharge as described herein.
- Arrange for the QSP or the appropriately trained contractor's superintendent or representative to oversee and enforce concrete curing procedures.

Costs

All of the above measures are generally low cost.

Inspection and Maintenance

- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities.
- BMPs must be inspected in accordance with General Permit requirements for the associated project type and risk level. It is recommended that at a minimum, BMPs be inspected weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events.

- Inspect BMPs subject to non-stormwater discharges daily while non-stormwater discharges occur.
- Sample non-stormwater discharges and stormwater runoff that contacts uncured and partially cured concrete as required by the General Permit.
- Ensure that employees and subcontractors implement appropriate measures for storage, handling, and use of curing compounds.
- Inspect cure containers and spraying equipment for leaks.

References

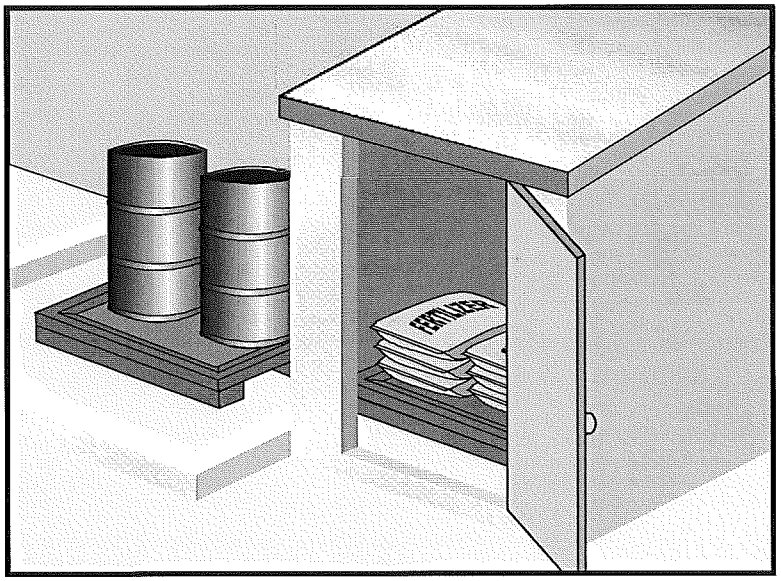
Blue Print for a Clean Bay-Construction-Related Industries: Best Management Practices for Stormwater Pollution Prevention; Santa Clara Valley Non Point Source Pollution Control Program, 1992.

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), March 2003.

Stormwater Management for Construction Activities, Developing Pollution Prevention Plans and Best Management Practices, EPA 832-R-92005; USEPA, April 1992.

Erosion and Sediment Control Manual, Oregon Department of Environmental Quality, February 2005.

Material Delivery and Storage WM-1



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☒ **Secondary Category**

Targeted Constituents	
Sediment	☑
Nutrients	☑
Trash	☑
Metals	☑
Bacteria	
Oil and Grease	☑
Organics	☑

Potential Alternatives

None

Description and Purpose

Prevent, reduce, or eliminate the discharge of pollutants from material delivery and storage to the stormwater system or watercourses by minimizing the storage of hazardous materials onsite, storing materials in watertight containers and/or a completely enclosed designated area, installing secondary containment, conducting regular inspections, and training employees and subcontractors.

This best management practice covers only material delivery and storage. For other information on materials, see WM-2, Material Use, or WM-4, Spill Prevention and Control. For information on wastes, see the waste management BMPs in this section.

Suitable Applications

These procedures are suitable for use at all construction sites with delivery and storage of the following materials:

- Soil stabilizers and binders
- Pesticides and herbicides
- Fertilizers
- Detergents
- Plaster
- Petroleum products such as fuel, oil, and grease

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- Asphalt and concrete components
- Hazardous chemicals such as acids, lime, glues, adhesives, paints, solvents, and curing compounds
- Concrete compounds
- Other materials that may be detrimental if released to the environment

Limitations

- Space limitation may preclude indoor storage.
- Storage sheds often must meet building and fire code requirements.

Implementation

The following steps should be taken to minimize risk:

- Chemicals must be stored in water tight containers with appropriate secondary containment or in a storage shed.
- When a material storage area is located on bare soil, the area should be lined and bermed.
- Use containment pallets or other practical and available solutions, such as storing materials within newly constructed buildings or garages, to meet material storage requirements.
- Stack erodible landscape material on pallets and cover when not in use.
- Contain all fertilizers and other landscape materials when not in use.
- Temporary storage areas should be located away from vehicular traffic.
- Material Safety Data Sheets (MSDS) should be available on-site for all materials stored that have the potential to effect water quality.
- Construction site areas should be designated for material delivery and storage.
- Material delivery and storage areas should be located away from waterways, if possible.
  - Avoid transport near drainage paths or waterways.
  - Surround with earth berms or other appropriate containment BMP. See EC-9, Earth Dikes and Drainage Swales.
  - Place in an area that will be paved.
- Storage of reactive, ignitable, or flammable liquids must comply with the fire codes of your area. Contact the local Fire Marshal to review site materials, quantities, and proposed storage area to determine specific requirements. See the Flammable and Combustible Liquid Code, NFPA30.
- An up to date inventory of materials delivered and stored onsite should be kept.

- Hazardous materials storage onsite should be minimized.
- Hazardous materials should be handled as infrequently as possible.
- Keep ample spill cleanup supplies appropriate for the materials being stored. Ensure that cleanup supplies are in a conspicuous, labeled area.
- Employees and subcontractors should be trained on the proper material delivery and storage practices.
- Employees trained in emergency spill cleanup procedures must be present when dangerous materials or liquid chemicals are unloaded.
- If significant residual materials remain on the ground after construction is complete, properly remove and dispose of materials and any contaminated soil. See WM-7, Contaminated Soil Management. If the area is to be paved, pave as soon as materials are removed to stabilize the soil.

Material Storage Areas and Practices

- Liquids, petroleum products, and substances listed in 40 CFR Parts 110, 117, or 302 should be stored in approved containers and drums and should not be overfilled. Containers and drums should be placed in temporary containment facilities for storage.
- A temporary containment facility should provide for a spill containment volume able to contain precipitation from a 25 year storm event, plus the greater of 10% of the aggregate volume of all containers or 100% of the capacity of the largest container within its boundary, whichever is greater.
- A temporary containment facility should be impervious to the materials stored therein for a minimum contact time of 72 hours.
- A temporary containment facility should be maintained free of accumulated rainwater and spills. In the event of spills or leaks, accumulated rainwater and spills should be collected and placed into drums. These liquids should be handled as a hazardous waste unless testing determines them to be non-hazardous. All collected liquids or non-hazardous liquids should be sent to an approved disposal site.
- Sufficient separation should be provided between stored containers to allow for spill cleanup and emergency response access.
- Incompatible materials, such as chlorine and ammonia, should not be stored in the same temporary containment facility.
- Materials should be covered prior to, and during rain events.
- Materials should be stored in their original containers and the original product labels should be maintained in place in a legible condition. Damaged or otherwise illegible labels should be replaced immediately.

- Bagged and boxed materials should be stored on pallets and should not be allowed to accumulate on the ground. To provide protection from wind and rain throughout the rainy season, bagged and boxed materials should be covered during non-working days and prior to and during rain events.
- Stockpiles should be protected in accordance with WM-3, Stockpile Management.
- Materials should be stored indoors within existing structures or completely enclosed storage sheds when available.
- Proper storage instructions should be posted at all times in an open and conspicuous location.
- An ample supply of appropriate spill clean up material should be kept near storage areas.
- Also see WM-6, Hazardous Waste Management, for storing of hazardous wastes.

Material Delivery Practices

- Keep an accurate, up-to-date inventory of material delivered and stored onsite.
- Arrange for employees trained in emergency spill cleanup procedures to be present when dangerous materials or liquid chemicals are unloaded.

Spill Cleanup

- Contain and clean up any spill immediately.
- Properly remove and dispose of any hazardous materials or contaminated soil if significant residual materials remain on the ground after construction is complete. See WM-7, Contaminated Soil Management.
- See WM-4, Spill Prevention and Control, for spills of chemicals and/or hazardous materials.
- If spills or leaks of materials occur that are not contained and could discharge to surface waters, non-visible sampling of site discharge may be required. Refer to the General Permit or to your project specific Construction Site Monitoring Plan to determine if and where sampling is required.

Cost

- The largest cost of implementation may be in the construction of a materials storage area that is covered and provides secondary containment.

Inspection and Maintenance

- BMPs must be inspected in accordance with General Permit requirements for the associated project type and risk level. It is recommended that at a minimum, BMPs be inspected weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events.
- Keep storage areas clean and well organized, including a current list of all materials onsite.
- Inspect labels on containers for legibility and accuracy.

- Repair or replace perimeter controls, containment structures, covers, and liners as needed to maintain proper function.

References

Blueprint for a Clean Bay: Best Management Practices to Prevent Stormwater Pollution from Construction Related Activities; Santa Clara Valley Nonpoint Source Pollution Control Program, 1995.

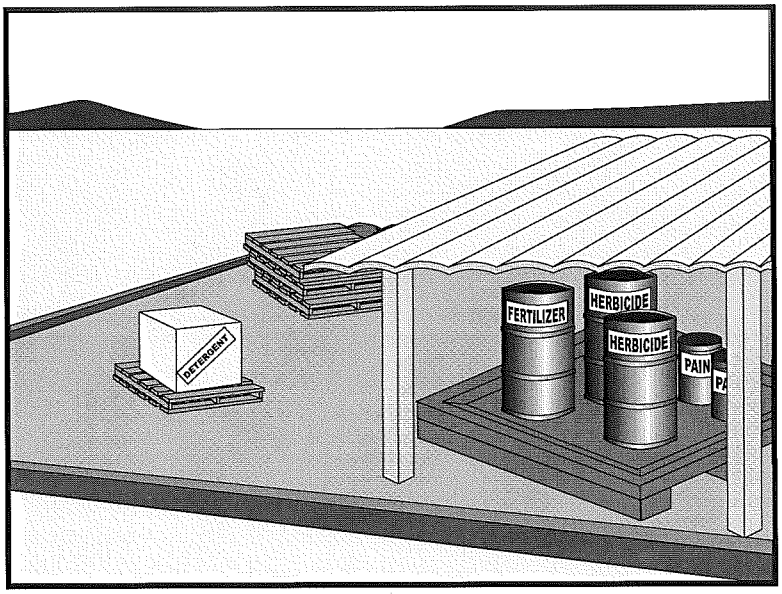
Coastal Nonpoint Pollution Control Program: Program Development and Approval Guidance, Working Group Working Paper; USEPA, April 1992.

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), March 2003.

Stormwater Management for Construction Activities; Developing Pollution Prevention Plans and Best Management Practice, EPA 832-R-92005; USEPA, April 1992.

Material Use

WM-2



Categories		
EC	Erosion Control	
SE	Sediment Control	
TC	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	
WM	Waste Management and Materials Pollution Control	☑

Legend:
☑ **Primary Category**
☒ **Secondary Category**

Description and Purpose

Prevent or reduce the discharge of pollutants to the storm drain system or watercourses from material use by using alternative products, minimizing hazardous material use onsite, and training employees and subcontractors.

Suitable Applications

This BMP is suitable for use at all construction projects. These procedures apply when the following materials are used or prepared onsite:

- Pesticides and herbicides
- Fertilizers
- Detergents
- Petroleum products such as fuel, oil, and grease
- Asphalt and other concrete components
- Other hazardous chemicals such as acids, lime, glues, adhesives, paints, solvents, and curing compounds
- Other materials that may be detrimental if released to the environment

Targeted Constituents	
Sediment	☑
Nutrients	☑
Trash	☑
Metals	☑
Bacteria	
Oil and Grease	☑
Organics	☑

Potential Alternatives

None

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Limitations

Safer alternative building and construction products may not be available or suitable in every instance.

Implementation

The following steps should be taken to minimize risk:

- Minimize use of hazardous materials onsite.
- Follow manufacturer instructions regarding uses, protective equipment, ventilation, flammability, and mixing of chemicals.
- Train personnel who use pesticides. The California Department of Pesticide Regulation and county agricultural commissioners license pesticide dealers, certify pesticide applicators, and conduct onsite inspections.
- The preferred method of termiticide application is soil injection near the existing or proposed structure foundation/slab; however, if not feasible, soil drench application of termiticides should follow EPA label guidelines and the following recommendations (most of which are applicable to most pesticide applications):
  - Do not treat soil that is water-saturated or frozen.
  - Application shall not commence within 24-hours of a predicted precipitation event with a 40% or greater probability. Weather tracking must be performed on a daily basis prior to termiticide application and during the period of termiticide application.
  - Do not allow treatment chemicals to runoff from the target area. Apply proper quantity to prevent excess runoff. Provide containment for and divert stormwater from application areas using berms or diversion ditches during application.
  - Dry season: Do not apply within 10 feet of storm drains. Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes; reservoirs; rivers; permanent streams; marshes or ponds; estuaries; and commercial fish farm ponds).
  - Wet season: Do not apply within 50 feet of storm drains or aquatic habitats (such as, but not limited to, lakes; reservoirs; rivers; permanent streams; marshes or ponds; estuaries; and commercial fish farm ponds) unless a vegetative buffer is present (if so, refer to dry season requirements).
  - Do not make on-grade applications when sustained wind speeds are above 10 mph (at application site) at nozzle end height.
  - Cover treatment site prior to a rain event in order to prevent run-off of the pesticide into non-target areas. The treated area should be limited to a size that can be backfilled and/or covered by the end of the work shift. Backfilling or covering of the treated area shall be done by the end of the same work shift in which the application is made.
  - The applicator must either cover the soil him/herself or provide written notification of the above requirement to the contractor on site and to the person commissioning the

application (if different than the contractor). If notice is provided to the contractor or the person commissioning the application, then they are responsible under the Federal Insecticide Fungicide, and Rodenticide Act (FIFRA) to ensure that: 1) if the concrete slab cannot be poured over the treated soil within 24 hours of application, the treated soil is covered with a waterproof covering (such as polyethylene sheeting), and 2) the treated soil is covered if precipitation is predicted to occur before the concrete slab is scheduled to be poured.

- Do not over-apply fertilizers, herbicides, and pesticides. Prepare only the amount needed. Follow the recommended usage instructions. Over-application is expensive and environmentally harmful. Unless on steep slopes, till fertilizers into the soil rather than hydraulic application. Apply surface dressings in several smaller applications, as opposed to one large application, to allow time for infiltration and to avoid excess material being carried offsite by runoff. Do not apply these chemicals before predicted rainfall.
- Train employees and subcontractors in proper material use.
- Supply Material Safety Data Sheets (MSDS) for all materials.
- Dispose of latex paint and paint cans, used brushes, rags, absorbent materials, and drop cloths, when thoroughly dry and are no longer hazardous, with other construction debris.
- Do not remove the original product label; it contains important safety and disposal information. Use the entire product before disposing of the container.
- Mix paint indoors or in a containment area. Never clean paintbrushes or rinse paint containers into a street, gutter, storm drain, or watercourse. Dispose of any paint thinners, residue, and sludge(s) that cannot be recycled, as hazardous waste.
- For water-based paint, clean brushes to the extent practicable, and rinse to a drain leading to a sanitary sewer where permitted, or contain for proper disposal off site. For oil-based paints, clean brushes to the extent practicable, and filter and reuse thinners and solvents.
- Use recycled and less hazardous products when practical. Recycle residual paints, solvents, non-treated lumber, and other materials.
- Use materials only where and when needed to complete the construction activity. Use safer alternative materials as much as possible. Reduce or eliminate use of hazardous materials onsite when practical.
- Document the location, time, chemicals applied, and applicator's name and qualifications.
- Keep an ample supply of spill clean up material near use areas. Train employees in spill clean up procedures.
- Avoid exposing applied materials to rainfall and runoff unless sufficient time has been allowed for them to dry.
- Discontinue use of erodible landscape material within 2 days prior to a forecasted rain event and materials should be covered and/or bermed.

- Provide containment for material use areas such as masons' areas or paint mixing/preparation areas to prevent materials/pollutants from entering stormwater.

Costs

All of the above are low cost measures.

Inspection and Maintenance

- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities.
- BMPs must be inspected in accordance with General Permit requirements for the associated project type and risk level. It is recommended that at a minimum, BMPs be inspected weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events.
- Ensure employees and subcontractors throughout the job are using appropriate practices.

References

Blueprint for a Clean Bay: Best Management Practices to Prevent Stormwater Pollution from Construction Related Activities; Santa Clara Valley Nonpoint Source Pollution Control Program, 1995.

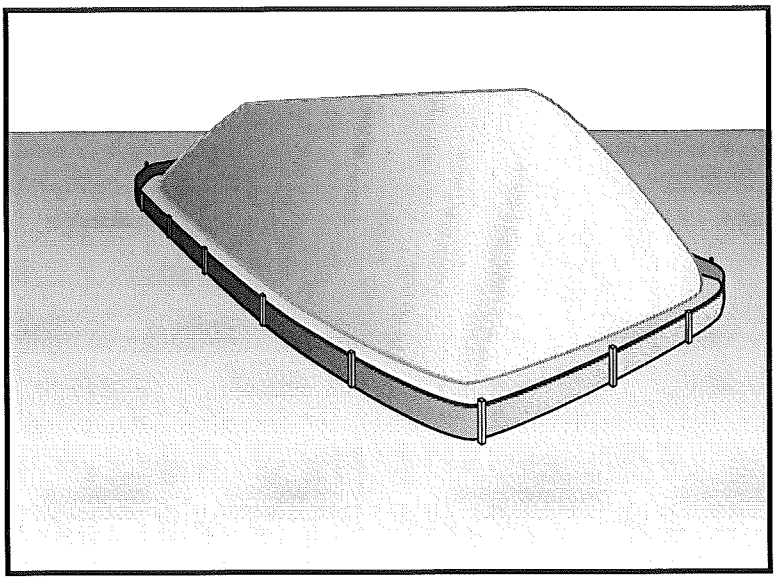
Coastal Nonpoint Pollution Control Program: Program Development and Approval Guidance, Working Group Working Paper; USEPA, April 1992.

Comments on Risk Assessments Risk Reduction Options for Cypermethrin: Docket No. OPP–2005–0293; California Stormwater Quality Association (CASQA) letter to USEPA, 2006.Environmental Hazard and General Labeling for Pyrethroid Non-Agricultural Outdoor Products, EPA-HQ-OPP-2008-0331-0021; USEPA, 2008.

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), March 2003.

Stormwater Management for Construction Activities; Developing Pollution Prevention Plans and Best Management Practice, EPA 832-R-92005; USEPA, April 1992.

Stockpile Management WM-3



Categories		
EC	Erosion Control	
SE	Sediment Control	☒
TC	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	☒
WM	Waste Management and Materials Pollution Control	☑

Legend:
☑ **Primary Category**
☒ **Secondary Category**

Targeted Constituents	
Sediment	☑
Nutrients	☑
Trash	☑
Metals	☑
Bacteria	
Oil and Grease	☑
Organics	☑

Potential Alternatives

None

Description and Purpose

Stockpile management procedures and practices are designed to reduce or eliminate air and stormwater pollution from stockpiles of soil, soil amendments, sand, paving materials such as portland cement concrete (PCC) rubble, asphalt concrete (AC), asphalt concrete rubble, aggregate base, aggregate sub base or pre-mixed aggregate, asphalt minder (so called "cold mix" asphalt), and pressure treated wood.

Suitable Applications

Implement in all projects that stockpile soil and other loose materials.

Limitations

- Plastic sheeting as a stockpile protection is temporary and hard to manage in windy conditions. Where plastic is used, consider use of plastic tarps with nylon reinforcement which may be more durable than standard sheeting.
- Plastic sheeting can increase runoff volume due to lack of infiltration and potentially cause perimeter control failure.
- Plastic sheeting breaks down faster in sunlight.
- The use of Plastic materials and photodegradable plastics should be avoided.

Implementation

Protection of stockpiles is a year-round requirement. To properly manage stockpiles:

- On larger sites, a minimum of 50 ft separation from concentrated flows of stormwater, drainage courses, and inlets is recommended.
- All stockpiles are required to be protected immediately if they are not scheduled to be used within 14 days.
- Protect all stockpiles from stormwater runon using temporary perimeter sediment barriers such as compost berms (SE-13), temporary silt dikes (SE-12), fiber rolls (SE-5), silt fences (SE-1), sandbags (SE-8), gravel bags (SE-6), or biofilter bags (SE-14). Refer to the individual fact sheet for each of these controls for installation information.
- Implement wind erosion control practices as appropriate on all stockpiled material. For specific information, see WE-1, Wind Erosion Control.
- Manage stockpiles of contaminated soil in accordance with WM-7, Contaminated Soil Management.
- Place bagged materials on pallets and under cover.
- Ensure that stockpile coverings are installed securely to protect from wind and rain.
- Some plastic covers withstand weather and sunlight better than others. Select cover materials or methods based on anticipated duration of use.

Protection of Non-Active Stockpiles

Non-active stockpiles of the identified materials should be protected further as follows:

Soil stockpiles

- Soil stockpiles should be covered or protected with soil stabilization measures and a temporary perimeter sediment barrier at all times.
- Temporary vegetation should be considered for topsoil piles that will be stockpiled for extended periods.

Stockpiles of Portland cement concrete rubble, asphalt concrete, asphalt concrete rubble, aggregate base, or aggregate sub base

- Stockpiles should be covered and protected with a temporary perimeter sediment barrier at all times.

Stockpiles of "cold mix"

- Cold mix stockpiles should be placed on and covered with plastic sheeting or comparable material at all times and surrounded by a berm.

Stockpiles of fly ash, stucco, hydrated lime

- Stockpiles of materials that may raise the pH of runoff (i.e., basic materials) should be covered with plastic and surrounded by a berm.

Stockpiles/Storage of wood (Pressure treated with chromated copper arsenate or ammoniacal copper zinc arsenate

- Treated wood should be covered with plastic sheeting or comparable material at all times and surrounded by a berm.

Protection of Active Stockpiles

Active stockpiles of the identified materials should be protected as follows:

- All stockpiles should be covered and protected with a temporary linear sediment barrier prior to the onset of precipitation.
- Stockpiles of "cold mix" and treated wood, and basic materials should be placed on and covered with plastic sheeting or comparable material and surrounded by a berm prior to the onset of precipitation.
- The downstream perimeter of an active stockpile should be protected with a linear sediment barrier or berm and runoff should be diverted around or away from the stockpile on the upstream perimeter.

Costs

For cost information associated with stockpile protection refer to the individual erosion or sediment control BMP fact sheet considered for implementation (For example, refer to SE-1 Silt Fence for installation of silt fence around the perimeter of a stockpile.)

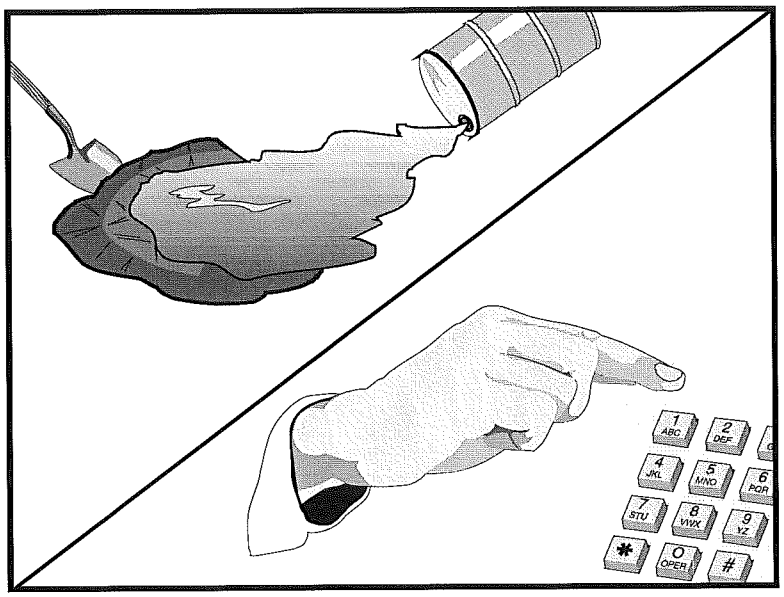
Inspection and Maintenance

- Stockpiles must be inspected in accordance with General Permit requirements for the associated project type and risk level. It is recommended that at a minimum, BMPs be inspected weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events.
- It may be necessary to inspect stockpiles covered with plastic sheeting more frequently during certain conditions (for example, high winds or extreme heat).
- Repair and/or replace perimeter controls and covers as needed to keep them functioning properly.
- Sediment shall be removed when it reaches one-third of the barrier height.

References

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), March 2003.

Spill Prevention and Control WM-4



Categories		
EC	Erosion Control	
SE	Sediment Control	
TC	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	
WM	Waste Management and Materials Pollution Control	☑

Legend:
☑ **Primary Objective**
☒ **Secondary Objective**

Targeted Constituents	
Sediment	☑
Nutrients	☑
Trash	☑
Metals	☑
Bacteria	
Oil and Grease	☑
Organics	☑

Potential Alternatives

None

Description and Purpose

Prevent or reduce the discharge of pollutants to drainage systems or watercourses from leaks and spills by reducing the chance for spills, stopping the source of spills, containing and cleaning up spills, properly disposing of spill materials, and training employees.

This best management practice covers only spill prevention and control. However, WM-1, Materials Delivery and Storage, and WM-2, Material Use, also contain useful information, particularly on spill prevention. For information on wastes, see the waste management BMPs in this section.

Suitable Applications

This BMP is suitable for all construction projects. Spill control procedures are implemented anytime chemicals or hazardous substances are stored on the construction site, including the following materials:

- Soil stabilizers/binders
- Dust palliatives
- Herbicides
- Growth inhibitors
- Fertilizers
- Deicing/anti-icing chemicals

- Fuels
- Lubricants
- Other petroleum distillates

Limitations

- In some cases it may be necessary to use a private spill cleanup company.
- This BMP applies to spills caused by the contractor and subcontractors.
- Procedures and practices presented in this BMP are general. Contractor should identify appropriate practices for the specific materials used or stored onsite

Implementation

The following steps will help reduce the stormwater impacts of leaks and spills:

Education

- Be aware that different materials pollute in different amounts. Make sure that each employee knows what a "significant spill" is for each material they use, and what is the appropriate response for "significant" and "insignificant" spills.
- Educate employees and subcontractors on potential dangers to humans and the environment from spills and leaks.
- Hold regular meetings to discuss and reinforce appropriate disposal procedures (incorporate into regular safety meetings).
- Establish a continuing education program to indoctrinate new employees.
- Have contractor's superintendent or representative oversee and enforce proper spill prevention and control measures.

General Measures

- To the extent that the work can be accomplished safely, spills of oil, petroleum products, substances listed under 40 CFR parts 110,117, and 302, and sanitary and septic wastes should be contained and cleaned up immediately.
- Store hazardous materials and wastes in covered containers and protect from vandalism.
- Place a stockpile of spill cleanup materials where it will be readily accessible.
- Train employees in spill prevention and cleanup.
- Designate responsible individuals to oversee and enforce control measures.
- Spills should be covered and protected from stormwater runon during rainfall to the extent that it doesn't compromise clean up activities.
- Do not bury or wash spills with water.

- Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMPs.
- Do not allow water used for cleaning and decontamination to enter storm drains or watercourses. Collect and dispose of contaminated water in accordance with WM-10, Liquid Waste Management.
- Contain water overflow or minor water spillage and do not allow it to discharge into drainage facilities or watercourses.
- Place proper storage, cleanup, and spill reporting instructions for hazardous materials stored or used on the project site in an open, conspicuous, and accessible location.
- Keep waste storage areas clean, well organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners should be repaired or replaced as needed to maintain proper function.

Cleanup

- Clean up leaks and spills immediately.
- Use a rag for small spills on paved surfaces, a damp mop for general cleanup, and absorbent material for larger spills. If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be sent to either a certified laundry (rags) or disposed of as hazardous waste.
- Never hose down or bury dry material spills. Clean up as much of the material as possible and dispose of properly. See the waste management BMPs in this section for specific information.

Minor Spills

- Minor spills typically involve small quantities of oil, gasoline, paint, etc. which can be controlled by the first responder at the discovery of the spill.
- Use absorbent materials on small spills rather than hosing down or burying the spill.
- Absorbent materials should be promptly removed and disposed of properly.
- Follow the practice below for a minor spill:
  - Contain the spread of the spill.
  - Recover spilled materials.
  - Clean the contaminated area and properly dispose of contaminated materials.

Semi-Significant Spills

- Semi-significant spills still can be controlled by the first responder along with the aid of other personnel such as laborers and the foreman, etc. This response may require the cessation of all other activities.

- Spills should be cleaned up immediately:
  - Contain spread of the spill.
  - Notify the project foreman immediately.
  - If the spill occurs on paved or impermeable surfaces, clean up using "dry" methods (absorbent materials, cat litter and/or rags). Contain the spill by encircling with absorbent materials and do not let the spill spread widely.
  - If the spill occurs in dirt areas, immediately contain the spill by constructing an earthen dike. Dig up and properly dispose of contaminated soil.
  - If the spill occurs during rain, cover spill with tarps or other material to prevent contaminating runoff.

Significant/Hazardous Spills

- For significant or hazardous spills that cannot be controlled by personnel in the immediate vicinity, the following steps should be taken:
  - Notify the local emergency response by dialing 911. In addition to 911, the contractor will notify the proper county officials. It is the contractor's responsibility to have all emergency phone numbers at the construction site.
  - Notify the Governor's Office of Emergency Services Warning Center, (916) 845-8911.
  - For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110,119, and 302, the contractor should notify the National Response Center at (800) 424-8802.
  - Notification should first be made by telephone and followed up with a written report.
  - The services of a spills contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staffs have arrived at the job site.
  - Other agencies which may need to be consulted include, but are not limited to, the Fire Department, the Public Works Department, the Coast Guard, the Highway Patrol, the City/County Police Department, Department of Toxic Substances, California Division of Oil and Gas, Cal/OSHA, etc.

Reporting

- Report significant spills to local agencies, such as the Fire Department; they can assist in cleanup.
- Federal regulations require that any significant oil spill into a water body or onto an adjoining shoreline be reported to the National Response Center (NRC) at 800-424-8802 (24 hours).

Use the following measures related to specific activities:

Vehicle and Equipment Maintenance

- If maintenance must occur onsite, use a designated area and a secondary containment, located away from drainage courses, to prevent the runon of stormwater and the runoff of spills.
- Regularly inspect onsite vehicles and equipment for leaks and repair immediately
- Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment onsite.
- Always use secondary containment, such as a drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.
- Place drip pans or absorbent materials under paving equipment when not in use.
- Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.
- Promptly transfer used fluids to the proper waste or recycling drums. Don't leave full drip pans or other open containers lying around
- Oil filters disposed of in trashcans or dumpsters can leak oil and pollute stormwater. Place the oil filter in a funnel over a waste oil-recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask the oil supplier or recycler about recycling oil filters.
- Store cracked batteries in a non-leaking secondary container. Do this with all cracked batteries even if you think all the acid has drained out. If you drop a battery, treat it as if it is cracked. Put it into the containment area until you are sure it is not leaking.

Vehicle and Equipment Fueling

- If fueling must occur onsite, use designate areas, located away from drainage courses, to prevent the runon of stormwater and the runoff of spills.
- Discourage "topping off" of fuel tanks.
- Always use secondary containment, such as a drain pan, when fueling to catch spills/ leaks.

Costs

Prevention of leaks and spills is inexpensive. Treatment and/ or disposal of contaminated soil or water can be quite expensive.

Inspection and Maintenance

- Inspect and verify that activity–based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect weekly during the rainy season and of two-week intervals in the non-rainy season to verify continued BMP implementation.
- Inspect BMPs subject to non-stormwater discharge daily while non-stormwater discharges occur.

- Keep ample supplies of spill control and cleanup materials onsite, near storage, unloading, and maintenance areas.
- Update your spill prevention and control plan and stock cleanup materials as changes occur in the types of chemicals onsite.

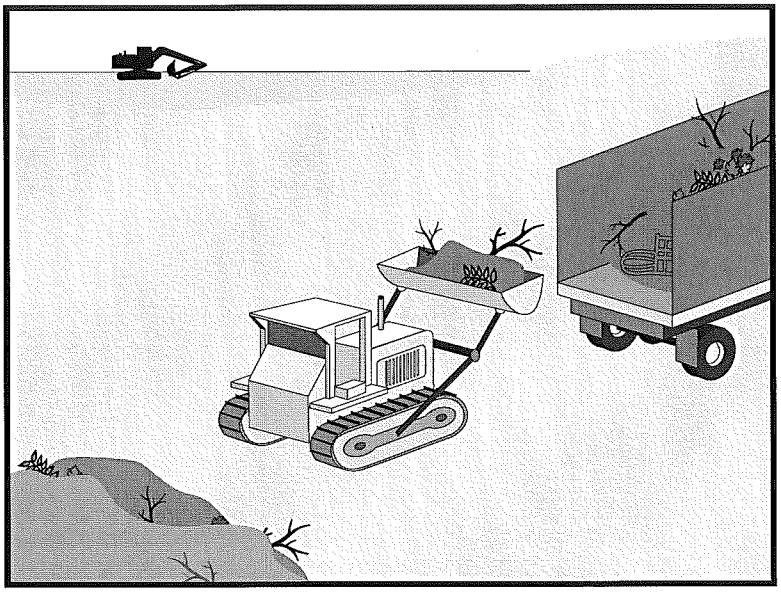
References

Blueprint for a Clean Bay: Best Management Practices to Prevent Stormwater Pollution from Construction Related Activities; Santa Clara Valley Nonpoint Source Pollution Control Program, 1995.

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), November 2000.

Stormwater Management for Construction Activities; Developing Pollution Prevention Plans and Best Management Practice, EPA 832-R-92005; USEPA, April 1992.

Solid Waste Management WM-5



Categories		
EC	Erosion Control	
SE	Sediment Control	
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WM	Waste Management and Materials Pollution Control	☑

Legend:
☑ **Primary Objective**
☒ **Secondary Objective**

Targeted Constituents	
Sediment	☑
Nutrients	☑
Trash	☑
Metals	☑
Bacteria	
Oil and Grease	☑
Organics	☑

Potential Alternatives

None

Description and Purpose

Solid waste management procedures and practices are designed to prevent or reduce the discharge of pollutants to stormwater from solid or construction waste by providing designated waste collection areas and containers, arranging for regular disposal, and training employees and subcontractors.

Suitable Applications

This BMP is suitable for construction sites where the following wastes are generated or stored:

- Solid waste generated from trees and shrubs removed during land clearing, demolition of existing structures (rubble), and building construction
- Packaging materials including wood, paper, and plastic
- Scrap or surplus building materials including scrap metals, rubber, plastic, glass pieces and masonry products
- Domestic wastes including food containers such as beverage cans, coffee cups, paper bags, plastic wrappers, and cigarettes
- Construction wastes including brick, mortar, timber, steel and metal scraps, pipe and electrical cuttings, non-hazardous equipment parts, styrofoam and other materials used to transport and package construction materials
- Highway planting wastes, including vegetative material,

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plant containers, and packaging materials

Limitations

Temporary stockpiling of certain construction wastes may not necessitate stringent drainage related controls during the non-rainy season or in desert areas with low rainfall.

Implementation

The following steps will help keep a clean site and reduce stormwater pollution:

- Select designated waste collection areas onsite.
- Inform trash-hauling contractors that you will accept only watertight dumpsters for onsite use. Inspect dumpsters for leaks and repair any dumpster that is not watertight.
- Locate containers in a covered area or in a secondary containment.
- Provide an adequate number of containers with lids or covers that can be placed over the container to keep rain out or to prevent loss of wastes when it is windy.
- Plan for additional containers and more frequent pickup during the demolition phase of construction.
- Collect site trash daily, especially during rainy and windy conditions.
- Remove this solid waste promptly since erosion and sediment control devices tend to collect litter.
- Make sure that toxic liquid wastes (used oils, solvents, and paints) and chemicals (acids, pesticides, additives, curing compounds) are not disposed of in dumpsters designated for construction debris.
- Do not hose out dumpsters on the construction site. Leave dumpster cleaning to the trash hauling contractor.
- Arrange for regular waste collection before containers overflow.
- Clean up immediately if a container does spill.
- Make sure that construction waste is collected, removed, and disposed of only at authorized disposal areas.

Education

- Have the contractor's superintendent or representative oversee and enforce proper solid waste management procedures and practices.
- Instruct employees and subcontractors on identification of solid waste and hazardous waste.
- Educate employees and subcontractors on solid waste storage and disposal procedures.
- Hold regular meetings to discuss and reinforce disposal procedures (incorporate into regular safety meetings).

- Require that employees and subcontractors follow solid waste handling and storage procedures.
- Prohibit littering by employees, subcontractors, and visitors.
- Minimize production of solid waste materials wherever possible.

Collection, Storage, and Disposal

- Littering on the project site should be prohibited.
- To prevent clogging of the storm drainage system, litter and debris removal from drainage grates, trash racks, and ditch lines should be a priority.
- Trash receptacles should be provided in the contractor's yard, field trailer areas, and at locations where workers congregate for lunch and break periods.
- Litter from work areas within the construction limits of the project site should be collected and placed in watertight dumpsters at least weekly, regardless of whether the litter was generated by the contractor, the public, or others. Collected litter and debris should not be placed in or next to drain inlets, stormwater drainage systems, or watercourses.
- Dumpsters of sufficient size and number should be provided to contain the solid waste generated by the project.
- Full dumpsters should be removed from the project site and the contents should be disposed of by the trash hauling contractor.
- Construction debris and waste should be removed from the site biweekly or more frequently as needed.
- Construction material visible to the public should be stored or stacked in an orderly manner.
- Stormwater runon should be prevented from contacting stored solid waste through the use of berms, dikes, or other temporary diversion structures or through the use of measures to elevate waste from site surfaces.
- Solid waste storage areas should be located at least 50 ft from drainage facilities and watercourses and should not be located in areas prone to flooding or ponding.
- Except during fair weather, construction and highway planting waste not stored in watertight dumpsters should be securely covered from wind and rain by covering the waste with tarps or plastic.
- Segregate potentially hazardous waste from non-hazardous construction site waste.
- Make sure that toxic liquid wastes (used oils, solvents, and paints) and chemicals (acids, pesticides, additives, curing compounds) are not disposed of in dumpsters designated for construction debris.
- For disposal of hazardous waste, see WM-6, Hazardous Waste Management. Have hazardous waste hauled to an appropriate disposal and/or recycling facility.

- Salvage or recycle useful vegetation debris, packaging and surplus building materials when practical. For example, trees and shrubs from land clearing can be used as a brush barrier, or converted into wood chips, then used as mulch on graded areas. Wood pallets, cardboard boxes, and construction scraps can also be recycled.

Costs

All of the above are low cost measures.

Inspection and Maintenance

- Inspect and verify that activity–based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect weekly during the rainy season and of two-week intervals in the non-rainy season to verify continued BMP implementation.
- Inspect BMPs subject to non-stormwater discharge daily while non-stormwater discharges occur
- Inspect construction waste area regularly.
- Arrange for regular waste collection.

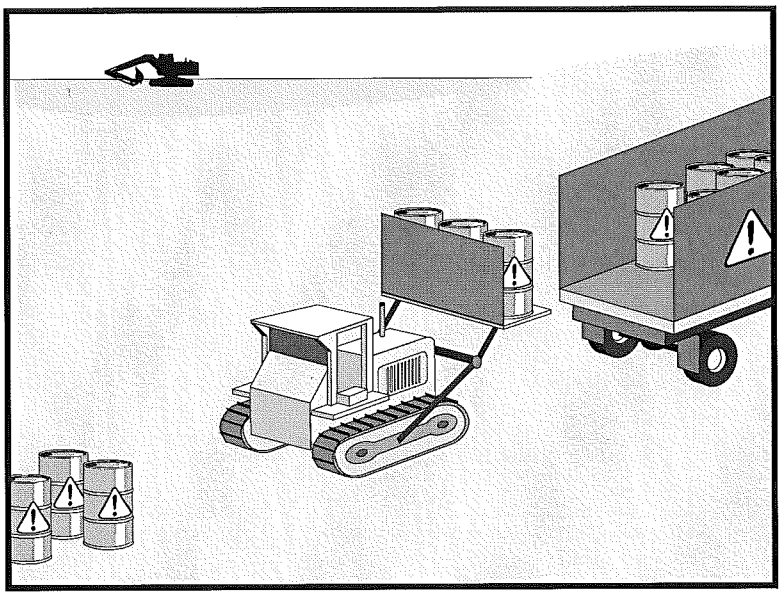
References

Processes, Procedures and Methods to Control Pollution Resulting from All Construction Activity, 430/9-73-007, USEPA, 1973.

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), November 2000.

Stormwater Management for Construction Activities; Developing Pollution Prevention Plans and Best Management Practice, EPA 832-R-92005; USEPA, April 1992.

Hazardous Waste Management WM-6



Categories

EC	Erosion Control	
SE	Sediment Control	
TC	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	
WM	Waste Management and Materials Pollution Control	☑

Legend:

☑ **Primary Objective**

☒ **Secondary Objective**

Targeted Constituents

Sediment	
Nutrients	☑
Trash	☑
Metals	☑
Bacteria	☑
Oil and Grease	☑
Organics	☑

Potential Alternatives

None

Description and Purpose

Prevent or reduce the discharge of pollutants to stormwater from hazardous waste through proper material use, waste disposal, and training of employees and subcontractors.

Suitable Applications

This best management practice (BMP) applies to all construction projects. Hazardous waste management practices are implemented on construction projects that generate waste from the use of:

- Petroleum Products
- Asphalt Products
- Concrete Curing Compounds
- Pesticides
- Palliatives
- Acids
- Septic Wastes
- Paints
- Stains
- Solvents
- Wood Preservatives
- Roofing Tar
- Any materials deemed a hazardous waste in California, Title 22 Division 4.5, or listed in 40 CFR Parts 110, 117, 261, or 302

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In addition, sites with existing structures may contain wastes, which must be disposed of in accordance with federal, state, and local regulations. These wastes include:

- Sandblasting grit mixed with lead-, cadmium-, or chromium-based paints
- Asbestos
- PCBs (particularly in older transformers)

Limitations

- Hazardous waste that cannot be reused or recycled must be disposed of by a licensed hazardous waste hauler.
- Nothing in this BMP relieves the contractor from responsibility for compliance with federal, state, and local laws regarding storage, handling, transportation, and disposal of hazardous wastes.
- This BMP does not cover aerially deposited lead (ADL) soils. For ADL soils refer to WM-7, Contaminated Soil Management.

Implementation

The following steps will help reduce stormwater pollution from hazardous wastes:

Material Use

- Wastes should be stored in sealed containers constructed of a suitable material and should be labeled as required by Title 22 CCR, Division 4.5 and 49 CFR Parts 172, 173, 178, and 179.
- All hazardous waste should be stored, transported, and disposed as required in Title 22 CCR, Division 4.5 and 49 CFR 261-263.
- Waste containers should be stored in temporary containment facilities that should comply with the following requirements:
  - Temporary containment facility should provide for a spill containment volume equal to 1.5 times the volume of all containers able to contain precipitation from a 25 year storm event, plus the greater of 10% of the aggregate volume of all containers or 100% of the capacity of the largest tank within its boundary, whichever is greater.
  - Temporary containment facility should be impervious to the materials stored there for a minimum contact time of 72 hours.
  - Temporary containment facilities should be maintained free of accumulated rainwater and spills. In the event of spills or leaks, accumulated rainwater and spills should be placed into drums after each rainfall. These liquids should be handled as a hazardous waste unless testing determines them to be non-hazardous. Non-hazardous liquids should be sent to an approved disposal site.
  - Sufficient separation should be provided between stored containers to allow for spill cleanup and emergency response access.

- Incompatible materials, such as chlorine and ammonia, should not be stored in the same temporary containment facility.
- Throughout the rainy season, temporary containment facilities should be covered during non-working days, and prior to rain events. Covered facilities may include use of plastic tarps for small facilities or constructed roofs with overhangs.

- Drums should not be overfilled and wastes should not be mixed.
- Unless watertight, containers of dry waste should be stored on pallets.
- Do not over-apply herbicides and pesticides. Prepare only the amount needed. Follow the recommended usage instructions. Over application is expensive and environmentally harmful. Apply surface dressings in several smaller applications, as opposed to one large application. Allow time for infiltration and avoid excess material being carried offsite by runoff. Do not apply these chemicals just before it rains. People applying pesticides must be certified in accordance with federal and state regulations.
- Paint brushes and equipment for water and oil based paints should be cleaned within a contained area and should not be allowed to contaminate site soils, watercourses, or drainage systems. Waste paints, thinners, solvents, residues, and sludges that cannot be recycled or reused should be disposed of as hazardous waste. When thoroughly dry, latex paint and paint cans, used brushes, rags, absorbent materials, and drop cloths should be disposed of as solid waste.
- Do not clean out brushes or rinse paint containers into the dirt, street, gutter, storm drain, or stream. "Paint out" brushes as much as possible. Rinse water-based paints to the sanitary sewer. Filter and reuse thinners and solvents. Dispose of excess oil-based paints and sludge as hazardous waste.
- The following actions should be taken with respect to temporary contaminant:
  - Ensure that adequate hazardous waste storage volume is available.
  - Ensure that hazardous waste collection containers are conveniently located.
  - Designate hazardous waste storage areas onsite away from storm drains or watercourses and away from moving vehicles and equipment to prevent accidental spills.
  - Minimize production or generation of hazardous materials and hazardous waste on the job site.
  - Use containment berms in fueling and maintenance areas and where the potential for spills is high.
  - Segregate potentially hazardous waste from non-hazardous construction site debris.
  - Keep liquid or semi-liquid hazardous waste in appropriate containers (closed drums or similar) and under cover.

- Clearly label all hazardous waste containers with the waste being stored and the date of accumulation.
- Place hazardous waste containers in secondary containment.
- Do not allow potentially hazardous waste materials to accumulate on the ground.
- Do not mix wastes.
- Use all of the product before disposing of the container.
- Do not remove the original product label; it contains important safety and disposal information.

Waste Recycling Disposal

- Select designated hazardous waste collection areas onsite.
- Hazardous materials and wastes should be stored in covered containers and protected from vandalism.
- Place hazardous waste containers in secondary containment.
- Do not mix wastes, this can cause chemical reactions, making recycling impossible and complicating disposal.
- Recycle any useful materials such as used oil or water-based paint.
- Make sure that toxic liquid wastes (used oils, solvents, and paints) and chemicals (acids, pesticides, additives, curing compounds) are not disposed of in dumpsters designated for construction debris.
- Arrange for regular waste collection before containers overflow.
- Make sure that hazardous waste (e.g., excess oil-based paint and sludge) is collected, removed, and disposed of only at authorized disposal areas.

Disposal Procedures

- Waste should be disposed of by a licensed hazardous waste transporter at an authorized and licensed disposal facility or recycling facility utilizing properly completed Uniform Hazardous Waste Manifest forms.
- A Department of Health Services certified laboratory should sample waste to determine the appropriate disposal facility.
- Properly dispose of rainwater in secondary containment that may have mixed with hazardous waste.
- Attention is directed to "Hazardous Material", "Contaminated Material", and "Aerially Deposited Lead" of the contract documents regarding the handling and disposal of hazardous materials.

Education

- Educate employees and subcontractors on hazardous waste storage and disposal procedures.
- Educate employees and subcontractors on potential dangers to humans and the environment from hazardous wastes.
- Instruct employees and subcontractors on safety procedures for common construction site hazardous wastes.
- Instruct employees and subcontractors in identification of hazardous and solid waste.
- Hold regular meetings to discuss and reinforce hazardous waste management procedures (incorporate into regular safety meetings).
- The contractor's superintendent or representative should oversee and enforce proper hazardous waste management procedures and practices.
- Make sure that hazardous waste is collected, removed, and disposed of only at authorized disposal areas.
- Warning signs should be placed in areas recently treated with chemicals.
- Place a stockpile of spill cleanup materials where it will be readily accessible.
- If a container does spill, clean up immediately.

Costs

All of the above are low cost measures.

Inspection and Maintenance

- Inspect and verify that activity–based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect weekly during the rainy season and of two week intervals in the non-rainy season to verify continued BMP implementation.
- Inspect BMPs subject to non-stormwater discharge daily while non-stormwater discharges occur
- Hazardous waste should be regularly collected.
- A foreman or construction supervisor should monitor onsite hazardous waste storage and disposal procedures.
- Waste storage areas should be kept clean, well organized, and equipped with ample cleanup supplies as appropriate for the materials being stored.
- Perimeter controls, containment structures, covers, and liners should be repaired or replaced as needed to maintain proper function.
- Hazardous spills should be cleaned up and reported in conformance with the applicable Material Safety Data Sheet (MSDS) and the instructions posted at the project site.

- The National Response Center, at (800) 424-8802, should be notified of spills of federal reportable quantities in conformance with the requirements in 40 CFR parts 110, 117, and 302. Also notify the Governors Office of Emergency Services Warning Center at (916) 845-8911.
- A copy of the hazardous waste manifests should be provided.

References

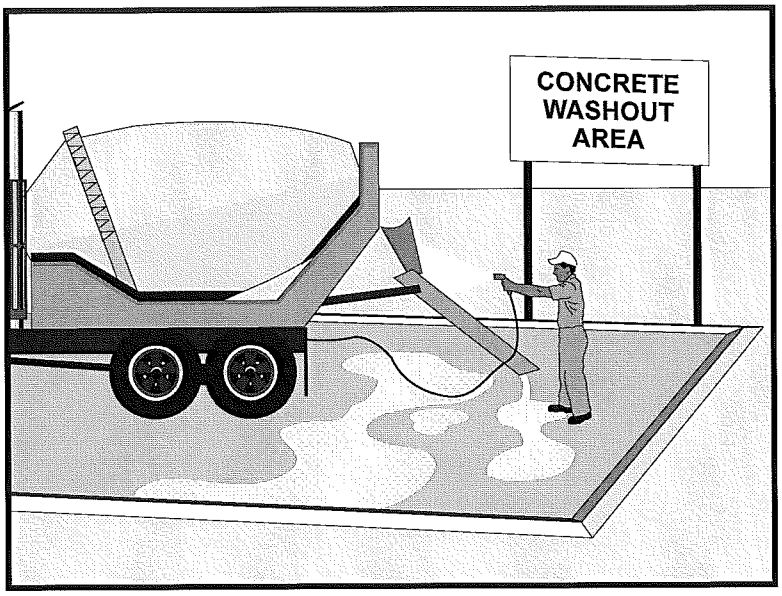
Blueprint for a Clean Bay: Best Management Practices to Prevent Stormwater Pollution from Construction Related Activities; Santa Clara Valley Nonpoint Source Pollution Control Program, 1995.

Processes, Procedures and Methods to Control Pollution Resulting from All Construction Activity, 430/9-73-007, USEPA, 1973.

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), November 2000.

Stormwater Management for Construction Activities; Developing Pollution Prevention Plans and Best Management Practice, EPA 832-R-92005; USEPA, April 1992.

Concrete Waste Management WM-8



Categories		
EC	Erosion Control	
SE	Sediment Control	
TC	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	☒
WM	Waste Management and Materials Pollution Control	☑

Legend:
☑ **Primary Category**
☒ **Secondary Category**

Targeted Constituents	
Sediment	☑
Nutrients	
Trash	
Metals	☑
Bacteria	
Oil and Grease	
Organics	

Potential Alternatives

None

Description and Purpose

Prevent the discharge of pollutants to stormwater from concrete waste by conducting washout onsite or offsite in a designated area, and by employee and subcontractor training.

The General Permit incorporates Numeric Effluent Limits (NEL) and Numeric Action Levels (NAL) for pH (see Section 2 of this handbook to determine your project's risk level and if you are subject to these requirements).

Many types of construction materials, including mortar, concrete, stucco, cement and block and their associated wastes have basic chemical properties that can raise pH levels outside of the permitted range. Additional care should be taken when managing these materials to prevent them from coming into contact with stormwater flows and raising pH to levels outside the accepted range.

Suitable Applications

Concrete waste management procedures and practices are implemented on construction projects where:

- Concrete is used as a construction material or where concrete dust and debris result from demolition activities.
- Slurries containing portland cement concrete (PCC) are generated, such as from saw cutting, coring, grinding, grooving, and hydro-concrete demolition.

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- Concrete trucks and other concrete-coated equipment are washed onsite.
- Mortar-mixing stations exist.
- Stucco mixing and spraying .
- See also NS-8, Vehicle and Equipment Cleaning.

Limitations

- Offsite washout of concrete wastes may not always be possible.
- Multiple washouts may be needed to assure adequate capacity and to allow for evaporation.

Implementation

The following steps will help reduce stormwater pollution from concrete wastes:

- Incorporate requirements for concrete waste management into material supplier and subcontractor agreements.
- Store dry and wet materials under cover, away from drainage areas. Refer to WM-1, Material Delivery and Storage for more information.
- Avoid mixing excess amounts of concrete.
- Perform washout of concrete trucks in designated areas only, where washout will not reach stormwater.
- Do not wash out concrete trucks into storm drains, open ditches, streets, streams or onto the ground. Trucks should always be washed out into designated facilities.
- Do not allow excess concrete to be dumped onsite, except in designated areas.
- For onsite washout:
  - On larger sites, it is recommended to locate washout areas at least 50 feet from storm drains, open ditches, or water bodies. Do not allow runoff from this area by constructing a temporary pit or bermed area large enough for liquid and solid waste.
  - Washout wastes into the temporary washout where the concrete can set, be broken up, and then disposed properly.
  - Washout should be lined so there is no discharge into the underlying soil.
- Do not wash sweepings from exposed aggregate concrete into the street or storm drain. Collect and return sweepings to aggregate base stockpile or dispose in the trash.
- See typical concrete washout installation details at the end of this fact sheet.

Education

- Educate employees, subcontractors, and suppliers on the concrete waste management techniques described herein.

- Arrange for contractor's superintendent or representative to oversee and enforce concrete waste management procedures.
- Discuss the concrete management techniques described in this BMP (such as handling of concrete waste and washout) with the ready-mix concrete supplier before any deliveries are made.

Concrete Demolition Wastes

- Stockpile concrete demolition waste in accordance with BMP WM-3, Stockpile Management.
- Dispose of or recycle hardened concrete waste in accordance with applicable federal, state or local regulations.

Concrete Slurry Wastes

- PCC and AC waste should not be allowed to enter storm drains or watercourses.
- PCC and AC waste should be collected and disposed of or placed in a temporary concrete washout facility (as described in Onsite Temporary Concrete Washout Facility, Concrete Transit Truck Washout Procedures, below).
- A foreman or construction supervisor should monitor onsite concrete working tasks, such as saw cutting, coring, grinding and grooving to ensure proper methods are implemented.
- Saw-cut concrete slurry should not be allowed to enter storm drains or watercourses. Residue from grinding operations should be picked up by means of a vacuum attachment to the grinding machine or by sweeping. Saw cutting residue should not be allowed to flow across the pavement and should not be left on the surface of the pavement. See also NS-3, Paving and Grinding Operations; and WM-10, Liquid Waste Management.
- Concrete slurry residue should be disposed in a temporary washout facility (as described in Onsite Temporary Concrete Washout Facility, Concrete Transit Truck Washout Procedures, below) and allowed to dry. Dispose of dry slurry residue in accordance with WM-5, Solid Waste Management.

Onsite Temporary Concrete Washout Facility, Transit Truck Washout Procedures

- Temporary concrete washout facilities should be located a minimum of 50 ft from storm drain inlets, open drainage facilities, and watercourses. Each facility should be located away from construction traffic or access areas to prevent disturbance or tracking.
- A sign should be installed adjacent to each washout facility to inform concrete equipment operators to utilize the proper facilities.
- Temporary concrete washout facilities should be constructed above grade or below grade at the option of the contractor. Temporary concrete washout facilities should be constructed and maintained in sufficient quantity and size to contain all liquid and concrete waste generated by washout operations.

- Temporary washout facilities should have a temporary pit or bermed areas of sufficient volume to completely contain all liquid and waste concrete materials generated during washout procedures.
- Temporary washout facilities should be lined to prevent discharge to the underlying ground or surrounding area.
- Washout of concrete trucks should be performed in designated areas only.
- Only concrete from mixer truck chutes should be washed into concrete wash out.
- Concrete washout from concrete pumper bins can be washed into concrete pumper trucks and discharged into designated washout area or properly disposed of or recycled offsite.
- Once concrete wastes are washed into the designated area and allowed to harden, the concrete should be broken up, removed, and disposed of per WM-5, Solid Waste Management. Dispose of or recycle hardened concrete on a regular basis.
- Temporary Concrete Washout Facility (Type Above Grade)
  - Temporary concrete washout facility (type above grade) should be constructed as shown on the details at the end of this BMP, with a recommended minimum length and minimum width of 10 ft; however, smaller sites or jobs may only need a smaller washout facility. With any washout, always maintain a sufficient quantity and volume to contain all liquid and concrete waste generated by washout operations.
  - Materials used to construct the washout area should conform to the provisions detailed in their respective BMPs (e.g., SE-8 Sandbag Barrier).
  - Plastic lining material should be a minimum of 10 mil in polyethylene sheeting and should be free of holes, tears, or other defects that compromise the impermeability of the material.
  - Alternatively, portable removable containers can be used as above grade concrete washouts. Also called a "roll-off"; this concrete washout facility should be properly sealed to prevent leakage, and should be removed from the site and replaced when the container reaches 75% capacity.
- Temporary Concrete Washout Facility (Type Below Grade)
  - Temporary concrete washout facilities (type below grade) should be constructed as shown on the details at the end of this BMP, with a recommended minimum length and minimum width of 10 ft. The quantity and volume should be sufficient to contain all liquid and concrete waste generated by washout operations.
  - Lath and flagging should be commercial type.
  - Plastic lining material should be a minimum of 10 mil polyethylene sheeting and should be free of holes, tears, or other defects that compromise the impermeability of the material.

- The base of a washout facility should be free of rock or debris that may damage a plastic liner.

Removal of Temporary Concrete Washout Facilities

- When temporary concrete washout facilities are no longer required for the work, the hardened concrete should be removed and properly disposed or recycled in accordance with federal, state or local regulations. Materials used to construct temporary concrete washout facilities should be removed from the site of the work and properly disposed or recycled in accordance with federal, state or local regulations..

- Holes, depressions or other ground disturbance caused by the removal of the temporary concrete washout facilities should be backfilled and repaired.

Costs

All of the above are low cost measures. Roll-off concrete washout facilities can be more costly than other measures due to removal and replacement; however, provide a cleaner alternative to traditional washouts. The type of washout facility, size, and availability of materials will determine the cost of the washout.

Inspection and Maintenance

- BMPs must be inspected in accordance with General Permit requirements for the associated project type and risk level. It is recommended that at a minimum, BMPs be inspected weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events.

- Temporary concrete washout facilities should be maintained to provide adequate holding capacity with a minimum freeboard of 4 in. for above grade facilities and 12 in. for below grade facilities. Maintaining temporary concrete washout facilities should include removing and disposing of hardened concrete and returning the facilities to a functional condition. Hardened concrete materials should be removed and properly disposed or recycled in accordance with federal, state or local regulations.

- Washout facilities must be cleaned, or new facilities must be constructed and ready for use once the washout is 75% full.

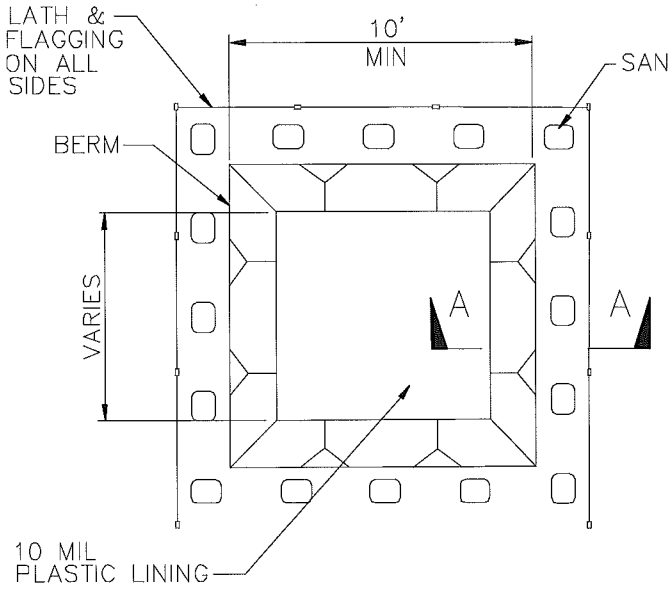
- Inspect washout facilities for damage (e.g. torn liner, evidence of leaks, signage, etc.). Repair all identified damage.

References

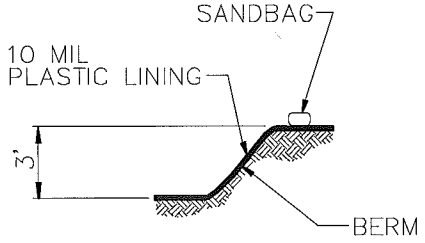
Blueprint for a Clean Bay: Best Management Practices to Prevent Stormwater Pollution from Construction Related Activities; Santa Clara Valley Nonpoint Source Pollution Control Program, 1995.

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), November 2000, Updated March 2003.

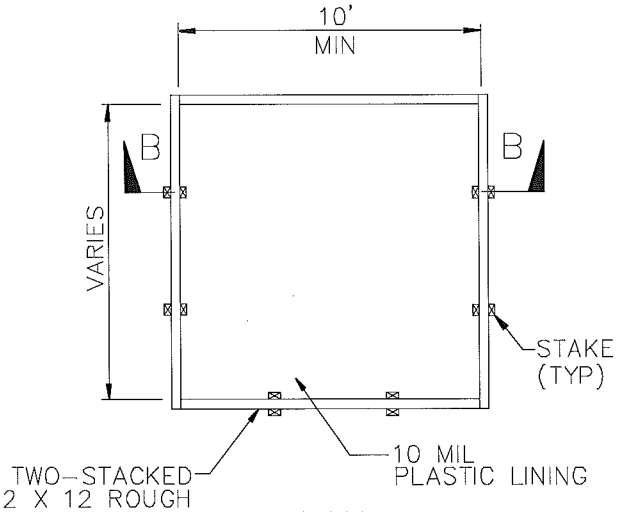
Stormwater Management for Construction Activities; Developing Pollution Prevention Plans and Best Management Practice, EPA 832-R-92005; USEPA, April 1992.



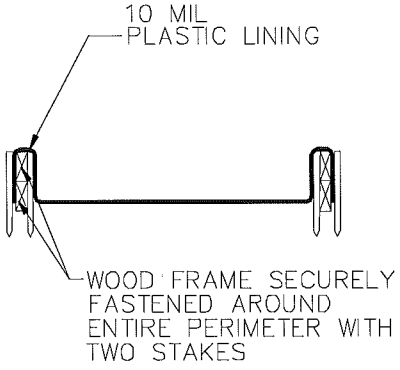
PLAN
NOT TO SCALE
TYPE "BELOW GRADE"



SECTION A–A
NOT TO SCALE



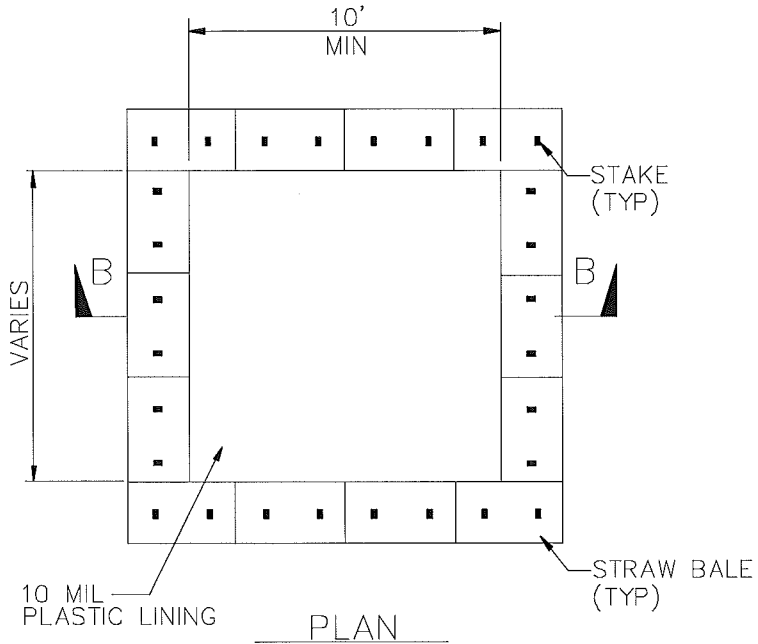
PLAN
NOT TO SCALE
TYPE "ABOVE GRADE"



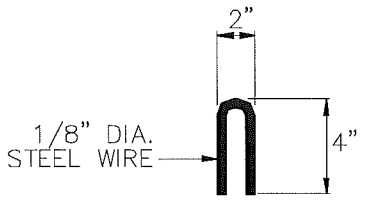
SECTION B–B
NOT TO SCALE

NOTES

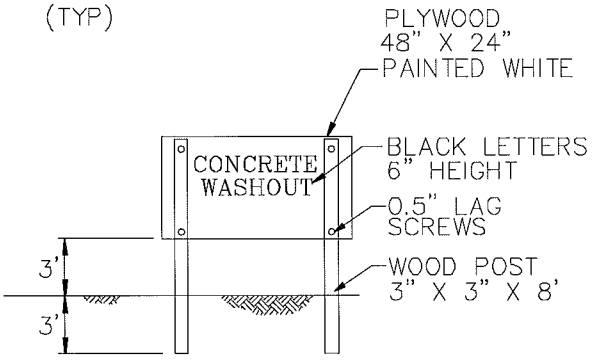
1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT. OF THE TEMPORARY CONCRETE WASHOUT FACILITY.



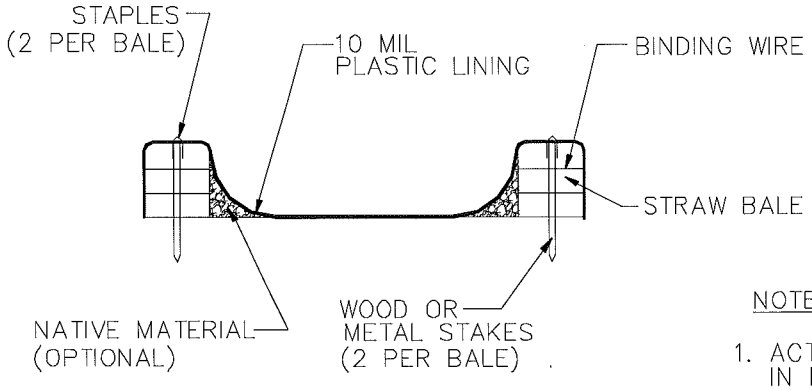
PLAN
NOT TO SCALE
TYPE "ABOVE GRADE"
WITH STRAW BALES



STAPLE DETAIL



CONCRETE WASHOUT
SIGN DETAIL
(OR EQUIVALENT)

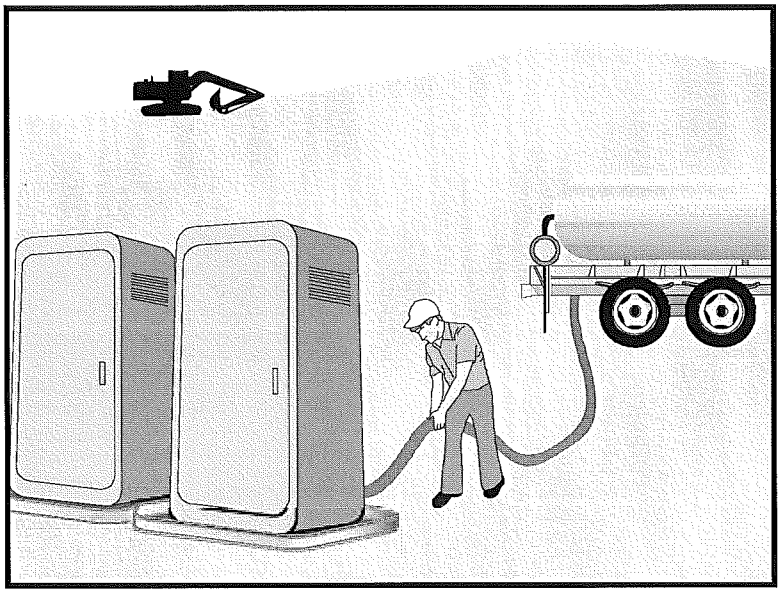


SECTION B–B
NOT TO SCALE

NOTES

1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT. OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

Sanitary/Septic Waste Management WM-9



Categories

EC	Erosion Control	
SE	Sediment Control	
TC	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	
WM	Waste Management and Materials Pollution Control	☑

Legend:

☑ **Primary Category**

☒ **Secondary Category**

Targeted Constituents

Sediment	
Nutrients	☑
Trash	☑
Metals	
Bacteria	☑
Oil and Grease	
Organics	☑

Potential Alternatives

None

Description and Purpose

Proper sanitary and septic waste management prevent the discharge of pollutants to stormwater from sanitary and septic waste by providing convenient, well-maintained facilities, and arranging for regular service and disposal.

Suitable Applications

Sanitary septic waste management practices are suitable for use at all construction sites that use temporary or portable sanitary and septic waste systems.

Limitations

None identified.

Implementation

Sanitary or septic wastes should be treated or disposed of in accordance with state and local requirements. In many cases, one contract with a local facility supplier will be all that it takes to make sure sanitary wastes are properly disposed.

Storage and Disposal Procedures

- Temporary sanitary facilities should be located away from drainage facilities, watercourses, and from traffic circulation. If site conditions allow, place portable facilities a minimum of 50 feet from drainage conveyances and traffic areas. When subjected to high winds or risk of high winds, temporary sanitary facilities should be secured to prevent overturning.

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- Temporary sanitary facilities must be equipped with containment to prevent discharge of pollutants to the stormwater drainage system of the receiving water.
- Consider safety as well as environmental implications before placing temporary sanitary facilities.
- Wastewater should not be discharged or buried within the project site.
- Sanitary and septic systems that discharge directly into sanitary sewer systems, where permissible, should comply with the local health agency, city, county, and sewer district requirements.
- Only reputable, licensed sanitary and septic waste haulers should be used.
- Sanitary facilities should be located in a convenient location.
- Temporary septic systems should treat wastes to appropriate levels before discharging.
- If using an onsite disposal system (OSDS), such as a septic system, local health agency requirements must be followed.
- Temporary sanitary facilities that discharge to the sanitary sewer system should be properly connected to avoid illicit discharges.
- Sanitary and septic facilities should be maintained in good working order by a licensed service.
- Regular waste collection by a licensed hauler should be arranged before facilities overflow.
- If a spill does occur from a temporary sanitary facility, follow federal, state and local regulations for containment and clean-up.

Education

- Educate employees, subcontractors, and suppliers on sanitary and septic waste storage and disposal procedures.
- Educate employees, subcontractors, and suppliers of potential dangers to humans and the environment from sanitary and septic wastes.
- Instruct employees, subcontractors, and suppliers in identification of sanitary and septic waste.
- Hold regular meetings to discuss and reinforce the use of sanitary facilities (incorporate into regular safety meetings).
- Establish a continuing education program to indoctrinate new employees.

Costs

All of the above are low cost measures.

Inspection and Maintenance

- BMPs must be inspected in accordance with General Permit requirements for the associated project type and risk level. It is recommended that at a minimum, BMPs be inspected weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events.
- Arrange for regular waste collection.
- If high winds are expected, portable sanitary facilities must be secured with spikes or weighed down to prevent over turning.
- If spills or leaks from sanitary or septic facilities occur that are not contained and discharge from the site, non-visible sampling of site discharge may be required. Refer to the General Permit or to your project specific Construction Site Monitoring Plan to determine if and where sampling is required.

References

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), March 2003.

Stormwater Management for Construction Activities; Developing Pollution Prevention Plans and Best Management Practice, EPA 832-R-92005; USEPA, April 1992.

Attachment K

Construction Site Inspection Report Form

GENERAL INFORMATION				
Project Name	Milpitas Fire Station No. 2			
APN	088-02-026			
Contractor				
Inspector's Name				
Inspector's Title				
Signature				
Date of Inspection				
Inspection Type (Check Applicable)	❒ Prior to forecast rain ❒ 24-hr intervals during extended rain		❒ After a rain event ❒ Other _____	
Season (Check Applicable)	❒ Rainy		❒ Non-Rainy	
Storm Data	Storm Start Date & Time:		Storm Duration (hrs):	
	Time elapsed since last storm (Circle Applicable Units)	Min. Hr. Days	Approximate Rainfall Amount (inches)	

PROJECT AREA SUMMARY AND DISTURBED SOIL AREA (DSA) SIZE		
Total Project Area	1	Acres
Field Estimate of Active DSAs		Acres
Field Estimate of Non-Active DSAs		Acres

INSPECTION OF BMPs				
BMP	**Yes**	**No**	**N/A**	**Corrective Action**
Preservation of Existing Vegetation				
Is temporary fencing provided to preserve vegetation in areas where no construction activity is planned?				
Location:				
Location:				
Location:				
Location:				
Erosion Control				
Does the applied temporary erosion control provide 100% coverage for the affected areas?				
Are any non-vegetated areas that may require temporary erosion control?				
Is the area where erosion controls are used required free from visible erosion?				
Location:				
Location:				
Location:				
Location:				
Temporary Linear Sediment Barriers (Silt Fence, Fiber Rolls, Sandbag Barriers, etc.)				
Are temporary linear sediment barriers properly installed, functional and maintained?				
Are temporary linear sediment barriers free of accumulated litter?				
Is the built-up sediment less than 1/3 the height of the barrier?				
Are cross barriers installed where necessary and properly spaced?				
Location:				
Location:				
Location:				
Location:				
Location:				
Storm Drain Inlet Protection				
Are storm drain inlets internal to the project properly protected?				
Are storm drain inlet protection devices in working order and being properly maintained?				
Location:				
Location:				
Location:				
Location:				
Location:				
Sediment Basins				

INSPECTION OF BMPs				
BMP	**Yes**	**No**	**N/A**	**Corrective Action**
Are basins designed in accordance with the requirements of the General Permit?				
Are basins maintained to provide the required retention/detention?				
Are basin controls (inlets, outlets, diversions, weirs, spillways, and racks) in working order?				
Location:				
Location:				
Location:				
Location:				
Stockpiles				
Are all locations of temporary stockpiles, including soil, hazardous waste, and construction materials in approved areas?				
Are stockpiles protected from run-on, run-off from adjacent areas and from winds?				
Are stockpiles located at least 15 m from concentrated flows, downstream drainage courses and storm drain inlets?				
Are required covers and/or perimeter controls in place?				
Location:				
Location:				
Location:				
Location:				
Concentrated Flows				
Are concentrated flow paths free of visible erosion?				
Location:				
Location:				
Location:				
Location:				
Tracking Control				
Is the entrance stabilized to prevent tracking				
Is the stabilized entrance inspected daily to ensure that it is working properly				
Are points of ingress/egress to public/private roads inspected and swept and vacuumed as needed?				
Are all paved areas free of visible sediment tracking or other particulate matter?				
Location:				
Location:				
Location:				
Location:				
Wind Erosion Control				
Is dust control implemented?				

INSPECTION OF BMPs				
BMP	**Yes**	**No**	**N/A**	**Corrective Action**
Location:				
Location:				
Location:				
Location:				
Dewatering Operations				
Are all one-time dewatering operations covered by the General Permit inspected before and as they occur and BMPs implemented as necessary during discharge?				
Is ground water dewatering handled in conformance with the dewatering permit issued by the RWQCB?				
Is required treatment provided for dewatering effluent?				
Location:				
Location:				
Location:				
Location:				
Vehicle & Equipment Fueling, Cleaning, and Maintenance				
Are vehicle and equipment fueling, cleaning and maintenance areas reasonably clean and free of spills, leaks, or any other deleterious material?				
Are vehicle and equipment fueling, cleaning and maintenance activities performed on an impermeable surface in dedicated areas?				
If no, are drip pans used?				
Are dedicated fueling, cleaning, and maintenance areas located at least 15 m away from downstream drainage facilities and watercourses and protected from run-on and runoff?				
Is wash water contained for infiltration/ evaporation and disposed of appropriately?				
Is on-site cleaning limited to washing with water (no soap, soaps substitutes, solvents, or steam)?				
On each day of use, are vehicles and equipment inspected for leaks and if necessary, repaired?				
Location:				
Location:				
Location:				
Location:				
Waste Management & Materials Pollution Control				
Are material storage areas and washout areas protected from run-on and runoff, and located at least 15 m from concentrated flows and downstream drainage facilities?				
Are all material handling and storage areas clean; organized; free of spills, leaks, or any other deleterious material; and stocked with appropriate clean-up supplies?				
Are liquid materials, hazardous materials, and hazardous wastes stored in temporary containment facilities?				

INSPECTION OF BMPs				
BMP	**Yes**	**No**	**N/A**	**Corrective Action**
Are bagged and boxed materials stored on pallets?				
Are hazardous materials and wastes stored in appropriate, labeled containers?				
Are proper storage, clean-up, and spill-reporting procedures for hazardous materials and wastes posted in open, conspicuous and accessible locations adjacent to storage areas?				
Are temporary containment facilities free of spills and rainwater?				
Are temporary containment facilities and bagged/boxed materials covered?				
Are temporary concrete washout facilities designated and being used?				
Are temporary concrete washout facilities functional for receiving and containing concrete waste and are concrete residues prevented from entering the drainage system?				
Do temporary concrete washout facilities provide sufficient volume and freeboard for planned concrete operations?				
Are concrete wastes, including residues from cutting and grinding, contained and disposed of off-site or in concrete washout facilities?				
Are spills from mobile equipment fueling and maintenance properly contained and cleaned up?				
Is the site free of litter?				
Are trash receptacles provided in the yard, field trailer areas, and at locations where workers congregate for lunch and break periods?				
Is litter from work areas collected and placed in watertight dumpsters?				
Are waste management receptacles free of leaks?				
Are the contents of waste management receptacles properly protected from contact with storm water or from being dislodged by winds?				
Are waste management receptacles filled at or beyond capacity?				
Location:				
Location:				
Location:				
Location:				
Temporary Water Body Crossing or Encroachment				
Are temporary water body crossings and encroachments constructed appropriately?				
Does the project conform to the requirements of the 404 permit and/or 1601agreement?				
Location:				
Location:				
Location:				
Location:				
Illicit Connection/ Discharge				

INSPECTION OF BMPs				
BMP	**Yes**	**No**	**N/A**	**Corrective Action**
Is there any evidence of illicit discharges or illegal dumping on the project site?				
If yes, has the Owner/Operator been notified?				
Location:				
Location:				
Location:				
Location:				
Discharge Points				
Are discharge points and discharge flows free from visible pollutants?				
Are discharge points free of any significant sediment transport?				
Location:				
Location:				
Location:				
Location:				
SWPPP Update				
Does the SWPPP and Project Schedule adequately reflect the current site conditions and contractor operations?				
Are all BMPs shown on the water pollution control drawings installed in the proper location(s) and according to the details in the SWPPP?				
Location:				
Location:				
Location:				
Location:				
General				
Are there any other potential concerns at the site?				
Location:				
Location:				
Location:				
Location:				
Storm Water Monitoring				
Does storm water discharge directly to a water body listed in the General Permit as impaired for sediment/sedimentation or turbidity?				
If yes, were samples for sediment/sedimentation or turbidity collected pursuant to the sampling and analysis plan in the SWPPP?				
Did the sampling results indicate that the discharges are causing or contributing to further impairment?				

INSPECTION OF BMPs				
BMP	**Yes**	**No**	**N/A**	**Corrective Action**
If yes, were the erosion/sediment control BMPs improved or maintained to reduce the discharge of sediment to the water body?				
Were there any BMPs not properly implemented or breaches, malfunctions, leakages or spills observed which could result in the discharge of pollutants to surface waters that would not be visually detectable in storm water?				
If yes, were samples for non-visually detectable pollutants collected pursuant to the sampling and analysis plan during rain events?				
If sampling indicated pollution of the storm water, were the leaks, breaches, spills, etc. cleaned up and the contaminated soil properly disposed of?				
Were the BMPs maintained or replaced?				
Were soil amendments (e.g., gypsum, lime) used on the project?				
If yes, were samples for non-visually detectable pollutants collected pursuant to the sampling and analysis plan in the SWPPP?				
If sampling indicated pollution of the storm water by the use of the soil amendments, is there a contingency plan for retention onsite of the polluted storm water?				
Did storm water contact stored materials or waste and run off the construction site? (Materials not in watertight containers, etc.)				
If yes, were samples for non-visually detectable pollutants collected pursuant to the sampling and analysis plan in the SWPPP?				

Attachment L

Program for Maintenance, Inspection, and Repair of Construction Site BMPs

The contractor shall use the following guidelines for maintenance, inspection, and repair of BMPs identified in the SWPPP		
BEST MANAGEMENT PRACTICES (BMPs)	**INSPECTION FREQUENCY (all controls)**	**MAINTENANCE/REPAIR PROGRAM**
TEMPORARY EROSION CONTROL BMPs		
EC-1, Scheduling	Verify work is progressing as scheduled at least once a week	■ Amend schedule when changes are warranted ■ Prior to rainy season
EC-2, Preservation of Existing Vegetation	All vegetation to remain shall have protective measures prior to commencement of work	■ Serious tree injuries shall be attended to by an arborist. ■ Repair any damage to the crown, trunk, or root system of a retained tree ■ Protect exposed roots with wet burlap or peat moss until the tunnel or trench is ready for backfill. ■ Remove the ends of damaged roots with a smooth cut ■ If bark damage occurs, cut back all loosened bark into the undamaged area, with the cut tapered at the top and bottom and drainage provided at the base of the wood. Limit cutting the undamaged area as much as possible. ■ Aerate soil that has been compacted over a trees root zone by punching holes 12 in. deep with an iron bar, and moving the bar back and forth until the soil is loosened. Place holes 18 in. apart throughout the area of compacted soil under the tree crown ■ Fertilize stressed or damaged broadleaf trees to aid recovery. ■ Fertilize trees in the late fall or early spring.

The contractor shall use the following guidelines for maintenance, inspection, and repair of BMPs identified in the SWPPP		
BEST MANAGEMENT PRACTICES (BMPs)	**INSPECTION FREQUENCY (all controls)**	**MAINTENANCE/REPAIR PROGRAM**
EC-4, Hydroseeding	At a minimum, should be inspected weekly, prior to forecasted rain events, daily during extended rain events and after the conclusion of events.	■ Areas where erosion is evident should be repaired and re-applied as soon as possible. ■ Care should be exercised to minimize the damage to protected areas while making repairs, as any area damaged will require re-application ■ Where seeds fail to germinate or die, the area must be re-seeded, fertilized and mulched within the planting season, using not less than half the original application rates ■ Irrigation systems, if applicable, should be inspected daily while in use to identify system malfunctions. If line breaks are detected, the system must be shut down immediately and breaks repaired before the system is put back into operation ■ Irrigation systems should be inspected for complete coverage and adjusted as needed to maintain coverage
EC-8, Wood Mulching	Inspect BMPs prior to forecast rain, daily during extended rain events, after rain events, weekly during the rainy season, and at two-week intervals during the non-rainy season.	■ Areas where erosion is evident shall be repaired and BMPs reapplied as soon as possible ■ Reapply mulch when bare earth becomes visible.
TEMPORARY SEDIMENT CONTROL BMPs		
SE-5, Fiber Rolls	Inspect prior to forecast rain, daily during extended rain events, after rain events, weekly during the rainy season, and at two-week intervals during the non-rainy season.	■ Repair or replace silt, torn unraveling or slumping fiber rolls ■ Remove sediment periodically that accumulates on the fiber roll.
SE-10, Drain Inlet Protection	Inspect prior to forecast of rain, daily during extended rain events, after rain events, weekly during rainy season, and every two weeks during non-rainy season.	■ Replace fabric that becomes clogged, torn or degrades. ■ Replace any damaged stakes. ■ If gravel becomes clogged with sediment, it must be removed from inlet and wither cleaned or replaced ■ Remove storm drain inlet protection once drainage area is stabilized.

The contractor shall use the following guidelines for maintenance, inspection, and repair of BMPs identified in the SWPPP		
BEST MANAGEMENT PRACTICES (BMPs)	**INSPECTION FREQUENCY (all controls)**	**MAINTENANCE/REPAIR PROGRAM**
WIND EROSION CONTROL BMPs		
WE-1, Wind Erosion Control	Inspect weekly during the rainy season and at two-week intervals in the non-rainy season. Check areas protected to ensure coverage	■ Most water based dust control measures require frequent application, often daily or even multiple times per day
TRACKING CONTROL BMPs		
TC-1, Stabilized Construction Entrance/Exit	Inspect weekly during the rainy season and at two-week intervals in the non-rainy season. Inspect local roads adjacent to road daily.	■ Remove aggregate, separate and dispose of sediment if entrance/exit is clogged. ■ Remove all sediment deposited on paved roadways within 24 hours. ■ Remove gravel and filter fabric at completion of construction.
TC-3, Entrance/Outlet Tire Wash	Inspect weekly during the rainy season and at two-week intervals in the non-rainy season. Inspect BMPs subject to non-storm water discharge daily.	■ Remove accumulated sediment in wash rack and/or sediment trap to maintain system performance ■ Inspect routinely for damage and repair as needed.
NON-STORM WATER MANAGEMENT BMPs		
NS-1, Water Conservation Practices	Inspect and verify that activity based BMPs are in place prior to commencement of authorized non-stormwater discharges. Inspect BMP's subject to non-stormwater discharges daily while non-stormwater discharges are occurring.	■ Repair water equipment as needed to prevent unintended discharges.
NS-3, Paving and Grinding Operations	Inspect and verify that activity based BMPs are in place prior to commencement of associated activity. Inspect weekly during rainy season and biweekly during non-rainy season	■ Keep ample supplies of drip pans onsite. ■ Inspect machinery regularly to minimize leaks and drips.
NS-6, Illicit Connection/Discharge	Inspect weekly during the rainy season and at two-week intervals in the non-rainy season. Inspect the site regularly to check for any illegal dumping or discharge.	■ Notify the owner or any illicit connection and illegal dumping or discharge incidents at the time of discovery.

The contractor shall use the following guidelines for maintenance, inspection, and repair of BMPs identified in the SWPPP		
BEST MANAGEMENT PRACTICES (BMPs)	**INSPECTION FREQUENCY (all controls)**	**MAINTENANCE/REPAIR PROGRAM**
NS-7, Potable Water/Irrigation	Inspect weekly during the rainy season and at two-week intervals in the non-rainy season. Inspect BMPs subject to non-stormwater discharges daily while non-stormwater discharges occur. Inspect irrigated areas regularly for signs of erosion and/or discharge.	■ Repair broken water lines as soon as possible. ■ Stabilize erosion as needed
NS-12, Concrete Curing	Inspect weekly during the rainy season and at two-week intervals in the non-rainy season. Inspect BMPs subject to non-storm water discharge daily. Inspect cure containers and spraying equipment for leaks.	■ Ensure that employees and subcontractors implement appropriate measures for storage, handling, and use of curing compounds.
WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs		
WM-1, Material Delivery and Storage	Inspect weekly during the rainy season and at two-week intervals in the non-rainy season.	■ Keep an ample supply of spill cleanup materials near the storage area. ■ Repair or replace perimeter controls, containment structures, covers, and liners as needed to maintain proper function.
WM-2, Material Use	Inspect weekly during the rainy season and at two-week intervals in the non-rainy season. Spot check employees throughout job to ensure appropriate practices are employed.	■ N/A
WM-3, Stockpile Management	Inspect weekly during the rainy season and at two-week intervals in the non-rainy season. Inspect BMPs subject to non-storm water discharge daily.	■ Repair and/or replace perimeter controls and covers as needed to keep them functioning properly.
WM-4, Spill Prevention and Control	Inspect weekly during the rainy season and at two-week intervals in the non-rainy season. Inspect BMPs subject to non-storm water discharge daily.	■ Keep ample supplies of spill control and cleanup materials onsite, near storage, unloading, and maintenance areas ■ Update spill prevention and control plan and stock cleanup materials as changes occur.

The contractor shall use the following guidelines for maintenance, inspection, and repair of BMPs identified in the SWPPP		
BEST MANAGEMENT PRACTICES (BMPs)	**INSPECTION FREQUENCY (all controls)**	**MAINTENANCE/REPAIR PROGRAM**
WM-5, Solid Waste Management	Inspect weekly during the rainy season and at two-week intervals in the non-rainy season. Inspect BMPs subject to non-storm water discharge daily. Inspect construction waste area regularly.	■ Arrange for regular waste collection.
WM-6, Hazardous Water Management	Inspect and verify that activity–based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect weekly during the rainy season and of two week intervals in the non-rainy season to verify continued BMP implementation. Inspect BMPs subject to non-stormwater discharge daily while non-stormwater discharges occur	■ Hazardous waste should be regularly collected. ■ A foreman or construction supervisor should monitor onsite hazardous waste storage and disposal procedures. ■ Waste storage areas should be kept clean, well organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. ■ Perimeter controls, containment structures, covers, and liners should be repaired replaced as needed to maintain proper function. ■ Hazardous spills should be cleaned up and reported in conformance with the applicable Material Safety Data Sheet (MSDS) and the instructions posted at the project site. ■ The National Response Center, at (800) 424-8802, should be notified of spills of federal reportable quantities in conformance with the requirements in 40 CFR parts 110, 117, and 302. Also notify the Governors Office of Emergency Services Warning Center at (916) 845-8911. ■ A copy of the hazardous waste manifests should be provided.
WM-8, Concrete Waste Management	Inspect weekly during the rainy season and at two-week intervals in the non-rainy season.	■ Washout facilities must be cleaned, or new facilities must be constructed and ready for use once the washout is 75% full.
WM-9, Sanitary/Septic Waste Management	Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect weekly during the rainy season and of two-week intervals in the non-rainy season to verify continued BMP implementation.	■ Arrange for regular waste collection. ■ If high winds are expected, portable sanitary facilities must be secured with spikes or weighted down to prevent over turning.

Attachment M

Site Specific Rain Event Action Plan

Rain Event Action Plan (REAP)

Date:		**WDID Number:**	
Date Rain Predicted to Occur:		**Predicted % chance of rain:**	

Site Information:

Site Name, City and Zip Code Project Risk Level: □ Risk Level 2 □ Risk Level 3

Site Stormwater Manager Information:

Name, Company, Emergency Phone Number (24/7)

Erosion and Sediment Control Contractor – Labor Force contracted for the site:

Name, Company, Emergency Phone Number (24/7)

Stormwater Sampling Agent:

Name, Company, Emergency Phone Number (24/7)

Current Phase of Construction

Check ALL the boxes below that apply to your site.

❑ Grading and Land Development	❑ Vertical Construction	❑ Inactive Site
❑ Streets and Utilities	❑ Final Landscaping and Site Stabilization	❑ Other:

Activities Associated with Current Phase(s)

Check ALL the boxes below that apply to your site (some apply to all Phases).

Grading and Land Development:

❑ Demolition	❑ Vegetation Removal	❑ Vegetation Salvage-Harvest
❑ Rough Grade	❑ Finish Grade	❑ Blasting
❑ Soil Amendment(s):	❑ Excavation (_____ ft)	❑ Soils Testing
❑ Rock Crushing	❑ Erosion and Sediment Control	❑ Surveying
❑ Equip. Maintenance/Fueling	❑ Material Delivery and Storage	❑ Other:

Streets and Utilities:

❑ Finish Grade	❑ Utility Install: water-sewer-gas	❑ Paving Operations
❑ Equip. Maintenance/Fueling	❑ Storm Drain Installation	❑ Material Delivery & Storage
❑ Curb and Gutter/Concrete Pour	❑ Masonry	❑ Other:

Vertical Construction:

❑ Framing	❑ Carpentry	❑ Concrete/Forms/Foundation
❑ Masonry	❑ Electrical	❑ Painting
❑ Drywall/Interior Walls	❑ Plumbing	❑ Stucco
❑ Equip. Maintenance/Fueling	❑ HVAC	❑ Tile
❑ Exterior Siding	❑ Insulation	❑ Landscaping & Irrigation
❑ Flooring	❑ Roofing	❑ Other:

Final Landscaping & Site Stabilization:

❑ Stabilization	❑ Vegetation Establishment	❑ E&S Control BMP Removal
❑ Finish Grade	❑ Storage Yard/ Material Removal	❑ Landscape Installation
❑ Painting and Touch-Up	❑ Irrigation System Testing	❑ Other:
❑ Drainage Inlet Stencils	❑ Inlet Filtration	❑ Perm. Water Quality Ponds
❑ Other:	❑ Other:	❑ Other:

Inactive Construction Site:

❑ E & S Control Device Installation	❑ Routine Site Inspection	❑ Trash Removal
❑ E & S Control Device Maintenance	❑ Street Sweeping	❑ Other:

Rain Event Action Plan (REAP)

Date:		WDID Number:	

Trades Active on Site during Current Phase(s)

Check ALL the boxes below that apply to your site

❑ Storm Drain Improvement	❑ Grading Contractor	❑ Surveyor- Soil Technician
❑ Street Improvements	❑ Water Pipe Installation	❑ Sanitary Station Provider
❑ Material Delivery	❑ Sewer Pipe Installation	❑ Electrical
❑ Trenching	❑ Gas Pipe Installation	❑ Carpentry
❑ Concrete Pouring	❑ Electrical Installation	❑ Plumbing
❑ Foundation	❑ Communication Installation	❑ Masonry
❑ Demolition	❑ Erosion and Sediment Control	❑ Water, Sewer, Electric Utilities
❑ Material Delivery	❑ Equipment Fueling/Maintenance	❑ Rock Products
❑ Tile Work- Flooring	❑ Utilities, e.g., Sewer, Electric	❑ Painters
❑ Drywall	❑ Roofers	❑ Carpenters
❑ HVAC installers	❑ Stucco	❑ Pest Control: e.g., termite prevention
❑ Exterior Siding	❑ Masons	❑ Water Feature Installation
❑ Insulation	❑ Landscapers	❑ Utility Line Testers
❑ Fireproofing	❑ Riggers	❑ Irrigation System Installation
❑ Steel Systems	❑ Utility Line Testers	❑ Other:

Trade Contractor Information Provided

Check ALL the boxes below that apply to your site.

❑ Educational Material Handout	❑ Tailgate Meetings	❑ Training Workshop
❑ Contractual Language	❑ Fines and Penalties	❑ Signage
❑ Other:	❑ Other:	❑ Other:

Continued on next page.

Rain Event Action Plan (REAP)

Date of REAP		**WDID Number:**	
Date Rain Predicted to Occur:		**Predicted % chance of rain:**	

Predicted Rain Event Triggered Actions

Below is a list of suggested actions and items to review for this project. Each active Trade should check all material storage areas, stockpiles, waste management areas, vehicle and equipment storage and maintenance, areas of active soil disturbance, and areas of active work to ensure the proper implementation of BMPs. Project-wide BMPs should be checked and cross-referenced to the BMP progress map.

Trade or Activity	Suggested action(s) to perform / item(s) to review prior to rain event
❑ Information & Scheduling	❑ Inform trade supervisors of predicted rain ❑ Check scheduled activities and reschedule as needed ❑ Alert erosion/sediment control provider ❑ Alert sample collection contractor (if applicable) ❑ Schedule staff for extended rain inspections (including weekends & holidays) ❑ Check Erosion and Sediment Control (ESC) material stock ❑ Review BMP progress map ❑ Other:_____ ❑ _____ ❑ _____
❑ Material storage areas	❑ Material under cover or in sheds (ex: treated woods and metals) ❑ Perimeter control around stockpiles ❑ Other:_____ ❑ _____ ❑ _____
❑ Waste management areas	❑ Dumpsters closed ❑ Drain holes plugged ❑ Recycling bins covered ❑ Sanitary stations bermed and protected from tipping ❑ Other:_____ ❑ _____ ❑ _____
❑ Trade operations	❑ Exterior operations shut down for event (e.g., no concrete pours or paving) ❑ Soil treatments (e.g.,: fertilizer) ceased within 24 hours of event ❑ Materials and equipment (ex: tools) properly stored and covered ❑ Waste and debris disposed in covered dumpsters or removed from site ❑ Trenches and excavations protected ❑ Perimeter controls around disturbed areas ❑ Fueling and repair areas covered and bermed ❑ Other:_____ ❑ _____ ❑ _____
❑ Site ESC BMPs	❑ Adequate capacity in sediment basins and traps ❑ Site perimeter controls in place ❑ Catch basin and drop inlet protection in place and cleaned ❑ Temporary erosion controls deployed ❑ Temporary perimeter controls deployed around disturbed areas and stockpiles ❑ Roads swept; site ingress and egress points stabilized ❑ Other:_____ ❑ _____ ❑ _____
❑ Concrete rinse out area	❑ Adequate capacity for rain ❑ Wash-out bins covered ❑ Other:_____ ❑ _____ ❑ _____
❑ Spill and drips	❑ All incident spills and drips, including paint, stucco, fuel, and oil cleaned ❑ Drip pans emptied ❑ Other:_____ ❑ _____ ❑ _____

Continued on next page.

❑ Other / Discussion / Diagrams	❑ _____ ❑ _____ ❑ _____ ❑ _____ ❑ _____ ❑ _____ ❑ _____ ❑ _____ ❑ _____ ❑ _____ ❑ _____ ❑ _____ ❑ _____

Attach a printout of the weather forecast from the NOAA website to the REAP.

I certify under penalty of law that this Rain Event Action Plan (REAP) will be performed in accordance with the General Permit by me or under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____Date: _____

Qualified SWPPP Practitioner (Use ink please)

Attachment N

Training Log

Storm Water Management Training Log

Project Name: Milpitas Fire Station No. 2

APN: 088-02-026

Storm Water Management Topic: (check as appropriate)

- ❑ Erosion Control
- ❑ Sediment Control
- ❑ Wind Erosion Control
- ❑ Tracking Control
- ❑ Non-storm water management
- ❑ Waste Management and Materials Pollution Control
- ❑ Storm Water Sampling

Specific Training Objective: _____

Location: _____ Date: _____

Instructor: _____ Telephone: _____

Course Length (hours): _____

Attendee Roster (attach additional forms if necessary)

Name	Company	Phone

Name	Company	Phone

COMMENTS:

Attachment O

Responsible Parties

Attachment P

Contractors and Subcontractors

SWPPP Notification

Company
Address
City, State, ZIP

Dear Sir/Madam,

Please be advised that the California State Water Resources Control Board has adopted the General Permit (General Permit) for Storm Water Discharges Associated with Construction Activity (CAS000002). The goal of these permits is prevent the discharge of pollutants associated with construction activity from entering the storm drain system, ground and surface waters.

[Owner/Developer/Contractor] has developed a Storm Water Pollution Prevention Plan (SWPPP) in order to implement the requirements of the Permits.

As a subcontractor, you are required to comply with the SWPPP and the Permits for any work that you perform on site. Any person or group who violates any condition of the Permits may be subject to substantial penalties in accordance with state and federal law. You are encouraged to advise each of your employees working on this project of the requirements of the SWPPP and the Permits. A copy of the Permits and the SWPPP are available for your review at the construction office. Please contact me if you have further questions.

Sincerely,

Name
Title

SUBCONTRACTOR NOTIFICATION LOG

Project Name: Milpitas Fire Station No. 2

APN: 088-02-026

SUBCONTRACTOR COMPANY NAME	CONTACT NAME	ADDRESS	PHONE NUMBER	EMERGENCY CONTACT NUMBER	DATE NOTIFICATION LETTER SENT	TYPE OF WORK

USE ADDITIONAL PAGES AS NECESSARY

Attachment Q

Construction Site Monitoring Program

Risk Level 1, 2, 3
Visual Inspection Field Log Sheet

Date and Time of Inspection:				Report Date:		
Inspection Type:	☐ Weekly	☐ Before predicted rain	☐ During rain event	☐ Following qualifying rain event	☐ Contained stormwater release	☐ Quarterly non-stormwater

Site Information

Construction Site Name:	
Construction stage and completed activities:	Approximate area of exposed site:

Weather and Observations

Date Rain Predicted to Occur:		Predicted % chance of rain:	
Estimate storm beginning: _____ (date and time)	Estimate storm duration:_____ (hours)	Estimate time since last storm: _____ (days or hours)	Rain gauge reading: _____ (inches)

Observations: If yes identify location		
Odors	Yes ☐	No ☐
Floating material	Yes ☐	No ☐
Suspended Material	Yes ☐	No ☐
Sheen	Yes ☐	No ☐
Discolorations	Yes ☐	No ☐
Turbidity	Yes ☐	No ☐

Site Inspections

Outfalls or BMPs Evaluated	**Deficiencies Noted**
(add additional sheets or attached detailed BMP Inspection Checklists)	

Photos Taken:	Yes ☐	No ☐	Photo Reference IDs:

Corrective Actions Identified (note if SWPPP/REAP change is needed)

Inspector Information

Inspector Name:	Inspector Title:
Signature:	Date:

Risk Level 2 ***Effluent Sampling Field Log Sheets***			
Construction Site Name:	Date:	Time Start:	
Sampler:			
Sampling Event Type:	☐ Stormwater	☐ Non-stormwater	☐ Non-visible pollutant

Field Meter Calibration	
pH Meter ID No./Desc.: Calibration Date/Time:	Turbidity Meter ID No./Desc.: Calibration Date/Time:

Field pH and Turbidity Measurements			
Discharge Location Description	pH	Turbidity	Time

Grab Samples Collected		
Discharge Location Description	Sample Type	Time

Additional Sampling Notes:
Time End:

Risk Level 3 ***Effluent Sampling Field Log Sheets***				
Construction Site Name:		Date:		Time Start:
Sampler:				
Sampling Event Type:	☐ Stormwater	☐ Non-stormwater	☐ Non-visible pollutant	☐ Post NEL Exceedance

Field Meter Calibration	
pH Meter ID No./Desc.: Calibration Date/Time:	Turbidity Meter ID No./Desc.: Calibration Date/Time:

Field pH and Turbidity Measurements			
Discharge Location Description	pH	Turbidity	Time

Grab Samples Collected			
Discharge Location Description	SSC	Other (specify)	Time

Additional Sampling Notes:
Time End:

Risk Level 3
Receiving Water Sampling Field Log Sheets

Construction Site Name:	Date:	Time Start:
Sampler:		

Receiving Water Description and Observations

Receiving Water Name/ID:		
Observations:		
Odors	Yes ☐	No ☐
Floating material	Yes ☐	No ☐
Suspended Material	Yes ☐	No ☐
Sheen	Yes ☐	No ☐
Discolorations	Yes ☐	No ☐
Turbidity	Yes ☐	No ☐

Field Meter Calibration

pH Meter ID No./Desc.: Calibration Date/Time:	Turbidity Meter ID No./Desc.: Calibration Date/Time:

Field pH and Turbidity Measurements and SSC Grab Sample

Upstream Location

Type	Result	Time	Notes
pH			
Turbidity			
SSC	Collected Yes ☐ No ☐		

Downstream Location

Type	Result	Time	Notes
pH			
Turbidity			
SSC	Collected Yes ☐ No ☐		

Additional Sampling Notes:

Time End:

Attachment R

Annual Certification of Compliance Form

Project Name: Milpitas Fire Station No. 2

APN: 088-02-026

Contractor Company Name: _____

Contractor Address: _____

Construction Start Date: _____ **Completion Date:** _____

Description of Work:

Work Now in Progress:

Work Planned for Next 12 Months:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Owner/Developer/Contractor Signature Date

CITY OF MILPITAS
AGENDA REPORT
(AR)

Item Title:	**Adopt a Resolution Approving the Annual Engineer's Report, and Adopt a Resolution Declaring the Intention to Levy and Collect Assessments for Fiscal Year 2020-21 for Landscaping and Lighting Maintenance Assessment District No. 95-1 (LLMD 95-1 McCarthy Ranch), and Provide Notice of Public Hearing to be held on May 19, 2020 for LLMD No. 95-1 McCarthy Ranch**
Category:	Consent Calendar-Community Development
Meeting Date:	5/5/2020
Staff Contact:	Steve Erickson, City Engineer, 408-586-3301
Recommendation:	Adopt a resolution approving the Annual Engineer's Report, and adopt a resolution declaring the intention to levy and collect assessments for Fiscal Year 2020-21 for Landscaping and Lighting Maintenance Assessment District No. 95-1 (LLMD 95-1 McCarthy Ranch), and provide Notice of Public Hearing to be held on May 19, 2020 for LLMD No. 95-1 McCarthy Ranch.

Background:
Landscaping and Lighting Maintenance Assessment District No. 95-1 (LLMD 95-1 McCarthy Ranch) provides funding for the maintenance and improvement of public landscaping, irrigation systems, pedestrian lighting, gateway columns and gateway signage along portions of North McCarthy Boulevard and the Ranch Drive gateway between State Route 237 and Dixon Landing Road in the areas as shown on the location map.

Analysis:
Before the City Council may levy the annual assessment for LLMD 95-1 McCarthy Ranch, the Landscaping and Lighting Act of 1972 requires the Council to adopt a resolution approving the annual Engineer's Report (Report) evaluating the LLMD district's maintenance and improvement costs for fiscal year 2020-21.

On March 3, 2020, the City Council directed the City Engineer to prepare the Report, which is included in the Council packet. The proposed total assessment for fiscal year 2020-21 is $374,361, with an assessment rate not exceeding the maximum assessment rate. Council must also adopt a resolution that declares its intent to levy and collect an assessment and directs publishing of notice of a public hearing to be held on May 19, 2020.

Policy Alternative:

Alternative:
Not approve the Engineer's Annual Report nor adopt a resolution of intent to levy and collect assessments for LLMD 95-1 McCarthy Ranch.

Pros: None

Cons: The Landscaping and Lighting Act of 1972 requires the legislative body to adopt a resolution of intent upon approval of the Report, not approving the Report nor adopting a resolution of intent would jeopardize the City's ability to collect assessments for the maintenance and upkeep of LLMD 95-1 McCarthy Ranch.

Reason not recommended: To provide funding to allow for the continued maintenance of LLMD 95-1 McCarthy Ranch, staff recommends City Council to approve the Annual Engineer's Report and declaring intent to levy and collect assessments for fiscal year 2020-21.

Fiscal Impact:
The levy and collection of assessments provides a funding resource for the City to improve and maintain public landscaping, irrigation systems, pedestrian lighting, gateway columns and entry signs within LLMD 95-1 McCarthy Ranch.

California Environmental Quality Act:
Levy and collection of assessment is not considered a project under CEQA as there will be no direct or reasonably foreseeable indirect physical change in the environment.

Recommendation:
Adopt a resolution approving the Annual Engineer's Report, and adopt a resolution declaring the intention to levy and collect assessments for Fiscal Year 2020-21 for Landscaping and Lighting Maintenance Assessment District No. 95-1 (LLMD 95-1 McCarthy Ranch), and provide Notice of Public Hearing to be held on May 19, 2020 for LLMD No. 95-1 McCarthy Ranch.

Attachments:
a) Resolution Approving Annual Engineer's Report
b) Resolution Declaring Intention to Levy and Collect Assessments
c) Engineer's Report LLMD No. 95-1 McCarthy Ranch
d) Location Map

RESOLUTION NO. ____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MILPITAS, APPROVING THE ANNUAL REPORT FOR THE LANDSCAPING AND LIGHTING MAINTENANCE ASSESSMENT DISTRICT NO. 95-1 (McCARTHY RANCH) FOR FISCAL YEAR 2020-21

WHEREAS, the City Council previously completed its proceedings in accordance with and pursuant to the Landscaping and Lighting Act of 1972, Part 2, Division 15 of the California Streets and Highways Code (commencing with Section 22500) (the "Act") to establish the Landscaping and Lighting Maintenance Assessment District (the "Assessment District"); and

WHEREAS, the City Council has retained NBS for the purpose of assisting with the annual levy of the Assessment District, and the preparation and filing of an Annual Report; and

WHEREAS, the City Council has, by previous resolution, ordered NBS to prepare and file such Annual Report; and

WHEREAS, NBS has prepared and filed such Annual Report with the City Clerk.

NOW, THEREFORE, the City Council of the City of Milpitas hereby finds, determines, and resolves as follows:

> **Approval of Report:** The City Council hereby approves the Annual Report concerning the levy of assessments as submitted by NBS for the fiscal year commencing July 1, 2020, and ending June 30, 2021.

PASSED AND ADOPTED this _____ day of ____, 2020, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST: APPROVED:

_____ _____

Mary Lavelle, City Clerk Rich Tran, Mayor

APPROVED AS TO FORM:

_____

Christopher J. Diaz, City Attorney

RESOLUTION NO. ____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MILPITAS, DECLARING ITS INTENTION TO LEVY AND COLLECT ASSESSMENTS FOR THE LANDSCAPING AND LIGHTING MAINTENANCE ASSESSMENT DISTRICT NO. 95-1 (McCARTHY RANCH) FOR FISCAL YEAR 2020-21

WHEREAS, the City Council previously completed its proceedings in accordance with and pursuant to the Landscaping and Lighting Act of 1972, Part 2, Division 15 of the California Streets and Highways Code (commencing with Section 22500) (the "Act") to establish the Landscaping and Lighting Maintenance Assessment District (the "Assessment District"); and

WHEREAS, the City Council has retained NBS for the purpose of assisting with the annual levy of the Assessment District, and the preparation and filing of an Annual Report.

NOW, THEREFORE, the City Council of the City of Milpitas hereby finds, determines, and resolves as follows:

1. **Intention:** The City Council hereby declares its intention to levy and collect assessments within the Assessment District to pay the costs of the Improvements for the fiscal year commencing July 1, 2020, and ending June 30, 2021. The City Council finds that the public's best interest requires such action.

2. **Improvements:** The improvements within the District include, but are not limited to: the operating, maintaining and servicing of all public landscaping improvements, consisting of landscaping and grass. Operating, maintaining and servicing include, but are not limited to: personnel, materials, electrical energy and water. Services provided include all necessary service, operations, administration and maintenance required to keep the improvements in a healthy, vigorous, and satisfactory condition.

3. **Assessment District Boundaries:** The boundaries of the Assessment District are as shown by the assessment diagram filed in the offices of the City Clerk, which map is made a part hereof by reference.

4. **Annual Report:** Reference is made to the Annual Report prepared by NBS, on file with the City Clerk, for a full and detailed description of the improvements, the boundaries of the Assessment District and the zones therein, and the proposed assessments upon assessable lots and parcels of land within the Assessment District.

5. **Notice of Public Hearing:** The City Council hereby declares its intention to conduct a Public Hearing concerning the levy of assessments in accordance with Section 22629 of the Act. All objections to the assessment, if any, will be considered by the City Council. The Public Hearing will be held on **Tuesday, May 19, 2020 at 7:00 pm** or as soon thereafter as is feasible in the meeting place of the City Council located at 455 E. Calaveras Boulevard, Milpitas, CA 95035. The City Council further orders the City Clerk to publish notice of this resolution in accordance with Section 22626 of the Act.

6. **Increase of Assessment:** The maximum assessment is not proposed to increase from the previous year above that previously approved by the property owners (as "increased assessment" is defined in Section 54954.6 of the Government Code).

PASSED AND ADOPTED this _____ day of ___, 2020, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

_____
Mary Lavelle, City Clerk

APPROVED:

_____
Rich Tran, Mayor

APPROVED AS TO FORM:

_____
Christopher J. Diaz, City Attorney

CITY OF MILPITAS

Fiscal Year 2020/21 Annual Report For:

Landscaping and Lighting Maintenance Assessment District No. 95-1

March 2020

Prepared by:

NBS
helping communities fund tomorrow

nbsgov.com

Corporate Headquarters
32605 Temecula Parkwa
Temecula
Toll free: 800.676.7516

CITY OF MILPITAS
LANDSCAPING AND LIGHTING MAINTENANCE ASSESSMENT DISTRICT NO. 95-1
455 East Calaveras Boulevard
Milpitas, California 95035
Phone (408) 586-3000

CITY COUNCIL

Rich Tran, Mayor

Bob Nuñez, Vice-Mayor

Karina R. Dominguez, Council Member

Carmen Montano, Council Member

Anthony Phan, Council Member

CITY STAFF

Steve Erickson, PE, Director of Engineering/City Engineer

Walter C. Rossmann, Director of Financial Services

Tony Ndah, Director of Public Works

NBS

Tim Seufert, Client Services Director

Adina McCargo, Project Manager

Tiffany Ellis, Senior Consultant

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1. ENGINEER'S LETTER

WHEREAS, in 1995 the City Council of the City of Milpitas (the "City"), State of California, under the Landscaping and Lighting Act of 1972 (the "Act"), created the City of Milpitas Landscaping and Lighting Maintenance Assessment District No. 95-1 (the "District") in order to provide for the continued maintenance, operation, and administration of various improvements within the boundaries of the District; and

WHEREAS, the City Council has directed NBS to prepare and file a report for Fiscal Year 2020/21 in accordance with Chapter 1, Article 4 of the Act presenting plans and specifications describing the general nature, location and extent of the improvements to be maintained; an estimate of the costs to maintain, operate, and service the improvements for the District for the referenced fiscal year; a diagram for the District showing the area and properties to be assessed; and an assessment of the estimated costs to maintain and service the improvements, stating the net amount to be assessed upon all assessable lots or parcels within the District in proportion to the special benefit received.

NOW THEREFORE, the following assessments have been calculated in accordance with the assessment methodology adopted and approved by the City Council at the time of District formation, and are made to cover the portion of the estimated costs of maintenance, operation, and servicing of the improvements, to be paid by the assessable real property within the District in proportion to the special benefit received:

District	Parcels	2020/21 Maximum Assessment Rate per Lot Sq. Ft.[1]	2020/21 Actual Assessment Rate per Lot Sq. Ft.	2020/21 Net Amount to be Assessed[2][3]
LLMAD 95-1	44	$0.0481	$0.0317	$374,360.81

(1) *The April 1, 2020 CPI was not available at the time of writing of this Report. The Fiscal Year 2020/21 CPI increase was estimated using the February 2020/21 CPI.*

(2) *Amounts placed on the tax roll include the 1% Santa Clara County Collection Fee.*

(3) *This amount is only an estimate and does not reflect the final billed amount with rounding adjustments. Refer to Section 7 for the rounded figure.*

I identified all parcels which will have a special benefit conferred upon them from the improvements described in District's Plans and Specifications section of this Engineer's Report (the "Benefited Parcels"). For particulars as to the identification of said parcels, reference is made to the Assessment Diagram, a copy of which is on file in the office of the City Clerk.

I have assessed the costs and expenses of the improvements upon the Benefited Parcels. In making such assessment:

a. The proportionate special benefit derived by each Benefited Parcel from the improvements was determined in relationship to the entirety of the maintenance costs of the improvements;

b. No assessment has been imposed on any Benefited Parcel which exceeds the reasonable cost of the proportional special benefit conferred on such parcel from the improvements; and

c. Any general benefits from the improvements have been separated from the special benefits and only special benefits have been assessed.

I, the undersigned, respectfully submit the enclosed Engineer's Report and, to the best of my knowledge, information and belief, the Engineer's Report, Assessments, and the Assessment Diagrams herein have been prepared and computed in accordance with the order of the City Council of the City of Milpitas, the Act, and Article XIIID.

Steven Erickson, PE
Director of Engineering/City Engineer

2. PLANS AND SPECIFICATIONS

The District provides for the continued administration, maintenance, operation, and servicing of various improvements located within the public right-of-way and dedicated easements within the boundaries of the District.

2.1 Location of Improvements

The District is located on the west side of the City of Milpitas, bounded on the east by State Route 880, on the west by Coyote Creek, on the south by State Route 237, and on the north by Dixon Landing Road. The improvements maintained include public landscaping and irrigation improvements, including jogging paths, pedestrian lighting, gateway improvements, and entry signage, which are primarily situated within the public right-of-way and dedicated public easements within the District.

2.2 Landscaping Improvements

Landscaping, pedestrian lighting, gateway, and signage improvements were installed along the roadways and sidewalks within the District to enhance the overall visual appearance for adjacent parcels.

The improvements within the District consist of the maintenance and installation of any or all public landscaping and irrigation improvements adjacent to curbs of the following described streets, including jogging paths, planter walls, grass berms, pedestrian lighting and appurtenant irrigation systems, ornamental planting including lawns, shrubs, and trees; installation and maintenance of gateway columns and entry signs. Such maintenance includes all necessary repairs, replacements, water, electric current, spraying, care, supervision, debris removal and all other items of work necessary and incidental for property maintenance and operation thereof. The landscaping, irrigation, pedestrian lighting, gateway, and signage improvements are collectively referred to as "landscaping improvements". All such work will be performed in the following areas:

2.2.1 N. MCCARTHY BOULEVARD

1. A strip of land including an earth berm approximately 50 feet in width from face of each curb line, from the southerly connection with Ranch Drive northerly 2,400 feet, more or less, to the northerly connection with Ranch Drive. A strip of land including a grass berm approximately 35 feet in width, west of the face of westerly curb, along the West Side of N. McCarthy Boulevard, from the southerly connection with Ranch Drive, northerly 2,400 feet, more or less. The initial phase includes a strip of land 6 feet wide on the west side of McCarthy Boulevard.
2. Commencing at a location approximately 2,400 feet north of State Route 237 thence proceeding north to the northern boundary of Lands of N. McCarthy, 7,800 feet more or less, a strip of land approximately 27 to 34 feet in width on each side along the east and west sides of McCarthy Boulevard between the northerly connection with Ranch Drive and Dixon Landing Road.
3. A median island from the southerly intersection with Ranch Drive northerly to the intersection with Dixon Landing Road.

4. Gateway Improvements, at the southerly intersection of N. McCarthy Boulevard and Ranch Drive and southerly of Bridge No. 1 along N. McCarthy Boulevard, including curved stone planter walls, gateway columns with entry sign appurtenant mounding ornamental plantings including flat work, trees and ground cover, irrigation systems; all as shown on landscape plans.
5. Lighting costs in the District are limited to the supplemental pedestrian lights installed between each of the 2 street lights on the section of curved walkway located on the East Side of N. McCarthy Boulevard. The conventional lighting along McCarthy Boulevard is not included.

2.2.2 MILPITAS ENTRY SIGN

1. City of Milpitas Entry Identification Sign along N. McCarthy Blvd., including walls, columns, lighting and other appurtenances.

2.2.3 RANCH DRIVE

1. Commencing at a Northerly location where the right-of-way of Ranch Drive is contiguous with the right-of-way of Interstate 880, thence southerly, a strip of land approximately 10 feet in width measured from the east face of curb of Ranch Drive, from the northerly connection with Interstate 880 and Ranch Drive, southerly 630 feet, more or less, thence 405 feet south to the southerly end of Gateway location, varying in width from 10 feet to 132 feet, more or less.
2. Gateway Improvements, at the southerly connection of Ranch Drive and Interstate 880, including curved stone planter walls, gateway columns with entry sign appurtenant mounding ornamental plantings including flat work, trees and ground cover, irrigation systems; all as shown on landscape plans (Part A), except the Shopping Center's Monument Sign.

2.3 Overhead

In addition to the hard costs of maintaining the improvements mentioned above, the City will incur costs for staff time and expenses related to the management and maintenance of the improvements within the District. Staff time includes oversight and coordination of both City and contractor provided services, annual tax roll preparation, and addressing property owner questions and concerns. These activities are directly related to the maintenance of the improvements, and without them the improvements could not be efficiently completed or properly maintained on an ongoing basis.

3. ESTIMATE OF COSTS

The estimated costs of maintenance and servicing of the improvements as described in the Plans and Specifications are summarized below.

3.1 District Budget

The Fiscal Year 2020/21 estimated cost budget for the maintenance and servicing of the improvements is as follows:

Description	Fiscal Year 2020/21 Budget
Maintenance Staff and Contract Services[1]	$260,750
Capital Equipment	0
Supplies	2,450
Utilities (Water, Electricity)	41,180
Reserve Fund	0
Capital Improvement Program	85,000
Maintenance Costs	**$389,380**
NBS	$4,350
City Staff District Administration	250
County Auditor-Controller Fee[2]	3,744
District Specific Costs	**$8,344**
Total District Costs	**$397,724**
General Benefit Contribution[3]	(23,363)
Operating Reserve Contribution	0
Net Amount to be Assessed	**$374,361**
Total District Square Footage[4]	11,792,520
Rate per Square Foot[5][6]	**$0.0317**
Maximum Rate Per Square Foot – 2020/21[7]	**$0.0481**

(1) *For 2020/21 Landscape Maintenance Contract Services includes Terracare and Irvine Company.*

(2) *County Auditor-Controller Fee is currently 1% of the total levy submittal.*

(3) *General Benefit Contribution is not applied to District Specific Costs as these are special benefits to the District.*

(4) *Total District Square Footage includes the 50% reduction for Parcel 5-7 (Sewer Main Pump Station) and Parcel 5-3C (Storm Pump Station).*

(5) *The Rate per Square Foot equals the Net Amount to be Assessed / Total District Square Footage.*

(6) *The assessed rate cannot exceed the maximum rate.*

(7) *The April 1, 2020 CPI was not available at the time of writing of this Report. The Fiscal Year 2020/21 CPI increase was estimated by using the February 2020/21 CPI.*

3.1.1 OPERATING RESERVE

It is the intent of the City to maintain an operating reserve which shall not exceed the estimated costs of maintenance and servicing of the improvements prior to December 10 of the fiscal year, or when the City expects to receive its apportionment of special assessments from the County, whichever is later. The operating reserve balance information for the District is as follows:

Estimated Fiscal Year Ending 6/30/2020 Operating Reserve Cash Balance	$159,000
Operating Reserve Collection for Fiscal Year 2020/21	0
Estimated Fiscal Year Ending 6/30/2021 Operating Reserve Cash Balance	**$159,000**

4. SPECIAL AND GENERAL BENEFIT

The improvements defined in Section 2 are expected to confer certain special benefits to parcels within the District. The special benefits are described in this section. Figures in this section are derived from a Special v. General Benefit Analysis performed in Fiscal Year 2014/15.

4.1 Introduction

Pursuant to Article XIIID, all parcels that receive a special benefit conferred upon them because of the installation, implementation and maintenance of the improvements, services and activities shall be identified, and the proportionate special benefit derived by each identified parcel shall be determined in relationship to the entire costs of the installation, implementation and maintenance of the improvements, services and activities.

Article XIIID, Section 4(a) of the California Constitution limits the amount of any assessment to the proportional special benefit conferred on the property. Proposition 218 requires that the City separate the general benefit from special benefit, so that only special benefit may be assessed to properties within the District. Furthermore, Article XIIID also provides that publicly owned properties must be assessed unless there is clear and convincing evidence that those properties receive no special benefit from the assessment.

4.2 Special Benefits Identified

The improvements described in Section 2 are expected to confer certain special benefits to parcels within the District. The special benefits conferred to property within the District can be grouped into three primary benefit categories: aesthetic benefit, safety benefit, and economic benefit. The three district benefit categories are further expanded upon below.

- **Improved Aesthetics**: The aesthetic benefit relates to the increase in the overall aesthetics because of the ongoing maintenance, servicing, and operation of the improvements within the District. The landscaping improvements enhance the overall image and desirability of the properties within the District. Street landscaping improvements improve the livability, commercial activity, appearance, and desirability for properties within the District. Regular maintenance ensures that the improvements do not reach a state of deterioration or disrepair to be materially detrimental to properties adjacent to or in close proximity to the improvements. The overall appeal of the District is enhanced when improvements are in place and kept in a healthy and satisfactory condition. Conversely, appeal decreases when improvements are not well-maintained, unsafe, or destroyed by the elements or vandalism. Streetscapes have a significant effect on how people view and interact with their community.[1] With streetscapes that are safe and inviting, people are more likely to walk, which can help reduce automobile traffic, improve public health, stimulate local economic activity, and attract residents and visitors to the community.[2]

[1] Victoria Transport Policy Institute. (2011). *Community Livability. Helping to Create Attractive, Safe, Cohesive Communities.* Retrieved from http://www.vtpi.org/tdm/tdm97.htm.
[2] *Ibid.*

- **Increased Safety**: Well-maintained areas mitigate crime, especially vandalism, and enhance pedestrian safety. A recent study found that after landscape improvements were installed, there was a 46% decrease in crash rates across urban arterial and highway sites and a second study reviewed found a 5% to 20% reduction in mid-block crashes after trees and planters in urban arterial roads were put in place. In addition, there is less graffiti, vandalism, and littering in outdoor spaces with natural landscapes than in comparable plant-less spaces.[3] The Victoria Transport Policy Institute has found that streetscapes reduce traffic speeds and when combined with improved pedestrian crossing conditions can significantly reduce collisions.[4]
- **Economic Activity**: Well-maintained street landscape improvements not only make adjacent properties appear more stable and prosperous but can spur investment in the property. The National Complete Streets Coalition notes that street design that is inclusive of all modes of transportation, where appropriate, not only improves conditions for existing businesses, but also is a proven method for revitalizing an area and attracting new development.[5] Landscaped sidewalks create an inviting place for customers to shop and do business.[6] Well-maintained and safe District areas will encourage an increase in the overall pedestrian activity. The area will become more pedestrian friendly, thus improving the retail environment by encouraging individuals to shop, dine, and stay within the District boundaries. The District will provide a cleaner more inviting environment to businesses and consumers which will attract, retain and expand the retail and business climate throughout. The effort will reduce vacancy rates and increase lease rates and utilization of property within the District.

4.3 General Benefits Identified

Section 4 of Article XIIID of the California Constitution provides that once a local agency which proposes to impose assessments on property has identified those parcels that will have special benefits conferred upon them and upon which an assessment will be imposed, the local agency must next "separate the general benefits from the special benefits conferred," and only the special benefits can be included in the amount of the assessments imposed.

General benefit is an overall and similar benefit to the public at large resulting from the maintenance of the District's improvements provided by the assessments levied. The improvements to be maintained by the District are located within the District boundaries only. There will be no District maintenance activities provided for improvements located outside of the District boundaries.

The ongoing maintenance of the District improvements will provide aesthetic, safety, and economic activity benefits to the property within the District. However, it is recognized that the ongoing maintenance activities will also provide a level of benefit to some property within proximity to the District,

---

[3] *Wolf, Kathleen L. (2010). Safe Streets – A Literature Review. In: Green Cities: Good Health (www.greenhealth.washington.edu)*. College of the Environment, University of Washington.

[4] Victoria Transport Policy Institute. (2011). *Community Livability. Helping to Create Attractive, Safe, Cohesive Communities.* Retrieved from http://www.vtpi.org/tdm/tdm97.htm.

[5] *Pugliese, Philip. (2008). Complete Streets provide all the elements of multi-modal transportation. Retrieved from http://www.americantrails.org/resources/trans/completestreets08.html*

[6] U.S Department of Transportation. Federal Highway Administration. (2001). *Designing Sidewalks and Trails for Access, Part II of II: Best Practices Design Guide.* Retrieved from http://www.fhwa.dot.gov/environment/bicycle_pedestrian /publications/sidewalk2

as well as individuals passing through. Therefore, the general benefit created because of the District maintenance activities has been considered.

4.4 Quantification of Benefit

As a result of the maintenance and operation of the improvements, there will be a level of general benefit to people that do not work or intend to conduct business within the District. In order for property within the District to be assessed only for that portion of special benefits received from the district's maintenance activities, general benefits provided by the ongoing maintenance of the improvements needs to be quantified. The amount of general benefit that is provided from the District's maintenance activities cannot be funded via property owners' assessments.

Based upon the City's General Plan, the streets within the City are classified into one of the following categories: freeway, expressway, arterial, collector, or local streets. The landscaping improvements are primarily located along N McCarthy Boulevard and Ranch Drive, and situated within the public right-of-way. The portion of the maintained landscaping that is located along N McCarthy Boulevard (classified as an arterial street) provides some general benefit to pass-through traffic. Arterial streets are intended to provide a higher degree of mobility and generally serve longer vehicle trips. The landscape improvements within the District boundaries not only serve the parcels in the immediate vicinity, but persons who live outside of the District and are passing by. The City's Traffic Volumes Map[7] does not identify the percentage of traffic, which is pass-through traffic. The City's Traffic Volumes Map does provide an estimated number of daily trips for N McCarthy Boulevard at the entrance of the District.

Street Name	Average Number of Vehicles per Day(1)
N McCarthy Boulevard (between SR 237 and Ranch Drive)	35,050

(1) *Average Number of Vehicles per Day is from the City of Milpitas Traffic Volumes Map*[8]

Before the determination and allocation of the percentage of special and general benefit for the District can be made, the estimated pass-through traffic must be computed. The pass-through trips are vehicles driving along the maintained streets for a portion of their trips, but not working, shopping, or conducting business in the District or benefiting from the landscaping improvements in place. In lieu of having a study that identifies the pass-through traffic, the estimated number of special benefit trips for each parcel based upon its land use has been used. Each parcel within the District was assigned an average daily number of special benefit trips according to the ITE Trip Generation report using the parcel's land use, building size, or number of units. Further, to make sure the number of trips generated by the parcels has not been overstated, the percentage of total trips that are made internally within the development so that both the original and end destination are within the District has been considered. The total special benefit trips have been reduced by approximately 29% (13,810 trips) to account for internal trips between the various businesses within the District. The total number of special benefit trips is therefore 33,708.

[7] *City of Milpitas. (2007). Traffic Volume Map. Retrieved from http://www.ci.milpitas.ca.gov*
[8] *Ibid.*

Property Type	Combined Trip Generations
Hotel (ITE Land Use 310)	2,328
Office (ITE Land Uses 710, 714, 750)	15,809
Restaurant (ITE Land Uses 931, 932, 934)	6,965
Retail (ITE Land Uses 815, 820, 863, 869)	22,416
Total Trips	**47,518**
Internal Trip Reduction[(1)]	(13,810)
Total Special Benefit Trips	**33,708**

[(1)] *The internal trip rate percentage was calculated by using the NCHRP 684 Internal Rate Capture Estimation Tool.*[9]

The total of all special benefit trips was removed from the average number of vehicles per day traveling within the District to estimate the number of pass-through trips daily.

Street Name	Average Number of Vehicles per Day	Less: Estimated Special Benefit Trips	Estimated Number of Pass Through Trips	Estimated % General Benefit
McCarthy Boulevard	35,050	33,708	1,342	3.83%

Based on the above calculations, the general benefit portion of the improved aesthetics, increased safety, and economic activity benefits resulting from the landscaping improvements is estimated to be 3.83%, rounded up to 4.00%.

Pass-thru Vehicle General Benefit	4.00%

The commonly accepted distance people will walk for public transportation, goods, and services is one-quarter mile.[10] However, based on the location of the District, and given that it is bounded by State Route 880 and 237, and Coyote Creek, there is not an efficient or practical means of walking into the District. Although unlikely, a person may decide to use the paths within the District, and as such the general benefit portion of the improved aesthetics, increased safety, and economic activity benefits resulting from the landscaping improvements is estimated to be 1.00%.

Pass-thru Walking General Benefit	1.00%

An estimated 1% of all US trips were made by bicycle.[11] Although the District is bounded by State Route 880 and 237, and Coyote Creek, there is a bike lane on N McCarthy Boulevard and a bike path along Coyote Creek.[12] According to the National Household Travel Surveys, 49% of bike trips are for recreation, exercise,

[9] Bochner, Brian S., Hooper, Kevin, Sperry, Benjamin and Dunphy, Robert. National Cooperative Highway Research Program, Transportation Research Board of National Academies (2011). *NCHRP Report 684 Enhancing Trip Capture Estimation for Mixed-use Developments.* Retrieved from *onlinepubs.trb.org/onlinepubs/*nchrp/nchrp_*rpt*_684.*pdf*

[10] Walkscore. (2014). Walk Score Methodology. Retrieved from http://www.walkscore.com/methodology.shtml

[11] U.S Department of Transportation. Federal Highway Administration. (2011). *Summary of Travel Trends: 2009 National Household Travel Survey.* (Report No. FHWA-PL-11-022). Retrieved from http://nhts.ornl.gov

[12] City of Milpitas. (2002). *General Plan.* Retrieved from http://www.ci.milpitas.ca.gov

and sports.[13] As result of the District maintenance activities, there will be a level of general benefit to bicycle traffic that is not associated with property in the District. As such the general benefit portion of the improved aesthetics, increased safety, and economic activity benefits resulting from the landscaping improvements is estimated to be .50%, rounded up to 1.00%.

Pass-thru Biking General Benefit	1.00%

4.4.1 COLLECTIVE DISTRICT-WIDE GENERAL BENEFIT

Since the District is comprised of improved aesthetics, safety, and economic activity benefits resulting from the collective landscaping improvements, the activity of both pedestrians and vehicles must be addressed in a collective form rather than independently. The sum of the calculated general benefits is the total general benefit related to vehicle, walking, and biking pass-thru traffic. This general benefit result is provided in the table below:

Pass-thru Vehicle General Benefit	4.00%
Pass-thru Walking General Benefit	1.00%
Pass-thru Biking General Benefit	1.00%
Total General Benefit	**6.00%**

The general benefit, which is the percentage of the total budget that must be funded through sources other than assessments, is 6.00%. The special benefit then, which is the percentage of the budget that may be funded by assessments, is 94.00%.

[13] Pucher, J., Buehler R., Meron, F., and Bauman, A. American Journals of Public Health, Supplement 1, Vol 101, No S1 (2011). *Walking and Cycling in the United States, 2001-2009: Evidence from the National Household Travel Surveys.* Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/21551387

4.5 Special Benefit Trips

A detailed breakdown of the estimated special benefit trips determined by the Special v. General Benefit Analysis performed in Fiscal Year 2014/15 for each parcel in the District is shown below:

Assmt ID	Assessor's Parcel No.	Land Use Description	Acreage	Gross Leasable Area	Average Trip Rate[1]	Estimated # of Daily Special Benefit Trips[2]
1-1A-1	022-54-016	710 - General office	1.06	4,046	11.03	44.63
1-1A-2	022-54-017[3]	310 – Hotel	3.29	161	8.17	1,315.37
1-1A-3	022-54-018[3]	310 – Hotel	2.31	124	8.17	1,013.08
1-1A-4	022-54-019	934 - Fast Food	0.19	-	496.12	-
1-1B	022-54-008	934 - Fast Food	0.78	2,912	496.12	1,444.70
1-2	022-54-002[4]	820 - Shopping Center	0.58	5,400	42.70	230.58
1-3	022-54-003	932 - High Vol. Restaurant	1.02	5,465	127.15	694.87
1-4A	022-54-009[4]	869 - Home Superstore	8.47	100,000	20.00	2,000.00
1-4B	022-54-012[4]	820 - Shopping Center	3.02	20,000	42.70	854.00
1-4C	022-54-013	820 - Shopping Center	0.23	10,000	42.70	427.00
1-4D	022-54-015	931 - Quality Restaurant	1.78	7,846	89.95	705.75
1-4E	022-54-014[4]	932 - High Vol. Restaurant	0.64	3,000	127.15	381.45
1-4F	022-54-011[4]	820 - Shopping Center	1.31	8,000	42.70	341.60
1-4G	022-54-010	931 - Quality Restaurant	1.03	7,476	89.95	672.47
2-1	022-53-001	931 - Quality Restaurant	0.75	6,500	89.95	584.68
2-2	022-53-002[4]	820 - Shopping Center	1.23	10,000	42.70	427.00
2-3	022-53-003[4]	820 - Shopping Center	0.76	8,000	42.70	341.60
2-4	022-53-004	934 - Fast Food	0.60	2,000	496.12	992.24
2-5	022-53-005	934 - Fast Food	0.74	3,000	496.12	1,488.36
2-6	022-53-006	863 – Elect. Superstore	1.19	51,250	45.04	2,308.30
2-7	022-53-007	820 - Shopping Center	21.92	214,094	42.70	9,141.81
3	022-29-016	815 - Discount Superstore	14.56	125,000	50.75	6,343.75
4-1A-1	022-56-005	714 - Corp Headquarters	2.03	115,753	7.98	923.71
4-1A-2	022-56-006	714 - Corp Headquarters	2.06	174,483	7.98	1,392.37
4-1A-3	022-56-007	714 - Corp Headquarters	2.07	177,483	7.98	1,416.31
4-1A-4	022-56-008	Undeveloped	34.52	-	-	-
4-1A-5	022-56-009	Parking Lot	24.32	-	-	-
4-1B	022-29-037	Open Space	6.00	-	-	-
5-1A-1	022-29-034	750 - Office Park	36.66	572,660	11.42	6,539.78
5-2A-1	022-29-035	750 - Office Park	31.14	480,772	11.42	5,490.42
5-3A-1	022-29-040	Undeveloped	15.55	-	-	-
5-3A-2	022-29-041	Undeveloped	1.00	-	-	-
5-3A-3	022-29-042	Undeveloped	6.94	-	-	-
5-3A-4	022-29-043	Undeveloped	7.36	-	-	-
5-3A-5	022-29-044	Undeveloped	7.73	-	-	-
5-3B-1A	022-30-054	Undeveloped	5.63	-	-	-
5-3B-2	022-30-038	Undeveloped	10.00	-	-	-
5-3B-3	022-30-039	Undeveloped	5.22	-	-	-
5-3C	022-30-035[5]	Pump Station	0.19	-	-	1.00
5-5A-1	022-30-055	Undeveloped	5.60	-	-	-
5-5A-2	022-30-056	Undeveloped	0.59	-	-	-
5-5A-3	022-30-057	Undeveloped	3.15	-	-	-
5-6	022-30-041	Open Space	1.43	-	-	-
5-7	022-30-049[5]	Sewer Pump Station	9.12	-	-	1.00

Total Estimated Daily Special Benefit Trips	47,517.83
Internal Trip Reduction(6)	(13,810.00)
Total Special Benefit Trips	**33,707.83**

(1) *Average Trip Rate per Day is from the Institute of Traffic Engineer's, Trip Generation Report.*[14]

(2) *Average Number of Special Benefit Trips per Day is the Average Trip Rate times each 1,000 square feet of gross leasable area.*

(3) *Average Number of Special Benefit Trips per Day is the Average Trip Rate times number of hotel rooms for this parcel.*

(4) *Building Square Feet for this parcel is unavailable at this time. Estimate of square feet was used based on similar building in center.*

(5) *Pump Station trips are an estimate.*

(6) *The internal trip rate percentage was calculated by using the NCHRP 684 Internal Rate Capture Estimation Tool.*

[14] *Trip Generation, 9th Edition: An Informational Report of the Institute of Transportation Engineers*. (2012). Washington, DC: Institute of Transportation Engineers.

5. METHOD OF ASSESSMENT

5.1 Introduction

The special benefits that accrue to the properties in the District are limited to those properties that abut an improved public street or which have been obligated by issuance of bonds for necessary public improvements (the "Benefited Parcels"). Other properties in the District receive only a general benefit from the work of the improvements, and there is also some general benefit that accrues to the community as a whole. As outlined in Section 4, the total amount of general benefit from the improvements is determined to be 6.00%.

The Benefited Parcels receive a special benefit proportionate to their net acreage and thus they are assessed on the basis of total net acreage for all costs associated with the maintenance and installation of the District's improvements, with the following exceptions:

- Of the 9.12 acres of parcel 022-30-049 (sewer pump station), 5.51 acres is the pump station and is not assessable. The remaining 3.61 acres does not benefit from landscaping as much as other Benefited Parcels because it is dedicated to municipal sanitary sewer and storm facilities use and will not otherwise be developed. Therefore, it is assigned a special benefit equal to 50% of other Benefited Parcels.
- Parcel 022-30-035 (storm pump station) does not benefit from landscaping as much as other Benefited Parcels because it is dedicated to municipal sanitary sewer and storm facilities use and will not otherwise be developed. Therefore, it is assigned a special benefit equal to 50% of other Benefited Parcels.
- Parcel 022-29-037 and parcel 022-30-041 are dedicated to open space and therefore do not receive special benefit from the maintenance and improvements.

5.2 Method of Assessment Spread

The amount of assessment levied on each Benefited Parcel in the District, for Fiscal Year 2020/21, is $0.0317 per square foot. The assessment rate was determined by taking the Fiscal Year 2020/21 Net Amount to be assessed ($374,360.81) divided by the total net square footage of the District (11,792,520 sq. ft.).

The maximum assessment rate for Fiscal Year 2020/21 is approximately $0.0481, which is a preliminary number. Each year the maximum assessment rate per square foot is increased by the percentage change from April 1st of the prior year to April 1st of the current year in the U.S. Department of Labor, Bureau of Labor Statistics, Consumer Price Indexes, Pacific Cities and U.S. City Average, San Francisco-Oakland-Hayward. The April 1, 2020 CPI was not available at the time of writing of this Report. For purposes of this report, the CPI increase was estimated by using the February 2020/21 CPI.

5.3 Maximum Assessment Rates

The following table provides the historical maximum assessment rate for Fiscal Year 2001/02 through the current fiscal year:

Fiscal Year	CPI	Percentage Increase[1]	Assessment Rate Range[2]	
2001/02	189.1	N/A	$0.0120	$0.0300
2002/03	193.0	2.06%	0.0122	0.0306
2003/04	197.3	2.23%	0.0125	0.0313
2004/05	198.3	0.51%	0.0126	0.0315
2005/06	202.5	2.12%	0.0129	0.0321
2006/07	208.9	3.16%	0.0133	0.0331
2007/08	215.842	3.32%	0.0137	0.0342
2008/09	222.074	2.89%	0.0141	0.0352
2009/10	223.854	0.80%	0.0142	0.0355
2010/11	227.697	1.72%	0.0144	0.0361
2011/12	234.121	2.82%	0.0149	0.0371
2012/13	238.985	2.08%	0.0152	0.0379
2013/14	244.675	2.38%	0.0155	0.0388
2014/15	251.495	2.79%	0.0160	0.0399
2015/16	257.622	2.44%	0.0163	0.0409
2016/17	264.565	2.70%	0.0168	0.0420
2017/18	274.589	3.79%	0.0174	0.0436
2018/19	283.422	3.22%	0.0180	0.0450
2019/20	294.801	4.01%	0.0187	0.0468
2020/21	299.690	2.91%[3]	0.0193	0.0481

(1) *Percentage increase from April 1 of the prior year to April 1 of the current year in the US Department of Labor, Bureau of Labor Statistics, Consumer Price Indexes, Pacific Cities and US City Average, San Francisco-Oakland-Hayward.*

(2) *The left and right column indicate the minimum and maximum assessment rate, respectively.*

(3) *The April 1, 2020 CPI was not available at the time of writing of this Report. The Fiscal Year 2020/21 CPI increase was estimated using the February 2020/21 CPI.*

5.4 Appeals

Any property owner who feels that the amount of their assessment is in error as a result of incorrect information being used to apply the foregoing method of spread may file an appeal with the Finance Director of the City. Any such appeal is limited to the correction of an assessment during the current or, if before July 1, the upcoming fiscal year. Upon the filing of any such appeal, the Finance Director shall promptly review the information provided by the property owner and if he/she finds that the assessment should be modified, he/she shall have the authority to make the appropriate changes in the assessment roll. If any such changes are provided after the assessment roll has been filed with the County for collection, the Finance Director is authorized to refund to the property owner the amount of any approved reduction.

6. ASSESSMENT DIAGRAM

The following page provides a copy of the assessment diagram of the District.

An assessment was levied by the City Council of the City of Milpitas, County of Santa Clara, State of California on the lots, pieces and parcels of land shown on this assessment diagram. Said assessment was levied on the 3rd day of June 2014 ; said assessment diagram and the assessment roll were recorded in the Office of the Superintendent of Streets of said City on the 3rd day of June 2014. Reference is made to the assessment roll recorded in the Office of the Superintendent of Streets for the exact amount of each assessment levied against each parcel of land shown on this assessment diagram.

Mary Lavelle
City Clerk of the City of Milpitas

Filed in the Office of the City Clerk of the City of Milpitas, County of Santa Clara, State of California this 20th day of May 2014.

Mary Lavelle
City Clerk of the City of Milpitas

Recorded in the Office of the Superintendent of Streets of the City of Milpitas, County of Santa Clara, State of California, this 3rd day of June 2014.

Superintendent of Streets
City of Milpitas

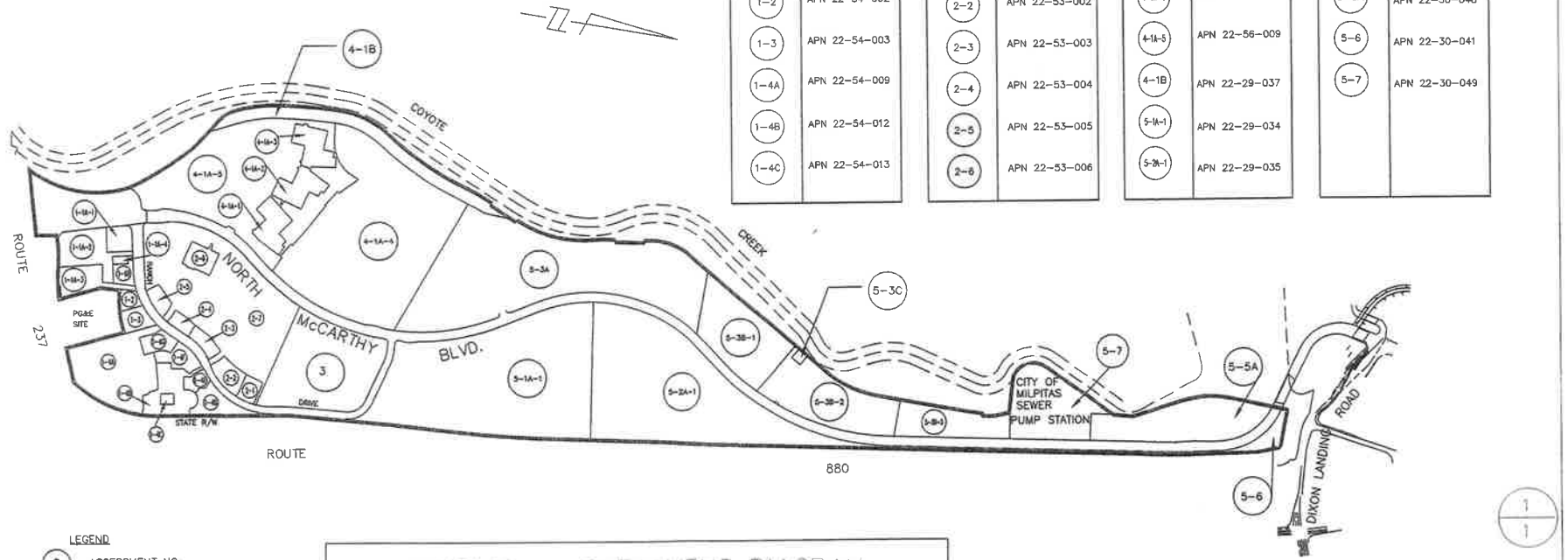
Figure 1

ASSESSMENT NO.	ASSESSOR'S PARCEL NO.
1-1A-1	APN 22-54-016
1-1A-2	APN 22-54-017
1-1A-3	APN 22-54-018
1-1A-4	APN 22-54-019
1-1B	APN 22-54-008
1-2	APN 22-54-002
1-3	APN 22-54-003
1-4A	APN 22-54-009
1-4B	APN 22-54-012
1-4C	APN 22-54-013

ASSESSMENT NO.	ASSESSOR'S PARCEL NO.
1-4D	APN 22-54-015
1-4E	APN 22-54-014
1-4F	APN 22-54-011
1-4G	APN 22-54-010
2-1	APN 22-53-001
2-2	APN 22-53-002
2-3	APN 22-53-003
2-4	APN 22-53-004
2-5	APN 22-53-005
2-6	APN 22-53-006

ASSESSMENT NO.	ASSESSOR'S PARCEL NO.
2-7	APN 22-53-007
3	APN 22-29-016
4-1A-1	APN 22-56-005
4-1A-2	APN 22-56-006
4-1A-3	APN 22-56-007
4-1A-4	APN 22-56-008
4-1A-5	APN 22-56-009
4-1B	APN 22-29-037
5-1A-1	APN 22-29-034
5-2A-1	APN 22-29-035

ASSESSMENT NO.	ASSESSOR'S PARCEL NO.
5-3A	APN 22-29-036
5-3B-1	APN 22-30-037
5-3B-2	APN 22-30-038
5-3B-3	APN 22-30-039
5-3C	APN 22-30-035
5-5A	APN 22-30-048
5-6	APN 22-30-041
5-7	APN 22-30-049



LEGEND

6 ASSESSMENT NO.

BOUNDARY DISTRICT

ASSESSMENT LIMIT

PART F - ASSESSMENT DIAGRAM

LANDSCAPING & LIGHTING & MAINTENANCE ASSESSMENT DISTRICT NO. 95-1

OF

CITY OF MILPITAS

COUNTY OF SANTA CLARA - STATE OF CALIFORNIA

Note:
Reference is hereby made to the maps and deeds of record in the Office of the Assessorof the County of Santa Clara for a detailed description of the lines and dimensions of anyparcels shown hereon. Those maps shall govern for all details concerning the lines anddimension of such parcels. Each parcel is identified in said maps by its distinctive Assessors Parcel Number.

1/1

958

7. ASSESSMENT ROLL

The assessment roll is a listing of the proposed assessment for Fiscal Year 2020/21 apportioned to each lot or parcel, as shown on the last equalized roll of the Assessor of the County of Santa Clara. The following page shows the assessment roll for Fiscal Year 2020/21.

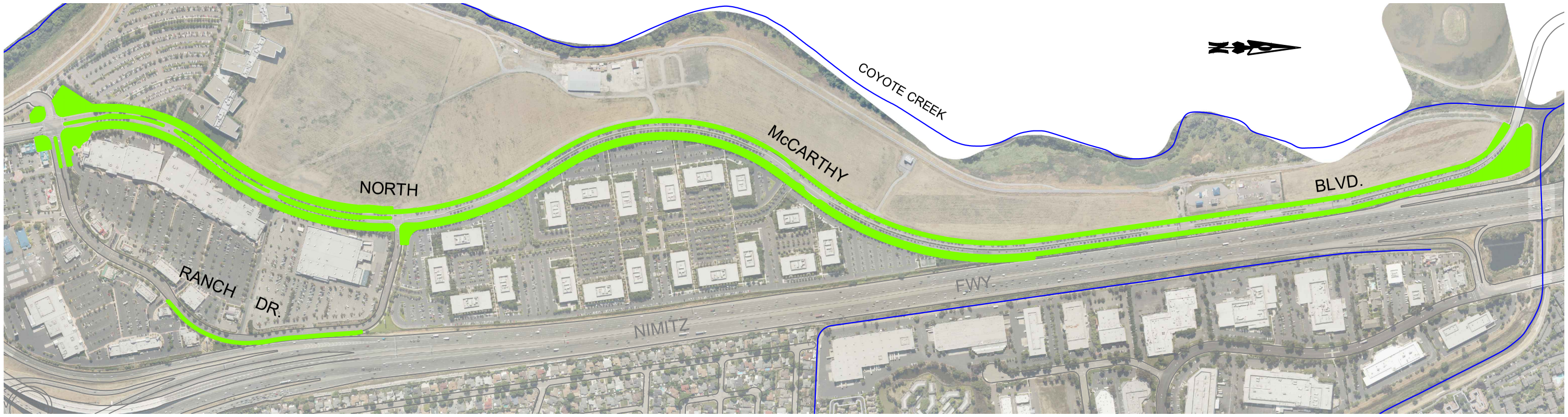
City of Milpitas
Landscaping and Lighting Maintenance Assessment District
No. 95-1
Fiscal Year 2020/21 Assessment Roll

APN	Owner	Net Sq. Ft.	Fiscal Year 20/21 Levy	Rounding Adj.	Fiscal Year 20/21 Total
022-29-016	WAL-MART REAL ESTATE	634,233.60	$20,134.14	$0.00	$20,134.14
022-29-034	MCCARTHY CENTER HOLDINGS LLC	1,589,504.40	50,459.80	0.00	50,459.80
022-29-035	MCCARTHY CENTER HOLDINGS LLC	1,363,863.60	43,296.69	(0.01)	43,296.68
022-29-037	CITY OF SAN JOSE	0.00	0.00	0.00	0.00
022-29-040	CREEKSIDE MILPITAS LLC	677,532.24	21,508.68	0.00	21,508.68
022-29-041	CREEKSIDE MILPITAS LLC	43,690.68	1,386.99	(0.01)	1,386.98
022-29-042	CREEKSIDE MILPITAS LLC	302,349.96	9,598.29	(0.01)	9,598.28
022-29-043	CREEKSIDE MILPITAS 2 LLC	320,732.28	10,181.84	0.00	10,181.84
022-29-044	CREEKSIDE MILPITAS 2 LLC	336,544.56	10,683.81	(0.01)	10,683.80
022-30-035	MILPITAS CITY OF	4,138.20	131.37	(0.01)	131.36
022-30-038	NEW TREND TECH INC	435,600.00	13,828.39	(0.01)	13,828.38
022-30-039	MCCARTHY RANCH LP	217,800.00	6,914.20	0.00	6,914.20
022-30-041	CITY OF MILPITAS	0.00	0.00	0.00	0.00
022-30-049	MILPITAS SANITARY DIST	78,625.80	2,496.02	0.00	2,496.02
022-30-054	CREEKSIDE MILPITAS 2 LLC	245,329.92	7,788.15	(0.01)	7,788.14
022-30-055	SPRIG CENTER LLC	243,936.00	7,743.90	0.00	7,743.90
022-30-056	SPRIG CENTER LLC	25,874.64	821.41	(0.01)	821.40
022-30-057	SPRIG CENTER LLC	137,039.76	4,350.41	(0.01)	4,350.40
022-53-001	HAM JAYNE Y	32,670.00	1,037.13	(0.01)	1,037.12
022-53-002	TMS MCCARTHY LP	53,578.80	1,700.89	(0.01)	1,700.88
022-53-003	TMS MCCARTHY LP	33,105.60	1,050.96	0.00	1,050.96
022-53-004	HSC ASSOCIATES LP	26,136.00	829.70	0.00	829.70
022-53-005	HSC ASSOCIATES LP	32,234.40	1,023.30	0.00	1,023.30
022-53-006	TMS MCCARTHY LP	51,836.40	1,645.58	0.00	1,645.58
022-53-007	TMS MCCARTHY LP	954,835.20	30,311.83	(0.01)	30,311.82
022-54-002	FIRST CREEKSIDE ASSOC	25,264.80	802.05	(0.01)	802.04
022-54-003	LOO YUK LUN TRUSTEE & ET AL & LOO MEI FONG TRUSTEE	44,431.20	1,410.50	0.00	1,410.50
022-54-008	IN N OUT BURGERS	33,976.80	1,078.61	(0.01)	1,078.60
022-54-009	MCCARTHY SHOPPING CTR LP	368,953.20	11,712.65	(0.01)	11,712.64
022-54-010	H & Y NORTHERN CALIFORNIA LLC	44,866.80	1,424.32	0.00	1,424.32
022-54-011	FIRST CREEKSIDE ASSOC	57,063.60	1,811.52	0.00	1,811.52
022-54-012	F&M SORCI LAND COMPANY INC	131,551.20	4,176.17	(0.01)	4,176.16
022-54-013	F&M SORCI LAND COMPANY INC	10,018.80	318.05	(0.01)	318.04
022-54-014	J N C INTERNATIONAL ENTPRS LLC	27,878.40	885.02	0.00	885.02
022-54-015	PACIFIC MERITAGE LLC	77,536.80	2,461.45	(0.01)	2,461.44
022-54-016	HOURET FAM LP	46,173.60	1,465.81	(0.01)	1,465.80
022-54-017	BRE SELECT HOTELS PROPERTIES LLC	143,312.40	4,549.54	0.00	4,549.54
022-54-018	LL MILPITAS, L P	100,623.60	3,194.36	0.00	3,194.36
022-54-019	IN N OUT BURGERS	8,276.40	262.74	0.00	262.74
022-56-005	HUDSON CAMPUS CENTER LLC	88,426.80	2,807.16	0.00	2,807.16
022-56-006	HUDSON CAMPUS CENTER LLC	89,733.60	2,848.65	(0.01)	2,848.64
022-56-007	HUDSON CAMPUS CENTER LLC	90,169.20	2,862.48	0.00	2,862.48
022-56-008	HUDSON CAMPUS CENTER LLC	1,503,691.20	47,735.60	0.00	47,735.60
022-56-009	HUDSON CAMPUS CENTER LLC	1,059,379.20	33,630.65	(0.01)	33,630.64
Total: 44 Parcels		**11,792,519.64**	**$374,360.81**	**(0.21)**	**$374,360.60**

CITY OF MILPITAS

LANDSCAPING AND LIGHTING MAINTENANCE DISTRICT (LLMD) 95-1

(N.T.S.)



2020-2021 FISCAL YEAR LANDSCAPE AREA FUNDED FOR MAINTENANCE

CITY OF MILPITAS
AGENDA REPORT
(AR)

Item Title:	**Adopt a Resolution Approving the Annual Engineer's Report, and Adopt a Resolution Declaring the Intention to Levy and Collect Assessments for Fiscal Year 2020-21 for Landscaping and Lighting Maintenance Assessment District No. 98-1 (LLMD 98-1 Sinclair Horizon), and Provide Notice of Public Hearing to be held on May 19, 2020 for LLMD 98-1 Sinclair Horizon**
Category:	Consent Calendar-Community Development
Meeting Date:	5/5/2020
Staff Contact:	Steve Erickson, City Engineer, 408-586-3301
Recommendation:	Adopt a Resolution approving the Annual Engineer's Report, and adopt a Resolution declaring the intention to levy and collect assessments for Fiscal Year 2020-21 for Landscaping and Lighting Maintenance Assessment District No. 98-1 (LLMD 98-1 Sinclair Horizon), and provide Notice of Public Hearing to be held on May 19, 2020 for LLMD No. 98-1 Sinclair Horizon.

Background:
Landscaping and Lighting Maintenance Assessment District No. 98-1 (LLMD 98-1 Sinclair Horizon) provides funding for the maintenance and improvement of public landscaping, irrigation systems, and pedestrian walking path adjacent to Sinclair Frontage Road and Los Coches Creek abutting the Sinclair Horizon residential subdivision in the areas as shown on the attached location map.

Analysis:
Before the City Council may levy the annual assessment for LLMD 98-1 Sinclair Horizon, the Landscaping and Lighting Act of 1972 requires the Council to adopt a resolution approving the annual Engineer's Report (Report) evaluating the LLMD district's maintenance and improvement costs for fiscal year 2020-21.

On March 3, 2020, the City Council directed the City Engineer to prepare this Report, which is included in the Council packet. The proposed total assessment for fiscal year 2020-21 is $45,894, with an assessment rate not exceeding the maximum assessment rate. Council must also adopt a resolution that declares its intent to levy and collect an assessment and directs publishing of notice of a public hearing to be held on May 19, 2020.

Policy Alternative:

Alternative:
Not approve the Engineer's Annual Report nor adopt a resolution of intent to levy and collect assessments for LLMD 98-1 Sinclair Horizon.

Pros: None

Cons: The Landscaping and Lighting Act of 1972 requires the legislative body to adopt a resolution of intent upon approval of the Report, not approving the Report nor adopting a resolution of intent would jeopardize the City's ability to collect assessments for the maintenance and upkeep of LLMD 98-1 Sinclair Horizon.

Reason not recommended: To provide funding to allow for the continued maintenance of LLMD 98-1 Sinclair Horizon, staff recommends approving the annual Report and declaring intent to levy and collect assessments for fiscal year 2020/21.

Fiscal Impact:
The levy and collection of assessments provides a funding resource for the City to improve and maintain public landscaping, irrigation systems, and pedestrian walking path within LLMD 98-1 Sinclair Horizon.

California Environmental Quality Act:
Levy and collection of assessment is not considered a project under CEQA as there will be no direct or reasonably foreseeable indirect physical change in the environment.

Recommendation:
Adopt a Resolution approving the Annual Engineer's Report, and adopt a Resolution declaring the intention to levy and collect assessments for Fiscal Year 2020-21 for Landscaping and Lighting Maintenance Assessment District No. 98-1 (LLMD 98-1 Sinclair Horizon) and provide Notice of Public Hearing to be held on May 19, 2020 for LLMD No. 98-1 Sinclair Horizon.

Attachments:
a) Resolution Approving Annual Engineer's Report
b) Resolution Declaring Intention to Levy and Collect Assessments
c) Engineer's Report LLMD No. 98-1 Sinclair Horizon
d) Location Map

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MILPITAS, APPROVING THE ANNUAL REPORT FOR THE LANDSCAPING AND LIGHTING MAINTENANCE ASSESSMENT DISTRICT NO. 98-1 (SINCLAIR HORIZON) FOR FISCAL YEAR 2020-21

WHEREAS, the City Council previously completed its proceedings in accordance with and pursuant to the Landscaping and Lighting Act of 1972, Part 2, Division 15 of the California Streets and Highways Code (commencing with Section 22500) (the "Act") to establish the Landscaping and Lighting Maintenance Assessment District (the "Assessment District"); and

WHEREAS, the City Council has retained NBS for the purpose of assisting with the annual levy of the Assessment District, and the preparation and filing of an Annual Report; and

WHEREAS, the City Council has, by previous resolution, ordered NBS to prepare and file such Annual Report; and

WHEREAS, NBS has prepared and filed such Annual Report with the City Clerk.

NOW, THEREFORE, the City Council of the City of Milpitas hereby finds, determines, and resolves as follows:

> **Approval of Report:** The City Council hereby approves the Annual Report concerning the levy of assessments as submitted by NBS for the fiscal year commencing July 1, 2020, and ending June 30, 2021.

PASSED AND ADOPTED this _____ day of _____, 2020, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

_____
Mary Lavelle, City Clerk

APPROVED:

_____
Rich Tran, Mayor

APPROVED AS TO FORM:

_____
Christopher J. Diaz, City Attorney

RESOLUTION NO. ____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MILPITAS, DECLARING ITS INTENTION TO LEVY AND COLLECT ASSESSMENTS FOR THE LANDSCAPING AND LIGHTING MAINTENANCE ASSESSMENT DISTRICT NO. 98-1 (SINCLAIR HORIZON) FOR FISCAL YEAR 2020-21

WHEREAS, the City Council previously completed its proceedings in accordance with and pursuant to the Landscaping and Lighting Act of 1972, Part 2, Division 15 of the California Streets and Highways Code (commencing with Section 22500) (the "Act") to establish the Landscaping and Lighting Maintenance Assessment District (the "Assessment District"); and

WHEREAS, the City Council has retained NBS for the purpose of assisting with the annual levy of the Assessment District, and the preparation and filing of an Annual Report.

NOW, THEREFORE, the City Council of the City of Milpitas hereby finds, determines, and resolves as follows:

1. **Intention:** The City Council hereby declares its intention to levy and collect assessments within the Assessment District to pay the costs of the Improvements for the fiscal year commencing July 1, 2020, and ending June 30, 2021. The City Council finds that the public's best interest requires such action.

2. **Improvements:** The improvements within the District include, but are not limited to: the operating, maintaining and servicing of all public landscaping improvements, consisting of landscaping and grass. Operating, maintaining and servicing include, but are not limited to: personnel, materials, electrical energy and water. Services provided include all necessary service, operations, administration and maintenance required to keep the improvements in a healthy, vigorous, and satisfactory condition.

3. **Assessment District Boundaries:** The boundaries of the Assessment District are as shown by the assessment diagram filed in the offices of the City Clerk, which map is made a part hereof by reference.

4. **Annual Report:** Reference is made to the Annual Report prepared by NBS, on file with the City Clerk, for a full and detailed description of the improvements, the boundaries of the Assessment District and the zones therein, and the proposed assessments upon assessable lots and parcels of land within the Assessment District.

5. **Notice of Public Hearing:** The City Council hereby declares its intention to conduct a Public Hearing concerning the levy of assessments in accordance with Section 22629 of the Act. All objections to the assessment, if any, will be considered by the City Council. The Public Hearing will be held on **Tuesday, May 19, 2020 at 7:00 pm** or as soon thereafter as is feasible in the meeting place of the City Council located at 455 E. Calaveras Boulevard, Milpitas, CA 95035. The City Council further orders the City Clerk to publish notice of this resolution in accordance with Section 22626 of the Act.

6. **Increase of Assessment:** The maximum assessment is not proposed to increase from the previous year above that previously approved by the property owners (as "increased assessment" is defined in Section 54954.6 of the Government Code).

PASSED AND ADOPTED this _____ day of ____, 2020, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

_____
Mary Lavelle, City Clerk

APPROVED:

_____
Rich Tran, Mayor

APPROVED AS TO FORM:

_____
Christopher J. Diaz, City Attorney

CITY OF MILPITAS

Fiscal Year 2020/21 Annual Report For:

Landscaping and Lighting Maintenance Assessment District No. 98-1

March 2020

Prepared by:

NBS
helping communities fund tomorrow

nbsgov.com

Corporate Headquarters
32605 Temecula Parkwa
Temecula
Toll free: 800.676.7516

CITY OF MILPITAS
LANDSCAPING AND LIGHTING MAINTENANCE ASSESSMENT DISTRICT NO. 98-1
455 East Calaveras Boulevard
Milpitas, California 95035
(408) 586-3000

CITY COUNCIL

Rich Tran, Mayor

Bob Nuñez, Vice-Mayor

Karina R. Dominguez, Council Member

Carmen Montano, Council Member

Anthony Phan, Council Member

CITY STAFF

Steve Erickson, PE, Director of Engineering/City Engineer

Walter C. Rossmann, Director of Financial Services

Tony Ndah, Director of Public Works

NBS

Tim Seufert, Client Services Director

Adina McCargo, Project Manager

Tiffany Ellis, Senior Consultant

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1. ENGINEER'S LETTER

WHEREAS, in 1998 the City Council of the City of Milpitas (the "City"), State of California, under the Landscaping and Lighting Act of 1972 (the "Act"), created the City of Milpitas Landscaping and Lighting Maintenance Assessment District No. 98-1 (the "District") to provide for the continued maintenance, operation, and administration of various improvements within the boundaries of the District; and

WHEREAS, the City Council has directed NBS to prepare and file a report for Fiscal Year 2020/21 in accordance with Chapter 1, Article 4 of the Act presenting plans and specifications describing the general nature, location and extent of the improvements to be maintained; an estimate of the costs to maintain, operate, and service the improvements for the District for the referenced fiscal year; a diagram for the District showing the area and properties to be assessed; and an assessment of the estimated costs to maintain and service the improvements, stating the net amount to be assessed upon all assessable lots or parcels within the District in proportion to the special benefit received.

NOW THEREFORE, the following assessments have been calculated in accordance with the assessment methodology adopted and approved by the City Council at the time of District formation, and are made to cover the portion of the estimated costs of maintenance, operation, and servicing of the improvements, to be paid by the assessable real property within the District in proportion to the special benefit received:

District	Parcels	2020/21 Maximum Assessment Rate per Lot[1]	2020/21 Actual Assessment Rate per Lot	2020/21 Net Amount to be Assessed[2][3]
LLMAD 98-1	98	$497.07	$468.31	$45,893.93

(1) *The April 1, 2020 CPI was not available at the time of writing of this Report. The Fiscal Year 2020/21 CPI increase was estimated using the February 2020/21 CPI.*

(2) *Amounts placed on the tax roll include the 1% Santa Clara County Collection Fee.*

(3) *This amount is only an estimate and does not reflect the final billed amount with rounding adjustments. Refer to Section 7 for the rounded figure.*

I identified all parcels which will have a special benefit conferred upon them from the improvements described in District's Plans and Specifications section of this Engineer's Report (the "Benefited Parcels"). For particulars as to the identification of said parcels, reference is made to the Assessment Diagram, a copy is on file in the office of the City Clerk.

I have assessed the costs and expenses of the improvements upon the Benefited Parcels. In making such assessment:

a. The proportionate special benefit derived by each Benefited Parcel from the improvements was determined in relationship to the entirety of the maintenance costs of the improvements;

b. No assessment has been imposed on any Benefited Parcel which exceeds the reasonable cost of the proportional special benefit conferred on such parcel from the improvements; and

c. Any general benefits from the improvements have been separated from the special benefits and only special benefits have been assessed.

I, the undersigned, respectfully submit the enclosed Engineer's Report and, to the best of my knowledge, information and belief, the Engineer's Report, Assessments, and the Assessment Diagrams herein have been prepared and computed in accordance with the order of the City Council of the City of Milpitas, the Act, and Article XIIID.

Steven Erickson, PE
Director of Engineering /City Engineer

2. PLANS AND SPECIFICATIONS

The District provides for the continued administration, maintenance, operation, and servicing of various improvements located within the public right-of-way and dedicated easements within the boundaries of the District.

2.1 Location of Improvements

The District is located in the City of Milpitas, bounded on the east by Sinclair Frontage Road, on the west by Berryessa Creek, and on the north by Los Coches Street. The improvements maintained include public landscaping and irrigation improvements, including jogging paths, planter walls, grass berms, and ornamental planting, which are primarily situated within the public rights-of-way and dedicated public by easements within the District.

2.2 Landscaping Improvements

The landscaping and irrigation improvements were installed within the District in order to enhance the overall visual appearance for adjacent parcels. The improvements consist of the maintenance and operation of any or all public landscaping and irrigation improvements adjacent to curbs, including asphalt concrete jogging paths, planter walls, grass berms, and appurtenant irrigation systems; ornamental planting including lawns, shrubs, and trees, including necessary repairs, replacements, water, electric current, spraying, care, supervision, debris removal and all other items of work necessary and incidental for proper maintenance and operation thereof. The landscaping and irrigation improvements are collectively referred to as "landscaping improvements". All such work will be performed in the following areas:

2.2.1 BERRYESSA CREEK

Due to the widening of the creek, improvements in Berryessa Creek were removed. Any improvements that existed in this reach (asphalt concrete jogging path, exercise equipment, planting, and irrigation) will no longer be maintained or improved.

2.2.2 LOS COCHES CREEK

1. A strip of land 812 feet long, 14 feet in width along the south bank of Los Coches Creek adjacent to Tract 9018. The improvements include an asphalt concrete jogging path, exercise equipment, planting, and irrigation.
2. A strip of land 5.5 feet wide within the Los Coches Street right-of-way between the back of sidewalk and the right-of-way along the south side of Los Coches Street between Berryessa Creek and Sinclair Frontage Rd. The improvements include planting and irrigation.

2.3 Overhead

In addition to the hard costs of maintaining the improvements mentioned above, the City will incur costs for staff time and expenses related to the management and maintenance of the improvements within the District. Staff time includes oversight and coordination of both City and contractor provided services, annual tax roll preparation, and addressing property owner questions and concerns. These activities are directly related to the maintenance of the improvements, and without them the improvements could not be efficiently completed or properly maintained on an ongoing basis.

3. ESTIMATE OF COSTS

The estimated costs of maintenance and servicing of the improvements as described in the Plans and Specifications are summarized below.

3.1 District Budget

The Fiscal Year 2020/21 estimated cost budget for the maintenance and servicing of the improvements is as follows:

Description	Fiscal Year 2020/21 Budget
Maintenance Staff[1]	$17,000
Capital Equipment	0
Supplies	1,700
Utilities (Water, Electricity)	17,495
Reserve Fund	12,500
Capital Improvement Program	12,500
Maintenance Costs	**$61,195**
NBS	$3,450
City Staff District Administration	250
County Auditor-Controller Fee[2]	459
District Specific Costs	**$4,159**
Total District Costs	**$65,354**
General Benefit Contribution[3]	(19,460)
Operating Reserve Contribution	0
Net Amount to be Assessed	**$45,894**
Total District Lots	**98**
Rate per Lot[4]	**$468.31**
Maximum Rate Per Lot – 2020/21[5]	**$497.07**

(1) *The City's Department of Public Works is the provider of Maintenance Services.*

(2) *County Auditor-Controller Fee is currently 1% of the total levy submittal.*

(3) *General Benefit Contribution is not applied to District Specific Costs as these are special benefits to the District.*

(4) *The Rate per lot equals the Net Amount to be Assessed / Total District Lots. The Rate cannot exceed the maximum rate.*

(5) *The April 1, 2020 CPI was not available at the time of writing of this Report. The Fiscal Year 2020/21 CPI increase was estimated by using the February 2020/21 CPI.*

3.1.1 OPERATING RESERVE

It is the intent of the City to maintain an operating reserve which shall not exceed the estimated costs of maintenance and servicing of the improvements prior to December 10 of the fiscal year, or when the City expects to receive its apportionment of special assessments from the County, whichever is later. The operating reserve balance information for the District is as follows:

Estimated Fiscal Year Ending 6/30/2020 Operating Reserve Cash Balance	$12,500
Operating Reserve Collection for Fiscal Year 2020/21	0
Estimated Fiscal Year Ending 6/30/2021 Operating Reserve Cash Balance	**$12,500**

4. SPECIAL AND GENERAL BENEFIT

The improvements defined in Section 2 are expected to confer certain special benefits to parcels within the District. The special benefits are described in this section. Figures in this section are derived from a Special v. General Benefit Analysis performed in Fiscal Year 2014/15.

4.1 Introduction

Pursuant to Article XIIID, all parcels that receive a special benefit conferred upon them as a result of the installation, implementation and maintenance of the improvements, services and activities shall be identified, and the proportionate special benefit derived by each identified parcel shall be determined in relationship to the entire costs of the installation, implementation and maintenance of the improvements, services and activities.

Article XIIID, Section 4(a) of the California Constitution limits the amount of any assessment to the proportional special benefit conferred on the property. Proposition 218 requires that the City separate the general benefit from special benefit, so that only special benefit may be assessed to properties within the District. Furthermore, Article XIIID also provides that publicly owned properties must be assessed unless there is clear and convincing evidence that those properties receive no special benefit from the assessment.

4.2 Special Benefits Identified

The improvements described in Section 2 are expected to confer certain special benefits to parcels within the District. The special benefits conferred to property within the District can be grouped into two primary benefit categories: aesthetic benefit and safety benefit. The two district benefit categories are further expanded upon below.

- **Improved Aesthetics:** The aesthetic benefit relates to the increase in the overall aesthetics as a result of the ongoing maintenance, servicing and operation of the improvements within the District. Street landscaping improvements improve the livability, commercial activity, appearance and desirability for properties within the District. Regular maintenance ensures that the improvements do not reach a state of deterioration or disrepair so as to be materially detrimental to properties adjacent to or in close proximity to the improvements. The overall appeal of the District is enhanced when improvements are in place and kept in a healthy and satisfactory condition. Conversely, appeal decreases when improvements are not well-maintained, unsafe, or destroyed by the elements or vandalism. Streetscapes have a significant effect on how people view and interact with their community[1]. With streetscapes that are safe and inviting, people are more likely to walk, which can help reduce automobile traffic, improve public health, stimulate local economic activity and attract residents and visitors to the community[2].
- **Increased Safety:** Well maintained areas mitigate crime, especially vandalism, and enhance pedestrian safety. A recent study found that after landscape improvements were installed, there

[1] Victoria Transport Policy Institute. (2011). *Community Livability. Helping to Create Attractive, Safe, Cohesive Communities.* Retrieved from http://www.vtpi.org/tdm/tdm97.htm.

[2] *Ibid.*

was a 46% decrease in crash rates across urban arterial and highway sites and a second study reviewed found a 5% to 20% reduction in mid-block crashes after trees and planters in urban arterial roads were put in place. In addition, there is less graffiti, vandalism, and littering in outdoor spaces with natural landscapes than in comparable plant-less spaces[3]. The Victoria Transport Policy Institute has found that streetscapes reduce traffic speeds and when combined with improved pedestrian crossing conditions can significantly reduce collisions[4].

4.3 General Benefits Identified

Section 4 of Article XIIID of the California Constitution provides that once a local agency which proposes to impose assessments on property has identified those parcels that will have special benefits conferred upon them and upon which an assessment will be imposed, the local agency must next "separate the general benefits from the special benefits conferred," and only the special benefits can be included in the amount of the assessments imposed.

General benefit is an overall and similar benefit to the public at large resulting from the maintenance of the District's improvements provided by the assessments levied. The improvements to be maintained by the District are located within the District boundaries only. There will be no District maintenance activities provided for improvements located outside of the District boundaries.

The ongoing maintenance of the District improvements will provide aesthetic and safety benefits to the property within the District. However, it is recognized that the ongoing District maintenance activities will also provide a level of benefit to some property within proximity to the District, as well as individuals passing through. Therefore, the general benefit created as a result of the District maintenance activities has been considered.

4.4 Quantification of Benefit

As a result of the maintenance and operation of the improvements, there will be a level of general benefit to people that do not live in or intend to conduct business within the District. In order for property within the District to be assessed only for that portion of special benefits received from the district's maintenance activities, general benefits provided by the ongoing maintenance of the improvements needs to be quantified. The amount of general benefit that is provided from the District's maintenance activities cannot be funded via property owners' assessments.

The landscaping improvements are primarily located along Los Coches Street and Sinclair Frontage Road and within the subdivision along Los Coches Creek and Berryessa Creek. A portion of the maintained landscaping provides some general benefit to pass-thru traffic. Per the City, there is 52,912 square feet of landscaping being maintained.

<u>Los Coches Creek and Berryessa Creek</u>

As result of the District maintenance activities, there will be a level of general benefit to pedestrians and vehicular traffic that are not associated with property in the District. As expressed by the Court in *Beutz v. County of Riverside* (2010), "*... courts of this state have long recognized that virtually all public improvement*

[3] *Wolf, Kathleen L. (2010). Safe Streets – A Literature Review. In: Green Cities: Good Health (www.greenhealth.washington.edu)*. College of the Environment, University of Washington.

[4] Victoria Transport Policy Institute. (2011). *Community Livability. Helping to Create Attractive, Safe, Cohesive Communities.* Retrieved from http://www.vtpi.org/tdm/tdm97.htm.

projects provide general benefits." A route beginning or ending with a parcel within the District does not include the "general public" for purposes of determining general benefit. The landscaping improvements along the south side of Los Coches Creek and Berryessa Creek are local in nature, however even though they are intended primarily for localized access, there is some portion of pedestrian traffic that may not be accessing the adjacent properties. The landscaping improvements are located adjacent to the backyard of homes, and access is only available by walking or bicycling. There is no vehicular access to these improvements.

The Summary of Travel Trends, 2009 National Household Travel Survey (NHTS) prepared by the U.S. Department of Transportation Federal Highway Administration analyzed the number of person trips by various modes of transportations such as private vehicle, transit, walking or some other means of transportation. According to the Pacific Division data extracted from the 2009 NHTS database, of the annual 181,703 (in millions) total person trips, 21,252 (in millions) or 11.70% of those person trips were made by using walking as their mode of transportation, and 2,066 (in millions) or 1.14% of those person trips were made by bicycling[5].

According to the U.S. Census Bureau (2010), the average household size in the City is 3.34 persons[6]. Based on this average household size, and considering there are 98 residential units within the District, there are approximately 327 people residing within the District boundaries. There are an estimated 163 residential units in close proximity, but outside of the District boundaries. Based on the City's average household size, there are approximately 544 persons residing outside of the District boundaries, but have access to the landscaping improvements.

Community	Estimated Number of Residential Units	Estimated Number of Persons(1)
District	98	327
Sundrop Subdivision	83	277
Sinclair Renaissance Subdivision	80	267
Total Residential Population	**261**	**871**

(1) *U.S. Census Bureau (2010) average household size in the City is 3.34 persons.*[7]

In order to determine the estimated total number of persons who are within close proximity to the landscaping improvements, and would utilize walking or bicycling as their mode of transportation, we applied the 12.84% (11.70% walking, 1.14% bicycling) of person trips reported from the NHTS Pacific Division study, to the total nearby residential population (871). There are approximately 112 people within close proximity of the District that utilize walking or bicycling as their mode of transportation.

In order to determine the portion of the 112 persons that reside within the District, we applied the 2009 NHTS walking trip percentage (12.84%) to the District population (327). Approximately 42 people within the District boundaries use walking or bicycling as their primary mode of transportation. Therefore, the total

[5] *U.S Department of Transportation. Federal Highway Administration. (2011). Summary of Travel Trends: 2009 National Household Travel Survey. (Report No. FHWA-PL-11-022). Retrieved from http://nhts.ornl.gov*

[6] *U.S. Census Bureau. (2010). Profile of General Population and Housing Characteristics: 2010, 2010 Demographic Profile Data. Milpitas, C.A. Retrieved March 23, 2015, http://quickf acts.census.gov/qf d/states/06/0647766.html*

[7] *Ibid.*

surrounding neighborhood area population, located outside of the District boundaries, but in close proximity the landscaping improvements, that uses walking or bicycling as their primary mode of transportation is estimated to be 70 people.

Community	Estimated Number of Persons
District	42
Sundrop Subdivision	36
Sinclair Renaissance Subdivision	34
Walking or Bicycling Population	**112**

In order to obtain a better picture of the overall level of general benefit provided by the landscaping improvements, the pedestrian traffic that utilizes walking or bicycling as the mode of transportation that will seek out and use the District improvements, but live outside of the District, must be considered. The 2009 NHTS further details the purposes of the reported walking (21,252 in millions) and bicycling (2,066 in millions) trips; based on the property types people entering the District would most likely do so for social or recreational activities.

The following details the number of walking and bicycling trips, based on the 2009 NHTS study, for each of the activities that are the most likely reasons people outside of the District would use the landscaping improvements:

Trip Purpose	Number of Walking or Bicycling Trips (in millions)
Social/Recreational	6,442
Total	**6,442**

Of the total number of walking and bicycling trips reported, 6,442 (in millions) or 27.63% are for purposes that persons outside of the District may use the landscaping improvements. Applying this percentage (27.63%) to the number of people walking or bicycling as their mode of transportation and that reside outside of the District (70), there are approximately 19 people (general benefit) that may use the landscaping improvements, but do not reside within the District. Taking the 19 people that may walk or bicycle, but reside outside of the District, divided by total residential population with access to the landscaping improvements (871), the estimated percentage of persons, engaging in what is considered general benefit because they do not reside within the District, represents 2.21%.

Los Coches Street and Sinclair Frontage Road

The City does not have a study showing traffic volume along Los Coches Street and Sinclair Frontage Road along the District boundaries. The portion of the maintained landscaping that is located along Los Coches Street and Sinclair Frontage Road provides some general benefit to pass-through traffic. Before the determination and allocation of the percentage of special and general benefit for the District can be made, the estimated pass-through traffic must be computed. The pass-through trips are vehicles driving along the maintained streets within the District for a portion of their trips, but not living or conducting business in the District and benefiting from the landscaping improvements in place.

The Sundrop and Sinclair Renaissance residential communities are located directly across the street and next to the District, and vehicles entering and/or exiting these communities in all likelihood are passing by a portion of the landscaping improvements for a portion of their trip. In lieu of having a study that identifies the pass-through traffic, the estimated number of trips generated for each community has been calculated based on the number of units and average number of trips per dwelling unit.

Community	Number of Residential Units(1)	Estimated Number of Daily Vehicle Trips(2)	% of Total Daily Vehicle Trips(3)
District	98	933.0	44.34%
Sundrop Subdivision	83	790.2	37.56%
Sinclair Renaissance Subdivision	80	380.8	18.10%
Total	**261**	**2,104.0**	**100.00%**

(1) *Number of Residential Units is from the City's Approved Projects map.*[8]

(2) *Per the ITE Trip Generation Report a single family residence generates an average of 9.52 trips per dwelling unit.*[9]

(3) *Number of daily trips has been reduced by 50% to account for vehicles entering and exiting the community from the opposite direction on Sinclair Frontage Road, and not driving along the portion of Los Coches Street and Sinclair Frontage Road with landscaping improvements maintained by the District.*

As detailed above, based on the average number of daily vehicle trips generated for the communities in close proximity to the District, 1,171 (55.66%) are generated by residential units located outside of the District (general benefit).

All Locations and Landscaping Improvements – Residential Pass-thru Benefit

The general benefit percentages determined in the previous sections for Los Coches Creek and Berryessa Creek (2.21%) and Los Coches Street and Sinclair Frontage Road (55.66%) were then applied to each corresponding location with landscaping improvements. The landscaping square footage being maintained by the District was provided by the City's Public Works Department. The general benefit percentage for each street type was multiplied by the total square footage being maintained for such street. The general benefit square footage was summed for all street segments and divided into the total square footage of all landscaping maintenance. The result is the combined general benefit percentage. The following table details this calculation.

Street Name	Total Square Footage	General Benefit Percentage	General Benefit Square Footage
Los Coches Creek	4,572	2.21%	101
Berryessa Creek	21,025	2.21%	465
Los Coches Street	24,747	55.66%	13,773
Sinclair Frontage	2,568	55.66%	1,429
Totals:	**52,912**		**15,768**
Landscaping General Benefit			**29.80%**

Based on the above calculations, the general benefit portion of the improved aesthetics and increased safety resulting from the landscaping improvements is estimated to be 29.80%.

[8] City of Milpitas. (2013). Approved Development Projects. Retrieved from http://www.ci.milpitas.ca.gov/government/planning/proj_approved.asp

[9] *Trip Generation, 9th Edition: An Informational Report of the Institute of Transportation Engineers. (2012). Washington, DC: Institute of Transportation Engineers.*

Public at Large General Benefit

Given the location and nature of the improvements, it is very unlikely the public at large would seek out or use the landscaping improvements within the District. In addition, there are more direct routes to access the industrial complexes/businesses located to the south of the District than the 2 lane Los Coches Street and Sinclair Frontage Road. Nevertheless, it is perceivable that members of the public at large may pass-thru a portion of the landscaping improvements, even if it's lost or leisure traffic. As such, general benefit of 2.00% has been assigned for the landscaping improvements to the public at large

4.4.1 COLLECTIVE DISTRICT-WIDE GENERAL BENEFIT

Since the District is comprised of improved aesthetics and increased safety benefits resulting from the collective landscaping improvements, the activity of both pedestrians and vehicles, and the public at large must be addressed in a collective form rather than independently. The sum of the calculated general benefits is the total general benefit related to all pass-thru traffic. This general benefit result is provided in the table below:

Residential Pass-thru General Benefit	29.80%
Public at Large General Benefit	2.00%
Total General Benefit	**31.80%**

The general benefit, which is the percentage of the total budget that must be funded through sources other than assessments, is 31.80%. The special benefit then, which is the percentage of the budget that may be funded by assessments, is 68.20%.

4.5 Special Benefit Trips

A detailed breakdown of the estimated special benefit trips determined by the Special v. General Benefit Analysis performed in Fiscal Year 2014/15 for each parcel in the District is shown below:

Assmt ID	Assessor's Parcel No.	Land Use Description	Acreage	Gross Leasable Area	Average Trip Rate[1]	Estimated # of Daily Special Benefit Trips[2]
1-1A-1	022-54-016	710 - General office	1.06	4,046	11.03	44.63
1-1A-2	022-54-017[3]	310 – Hotel	3.29	161	8.17	1,315.37
1-1A-3	022-54-018[3]	310 – Hotel	2.31	124	8.17	1,013.08
1-1A-4	022-54-019	934 - Fast Food	0.19	-	496.12	-
1-1B	022-54-008	934 - Fast Food	0.78	2,912	496.12	1,444.70
1-2	022-54-002[4]	820 - Shopping Center	0.58	5,400	42.70	230.58
1-3	022-54-003	932 - High Vol. Restaurant	1.02	5,465	127.15	694.87
1-4A	022-54-009[4]	869 - Home Superstore	8.47	100,000	20.00	2,000.00
1-4B	022-54-012[4]	820 - Shopping Center	3.02	20,000	42.70	854.00
1-4C	022-54-013	820 - Shopping Center	0.23	10,000	42.70	427.00
1-4D	022-54-015	931 - Quality Restaurant	1.78	7,846	89.95	705.75
1-4E	022-54-014[4]	932 - High Vol. Restaurant	0.64	3,000	127.15	381.45
1-4F	022-54-011[4]	820 - Shopping Center	1.31	8,000	42.70	341.60
1-4G	022-54-010	931 - Quality Restaurant	1.03	7,476	89.95	672.47
2-1	022-53-001	931 - Quality Restaurant	0.75	6,500	89.95	584.68
2-2	022-53-002[4]	820 - Shopping Center	1.23	10,000	42.70	427.00
2-3	022-53-003[4]	820 - Shopping Center	0.76	8,000	42.70	341.60
2-4	022-53-004	934 - Fast Food	0.60	2,000	496.12	992.24
2-5	022-53-005	934 - Fast Food	0.74	3,000	496.12	1,488.36
2-6	022-53-006	863 – Elect. Superstore	1.19	51,250	45.04	2,308.30
2-7	022-53-007	820 - Shopping Center	21.92	214,094	42.70	9,141.81
3	022-29-016	815 - Discount Superstore	14.56	125,000	50.75	6,343.75
4-1A-1	022-56-005	714 - Corp Headquarters	2.03	115,753	7.98	923.71
4-1A-2	022-56-006	714 - Corp Headquarters	2.06	174,483	7.98	1,392.37
4-1A-3	022-56-007	714 - Corp Headquarters	2.07	177,483	7.98	1,416.31
4-1A-4	022-56-008	Undeveloped	34.52	-	-	-
4-1A-5	022-56-009	Parking Lot	24.32	-	-	-
4-1B	022-29-037	Open Space	6.00	-	-	-
5-1A-1	022-29-034	750 - Office Park	36.66	572,660	11.42	6,539.78
5-2A-1	022-29-035	750 - Office Park	31.14	480,772	11.42	5,490.42
5-3A-1	022-29-040	Undeveloped	15.55	-	-	-
5-3A-2	022-29-041	Undeveloped	1.00	-	-	-
5-3A-3	022-29-042	Undeveloped	6.94	-	-	-
5-3A-4	022-29-043	Undeveloped	7.36	-	-	-
5-3A-5	022-29-044	Undeveloped	7.73	-	-	-
5-3B-1A	022-30-054	Undeveloped	5.63	-	-	-
5-3B-2	022-30-038	Undeveloped	10.00	-	-	-
5-3B-3	022-30-039	Undeveloped	5.22	-	-	-
5-3C	022-30-035[5]	Pump Station	0.19	-	-	1.00
5-5A-1	022-30-055	Undeveloped	5.60	-	-	-
5-5A-2	022-30-056	Undeveloped	0.59	-	-	-
5-5A-3	022-30-057	Undeveloped	3.15	-	-	-
5-6	022-30-041	Open Space	1.43	-	-	-
5-7	022-30-049[5]	Sewer Pump Station	9.12	-	-	1.00
Total Estimated Daily Special Benefit Trips						47,517.83
Internal Trip Reduction[6]						(13,810.00)

Total Special Benefit Trips	33,707.83

(1) *Average Trip Rate per Day is from the Institute of Traffic Engineer's, Trip Generation Report.*[10]

(2) *Average Number of Special Benefit Trips per Day is the Average Trip Rate times each 1,000 square feet of gross leasable area.*

(3) *Average Number of Special Benefit Trips per Day is the Average Trip Rate times number of hotel rooms for this parcel.*

(4) *Building Square Feet for this parcel is unavailable at this time. Estimate of square feet was used based on similar building in center.*

(5) *Pump Station trips are an estimate.*

(6) *The internal trip rate percentage was calculated by using the NCHRP 684 Internal Rate Capture Estimation Tool.*

[10] *Trip Generation, 9th Edition: An Informational Report of the Institute of Transportation Engineers*. (2012). Washington, DC: Institute of Transportation Engineers.

5. METHOD OF ASSESSMENT

5.1 Method of Assessment Spread

All parcels in the District on which residential dwellings will be constructed specially benefit from the improvements to an equivalent extent. These parcels are therefore assessed on a per lot basis for the maintenance and operation of the District, including incidentals and appurtenances, and will include all the costs of maintenance and/or operating the improvements. As outlined in Section 4, the total amount of general benefit from the improvements is determined to be 31.80%.

The maximum assessment rate for Fiscal Year 2020/21 is $497.07, which is a preliminary number. The actual assessment rate levied on each taxable parcel for Fiscal Year 2020/21 is $468.31.

Each year the maximum assessment rate shall be increased by the percentage change from April 1st of the prior year to April 1st of the current year by the U.S. Department of Labor, Bureau of Labor Statistics, Consumer Price Indexes, Pacific Cities and U.S. City Average, San Francisco-Oakland-Hayward. The April 1, 2020 CPI was not available at the time of writing of this Report. For purposes of this report, the CPI increase was estimated by using the February 2020/21 CPI.

5.2 Maximum Assessment Rates

The following table provides the historical maximum assessment rates for Fiscal Year 2000/01 through the current fiscal year:

Fiscal Year	CPI	Percentage Increase[1]	Maximum Rate
2000/01	178.7	N/A	$292.803
2001/02	189.1	5.82%	309.844
2002/03	193.0	2.06%	316.234
2003/04	197.3	2.23%	323.280
2004/05	198.3	0.51%	324.918
2005/06	202.5	2.12%	331.800
2006/07	208.9	3.16%	342.286
2007/08	215.842	3.32%	353.661
2008/09	222.074	2.89%	363.872
2009/10	223.854	0.80%	366.789
2010/11	227.697	1.72%	373.086
2011/12	234.121	2.82%	383.611
2012/13	238.985	2.08%	391.581
2013/14	244.675	2.38%	400.904
2014/15	251.495	2.79%	412.079
2015/16	257.622	2.44%	422.118
2016/17	264.565	2.70%	433.494
2017/18	274.589	3.79%	449.919
2018/19	283.422	3.22%	464.392
2019/20	294.801	4.01%	483.037
2020/21	299.690	2.91%[2]	497.074

(1) *Percentage increase from April 1 of the prior year to April 1 of the current year in the US Department of Labor, Bureau of Labor Statistics, Consumer Price Index, Pacific Cities and US City Average, San Francisco-Oakland-Hayward.*

(2) *The April 1, 2020 CPI was not available at the time of writing of this Report. The Fiscal Year 2020/21 CPI increase was estimated using the February 2020/21 CPI.*

5.3 Appeals

Any property owner who feels that the amount of their assessment is in error as a result of incorrect information being used to apply the foregoing method of spread, may file an appeal with the Finance Director of the City. Any such appeal is limited to correction of an assessment during the current or, if before July 1, the upcoming fiscal year. Upon the filing of any such appeal, the Finance Director shall promptly review the information provided by the property owner and if he/she finds that the assessment should be modified, he/she shall have the authority to make the appropriate changes in the assessment roll. If any such changes are provided after the assessment roll has been filed with the County for collection, the Finance Director is authorized to refund to the property owner the amount of any approved reduction.

6. ASSESSMENT DIAGRAM

The following page provides a copy of the assessment diagram of the District.

ASSESSMENT DIAGRAM NUMBER	ASSESSMENT PARCEL NUMBER
1	86-48-001
2	86-48-002
3	86-48-003
4	86-48-004
5	86-48-005
6	86-48-006
7	86-48-007
8	86-48-008
9	86-48-009
10	86-48-010
11	86-48-011
12	86-48-012
13	86-48-013
14	86-48-014
15	86-48-015
16	86-48-016
17	86-48-017
18	86-48-018
19	86-48-019
20	86-48-020
21	86-48-021
22	86-48-022
23	86-48-023
24	86-48-024
25	86-48-025
26	86-48-026
27	86-48-027
28	86-48-028
29	86-48-029
30	86-48-030
31	86-48-031
32	86-48-032
33	86-48-033
34	86-48-034
35	86-48-035
36	86-48-036
37	86-48-037
38	86-48-038
39	86-48-039
40	86-48-040
41	86-48-041
42	86-48-042
43	86-48-043
44	86-48-044
45	86-48-045
46	86-48-046
47	86-48-047
48	86-48-048
49	86-48-049
50	86-48-050
51	86-48-051
52	86-48-052
53	86-48-053
54	86-48-054
55	86-48-055
56	86-48-056
57	86-48-057
58	86-48-058
59	86-48-059
60	86-48-060
61	86-48-061
62	86-48-062
63	86-48-063
64	86-48-064
65	86-48-065
66	86-48-066
67	86-48-067
68	86-48-068
69	86-48-069
70	86-48-070
71	86-48-071
72	86-48-072
73	86-48-073
74	86-48-074
75	86-48-075
76	86-48-076
77	86-48-077
78	86-48-078
79	86-48-079
80	86-48-080
81	86-48-081
82	86-48-082
83	86-48-083
84	86-48-084
85	86-48-085
86	86-48-086
87	86-48-087
88	86-48-088
89	86-48-089
90	86-48-090
91	86-48-091
92	86-48-092
93	86-48-093
94	86-48-094
95	86-48-095
96	86-48-096
97	86-48-097
98	86-48-098

NOTE:
REFERENCE IS HEREBY MADE TO THE MAPS AND DEEDS OF RECORD IN THE OFFICE OF THE ASSESSOR OF THE COUNTY OF SANTA CLARA FOR A DETAILED DESCRIPTION OF THE LINES AND DIMENSIONS OF ANY PARCELS SHOWN HEREIN. THOSE MAPS SHALL GOVERN FOR ALL DETAILS CONCERNING THE LINES AND DIMENSIONS OF SUCH PARCELS. EACH PARCEL IS IDENTIFIED IN SAID MAPS BY ITS DISTINCTIVE ASSESSORS PARCEL NUMBER.

An assessment was levied by the City Council of the City of Milpitas, County of Santa Clara, State of California on the lots, pieces and parcels of land shown on this assessment diagram. Said assessment was levied on the 3rd day of June 2014, said assessment diagram and the assessment roll were recorded in the Office of the Superintendent of Streets of said City on the 3rd day of June 2014 reference is made to the assessment roll recorded in the Office of the Superintendent of Streets for the exact amount of each assessment levied against each parcel of land shown on this assessment diagram.

Mary Lavelle
City Clerk of the City of Milpitas

Filed in the Office of the City Clerk of the City of Milpitas, County of Santa Clara, State of California this 20th day of May 2014.

Mary Lavelle
City Clerk of the City of Milpitas

Recorded in the Office of the Superintendent of Streets of the City of Milpitas, County of Santa Clara, State of California, this 3rd day of June 2014.

Superintendent of Streets
City of Milpitas

Figure 1

PART F

ASSESSMENT DIAGRAM
LANDSCAPING AND LIGHTING
MAINTENANCE ASSESSMENT DISTRICT
NO. 98-1

MILPITAS CALIFORNIA

June 2014

1/1

7. ASSESSMENT ROLL

The assessment roll is a listing of the proposed assessment for Fiscal Year 2020/21 apportioned to each lot or parcel, as shown on the last equalized roll of the Assessor of the County of Santa Clara. The following pages show the assessment roll for Fiscal Year 2020/21.

City of Milpitas
Landscaping and Lighting Maintenance Assessment District
No. 98-1
Fiscal Year 2020/21 Assessment Roll

APN	Assessment ID	Owner	Fiscal Year 20/21 Levy	Rounding Adj.	Fiscal Year 20/21 Total
086-48-001	1	HUYNH CONNIE C AND NGUYEN HUNG	$468.31	(0.01)	$468.30
086-48-002	2	BHAT BALASUBRAMANYA AND RAMANANDA RAMYA N	468.31	(0.01)	468.30
086-48-003	3	SANTIAGO SIMON AND RACHEL	468.31	(0.01)	468.30
086-48-004	4	GDK ENTERPRISE LLC	468.31	(0.01)	468.30
086-48-005	5	NOGUERA ALEX D AND GUTIERREZ-NOGUERA MARLI	468.31	(0.01)	468.30
086-48-006	6	KEMPIS BENJAMIN S AND EVANGELINE Q TRUSTEE	468.31	(0.01)	468.30
086-48-007	7	SHILEDAR ADITYA AND BADHE PRIYA P	468.31	(0.01)	468.30
086-48-008	8	XU JIANZHONG AND WANG XIAOMIN	468.31	(0.01)	468.30
086-48-009	9	LAM TUAN AND NGUYEN YEN N	468.31	(0.01)	468.30
086-48-010	10	VU JOSEPH ANH AND TRAN YENLINH T	468.31	(0.01)	468.30
086-48-011	11	GUTIERREZ ALEJANDRO J TRUSTEE & ET AL & GUTIERREZ-NOGUERA MARLI TRUSTEE	468.31	(0.01)	468.30
086-48-012	12	ECAL ERLINDA E AND GEORGE E	468.31	(0.01)	468.30
086-48-013	13	DELA CRUZ DALE E AND JEANETTE M	468.31	(0.01)	468.30
086-48-014	14	TRINH DANH XUAN	468.31	(0.01)	468.30
086-48-015	15	NGUYEN TUNG K AND LAC V	468.31	(0.01)	468.30
086-48-016	16	LADLE GORDON B AND MARICAR C	468.31	(0.01)	468.30
086-48-017	17	JACKSON PAUL K AND BRITTON-JACKSON VIVIAN	468.31	(0.01)	468.30
086-48-018	18	CAO MICHAEL T AND TAM VUONG	468.31	(0.01)	468.30
086-48-019	19	MIGUELINO OSCAR T JR AND JUDY Y	468.31	(0.01)	468.30
086-48-020	20	BUI THUAN AND NGUYEN HA TRUSTEE	468.31	(0.01)	468.30
086-48-021	21	TRAN KENNETH L AND LENA L TRUSTEE	468.31	(0.01)	468.30
086-48-022	22	AGBUYA ALBERT P AND AMORFINA G TRUSTEE	468.31	(0.01)	468.30
086-48-023	23	PATEL BHUSHAN AND AARTI M	468.31	(0.01)	468.30
086-48-024	24	KOH CHENG-CHEE ET AL & KOH KEWSEK	468.31	(0.01)	468.30
086-48-025	25	GADIGE BHASKAR V AND HIMABINDU	468.31	(0.01)	468.30
086-48-026	26	AGARWAL SHIV AND TAYAL MANISHA TRUSTEE	468.31	(0.01)	468.30
086-48-027	27	NARVAEZ HOWARD M TRUSTEE & ET AL & CHU FONDA W TRUSTEE	468.31	(0.01)	468.30
086-48-028	28	LEUNG PAUL K AND NANCY M	468.31	(0.01)	468.30
086-48-029	29	TRAN MICHAEL AND TIFFANY	468.31	(0.01)	468.30
086-48-030	30	WU XILONG AND YU ZHEBIN TRUSTEE	468.31	(0.01)	468.30
086-48-031	31	WONG IRENE TRUSTEE	468.31	(0.01)	468.30
086-48-032	32	BAKHRU SUDHIR AND MULLASSERY DIVYA	468.31	(0.01)	468.30
086-48-033	33	RAGHUNATHA SWAROOP AND PADUBIDRI LALITHA TR	468.31	(0.01)	468.30
086-48-034	34	GUDURI VINOD AND LAKMA SHAILAJA	468.31	(0.01)	468.30
086-48-035	35	YAU TIMOTHEUS AND PEGGY	468.31	(0.01)	468.30
086-48-036	36	VOLADRI RAMA K AND GURJAL MANI R	468.31	(0.01)	468.30
086-48-037	37	CHU WEI MUN	468.31	(0.01)	468.30
086-48-038	38	AGRAWAL RAKESH AND KANSAL ESHA TRUSTEE	468.31	(0.01)	468.30
086-48-039	39	DUNN ERIC J AND BUI TRANG THI THUY	468.31	(0.01)	468.30
086-48-040	40	MUNE DEREK AND LEE TERRI L	468.31	(0.01)	468.30
086-48-041	41	AGGARWAL RAHUL AND SHELLY	468.31	(0.01)	468.30
086-48-042	42	RAO QIZHOU AND SHAN MENGWEN	468.31	(0.01)	468.30
086-48-043	43	LOW NEE-LOONG AND OH BEE-BEE	468.31	(0.01)	468.30
086-48-044	44	VOGETY RAMANAGOPAL V AND VEDANTAM KANYALAKS	468.31	(0.01)	468.30
086-48-045	45	MAI KENNY CHI AND PAULINE	468.31	(0.01)	468.30
086-48-046	46	DO KHAN AND NGUYEN THU K TRUSTEE	468.31	(0.01)	468.30
086-48-047	47	TSAI JULIE Y ET AL & TSAI CHRISTINE P	468.31	(0.01)	468.30
086-48-048	48	GDK ENTERPRISES LLC	468.31	(0.01)	468.30
086-48-049	49	PEI NICHOLAS	468.31	(0.01)	468.30
086-48-050	50	WANG YUN AND TONG MIN	468.31	(0.01)	468.30
086-48-051	51	LY PETER T	468.31	(0.01)	468.30
086-48-052	52	WONG JAMES	468.31	(0.01)	468.30
086-48-053	53	FANG XIONG AND WANG QING	468.31	(0.01)	468.30
086-48-054	54	LAN DI AND CAO RONG TRUSTEE	468.31	(0.01)	468.30
086-48-055	55	LAM RONNY AND JULIE TRAN TRUSTEE	468.31	(0.01)	468.30
086-48-056	56	ZHOU GUO QUAN AND LIU XIN	468.31	(0.01)	468.30
086-48-057	57	LI HONG AND TU MINGHU	468.31	(0.01)	468.30
086-48-058	58	DUGYALA ANURADHA TRUSTEE	468.31	(0.01)	468.30
086-48-059	59	AU JONSON C AND OR SOPHIA YUK YU	468.31	(0.01)	468.30
086-48-060	60	TRUONG MAI C ET AL	468.31	(0.01)	468.30
086-48-061	61	BASANI SHAILESH KUMAR AND SUPRIYA TRUSTEE	468.31	(0.01)	468.30

City of Milpitas
Landscaping and Lighting Maintenance Assessment District
No. 98-1
Fiscal Year 2020/21 Assessment Roll

APN	Assessment ID	Owner	Fiscal Year 20/21 Levy	Rounding Adj.	Fiscal Year 20/21 Total
086-48-062	62	LEE ANDREW AND LIU LISA	468.31	(0.01)	468.30
086-48-063	63	AZALI ALBERTUS H AND TUNGGAL WENDA TRUSTEE	468.31	(0.01)	468.30
086-48-064	64	NIGAM AJAY AND ANJULA TRUSTEE	468.31	(0.01)	468.30
086-48-065	65	KOMATSU HIROYUKI AND MIKA	468.31	(0.01)	468.30
086-48-066	66	NAIR SEEMA	468.31	(0.01)	468.30
086-48-067	67	BIALA CHARITO M TRUSTEE & ET AL & BIALA FE T TRUSTEE	468.31	(0.01)	468.30
086-48-068	68	NITAFAN DEMETRIO B AND CECILIA C	468.31	(0.01)	468.30
086-48-069	69	NGUYEN TANYA VINH ET AL & NGUYEN STEVEN D	468.31	(0.01)	468.30
086-48-070	70	HUYNH QUANG AND VO JASMINE TRUSTEE	468.31	(0.01)	468.30
086-48-071	71	PATEL GITA V TRUSTEE	468.31	(0.01)	468.30
086-48-072	72	FENG HAIJUN AND ZHONG WEIHONG	468.31	(0.01)	468.30
086-48-073	73	XUE WEI AND SUN LI	468.31	(0.01)	468.30
086-48-074	74	GANGAIAH MAHENDRA AND VENKATARAMU CHANDRIKA	468.31	(0.01)	468.30
086-48-075	75	PRABHU VIVEK R AND PRADHU SUNITA T TRUSTEE	468.31	(0.01)	468.30
086-48-076	76	HSIAO JEFF C AND NGUYEN ANGELA T TRUSTEE &	468.31	(0.01)	468.30
086-48-077	77	CHIN MICHAEL AND MARY TRUSTEE	468.31	(0.01)	468.30
086-48-078	78	TRUONG PHILLIP TRUSTEE	468.31	(0.01)	468.30
086-48-079	79	XIONG XIANG D AND YEE VICKY TRUSTEE & ET AL	468.31	(0.01)	468.30
086-48-080	80	REDDY SAMINA AGUTHU ET AL & DESAI NIRAJ SHIRISH	468.31	(0.01)	468.30
086-48-081	81	ARUNACHALAM SARAVANAN AND KRISHNAMOORTHY SA	468.31	(0.01)	468.30
086-48-082	82	MA NAN	468.31	(0.01)	468.30
086-48-083	83	BUKIN KONSTANTIN V AND HSIEH PING	468.31	(0.01)	468.30
086-48-084	84	DESAI RAJENDRA J AND PRATIMA R	468.31	(0.01)	468.30
086-48-085	85	ZHAO QIANG JIMMY AND YUO JENNY BIN	468.31	(0.01)	468.30
086-48-086	86	TAN ALICIA SHUFANG TRUSTEE	468.31	(0.01)	468.30
086-48-087	87	PIERCE BRAD A AND KOH CHENG-CHEE TRUSTEE	468.31	(0.01)	468.30
086-48-088	88	AHUJA SUMEET AND RUCHI	468.31	(0.01)	468.30
086-48-089	89	DEVADAS MANJUNATH AND KARVETI HEMALATHA	468.31	(0.01)	468.30
086-48-090	90	LIEU TONY AND TIFFANY	468.31	(0.01)	468.30
086-48-091	91	KRISHNAN ANANTA AND KUMAR MAYA	468.31	(0.01)	468.30
086-48-092	92	LIM PERRY F AND DIXIE M TRUSTEE	468.31	(0.01)	468.30
086-48-093	93	LU COURTNIE TU TRINH	468.31	(0.01)	468.30
086-48-094	94	QUANG TONY D	468.31	(0.01)	468.30
086-48-095	95	SINGLA SANJEEV K AND ANITA	468.31	(0.01)	468.30
086-48-096	96	PAL SHIRISH C AND DAS SUJATA S	468.31	(0.01)	468.30
086-48-097	97	ANNADATA ANIL K AND VEEPURI SRAVANTHI	468.31	(0.01)	468.30
086-48-098	98	ONG PHILIP J JR AND UYEN T TRUSTEE	468.31	(0.01)	468.30
Total: 98 Parcels			**$45,894.38**	**-$0.98**	**$45,893.40**

CITY OF MILPITAS

LANDSCAPING AND LIGHTING MAINTENANCE DISTRICT (LLMD) 98-1

(N.T.S.)

2020-2021 FISCAL YEAR LANDSCAPE AREA FUNDED FOR MAINTENANCE

CITY OF MILPITAS
AGENDA REPORT
(AR)

Item Title:	**Adopt a Resolution to Confirm the Order of the Director of Emergency Services Imposing Regulations to Protect Essential Workers And Consumers Through The Use Of Face Coverings**
Category:	Consent Calendar-Leadership and Support Services
Meeting Date:	5/5/2020
Staff Contact:	**Christopher J. Diaz, City Attorney, 408-586-3040**
Recommendation:	Adopt a Resolution to confirm the Order of the Director of Emergency Services imposing regulations to protect essential workers and consumers through the use of face coverings.

Background:
At a special City Council meeting held on April 21, 2020, the Milpitas City Council directed the City's Emergency Services Director, Interim City Manager Steve McHarris, to issue an order requiring workers, customers and visitors at certain Essential Businesses, as defined by the Santa Clara County Shelter In Place Order, to wear face coverings at those Essential Businesses. On April 22, 2020, pursuant to the City's general police powers, the emergency authority contained in Milpitas Municipal Code I-1-4.03, and Government Code Section 8634, the Emergency Services Director did issue an order requiring workers, customers, and visitors at certain Essential Businesses to wear face coverings at those Essential Businesses. Pursuant to Milpitas Municipal Code V-1-4.03, the City Council must confirm this order at the earliest practicable time in order for it to remain valid.

Analysis:
At the April 7, 2020 Milpitas City Council meeting, Councilmember Montano requested City staff to research a Los Angeles order related to face coverings to prevent the spread of COVID-19 and to explore similar guidance in Milpitas.

City staff presented its findings on the Los Angeles and other orders at the City Council meeting on April 21, 2020. At that juncture, Contra Costa, Marin, Alameda, San Mateo, San Francisco, Sonoma, and Los Angeles Counties, as well as the Cities of Fremont, Glendale, Beverly Hills, and Los Angeles, had issued orders regarding face coverings, and the County of Santa Clara had issued guidance strongly urging the public to wear face coverings. Following a discussion, the Milpitas City Council unanimously directed the Interim City Manager, in his role as the City's Emergency Services Director, to issue a regulation requiring use of face coverings at essential businesses in the City of Milpitas.

On April 22, the Interim City Manager issued a "Director Of Emergency Services Order Imposing Regulations To Protect Essential Workers And Consumers Through The Use Of Face Coverings To Prevent The Spread Of The Novel Coronavirus (COVID-19)" ("Order"), which took effect at 8:00 a.m. on April 24, 2020, and will continue until the end of the local emergency period. The Order requires that individuals who work at or perform services at certain Essential Businesses wear face coverings (which need not be medical-grade masks or N95 respirators, but rather include cloth coverings), employers provide face coverings for their employees, customers and visitors of the Essential Businesses wear face coverings, and provides that business owners and operators may refuse admission or service to those who fail to wear face coverings. Children six (6) years of age and under are exempted from the requirements. Enforcement of the Order

set forth in Milpitas Municipal Code Chapter I-21, with education being the first step in the enforcement process, and to the extent an individual cited under the Order can show with documentation sufficient to City staff that they have an economic hardship specific to COVID-19, City staff may dismiss the citation in the interest of justice.

In accordance with Milpitas Municipal Code V-1-4.03, the City Council must confirm the Order at the earliest practicable time in order to remain valid.

The County of Santa Clara recently issued a new County Order that takes effect at 11:59 p.m. on May 3rd. Although the City's Order cited to the County's prior March 31st Order, under the new County Order, the essential businesses listed in the City Order are still considered essential but listed in Section 16(f) of the new County Order versus 13(f) of the prior County Order. Thus, the City's Order still remains valid and binding even in light of the new County Order.

Policy Alternative:

Alternative: Do not adopt the Resolution confirming the face covering Order, or seek changes to the Order.

Pros: None.
Cons: The Order will not remain valid. If the Council merely seeks changes, the Order could remain valid but with potential changes directed by the City Council.

Reason not recommended: The City is the first city in Santa Clara County to issue a face covering order. Not confirming the Order would limit the City's efforts to prevent the spread of COVID-19 and be a leader in flattening the curve. The Council can, however, seek changes, if desired.

Fiscal Impact:
None at this time.

California Environmental Quality Act:
Under Title 14 of the California Code of Regulations, Section 15061(b)(3) and Section 15378(b), each as a separate and independent basis, the City Council's adoption of the resolution confirming the order is exempt from the requirements of the California Environmental Quality Act (CEQA) in that it is not a Project which has the potential for causing a significant effect on the environment.

Recommendation:
Adopt the Resolution to confirm the Order of the Director of Emergency Services imposing regulations to protect essential workers and consumers through the use of face coverings.

Attachment:
Resolution and Exhibit A (Order imposing regulations)

RESOLUTION NO. ____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MILPITAS CONFIRMING THE ORDER OF THE DIRECTOR OF EMERGENCY SERVICES IMPOSING REGULATIONS TO PROTECT ESSENTIAL WORKERS AND CONSUMERS THROUGH THE USE OF FACE COVERINGS TO PREVENT THE SPREAD OF THE NOVEL CORONAVIRUS (COVID-19)

WHEREAS, international, national, state and local health and governmental authorities are responding on an urgent, emergency basis to an unprecedented outbreak of respiratory disease caused by a novel coronavirus that emerged in 2019 ("COVID-19"); and

WHEREAS, on March 16, 2020, the County of Santa Clara, along with other Bay Area counties, issued an order directing residents to shelter at home beginning March 17, 2020. The County's Shelter-in-Place Order ("County Order") also requires all businesses, except Essential Businesses as described in the County Order, to cease all activities at facilities located within the County except minimum basic operations. The County Order has since been extended with modifications and is currently in effect through May 3, 2020 and is expected to be extended again with further potential modifications; and

WHEREAS, on March 12, 2020, the Interim City Manager, acting as the Director of Emergency Services, proclaimed the existence of a local emergency in response to the COVID-19 pandemic within the City of Milpitas, and on March 17, 2020; the Milpitas City Council ratified the emergency proclamation; and

WHEREAS, the number of confirmed cases and deaths in the County of Santa Clara and Milpitas continues to grow; and

WHEREAS, the Centers for Disease Control has advised that individuals use simple cloth face coverings in public in addition to social distancing and good hygiene to help slow the spread of the virus; and

WHEREAS, workers continue to provide essential services during this emergency, and some of these critical workers face an outsized risk of exposure. It is imperative that medical workers and first responders continue to follow the advice of health officials and wear hospital grade masks, such as surgical masks or N95 respirators. Other essential workers who come into frequent contact with the public must also be protected from infection. There is a worldwide shortage of medical grade masks, and health officials are increasingly urging non-medical workers to wear non-medical grade cloth face coverings to help curb the spread of COVID-19 by preventing the transmission of respiratory droplets that contain the virus; and

WHEREAS, on April 21, 2020, the Milpitas City Council unanimously directed the Interim City Manager to issue a regulation requiring the use of face coverings at Essential Businesses in the City; and

WHEREAS, in the interest of public health, safety and welfare as affected by the emergency caused by the spread of COVID-19, and to aid the City's efforts to slow the pace of community spread and avoid unnecessary strain on our medical system, the Interim City Manager, acting as the Director of Emergency Services, issued an Order Imposing Regulations To Protect Essential Workers And Consumers Through The Use Of Face Coverings To Prevent The Spread Of The Novel Coronavirus (COVID-19) ("City's Face Covering Order") within the City pursuant to his existing authority contained at Milpitas Municipal Code V-1-4.03-1 and Government Code Section 8634 as a regulation related to the protection of life as affected by the emergency posed by COVID-19; and

WHEREAS, the City's Face Covering Order requires that individuals who work at or perform services at certain Essential Businesses wear face coverings (which need not be medical-grade masks or N95 respirators, but rather include cloth coverings), employers provide face coverings for their employees, customers and visitors of the Essential Businesses wear face coverings, and provides that business owners and operators may refuse admission or service to those who fail to wear face coverings; with children six (6) years of age and under excepted; and

WHEREAS, enforcement of the City's Face Covering Order is as set forth in Milpitas Municipal Code Chapter I-21, with education being the first step in the enforcement process. Pursuant to Milpitas Municipal Code 1-21-1.07, to the extent an individual cited under the Order can show with documentation sufficient to City staff that they have an economic hardship specific to COVID-19, staff may dismiss the citation in the interest of justice; and

WHEREAS, the City's Face Covering Order was issued on April 22, 2020, and took effect at 8:00 a.m. on April 24, 2020, and will continue until the end of the local emergency period, but must be confirmed by the City Council at the earliest practicable time in order to remain valid.

NOW, THEREFORE, the City Council of the City of Milpitas hereby finds, determines, and resolves as follows:

Section 1. The Interim City Manager, acting as the Director of Emergency Services, is authorized to make and issue rules and regulations on matters reasonably related to the protection of life and property as affected by such emergency pursuant to California Government Code section 8634 and Milpitas Municipal Code V-1-4.03. The Interim City Manager issued the City's Face Covering Order, attached as **Exhibit "A"** and incorporated herein by reference, as a regulation related to the protection of life as affected by the emergency posed by COVID-19.

Section 2. The City Council hereby confirms the City's Face Covering Order, with it to remain in effect until the local emergency is terminated.

Section 3. Severability. If any provision of this Resolution or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications, and to this end the provisions of this Resolution are declared to be severable.

Section 4. Effective Date. This Resolution shall become effective immediately.

PASSED AND ADOPTED this _____ day of _____, 2020, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

Mary Lavelle, City Clerk

APPROVED:

Rich Tran, Mayor

APPROVED AS TO FORM:

Christopher J. Diaz, City Attorney

CITY OF MILPITAS
DIRECTOR OF EMERGENCY SERVICES ORDER
IMPOSING REGULATIONS TO PROTECT ESSENTIAL WORKERS AND CONSUMERS THROUGH THE USE OF FACE COVERINGS TO PREVENT THE SPREAD OF THE NOVEL CORONAVIRUS (COVID-19)

WHEREAS, international, national, state and local health and governmental authorities are responding on an urgent, emergency basis to an unprecedented outbreak of respiratory disease caused by a novel coronavirus that emerged in 2019 ("COVID-19"); and

WHEREAS, on February 10, 2020, the County of Santa Clara ("County") ratified the declaration of its Health Officer and proclamation of its Director of Emergency Services of a local emergency and declared a local and public health emergency as a result of COVID-19;

WHEREAS, on March 4, 2020, Governor Newsom declared a State of Emergency to make additional resources available, formalize emergency actions already underway across multiple state agencies and departments, and help the state prepare for the broader spread of COVID-19; and

WHEREAS, on March 11, 2020, the World Health Organization declared the COVID-19 outbreak a pandemic; and

WHEREAS, on March 16, 2020, the County of Santa Clara joined Contra Costa, Marin, San Francisco, San Mateo, Alameda counties on issuing a legal order directing their respective residents to shelter at home for three weeks beginning March 17, 2020. The County's Shelter-in-Place Order ("County Order") also requires all businesses except Essential Businesses as described in the Order to cease all activities at facilities located within the County except minimum basic operations and prohibits all public and private gatherings of any number of people except for limited purposes as well as all non-essential travel; and

WHEREAS, the Interim City Manager, acting as the Director of Emergency Services, proclaimed the existence of a local emergency in response to the COVID-19 pandemic within the City of Milpitas on March 12, 2020; and

WHEREAS, on March 17, 2020, the Milpitas City Council ratified the Interim City Manager's Emergency Proclamation regarding the existence of a local emergency; and

WHEREAS, on March 31, 2020, the County Order was extended through May 3, 2020 with modifications; and

WHEREAS, as of April 22, 2020, there are 1,962 confirmed cases and 94 deaths from COVID-19 in the County of Santa Clara with 66 confirmed cases in Milpitas; and

WHEREAS, the Centers for Disease Control is now advising that individuals use simple cloth face coverings in public in addition to social distancing and good hygiene to help slow the spread of the virus; and

WHEREAS, workers continue to provide essential services during this emergency, and some of these critical workers face an outsized risk of exposure. It is imperative that medical workers and first responders continue to follow the advice of health officials and wear hospital grade masks, such as surgical masks or N95 respirators. Other essential workers who come into frequent contact with the public must also be protected from infection. There is a worldwide shortage of medical grade masks, and health officials are increasingly urging non-medical workers to wear non-medical grade cloth face coverings to help curb the spread of COVID-19, by preventing the transmission of respiratory droplets that contain the virus;

WHEREAS, in the two weeks prior to the date of this Order, Contra Costa, Marin, Alameda, San Mateo, San Francisco, Sonoma, and Los Angeles counties, as well as the Cities of Fremont, Glendale, Beverly Hills, and Los Angeles, have issued orders requiring individuals to wear face coverings in public places, and the County of Santa Clara has issued guidance strongly urging the public to wear face coverings;

WHEREAS, in the interest of public health, safety and welfare as affected by the emergency caused by the spread of COVID-19, and to aid the City's efforts to slow the pace of community spread and avoid unnecessary strain on our medical system, it is necessary to issue these regulations for the protection of the public health, safety; and.

WHEREAS, the City's Emergency Services Director is issuing this Order pursuant to his existing authority contained at Milpitas Municipal Code V-1-4.03-1 as a regulation related to the protection of life as affected by the emergency posed by COVID-19.

NOW, THEREFORE, BE IT RESOLVED, by virtue of the authority granted pursuant to Milpitas Municipal Code V-1-4.03, the Director of Emergency Services issues the following Order, effective at 8:00 a.m. on April 24, 2020 and until the end of the local emergency period, which shall apply to persons and places within the City of Milpitas:

Section 1. All workers who work at businesses or perform services under Paragraph 13(f) of the County of Santa Clara's Shelter-in-Place Order, in the following subparagraphs:

i. Healthcare Operations as defined by the County Order;

ii. Grocery stores, certified farmers' markets, farm and produce stands, supermarkets, food banks, convenience stores, and other establishments engaged in the retail sale of unprepared food, canned food, dry goods, non-alcoholic beverages, fresh fruits and vegetables, pet supply, fresh meats, fish, and poultry, as well as hygienic products and household consumer products necessary for personal hygiene or the habitability, sanitation, or operation of residences. The businesses included in this subparagraph (ii) include establishments that sell multiple categories of products provided that they sell a significant amount of essential products identified in this subparagraph, such as liquor stores that also sell a significant amount of food;

iii. Gas stations and auto-supply, auto-repair (including, but not limited to, for cars, trucks, motorcycles and motorized scooters), and automotive dealerships, but only for the purpose of providing auto-supply and auto-repair services (and not, by way of example, car sales or car washes);

iv. Bicycle repair and supply shops;

v. Hardware stores;

vi. Plumbers, electricians, exterminators, and other service providers who provide services that are necessary to maintaining the habitability, sanitation, and operation of occupied residences and Essential Businesses, but not for cosmetic or other purposes;

vii. Laundromats, drycleaners, and laundry service providers;

viii. Restaurants and other facilities that prepare and serve food, but only for delivery or carry out;

ix. Funeral home providers, mortuaries, cemeteries, and crematoriums, to the extent necessary for the transport, preparation, or processing of bodies or remains;

x. Businesses that have the primary function of shipping or delivering groceries, food, or other goods directly to residences or businesses;

xi. Taxis, rental car companies, rideshare services (including shared bicycles and scooters), and other private transportation providers; and

xii. Professional services, such as legal, notary, or accounting services, when necessary to assist in compliance with non-elective, legally required activities;

shall wear face coverings over their noses and mouths ("Face Coverings") while performing their work. Face Coverings need not be medical-grade masks or N95 respirators, but rather include cloth coverings, such as scarves and bandanas, that cover the nose and mouth. All essential, non-medical workers required to wear Face Coverings must frequently (at least once a day) wash any reusable face coverings, for the health and safety of themselves and others. Single-use Face Coverings must be properly discarded into trash receptacles.

Section 2. Employers of all workers who work at businesses or perform services described in Section 1 of this Order must provide, at their expense, non-medical grade Face Coverings for their employees.

Section 3. All customers and visitors, over six (6) years of age, who visit the businesses and organizations described in Section 1 of this Order must wear Face Coverings to provide additional protection for employees and customers.

Section 4. A business owner or operator described in Section 1 of this Order may refuse admission or service to any individual over six (6) years of age who fails to wear a Face Covering as required by this Order provided that such business or operator has posted in a conspicuous location, which is visible to any customer or visitor, a notice of the Face Covering requirement imposed by this Order.

Section 5. Violations of this Order shall be enforced as set forth in Milpitas Municipal Code Chapter I-21 with education being the first step in the enforcement process. Pursuant to Milpitas Municipal Code Chapter 1-21-1.07, to the extent an individual cited under this Order can show with documentation sufficient to City staff that they have an economic hardship specific to COVID-19, city staff may dismiss the citation in the interest of justice.

Section 6. This Order shall remain in effect for the duration of the local emergency proclaimed in response to the COVID-19 crisis.

Section 7. Under Title 14 of the California Code of Regulations, Section 15061(b)(3) and Section 15378(b), each as a separate and independent basis this Order is exempt from the requirements of the California Environmental Quality Act (CEQA) in that it is not a Project which has the potential for causing a significant effect on the environment.

Section 8. If any section, subsection, sentence, clause or phrase of this Order is for any reason held by a court of competent jurisdiction to be invalid, such a decision shall not affect the validity of the remaining portions of this Order. The Director of Emergency Services hereby declares that he would have issued this Order and each section or subsection, sentence, clause and phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses or phrases be declared invalid.

Approved and issued on April 22, 2020.

Steven G. McHarris
Interim City Manager/Director of Emergency Services

CITY OF MILPITAS
AGENDA REPORT
(AR)

Item Title:	**Public Hearing and Adopt a Resolution Approving the Fiscal Year 2020-21 Master Fee Schedule**
Category:	Public Hearings-Leadership and Support Services
Meeting Date:	5/5/2020
Staff Contact:	**Walter C. Rossmann, 408-586-3111**
Recommendations:	1. Move to close the Public Hearing following any comments. 2. Adopt a Resolution approving the Fiscal Year 2020-21 Master Fee Schedule.

Background:

Consistent with Council adopted fiscal policy regarding user fees, staff is bringing forward the attached Master Fee Schedule for Fiscal Year 2020-21 for Council consideration and adoption. Per the fiscal policy, all fees were reviewed for potential adjustments to recover the full cost of services provided.

The City's master fee schedule identifies fees for services and activities provided at the request of, or on behalf of, a single party as opposed to the public at large. Examples of user and regulatory fees collected by the City of Milpitas and municipalities throughout California include, but are not limited to:

- **Planning Fees**, such as entitlement review and review for compliance with the zoning code
- **Building Fees**, such as permitting of new construction or modifications to existing structures
- **Engineering Fees**, such as map review, encroachment permitting, and public improvement review
- **Utility Fees**, such as requests for sewer lateral inspections, and restoration of discontinued service
- **Police Fees**, such as vehicle impound and false alarm response
- **Animal Regulation Fees,** such as licensing and impound fees
- **Fire Fees**, such as annual inspections and construction review to ensure compliance with the fire code
- **Recreation Fees**, such as program participation fees, and facility rental fees
- **Administrative Fees**, such as requests for public records

User and regulatory fees specifically exclude:

- Taxes
- Assessments
- Franchise Fees
- Development Impact Fees
- Fines or Penalties
- Utility Rates and Services Charges

User and regulatory fees are established by the City Council. The master fee schedule was comprehensively updated on May 15, 2019. The 2019 fee schedule update was influenced by the results of a comprehensive study of development services fees. Because significant changes to fees were proposed as part of the 2019 update, staff held a study session to seek Council input prior to bringing the fee schedule forward for Council consideration. With the approval of the FY 2019-20 Master Fee Schedule on May 15, 2019, the City Council also directed staff to bring the Master Fee Schedule on an annual basis as part of the budget process with an escalation to reflect increases in staff cost.

The significant changes to fees adopted by the Council in 2019 were based on a cost of service study that typically completed every three to five years with incremental updates occurring in the years in between comprehensive studies. The update as described below represents an interim year update with minor, incremental, changes proposed that incorporate feedback received during prior fee studies and feedback received subsequent to adoption of the City's current schedule of fees.

This item and staff's recommendations are intended to be considered upon completion of a public hearing. The public hearing provides all interested parties with an opportunity to comment or request clarification regarding any of the fees proposed for update. Prior to the public hearing, the City published a newspaper notice of the public hearing and notifies all interested parties that have requested to be notified regarding proposed fee updates. Further, the proposed FY 2020-21 Master Fee Schedule has been made available for inspection on the City's website since April 24, 2020 as required by law.

Analysis:

The recommended changes to the Master Fee Schedule, as summarized in the table below, are focusing on maintaining cost recovery levels consistent with the Council approved fiscal policy by increasing certain fees consistent with average salary increases as granted by the City Council. For illustration purposes, staff attached to this staff report the FY 2020-21 Master Fee Schedule by department showing the FY 2019-20 adopted fees and FY 2020-21 proposed fees. For the two fees, which are recommended to be increased by more than 5%, and one new fee brought forward per previous Council direction, staff is providing a cost of services analysis attached to this staff report.

Summary of Recommended Changes to Fees

Description	Count	Percentage*
Fees Proposed to Remain Unchanged	377	51%
Fees Proposed to Increase by 5% or Less	350	48%
Fees Proposed to Increase by More than 5%	2	1%
New Fees Proposed	1	Less than 1%
Total Fees Examined	730	100%

*Amounts rounded for illustration

Additionally, as an information item, this staff report provides a summary and impact of the Council approved Water and Sewer rate increases effective July 1, 2020 and forthcoming ambulance services fees.

Fees Proposed to Remain Unchanged or Increase by 5% or Less

Ninety-nine percent (99%) of user and regulatory fees are proposed to remain unchanged or increase by five percent (5%) or less. Since this represents an interim year update, any modifications to fees are simply meant to avoid degradation of existing cost recovery levels per hour of City service provided. Most service-based fees are proposed to increase by four percent (4%) consistent with prior Council direction. This amount is intended to represent a reasonable estimate of annual cost inflation for salaries and wages. The fee adjustments reflect negotiated changes in personnel costs for employees commonly classified as miscellaneous employees and employees commonly classified as safety employees.

- 5% increase for safety employees: used for fire fees and police fees
- 4% increase for miscellaneous employees: used for all other fees

The majority of fees proposed to remain unchanged at this time are Recreation and Community Services fees. The City offers year-round programming and facilitates rentals of various City facilities. Staff is in the process completing a Parks Master Plan study which includes studying market rates for recreation program and facility rental fees. Future recommendations on rate increases will be presented to City Council via a separate agenda item.

Fees Proposed to Increase by More than 5%

Two fees are proposed to increase by more than 5%. On December 2019, the City Council approved the amendments to the ordinance relating to discontinuance and restoration of water service and the Policy on Discontinuance of Residential Water Service (Policy). As part of these amendments, warning notice fee and water service restoration fees were removed and subsequently added to the FY 2019-20 Master Fee Schedule. As part of the FY 2020-21 Proposed Master Fee Schedule, staff recommends increasing the water restoration fees from $50 during normal business hours and $125 during non-operational hours as outlined below to achieve full cost recovery.

The proposed fees are:

- Restoration Fee During Normal Operating Hours: $128
- Restoration Fee During Non-Operational Hours: $337

Prior to discontinuing service utility customers receive a minimum of three separate notifications regarding amounts due and procedures to avoid discontinuance of service including guidance for negotiating a payment plan.

In compliance with the City's Policy on Discontinuance of Residential Water Service, the City will continue to charge the following restoration fees for low income residents:

- Restoration Fee During Normal Operating Hours: $50 (no change proposed)
- Restoration Fee During Non-Operational Hours: $150 (no change proposed)

New Fee Proposed

During the February 18, 2020 City Council conducted a public hearing and introduced an ordinance amending the City's Municipal Code to establish regulations and a permitting requirement for short-term rentals (STRs). This followed more than a year of community outreach meetings and commission meetings soliciting public comments and community input and concerns. A short-term rental permit fee is proposed to allow the City to recover the costs of review, approval, and administration of short-term rental permits. The proposed fee is intended to recover the City's full cost of service.

- Short-term rental permit fee: $488

As approved by the City Council on February 18, 2020, the short-term rental ordinance provides for a 12-month pilot program. During the pilot period, staff will carefully monitor and evaluate the time and cost involved in processing the new STR permits and recommend adjustments to the fee, as needed.

Water and Sewer Service Rates

On February 5, 2019, the City Council adopted Ordinance Nos. 120.48 and 208.53, adjusting water, recycled water, and sewer service charges and fees for Fiscal Years FY 2018-19 through FY 2022-23. In accordance with the rate ordinances, Water and Sewer rates will increase by approximately 6 percent and 8 percent, respectively. For a typical single-family residential household, the bi-monthly water charge will increase by $6.47 from $122.57 to $129.04; and the bi-monthly sewer charge will increase by $8.55 from $102.52 to $111.07. The combined monthly increased cost for a typical single-family residential household will be $7.51.

With the increased water rates, the Water Utility is better positioned to respond to water system gaps including infrastructure expected to be identified in the Water Master Plan currently under way and ensure compliance with the American Water Infrastructure Act (AWIA). The Master Plan and risk assessment component of AWIA will be completed by December 2020. The increased water rates will also ensure sufficient funds are available to pay for projected wholesale rates from our two providers for future years. Similarly, the sewer rate increase will better position the Sewer Utility to cover anticipated funding needs for CIP especially with many unknowns regarding the modernization of the San Jose/Santa Clara Regional Wastewater Facility.

It is important to note that all references to rates for water and sewer services are included in the Master Fee Schedule for information purposes only and are not being considered, modified, or increased as part of

update of user and regulatory fees because the rate adjustments are required in accordance with the Council approved rate ordinances.

Ambulance Service Fees
The Fire Department is finalizing implementing the Ambulance Service. As part of the implementation, for the May 19, 2020 City Council meeting, Fire plans to bring forward an ordinance authorizing the Fire Department to recover costs for providing ambulance services. As part of bringing forward the ordinance, Fire will also recommend amending the FY 2020-21 Master Fee Schedule to include ambulance services related fees.

Policy Alternatives:
Alternative 1: Leave fees unchanged and do not adjust with a 5% increase for fire and police fees and 4% increase for all other fees.

Pros: Residents and businesses will not experience an increase in fees.
Cons: The City will lose estimated revenue in the amount of $600,000.
Reason not recommended: Consistent with the Council approved fiscal policies, staff reviewed fees to recover the full cost of services provided and maintain cost recovery levels. The fee adjustments reflect negotiated increases in salary and wages for employees.

Alternative 2: Implement an inflationary adjustment of 2.5% per the February 2020 Bay Area Consumer Price Index as published by the U.S. Department of Labor.

Pros: Residents and businesses will experience an increase consistent with the Consumer Price Index.
Cons: The City will lose estimated revenue in the amount of $250,000 to $300,000.
Reason not recommended: Consistent with the Council approved fiscal policies, staff reviewed fees to recover the full cost of services provided and maintain cost recovery levels. The fee adjustments reflect negotiated increases in salaries and wages for employees.

Fiscal Impact:
The anticipated revenue impact of the proposed changes included in the fee schedule update is $600,000 based on historical transaction volumes. In light of the current pandemic associated with COVID-19, it is important to note this study does not attempt to forecast aggregate decreases in total costs recovered that may occur as a result of “shelter-in-place” orders and associated economic slowdown. While adjusting fees and billing rates will provide a fiscal impact in the form of additional revenue, the revenue is not intended to be used to fund new services, rather the revenue is intended to offset the costs of providing existing services that are recoverable from fees.

California Environmental Quality Act:
The fees (charges) authorized by this Resolution are statutorily exempt from environmental review under Public Resources Code Section 21080(b)(8) of the California Environmental Quality Act, which provides an exemption for the establishment or modification of charges by public agencies, which the public agency finds are for the purpose of meeting operating expenses.

Recommendations:
1. Move to Close the Public Hearing following any comments.
2. Adopt a Resolution Approving the Fiscal Year 2020-21 Master Fee Schedule.

Attachments:
1. Resolution Approving the Master Fee Schedule for Fiscal Year 2020-21
2. Illustration of Current and Proposed Fees
3. Cost of Service Analysis for Fee Modifications
4. Letter from Sunnyhills Neighborhood Association

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MILPITAS APPROVING THE MASTER FEE SCHEDULE FOR FISCAL YEAR 2020-21

WHEREAS, the City of Milpitas (the "City") charges fees for licenses, permits, and various services provided by the City (collectively, the "Fees"); and

WHEREAS, the Fees are established to offset all, or portions of, the costs of providing the various services for which the Fees are collected; and

WHEREAS, certain of the Fees are subject to the adoption procedures set forth under Government Code section 66016, and others are subject to the procedures of Government Code section 66018; and

WHEREAS, in addition to Fees, the City's Master Fee Schedule also identifies various fines and penalties (the "Penalties") for violations of applicable State or local law, including violation of a provision of any ordinance or the City's Municipal Code; and

WHEREAS, it is useful to consolidate into one place such fees for services, permits, licenses and fines for public information and transparency into a Master Fee Schedule, attached hereto as **Exhibit 1** and incorporated into this Resolution by this reference; and

WHEREAS, on February 5, 2019, pursuant to the procedural and substantive requirements of article XIII D, section 6 of the California Constitution (also known as "Proposition 218"), the City Council approved a schedule of automatic increases for the rates for its water and sewer service fees and charges; and

WHEREAS, all references to the approved schedule of automatic increases for the rates for water and sewer service fees and charges are included in the Master Fee Schedule for information purposes only and are not being considered, modified, or "increased" as such term is defined under Government Code section 53750; and

WHEREAS, on May 15, 2019, the City Council directed staff to bring the Master Fee Schedule on an annual basis as part of the budget process with an escalation to reflect increases in staff cost; and

WHEREAS, staff recommends authorizing the Finance Director to make annual inflationary adjustments for various fees identified in the Master Fee Schedule; and

WHEREAS, inflationary adjustments will be based on the estimated average annual increase in employee salary and wage costs, with distinct averages calculated for employees commonly classified as miscellaneous employees and employees commonly classified as safety employees; and

WHEREAS, if the estimated average employee salary and wage costs do not change or go down, no change shall be made to the fee schedule for that year unless an adjustment is made to targeted cost recovery levels or fee study findings indicate that an adjustment is appropriate; and

WHEREAS, the City Council now wishes to adopt new or increased Fees and Penalties set forth in Exhibit 1 hereto, and to authorize the consolidation of Fees, Penalties, and other levies and exactions into the Master Fee Schedule, which shall not include taxes, AB1600 development impact fees, or assessments, which are all passed or adopted by different legislative requirements, approvals, and processes; and

WHEREAS, this hearing to consider the establishment of new or increased Fees and Penalties was duly noticed pursuant to Government Code Sections 66016 and 66018; and

NOW, THEREFORE, the City Council of the City of Milpitas hereby finds, determines, and resolves as follows:

1. The above Recitals are true and correct and by this reference incorporated herein.

2. The City Council hereby approves the Master Fee Schedule included herewith as **Exhibit 1**, and further adopts the new or increased Fees and Penalties set forth therein. The Fees and Penalties adopted pursuant to this Resolution shall supersede any prior fees, charges, penalties, or other exactions imposed by resolution or otherwise by the City Council, to the extent such prior fees, charges, penalties, or other exactions conflict with the Fees and Penalties set forth in Exhibit 1 hereto.

3. The City Council has considered the full record before it, which may include but is not limited to such things as the staff report, testimony by staff and the public, and other materials and evidence submitted or provided to it. Based upon such consideration, the City Council finds and determines that:

   (a) The Fees established by this Resolution:

      (1) are imposed for a specific government service provided directly to the payor, or for reasonable regulatory costs of the City for issuing licenses and permits, performing investigations, inspections, and administrative enforcements of the City's Municipal Code or other rules or ordinances;

      (2) are no more than necessary to cover the reasonable costs of the governmental activity for which the Fee is imposed; and

      (3) the manner in which those costs are allocated to a payor bear a fair or reasonable relationship to the payor's burdens on, or benefits received from, the governmental activity for which the Fee is imposed.

   (b) The Penalties established by this resolution are imposed for a violation of applicable State or local law, including violation of an ordinance of the City or the Municipal Code, and persons upon whom the Penalty is imposed have adequate rights to appeal such penalty under the Municipal Code.

   (c) The Fees and Penalties are not taxes within the meaning of California Constitution article XIII C, section 1(e).

4. The Finance Director has authority to make annual inflationary adjustments for various fees identified in the Master Fee Schedule based on the estimated average annual increase in wages and salaries, with distinct averages calculated for employees commonly classified as miscellaneous employees and employees commonly classified as safety employees. If the estimated average employee compensation costs do not change or go down, no change shall be made to the fee schedule for that year unless an adjustment is made to targeted cost recovery levels or fee study findings indicate that an adjustment is appropriate.

5. The inflationary changes authorized by this Resolution do not apply to the rates for water and sewer service fees and charges. These rates and charges are established pursuant to the procedural and substantive requirements of article XIII D, section 6 of the California Constitution (also known as "Proposition 218"). Any reference to rates for water and sewer service fees and charges are included in the Master Fee Schedule for information purposes only and are not considered, modified, or "increased" as such term is defined under Government Code section 53750 as part of the City's fee schedule update.

6. Fees for licenses and permits related to development service activities will become effective sixty (60) days after adoption.

7. All other Fees and Penalties will become effective July 1, 2020.

PASSED AND ADOPTED this _____ day of _____, 2020 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

_____
Mary Lavelle, City Clerk

APPROVED

_____
Rich Tran, Mayor

APPROVED AS TO FORM:

_____
Christopher J. Diaz, City Attorney

Exhibit 1

Master Fee Schedule

Effective Fiscal Year 2020-21

City of Milpitas
MASTER FEE SCHEDULE

Services / Activities / Subject Matter	Page
BUILDING	3
PLANNING	13
ENGINERING	15
PUBLIC WORKS	16
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POLICE	23
ANIMAL REGULATION	24
RECREATION	25
FINANCE	33
CITY CLERK	34
INFORMATION SERVICES	35

City of Milpitas

BUILDING AND HOUSING - CONSTRUCTION

	Occupancy Classification	Threshold SqFt	Fee Plan Review Base Fee	Fee Plan Review Fee Per Add'l 100 SF or Fraction Thereof	Fee Inspection Base Fee	Fee Inspection Fee Per Add'l 100 SF or Fraction Thereof	Y'rly In'fltr
1	Single-Family, Two-Family, Additional Dwelling Units / Remodels	100	$ 261.44		$ 428.03		Y
		200	$ 374.58		$ 642.05		Y
		300	$ 544.29		$ 856.07		Y
		400	$ 996.84		$ 1,177.09		Y
		500	$ 1,223.12	$ 154.11	$ 1,712.13	$ 171.21	Y
		1,000	$ 1,993.68	$ 181.02	$ 2,568.20	$ 171.21	Y
		1,500	$ 2,898.80	$ 181.02	$ 3,424.26	$ 256.82	Y
		2,000	$ 3,803.91	$ 154.11	$ 4,708.36	$ 342.43	Y
		2,500	$ 4,574.47	$ 135.77	$ 6,420.49	$ 342.43	Y
		3,000	$ 5,253.31	$ 77.06	$ 8,132.62	$ 149.81	Y
		4,000	$ 6,023.87	$ 90.51	$ 9,630.73	$ 214.02	Y
		5,000	$ 6,928.99	$ 45.26	$ 11,770.89	$ 107.01	Y
	Tract or Repetitive Fees:		25% of Original		Same as regular		N
	Commercial / Multi-Family / Non-Residential - New Construction, Tenant Improvement, and Shell						
2	A-Assembly - New Construction	1,500	$ 4,216.43	$ 61.48	$ 10,767.69	$ 138.75	Y
		7,500	$ 7,905.81	$ 87.84	$ 15,382.42	$ 128.08	Y
		15,000	$ 14,493.99	$ 79.06	$ 24,611.87	$ 85.38	Y
		30,000	$ 26,352.71	$ 14.64	$ 44,301.36	$ 39.14	Y
		75,000	$ 32,940.88	$ 19.32	$ 69,220.88	$ 40.56	Y
		150,000	$ 47,434.87	$ 31.63	$ 86,141.54	$ 57.64	Y
3	A-Assembly - Tenant Improvement	500	$ 1,581.60	$ 69.19	$ 2,996.23	$ 64.21	Y
		2,500	$ 2,965.51	$ 98.85	$ 4,280.33	$ 102.73	Y
		5,000	$ 5,436.77	$ 88.96	$ 6,848.52	$ 109.57	Y
		10,000	$ 9,885.03	$ 22.16	$ 12,327.34	$ 46.23	Y
		25,000	$ 13,209.13	$ 37.14	$ 19,261.46	$ 18.83	Y
		50,000	$ 22,494.56	$ 44.99	$ 23,969.82	$ 47.94	Y
5	B - Business - New Construction:	1,000	$ 3,987.37	$ 86.08	$ 7,490.57	$ 80.26	Y
		5,000	$ 7,430.45	$ 118.64	$ 10,700.81	$ 128.41	Y
		10,000	$ 13,362.60	$ 105.50	$ 17,121.30	$ 136.97	Y
		20,000	$ 23,912.04	$ 19.47	$ 30,818.34	$ 57.78	Y
		50,000	$ 29,752.46	$ 30.61	$ 48,153.66	$ 28.25	Y
		100,000	$ 45,053.74	$ 45.05	$ 62,278.73	$ 62.28	Y
6	B - Business - Tenant Improvement:	500	$ 1,528.24	$ 66.86	$ 3,277.12	$ 70.22	Y
		2,500	$ 2,865.44	$ 95.51	$ 4,681.61	$ 112.36	Y
		5,000	$ 5,253.31	$ 85.97	$ 7,490.57	$ 119.85	Y
		10,000	$ 9,551.47	$ 15.92	$ 13,483.02	$ 50.56	Y
		25,000	$ 11,939.34	$ 21.02	$ 21,067.22	$ 20.60	Y
		50,000	$ 17,192.65	$ 34.38	$ 26,216.99	$ 52.44	Y
7	E - Education - New Construction:	500	$ 1,793.31	$ 78.42	$ 4,119.81	$ 88.29	Y
		2,500	$ 3,362.46	$ 112.08	$ 5,885.45	$ 141.25	Y
		5,000	$ 6,164.51	$ 100.87	$ 9,416.72	$ 150.66	Y
		10,000	$ 11,208.20	$ 18.68	$ 16,950.09	$ 63.56	Y
		25,000	$ 14,010.25	$ 24.66	$ 26,484.51	$ 25.90	Y
		50,000	$ 20,174.76	$ 40.35	$ 32,958.50	$ 65.92	Y

City of Milpitas

BUILDING AND HOUSING - CONSTRUCTION

	Occupancy Classification	Threshold SqFt	Fee Plan Review Base Fee	Fee Plan Review Fee Per Add'l 100 SF or Fraction Thereof	Fee Inspection Base Fee	Fee Inspection Fee Per Add'l 100 SF or Fraction Thereof	Y'rly In'fltr
8	E - Education - Tenant Improvement:	100	$ 843.29	$ 184.46	$ 1,498.11	$ 160.51	Y
		500	$ 1,581.16	$ 263.53	$ 2,140.16	$ 256.82	Y
		1,000	$ 2,898.80	$ 237.17	$ 3,424.26	$ 273.94	Y
		2,000	$ 5,270.54	$ 43.92	$ 6,163.67	$ 115.56	Y
		5,000	$ 6,588.18	$ 57.98	$ 9,630.73	$ 47.08	Y
		10,000	$ 9,486.97	$ 94.87	$ 11,984.91	$ 119.85	Y
9	F - Factory - New Construction:	5,000	$ 5,797.60	$ 19.94	$ 8,560.65	$ 42.81	Y
		25,000	$ 9,784.96	$ 44.92	$ 17,121.30	$ 102.74	Y
		50,000	$ 21,013.24	$ 14.48	$ 42,803.25	$ 29.96	Y
		100,000	$ 28,254.15	$ 8.36	$ 57,784.39	$ 7.85	Y
		250,000	$ 40,791.19	$ 4.64	$ 69,555.28	$ 14.98	Y
		500,000	$ 52,380.30	$ 10.47	$ 107,008.13	$ 21.40	Y
10	F - Factory - Tenant Improvement:	2,000	$ 2,233.31	$ 18.92	$ 2,334.72	$ 19.46	Y
		10,000	$ 3,746.65	$ 45.40	$ 3,891.20	$ 46.70	Y
		20,000	$ 8,286.66	$ 15.04	$ 8,560.65	$ 15.57	Y
		40,000	$ 11,294.98	$ 8.41	$ 11,673.61	$ 8.91	Y
		100,000	$ 16,345.73	$ 4.83	$ 17,024.02	$ 4.87	Y
		200,000	$ 21,166.63	$ 10.59	$ 21,888.03	$ 10.94	Y
11	H - Hazardous Materials - New Construction:	1,000	$ 4,558.02	$ 99.70	$ 8,426.89	$ 90.29	Y
		5,000	$ 8,546.29	$ 142.43	$ 12,038.41	$ 144.46	Y
		10,000	$ 15,668.20	$ 128.19	$ 19,261.46	$ 154.10	Y
		20,000	$ 28,487.64	$ 23.74	$ 34,670.63	$ 65.01	Y
		50,000	$ 35,609.55	$ 31.34	$ 54,172.86	$ 26.49	Y
		100,000	$ 51,277.75	$ 51.28	$ 67,415.12	$ 67.41	Y
12	H - Hazardous Materials - Tenant Improvement:	1,000	$ 2,279.01	$ 49.86	$ 4,494.34	$ 48.15	Y
		5,000	$ 4,273.15	$ 71.22	$ 6,420.49	$ 77.04	Y
		10,000	$ 7,834.10	$ 64.10	$ 10,272.78	$ 82.18	Y
		20,000	$ 14,243.82	$ 11.87	$ 18,491.00	$ 34.67	Y
		50,000	$ 17,804.78	$ 15.67	$ 28,892.19	$ 14.12	Y
		100,000	$ 25,638.88	$ 25.64	$ 35,954.73	$ 35.95	Y
13	I - Licensed Clinics - New Construction:	2,000	$ 2,739.80	$ 29.96	$ 5,617.93	$ 30.10	Y
		10,000	$ 5,137.12	$ 42.81	$ 8,025.61	$ 48.15	Y
		20,000	$ 9,418.05	$ 38.53	$ 12,840.98	$ 51.37	Y
		40,000	$ 17,123.73	$ 7.13	$ 23,113.76	$ 21.67	Y
		100,000	$ 21,404.66	$ 9.42	$ 36,115.24	$ 8.83	Y
		200,000	$ 30,822.71	$ 15.41	$ 44,943.41	$ 22.47	Y
14	I - Licensed Cliics - Tenant Improvement:	1,000	$ 1,106.59	$ 24.21	$ 2,340.80	$ 25.08	Y
		5,000	$ 2,074.86	$ 34.58	$ 3,344.00	$ 40.12	Y
		10,000	$ 3,803.91	$ 31.13	$ 5,350.41	$ 42.81	Y
		20,000	$ 6,916.20	$ 5.76	$ 9,630.73	$ 18.05	Y
		50,000	$ 8,645.25	$ 7.61	$ 15,048.02	$ 7.35	Y
		100,000	$ 12,449.16	$ 12.45	$ 18,726.42	$ 18.73	Y

City of Milpitas

BUILDING AND HOUSING - CONSTRUCTION

	Occupancy Classification	Threshold SqFt	Fee Plan Review Base Fee	Fee Plan Review Fee Per Add'l 100 SF or Fraction Thereof	Fee Inspection Base Fee	Fee Inspection Fee Per Add'l 100 SF or Fraction Thereof	Y'rly In'fltr
15	M - Mercantile - New Construction:	500	$ 2,266.55	$ 99.16	$ 4,681.61	$ 100.32	Y
		2,500	$ 4,249.79	$ 141.66	$ 6,688.01	$ 160.51	Y
		5,000	$ 7,791.28	$ 127.49	$ 10,700.81	$ 171.22	Y
		10,000	$ 14,165.96	$ 23.61	$ 19,261.46	$ 72.23	Y
		25,000	$ 17,707.45	$ 31.17	$ 30,096.04	$ 29.43	Y
		50,000	$ 25,498.73	$ 51.00	$ 37,452.84	$ 74.90	Y
16	M - Mercantile - Tenant Improvement:	250	$ 1,040.77	$ 91.06	$ 1,872.64	$ 80.26	Y
		1,250	$ 1,951.44	$ 130.09	$ 2,675.20	$ 128.41	Y
		2,500	$ 3,577.63	$ 117.08	$ 4,280.33	$ 136.97	Y
		5,000	$ 6,504.79	$ 21.68	$ 7,704.59	$ 57.78	Y
		12,500	$ 8,130.98	$ 28.62	$ 12,038.41	$ 23.55	Y
		25,000	$ 11,708.62	$ 46.83	$ 14,981.14	$ 59.92	Y
17	R-1 - Residential Hotels - New Construction:	2,000	$ 10,140.81	$ 110.92	$ 25,748.83	$ 137.94	Y
		10,000	$ 19,014.02	$ 158.45	$ 36,784.04	$ 220.71	Y
		20,000	$ 34,859.05	$ 142.60	$ 58,854.47	$ 235.41	Y
		40,000	$ 63,380.08	$ 26.41	$ 105,938.04	$ 99.32	Y
		100,000	$ 79,225.10	$ 34.86	$ 165,528.19	$ 40.47	Y
		200,000	$ 114,084.15	$ 57.04	$ 205,990.64	$ 102.99	Y
18	R-1 - Residential Hotels - Tenant Improvement:	500	$ 2,410.66	$ 105.47	$ 5,992.46	$ 128.41	Y
		2,500	$ 4,520.00	$ 150.66	$ 8,560.65	$ 205.45	Y
		5,000	$ 8,286.66	$ 135.60	$ 13,697.04	$ 219.15	Y
		10,000	$ 15,066.65	$ 25.12	$ 24,654.67	$ 92.46	Y
		25,000	$ 18,833.31	$ 33.14	$ 38,522.93	$ 37.67	Y
		50,000	$ 27,119.97	$ 54.24	$ 47,939.64	$ 95.88	Y
19	R-2 - Residential Multi-Family - New Construction:	2,000	$ 21,211.62	$ 11.10	$ 32,771.24	$ 175.56	Y
		10,000	$ 22,099.64	$ 184.16	$ 46,816.05	$ 280.89	Y
		20,000	$ 40,516.01	$ 165.74	$ 74,905.69	$ 299.62	Y
		40,000	$ 73,665.47	$ 30.69	$ 134,830.24	$ 126.40	Y
		100,000	$ 92,081.83	$ 40.52	$ 210,672.25	$ 51.50	Y
		200,000	$ 132,597.84	$ 66.30	$ 262,169.91	$ 131.08	Y
20	R-2 - Residential Multi-Family - Tenant Improvement:	500	$ 3,068.93	$ 134.26	$ 6,554.25	$ 140.45	Y
		2,500	$ 5,754.24	$ 191.81	$ 9,363.21	$ 224.71	Y
		5,000	$ 10,549.44	$ 172.63	$ 14,981.14	$ 239.70	Y
		10,000	$ 19,180.80	$ 31.97	$ 26,966.05	$ 101.12	Y
		25,000	$ 23,976.00	$ 42.19	$ 42,134.45	$ 41.19	Y
		50,000	$ 34,525.45	$ 69.06	$ 52,433.98	$ 104.86	Y
21	R-4 - Care / Assisted Living - New Construction:	2,000	$ 6,191.23	$ 67.71	$ 14,044.82	$ 75.24	Y
		10,000	$ 11,608.55	$ 96.74	$ 20,064.02	$ 120.38	Y
		20,000	$ 21,282.34	$ 87.07	$ 32,102.44	$ 128.41	Y
		40,000	$ 38,695.17	$ 16.12	$ 57,784.39	$ 54.17	Y
		100,000	$ 48,368.96	$ 21.28	$ 90,288.11	$ 22.07	Y
		200,000	$ 69,651.30	$ 34.83	$ 112,358.53	$ 56.18	Y

City of Milpitas

BUILDING AND HOUSING - CONSTRUCTION

	Occupancy Classification	Threshold SqFt	Fee Plan Review Base Fee	Fee Plan Review Fee Per Add'l 100 SF or Fraction Thereof	Fee Inspection Base Fee	Fee Inspection Fee Per Add'l 100 SF or Fraction Thereof	Y'rly In'fltr
22	R-4 - Care / Assisted Living - Tenant Improvement:	1,000	$ 3,015.56	$ 65.97	$ 7,490.57	$ 80.26	Y
		5,000	$ 5,654.17	$ 94.23	$ 10,700.81	$ 128.65	Y
		10,000	$ 10,365.99	$ 84.81	$ 17,121.30	$ 136.97	Y
		20,000	$ 18,847.25	$ 15.70	$ 30,818.34	$ 57.78	Y
		50,000	$ 23,559.06	$ 20.73	$ 48,153.66	$ 23.55	Y
		100,000	$ 33,925.04	$ 33.92	$ 59,924.55	$ 59.92	Y
23	S-1 - Storage Moderate Hazard - New Construction:	1,000	$ 3,688.05	$ 80.67	$ 7,022.41	$ 76.28	Y
		5,000	$ 6,915.10	$ 115.25	$ 10,032.01	$ 120.38	Y
		10,000	$ 12,677.68	$ 103.73	$ 16,051.22	$ 128.41	Y
		20,000	$ 23,050.32	$ 19.21	$ 28,892.19	$ 54.17	Y
		50,000	$ 28,812.90	$ 25.36	$ 45,144.05	$ 22.07	Y
		100,000	$ 41,490.58	$ 41.49	$ 56,179.27	$ 56.18	Y
24	S-2 - Storage Low Hazard - New Construction:	1,000	$ 2,028.16	$ 44.37	$ 4,119.81	$ 44.14	Y
		5,000	$ 3,802.80	$ 63.38	$ 5,885.45	$ 70.63	Y
		10,000	$ 6,971.81	$ 57.04	$ 9,416.72	$ 75.34	Y
		20,000	$ 12,676.02	$ 10.57	$ 16,950.09	$ 31.78	Y
		50,000	$ 15,845.02	$ 13.95	$ 26,484.51	$ 12.95	Y
		100,000	$ 22,816.83	$ 22.82	$ 32,958.50	$ 32.96	Y
25	S - Storage - Tenant Improvement:	500	$ 1,501.55	$ 65.70	$ 2,574.88	$ 55.17	Y
		2,500	$ 2,815.41	$ 93.85	$ 3,678.40	$ 88.29	Y
		5,000	$ 5,161.58	$ 84.46	$ 5,885.45	$ 94.17	Y
		10,000	$ 9,384.69	$ 15.64	$ 10,593.80	$ 39.73	Y
		25,000	$ 11,730.87	$ 20.64	$ 16,552.82	$ 16.18	Y
		50,000	$ 16,892.45	$ 33.79	$ 20,599.06	$ 41.19	Y
26	U - Utility - Misc - New Construction:	150	$ 869.97	$ 126.87	$ 1,591.75	$ 113.69	Y
		750	$ 1,631.20	$ 181.24	$ 2,273.92	$ 181.92	Y
		1,500	$ 2,990.53	$ 163.12	$ 3,638.28	$ 194.04	Y
		3,000	$ 5,437.32	$ 30.21	$ 6,548.90	$ 81.86	Y
		7,500	$ 6,796.65	$ 39.87	$ 10,232.65	$ 33.35	Y
		15,000	$ 9,787.18	$ 65.25	$ 12,733.97	$ 84.90	Y
27	U - Utility - Misc - Tenant Improvement:	100	$ 579.98	$ 126.87	$ 1,123.59	$ 120.38	Y
		500	$ 1,087.46	$ 181.24	$ 1,605.12	$ 192.62	Y
		1,000	$ 1,993.68	$ 163.12	$ 2,568.20	$ 205.45	Y
		2,000	$ 3,624.88	$ 30.21	$ 4,622.75	$ 86.67	Y
		5,000	$ 4,531.10	$ 39.87	$ 7,223.05	$ 35.31	Y
		10,000	$ 6,524.78	$ 65.25	$ 8,988.68	$ 89.89	Y
28	Shell Building:	5,000	$ 5,479.59	$ 23.97	$ 10,299.53	$ 22.07	Y
		25,000	$ 10,274.24	$ 34.25	$ 14,713.62	$ 35.31	Y
		50,000	$ 18,836.10	$ 30.83	$ 23,541.79	$ 37.67	Y
		100,000	$ 34,247.45	$ 5.71	$ 42,375.22	$ 15.89	Y
		250,000	$ 42,809.32	$ 7.53	$ 66,211.28	$ 6.47	Y
		500,000	$ 61,645.42	$ 12.32	$ 82,396.26	$ 16.48	Y

* Amounts exclude City of Milpitas standard permitting fees and State of California fees.

City of Milpitas
BUILDING AND HOUSING - MISCELLANEOUS

	Activity Description	Fee	Charge Basis	Y'rly In'fltr	Note
	RESIDENTIAL				
	Combination Permits				
1	Attached Garage - 1 to 3 cars	$1,290		Y	
2	Detached Garage or Shed	$1,108		Y	
3	Bathroom Remodel (1 or more if inspected at same time)	$945		Y	
4	Kitchen Remodel	$1,373		Y	
5	Standard Patio Encl / Sun Room, manufactured	$1,215		Y	
6	Engineered Patio Encl / Sun Room, custom	$1,272		Y	
7	Garage conversion	$1,215		Y	
8	Green House	$1,001		Y	
9	Patio Cover	$1,001		Y	
10	Window, Skylight or Exterior Door	$838		Y	
	Miscellaneous Construction				
11	Wood Fences over 7’ high, concrete / masonry over 4’ high	$746		Y	
12	Sound Wall	$1,293		Y	
13	Structural Roof Conversions	$1.99	per sq ft	Y	
14	AC Condenser Replacement	$268		Y	
15	Furnace Replacement	$321		Y	
16	Water Heater Replacement	$321		Y	
	Solar Permit				
17	a) 15kw or less	$500		N	
18	b) Above 15kw – base	$500	base	N	
19	c) Above 15kw – per kw	$15	per kw	N	
	Solar Thermal				
20	a) 10kwth or less	$450		N	
21	b) 10kwth or more - base	$450	base	N	
22	c) 10kwth or more – per kwth	$15	per kw	N	
23	Fireplace reconstruction	$633		Y	
24	Siding/stucco replacement	$535		Y	
25	Seismic Strengthening	$633		Y	
	Mobilehome Permit Fees				
26	Permit Issuance Fee	$183		Y	
27	Awning	$327	each	Y	
28	Porch larger than 12 sf.	$327	each	Y	
29	Deck larger than 12 sf.	$434	each	Y	
30	Cabana	$440	each	Y	
31	Ramada	$440	each	Y	
32	Private garage	$874	each	Y	
	COMMERCIAL				
	Miscellaneous Construction				
33	Permit Issuance Fee	$138		Y	
	Equipment Installation				
34	a) Each Type - Plan Check	$453		Y	
35	b) Each Type (max 3 pieces) - Inspection	$428		Y	
	Racks, each type				
36	a) First Rack / Each Rack Type	$774		Y	
37	b) Each 5 additional racks or fraction thereof	$214		Y	
38	Roof Screen	$988		Y	
39	Fences	$988		Y	
	Monument Sign				
40	a) Each Piece - Not Electrical	$654		Y	

City of Milpitas
BUILDING AND HOUSING - MISCELLANEOUS

	Activity Description	Fee	Charge Basis	Y'rly In'fltr	Note
41	b) Each Piece - Including Electrical	$818		Y	
	Wall Mounted Sign				
42	a) Each Type (max 2 pieces) - Not Electrical	$440		Y	
43	b) Each Type (max 2 pieces) - Including Electrical	$604		Y	
	Solar				
44	a) 50kw or less	$1,000		N	
45	b) 50kw – 250kew – Base	$1,000	base	N	
46	c) 50kw – 250kw – per kw above 50kw	$7		N	
47	d) 250+ kw – Base	$2,400	base	N	
48	e) 250+ kw – per kw	$5	per kw	N	
	Structures not listed: See hourly rates for PC and INSP				
	Other Plan Check, Inspection and Permit Fees				
49	Certificate of Occupancy (inspection, record review, printing)	$665		Y	
50	Temporary Building Permit Issuance *****	$410		Y	
51	Accessibility Exception Request	$544		Y	
52	Christmas Tree Lot	$306		Y	
53	Faithful Performance Bond Execution	$318		Y	
54	Inspection Investigation Fee (Construction w/o Permits, Per MMC)	100% of insp. Fee		N	
	Grading				
55	Permit Issuance Fee	$137		Y	
	Plan Check:				
56	a) 0 - 10,000 Cubic Yards	$453		Y	
57	b) Add for each additional 10,000 CY or fraction thereof	$113		Y	
58	c) Over 100,000 Cubic Yards	$1,471		Y	
59	d) Over 100,000 Cubic Yards – add for each additional 10,000 CY or fraction thereof	$57		Y	
	Inspection:				
60	a) 0 - 10,000 Cubic Yards	$749		Y	
61	b) Add for each additional 10,000 CY or fraction thereof	$107		Y	
62	c) Over 100,000 Cubic Yards	$1,712		Y	
63	d) Over 100,000 Cubic Yards – add for each additional 10,000 CY or fraction thereof	$54		Y	
	Site Improvement				
64	Permit Issuance	$138		Y	
	Plan Check				
65	a) 0-50,000 SF	$2,263		Y	
66	b) 50,001-100,000 SF	$3,168		Y	
67	c) 100,001-500,000 SF	$9,051		Y	
68	d) 500,001+ SF	$1.36	per 100 SF	Y	
	Inspection				
69	a) 0-50,000 SF	$3,424		Y	
70	b) 50,001-100,000 SF	$5,136		Y	
71	c) 100,001-500,000 SF	$10,701		Y	
72	d) 500,001+ SF	$1.78	per 100 SF	Y	
	Pools or Spas				
	Swimming Pool				
73	a) Private	$972		Y	
74	b) Public	$1,532		Y	
75	Spa - separate	$972		Y	
76	Private Pool & Spa together	$1,627		Y	

City of Milpitas
BUILDING AND HOUSING - MISCELLANEOUS

	Activity Description	Fee	Charge Basis	Y'rly In'fltr	Note
77	Existing Pools / Spas – Mechanical, Electrical, Plumbing - per trade	$532	per trade	Y	
	Re-Roofing				
78	Single-Family and Two-Family	$627		Y	
79	Multi-Family, Residential, each building	$1,007		Y	
80	Commercial/Industrial, each building **	$1,275		Y	
	Miscellaneous Fee				
81	Change of Address	$624	per request	Y	
82	Extension of Plan Check	$92		Y	
83	Extension of Permit	$92		Y	
84	Records Research	$92		Y	
85	Records Research with Documentation, per Address	$138	per address	Y	
86	Report of Monthly or Yrly Bldg Permit Activity (no charge to public agencies)	$92		Y	
87	Reprinting of Building Permit Cards	$61		Y	
88	Alternative Materials or Methods of Construction	$679		Y	
	Other Plan Check and Inspection Permit Fees				
89	Inspection Investigation Fee (Construction w/o Permits, Per MMC)	100% of insp. Fee		N	
90	Reinspection Fee - per reinspection	$321	per reinspection	Y	
91	Demolition Permit	$526		Y	
92	Revision / Deferred Submittal Plan Check - per hour	$226	per hour	Y	
	Digitizing				
	Digitizing				
	a) Document Size up to 11"x17"				
93	i) 1st 10 pages	$1	each	N	
94	ii) Each additional page	0.50	each	N	
	b) Document Size Larger than 11"x17"				
95	i) 1st 10 pages	$4	per page	N	
	Hourly Rates				
	Hourly Rates - Normal Business Hours				
96	a) Plan Check	$226		Y	
97	b) Inspection	$214		Y	
	Afterhours (Overtime) Hourly Rates				
98	a) Plan Check	$271		Y	
99	b) Inspection	$255		Y	
	Standard Permitting Fees				
100	Community Planning Fee - % of Building Permit	5.00%		N	
101	Technology Fee - % of Building Permit	3.80%		Y	
	STATE FEES				
	Strong Motion Instrumention and Seismic Hazard Mapping Fees: * **				
102	Category 1 - Residential - Min Fee = $0.50	Val. x 0.00013		N	
103	Category 2 - All Other Buildings - Min Fee = $0.50	Val. x 0.00028		N	
	Building Standards Administration Special Revolving Fund: * **				
	Permit Valuation				
104	a) $1-$25,000	$1		N	
105	b) $25,001 - $50,000	$2		N	
106	c) $50,001 - $75,000	$3		N	
107	d) $75,001 - $100,000	$4		N	
108	e) Every $25,000 or fraction thereof above $100,000	$1		N	

City of Milpitas
BUILDING AND HOUSING - MISCELLANEOUS

	Activity Description	Fee	Charge Basis	Y'rly In'fltr	Note
	ELECTRICAL				
109	Electrical Permit Issuance ****	$183		Y	
110	Plan Check Fee - (min. 1 hr) - per hour	$226	per hour	Y	
	Receptacle Outlets, multiple on one circuit				
111	a) First 20	$107		Y	
112	b) Each additional 20	$89		Y	
113	Receptacle, fed from dedicated circuit	$54	each	Y	
	Switches, Dimmers, Occupancy sensors, Sensor Power Packs, etc.				
114	a) First 20	$107		Y	
115	b) Each additional 20	$89		Y	
	Lighting Fixtures, Sockets				
116	a) First 20	$107		Y	
117	b) Each additional 20	$89		Y	
118	Track lighting with fixtures - per linear feet	$1.07		Y	
119	Pole/Platform-Mounted/Theatrical Fixtures - each	$54	each	Y	
120	Circuit Breaker Panel/Subpanel, Lighting Control Panel – each	$89	each	Y	
121	Residential Equipment or Appliance, fed from dedicated circuit – each	$54	each	Y	
122	Commercial Equipment or Appliance, fed from dedicated circuit – each	$89	each	Y	
123	Power pole for cubicles	$54	each	Y	
	Generator				
124	a) Portable	$107	each	Y	
125	b) 10 kW or less	$107	each	Y	
126	c) More than 10 kW	$161	each	Y	
	Electrical vehicle charging station				
127	a) Residential	$54		Y	
128	b) Commercial	$89		Y	
	HEPA filter				
129	a) First 20	$107		Y	
130	b) Each additional 20	$89		Y	
131	Time Clock	$54	each	Y	
132	Junction box, fed from dedicated circuit	$54		Y	
	Sign, lighting systems from one branch circuit				
133	a) First one	$214		Y	
134	b) Each additional	$107		Y	
	Services				
135	a) Not over 200 amps (new or change) – each	$107	each	Y	
136	b) 201 amps - 1000 amps (new or change)	$214	each	Y	
137	c) Over 1000 amperes (new or change)	$268	each	Y	
138	Power Apparatus (UPS) or Transformer	$89	each	Y	
139	Miscellaneous Apparatus, Conduits & Conductors	$89	each	Y	
140	Construction Temporary Power Pole with service panel, each pole	$107		Y	
141	Elevator	$214	each	Y	
142	Special Circuitry, per circuit	$89	per circuit	Y	
	MECHANICAL				
143	Mechanical Permit Issuance ****	$183		Y	
144	Plan Check Fee (min.1 hr)	$226	per hour	Y	
145	Install Furnace or Heater, Residential (not including duct work)	$143		Y	
146	Install, Relocate, Replace Flue Vent (not including with appliance)	$107		Y	
	Install Hood with Mechanical Exhaust				
147	a) Residential	$89		Y	
148	b) Commercial	$214		Y	
149	Duct Work per unit or System	$89		Y	

City of Milpitas
BUILDING AND HOUSING - MISCELLANEOUS

	Activity Description	Fee	Charge Basis	Y'rly In'fltr	Note
150	Install Industrial-type Incinerator	$161		Y	
	Install/Replace				
151	a) Boiler	$107	each	Y	
152	b) Condenser, VAV or Fan Coil 0-5 ton <2000 CFM	$107	each	Y	
153	c) Condenser, VAV or Fan Coil Over 5 ton >2000 CFM	$214	each	Y	
154	Roof-top HVAC package unit including duct work	$214		Y	
	Dryer vent				
155	a) Dryer vent, residential	$89	each	Y	
156	b) Dryer vent, commercial	$214	each	Y	
157	Pump	$161	each	Y	
158	Install/Replace Fire or Fire/Smoke Dampers - 5 (or portion of)	$107		Y	
159	Non-portable Evaporative Cooler	$161		Y	
160	Single Bathroom Ventilation Fan and Duct	$89		Y	
161	Ventilation System, not HVAC	$107		Y	
162	Other Regulated Appliance	$161		Y	
	Process Piping				
	a) Hazardous process piping system				
163	i) First 4 outlets	$161		Y	
164	ii) Over 4 outlets - per outlet	$89	per outlet	Y	
	b) Non-Hazardous process piping system				
165	i) First 4 outlets	$161		Y	
166	ii) Over 4 outlets - per outlet	$89	per outlet	Y	
	PLUMBING				
167	Plumbing Permit Issuance ****	$183		Y	
168	Plan Check Fee (min. 1 hr) - per hour	$226	per hour	Y	
	Plumbing Fixtures				
169	a) First 5 traps (or portion of)	$161		Y	
170	b) Each Additional trap	$89		Y	
171	Building Drain or Sewer (New or Replacement)	$161		Y	
172	Rain Water Drainage System	$107		Y	
173	Water Heater and Vent	$161		Y	
174	Gas Piping System - (each appliance)	$107		Y	
175	Automatic Gas Shut-off Device (Seismic or Excess Flow) if not part of new gas piping system	$107		Y	
176	Industrial Waste Pre-Treatment System	$214		Y	
177	Grease Trap	$161		Y	
178	Grease Interceptor	$214		Y	
	Water System Installation				
179	a) New	$321		Y	
180	b) Re-pipe	$214		Y	
181	Pump	$161	each	Y	
182	Repair/Alteration of Drain/Vent	$161		Y	
183	Landscape Sprinkler System	$161		Y	
184	Landscape Reclaim Water	$268	per valve	Y	
	Backflow Protection				
185	a) first 5	$161		Y	
186	b) each additional 5 (or portion of)	$89		Y	
187	Reclaim Water System, No Irrigation	$321		Y	
188	Private Sewage Disposal System	$107		Y	

** Additional fees may be charged for roof penetrations and/or equipment installation.
*** Fees set by the State of California and are subject to change.
**** Permit issuance fee. When more than one specialty permit (electrical, mechanical, plumbing) is concurrently issued to one applicant, only one permit issuance fee will be charged.
***** Full permit fees of the main building permit shall be paid prior to issuance of the temporary building permit.

City of Milpitas

BUILDING AND HOUSING - NEIGHBORHOOD BEAUTIFICATION

	Activity Description	Fee	Y'rly In'fltr	Note
1	1st Violation to Neighborhood Beautification Ordinance	$100	N	
2	2nd Violation to Neighborhood Beautification Ordinance	$200	N	
3	3rd or More Violations to Neighborhood Beautification Ordinance	$500	N	
4	Delinquency Penalty on Neighborhood Beautification Ordinance	$25	N	
5	Graffiti Abatement	Actual Cost	N	
6	Public Nuisance Abatement	As defined in Municipal Code Sections	N	

City of Milpitas
PLANNING

	Activity Description	Fee	Y'rly In'fltr	Note
	Special Events:			
	Application Fee			
1	a) Minor Events	$945	Y	
2	b) Major Events	$5,787	Y	
3	Conceptual Review - Planning Staff Only - per meeting	$362	Y	
	Pre Application Review Process:			
4	Single Family / Additional Dwelling Units	$2,712	Y	
5	All Others	$8,775	Y	
	Tentative Maps:			
6	Parcel Map	$13,375	Y	
7	Tract Map	$19,396	Y	
	Minor Site Development:			
8	Over the Counter Review	$241	Y	[a]
	Staff Review Fee			
9	a) Staff Review - Zoning Administrator	$3,062	Y	
10	b) Staff Review Hill Side - Zoning Administrator	$4,301	Y	
11	Requiring PC / CC Approval	$9,158	Y	
	Site Development:			
12	New Development	$16,174	Y	
13	Additions/Alterations 200+ sf	$4,636	Y	
14	Zoning Administrator	$13,280	Y	[a]
	Minor Conditional Use Permit:			
15	Staff Review - Zoning Administrator	$1,230	Y	
16	Requiring PC / CC Approval	$2,920	Y	
17	Telecommunications	$945	Y	
	Conditional Use Permit:			
18	Single Family Districts	$539	Y	
19	Family Day Care Homes	$973	Y	
20	Temporary Use Permit	$842	Y	
21	Zoning Administrator	$12,418	Y	[a]
20	All Other CUPs	$14,632	Y	
	Signs:			
21	Temporary (Including Banners)	$114	Y	
22	Permanent (Including Wall Signs)	$330	Y	
23	Freestanding signs over 6ft in height	$558	Y	
	Variance:			
24	Single Family	$993	Y	
25	Signs	$974	Y	
26	Multi-Family / Non-Residential	$3,057	Y	
	Special Use Permit:			
27	Staff Review	$945	Y	[a]
28	Requiring PC / CC Approval	$2,421	Y	[a]
	Short-Term Rental Permit			
29	Short-Term Rental Permit	$488	Y	
	Deposit-Based Fees:			
30	Amendments, General Plan, Zoning, or Specific Plan (Map or Text)	$20,000	N	
31	Development Agreements	$20,000	N	
32	Environmental Review/CEQA clearance	$35,000	N	
33	Planned Unit Development	$20,000	N	
34	Billboards	$2,500	N	

City of Milpitas
PLANNING

	Activity Description	Fee	Y'rly In'fltr	Note
	Miscellaneous Fees:			
35	Amendments/Modifications to an Existing Permit	50% of permit	N	
36	Appeal To Planning Commission/City Council	$1,933	Y	
37	Time Extensions	$797	Y	
38	Noticing Fee	$571	Y	
39	Copies - per page	$0.10	Y	
40	Planning Research - per hour	$242	Y	
41	Zoning Conformance Letter	$228	Y	
42	Lot Line Adjustment	$1,439	Y	
43	Home Occupation Permit	$57	Y	
44	Tree Removal	$231	Y	
45	Building Plan Check Support	$241	Y	
46	Building Inspection Support	$241	Y	
47	Permit Compliance Review	$483	Y	
48	Letter of Determination / Interpretation	$965	Y	
49	Pass Through for Legal Fees	Pass - Through	N	
50	Technology Fee - % of Permit	3.80%	Y	

[a] FY 19/20 amount unintentionally omitted from fee schedule. Corrected for FY 20/21.

City of Milpitas
ENGINEERING

	Activity Description	Fee	Y'rly In'fltr	Note
1	Minor Encroachment Permit	$1,113	Y	
2	Lot Line / Merger Adjustment	$1,845	Y	
3	Street / Alley Easement Vacation	$2,385	Y	
	Bldg Permit Reviews:			
4	Single Family New Building / Addition	$611	Y	
5	Commercial / Industrial New Building	$2,036	Y	
6	Commercial / Industrial Tenant Improvement	$204	Y	
7	Commercial / Industrial Site Improvement (including Grading)	$1,832	Y	
8	All Other Permit Application Reviews (per hour)	$204	Y	
	Engineering Plan Review: (Construction Cost Estimate)			
9	Up to $50,000	$5,200	Y	
10	$50,001-$200,000	$10,400	Y	
11	$200,001-$500,000	$15,600	Y	
12	Over $500,001	$20,800	Y	
	Engineering Inspection: (Construction Cost Estimate)			
13	Up to $50,000	$5,200	Y	
14	Greater than $50,000 - % of Construction Cost Estimate	10%	N	
15	Technology Fee - % of Permit	3.80%	Y	

City of Milpitas
PUBLIC WORKS

	Activity Description	Fee	Y'rly In'fltr	Note
	Water			
	Water Meter Size			
1	a) 5/8"	$30.34	N	
2	b) 3/4"	$45.52	N	
3	c) 1"	$75.86	N	
4	d) 1-1/2"	$151.72	N	
5	e) 2"	$242.76	N	
6	f) 3"	$455.17	N	
7	g) 4"	$758.61	N	
8	h) 6" and above	$1,517.23	N	
	Fire Service Line Size			
9	a) 2"	$48.55	N	
10	b) 3"	$91.03	N	
11	c) 4"	$151.72	N	
12	d) 6" and above	$303.45	N	
	Volumetric Charge			
13	a) Residential	$5.97	N	
14	b) Commercial/ Industrial/ Institutional/ Construction Meter	$5.97	N	
15	c) Irrigation (potable)	$5.97	N	
16	d) City Accounts (potable)	$5.97	N	
17	e) Ed Levin Park	$4.10	N	
	f) Recycled			
18	i) Recycled - Irrigation	$4.01	N	
19	ii) Recycled - Industrial/ Dual Plumbed/ Construction Water	$4.01	N	
20	iii) Recycled - City Accounts (recycled)	$4.01	N	
21	g) Capital Surcharge	$1.08	N	
	Water Meter			
	Water Meter Testing			
22	a) Residential Deposit	$110	N	[a]
23	b) Commercial Deposit	$300	N	[a]
	Sewer			
	Residential Flat fee			
24	a) Single-Family	$111.07	N	
25	b) Multiple-Family	$85.30	N	
26	c) Mobile Home Parks	$70.08	N	
27	d) Non-Residential Flat Rate	$25.78	N	

City of Milpitas
PUBLIC WORKS

	Activity Description	Fee	Y'rly In'fltr	Note
	Quantity and Strength Charges			
28	a)Motels, hotels & senior citizen housing developments	$4.97	N	
29	b) General offices, banks, government offices, general merchandise, retail, and shopping centers; building, hardware, and gardening material facilities; amusement centers, and theaters	$5.67	N	
30	c) City of Milpitas	$4.91	N	
31	d) Service stations, repair shops, and car washes	$4.93	N	
32	e) Eating and drinking establishments	$8.11	N	
33	f) Convalescent hospitals, day care centers and health service facilities	$4.84	N	
34	g) Personal services - laundry, barber/beauty shops, cleaners	$4.56	N	
35	h) Electrical and electronics design, fabrication, assembly and storage facilities	$5.58	N	
36	i) Metal fabrication, machinery, and tool fabrication facilities	$7.12	N	
37	j) RockTenn (Jefferson Smurfit Corporation)	$9.39	N	
38	k) T. Marzetti Co.	$10.65	N	
39	l) Prudential Overall Supply	$7.08	N	
40	m) Siemens Water (previously US Filter)	$5.87	N	
41	n) Elmwood Rehabilitation center	$5.89	N	
42	o) Linear Technology Corporation	$5.71	N	
43	p) DS Water	$4.92	N	
44	q) Headway Technology Corporation	$6.07	N	
45	r) Lucky Pure Water	$4.54	N	
46	s) Milpitas Materials	$4.54	N	
47	t) Union Pacific Railroad	$6.12	N	
48	u) Cisco	$5.58	N	
49	v) Lifescan	$5.58	N	
50	x) Schools, colleges and churches	$8.05	N	
	Utilities			
51	Service Request and Basic Inspection	$128		
52	Discontinuance of Service	$128		
53	Meter Removal / Installation			
	a) Less than 2"	$103		
	b) Greater than or Equal to 2"	$304		
54	Hydrant Flow Test			
	a) Two or Fewer Hydrants	$635		
	b) Three Hydrants	$659		
	c) Four Hydrants	$686		
55	Sewer Lateral Inspection			
	a) Visual Inspection	$103		
	b) Video Inspection - Residential	$448		
	c) Video Inspection - Commercial	$670		
56	Late Payment Penalty Fee (% of amount due)	5%	N	
57	Final Notice Penalty	5%	N	
58	Discontinuance of Service Warning Notice	$10	N	
59	Restoration Fee - During Normal Operating Hours			
	a) Low Income	$50	N	[b]
	b) All Others	$128	N	
60	Restoration Fee - During Non-Operational Hours			
	a) Low Income	$150	N	[b]
	b) All Others	$337	N	

Notes

[a] If meter is not accurate, deposit is refunded. If meter has been tampered with, the resident or business is charged for the repair.

[b] For residential customers who demonstrate to the City a household income below 200 percent of the federal poverty line, the City will limit any service restoration charges during normal operating hours to fifty dollars ($50), and during nonoperational hours to one hundred fifty dollars ($150) for 2020. The limits will only apply if the City's service restoration charges actually exceed these amounts. These limits are subject to an annual adjustment for changes in the Bureau of Labor Statistics' Consumer Price Index for All Urban Consumers (CPI-U) beginning January 1, 2021.

City of Milpitas
PUBLIC WORKS

	Activity Description	Fee	Y'rly In'fltr	Note
	Public Sewers			
1	Delinquent Fees	varies	N	[a]
2	Civil Penalties	varies	N	[b]
3	Unmetered Wastes	varies	N	[c]
4	Authority to Disconnect	varies	N	[d]
5	Payment for Sewage Services	varies	N	[e]
6	Inspection Fees	varies	N	[f]
7	House Lateral Fee	varies	N	[g]
8	Disbursements of Short Side Charges	varies	N	[h]
	Water Service Charges			
9	Construction Water	$2,000	N	
10	Deposits for service	$150	N	

Notes

[a] See City of Milpitas Municipal Code Section VIII-2-5.33. Permit applications are due ninety (90) days prior to commencing discharge to the sanitary system or expiration of existing discharge permit. Any person who fails to file an application for a discharge permit prior to discharge shall be assessed a penalty for delinquent filing as follows: (1) Up to and including thirty (30) days delinquency, the penalty shall be fifty percent (50%) of the permit fee. More than thirty (30) days but less than one year delinquency, the penalty shall be one hundred percent (100%) of the permit fee. (3) More than one(1) year delinquency, the penalty shall be one thousand percent (1,000%) of the permit fee. (b) Such penalties shall be in addition to any other penalties or fines that may be levied, and in addition to any other remedies that the City may have with respect to the discharge.

[b] See City of Milpitas Municipal Code Section VIII-2-5.50. Any person who intentionally, accidentally, or negligently violates any provisions of this Chapter, any provision of any permit issued pursuant to this Chapter, or who intentionally, accidentally, or negligently discharges waste or wastewater which causes pollution, or violates any effluent limitation, national standard of performance, or national pretreatment or toxicity standard, shall be civilly liable to the City in a sum up to ten thousand dollars ($10,000) for the first day in which such violation occurs, up to twenty-five thousand dollars ($25,000) for the second day in which such violation occurs, and fifty thousand dollars ($50,000) for each additional day.

[c] See City of Milpitas Municipal Code Section VIII-2-6.02. Where rates are herein specified to be in accordance with the use of water, all such premises shall be separately metered. Where such metering is not provided, or for newly constructed units, the City shall make a reasonable estimate of the volume of water consumed to be used as a basis for sewer service charges.

[d] See City of Milpitas Municipal Code Section VIII-2-6.03. In the event of a failure to pay the charges as provided for sewage service, the City is authorized to disconnect sewer or water service, or both.

[e] See City of Milpitas Municipal Code Section VIII-2-6.04. All accounts are due and payable within fifteen (15) days of the date of the bill. Accounts shall become delinquent and a late fee equal to five percent (5%) of the amount due shall be imposed of a payment has not been received by 5:00 p.m. on the due date.

[f] See City of Milpitas Municipal Code Section VIII-2-7.01. Each connector shall pay a fee to City for issuing of each permit, for the inspection of each house lateral, house sewer or side sewer, the sum of five dollars ($5). Where connector has on file with the City cash deposit for inspection of work, no inspection fee shall be required. In such case, all cost and expenses incurred by City in inspection of the connection shall be made from said deposit.

[g] See City of Milpitas Municipal Code Section VIII-2-7.02. Before the issuance of a permit for the installation of a house lateral, connector shall pay City a fee which shall include the following: (A) An engineering charge to defray the cost of processing the permit application, which shall be an amount equal to forty cents ($0.40) times one-half the width of the street expressed in feet in which the house lateral is being constructed. (B) A short side charge shall be collected in all cases where the main or trunk to which connection is being made is located between the center line of the street and the property to be served. Said short side charge shall be an amount equal to four dollars and fifty cents ($4.50) times the distance in feet between the center line of the street and the main or trunk sewer to which the connection is being made. The purpose of this charge is to equalize connection cost for property on both sides of the street.

[h] See City of Milpitas Municipal Code Section VIII-2-7.03. The City Council may disburse to connectors whose house laterals connect to a main or trunk sewer at a point beyond the center line of the street an amount equal to $4.50 times the distance in feet between the center of the street and the main or trunk sewer to which said connection was made.

City of Milpitas
FIRE

	Activity Description	Fee	Charge Basis	Y'rly In'fltr	Note
	FIRE INVESTIGATION/ENFORCEMENT/RESPONSE				
1	Emergency Response – Haz Mat Calls, Minimum 1-hr	HR(s) * hourly rate		N	
2	Response to DUI	HR(s) * hourly rate		N	
3	Non-Milpitas Response	HR(s) * hourly rate		N	
4	Response/Investigation Fee	HR(s) * hourly rate		N	
5	Referral Inspection (Life/Safety) 2 hrs minimum charge	HR(s) * hourly rate		N	
6	Referral Inspection (Haz Mat) 2 hrs minimum charge	HR(s) * hourly rate		N	
7	Fire Code Chapter 50 (Haz Mat) - Release Cleanup 2hrs minimum charge	HR(s) * hourly rate		N	
8	Enforcement Cost Recovery	HR(s) * hourly rate		N	
	FALSE ALARM				
	False Alarm				
9	a) First two in 12 month time-frame	no charge		N	
10	b) 3rd occurrence	$300		N	
11	c) 4th occurrence	$600		N	
12	d) 5th or more	$900		N	
	MISCELLANEOUS				
13	Data input (HMBP/HMIS), Minimum of 2 hours	HR(s) * hourly rate		N	
14	Late fee – over 60 days	Collection Cost		N	
15	Failure to obtain a permit	Double permit fee		N	
16	Weed Abatement. Fee = (hrs * $/HR), minimum 1-hr	HR(s) * hourly rate		N	
17	Fire Watch, Fee = (hrs * hourly rate). Std. or OT rate	HR(s) * hourly rate		N	[a]
18	Pre-inspection (residential care facilities)	Per Code		N	
19	Confined Space permits	HR(s) * hourly rate		N	
20	Electronic Archive, per permit	$25		N	
21	Use of Trailer	$60	per hour	N	
22	Administrative Fee	$70	per hour	N	
23	Instructor	Actual Cost		N	
24	Fire Reports	$13		N	
25	Other Services Not Listed	HR(s) * hourly rate		N	
	FIRE PREVENTION				
	ANNUAL OPERATIONAL PERMITS				
25	A-1 Occupancy (theaters and other small viewing halls)	$1,160		Y	
26	A-2 Occupancy (Food & Drink Establishment)	$877		Y	
27	A-3 Occupancy (Worship, recreation, or amusement)	$877		Y	
28	A-4 & A-5 Occupacy (indoors or outdoors sport event structures)	$2,009		Y	
29	High Piled Storage	$1,160		Y	
	Malls				
28	a) Small (0 to 50,000 s.f.)	$863		Y	
29	b) Medium (50,001 to 100,000 s.f.)	$1,443		Y	
30	c) Large (over 100,000 s.f.)	$2,009		Y	
31	Combustible Dust Producting Facility	$580		Y	
32	Motels	$877		Y	
	Hotels & Multi-Story Structures				
33	a) <5 stories	$1,726		Y	
34	b) 5+ stories - per floor	$290		Y	
	Commercial Daycare				

City of Milpitas
FIRE

	Activity Description	Fee	Charge Basis	Y'rly In'fltr	Note
35	a) Small (<100 children or elderly)	$566		Y	
36	b) Large (100+ children or elderly)	$1,132		Y	
	Residential Daycare				
37	a) Small Family Daycare (8 or fewer children)	$0		N	
38	b) Large Family Daycare (9-14 children)	$0		N	
39	c) Elderly Care (6 or fewer people)	$0		N	
40	Small Apartments (3-4 units)	$283		Y	
41	Medium Apartments (5-15 units)	$1,132		Y	
42	Large Apartments (more than 15 units)	$1,699		Y	
43	Small Chemical User (Example: doctor/dentist, dry cleaner, photo shop, graphic design, print shop, automobile engine repair, propane, CO2 beverage dispensing system, battery systems, emergency generators, pools, etc.)	$594		Y	
44	Medium Chemical User (Example: automobile body shop, research and design, analytical labs, pool supplies, big-box retail stores)	$1,470		Y	
45	Large Chemical User (Semiconductor or similar facilities)	$2,320		Y	
46	Plating Shops	$1,754		Y	
	Toxic Gas				
47	a) Small Toxic Gas - Annual Monitoring Certification	$1,132		Y	
48	b) Large Toxic Gas - Annual Monitoring Certification	$2,265		Y	
	Mobile Fueling				
49	a) Vendor	$1,470		Y	
50	b) Site	$1,470		Y	
51	Underground Tanks	$892		Y	
	Urban Runoff Inspections				
52	a) Industrial	$594		Y	
53	b) Restaurants (once every 2 years)	$594		Y	
54	Other Miscellaneous Annual Inspections Fee - per hour	$283		Y	
	CONSTRUCTION REVIEW / PERMIT / INSPECTION				
	Building Life / Safety:				
	Demolition Fees:				
55	Interior or Partial Building or Misc. Demolition	$567		Y	
56	Complete Building with or without Site Demolition	$851		Y	
	Grading Fees: These are only assessed if permits are submitted separately to Building Department from new construction or remodel permits.				
57	a) Less than 1 acre	$567		Y	
58	b) 1-5 acres	$851		Y	
59	c) Greater than 5 acres	$1,135		Y	
	Site Improvement Fees: These are only assessed if permits are submitted separately to Building Department from new construction or remodel permits.				
60	a) Less than 1 acre	$851		Y	
61	b) 1-5 acres	$1,702		Y	
62	c) Greater than 5 acres	$284	per acre	Y	

City of Milpitas
FIRE

	Activity Description	Fee	Charge Basis	Y'rly In'fltr	Note
	New Building – Shell:				
63	a) Less than 5,000 sq. ft.	$851		Y	
64	b) 5,000-25,000 sq. ft.	$1,702		Y	
65	c) 25,000-50,000 sq. ft.	$2,553		Y	
66	d) 50,000+ sq. ft. – per sq. ft.	$0.06		Y	
	New Building – New Construction:				
67	a) Less than 5,000 sq. ft.	$851		Y	
68	b) 5,000-25,000 sq. ft.	$2,269		Y	
69	c) 25,000-50,000 sq. ft.	$4,255		Y	
70	d) 50,000+ sq. ft. – per sq. ft.	$0.09	per sq ft	Y	
	Additions, Alterations, and Tenant Improvements:				
71	a) Less than 5,000 sq. ft.	$541		Y	
72	b) 5,000-25,000 sq. ft.	$2,136		Y	
73	c) 25,000-50,000 sq. ft.	$3,990		Y	
74	d) 50,000+ sq. ft. – per sq. ft.	$0.08	per sq ft	Y	
75	Missed Plan Check by Appointment	$284		Y	
76	Revision to Project Fee - per hour (min 1 hr)	$284		Y	
	Tents, Canopies, or Membrane Structures:				
77	a) 4 or less	$850		Y	
78	b) 5+	$1,134		Y	
	Temporary Assembly (Indoors or outdoors), with or w/out tent				
79	a) Occupancy 50-299	$850		Y	
80	b) Occupancy 300-999	$1,417		Y	
81	c) Occupancy 1000+	$2,268		Y	
	Fire Extinguishing Systems: These are typically deferred submittals and reviewed and inspected after building plan submittals.				
	Fire Service Underground:				
82	a) New or Replace - each	$1,417		Y	
83	b) Repairs	$567		Y	
	Fire Sprinkler Systems:				
84	a) Less than 2,000 sq. ft	$824		Y	
85	b) 2,000+ sq. ft. – per sq. ft., fee = Base Fee + [(project sq. ft. - 2,000 sq. ft.) * per sq. ft. fee]	$0.21		Y	[b]
86	Hood & Duct Systems – Each	$1,134		Y	
87	FM 2000 (under floor systems, etc.) each	$1,134		Y	
88	Other (deluge, foam, preaction, etc.) each	$1,134		Y	
	Fire Alarm Systems:				
	Additions, Alterations, or Repairs: If more than 10 devices then the New Fire Alarm fee applies.				
89	a) 1-5 Devices	$567		Y	
90	b) 5-10 Devices	$1,134		Y	
	New Fire Alarm:				
91	a) Less than 5,000 sq. ft.	$1,134		Y	
92	b) 5,000+ sq. ft. – per sq. ft., fee = Base Fee + [(project sq. ft. - 5,000 sq. ft.) * per sq. ft. fee]	$0.19		Y	

City of Milpitas
FIRE

	Activity Description	Fee	Charge Basis	Y'rly In'fltr	Note
	Hazardous Materials - Building Construction:				
93	a) Small TI (Example: registration form, inert compressed gas system installations)	$575		Y	
94	b) Medium TI (Construction not otherwise classified as Small or Large TI. Example: emergency generator, lift stations, aboveground tanks, treatment systems, battery systems, CO2 beverage dispensing system, propane system, large tank installations)	$1,440		Y	
95	Large TI (H Occupancy, Plating)	$2,589		Y	
96	Toxic Gas Tools (furnaces, implanter, reactors)	$2,305		Y	
97	Closure - process / tools	$865		Y	
	Closure - Facility				
98	a) Small TI	$433		Y	
99	b) Medium TI	$865		Y	
100	c) Large TI	$1,440		Y	
	Underground Tank Installation:				
101	a) 4 Tank System or less	$5,177		Y	
102	b) Each additional tank	$581		Y	
	Underground Tank Removal:				
103	a) 2 Tank System or Less	$2,311		Y	
104	b) Each additional tank	$291		Y	
	CERS & APSA - Fee no longer applicable				
105	a) CERS - Fee no longer applicable	$0		N	
106	b) APSA - Fee no longer applicable	$0		N	
	MISCELLANEOUS FEES:				
107	After Hours or Fast-Track Plan Check, Inspection - 3 hrs min at OT Rate	$1,000		Y	
108	Alternate Materials & Methods Review	$1,030		Y	
	New Occupancy (new business)				
109	a) No Hazardous Materials	$283		Y	
110	b) With Hazardous Materials	$566		Y	
111	Smoke Detectors Verifications (new owner)	$283		Y	
112	Title 19 5-year automatic fire sprinkler certification	$824		Y	
113	Failure to cancel a scheduled inspection 24 hrs. prior	$283		Y	
114	Temporary Certificate of Occupancy	$142		Y	
115	Standard Hourly Rate - per hour	$284		Y	
116	Overtime Hourly Fee - per hour	$333		Y	
117	Other activities not listed - per hour	$283		Y	
118	Fire Department Technology Fee - % of permit	3.80%		Y	
119	Emergency Response Mapping - new projects - per hour	$257		Y	

[a] Minimum 3 hours.
[b] Incorrect amount of $0.13 shown in originally adopted fee schedule for FY 19/20. Correct amount, based on fee study was $0.20. FY 20/21 fee adjustment based on corrected amount for FY 19/20.

City of Milpitas
POLICE

	Activity Description	Fee	Charge Basis	Y'rly In'fltr	Note
	Citations				
1	Citation Sign off for Non Milpitas Residents	$20		N	
2	Parking Citations	$65		N	
3	Traffic & Parking citations	$5		N	
	False Alarm Fines				
4	False Alarm: Fourth Offense (Calendar Year)	$50		N	
5	False Alarm: Fifth Offense (Calendar Year)	$100		N	
6	False Alarm: Sixth Offense or More (Calendar Year)	$250		N	
	Miscellaneous				
	Fingerprints				
7	a) Ink Card Up to (2) Cards	$25		N	
8	b) Ink Card Over (2) Cards	$5	Each Additional Card	N	
9	c) Live Scan plus DOJ and FBI fees	$25		N	
	Subpoenas				
10	a) Officer	$275		N	
11	b) Records	$15		N	
12	Booking Fee	$139		N	
	Administrative Tow Fees				
13	a) Impound	$346		N	
14	b) Stored	$50		N	
15	Repossession Fee	$15		N	
16	Incident (Log Event) Reports	$5		N	
17	Photos on CD / Digital Media	$15		N	
	Police Reports				
18	a) Up to (10) Pages	$13		N	
19	b) Police Reports Over (10) Pages	$1	per page	N	
20	US Investigative Request for Law Enforcement Data	$15		N	
21	Videos / Digital Reproduction	$50		N	
22	Massage Permits	$1,000		N	

City of Milpitas
ANIMAL REGULATION

	Activity Description	Fee	Charge Basis	Y'rly In'fltr	Note
1	Animal Bites Penalty	$200		N	
2	Animal Impoundment Hearing	$50		N	
3	Animal Nuisance (e.g. barking)	$100		N	
4	Animals in Excess of Maximum Allowed Penalty	$50		N	
5	Failure to Apply for Annual Animal Facility Permit	$20		N	
6	Inadequate Control or Confinement of Potentially Dangerous Animal Penalty	$100		N	
7	Late Payments for Animal Fees	10%	7 days	N	
8	Unlicensed dog or cat penalty	$50		N	
9	Violation of Leash Law	$25		N	
	Dog License				
10	a) Altered	$25		N	
11	b) Late Fee	$20		N	
12	c) Unaltered	$65		N	
	Cat License				
13	a) Altered	$15		N	
14	b) Late Fee	$20		N	
15	c) Unaltered	$35		N	
	Dog Seller Fee				
16	a) 1st Permit within Calendar Year	$78		Y	
17	b) 2nd Permit within Calendar Year	$156		Y	
	Cat Seller Fee				
18	a) 1st Permit within Calendar Year	$52		Y	
19	b) 2nd Permit within Calendar Year	$104		Y	
20	Animal Disposal Fee	Actual Cost		N	
21	Quarantining Animal Fee	Actual Cost		N	
22	Redemption of Impounded Animal Fee	Actual Cost		N	
23	Annual Animal Adoption Permit Fee	$52		Y	
24	Annual Animal Facility Permit Application Fee	$52		Y	
25	Dangerous Animal Annual Permit Fee	$156		Y	
26	Permit for Exception to Number or Type of Animals Allowed, Application Fee	$21		Y	
27	Other Requested/Required Services - See City of San Jose (The City of Milpitas contracts with the City of San Jose for various Animal Regulation services)	See City of San Jose fee schedule		N	

City of Milpitas
RECREATION

	Activity Description	Fee	Charge Basis	Y'rly In'fltr	Note
	ADULT RECREATION				
	Adult Enrichment Fees				
	Sports League (full season)				
1	a) per team	$500	per season	N	
2	b) Additional fee per non-resident player	$10	per season	N	
3	Garden Plots (Residents Only)	$60	per year	N	
	AQUATICS				
4	Recreational Swim	$2 - $5	per person	N	
	Swimming Lessons Group				
5	a) Residents	$75 - $85		N	
6	b) Non-Resident	$95 - $105		N	
	Semi-Private/Private Swimming Lessons				
7	a) Residents	$38	per half hour lesson	N	
8	b) Non-Resident	$58	per half hour lesson	N	
	Parent-Tot Drop-in swim pass				
9	a) Residents	$15	per 5 visits	N	
10	b) Non-Resident	$35	per 5 visits	N	
	Monthly Swim Club Fee Development Group				
11	a) Residents	$68 - $88	per month	N	
12	b) Non-Resident	$108 - $128	per month	N	
	Monthly Swim Club Juniors/Intermediate				
13	a) Residents	$78 - $98	per month	N	
14	b) Non-Resident	$118 - $138	per month	N	
	Monthly Swim Club-Senior				
15	a) Residents	$88 - $108	per month	N	
16	b) Non-Resident	$128 - $148	per month	N	
17	**CLASSES**	Instructor: hrs. * hourly rate		N	
	MEMBERSHIP				
	Senior Enrichment Fees(50+ years of age)				
	Senior Center Membership				
18	a) Residents	$12		N	
19	b) Non-Resident	$30		N	
	Sports Center Membership				
	Fitness Passes- Per Visit Packages				
20	a) 5 visits	$25	per visit	N	
21	b) 10 visits	$50	per visit	N	
21	c) 15 visits	$75	per visit	N	
22	d) 20 visits	$100	per visit	N	
	Fitness Passes Senior (50+)- Per Visit Packages				
23	a) 5 visits	$15	per visit	N	
24	b) 10 visits	$30	per visit	N	
25	c) 15 visits	$45	per visit	N	
26	d) 20 visits	$60	per visit	N	
27	Drop-In Fee	$7 - $12	per visit	N	

City of Milpitas
RECREATION

	Activity Description	Fee	Charge Basis	Y'rly In'fltr	Note
	Sports Center Unlimited Packages				
28	a) Monthly	$60		N	
29	b) 3 Months	$180		N	
30	c) 6 Months	$280		N	
31	d) 12 Months	$480		N	
	Sports Center Unlimited Packages - Senior (50+)				
32	a) Monthly	$38		N	
33	b) 3 Months	$85		N	
34	c) 6 Months	$135		N	
35	d) 12 Months	$235		N	
36	Annual Non-Resident Fee	$50 - $100		N	
	Department General Fees				
37	General Internal Class Program Fees	Staff time + Materials		N	
38	Membership Card replacement fee	$5		N	
39	Transaction Fee	$1 - $3	per receipt	N	
40	Trips	Actual cost to City + Trip Admission Fee		N	
41	General Non-Resident Fees	$20 - $30	per person/class/ month/program or trip	N	
	Artificial Turf Field				
	Deposit (Football/Soccer)				
42	a) Priority II & III	n/a		N	
43	b) Priority IV & V	$1,000		N	
	Deposit (Soccer/Volleyball)				
44	a) Priority II & III	n/a		N	
45	b) Priority IV & V	$750		N	
	Artificial Turf Football/Soccer w/o lights				
46	a) Priority II & III	n/a		N	
47	b) Priority IV	$150	per hour	N	
48	c) Priority V	$300	per hour	N	
	Artificial Turf Football/Soccer w/ lights				
49	a) Priority II & III	n/a		N	
50	b) Priority IV	$160	per hour	N	
51	c) Priority V	$320	per hour	N	
	Artificial Turf Volleyball/Soccer w/o lights				
52	a) Priority II & III	n/a		N	
53	b) Priority IV	$100	per hour	N	
54	c) Priority V	$200	per hour	N	
	Artificial Turf Volleyball/Soccer w/ lights				
55	a) Priority II & III	n/a		N	
56	b) Priority IV	$110	per hour	N	
57	c) Priority V	$220	per hour	N	
	Tournament: Field w/o lights (Football)				
58	a) Priority II & III	n/a		N	
59	b) Priority IV	$210	per hour	N	
60	c) Priority V	$315	per hour	N	

City of Milpitas
RECREATION

	Activity Description	Fee	Charge Basis	Y'rly In'fltr	Note
	Tournament: Field w/ lights (Football)				
61	a) Priority II & III	n/a		N	
62	b) Priority IV	$220	per hour	N	
63	c) Priority V	$330	per hour	N	
	Tournament: Field w/o lights (Small)				
64	a) Priority II & III	n/a		N	
65	b) Priority IV	$160	per hour	N	
66	c) Priority V	$240	per hour	N	
	Tournament: Field w/ lights (Small)				
67	a) Priority II & III	n/a		N	
68	b) Priority IV	$170	per hour	N	
69	c) Priority V	$255	per hour	N	
	Community Center Rentals				
70	Application Fee (non-refundable)	$20 - $30	per hour	N	
71	Rental Deposits: Auditorium	$500	per hour	N	
	Auditorium (3 hr. minimum)				
72	a) Priority II	no fee		N	
73	b) Priority III	$100	per hour	N	
74	c) Priority IV	$200	per hour	N	
75	d) Priority V	$260	per hour	N	
	Conference Room (2 hr. minimum)				
76	a) Priority II	no fee		N	
77	b) Priority III	$35	per hour	N	
78	c) Priority IV	$70	per hour	N	
79	d) Priority V	$130	per hour	N	
	Dance Studio. Craft Classroom (2 hr. minimum)				
80	a) Priority II	no fee		N	
81	b) Priority III	$20	per hour	N	
82	c) Priority IV	$40	per hour	N	
83	d) Priority V	$100	per hour	N	
	Facility Attendant Fees				
84	a) Priority II,III, IV	$30	per hour	N	
85	b) Priority V	$60	per hour	N	
	Piano				
86	a) Priority III, IV	$20	per day	N	
87	b) Priority V	$80	per day	N	
88	Auditorium Screen Deposit	$250		N	
89	Auditorium Sound System (includes staff time)	$50	per hour	N	
	Field Rentals				
90	Application Fee (non-refundable)	$20 - $30		N	[a]
	Cricket Pitch				
91	a) Priority II & III	n/a		N	
92	b) Priority IV	$30	per hour	N	
93	c) Priority V	$60	per hour	N	
	Rental Deposits				
94	a) Priority II & III	n/a		N	
95	b) Priority IV & V	$750		N	

City of Milpitas
RECREATION

	Activity Description	Fee	Charge Basis	Y'rly In'fltr	Note
	Soccer Field w/o lights (2hr. Minimum) (grass)				
96	a) Priority II & III	n/a		N	
97	b) Priority IV	$30	per hour	N	
98	c) Priority V	$60	per hour	N	
	Soccer Field w/ lights (2hr. Minimum) (grass)				
99	a) Priority II & III	n/a		N	
100	b) Priority IV	$40	per hour	N	
101	c) Priority V	$80	per hour	N	
	Softball/ Baseball Field w/o lights (2hr minimum)				
102	a) Priority II & III	n/a		N	
103	b) Priority IV	$20	per hour	N	
104	c) Priority V	$40	per hour	N	
	Softball/ Baseball Field w/ lights (2hr minimum)				
105	a) Priority II & III	n/a		N	
106	b) Priority IV	$30	per hour	N	
107	c) Priority V	$60	per hour	N	
	Tournaments: Field w/o lights				
108	a) Priority II & III	n/a		N	
109	b) Priority IV	$60	per hour	N	
110	c) Priority V	$120	per hour	N	
	Tournaments: Field w/ lights				
111	a) Priority II & III	n/a		N	
112	b) Priority IV	$80	per hour	N	
113	c) Priority V	$160	per hour	N	
	Gym, Fields, Courts & Pool Rentals				
114	Application Fee (non-refundable)	$20 - $30		N	
	Rental Deposit				
115	a) Priority II & III	n/a		N	
116	b) Priority IV & V	$750		N	
	Large Gymnasium (3 hr. minimum)				
117	a) Priority II & III	n/a		N	
118	b) Priority IV	$80		N	
119	c) Priority V	$160		N	
	Tournaments: Large Gymnasium (3 hr. Minimum)				
120	a) Priority II & III	n/a		N	
121	b) Priority IV	$140		N	
122	c) Priority V	$220		N	
	Training Pool (2hr. minimum)				
123	a) Priority II & III	n/a		N	
124	b) Priority IV	$50	per hr + 2 guards	N	
125	c) Priority V	$100	per hr + 2 guards	N	
	Yard Pool (2 hr. minimum)				
126	a) Priority II & III	n/a		N	
127	b) Priority IV	$60	per hr + 2 guards	N	
128	c) Priority V	$120	per hr + 2 guards	N	

City of Milpitas
RECREATION

	Activity Description	Fee	Charge Basis	Y'rly In'fltr	Note
	Meter Pool (2 hr. minimum)				
129	a) Priority II & III	n/a		N	
130	b) Priority IV	$70	per hr + 2 guards	N	
131	c) Priority V	$140	per hr + 2 guards	N	
	Facility Attendant/Scorekeeper (per attendant)				[a]
132	a) Priority II & IV	$30	per hour	N	
133	b) Priority V	$60	per hour	N	
	Lifeguard Fees (per Lifeguard)				[a]
134	a) Priority II & IV	$15	per hour	N	
135	b) Priority V	$30	per hour	N	
	Higuera Adobe				
136	Application Fee (non-refundable)	$20 - $30		N	[b]
137	Rental Deposit	$750		N	[b]
	Auditorium				
138	a) Priority II	no fee		N	
139	b) Priority III	$50	per hour	N	
140	c) Priority IV	$100	per hour	N	
141	d) Priority V	$160	per hour	N	
	Facility Attendant Fees (per attendant)				
142	a) Priority II, III, & IV	$30	per hour	N	
143	b) Priority V	$60	per hour	N	
	Mobile Stage Rental				
144	Deposit (All Priorities)	$1,000		N	
145	Rental (All Priorities)	$1,250 - $2,500	per day	N	
146	Light Package	$100 - $1,000	per rental	N	[c]
147	Light Mixer	$100 - $400	per rental	N	[d]
148	Light Tech	$30 - $100	per hour	N	[e]
149	Stage Extentions/Stage Risers	$100 - $500	per rental	N	[c]
150	Staff Fee	$30 - $100	per hour	N	[f]
151	Sound Package	$100 - $2,500	per rental	N	[c]
152	Sound Tech	$30 - $100	per hour	N	[e]
153	Audio Mixer	$100 - $400	per rental	N	[d]
154	Mileage	$0.30 - $2.00	per mile outside City	N	[g]
155	ADA Ramp	$250		N	
156	Truss Roof Cover/ Banner Support	$100 - $400	per rental	N	[c]
	Picnic Area Rentals				
157	Application Fee (non-refundable)	$20 - $30		N	
158	Rental Deposit: Large Picnic Area	$250		N	
	Small Parks with Restrooms (50 or less capacity)				
159	a) Priority III & IV	$80	per day per area	N	[b]
160	b) Priority V	$140	per day per area	N	[b]
	Small Parks without Restrooms (50 or less capacity)				
161	a) Priority III & IV	$60	per day per area	N	[b]
162	b) Priority V	$120	per day per area	N	[b]

City of Milpitas
RECREATION

	Activity Description	Fee	Charge Basis	Y'rly In'fltr	Note
	Medium Parks 50 to 100 or less capacity				
163	a) Priority III & IV	$140	per day per area	N	[b]
164	b) Priority V	$200	per day per area	N	[b]
	Large Parks More than 100+ capacity				
165	a) Priority III & IV	$320	per day per area	N	[b]
166	b) Priority V	$380	per day per area	N	[b]
	Sal Cracolice Facility Rental				
167	Application Fee (non-refundable)	$20 - $30		N	
168	Rental Deposits	$750		N	[h]
	Auditorium w/kitchenette (3hr. Minimum)				
169	a) Priority II	no fee		N	
170	b) Priority III	$80	per hour	N	
171	c) Priority IV	$160	per hour	N	
172	d) Priority V	$220	per hour	N	
	Facility Attendant Fees (per attendant)				
173	a) Priority II, III, & IV	$30	per hour	N	
174	b) Priority V	$60	per hour	N	
	Amphitheatre				
175	a) Priority II, III, & IV	$120	per day	N	
176	b) Priority V	$180	per day	N	
	Meeting Room				
177	a) Priority II	no fee		N	
178	b) Priority III	$45	per hour	N	
179	c) Priority IV	$90	per hour	N	
180	d) Priority V	$150	per hour	N	
	Senior Center Rentals				
181	Application Fee (non-refundable)	$20 - $30		N	
182	Rental Deposits: Auditorium	$750		N	[h]
	Rental Deposits: Classrooms				
183	a) Priority II	no fee		N	
184	b) Priority III	$75	per hour	N	
185	c) Priority IV	$150	per hour	N	
186	d) Priority V	$240	per hour	N	
	Community Room Auditorium (3hr. Minimum)				
187	a) Priority II	no fee		N	
188	b) Priority III	$90	per hour	N	
189	c) Priority IV	$180	per hour	N	
190	d) Priority V	$240	per hour	N	
	Classroom 140 and 141 (Full)				
191	a) Priority II	no fee		N	
192	b) Priority III	$45	per hour	N	
193	c) Priority IV	$90	per hour	N	
194	d) Priority V	$150	per hour	N	
	Classroom 140 and 141 (Half)				
195	a) Priority II	no fee		N	
196	b) Priority III	$25	per hour	N	
197	c) Priority IV	$50	per hour	N	
198	d) Priority V	$110	per hour	N	

City of Milpitas
RECREATION

	Activity Description	Fee	Charge Basis	Y'rly In'fltr	Note
	Facility Attendant Fees (per attendant)				
199	a) Priority II, III, & IV	$30	per hour	N	
200	b) Priority V	$60	per hour	N	
	Dance Studio				
201	a) Priority II	no fee		N	
202	b) Priority III	$20	per hour	N	
203	c) Priority IV	$40	per hour	N	
204	d) Priority V	$100	per hour	N	
	Senior Enrichment Fees(50+ years of age)				
205	Garden Plots (Residents Only)	$15	per year	N	
	Tennis Court Rentals				
206	Deposit	$250		N	[h]
	Tennis Courts w/o lights (per court)				
207	a) Priority II & III	n/a		N	
208	b) Priority IV	$8	per hour	N	
209	c) Priority V	$10	per hour	N	
	Tennis Courts w/ lights (per court)				
210	a) Priority II & III	n/a		N	
211	b) Priority IV	$10	per hour	N	
212	c) Priority V	$12	per hour	N	
	Tournament: Tennis Courts w/o lights				
213	a) Priority II & III	n/a		N	
214	b) Priority IV	$26	per hour	N	
215	c) Priority V	$52	per hour	N	
	Tournament: Tennis Courts w/ lights				
216	a) Priority II & III	n/a		N	
217	b) Priority IV	$30	per hour	N	
218	c) Priority V	$60	per hour	N	
219	Rental Deposits: All other rooms	$200		N	[h]
	SALES				
	Department General Fees				
220	Recreation Services Merchandise	actual cost + % mark-up		N	
	SENIORS				
	Department General Fees				
221	Milpitas Resident Senior Citizen Discount (50 years+)	25% off any non-senior center based class		N	
	Senior Enrichment Fees(50+ years of age)				
222	Senior Center Programs-Classes	$2 - $5	per hour instruction	N	
223	Senior Center Citizen Trip Admin Fee	$5 - $10	per activity	N	[i]
224	Misc. Senior Center staff-run Programs/Events	$0.00 - $15		N	[j]
225	Senior Center Program/Class Non-Resident Fee	$10	per class	N	
226	Senior Center Fitness Room	$1.50	per visit	N	

City of Milpitas
RECREATION

	Activity Description	Fee	Charge Basis	Y'rly In'fltr	Note
	SPECIAL EVENTS				
	Special Event Fees				
227	Special Event Entrance Fee	$0 - $50		N	
228	Special Events Activity Fee	$0 - $15		N	
229	Special Event Vendor Fees	$100-$500	per space OR 5% - 20% net sales	N	
230	Special Event Non-Profit Vendor Fees	$0 - $250	per space OR 0% - 10% net sales	N	
	YOUTH				
	Youth Enrichment Fees				
	Youth Sports User Fee				
231	a) Outdoor	$10	per player per season	N	
232	b) Indoor	$20	per player per season	N	
233	Junior Warriors Basketball League	$129-$160	per player per season	N	
	After School Program				
234	a) Residents	$8 - $12	per day for residents	N	
235	b) Non-residents	$8 - $12 with add'l $20/year	day for non-residents with add'l $20/year	N	
	Late fee for After-School/Day Camp Programs				
236	a) 1st offense & 2nd offense	$10	per each 10 minutes	N	
237	b) 3rd offense or more	$25	per each 10 minutes	N	
238	Day Camp (Regular Day) – Staff Run	$175 - $195	per week	N	
239	Trip Week Day Camp	$299 - $350	per week	N	
240	Extended Care Day Camp	$40	per week	N	
	RENTALS				
	Special Event Venue/Open Space				
241	Application Fee (non-refundable)	$30	per application	N	
242	Rental Deposits	$1,000	per day	N	
	Rental Fee				
243	a) Priority II & III	$990	per day	N	
244	b) Priority IV	$1,980	per day	N	
245	c) Priority V	$2,970	per day	N	
246	Facility Attendant Fees (per attendant)	$30	per hour	N	

Notes:
- [a] No fee for Priority III.
- [b] No fee for Priority II.
- [c] Based on needs and packages.
- [d] Based on needs and days.
- [e] Based on cost of tech.
- [f] Based on needs, actual costs of staff used in rental, time for load in/out and transportation.
- [g] Based on current gas prices.
- [h] No fee for Milpitas residents.
- [i] Depending on trip costs.
- [j] Includes holiday dinner, tea parties, cooking classes, dances, misc. activities.

Additional Notes:

* Recreation Fees recovery goals may be adjusted/balanced based on "market factors".

** Legend, Recreation Fees:

Priority II= Milpitas Public Schools, Chamber, and Gov. Agencies
Priority III= Resident Non-Profits
Priority IV= Milpitas Residents
Priority V= Non-Resident

City of Milpitas
FINANCE

	Activity Description	Fee	Charge Basis	Y'rly In'fltr	Note
1	Bond Payoff Calculation	$172		Y	
	Business License				
2	a) New Application Processing Fee	$50	per year	N	
3	b) Processing Fee (renewal)	$25	per year	N	
4	Phone Check Fee (User Fee - Finance)	$15		N	
5	Property Damage Invoice Processing Fee	$30	plus replacement cost	N	

City of Milpitas
CITY CLERK

	Activity Description	Fee	Charge Basis	Y'rly In'fltr	Note
	Miscellaneous				
1	Campaign Late Filing Fees (per day. Set by State of California)	$10	per day	N	
2	Bingo License Renewals (Municipal Code)	$50		N	
3	Passport Application/Execution Fee (set by U.S. Government)	$35		N	
4	Requests Requiring Special Programming or Formatting	Actual Cost	per hour / T&M	N	

City of Milpitas
INFORMATION SERVICES

	Activity Description	Fee	Charge Basis	Y'rly In'fltr	Note
1	Digital Media Reproduction	$20	per flash drive/DVD, etc.	N	
2	Requests Requiring Special Programming or Formatting	Actual Cost	per hour / T&M	N	

INFLATIONARY ADJUSTMENT CALCULATION

Source: CPI All Urban Consumers (CPI-U) San Francisco-Oakland-Hayward CA

Month / Period	Year	Value	FY 18/19	FY 19/20	FY 20/21	FY 21/22	
Annual Avg	2016	266.344					
Annual Avg	2017	274.924	3.22%				
Annual Avg	2018	285.550		3.87%			
Annual Avg	2019				4.00%		*Override amount inserted by ClearSource.*
Annual Avg	2020	0.000				0.00%	*Current amount is placeholder to equal 3% cost inflation.*

INFLATIONARY ADJUSTMENT CALCULATION

Source: CPI All Urban Consumers (CPI-U) San Francisco-Oakland-Hayward CA

Month / Period	Year	Value	FY 18/19	FY 19/20	FY 20/21	FY 21/22	
Annual Avg	2016	266.344					
Annual Avg	2017	274.924	3.22%				
Annual Avg	2018	285.550		3.87%			
Annual Avg	2019	295.004			3.31%		*Yellow shading to be populated by City of Milpitas Finance once pe*
Annual Avg	2020	303.854				3.00%	*Current amount is placeholder to equal 3% cost inflation.*

Mileage Reimbursement ($/mile) $0.58 (Source: California Department of Human Resources - Personal Vehicle Mileage Reimbursement)

Trip Charge — Cost-Based

Fee Description: The cost for a maintenance worker to travel to a customer's location for a service request.

Labor

Position	*(select title of personnel working on fee)*	Maintenance Worker III-40
Fully Burden Hourly Rate	*(rate populated based on selected position)*	$100.40
Hours of Labor	*(input typical hours spent on fee)*	0.75

Travel		**Distance (miles)**	**# of Vehicles**	**Travel time (hours)**
Average round trip	*(input average round trip and number of vehicles typically used)*	5.00	1	0.5

Fee Calculation	Fully-Burdened Cost	% Recovery	Proposed Fee
Labor	$75.30	100%	$75.30
Travel	$2.88	100%	$2.88
Travel Time	$50.20	100%	$50.20
Total Fee Calculation	**$128.37**		**$128.37**

Trip Charge - After Hours — Cost-Based

Fee Description: The cost for a maintenance worker to travel to a customer's location for a service request after hours.

Labor

Position	*(select title of personnel working on fee)*	Maintenance Worker III-40	On Call After Hours	Hours of Labor Notes
Fully Burden Hourly Rate	*(rate populated based on selected position)*	$100.40	$450.00	Minimum of 3 hours after hours
Hours of Labor	*(input typical hours spent on fee)*	3.00		On call staff receive $450/ week (40 hours)

Travel		**Distance (miles)**	**# of Vehicles**	**Travel time (hours)**
Average round trip	*(input average round trip and number of vehicles typically used)*	5.00	1	0

Fee Calculation	Fully-Burdened Cost	% Recovery	Proposed Fee
Labor	$301.19	100%	$301.19
On Call After Hours	$33.75	100%	$33.75
Travel	$2.88	100%	$2.88
Travel Time	$0.00	100%	$0.00
Total Fee Calculation	**$337.82**		**$337.82**

Discontinuance of Service — Cost-Based

Fee Description: The cost for a maintenance worker to disconnect service.

Labor

Position	*(select title of personnel working on fee)*	Maintenance Worker III-40
Fully Burden Hourly Rate	*(rate populated based on selected position)*	$100.40
Hours of Labor	*(input typical hours spent on fee)*	0.75

Travel

		Distance (miles)	# of Vehicles	Travel time (hours)
Average round trip	*(input average round trip and number of vehicles typically used)*	5.00	1	0.5

Fee Calculation	Fully-Burdened Cost	% Recovery	Proposed Fee
Labor	$75.30	100%	$75.30
Travel	$2.88	100%	$2.88
Travel Time	$50.20	100%	$50.20
Total Fee Calculation	**$128.37**		**$128.37**

Restoration of Discontinuance of Service — Cost-Based

Fee Description: The cost for a maintenance worker to reestablish service.

Labor

Position	*(select title of personnel working on fee)*	Maintenance Worker III-40
Fully Burden Hourly Rate	*(rate populated based on selected position)*	$100.40
Hours of Labor	*(input typical hours spent on fee)*	0.75

Travel

		Distance (miles)	# of Vehicles	Travel time (hours)
Average round trip	*(input average round trip and number of vehicles typically used)*	5.00	1	0.5

Fee Calculation	Fully-Burdened Cost	% Recovery	Proposed Fee
Labor	$75.30	100%	$75.30
Travel	$2.88	100%	$2.88
Travel Time	$50.20	100%	$50.20
Total Fee Calculation	**$128.37**		**$128.37**

Meter Removal/ Installation	Cost-Based

Fee Description: The cost includes pulling the meter for testing or replacement.

Labor

		Maintenance Worker III-40	Maintenance Worker III-40	Maintenance Worker III-40	Hours of Labor Notes
Position	*(select title of personnel working on fee)*				
Fully Burden Hourly Rate	*(rate populated based on selected position)*	$100.40	$100.40	$100.40	1 MWIII for less than 2"
Hours of Labor	*(input typical hours spent on fee)*	0.50	1.00	1.00	2 MWIII for greater than 2"
					30 minutes for less than 2"
Travel		**Distance (miles)**	**# of Vehicles**	**Travel time (hours)**	1 hour for greater than 2"
Average round trip	*(input average round trip and number of vehicles typically used)*	5.00	1	0.5	

Fee Calculation - Less than 2"	Base Cost
Labor	$50.20
Travel	$2.88
Travel Time	$50.20
Total Fee Calculation	**$103.27**

Fee Calculation - Greater than or equal to 2"	Base Cost
Labor	$200.80
Travel	$2.88
Travel Time	$100.40
Total Fee Calculation	**$304.07**

Meter Size	Fully-Burdened Cost	% Recovery	Proposed Fee
Less than 2"	$103.27	100%	**$103.27**
Greater than or equal to 2"	$304.07	100%	**$304.07**

Hydrant Flow Test — Cost-Based

Fee Description: Hydrant flow tests measure pressure and flow in the water system. Hydrant flow tests are required for fire sprinkler design and by schools.

Labor

		Maintenance Worker III-40	Maintenance Worker III-40	Water System Operator	Hours of Labor Notes
Position	*(select title of personnel working on fee)*				15 minutes of flushing for 2 hydrants
Fully Burden Hourly Rate	*(rate populated based on selected position)*	$100.40	$100.40	$104.58	Preflush for 10 minutes
Hours of Labor	*(input typical hours spent on fee)*	1.57	1.57	1.57	Connect devices for 10 minutes
Travel		**Distance (miles)**	**# of Vehicles**	**Travel time (hours)**	Traffic control for 30 minutes on start and finish
Average round trip	*(input average round trip and number of vehicles typically used)*	5.00	1	0.5	5 minutes for each additional hydrant
					2-4 hydrants based on location

Fee Calculation - 2 or Fewer Hydrants	Base Cost
Labor	$479.44
Travel	$2.88
Travel Time	$152.69
Total Fee Calculation	**$635.00**

Fee Calculation - 3 Hydrants	Base Cost
Labor	$503.87
Travel	$2.88
Travel Time	$152.69
Total Fee Calculation	**$659.43**

Fee Calculation - 4 Hydrants	Base Cost
Labor	$531.35
Travel	$2.88
Travel Time	$152.69
Total Fee Calculation	**$686.92**

Number of Hydrants	Fully-Burdened Cost	% Recovery	Proposed Fee
2 or fewer hydrants	$635.00	100%	**$635.00**
3 hydrants	$659.43	100%	**$659.43**
4 hydrants	$686.92	100%	**$686.92**

Sewer Lateral Visual Inspection — Cost-Based

Fee Description: The cost to do a visual inspection of a sewer lateral.

Labor

		Maintenance Worker III-40	Hours of Labor Notes
Position	*(select title of personnel working on fee)*		
Fully Burden Hourly Rate	*(rate populated based on selected position)*	$100.40	30 minutes for MWIII to do visual inspection
Hours of Labor	*(input typical hours spent on fee)*	0.50	

Travel

		Distance (miles)	# of Vehicles	Travel time (hours)
Average round trip	*(input average round trip and number of vehicles typically used)*	5.00	1	0.5

Fee Calculation	Fully-Burdened Cost	% Recovery	Proposed Fee
Labor	$50.20	100%	$50.20
Travel	$2.88	100%	$2.88
Travel Time	$50.20	100%	$50.20
Total Fee Calculation	**$103.27**		**$103.27**

Sewer Lateral Video Inspection - Residential — Cost-Based

Fee Description: The cost to do a video inspection of a sewer lateral for a residential customer.

Labor

		Equipment Maint Worker II-40	Equipment Maint Worker III-40	Hours of Labor Notes
Position	*(select title of personnel working on fee)*			
Fully Burden Hourly Rate	*(rate populated based on selected position)*	$103.15	$119.53	1.5 hours for EMII and EMIII to do video inspection
Hours of Labor	*(input typical hours spent on fee)*	1.50	1.50	

Travel

		Distance (miles)	# of Vehicles	Travel time (hours)
Average round trip	*(input average round trip and number of vehicles typically used)*	5.00	1	0.5

Fee Calculation	Fully-Burdened Cost	% Recovery	Proposed Fee
Labor	$334.02	100%	$334.02
Travel	$2.88	100%	$2.88
Travel Time	$111.34	100%	$111.34
Total Fee Calculation	**$448.24**		**$448.24**

Sewer Lateral Video Inspection - Commercial — Cost-Based

Fee Description: The cost to do a video inspection of a sewer lateral for a commercial customer.

Labor

		Equipment Maint Worker II-40	Equipment Maint Worker III-40	Hours of Labor Notes
Position	*(select title of personnel working on fee)*			
Fully Burden Hourly Rate	*(rate populated based on selected position)*	$103.15	$119.53	1.5 hours for EMII and EMIII to do video inspection
Hours of Labor	*(input typical hours spent on fee)*	2.50	2.50	Traffic control for 30 minutes on start and finish

Travel

		Distance (miles)	# of Vehicles	Travel time (hours)
Average round trip	*(input average round trip and number of vehicles typically used)*	5.00	1	0.5

Fee Calculation	Fully-Burdened Cost	% Recovery	Proposed Fee
Labor	$556.70	100%	$556.70
Travel	$2.88	100%	$2.88
Travel Time	$111.34	100%	$111.34
Total Fee Calculation	**$670.92**		**$670.92**

City of Milpitas
User and Regulatory Fee Study
Cost of Service Calculation - Short-Term Rental Permit

	Fee Description	Proposed Fee Type	Est. Labor Hours	Fully-Burdened Hourly	Est. Cost of Service	Proposed Fee	Proposed Cost Recovery
1	Short-Term Rental Permit	flat	2.00	$244	$488	$488	100%

Dear Mayor and Milpitas City Council,
Thank you for serving our city. It is a privilege to live in a real community, the City of Milpitas, and to experience the sense of teamwork that unites us. Nevertheless, we have concerns about the fees and processes involved in sponsoring a community event here.

The Sunnyhills Neighborhood Association (SNA) began a tradition in October 2009 of hosting a Halloween Party for the purposes of drawing our community together and providing a safe alternative for children. Our Halloween costume party draws nearly 200 neighbors each year to Sunnyhills-Augustine Park for a 2 hour event, free to everyone:
-Children wear fun costumes
-Families complete and take home art projects
-The Milpitas Police Department sends an officer to provide safety tips and to describe and promote the Neighborhood Watch Program
-The Fire Department sends the "Safety House" or an engine, which is simultaneously educational and entertaining
-The Police Volunteers set up a booth and provide free Child ID cards.
-The children display their costumes, a process in which they are not compared competitively, but rather uniformly affirmed by the visiting officer
-The Neighborhood Association provides a certificate and small prize to all children in costumes
-Fun, live music keeps the energy going
-Free refreshments are served in accordance with health regulations,.
-Local retail merchants contribute food and other goods to be shared; they are recognized from the stage for their service.
-The City of Milpitas is recognized in our flier and explicitly from the stage, for its generous contributions towards the event.
-Milpitas High School and middle school students are recruited to help, and receive community service credits.

Supervisor Dave Cortese and his staff contribute massively to the practical needs of the event by printing our flier for distribution at the nearby elementary schools and providing the following:

100 chairs (approximately)
8 tables
Stage (dimensions that comply with ADA requirements)
PA system
80 pumpkins for art projects
Liability Insurance for the event
+ often a supportive appearance from Dave Cortese himself

Probably the most important value the event provides is an opportunity for 150-200 neighbors to get to know each other, for the first time, or at least better than they have. All of this is free to the public, to everyone who attends. SNA has never sought a dime from these events, in fact we spend money for these events and provide all of the publicity. We spend, I would conservatively estimate, at least 200 volunteer hours each year.

This tradition started at a meeting in Wiley and Debbie Rankin's backyard in June 2009. The Rankins and another SNA member have spearheaded this event and have been excited to see the tradition grow, as have I. According to the Rankins, when they began, it cost them $60 to reserve Augustine Park. That was it. They paid the $60, were reimbursed by SNA, and Dave Cortese provided the insurance and the hardware.

In 2019, the overall cost to SNA was $1132.63. While we were granted a fee waiver for all but $20, the process of applying for the permits involved has grown exponentially. If the event were to be held in 2020, the overall fees would be around $2100 and, if granted a full fee waiver of $1500, would leave SNA with a bill of $600.

When the Rankins joined SNA and met Neil McKenzie in 1992 (shortly after they moved to Milpitas), the organization had around $2000 in the bank. Right now, we have around $2000 in the bank - before we pay out our $500 scholarship.

We believe that no one in City government has intended this, and we still experience a lot of friendly city officials who help us each year, but what we now experience when we initiate this process is a hostile environment. The regulatory process and increasing fees are essentially saying "No" to a community sponsored event, run by volunteers, that draws the city (and particularly our neighborhood) together. For free. We don't understand. Isn't one purpose of city government to support events that encourage community building and instill pride, rather than discourage them?

So here are our questions:

1. Does the city recognize the tectonic shift that has happened (fee increase by a factor of 40, etc), especially in the last few years?
2. Can the city take proactive steps to mitigate the very discouraging barriers that SNA and other groups face?
3. Since SNA is not willing to risk all of its assets on one event, can the City Council please address this crisis which threatens the very existence of our 12 year tradition?
4. Would the city consider co-sponsoring the event?

The City has, as we understand it, monetized the value of the labor and procedural costs to authorize our event, prepare for our event, and review the plans for our event. Thus begins the theoretical framework to justify charging us $2,100. But what about the value of the event to the City? How about the value of forming hundreds of new relationships (over the years, thousands of friendships), of safety tips shared, of Neighborhood Watch groups formed and going on to thrive, during events like National Night Out)?

If one crime has been prevented due to these community activities, doesn't that provide the type of offset that we are all looking for? Can that value be monetized as well, and used to justify a much more affordable fee structure? Unless such an adjustment is made the expense of the event will make it very difficult for us to continue this community tradition.

Thank you for your attention to this matter. Thank you for hearing our thoughts. We look forward to hearing from you, specifically regarding each of these questions, at your earliest opportunity.

Sincerely

Allysson McDonald, President
Sunnyhills Neighborhood Association

CITY OF MILPITAS
AGENDA REPORT
(AR)

Item Title:	**Adopt the City of Milpitas Economic Development Strategy and Implementation Actions**
Category:	Community Development
Meeting Date:	5/5/2020
Staff Contacts:	**Alex Andrade, Economic Development Director, 408-586-3046** **Daniel Degu, Economic Development Coordinator, 408-586-3054**
Recommendation:	Adopt the City of Milpitas Economic Development Strategy and implementation actions.

Background:

The City Council has identified Economic Development and Job Growth as a priority, which is vital to the health of the local economy. In order to proceed with this specific Council priority, the Office of Economic Development is focused on updating the current Economic Development Strategy, which is approximately 15 years old. The proposed Economic Development Strategy is designed to be forward thinking and inclusive, with a regional economic lens to ensure local economic success and vitality. The economic downturn due to the COVID-19 pandemic which is unfolding around us has required very recent adjustments to the proposed strategy to address the negative effects to the Milpitas business community and workforce. Therefore, the proposed Economic Development Strategy and Implementation Actions is timely and more necessary than ever.

On June 18, 2019, the City Council approved and authorized the Interim City Manager to execute a Professional Services Agreement with consultant Strategic Economics for development of an Economic Development Strategy. Based on staff's recommendation, Council approved Strategic Economics (and subconsultant, Plan to Place) as the most qualified consultant team because of their identification of forward-looking economic development growth opportunities with place-making solutions, expanding workforce development opportunities for local residents, strategies to prevent small business displacement, inclusive community engagement plans, identification of new funding sources, and attracting emerging technologies while retaining valuable industry sectors (Attachment A).

On November 12, 2019, a City Council Study Session was held to receive an update on the draft Economic Development Strategy's stakeholder and community engagement outreach, economic context, existing conditions and to provide staff feedback on the preliminary findings of the strategy (Attachment B). Staff and the consultant team incorporated Council's comments and direction from the Study Session onto the attached draft. Issues discussed at the Council Study Session include, but are not limited to, the following:

- **Tech/Advanced Manufacturing** – Ensure that the two main economic drivers continue to thrive in a competitive local and regional economy;
- **Innovation District** – Be proactive in developing an Innovation District near the Milpitas Transit Center to attract new and emerging technology businesses and workforce;
- **Milpitas Transit Center** – Improve access for residents, employees and shoppers to help create economic development opportunities in and around the Milpitas Transit Center;
- **Small Business** – Assist and collaborate with the small business community for economic vitality; and

- **Miscellaneous Items** – Workforce development, trends in sales tax and revenues over time, business attraction, industrial uses, permitting processes, placemaking, first/last mile solutions for transit, welcome center at the Milpitas Transit Center, Chamber partnership, marketing, utility rates and Midtown improvements.

On February 18, 2020, the City Council received a report on the draft Economic Development Strategy Framework. The report reviewed the draft Economic Development Strategy Framework as a preview of the initial proposed strategies based on feedback obtained at the November 12, 2019 Council Study Session as well as economic research and public feedback from community stakeholders and the Economic Development and Trade Commission (EDTC). The Council moved the report to the consent calendar where it was approved as received with no further Council comment.

On March 17, 2020, the City Council established a Subcommittee to explore recommendations for the Council regarding small business loans including those that other cities may have, relief assistance, small business survey, tracking of business assistance requests, and other relevant possibilities on response to COVID-19. The Small Business Assistance Subcommittee has met twice. Meetings took place on March 24, 2020 and April 6, 2020 and discussion topics included developing a purpose statement, drafting a work plan, and recommending to the full City Council that a small business loan program be developed. It is important to note that the role of the newly established Small Business Assistance Subcommittee is to focus on the immediate small business response related to COVID-19. On the other hand, the Economic Development Strategy and Implementation Actions document contains longer-term economic development programs and initiatives that promote economic vitality under a five-year plan. The Economic Development Strategy and Implementation Actions document represents general policy statements and goals for future programs and initiatives. Economic conditions are evolving rapidly, and the Office of Economic Development continues to monitor, research and connect our business partners with essential resources and assistance for business continuity, resiliency and recovery.

Staff has presented community engagement and stakeholder findings, industry data analysis, and preliminary draft strategies at various EDTC meetings over the past six months. On April 24, 2020, EDTC received a Memorandum and presentation on staff's response to COVID-19 business assistance and guidance, the draft Economic Development Strategy and Implementation Actions, and an update on the City's Community Identification and Branding Study. EDTC voted unanimously (5-0) to recommend that the City Council adopt the Economic Development Strategy and Implementation Actions Draft Report.

With continued COVID-19 related impacts to our local economy, staff asked Strategic Economics to revise the Executive Summary of the Draft Report to include available information about the COVID-19 impacts, as well as a description of the business assistance and emergency implementation actions that the City has already taken to assist businesses during the crisis. Strategic Economics has also added new strategies and implementation actions into the document that will focus on providing assistance and help businesses in the most affected industries, such as retail and restaurants, manufacturing, and other small businesses. Some of the implementation actions are a continuation of the COVID-19 response activities, while others are new ideas to help businesses and workers recover once the shelter-in-place Order is lifted. The revised Economic Development Strategy and Implementation Actions document focuses on Small Business Entrepreneurship and Displacement Prevention, Retail and Restaurant, and Workforce Development and Education Resources as the most immediate strategies to implement in response to the pandemic.

Since a Council priority is Economic Development and Job Growth, staff will continue to work toward strengthening our economic foundations that support community prosperity and opportunity while ensuring a sustainable and livable city. Notwithstanding, we have entered a severe recession due to the pandemic, which will has significantly reduced economic activity and revenues to the City. The Fiscal Year 2020-21 Proposed Budget is based on the Forecast presented to Council in early April, which assumes Milpitas will resume normal economic activities within the next 12 to 18 months. Restrictions on travel and movement of people in order to contain COVID-19, will have a significant impact on the regional, national and global economies. Locally, the Great Mall has been closed, business travel generating overnight hotel stays has decreased substantially with some hotels closing their doors, and construction activity ceased significantly when the most recent April 29, 2020 Santa Clara County shelter-in-place Order was issued. The most immed

fiscal impact to the City is directly tied to the substantial reductions in revenue from Transient Occupancy Tax (TOT), Sales Tax, and fees related to construction activity. Therefore, the Economic Development Strategy may be affected in terms of available staff and financial resources recommended to implement certain specific actions. However, the Economic Development Strategy and Implementation Actions document provides for numerous actions that support current City business assistance activities until staff is able to commence longer-term strategies.

Analysis:

The proposed Economic Development Strategy and Implementation Actions must now consider the unprecedented period of economic uncertainty resulting from efforts to slow the spread of the coronavirus for public health and safety. The Office of Economic Development has been undertaking numerous efforts to assist businesses harmed by the legally mandated restrictions on travel and business operations. As a plan focused on the next five years, the Economic Development Strategy provides a roadmap for stabilizing and growing the Milpitas economy as the City, region, nation, and world recover from the current economic crisis.

The purpose of the May 5, 2020 City Council meeting is to discuss and adopt the proposed Economic Development Strategy and Implementation Actions. To view the entire Economic Development Strategy and Implementation Actions report, please refer to Attachment C in the Council's agenda packet.

A summary of the proposed strategies is outlined below.

1. **Small Business, Entrepreneurship and Displacement Prevention Strategies**

Strategy 1. Continue to provide assistance and resources for small businesses in response to COVID-19.

Strategy 2. Continue to collaborate with nonprofits, foundations and lenders to provide technical assistance and resources to small businesses.

Strategy 3. Support businesses located in areas that are expected to undergo major reinvestment and redevelopment activity.

Strategy 4. Require that new development projects develop a plan for relocating or accommodating small businesses that are displaced.

Strategy 5. Leverage business organizations to conduct outreach to small businesses.

Strategy 6. Expedite and streamline process of permit issuance and inspections in order to reduce the time and expense for small businesses.

2. **Retail and Restaurant Strategies**

Strategy 7. Continue to assist with COVID-19 emergency assistance and recovery.

Strategy 8. Explore a Buy Local marketing initiative for promotion of Milpitas' shopping centers/districts and globally diverse mix of restaurants and retailers.

Strategy 9. Provide storefront façade improvement assistance to enhance the attractiveness and appearance of business exteriors when funding sources become available.

Strategy 10. Monitor performance of retail centers and proactively reach out to property owners and businesses to provide assistance.

Strategy 11. Allow flexible uses in business park areas to encourage placement of retail, restaurants, services, and amenities near office space.

3. Workforce Development and Education Resources

Strategy 12. Explore potential conversion of marginal hotel and motel properties into permanent affordable housing, using state funding resources.

Strategy 13. Explore partnerships with employers and developers to provide affordable workforce housing options.

Strategy 14. Establish regular meetings with workforce development organizations, the Milpitas Unified School District (MUSD), regional universities and community colleges to coordinate their activities around training and educational programs to assist unemployed residents and youth to access jobs in target industries, including high tech and advanced manufacturing/high tech sectors.

Strategy 15. Collaborate with MUSD Board and staff leadership to develop a shared work program that clarifies Milpitas City staff roles in connecting school district programs and students with training and exposure opportunities at businesses in the city.

Strategy 16. Explore collaborations with regional educational resources, such as apprenticeships via the Advanced Manufacturing Bay Area Community Colleges office.

Strategy 17. Continue to provide support for the FlexFactor program and Manufacturing Day to introduce youth to potential opportunities and to connect job-seekers with employers.

4. High Tech and Advanced Manufacturing Sector

Strategy 18. Assist with COVID-19 response and recover for advanced manufacturing businesses.

Strategy 19. Pursue growth and retention of businesses engaged in Milpitas' highly concentrated and specialized technology, advanced manufacturing and related research and development sector.

Strategy 20. Pursue opportunities to leverage existing strengths in electronics and materials science, research and development, advanced manufacturing, and engineering to diversify the types of production and research and development activities and businesses in Milpitas.

Strategy 21. Explore creating a "demonstration partnership policy" for developing, testing, and demonstrating innovative solutions to City needs that involve public-private partnerships with innovative businesses in Milpitas and use of City land, data, or facilities.

Strategy 22. Assist in the marketing, promotion, and tenanting of vacant office and flex/R&D spaces.

5. Light Industrial, Manufacturing and Warehouse Distribution

Strategy 23. Ensure light industrial/manufacturing uses are prioritized relative to warehouse/distribution centers in land use regulations and infrastructure investments.

Strategy 24. Support conversion or redevelopment of warehouse/distribution properties to office, production, and research and development uses.

Strategy 25. Monitor business-to-business sales tax collection in commercial and industrial subareas.

6. Innovation District/Real Estate Development Opportunities

Strategy 26. Encourage the development of a walkable mixed-use environment with restaurant, and office uses in the Transit Area Specific Plan (TASP), especially at the Great Mall and surrounding areas.

Strategy 27. Identify and preserve high-priority office/R&D development sites in and near the TASP, including changes to land use policy.

Strategy 28. Pursue establishment of business incubators and co-working spaces in the TASP.

Strategy 29. Facilitate deployment of 5G wireless service in the TASP area, especially in underserved areas and in locations targeted for growth of office/R&D uses as part of a new Innovation District.

Strategy 30. Assist in the placement of event programming and temporary "pop-up" uses in the TASP to enliven public spaces and vacant retail spaces until sufficient demand exists to maintain this vibrancy without assistance.

Strategy 31. Position Midtown as a community destination for local, independent retail and restaurants.

Strategy 32. Expand staff capacity and funding for real estate functions and to incentivize development of properties in Midtown, TASP, and other areas that will help to achieve the City's community and economic development goals.

Strategy 33. Ensure that City receives tax revenues from sales of marijuana products, including delivery services.

7. **City Marketing and Processes**

Strategy 34. Develop consistent, modern branding based on City goals for business attraction/retention.

Strategy 35. Address delays and challenges in City permitting processes and permitting requirements, especially regarding certificate of occupancy requirements for changes of business ownership.

Strategy 36. Update the City's economic development web presence.

Policy Alternative

Alternative: Do not adopt the Economic Development Strategy and Implementation Actions at this time and return at a future date for adoption.

Pros: Staff would receive Council comments and direction and return to Council at a later date for adoption of the Economic Development Strategy and Implementation Actions.

Cons: Depending on Council direction, not adopting the Economic Development Strategy and Implementation Actions would require additional limited staff time and consultant resources towards refinement of the document at a time when the business community is seeking assistance and guidance on business resiliency, survival, and strategic recovery outcomes.

Reason not recommended: It is critical for our local business community to obtain City Council adoption of the proposed Economic Development Strategy and Implementation Actions to ensure that Milpitas maintains its competitiveness in: (1) attracting emerging technologies; (2) retaining and expanding existing businesses and industries; (3) preparing the local workforce for future jobs; (4) encouraging development activity; and (5) sustaining the City's fiscal health. For these reasons, Alternative 1 is not recommended.

Fiscal Impact:

The proposed Economic Development Strategy and Implementation Actions report identifies 36 Strategies with many more implementation actions. Given the current fiscal environment caused by the COVID-19 pandemic, staff will concentrate on implementing strategies within existing resources. Additional funding sources for the implementation of the strategies will be determined as part of the annual budget development process and brought forward for Council consideration through future City Manager's proposed budgets.

California Environmental Quality Act:
By the definition provided in the California Environmental Quality Act (CEQA) Guidelines Section 15378, this action does not qualify as a "project" for the purpose of CEQA as this action has no potential to result in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.

The City Council's action in adopting the strategy document is also exempt from CEQA under Guideline 15306 as basic data collection and research which does not cause or result in a serious or major disturbance to an environmental resource. The data collection and research captured in this strategy document details potential actions the City can explore, but which it is not yet approving, adopting, or funding. Any future consideration of potential actions will include an analysis of any environmental impacts associated with implementation of those actions. At this time, to explore any potential environmental impacts of each potential action contemplated in the study would be speculative and is not required by CEQA.

Recommendation:
Adopt the City of Milpitas Economic Development Strategy and implementation actions.

Attachments:
A: 06-18-2019 City Council Agenda Report and Meeting Minutes
B: 11-12-2019 City Council Study Session on Economic Development Strategy
C: City of Milpitas Economic Development Strategy and Implementation Actions

CITY OF MILPITAS
AGENDA REPORT
(AR)

Item Title:	Approve a Professional Services Agreement with Strategic Economics to develop an Economic Development Strategy
Category:	Consent Calendar-Community Development
Meeting Date:	6/18/2019
Staff Contact:	Alex Andrade, Economic Development Director 408-586-3046
Recommendation:	Approve and Authorize the Interim City Manager to execute a Professional Services Agreement with consultant Strategic Economics for development of an Economic Development Strategy in the amount of $129,985.

Background:

One of City Council's identified priorities is Economic Development and Job Growth, which is vital to the health of the Milpitas local economy. The Office of Economic Development's mission is to provide services and resources to the business and development communities with the purpose of attracting, retaining and expanding business and employment opportunities for residents, stimulating the local economy and expanding local retail sales, transient occupancy and commercial property tax bases while maintaining a positive balance between growth, social equity and the economic vitality of Milpitas.

The current Milpitas Economic Strategic Plan was adopted by City Council in 2005. As a policy document, an Economic Development Strategic Plan is intended to identify specific strategies and create a work plan to stimulate economic and business development by providing a roadmap for the formulation and implementation of a program that creates opportunities to maximize economic growth. In 2005, the Economic Strategic Plan focused on improving Milpitas' image as a place to live, work and shop, improving retail opportunities, balancing housing supply for local workforce, business retention, improving employability, and diversifying the economic base since the current Plan is almost fifteen years old, an update is overdue.

An updated Economic Development Strategy is necessary to proceed with the City Council's priority of Economic Development and Job Growth. In the intervening years, significant changes have occurred, including major residential development around the new Milpitas Transit Center, a changing retail landscape and transformative innovations in technology and advanced manufacturing. The purpose of an updated Economic Development Strategy is to prepare Milpitas for a resilient and sustainable local economy that captures emerging innovation and technology, growth opportunities and establishes creative strategies to support economic vitality today and for future generations, which improves the quality of life for residents, employees and visitors alike.

Analysis:

The Office of Economic Development seeks to collaborate with a creative consultant to produce a 5-year Economic Development Strategy that is forward thinking and inclusive, resulting in positioning Milpitas as a regional and global center of business, technology and culture within the Silicon Valley. The selected consultant will establish an Economic Development Strategy based on the following goals:

1. Cultivate a strong stable and diverse local economy;
2. Achieve fiscal sustainability and maintain adequate revenues to provide quality and essential public services;
3. Encourage new development in key opportunity areas that provide high-quality work environments and competitive business locations;
4. Pursue economic development opportunities that foster and improve quality of life; and
5. Increase community workforce preparedness and cultivate an entrepreneurial environment that fosters innovation.

On May 3, 2019, the Purchasing Division released RFP No. 2335 for an Economic Development Strategy on PublicPurchase.com, the City's eProcurement website. Aside from the goals described above, the RFP's scope of work focused on a review of current economic conditions; develop an economic development work plan, community engagement, and recommendations and implementation of the City's economic development efforts. Thirty four firms were notified of the issuance of the RFP and twenty vendors downloaded the bid document. The RFP closed on May 21, 3019 and there were four proposers. Three of the four proposers met all of the criteria for the solicitation, they are:

- Economic & Planning Systems, Inc.
- Strategic Economics, Inc.
- Applied Development Economics, Inc.

The evaluation committee reviewed proposals based on the merits of the cover letter, company profile, execution plan, personnel assigned, references and proposed compensation. After an initial assessment by the evaluation committee, all three firms met with an interview panel comprised of City staff to clarify various parts of the proposals prior to a final scoring. Interviews were conducted on May 29, 2019, and scoring was finalized on the same day. The table below shows the final evaluation scores with Strategic Economics as the recommended firm.

Economic Development Strategy RFP No. 2335	**Strategic Economics, Inc.**	**Applied Development Economics, Inc.**	**Economic & Planning Systems, Inc.**
Evaluation Score	**87.33**	**81.83**	**78.00**

Staff recommends that City Council approve Strategic Economics as the most qualified consultant for the development of the City of Milpitas' Economic Development Strategy and authorize the Interim City Manager to execute a Professional Services Agreement. There are various reasons for Strategic Economics being deemed the most qualified consultant including, but not limited to, identification of forward-looking economic development growth opportunities with place-making solutions, expanding workforce development opportunities for local residents, strategies to prevent small business displacement, inclusive community engagement plans, identification of new funding sources, and attracting emerging technologies while retaining valuable industry sectors.

If the City Council approves Strategic Economics as the consultant, next steps include commencing the analysis of economic development conditions and opportunities, stakeholder interviews and community engagement, and delivery of a draft industry analysis report for review and feedback. Staff and consultant will present findings to the community and Economic Development and Trade Commission, and City Council will have an opportunity to review, provide feedback and consider the Economic Development Strategy for adoption at a future City Council meeting. Staff expects the Economic Development Strategy to be complete in the first Quarter of 2020.

The Office of Economic Development's vision for local economic development is to preserve and enhance Milpitas' business climate to ensure the City is financially stable to provide essential services and collaborate with the community in its commitment to improve quality of life. Thus, the Economic Development Strategy is important for a sustainable and healthy economy, and to achieve the City Council's priority of Economic Development and Job Growth.

Policy Alternatives:

Alternative 1: Select a different consultant.

Pros: An Economic Development Strategy would still be developed with the selection of a different consultant.

Cons: The evaluation committee determined that Strategic Economics is the most qualified vendor to develop the City of Milpitas' Economic Development Strategy based on a comprehensive evaluation of proposals.

Reason not recommended: Selecting a different vendor may result in pursuing a contract with an organization that is not recommended by the evaluation committee, which based its vendor recommendation on the merits of RFP proposals and interviews.

Alternative 2: Do not approve a consultant at this time.

Pros: The City would not spend the $129,985 on developing an Economic Development Strategy.

Cons: The City will continue to operate without a current Economic Development Strategy potentially resulting in missed opportunities for job growth, workforce development and additional revenue generation.

Reason not recommended: The City has not updated its Economic Development Strategy since 2005. Further delaying the selection of a qualified consultant would postpone the development of an Economic Development Strategy resulting in missed opportunities for job growth, workforce development and additional revenue generation.

Fiscal Impact:

The funding for the development of an Economic Development Strategy is currently budgeted in the Office of Economic Development's contractual services budget for Fiscal Year 2018-2019.

California Environmental Quality Act:

By the definition provided in the California Environmental Quality Act (CEQA) Guidelines Section 15378, this action does not qualify as a "project" for the purpose of CEQA as this action has no potential to result in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.

Recommendation:

Approve and authorize the Interim City Manager to execute a Professional Services Agreement with consultant Strategic Economics for development of an Economic Development Strategy in the not to exceed amount of $129,985.

Attachments:

Professional Services Agreement

EXHIBIT A

Scope of Work, with Task Options

Data Assumptions

Note that the scope assumes that the City will provide certain confidential data, including establishment-level employer data from the California Employment Development Department, establishment-level sales tax data, business license data, and parcel data including building characteristics and ownership. Strategic Economics will sign any necessary confidentiality agreements to view and analyze this data.

Task 1: Analysis of Economic Conditions and Opportunities

1.1: Request and Review of Existing Data and Background Materials

Prior to the kick-off meeting, Strategic Economics will review the current Economic Development Strategy and Work Program, and work completed to date as listed in the RFP. Strategic Economics will also request relevant data from the City, including GIS shape files, financial data, development projects, etc.

1.2: Kick-Off Meeting and Site Visit

Strategic Economics and Plan to Place will attend a project initiation meeting with City staff to review the scope of work and the schedule of deliverables, and meetings with stakeholders and the Economic Development and Trade Commission. During the kick-off meeting, the SE team will also begin to identify stakeholders, discuss the engagement strategy, and discuss project role and responsibilities. The kick-off meeting will be an opportunity to make refinements to the scope and schedule, if needed. After the meeting, Strategic Economics and Plan to Place will tour the city with City staff, with a special focus on the City's key economic generators and opportunity areas.

1.3: Industry Analysis

While the previous economic analysis for the General Plan Update provides an overview of economic activity and trends in Milpitas, there is a need to gain a more nuanced understanding of the types of industries and businesses that are successful, have potential for growth, or require additional support from the City.
Building on the economic and fiscal analyses completed for the General Plan Update, the SE Team will selectively analyze employment, industry, and business trends by examining local and regional Silicon Valley trends and projections using a combination of California Employment Development Department Data, County Business Patterns, City business license data (if

available), and Plan Bay Area 2040 regional employment projections. If the data is available, the SE team will also evaluate start-ups and entrepreneurial activity in the city.
These analyses will identify the city's strengths beyond the two-digit NAICS code level to gain a more fine-grained understanding of the types of businesses that drive the regional economy (e.g., computer software and hardware), those that support the regional economy (e.g., professional and business services), and those that serve local residents (e.g., convenience retail and restaurants). The task will also provide insights into Milpitas's specific strengths and weaknesses relative to the Silicon Valley region, and identify emerging technologies and innovative clusters in the city. Finally, the SE Team will also examine the sources of Milpitas's General Fund revenues and the connections between these revenues and the City's different businesses and land uses.

Task 1.4.1 Workforce Development and Jobs-Skills Match

The composition of jobs available in Milpitas may not meet the advanced skill levels of the local resident workforce, requiring many residents to commute to other cities. In this task, Strategic Economics will analyze the demographic and commute characteristics of the resident labor force in Milpitas, and identify the potential types of occupations that the City could attract that would better match their skills. The sub-tasks include:

- Analyze educational attainment of workers at jobs currently located in Milpitas and compare against resident educational attainment and occupational profiles.
- Interview NOVA and other workforce development organizations to gain current information about the jobs-skills match issues in Santa Clara County and, to the extent possible, in Milpitas. Review relevant workforce development reports and literature on workforce needs for emerging industries.
- Conduct interviews with Silicon Valley employers in the industries and clusters that have been targeted for growth and attraction in Milpitas based on Task 1.3 analysis. These interviews will be structured to reveal the location decisions of these industries vis-à-vis access to workforce/talent, and the pros and cons of locating in Milpitas.
- Describe the findings of the interviews and analyses in the Industry Analysis Report.
- Based on these findings, recommend and incorporate strategies and implementation actions in the Economic Development Strategy.

1.4.2 Preventing Displacement of Small Businesses

Strategic Economics will evaluate current conditions and recent trends affecting small businesses in Milpitas, and assess the potential risk of displacement. The assessment will include:

- Existing business mix (retail, restaurants, personal services, automobile-oriented retail, production, distribution and repair businesses, etc.) and overall business trends (change in number and composition of small businesses over time).
- Interviews with business owners, commercial brokers, and business associations.
- Retail and restaurant sales trends over time, compared to citywide trends, based on sales tax data.

Based on the analysis of trends, Strategic Economics will identify the key issues faced by small businesses in Milpitas, and their potential risk of displacement. The findings of the interviews and analyses will be described in the Industry Analysis Report.
Based on these findings, Strategic Economics will recommend and incorporate strategies and implementation actions in the Economic Development Strategy to help prevent displacement as a result of redevelopment. The recommendations may include strategies related to leveraging new development to preserve space for small businesses and implementing district-based strategies for supporting small businesses (e.g., technical assistance, marketing, grants/loans for façade or tenant improvements). The recommendations will draw on targeted research of how other jurisdictions have addressed similar challenges.

1.5: Stakeholder Interviews

Strategic Economics will facilitate a series of up to six in-person stakeholder group meetings. The stakeholders will be defined in close coordination with City staff, but could potentially include: key business representatives representing retail/restaurants, advanced manufacturing, other high tech industries; brokers, developers, hotel operators, community leaders, property owners, and City staff. In addition to gathering qualitative information and answering key questions raised in the RFP, the stakeholder groups will help to build support for the Economic Development Strategy and achieve "buy-in" from community leaders. Strategic Economics will facilitate each of the meetings, formulating specific topics and questions with the goal of gathering required information and generating ideas for potential strategies. It is assumed that City staff will contact all stakeholders to schedule and coordinate the meetings.

Task 1 Deliverables:

- Final scope of work and project schedule, defining key meetings and dates for submittal of draft and final deliverables (Word and PDF)
- Administrative draft and final draft of Industry Data Analysis Report (incorporating the findings of tasks 1.3 through 1.5)
- Summary notes from stakeholder interviews

Task 2: Develop Economic Development Strategy Report and Implementation Matrix

The SE team will then incorporate the results of the Economic Conditions and Opportunities analyses to draft an initial document framework for review by City staff. Based on feedback on the framework from City staff, the SE team will prepare an Administrative Draft of the Economic Development Strategy Report with an implementation matrix. Upon review by appropriate parties, the SE team will deliver a revised Public draft Economic Development Strategy Report and implementation matrix. Upon vetting of this public draft by the community, Economic Development and Trade Commission (EDTC), and City Council, the SE team will provide a final Economic Development Strategy Report and implementation matrix for approval by the City Council.

The plan will describe economic context, existing conditions, and future changes necessary to maintain Milpitas's competitiveness in attracting cutting edge emerging technologies, retaining and expanding existing businesses and industries, preparing the local workforce for future jobs, encouraging development activity, and sustaining the City's fiscal health. Strategies will address key issues identified by the City, including the creation of a strategic workforce development initiative and the EDTC's roles. The plan will also incorporate place-based strategies related to revitalizing Main Street, implementing the Midtown Specific Plan, attracting innovative jobs to an "innovation district" near the Milpitas Transit Center, and strategies for pursuing a Smart City Initiative. Team member Plan to Place will provide guidance on how best to roll out Milpitas's new branding efforts, and provide strategies related to future outreach to key economic development stakeholders.

The implementation matrix will identify specific prioritized actions for the next five years, with implementation guidelines, schedule, and identification of responsible parties and funding sources. The matrix will include strategies and actions for both the City as a whole and for the opportunity areas. The actions will incorporate measurable annual performance objectives, including the Office of Economic Development's new performance metrics. The Economic Development Strategy will recommend new potential sources of funding to achieve the plan's objectives, including consideration of a Strategic Property Acquisition Revenue fund, Transportation Management Association, Parking Assessment District, and a Property-based Improvement District for Midtown.

Task 2 Deliverables:

- Administrative draft Economic Development Strategy report and implementation matrix (with budget and schedule)
- Public draft Economic Development Strategy report and implementation matrix (with budget and schedule)
- Final draft Economic Development Strategy report and implementation matrix (with budget and schedule)

Task 3: Community Engagement and Meetings

The SE team will engage the community throughout the project. Through a series of two community workshops, the SE team will receive input on the Milpitas community's economic development priorities, present analytical findings and vet preliminary strategy focus areas, and present and receive feedback on the strategies and implementation actions incorporated in the Economic Development Strategy.

Task 3.1: Community Engagement Plan

At the onset of the project, Plan to Place will prepare an engagement strategy to:

- Outline project goals and objectives;

- Identify engagement activities;
- Identify target demographic and interest groups and identify methods of communication and engagement;
- Confirm coordination, facilitation and communication responsibilities; and
- Outline schedule, format, and resources for all engagement activities.

Task 3.2: Community Workshops

The SE team will prepare for and execute up to two (2) community workshops to discuss topics related to the economic development strategy. The anticipated team's roles and responsibilities include:

- Plan to Place will work with the project team to prepare an overall purpose, approach, objective and anticipated outcome of the community workshops.
- Plan to Place will prepare meeting materials including agendas, sign-in sheets and assist with interactive activities to get input on the strategies and deliverables prepared by SE.
- Plan to Place will co-facilitate each workshop.
- City staff will coordinate meeting location logistics (e.g., room, a/v equipment, refreshments).
- Plan to Place will assist with meeting logistics including room set up and break-down.
- Plan to Place will prepare summary notes.

Task 3.3: Economic Development and Trade Commission and City Council Meetings

SE will attend up to two (2) meetings with the EDTC to report on the findings of the study, refine the EDTC's roles within the Economic Development Strategy's recommendations, and to receive input on the Public draft plan. SE will also attend one (1) meeting with the City Council to present the plan findings and recommendations. The timing and content of all of these meeting will be coordinated with City staff.

Task 3 Deliverables:

- Community Engagement Plan
- Materials for each community workshop (agendas, sign in sheets, PowerPoint presentations, any feedback activity materials)
- Summary notes from each community workshop
- PowerPoint presentations for the EDTC and City Council meetings

Draft **MEETING MINUTES**
CITY OF MILPITAS

Minutes of:	**Special and Regular Meetings of the Milpitas City Council**
Date:	**Tuesday, June 18, 2019**
Time:	**5:30 PM Closed Session** **7:00 PM Open Session**
Location:	**Council Chambers, Milpitas City Hall, 455 East Calaveras Blvd., Milpitas**

CALL TO ORDER

Mayor Tran called the joint meeting to order at 5:31 PM. City Clerk Mary Lavelle called the roll.

PRESENT: Mayor Tran, Vice Mayor Dominguez, Councilmembers Montano and Nuñez

ABSENT: Councilmember Phan was absent at roll call. He arrived in Closed Session.

CLOSED SESSION

City Council convened in Closed Session to discuss six agenda items, five as listed on the Regular Meeting agenda (a) – (e) and one listed on a Special Meeting agenda.

At 6:30 PM, City Council paused from Closed Session to go outdoors to join the City-sponsored "Juneteenth" celebration at Cesar Chavez Plaza. The Council reconvened in Closed Session.

City Council came out from Closed Session to the dais for the Open Session regular agenda at 7:46 PM.

ANNOUNCEMENT

City Attorney Chris Diaz stated out of Closed Session the following Council actions:
(1) City Council agreed by unanimous vote to approve a side letter with the Milpitas Police Officers Association regarding retiree dependents' health care benefits. That document would be available with the City Clerk or Human Resources Director.
(2) City Council agreed to changes, regarding the open session agenda item no. C14, on an amendment to the agreement with the law firm BB&K. A new version of the modified amendment was handed to the City Clerk and would be the version for Council action.
(3) Regarding Agenda Item No. 19, for the appointment of Steve McHarris as interim City Manager, there was one modification to the Resolution to remove item 3.

PLEDGE

Resident Voltaire Montemayor led the pledge of allegiance.

INVOCATION

Councilmember Nuñez led a prayer from the dais to start the meeting.

PRESENTATIONS

Mayor Tran presented:
(1) Certificates to students for efforts on "All Hearts One Bullet" High School event to speak out and combat gun violence on school campuses, which was accepted by Nisha Porchezhiyan and Sean Nguyen.
(2) Proclamation of *Philippines Independence Day* for June 12, 2019 was presented by Vice Mayor Dominguez to women representatives of Bayanihan Fil-Am Foundation.

PUBLIC FORUM

Frank DeSmidt, Milpitas Rotary Club and Chamber of Commerce representative, announced that on Thursday, July 25 there would be the Chamber's annual awards banquet at Embassy Suites Hotel. On September 27, at the same hotel, would be the Chamber's Casino Night fundraiser.

George Lund, resident and property owner, would like something done about corruption at Milpitas Code Enforcement. He claimed felonies were done by that office. He'd been harassed

Councilmember Montano wished to remove item no. C11 (wet well in stormwater system) from consent.

Motion/Second: Councilmember Nuñez/Councilmember Montano

Motion carried by a vote of: AYES: 5
NOES: 0

C1. Council calendars — Accepted City Council calendars for June and July 2019.

C2. August meetings — Canceled the regularly scheduled City Council meeting on August 6, 2019 and called for a Special City Council meeting on August 13, 2019, due to the observance in Milpitas of National Night Out on August 6 and on the first Tuesday each August annually. Councilmember Nuñez clarified at the consent calendar vote that he desired this action to be for all future years.

C3. Meeting Minutes — Approved City Council meeting minutes of June 4, 2019.

C4. 3 Resolutions related to employee agreements

1. Adopted Resolution No. 8886 approving a new Memorandum of Understanding between the City of Milpitas and United Public Employees of California (UPEC) Mid-Management and Confidential Unit (MidCon) covering the period of July 1, 2019 through June 30, 2023.
2. Adopted Resolution No. 8887 approving a new Memorandum of Understanding between the City of Milpitas and the Professional and Technical Group (ProTech) of employees covering the period of July 1, 2019 through June 30, 2023.
3. Adopted Resolution No. 8888 updating the Unrepresented Miscellaneous, Police and Fire Management Salary and Benefit Matrix covering the period of July 1, 2019 through June 30, 2023.

C5. Resolution – Annex Property into CFD 2005-1

1. Adopted Resolution No. 8889 certifying election results and adding Tract No. 10470 to Community Facilities District 2005-1 (Annexation No. 20); and
2. Approved Final Tract Map No. 10470, accept all offers of dedications as stated and depicted on the final map upon completion and acceptance of improvements; and
3. Approved and authorized the Interim City Manager to execute the Subdivision Improvement Agreement between the City of Milpitas and Eighty-Eight Homes LLC.

C6. Resolution – Skate Park — Adopted Resolution No. 8890 approving project plans and specifications and awarded a construction contract for the Base Bid plus Add Alternates 1 and 4, authorized the Interim City Manager to execute the contract with Suarez and Munoz Construction, Inc. in the amount of $4,579,156 for the Milpitas Skate Park and Concession/Storage/Restroom Buildings, Projects No. 5111, No. 3424 and No. 6133, and authorized the Engineering Director/City Engineer to negotiate and execute contract change orders in an aggregate amount not to exceed $690,000; approved budget appropriation in the amount of $800,000 from the General Fund Unassigned Reserves.

C7. Resolution – Xerox — Adopted Resolution No. 8891 authorizing the City Manager to execute a lease with Xerox Corporation for copier/multifunction digital devices and full service maintenance through a Cooperative Procurement Contract by Region 4 Educational Services Center for a 60-month (5 year) maximum contract amount of $292,867.

8. RFP for Economic Development — Economic Development Director Alex Andrade provided an overview of the Request for Proposals for an economic development strategy for the City of Milpitas.

Councilmember Montano asked how staff would prevent displacement of small businesses, and Mr. Andrade replied that would be part of the results of the final reports. Consultant Ms. Sujata Srivastava from Strategic Economics also responded to her question.

Vice Mayor Dominguez was concerned about displacement of those businesses and wanted to be challenged with policy or strategies that had not been done in Milpitas.

Councilmember Nuñez wanted to know how the Community Development Roundtable operated, with respect to this plan and Mr. Andrade commented. He asked additional questions on employment density near transit.

The consultant came forward stating she'd worked previously with the cities of Cupertino, Redwood City, Alameda and other Bay Area locales.

Councilmember Montano asked the difference between the economic development strategy of five years ago, and what would be done today. It seemed to her the last effort on this was only shelved. She asked staff to provide the past strategy to the consultant.

Vice Mayor Dominguez would support this request for the study while strategies and priorities were being worked on at the Economic Development Commission and by staff. The 2005 strategy was outdated so a new one was needed.

Councilmember Phan would like a Trader Joe's store in Milpitas and was excited moving forward with this strategy. He asked if the study would relate to revenue growth of the City. Mr. Phan suggested to inventory public properties or consider land banking. He liked the Smart City element and understanding infrastructure needs.

Mayor Tran was concerned that sales tax was down this past month. This strategy could help to jump start that source of revenue. Maybe urge a change and an update to retail sector. He then welcomed comments from the audience.

Tom Valore, resident, agreed there was a need for an economic development strategy, especially after being on the Board of Directors at Milpitas Chamber of Commerce. He wanted to understand why this strategy was being outsourced and not done internally by City staff.

Voltaire Montemayor, resident, noted the rating was so high, while and the need and usefulness was there. Work with good quality, with concern for expense, he said.

Motion: to approve and authorize the Interim City Manager to execute a Professional Services Agreement with consultant Strategic Economics for development of an Economic Development Strategy in the amount of $129,985

Motion/Second: Councilmember Montano/Vice Mayor Dominguez

Motion carried by vote of: AYES: 5
NOES: 0

C9. Assume First Amendment to McCarthy Ranch Development Agreements

Approved form Partial Assignment and Assumption Agreements to Embarcadero Capital Partners and Bridge Development Partners and authorized the Interim City Manager to execute the assignments, subject to minor conforming and clarifying changes approved by City Attorney.

C10. Digital Billboard

Directed the Interim City Manager to proceed with a City Digital Billboard Guidance Study through a Professional Services Agreement.

11. Agreement with Peninsula Pump & Equipment for Wet Well Rehabilitation

Councilmember Montano wished to comment on wet wells in the stormwater system. For these pumps, there must be a lack of debris in stormdrains, so residents needed to concentrate with the city on cleaning up streets. Public Works Director Tony Ndah explained the need for work on the wet well, and responded to her comments.

Motion: to approve a five-year Agreement with Peninsula Pump & Equipment Inc. from the date of execution through June 30, 2024, for a total maximum compensation of $457,800, to provide Wet Well Rehabilitation and Annual Maintenance Services, subject to annual appropriation of funds

Motion/Second: Councilmember Montano/Councilmember Phan

Attachment B
CITY OF MILPITAS
AGENDA REPORT
(AR)

Item Title:	**Economic Development Strategy Study Session**
Category:	Community Development
Meeting Date:	11/12/2019
Staff Contact:	**Alex Andrade, Economic Development Director, 408-586-3046** **Daniel Degu, Economic Development Coordinator, 408-586-3054**
Recommendation:	1. Receive update on the draft Economic Development Strategy from the Office of Economic Development. 2. Provide feedback and direction to the Office of Economic Development regarding current preliminary research results of the draft Economic Development Strategy.

Background:

One of City Council's identified priorities is Economic Development and Job Growth, which is vital to the health of the local economy. The Office of Economic Development's mission is to provide services and resources to the business and development communities with the purpose of attracting, retaining and expanding business and employment opportunities for residents, stimulating the local economy and expanding local retail sales, transient occupancy and commercial property tax bases while maintaining a positive balance between growth, social equity and the economic vitality of Milpitas.

An Economic Development Strategy is a policy document intended to identify specific strategies and create a work-plan to stimulate economic and business development by providing a roadmap for the formulation and implementation of a program that creates opportunities to maximize economic growth. The current Milpitas Economic Development Strategy was adopted by City Council on February 7, 2006.

On June 18, 2019, the City selected Strategic Economics as the consultant to develop a new Economic Development Strategy. The purpose of an updated Economic Development Strategy is to prepare Milpitas for a resilient and sustainable local economy that captures emerging innovation and technology, growth opportunities with place-making solutions, strategies to prevent small business displacement, and establishes creative strategies to support economic vitality today and for future generations, which improves the quality of life for residents, employees and visitors alike.

The consultant team will establish an Economic Development Strategy based on the following goals:

1. Cultivate a strong stable and diverse local economy;
2. Achieve fiscal sustainability and maintain adequate revenues to provide quality and essential public services;
3. Encourage new development in key opportunity areas that provide high-quality work environments and competitive business locations;
4. Pursue economic development opportunities that foster and improve quality of life; and
5. Increase community workforce preparedness and cultivate an entrepreneurial environment that fosters innovation.

The purpose of this Study Session is to provide an update on the draft Economic Development Strategy and seek feedback from the Council on the current findings of the strategy. The consultant team and City staff will incorporate the Council's comments and direction from this Study Session into work currently underway. The Office of Economic Development anticipates providing the Council another update on the draft Economic Development Strategy via an Informational Memorandum in mid-December 2019 and expects adoption of the final Economic Development Strategy Report and Implementation Matrix in the first Quarter of 2020.

The Economic Development Strategy Report will describe economic context, existing conditions, and future changes necessary to maintain Milpitas' competitiveness in attracting cutting edge emerging technologies, retaining and expanding existing businesses and industries**,** preparing the local workforce for future jobs, encouraging development activity, and investing in the City's fiscal health.

The Implementation Matrix will identify specific priority actions for the next five years, with implementation guidelines, schedule, and identification of responsible parties and funding sources. The matrix will include strategies and actions for both the City and for the opportunity areas. The actions will incorporate measurable annual performance objectives, including the Office of Economic Development's new performance metrics. The Economic Development Strategy will also recommend new potential sources of funding to achieve the plan's objectives.

Analysis:

The current process of preparing a new Economic Development Strategy began in July 2019. The consultant team has completed approximately half of the project deliverables specified in their scope of work, which makes this an opportune time to receive vital City Council feedback and direction at this time. To date, the consultant team and City staff have completed the following tasks and milestones:

- **Kick-Off Meeting and Site Visit –** The consultant team attended a project initiation meeting with City staff to review the scope of work and the schedule of deliverables, and meetings with stakeholders and the Economic Development and Trade Commission (EDTC). During the kick-off meeting, Strategic Economics also began to identify stakeholders, discussed the engagement strategy, and discussed project role and responsibilities. After the meeting, the consultant team toured the Milpitas with City staff, with a special focus on the City's key economic drivers and opportunity areas.

- **Industry Analysis –** Since initiation of the project, the consultant team has been selectively analyzing employment, industry, and business trends by examining county-level employment and industry data. Strategic Economics is currently awaiting receipt of detailed confidential establishment data from the State of California to complete analysis of employment and industry trends for Milpitas itself. And, they have also conducted multiple interviews with commercial and industrial real estate brokers to better understand market factors that impact Milpitas' ability to attract and retain different kinds of businesses.

- **Workforce Development and Jobs-Skills Match –** Since August 2019, Strategic Economics has been analyzing demographic and commute characteristics of the resident labor force in Milpitas and identifying the potential types of occupations that the City could attract that would better match their skills. A detailed analysis of the occupational mix in Milpitas versus Santa Clara County has also been performed.

- **Preventing Displacement of Small Businesses –** Since project initiation, the consultant team has been evaluating the current conditions and recent trends affecting small businesses in Milpitas and assessing the potential risk of displacement. This task will be completed upon receipt of establishment data from the State of California, as noted in the "Industry Analysis" task above.

- **Online Survey –** An online public survey was made available to the public, targeting those that live and/or work in Milpitas, to learn about their priorities and needs as it relates to having a more diverse, healthy, and vibrant local economy. The public survey was made live on October 23, 2019 and was shared with the Milpitas Chamber of Commerce, posted onto the City website and the City's soc

media outlets: Nextdoor and Facebook. City staff will also send the public survey to major property owners and shopping/retail centers to be distributed to their tenants and employees. The survey will close at the end of November 2019. The online survey website is www.opentownhall.com/portals/293/Issue_7961.

- **Project Website –** The Economic Development Strategy website has been active since October 24, 2019, and provides information regarding the upcoming schedule, online survey, and other resource materials. The project website is www.ci.milpitas.ca.gov/milpitas/economicdevelopmentstrategy.

- **Community Outreach –** The consultant team and City staff has been using a high-touch approach to community engagement, integrating person-to-person community outreach with frequent, multiple contacts to effectively reach as many members of the community as possible. **Attachment B** (attached) includes a high-level summary of issues and topics from all business, organization, and broader community outreach events, as highlighted below.

    - **Stakeholder Meetings and Interviews**

        - Strategic Economics conducted an extensive number of interviews since September 2019 with business community stakeholders, including high-tech businesses, Milpitas Chamber of Commerce Board of Directors and Chamber staff, commercial real estate brokers, business owners, property owners, landlord representatives, and hospitality operators. To date, there have been 5 in-person stakeholder group meetings and 11 stakeholder phone interviews.

    - **Community Engagement and Meetings**

        - On September 19, 2019, the Office of Economic Development and Strategic Economics engaged EDTC to provide a project introduction and obtain feedback from the Commission on how the City can improve its services and develop strategies to address key issues. General comments received from Commissioners included in **Attachment B**.

        - A Community Workshop that provided an overview of the draft Economic Development Strategy was held the evening of October 24, 2019. The Community Workshop was promoted through a variety of methods, including direct outreach to Great Mall, local and regional community-based organizations, social gathering places, homeowner associations, City staff, social groups such as Rotary, Kiwanis, and Executive Lions Club, business community stakeholder groups, and workforce development partners such as NextFlex, NOVA, and SEMI. The consultant team and City staff provided an oral presentation and answered questions from attendees. Community members at this meeting evaluated Milpitas' performance in several topic areas related to economic development, and expressed their priorities for issues that should be addressed in the Economic Development Strategy. This feedback is summarized in **Attachment B.**

Policy Alternatives:

This is an informational item for Council direction. The draft Economic Development Strategy is an approved Council Priority, and the project is currently underway.

Fiscal Impact:

This is an informational item for Council direction. No fiscal impact.

California Environmental Quality Act:

By the definition provided in the California Environmental Quality Act (CEQA) Guidelines Section 15378, this action does not qualify as a “project” for the purpose of CEQA as this action has no potential to result in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.

Recommendation:

1. Receive update on the draft Economic Development Strategy from the Office of Economic Development.
2. Provide feedback and direction to the Office of Economic Development regarding current preliminary research results of the draft Economic Development Strategy.

Attachments:

A. 06-18-19 Council Agenda Report + Meeting Minutes
B. Presentation for Study Session on the draft Economic Development Strategy

CITY OF MILPITAS ECONOMIC DEVELOPMENT STRATEGY AND IMPLEMENTATION ACTIONS

CITY COUNCIL DRAFT REPORT

Prepared for:

City of Milpitas

April 30, 2020

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I. EXECUTIVE SUMMARY

The *City of Milpitas Economic Development Strategy and Implementation Actions* report (EDS) is a policy document that will guide the City's economic development activities over the next five years. The EDS will serve as Milpitas' road map to grow and diversify the City's economy, support businesses and workers, and improve quality of life in the community.

The EDS is being published during an unprecedented period of economic uncertainty resulting from efforts to slow the spread of the coronavirus responsible for COVID-19. The City of Milpitas is undertaking immediate efforts to assist businesses harmed by legally mandated restrictions on travel and business operations. These actions are expected to dominate the work of the City for at least the next year. Since the EDS is a five-year plan, the strategies and actions in the EDS provide a roadmap for stabilizing and growing the Milpitas economy as the City, region, nation, and world recover from the current economic crisis.

The EDS report's analytical findings, strategies, and implementation actions were developed in conjunction with input provided by the City of Milpitas' City Council, Economic Development and Trade Commission (EDTC), and numerous community stakeholders. Input from stakeholders was gathered via a series of industry-specific stakeholder focus groups, a meeting with the Milpitas Chamber of Commerce, a public community workshop, input stations in Milpitas City Hall and at Milpitas High School, an online community survey, and one-on-one interviews.

COVID-19 Economic Impacts and Responses

On March 16, 2020 and subsequently on March 31, 2020 and April 29, 2020, the Santa Clara County Public Health Department issued or modified Orders directing individuals, businesses and government agencies to shelter-in-place to slow the spread of COVID-19. While this pandemic is clearly a public health and safety concern, the financial impacts our local and regional markets are experiencing is unprecedented and will likely have long lasting effects. The City of Milpitas recognizes that businesses are an important part of the fabric of the local community. Since the first Order was established, the City's Office of Economic Development has been addressing the pandemic's impacts to the business community, the immediate and future challenges staff expects to face, and the Office of Economic Development's role within the City organization.

The Office of Economic Development has re-prioritized its mission to assist with business continuity, resiliency and recovery through researching, organizing, and consulting with Milpitas City departments, Santa Clara County's Office of the Executive, business advocacy groups, financial institutions, and community based and philanthropy organizations. Aside from collaborating with various partners to ensure the corporate community is well informed about available resources, the following represents a proactive approach to providing critical relief programs that promote business continuity, resiliency and recovery.

- COVID-19 Website Updates – Commencing on March 13, 2020 staff added coronavirus related business assistance and guidance information for employers and employees onto the Economic Development webpage. Since then, staff has been updating vital business resources information and have developed a new webpage exclusively for information on available loans from the U.S. Small Business Administration (SBA), California's Infrastructure

and Economic Development Bank (IBank), and other private funding sources as well as non-financial relief programs.

- **Small Business Assistance Subcommittee** – On March 17, 2020, City Council established a Subcommittee to explore recommendations for the City Council regarding small business loans including those that other cities may have, relief assistance, small business survey, tracking of business assistance requests, and other relevant possibilities. The Small Business Assistance Subcommittee met on March 24, 2020 and April 6, 2020 to develop a purpose statement, draft a work plan, and to recommend to the City Council that a small business loan program be developed.

- **Milpitas City Council** – City Council met on March 17, 2020 and April 21, 2020 to discuss how the City may be able to assist the small business community including the establishment of the Small Business Assistance Subcommittee to focus on exploring small business loans and other relief programs, and to consider development of a small business loan program. Staff is engaged in discussions with the Silicon Valley Community Foundation and Opportunity Fund on the potential collaboration as fiscal agent and administrator should Council approve the development of a City sponsored small business loan program.

- **Business Survey** – Staff developed a Business Survey in English, Chinese, Spanish and Vietnamese languages. To date, staff has received over 180 responses to the Business Survey and has learned about some pinch points that the business community is experiencing such as the need for financial assistance for rent/mortgage, payroll and utilities, business operation modifications required and workforce reductions.

- **Virtual Business Assistance Center** – In order to improve customer service delivery, the Office of Economic Development, with the assistance of colleagues in other departments, have developed a Virtual Business Assistance Center, to assist business representatives on their respective assistance requests. To date, staff has received over 90 business assistance requests and staff is now proactively connecting with over 250 representatives from the corporate community vis-à-vis those that have completed the Business Survey, participated in the City hosted webinar and/or emailed staff through the newly created BusinessAssistance@ci.milpitas.ca.gov email address.

- **Assistance in Multiple Languages** – In addition to the Business Survey, the Office of Economic Development stands ready to assist with federal, state and local government financial and non-financial resources, as well as additional resources available in the private sector, to business representatives in English, Chinese, Spanish and Vietnamese. Economic Development staff have developed a standard business assistance template and have trained City language experts on the use of the template and the process of following up to business requests for assistance.

- **Restaurant Promotions Campaign** – The Office of Economic Development initiated a Restaurant Promotions Campaign to determine which restaurants are open and providing delivery or take-out services during the pandemic. The Economic Development website illustrates this information in order to help restaurateurs in a shop local campaign. This successful initiative included a partnership with the Chamber of Commerce and Lions Club as they assisted in contacting over 225 restaurants.

- **Grocery Stores** – Staff contacted all local grocery stores to ensure that social distancing practices were in place and to keep the shopping carts clean for public health and safety.

- **Business Resiliency and Recovery Webinar** – Staff hosted a Business Resiliency and Recovery Webinar on April 16, 2020. The webinar included speakers and co-hosts from the Silicon Valley Small Business Development Center, Dennis King, Small Business Development Corporation of Orange County including Mike Ocasio and Ed Brugman, Warren Wettenstein, President of the Milpitas Chamber of Commerce and Superintendent Cheryl Jordan of the Milpitas Unified School District. Approximately 130+ people participated, and staff has received positive comments from various business owners since then.

- **Communications Strategy** – The corporate community is seeking the City's response, guidance and regular communications. A communications strategy with an emphasis on empathy, flexibility and accessibility has been implemented to provide valuable business assistance and guidance from various sources with the expertise in the areas of technical guidance and financial resource aide. Staff has been communicating frequently with the local business community through Constant Contact messages that provides critical information related to financial assistance through SBA and lending institutions, County Order explaining the definition of "essential business," staff offering businesses technical assistance, California's Employment Development Department programs for employers and employees, and much more. To date, nine messages have been distributed to business representatives who have active business licenses.

- **Bay Area Urban Manufacturing (BAUM)** – Staff has been participating on weekly Bay Area Urban Manufacturing calls to ensure that the Office of Economic Development team better understands the specific needs of the technology and advanced manufacturing industries. These industries are vital to the health of the local economy because they make up approximately 30 percent of all Milpitas businesses and jobs.

- **Education and Learning** – Information is being shared at rapid speed and is constantly evolving, so in order to stay up-to-date on such things as stimulus packages and employee benefits, staff continues to participate in various webinars for more education and learning.

It is important to note that the role of the newly established Small Business Assistance Subcommittee is to focus on the immediate small business response related to COVID-19. On the other hand, the Economic Development Strategy and Implementation Actions document also contains longer-term Economic Development programs and initiatives that promotes the economic vitality of the local economy under a five-year plan. The Economic Development Strategy and Implementation Actions document represents general policy statements and goals for future programs and initiatives. Economic conditions are evolving rapidly, and the Office of Economic Development continues to monitor, research and connect our business partners with essential resources and assistance for business continuity, resiliency and recovery.

Summary of the Economic Development Strategies

The strategies are organized within seven topic areas based on challenges and opportunities identified through outreach activities and data analysis. The EDS report also includes detailed implementation actions for each strategy, identifying the lead organization/department, supporting organization/department, potential partners, and need for additional funding. The numbering of the topic areas and strategies has no relationship to their relative importance for implementation.

Over the next 12 months, the EDS assumes that the City of Milpitas' economic development activities will be dedicated to assisting the business community and unemployed workers through the economic crisis caused by efforts to slow the spread of the coronavirus responsible for COVID-19, and hopefully the path to recovery.

SMALL BUSINESS, ENTREPRENEURSHIP, AND DISPLACEMENT PREVENTION STRATEGIES

Small businesses, defined as having between 2 and 49 workers, account for one-third of all jobs in Milpitas and include a wide diversity of industries. The overall number of businesses in Milpitas had grown in the last decade, including office-based small businesses, retail and personal services stores, and restaurants and drinking places. However, there was a slight decline in small industrial businesses, mostly due to the ongoing transformation of the Transit Area Specific Plan (TASP)[1] area from an industrial area to a largely residential area.

Small businesses are especially vulnerable to harm and potential permanent closure resulting from shelter in place orders and social distancing requirements issued to prevent COVID-19. These businesses are less likely to have the financial resources and access to capital available to larger companies. Small businesses are also experiencing difficulties in accessing newly available federal assistance through grant and loan programs. Strategies to support small businesses include:

- Providing immediate assistance and resources for small businesses in response to COVID-19,
- Strengthening partnerships to provide technical assistance and outreach,
- Targeting support to small businesses in areas expected to undergo significant change,
- Requiring developers to plan for relocating or accommodating small businesses that are displaced, and
- Expediting and reducing the time and expense of permits and inspections for small businesses.

RETAIL AND RESTAURANT STRATEGIES

The number and diversity of restaurants and retailers in Milpitas is one of the City's major strengths, both economically and culturally. Restaurants performed very well in recent years with sales increasing significantly. However, the share of sales generated by retail stores citywide is declining, matching national trends. Performance also varies greatly by retail center; several retail centers continue to perform well, and are some of the largest contributors to the City's fiscal health (such as the Great

[1] The specific plan may be renamed the Milpitas Metro Specific Plan as part of an update.

Mall, McCarthy Center, and Milpitas Square). In contrast, some of Milpitas' older retail centers are disinvested and underperforming. Certain employment areas in Milpitas also lack amenities preferred by workers, including cafes, gyms, restaurants, and daycare facilities.

Regardless of positive long-term trends, retail and restaurant businesses are now suffering significant economic harm as a result of efforts to combat the COVID-19 pandemic. In the short term, shelter in place orders have eliminated onsite dining entirely, and most restaurants cannot compensate for this lost business through takeout and delivery orders. "Nonessential" retail stores are also shut down, including nearly all businesses at the Great Mall. As a result, significant numbers of Milpitas restaurant and retail employees have been laid off or furloughed. Retail and restaurant businesses may continue to suffer even as restrictions are loosened, since social distancing requirements may limit the number of customers in a space, and customers themselves may be wary of crowded spaces for a long time to come. The declines in retail and restaurant activity will also result in a major decline in Milpitas' overall tax revenues since sales and use tax typically constitutes the second largest source of General Fund revenue.

Strategies include:

- Immediate assistance in response to COVID-19 impacts on this sector,
- Assisting in promotion of shopping centers/districts and the City's diverse mix of restaurants and retailers,
- Providing storefront façade improvement assistance when resources are available,
- Proactively monitoring sales performance of retail centers and reaching out to owners, and
- Encouraging placement of retail, restaurants, services, and amenities near office space

WORKFORCE DEVELOPMENT AND EDUCATION RESOURCES

Employers in Milpitas offer a wide variety of job opportunities, with a mix of high skill, high-wage workers in computer, mathematical, and engineering occupations, as well as middle-wage, middle-skill workers in manufacturing occupations. Milpitas also has a sizeable share of low-wage service industry jobs. Many employers reported that they have struggled to find highly skilled workers in recent years. Now that unemployment rates are rising due to layoffs resulting from the COVID-19 pandemic, job seekers are likely to require workforce development and education opportunities more than ever in order to enhance their skills and compete for high quality job opportunities. Furthermore, the need for affordable housing—already a significant challenge identified by Milpitas stakeholders—will further increase as workers lose their incomes.

Strategies include:

- Assisting workers that have been laid off or furloughed due to the COVID-19 crisis,
- Identifying opportunities to develop more workforce housing so that employees can live and work in Milpitas,

- Establishing regular meetings with workforce development and education partners to coordinate their activities around training and educational programs for employment in growing target industries,

- Collaborating with MUSD Board and staff leadership to develop a shared work program,

- Exploring collaborations with regional educational resources, such as promoting apprenticeship programs, and

- Continuing to provide support for the FlexFactor program and Manufacturing Day to introduce youth to potential opportunities and to connect job seekers with employers.

TECH AND ADVANCED MANUFACTURING STRATEGIES

Milpitas has a unique strength in attracting and retaining high-tech companies engaged in R&D and advanced manufacturing activities. These firms are at the forefront of new technological innovations, both regionally and globally. In particular, Milpitas is highly specialized in computer and electronics design and manufacturing. Strategies to support tech and advanced manufacturing businesses include:

- Immediate assistance in response to COVID-19 impacts on this sector,

- Pursuing growth and retention of businesses within the City's existing concentrated and specialized tech, advanced manufacturing, and related research and development sector,

- Diversifying the types of production and research and development activities and businesses in Milpitas,

- Creating a "demonstration partnership policy" for demonstrating innovative solutions to City needs via public-private partnerships, and

- Assisting in the promotion and tenanting of vacant office and flex/R&D spaces.

LIGHT INDUSTRIAL/MANUFACTURING AND WAREHOUSE/DISTRIBUTION STRATEGIES

Milpitas has a competitive industrial market which includes a variety of building types ranging from manufacturing, R&D, and warehouse/distribution. There is strong demand for warehouse and distribution space in Milpitas, and this building type accounts for most of the commercial development activity in the City, besides hotel and retail projects. However, compared to other uses such as manufacturing, office, and R&D space, warehouse and distribution buildings generally consume large amounts of land, produce a lower number of jobs in lower skill occupations, and generate minimal local tax revenues. Therefore, the strategies seek to position Milpitas to prioritize the attraction and retention of light industrial, manufacturing, R&D and office land uses, which can generate greater economic benefits for the community. Strategies include:

- Prioritization of light industrial/manufacturing uses relative to warehouse/distribution centers,

- Supporting conversion or redevelopment of warehouse/distribution properties to tech office/R&D, production, and research and development uses, and

- Monitoring business-to-business sales tax collection in commercial and industrial subareas.

INNOVATION DISTRICT/REAL ESTATE DEVELOPMENT OPPORTUNITIES STRATEGIES

Residents, workers, and business owners and representatives in Milpitas agreed that the City lacks a mixed use, walkable, downtown-like district or corridor with a clear sense of place, as well as certain types of sought-after amenities such as public gathering spaces, entertainment and nightlife establishments, and arts/cultural uses. The introduction of BART service to the Transit Area Specific Plan (TASP) area, which may be rebranded as "Milpitas Metro Specific Plan" as part of a forthcoming plan update, presents a tremendous opportunity to create a transit-oriented, truly mixed-use district. The Midtown Specific Plan area, which may be renamed "Calaveras Gateway/Milpitas Main Street Specific Plan" as part of an update, also holds potential to become a more vibrant, walkable corridor. The following strategies outline the steps required to achieve long-term change in these two areas of opportunity, and to more strategically deploy the City's real estate assets to generate new sources of revenue for economic development:

- Encouraging the development of a walkable mixed-use environment with restaurant and office uses in the TASP area,
- Identifying and preserving high-priority office/R&D development sites in and near the TASP area,
- Investing in infrastructure to enable 5G technology, especially in under-served areas,
- Pursuing creation of business incubators/co-working spaces and event programming/ temporary pop-up uses in the TASP area,
- Positioning Midtown as a community destination for local, independent retail and restaurants,
- Expanding staff capacity and funding for real estate functions to incentivize development of properties in Midtown, the TASP area, and other areas, and
- Ensuring any commercial marijuana delivery sales or future sales within the City itself generate local tax revenues.

CITY MARKETING AND PROCESSES

Milpitas is seen as lacking a specific brand and broader recognition as a business destination within Silicon Valley. Brokers, developers, and businesses also emphasized the need to improve the City's permitting processes. The City has begun to proactively address these issues, including implementation of recommendations resulting from a comprehensive assessment of the development review process led by the Matrix Consulting Group. Strategies include:

- Developing consistent modern branding for economic development efforts, including updating the City's economic development web presence, and
- Addressing delays and challenges in City permitting processes and requirements.

II. REPORT INTRODUCTION

The *City of Milpitas Economic Development Strategy and Implementation Actions* report (EDS) is a policy document that will guide the City's economic development activities over the next five years. The City of Milpitas and the surrounding Silicon Valley region have changed significantly since Milpitas' last economic development strategy, which was approved in 2006. This updated EDS will serve as Milpitas' road map to grow and diversify the City's economy, support businesses and workers, and improve quality of life in the community. The goals of the EDS effort include:

- Create a resilient and sustainable local economy
- Capture emerging innovation and technologies
- Identify forward-looking investment and growth opportunities
- Develop creative strategies to support economic vitality for today and the future
- Improve quality of life for residents, employees, and visitors
- Prepare students and the local workforce for future jobs
- Invest in the City's fiscal health
- Enhance competitiveness and strengthen Milpitas' position within the regional economy of Silicon Valley

The EDS is being published during an unprecedented period of economic uncertainty resulting from efforts to slow the spread of the coronavirus responsible for COVID-19. The City of Milpitas is undertaking immediate efforts to assist businesses harmed by legally mandated restrictions on travel and business operations. These actions will rapidly evolve in response to changing economic conditions, and are expected to dominate the work of the City for at least the next year.

Since the EDS is a five-year plan, the detailed forward-looking strategies and actions in the EDS also provide a roadmap for stabilizing and growing the Milpitas economy as the City, region, nation, and world recover from the current economic crisis. The EDS represents general policy statements and goals for future programs and initiatives. Economic conditions are evolving rapidly, and the Office of Economic Development continues to monitor, research and connect business partners with essential resources and assistance for business continuity, resiliency and recovery.

The EDS Development Process

From July 2019 to March 2019, the consultant team (Strategic Economics and Plan to Place) worked with the City of Milpitas' City Council, Office of Economic Development, Economic Development and Trade Commission (EDTC), Milpitas Chamber of Commerce and other stakeholders to develop the strategies, actions, and technical analyses of the EDS. The technical analysis effort identified strengths, weaknesses, opportunities, and threats of the Milpitas local economy, and conclusions from the analysis then informed the strategies and implementation actions outlined in the EDS. The consultant team and the Office of Economic Development thank all participants for sharing their time, opinions, and expertise.

Activities have included:

- **Data analysis**: an analysis of various quantitative and qualitative data sources was conducted, including: jobs by industry type, real estate market conditions for office, R&D, industrial, and retail uses, fiscal conditions, workforce and commute patterns, and small business health and growth.
- **Industry stakeholder focus groups and interviews**: a series of topic-specific stakeholder focus groups were held between September and December 2019. Focus groups were organized in the following six groups: technology and advanced manufacturing companies, developers / property owners / brokers, education and workforce partners and organizations, hospitality and leisure companies, retailers and retail center owners / property managers, and City executive staff.
- **Additional interviews:** The consultant team conducted additional interviews with office, R&D, industrial, and retail brokers, as well as workforce development organizations.
- **Outreach to Milpitas Chamber of Commerce:** The consultant team attended a Milpitas Chamber of Commerce meeting on October 24, 2019, to present findings and gather feedback from Chamber members.
- **Community workshop:** A community workshop was held at City Hall on October 24, 2019, to give Milpitas residents, workers, and other community members the opportunity to share their thoughts regarding economic development opportunities, weaknesses, and priorities for the City. The Office of Economic Development, Strategic Economics, and Plan to Place were joined at the meeting by Articulate Solutions to share the Community Identification and Branding Study's mission and objectives. The workshop material was also available for input in person after the workshop, with the feedback materials available at City Hall through November 2019 and at the Milpitas High School library in December 2019. Approximately 50 members from the community provided responses through these efforts.
- **Online community survey:** The City gathered additional community input by running an online survey from September to November 2019. The online survey received a total of 60 responses.
- **Outreach to City Council:** The consultant team presented preliminary findings to the City Council on November 12, 2019 through a Study Session. On February 18, 2020, City Council received a preview of the draft "Economic Development Strategy Framework." Milpitas City staff have provided additional updates to the City Council throughout the EDS process.
- **Outreach to Economic Development and Trade Commission:** The consultant team attended an EDTC meeting on September 19, 2019, to present findings and gather feedback from EDTC commissioners. Staff from the Office of Economic Development have been providing updates to EDTC since the commencement of the EDS project. On April 24, 2020, EDTC received a memorandum and presentation on staff's response to COVID-19 business assistance and guidance, the Public Draft Economic Development Strategy and Implementation Actions, and an update on the City's Community Identification and Branding Study. EDTC voted unanimously to recommend that the City Council adopt the Economic Development Strategy and Implementation Actions Draft Report.

Report Contents

The remainder of the EDS report includes two major sections consisting of the following content:

1. **Strategies and Implementation Actions:** This section describes the strategies that the City should pursue to achieve its economic development goals. The strategies were directly informed by findings from the outreach and data analysis. Strategies are organized around seven topic areas, and each strategy includes specific action items to guide the City's efforts over the next five years. For each topic area, a summary table of implementation actions is provided, which includes details regarding time frame, responsible party, potential partners, and need for additional funding.

2. **Technical Analysis:** This section summarizes the existing conditions and dynamics of Milpitas' local economy and identifies the City's strengths, weaknesses, and opportunities for future growth. It includes key findings from technical analyses and community outreach.

III. STRATEGIES AND IMPLEMENTATION ACTIONS

The following section of this report describes the EDS strategies and implementation actions for each strategy. These actions will guide the City's economic development activities over the next five years. The strategies are organized around the following seven topic areas (in no particular order) based on the types of challenges and opportunities identified based on the outreach and data analysis:

1. Small Business, Entrepreneurship, and Displacement Prevention
2. Retail and Restaurant
3. Workforce Development and Education Resources
4. Tech and Advanced Manufacturing
5. Light Industrial/Manufacturing and Warehouse/Distribution
6. Innovation District/Real Estate Development Opportunities
7. City Marketing and Processes

At the end of each topic area, a table summarizes strategies and implementation actions including:

- **Time frame:** In the first year, implementation will be focused on COVID-19 recovery, given minimal staff resources and anticipated budget constraints. Other items are shown as occurring within 2-3 years or within 3-5 years. The timing of an action is based partly on whether the action requires additional funding, given that tax revenues are likely to be limited until the economy recovers from efforts to slow the spread of the coronavirus responsible for COVID-19.
- **Relevant subareas (if applicable):** Indicates whether the action item applies citywide or to specific subareas. The subarea names are based on those used as part of the process to update the City's General Plan, as shown in Figure 1.
- **Lead organization/department**: Indicates the City department or outside organization with primary responsibility for implementing the strategy.
- **Supporting agencies/partners**: Lists major partners for implementing the strategy.
- **Additional funding required:** Identifies whether significant additional funding will be required to implement the action/strategy beyond allocation of current revenue sources through the City Council's annual budgeting process. Substantial reductions in revenue for transient occupancy tax, sales tax, and fees are likely to occur due to the economic impacts associated with responses to the COVID-19 pandemic. Therefore, the EDS may be affected in terms of available staff and financial resources to implement specific actions.

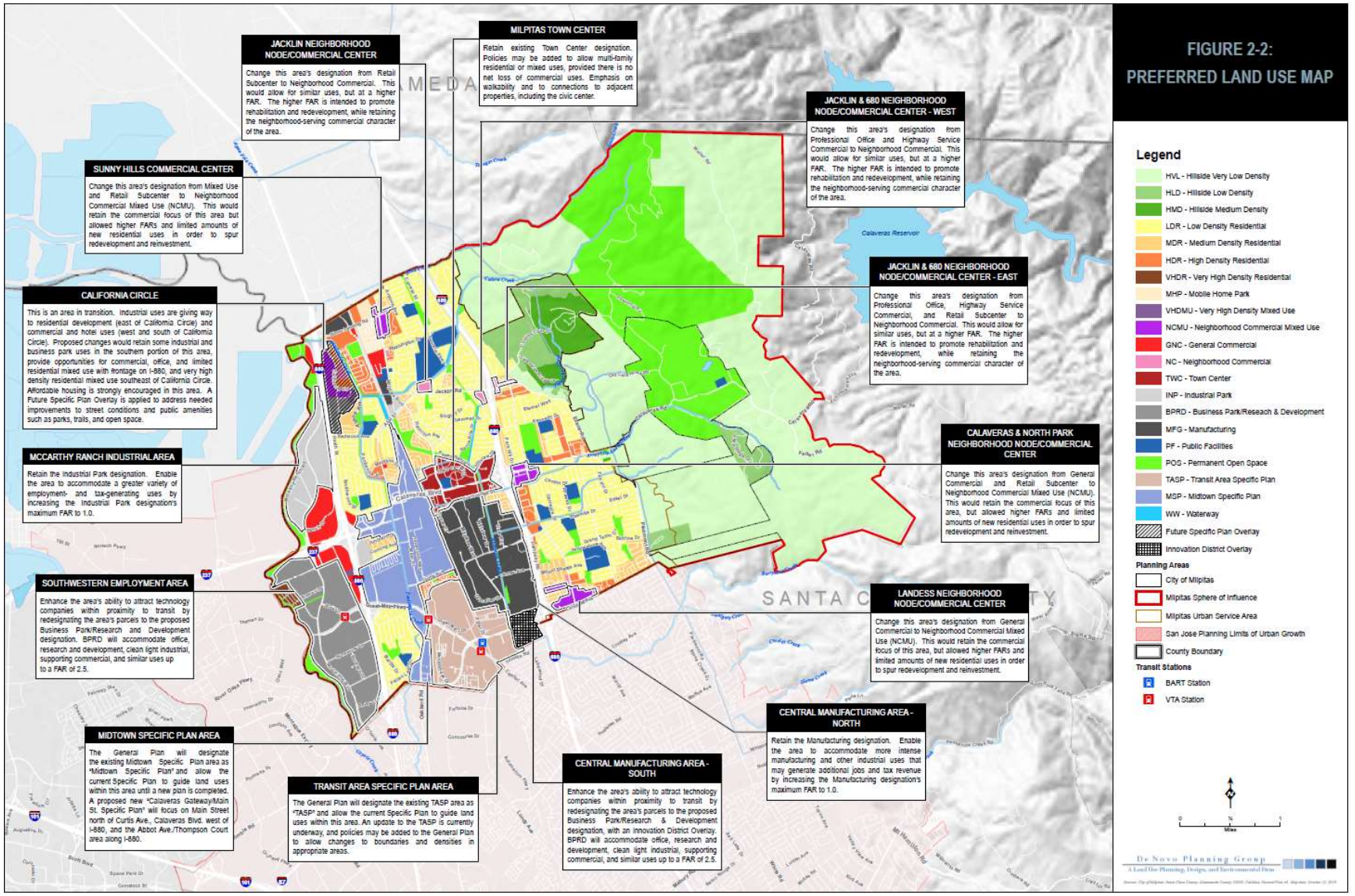
ONGOING MONITORING AND RESPONSE TO COVID-19 IMPACTS

The strategies and descriptions of implementation actions incorporate consideration of the immediate economic crisis triggered by shelter-in-place orders issued to slow the spread of the coronavirus responsible for COVID-19. The strategies and actions focus one-year implementation actions on high-priority efforts to support businesses through the crisis and assume that City financial resources will be limited in the next few years due to reduced tax revenues. Given the importance of the City's immediate responses to the COVID-19 crisis, a detailed description of recent City efforts was included in this report's Executive Summary. Please refer to page 2 for this information.

The introductions to several of the sets of strategies provide qualitative information about the ways in which efforts to combat the COVID-19 pandemic are likely to specifically impact related businesses, organizations, or workers. Unfortunately, it will take time before data is available to assess these impacts, and to assess the resulting changes in City tax revenues. Staff from the Office of Economic Development should closely monitor, at minimum, the following categories of data in order to understand and respond to trends:

- **Business survey data:** The City should continue to survey businesses to determine specific needs and performance concerns. The survey should be especially targeted to understanding the unique needs of small businesses.
- **Job counts:** The total number of jobs located in Milpitas should be monitored through data available from NOVA Workforce and compared to the county and region to compare performance. This data can also be analyzed to examine trends in specific occupations.
- **Workforce employment and unemployment rates:** The total resident workforce count and unemployment rates should be monitored through data available from NOVA Workforce, with comparison to the same data for the county and region.
- **Transient occupancy tax revenue:** TOT receipts should be monitored both overall and for individual hotels in the City so staff can quickly respond to overall and property-specific needs.
- **Sales and use tax revenue:** Sales and use tax revenue should be monitored overall, by business category, and by subarea to identify and respond to relatively rapid declines or lagging recovery rates.
- **Commercial and industrial rents, vacancy rates, and absorption:** Staff should monitor real estate market reports with this data for office, flex, R&D, manufacturing, and warehouse/light industrial uses for both the City and surrounding market area.

FIGURE 1: REFERENCE MAP OF GENERAL PLAN SUBAREA LOCATIONS AND NAMES (DRAFT GENERAL PLAN PREFERRED LAND USE MAP AS OF OCTOBER 2019)



Small Business, Entrepreneurship, and Displacement Prevention Strategies

Small businesses, defined as having between 2 and 49 workers, account for one-third of all jobs in Milpitas and include a wide diversity of industries. Most small businesses are concentrated in the City's established employment areas, including Central Manufacturing Area-North, Southwestern Employment Area, and Midtown. These areas contain low-cost commercial space that can accommodate a wide range of industrial, office, and retail businesses.

Prior to potential still-unknown impacts from efforts to prevent COVID-19, the overall number of businesses in Milpitas grew in the last decade. This growth included office-based small businesses (e.g. startup companies, traditional office services such as financial or real estate services), retail and personal services stores, and restaurants and drinking places. However, there was a small decline in small industrial businesses (e.g. auto repair, small manufacturers, other production and distribution companies), mostly due to the ongoing transformation of the Transit Area Specific Plan (TASP)[2] area from an industrial area to a largely residential area. Of note, Serra Center and Manufacturing Area-South, which are well-positioned for redevelopment, have relatively few small businesses.

Small businesses are especially vulnerable to harm and potential permanent closure resulting from shelter in place orders and social distancing requirements issued to prevent COVID-19. These businesses are less likely to have the financial resources and access to capital available to larger companies. Small businesses are also experiencing difficulties in accessing newly available federal assistance through grant and loan programs—such as the Paycheck Protection Program—due to application challenges and inadequate funding of the programs.

The following strategies seek to support the sustainability, resiliency, and ultimately the continued growth of small businesses in Milpitas. In the immediate future, the City's efforts should focus on providing emergency responses to support continued small business operations. As the economy recovers, strategies include supporting existing small businesses by decreasing startup time and costs (e.g. streamlining the City's permitting processes) and increasing resources available to entrepreneurs (e.g. technical assistance, direct outreach). Resources and outreach should come from both the City, as well as key partner organizations. The strategies also focus on supporting small businesses that are in areas planned to undergo redevelopment.

Strategy 1. Assist with COVID-19 emergency assistance and recovery.

Action 1.1. Continue with the establishment of a City small business loan program in collaboration with the Silicon Valley Community Foundation and Opportunity Fund, prioritizing disadvantaged businesses that have not received relief from federal and state programs.

Action 1.2. Continue to conduct Business Resiliency and Recovery Webinars and provide technical assistance and services through the Virtual Business Assistance Center.

Action 1.3. Maintain up-to-date information on the Economic Development webpage, including available federal, state, and private loans and grants for small businesses and other non-financial resources.

[2] The specific plan may be renamed the Milpitas Metro Specific Plan as part of an update.

Action 1.4. Work with small businesses to pursue deferments on federal income taxes, state income taxes. Assist small businesses to seek suspension of services like garbage collection, and negotiate flexible payment plans on utilities like electricity and water.

Strategy 2. Maintain partnerships to provide technical assistance and funding to small businesses

Action 2.1. Maintain and enhance relationships with nonprofits, foundations, and lenders that provide technical assistance or financial assistance to small businesses, and refer local small businesses to available resources.

Strategy 3. Support businesses located in areas that are expected to undergo major reinvestment and redevelopment activity over the next several years.

Action 3.1. Reach out to businesses in areas likely to undergo significant reinvestment and redevelopment activity in coming years, or in buildings impacted by nearby construction activity. Assess opportunities to support these businesses, primarily through connections to available outside technical resources.

Strategy 4. Require that new development projects develop a plan for relocating or accommodating small businesses that are displaced.

Action 4.1. Establish new policies setting goals, criteria, and process for developers to create a plan to prevent displacement of small businesses.

Strategy 5. Leverage business organizations to conduct regular ongoing outreach to small businesses.

Action 5.1. Restart the small business outreach program in partnership with organizations such as the Chamber of Commerce and Silicon Valley Small Business Development Center.

Action 5.2. Conduct regular workshops, in partnership with the Silicon Valley Small Business Development Center, that direct small businesses to available resources.

Strategy 6. Expedite and streamline the process of permit issuance and inspections in order to reduce the time and expense for small businesses.

Action 6.1. Study existing permitting processes and implement changes that expedite and lower the cost of permitting and inspections processes for small businesses.

FIGURE 2: SMALL BUSINESS, ENTREPRENEURSHIP, AND DISPLACEMENT PREVENTION IMPLEMENTATION ACTIONS

Action Item	Time Frame	Subarea (if applicable)	Lead Organization/ Department	Supporting Organization/ Department	Additional Funding Required?
1.1. Move forward to establish a small business loan program	1 year	Citywide	Economic Development, Small Business Assistance Subcommittee	Silicon Valley Community Foundation, Opportunity Fund	No
1.2. Continue to conduct Business Resiliency and Recovery Webinars and technical assistance	1 year	Citywide	Economic Development	Small Business Development Center, Silicon Valley Community Foundation	No
1.3. Maintain up-to-date information on the Economic Development webpage	1 year	Citywide	Economic Development	Public Information Officer	No
1.4. Work with small businesses to pursue deferments on taxes, suspension of services, and negotiate with utilities on payment	1 year	Citywide	Economic Development	PG&E, Water district, Waste collection services	No
2.1. Connect small businesses with technical assistance	Ongoing	Citywide	Economic Development	Silicon Valley Small Business Development Center	No
3.1. Identify and support businesses in areas undergoing investment and development activity	Ongoing	Citywide	Economic Development	Planning, Milpitas Chamber of Commerce, Silicon Valley Organization	No
4.1. Establish business retention, relocation, or other assistance plan requirements for new development	3-5 years	Citywide	Economic Development	Planning	No
5.1. Restart the small business outreach program	2-3 years	Citywide	Economic Development	Milpitas Chamber of Commerce, Silicon Valley Small Business Development Center	No

Action Item	Time Frame	Subarea (if applicable)	Lead Organization/ Department	Supporting Organization/ Department	Additional Funding Required?
5.2. Conduct regular workshops that direct small businesses to available resources	2-3 years and Ongoing	Citywide	Economic Development	Silicon Valley Small Business Development Center	No
6.1. Expedite and streamline permitting processes for small businesses	2-3 years	Citywide	Economic Development	Building and Safety, Planning, Fire Prevention	No

Retail and Restaurant Strategies

The number and diversity of restaurants and retailers in Milpitas is one of the City's major strengths, both economically and culturally. Prior to the impacts of the COVID-19 pandemic, restaurants were performing very well, with sales increasing significantly in the last several years. However, the share of sales generated by retail stores citywide was declining, matching national trends. Performance also varied greatly by retail center; several retail centers continued to perform well, and represent some of the largest contributors to the City's fiscal health (such as the Great Mall, McCarthy Center, and Milpitas Square). In contrast, some of Milpitas' older retail centers are disinvested and underperforming. Those centers may present opportunities for redevelopment, especially those located along major arterials such as the Serra Center. Finally, certain employment areas in Milpitas, such as the Southwestern Employment Area and McCarthy Ranch Industrial Area, lack amenities preferred by workers, including cafes, gyms, restaurants, and daycare facilities.

Retail and restaurant businesses are likely to suffer significant economic harm as a result of efforts to combat the COVID-19 pandemic. In the short term, shelter in place orders have eliminated onsite dining entirely, and most restaurants cannot compensate for this lost business through takeout and delivery orders—if they are able to complete these orders at all. "Nonessential" retail stores are also shut down, including nearly all businesses at the Great Mall. These businesses may continue to suffer even as restrictions are loosened, since social distancing requirements may limit the number of customers in a space, and customers themselves may be wary of crowded spaces for a long time to come. The declines in retail and restaurant activity will also result in a major decline in Milpitas' overall tax revenues since sales and use tax typically constitutes the second largest source of General Fund revenue.

The following strategies seek to support Milpitas' existing restaurants and retail centers first through immediate emergency assistance and recovery measures. Subsequent strategies focus on developing stronger collaborations with the Chamber of Commerce, and by increasing outreach and referrals to services by the City. These strategies also aim to monitor struggling retail areas, and allow more flexible uses in areas that could benefit from more diverse amenities.

Strategy 7. Assist with COVID-19 emergency assistance and recovery.

Action 7.1. Conduct additional research on ways that the City can assist retail and restaurant tenants that are unable to pay rents for their commercial spaces. These strategies would be in addition to the countywide moratorium, which expires on May 31, 2020 and protects small businesses and nonprofits.

Action 7.2. Extend the Restaurant Promotions Campaign after the shelter in place order is lifted to encourage patrons to continue visiting local restaurants and retail stores.

Strategy 8. Explore a Buy Local marketing initiative for Milpitas' shopping centers/districts and globally diverse mix of restaurants and retailers.

Action 8.1. Explore the creation of a "buy local" initiative to help promote local and independently owned retail and restaurants.

Strategy 9. Provide storefront façade improvement assistance to enhance the attractiveness and appearance of business exteriors.

Action 9.1. Commence implementation the Pilot Façade Improvement Grant Program.

Strategy 10. Upon recovery and stabilization of retail and restaurant businesses, monitor performance of retail centers and proactively reach out to property owners and businesses if sales tax revenues decline.

Action 10.1. Review retail sales tax data on a quarterly basis and immediately reach out to offer technical assistance to property owners and businesses in any areas showing unusual declines.

Strategy 11. Allow flexible uses in business park areas to encourage placement of retail, restaurants, services, and amenities near office space.

Action 11.1. Review and revise zoning and land use regulations to encourage incorporation of amenities like childcare centers, gyms, and other services in office/R&D districts.

FIGURE 3: RETAIL AND RESTAURANT IMPLEMENTATION ACTIONS

Action Item	Time Frame	Subarea (if applicable)	Lead Organization/ Department	Supporting Organization/ Department	Additional Funding Required?
7.1. Conduct additional research on ways that the City can assist retail and restaurant tenants that are unable to pay rents	1 year	Citywide	Economic Development	City Attorney	No
7.2. Extend the Restaurant Promotions Campaign	1 year	Citywide	Economic Development	Milpitas Chamber of Commerce, Lions Club	No
8.1. Collaborate with business organizations to launch Buy Local program	2-3 years	Citywide	Economic Development	Milpitas Chamber of Commerce, Lions Club, business organizations	No
9.1. Implement Pilot Façade Improvement Grant Program	3-5 years and then Ongoing	Retail districts or centers	Economic Development	EDTC	Yes
10.1. Review sales tax data and conduct outreach	2-3 years and then Ongoing	Retail districts or centers	Economic Development	Milpitas Chamber of Commerce	No
11.1. Update zoning and policies to encourage amenities in office/R&D districts	2-3 years	All major employment areas	Economic Development	Planning	No

Workforce Development and Education Resources

Employers in Milpitas offer a wide variety of job opportunities, with a mix of high skill, high-wage workers in computer, mathematical, and engineering occupations, as well as middle-wage, middle-skill workers in manufacturing occupations. Milpitas also has a sizeable share of low-wage service industry jobs.

However, with recent rapidly rising housing costs and limited transportation options, many employers were struggling to find highly skilled workers to fill job openings. Several partner organizations, like the school districts, community colleges, and NOVA, collaborate extensively with the City and private employers to implement various programs and resources to address these issues, especially in the advanced R&D and manufacturing sectors.

Now that unemployment rates are rising due to layoffs resulting from the COVID-19 pandemic, job seekers are likely to require workforce development and education opportunities more than ever to enhance their skills and compete for high quality job opportunities. Furthermore, the need for affordable housing—already a significant challenge identified by Milpitas stakeholders—will further increase as workers lose their incomes.

The following strategies focus on identifying opportunities and partnerships to provide affordable workforce housing, and on deepening existing partnerships between the City, the school districts and community colleges, workforce-focused organizations, and private employers in order to increase coordination and communication, grow existing programs, and establish potential new resources such as apprenticeship programs.

Strategy 12. Explore potential conversion of marginal hotel and motel properties into permanent affordable housing.

Action 12.1. Explore the viability of converting marginal hotel and motel properties to permanent affordable housing, making use of available state funding and resources.

Strategy 13. Explore partnerships with employers and developers to provide affordable workforce housing options.

Action 13.1. Identify sites owned by major employers, including private and nonprofit institutions (e.g. Milpitas Unified School District) to develop workforce housing so that employees can live and work in Milpitas.

Action 13.2. Facilitate development of publicly owned sites in Milpitas for workforce housing, where appropriate.

Strategy 14. Establish regular meetings with workforce development organizations, Milpitas Unified School District (MUSD), regional universities, and community colleges to coordinate their activities around training and educational programs to prepare youth and adults for employment in growing target industries, including tech and advanced manufacturing sectors.

Action 14.1. Create an Education and Workforce Development Working Group composed of the workforce board, nonprofits, MUSD, regional universities, community colleges, and employers that meets regularly to discuss programs for training and education.

Action 14.2. Proactively develop and implement new partnerships and programs that emerge from these discussions.

Strategy 15. Collaborate with MUSD Board and staff leadership to develop a shared work program that clarifies Milpitas City staff roles in connecting school district programs and students with training and exposure opportunities at businesses in the city.

Action 15.1. Develop a shared work program and agreement with the MUSD, San José State University (SJSU), Evergreen Valley College, and other organizations.

Action 15.2. Identify and implement new funding sources to add staffing capacity in the Office of Economic Development for workforce development activities.

Strategy 16. Explore collaborations with regional educational resources, such as apprenticeships via the Advanced Manufacturing Bay Area Community Colleges office.

Action 16.1. Conduct outreach to regional education and apprenticeship organizations to identify collaborative opportunities, integrate new partners into the Education and Workforce Development Working Group, and connect these organizations with area businesses.

Strategy 17. Continue to provide support for the FlexFactor program and Manufacturing Day to introduce youth to potential opportunities and to connect job seekers with employers.

Action 17.1. Continue annual participation in and funding assistance for the FlexFactor and Manufacturing Day programs.

FIGURE 4: WORKFORCE DEVELOPMENT AND EDUCATION RESOURCES IMPLEMENTATION ACTIONS

Action Item	Time Frame	Subarea (if applicable)	Lead Organization/ Department	Supporting Organization/ Department	Additional Funding Required?
12.1. Explore conversion of marginal hotel and motel properties to housing	2-3 years	Citywide	Planning	Economic Development, Housing, Nonprofits, Hotel and motel property owners	No
13.1. Explore housing partnerships with larger employers as part of ongoing outreach	Ongoing	Citywide	Economic Development	Housing, Planning	No
13.2. As appropriate, facilitate development of publicly owned sites in Milpitas for housing	Ongoing	Citywide	Economic Development	Housing, Planning	No
14.1. Create standing Education and Workforce Development Working Group	1 year and Ongoing	Citywide	Economic Development	MUSD, NOVA, San Jose Community College, Evergreen Valley College, San Jose State University, Milpitas businesses, Milpitas Chamber of Commerce Silicon Valley Organization	No
14.2. Develop new partnerships and programs	2-3 years and Ongoing	Citywide	Economic Development	Same as above	No
15.1. Develop program and agreement with MUSD	2-3 years	Citywide	Economic Development	MUSD	No

Action Item	Time Frame	Subarea (if applicable)	Lead Organization/ Department	Supporting Organization/ Department	Additional Funding Required?
15.2. Identify and implement funding sources to expand City staff capacity for workforce development activities	3-5 years	Citywide	Economic Development	City Council, Finance	Yes
16.1. Engage additional regional education and apprenticeship organizations	2-3 years	Citywide	Economic Development	Advanced Manufacturing Bay Area Community Colleges, Milpitas businesses, SEMI, Other education and apprenticeship organizations	No
17.1. Participate in FlexFactor and Manufacturing Day programs	Ongoing	Citywide	Economic Development	MUSD, Evergreen Valley College, NextFlex	Yes

Tech and Advanced Manufacturing Sector Strategies

Milpitas has a unique strength in attracting and retaining tech companies engaged in R&D and advanced manufacturing activities. These firms are at the forefront of new technological innovations, both regionally and globally. In particular, Milpitas is highly specialized in computer and electronics design and manufacturing. Milpitas offers many advantages for advanced manufacturing and R&D firms, including a supply of flexible, low-cost R&D and industrial buildings, and a strategic location at the border of Santa Clara and Alameda Counties. Milpitas is an excellent location for companies that need a diverse workforce that includes both skilled manufacturing occupations and highly educated researchers and engineers.

Manufacturing businesses are likely to suffer significant impacts as a result of efforts to combat the COVID-19 pandemic. Many of these businesses are shut down in the short term. As businesses reopen, some may be unable to achieve required social distancing space between workers. Manufacturers must also confront disruptions to the global supply chain and falling overall demand for many products.[3]

The following strategies seek to retain and build on Milpitas' existing strengths in computer and electronics design and manufacturing while also leveraging existing competitive assets to diversify the types of innovative tech businesses located in Milpitas. Examples include businesses in a broader array of industries such as nanotechnology, biotechnology, or clean tech. The strategies also focus on tenanting large business parks that have been vacant for several years, as these spaces represent opportunities to attract new companies and reinvestment in Milpitas.

Strategy 18. Assist with COVID-19 response and recovery for advanced manufacturing businesses.

Action 18.1. Continue to participate in weekly Bay Area Urban Manufacturing calls to ensure that the Office of Economic Development team better understands the specific needs and priorities of the technology and advanced manufacturing industries.

Action 18.2. Track and disseminate information on local, regional, state and federal resources (financial and technical assistance) specifically for manufacturers that are affected by COVID-19.

Strategy 19. Pursue growth and retention of businesses engaged in Milpitas' highly concentrated and specialized tech, advanced manufacturing and related research and development sector.

Action 19.1. Develop and regularly convene industry group(s) representing advanced manufacturing, medical devices, electronics, and software, with a goal of maintaining relationships with these companies and understanding emerging challenges, opportunities, and potential opportunities for City staff to provide suitable support for these businesses' needs.

Action 19.2. Continue to conduct one-on-one visits with businesses in the tech, advanced manufacturing, medical devices, electronics, and software industries to understand business needs, introduce available resources, and encourage participation in the stakeholder group.

[3] Recent reporting by PwC provides additional summary of the impacts of the COVID-19 pandemic on manufacturers at https://www.pwc.com/us/en/library/covid-19/coronavirus-impacts-industrial-manufacturing.html

Action 19.3. Review proposed zoning changes and development applications to ensure that sites are preserved for advanced manufacturing and R&D uses rather than warehouse and distribution development. Target these preservation efforts to areas in which there are both development pressures for adding warehouse and distribution space and there are concentrations of existing advanced manufacturing and R&D uses, such as in the McCarthy Ranch Industrial Area and the Central Manufacturing Area-North.

Action 19.4. Develop and implement an international trade program incorporating marketing and promotions of the Foreign Trade Zone/Select USA, engagement with outside partners to organize training for businesses, and engagement with outside partners to explore additional opportunities to enhance connections between city stakeholders and foreign trade and investment opportunities.

Strategy 20. Pursue opportunities to leverage existing strengths in electronics and materials science, research and development, advanced manufacturing, and engineering to diversify the types of production and research and development activities and businesses in Milpitas.

Action 20.1. Engage with partners in the Silicon Valley Economic Development Alliance (SVEDA), Silicon Valley Leadership Group, Bay Area Council, other regional economic development organizations, and commercial/industrial real estate brokers to identify emerging trends in the location preferences and needs of businesses in these industries.

Strategy 21. Explore creating a "demonstration partnership policy" for developing, testing, and demonstrating innovative solutions to City needs that involve public-private partnerships with innovative businesses in Milpitas and use of City land, data, or facilities.

Action 21.1. Develop and implement the partnership policy, including goals, selection and assessment criteria, public participation criteria, and steps for adopting and implementing projects.

Strategy 22. Assist in the marketing, promotion, and tenanting of vacant office and flex/R&D spaces.

Action 22.1. Develop promotional marketing materials for brokers and site locators to assist with marketing and leasing of vacant buildings, especially in large campuses.

Action 22.2. Improve the City's economic development webpage to include a continuously updated database of available R&D and office properties.

FIGURE 5. HIGH TECH AND ADVANCED MANUFACTURING IMPLEMENTATION ACTIONS

Action Item Summary	Time Frame	Subarea (if applicable)	Lead Organization/ Department	Supporting Organization/ Department	Additional Funding Required?
18.1. Bay Area Urban Manufacturing calls to understand the sector's needs and priorities	1 year	Citywide	Economic Development	EDTC, Bay Area Urban Manufacturing, SVEDA, East Bay Economic Development Alliance (EBEDA), Silicon Valley Organization	No
18.2. Track and disseminate information on local, regional, state and federal resources	1 year	Citywide	Economic Development	EDTC, Bay Area Urban Manufacturing, SVEDA, East Bay Economic Development Alliance (EBEDA), Silicon Valley Organization	No
19.1. Convene industry groups	2-3 years	Citywide	Economic Development	Business stakeholder groups	No
19.2. Engage in targeted business visits	Ongoing	Citywide	Economic Development	Advanced manufacturing, medical device, electronics, and software businesses	No
19.3. Review proposed zoning and development applications to preserve advanced manufacturing and R&D uses	Ongoing	Citywide	Economic Development	Planning	No
19.4. Implement, market, and promote international trade program	1-2 years	Citywide	Economic Development	EDTC	Yes

Action Item Summary	Time Frame	Subarea (if applicable)	Lead Organization/ Department	Supporting Organization/ Department	Additional Funding Required?
20.1. Leverage partner organizations to diversify R&D, advanced manufacturing, engineering	2-3 years	Citywide	Economic Development	SVEDA, East Bay Economic Development Alliance (EBEDA), Silicon Valley Organization	No
21.1. Develop and implement "demonstration partnership policy"	2-3 years and Ongoing	Citywide	Economic Development	Businesses, Milpitas Chamber of Commerce, EDTC, Planning	Yes
22.1. Develop marketing materials for brokers and site locators	2-3 years	Citywide	Economic Development	Public Information Officer, Milpitas Chamber of Commerce, Commercial brokers	Yes
22.2. Update City's economic development website with property availability	2-3 years	Citywide	Economic Development	Commercial brokers, Public Information Officer, Information Technology	Yes

Light Industrial/Manufacturing and Warehouse/Distribution Strategies

Milpitas has recently attracted new warehouse and distribution development projects in some of the City's major employment districts such as the McCarthy Ranch Industrial Area. Proposals are also in the pipeline to redevelop vacant R&D campuses into warehouse and distribution buildings (such as in Central Manufacturing Area-North). These projects are the only type of major commercial development activity in Milpitas since the early 2000s, except for some retail and hotel projects. Warehouse and distribution space is in very high demand across the region, and businesses generally seek this space in Milpitas because of the city's stock of large and low-cost space, proximity to households and businesses in Silicon Valley, and convenient freeway access. However, compared to other uses such as manufacturing, office, and R&D space, warehouse and distribution buildings generally consume large amounts of land, generate relatively low sales tax revenue—an increasingly important consideration as Milpitas confronts declining revenues due to the COVID-19 pandemic—and usually produce a limited number of jobs relative to the amount of building area occupied.

Given the lesser benefits associated with warehouse and distribution uses, the following strategies seek to position Milpitas to prioritize attraction and retention of light industrial, manufacturing, R&D and office land uses. Milpitas should also monitor subarea business-to-business sales tax revenues since these are often associated with manufacturing businesses and are a major source of public revenues, yet are currently not tracked beyond the citywide level.

Strategy 23. Ensure light industrial/manufacturing uses are prioritized relative to warehouse/distribution centers in land use regulations and infrastructure investments.

Action 23.1. Monitor and pursue future funding and resources made available by the Association of Bay Area Governments and Metropolitan Transportation Commission for areas of Milpitas that are designated as Priority Production Areas (Southwestern Employment Area, McCarthy Ranch Industrial Area and Central Manufacturing Area-North).

Action 23.2. Update zoning code and land use policies to ensure that light industrial/manufacturing uses are preserved in appropriate areas in order to limit redevelopment or conversion into warehouse/distribution centers. Identify targeted locations in which warehouse/distribution uses are allowed and disallowed.

Strategy 24. Support conversion or redevelopment of warehouse/distribution properties to tech office/R&D, production, and research and development uses.

Action 24.1. Identify high-potential opportunity areas for converting warehouse and distribution properties to higher value production and tech office/R&D uses. Review and adjust zoning for these areas, including within a potential "Innovation District" near the Milpitas Transit Center.

Action 24.2. Conduct outreach to the property owner(s) of the large vacant site along Hammond Way (west of the freight rail alignment) to explore potential for redevelopment of the site for tech office/R&D, production, and/or flex/R&D uses, as determined by updates to the Midtown Specific Plan (which is anticipated to become the "Calaveras Gateway/Milpitas Main Street Specific Plan").

Strategy 25. Monitor business-to-business sales tax collection in commercial and industrial subareas.

Action 25.1. Track business-to-business sales tax data on a quarterly and annual basis for each commercial and industrial subarea of the city.

FIGURE 6: LIGHT INDUSTRIAL/MANUFACTURING AND WAREHOUSE/DISTRIBUTION IMPLEMENTATION ACTIONS

Action Item	Time Frame	Subarea (if applicable)	Lead Organization/ Department	Supporting Organization/ Department	Additional Funding Required?
23.1. Monitor ABAG/MTC funding for PPAs	Ongoing	Central Manufacturing Area North, McCarthy Ranch Industrial Area, Southwestern Employment Area	Planning	Economic Development	No
23.2. Update zoning and policies to prioritize retention and growth of industrial/manufacturing spaces	2-3 years	All areas with these uses	Planning	Economic Development	No
24.1. Identify sites and update zoning to encourage conversions of warehouse and distribution to tech office/R&D and production uses	2-3 years	Areas with warehouse and distribution uses, TASP (Innovation District)	Economic Development	Planning	No
24.2. Reach out to owner(s) of vacant Hammond Way site	2-3 years	Central Manufacturing Area North	Economic Development	Hammond Way site owner(s)	No
25.1. Track business-to-business sales tax data for commercial and industrial subareas	Ongoing	Citywide	Economic Development	Finance Department	No

Innovation District/Real Estate Development Opportunities Strategies

Residents, workers, and business owners and representatives in Milpitas agreed that the City lacks a mixed use, walkable, downtown-like district or corridor with a clear sense of place, as well as certain types of sought-after amenities such as public gathering spaces, entertainment and nightlife establishments, and arts/cultural uses. These improvements would benefit retailers and eating and drinking establishments, and also make it easier for Milpitas to attract high tech companies and workers that favor locations with a mix of diverse amenities. Two major subareas in Milpitas present opportunities to address these needs:

- The first is the Transit Area Specific Plan (TASP) area, which may be renamed "Milpitas Metro Specific Plan." The area is well-suited to incorporate a new "Innovation District" targeted for growth of innovation-focused technology businesses. The introduction of BART service at the Milpitas Transit Center station area presents a tremendous opportunity to create a transit-oriented, truly mixed-use district. As new residential projects are completed, ground floor retail opens, and infrastructure investments are made in the TASP area, the "Innovation District" could, in the longer term, attract office or R&D users. However, this will require preserving sites for commercial development and investing in public infrastructure, especially to improve first/last-mile connections to the Transit Center.
- The second is the Midtown Specific Plan area, which may be renamed "Calaveras Gateway/Milpitas Main Street Specific Plan." The revitalization of Main Street into a more vibrant, walkable corridor is one of the major goals of a planned update to the Midtown Specific Plan.

The following strategies outline the steps required to achieve long-term change in these two areas of opportunity. The strategies focus on land use change, infrastructure and transportation investments, business growth, and placemaking. The strategies also leverage opportunities for the City to deploy its real estate assets and other revenue generation opportunities to achieve its economic development goals.

Strategy 26. Encourage the development of a walkable mixed-use environment with restaurant and office uses in the Transit Area Specific Plan (TASP) area, especially at Great Mall and surrounding areas.

Action 26.1. Regularly meet with Great Mall property owners and management to check on any immediate concerns/needs and to identify opportunities to develop a walkable mixed-use area with retail, office, and/or residential uses at the property. Complete this action in conjunction with the TASP update process.

Action 26.2. Work with developers, businesses, and brokers to integrate ground-floor retail into proposed residential and office projects in the TASP area and to attract tenants to these spaces.

Action 26.3. Explore reducing parking requirements and other zoning requirements/processes to help facilitate establishing restaurant and retail uses in the TASP area; leverage ABAG/MTC Priority Development Area grant funding for this effort, if available.

Action 26.4. Identify necessary public improvements in the TASP area via the specific plan update process, and complete planned updates to the Transit Area Development Impact Fee (TADIF); leverage ABAG/MTC Priority Development Area grant funding for this effort, if available.

Action 26.5. Explore the potential to implement a circulator shuttle or other mobility system that connects the transit center with area homes and businesses through a Transportation Management Association (TMA) and grant opportunities.

Strategy 27. Identify and preserve high-priority office/R&D development sites in and near the TASP area, including changes to land use policy.

Action 27.1. Continue discussions with the VTA Real Estate Department regarding potential development of office and R&D uses on VTA-owned sites in the TASP area.

Action 27.2. Identify potential office and R&D development opportunity sites in and near the current TASP boundaries (especially around the Milpitas Transit Center). As part of the TASP update, expand the area's boundaries to incorporate potential Innovation District sites. Enact land use policy and zoning that prioritize appropriate sites in the TASP for office and R&D development that have a high potential for these uses, while allowing for continued residential development. Sites could be purchased using a Strategic Property Acquisition Revenue (SPAR) fund (see Strategy 23, below).

Strategy 28. Pursue establishment of business incubators and co-working spaces in the TASP area.

Action 28.1. Reach out to existing business incubators, area property owners, and other partners to explore potential siting of incubators and co-working spaces in the TASP area, potentially as an interim temporary use.

Strategy 29. Facilitate deployment of 5G wireless service in the TASP area, especially in underserved areas and in locations targeted for growth of office/R&D uses as part of a new Innovation District.

Action 29.1. Review permitting requirements for 5G facilities installation to identify and remove any obstacles to deployment, especially in under-served areas.

Strategy 30. Assist in the placement of event programming and temporary "pop-up" uses in the TASP area to enliven public spaces and vacant retail spaces until sufficient demand exists to maintain this vibrancy without assistance.

Action 30.1. Review existing permitting requirements to ensure pop-up uses can easily locate temporarily in public spaces and vacant retail spaces.

Action 30.2. Conduct outreach to property owners, community organizations, arts organizations, and small local businesses to explore and assist placement of temporary dining, arts, and entertainment uses in the TASP area.

Strategy 31. Position Midtown as a community destination for local, independent retail and restaurants.

Action 31.1. Use the Midtown Specific Plan update process to identify appropriate locations for concentrating new commercial development and business activity.

Action 31.2. Lead area planning efforts to redevelop Serra Center, incorporating surrounding properties owned by the Milpitas Unified School District (MUSD) and the County of Santa Clara.

Action 31.3. Provide technical support for property owners and business owners on Main Street to explore and assist with forming a Property-based Business Improvement District (PBID), including potentially funding services for a district formation consultant.

Action 31.4. Identify necessary public improvements in the Midtown area via the specific plan update process and develop an impact fee or other financing mechanism for new development projects to contribute toward these improvements.

Action 31.5. Through the specific plan update process, explore reducing parking requirements and other zoning requirements/processes to help facilitate establishing restaurant and retail uses in Midtown.

Action 31.6. Work with businesses in Midtown to explore and implement rebranding of the area, including possible funding from a new area PBID.

Strategy 32. Expand staff capacity and funding for real estate functions to incentivize development of properties in Midtown, the TASP area, and other areas that will help to achieve the City's community and economic development goals.

Action 32.1. Identify potential funding options and sources for creating a Strategic Property Acquisition Revenue (SPAR) fund and for funding the real estate development activities of City staff generally. Pursue adoption of a SPAR fund, including its structure, funding sources, and uses in order to generate public revenue and position the City to participate in real estate development and investment initiatives.

Action 32.2. Develop a strategy for the existing portfolio of city-owned properties, including disposition and leasing agreements to generate more revenues for economic development activities and other community needs.

Strategy 33. Ensure that City receives tax revenues from sales of marijuana products, including delivery services.

Action 33.1. Explore potential to capture tax revenues from marijuana deliveries to addresses in Milpitas. If cannabis sales are permitted in the future, ensure that the City is capturing additional revenues.

FIGURE 7: INNOVATION DISTRICT/REAL ESTATE DEVELOPMENT OPPORTUNITIES STRATEGIES IMPLEMENTATION ACTIONS

Action Item	Time Frame	Subarea (if applicable)	Lead Organization/ Department	Supporting Organization/ Department	Additional Funding Required?
26.1. Engage with Great Mall regarding challenges and growth	Ongoing	TASP	Economic Development	Great Mall management and property owner	No
26.2. Expand and tenant ground-floor retail in TASP projects	Ongoing	TASP	Economic Development	Planning, Property developers	No
26.3. Explore reducing parking and other requirements to facilitate establishing restaurant and retail uses in the TASP area	2-3 years	TASP	Planning	Economic Development	No
26.4. Identify infrastructure and mobility investments in TASP and update TADIF	2-3 years	TASP	Planning	Economic Development, Public Works, Engineering	No
26.5. Explore circulator shuttle or other mobility system at transit center	3-5 years	TASP and beyond	Economic Development	Engineering, Planning, AC Transit, Private shuttle operators	Yes
27.1. Pursue office and R&D development at VTA sites	Ongoing	TASP	Economic Development	Planning	Yes
27.2. Identify potential office and R&D sites in/near TASP and update TASP	2-3 years	TASP	Economic Development	Planning	Yes
28.1. Assist in recruiting and locating business incubators and co-working spaces in the TASP	2-3 years	TASP	Economic Development		No
29.1. Identify and remove permitting challenges for 5G service installation	2-3 years	TASP and beyond	Planning	Economic Development	No

Action Item	Time Frame	Subarea (if applicable)	Lead Organization/ Department	Supporting Organization/ Department	Additional Funding Required?
30.1. Remove permitting barriers to temporary pop-up uses	2-3 years	TASP	Economic Development	Planning, Building and Safety, Fire Prevention	No
30.2. Assist in recruiting and locating pop-up uses in the TASP	2-3 years	TASP	Economic Development	Property owners, Local businesses, Milpitas Chamber of Commerce, Community and arts organizations	No
31.1. Identify Midtown development and business growth opportunity sites	2-3 years	Midtown	Economic Development	Planning	No
31.2. Lead efforts to revitalize Serra Center, integrating public properties	2-3 years	Midtown	Economic Development	Serra Center property owner and businesses, Planning	No
31.3. Form a PBID at Main Street, Serra Center, and surrounding properties	3-5 years	Midtown	Economic Development	Midtown property owners and businesses	Yes
31.4. Identify Midtown improvements and establish impact fee or other funding mechanism	3-5 years	Midtown	Planning	Economic Development, Midtown stakeholders	Yes
31.5. Explore reducing parking and other requirements to facilitate establishing restaurant and retail uses in Midtown	3-5 years	Midtown	Planning	Economic Development	Yes
31.6. Work with businesses in Midtown to explore and implement rebranding of the area	3-5 years	Midtown	Economic Development	Midtown stakeholders	Yes
32.1. Identify funding options for SPAR fund, develop and adopt SPAR fund	3-5 years	Citywide	Economic Development	City Manager's Office (CMO), Finance, City Council	No

Action Item	Time Frame	Subarea (if applicable)	Lead Organization/ Department	Supporting Organization/ Department	Additional Funding Required?
32.2. Develop strategy for use of city-owned properties	3-5 years	Citywide	Economic Development	City Council	No
33.1. Capture revenues from marijuana sales, including delivery	Ongoing	Citywide	Finance	City Council, Economic Development	No

City Marketing and Processes

Within the highly competitive business environment of Silicon Valley, Milpitas is seen as lacking a specific brand and broader recognition as a business destination within the region. Brokers, developers, and businesses also emphasized the need to improve the City's permitting processes. The City has started to proactively address these issues, including implementation of recommendations resulting from a comprehensive assessment of the development review process led by the Matrix Consulting Group.

The following strategies seek to reinforce the efforts and findings already outlined in these studies, and emphasize the need for a more effective branding of Milpitas as a business destination. This includes re-examining the City's marketing efforts, including the City's online web presence.

Strategy 34. Develop consistent, modern branding based on City goals for business attraction/ retention.

Action 34.1. Develop a brand identity for Milpitas economic development efforts, focusing on enhancing the City's identity as a unique part of the Silicon Valley and Bay Area economy with specialized workforce, real estate, and mobility assets for businesses.

Action 34.2. Develop and disseminate—online and in print media—updated marketing materials that present the City's brand and assets for potential employers and businesses. Partner with local businesses and business organizations as part of these efforts.

Strategy 35. Address delays and challenges in City permitting processes and permitting requirements, especially regarding certificate of occupancy requirements for changes of business ownership.

Action 35.1. Continue implementation of recommendations from the Matrix Consulting Group evaluation study to improve the development review process through interdepartmental coordination, enhanced technology tools, and other measures, including the express plan check process for tenant improvements.

Action 35.2. Pursue adjustments to requirements to obtain a new certificate of occupancy for changes of business ownership.

Strategy 36. Update the City's economic development web presence.

Action 36.1. Update the City's economic development webpage and integrate with City's main website. Provide useful resources on the website, including information regarding space availability and development opportunities in the city.

FIGURE 8: CITY MARKETING AND PROCESSES IMPLEMENTATION ACTIONS

Action Item	Time Frame	Subarea (if applicable)	Lead Organization/ Department	Supporting Organization/ Department	Additional Funding Required?
34.1. Update branding/identity for economic development	2-3 years	Citywide	Economic Development	CMO, Public Information Officer	Yes
34.2. Update marketing of City's brand and business assets	3-5 years	Citywide	Economic Development	CMO, Public Information Officer	Yes
35.1. Implement recommendations of development review process study	2-3 years	Citywide	Planning, Building and Safety	Economic Development	No
35.2. Change certificate of occupancy requirements for business ownership changes	2-3 years	Citywide	Planning, Building and Safety	Economic Development	No
36.1. Update and improve economic development website integration and content	2-3 years	Citywide	Economic Development	CMO, Public Information Officer	Yes

Performance Measures

The following performance measures are recommended for use by the City of Milpitas' Office of Economic Development to set annual objectives and measure progress in fulfilling ongoing activities recommended in the EDS strategies and actions. Each performance measure should include an annual numerical target that is established prior to each fiscal year. The performance measures focus on the direct activities of the Office of Economic Development, rather than broader economic indicators which are heavily influenced by regional, national, and international economic and market conditions.

The first five performance measures are already in use by the Office of Economic Development, while measures six through eight are new.

1. **Corporate Visitation Program** – Number of corporate visits that lead to a follow up

2. **Business Engagement** – Number of meetings with the corporate, brokerage and development communities leading to business attraction, retention and expansion

3. **Customer Service** – Percentage of business partners engaged with the Economic Development team who rank their experience as "very good" or "excellent" on a survey

4. **Branding** – Number of promotions and marketing of the local business community through social media and other digital media platforms

5. **Permit Assistance** – Number of firms who received permit and other assistance from Economic Development staff

6. **Tech/Advanced Manufacturing Stakeholder Group** – Number of meetings conducted with the Tech and Advanced Manufacturing Industry Stakeholder Group

7. **Small Business Assistance and Referrals** – Number of small businesses provided direct permitting or financial assistance, or referred to available third party financial and technical assistance resources

8. **Education and Workforce Development Working Group** – Number of meetings conducted with the Education and Workforce Development Working Group

Since these performance measures only assess success in fulfilling ongoing annual activities, the Office of Economic Development must also undertake an annual review of its progress in implementing all the actions recommended in the EDS. Many of the actions are one-time activities that serve as incremental steps in implementing a strategy. The comprehensive annual review is an opportunity to assess progress in completing actions and fulfilling the strategies.

IV. TECHNICAL ANALYSIS

The Technical Analysis summarizes the existing conditions and dynamics of Milpitas' local economy to identify the City's strengths, weaknesses, and opportunities for future growth. Strategic Economics, with support from Plan to Place, completed technical analysis and community outreach to develop the findings of this section. The conclusions were used to guide development of the strategies and implementation actions outlined in the first section of this document.

The technical analysis does not incorporate data reflecting the impacts of the COVID-19 pandemic, although it does note areas in which COVID-19 may significantly influence conditions. The research and analysis were completed in late-2019 through early 2020, prior to the occurrence of the global pandemic. Also, publication of the detailed data required for much of the analysis lags by several months to several quarters. The economic impacts of responses to the COVID-19 pandemic have occurred so rapidly that it will take some time before comprehensive data is available. The previous section of this report recommended several categories of data to monitor on page 13.

Summary of the Technical Analysis Findings

The following summary highlights the major findings of the technical analysis for the EDS. These findings were based on extensive technical analysis and feedback from City Council and stakeholders.

KEY INDUSTRY GROUPS

Milpitas is home to 51,500 jobs, and has experienced strong job growth since 2009. Many different types of businesses are thriving in Milpitas, ranging from industries that are exporting goods and services globally, as well as industries that serve residents and workers in the city and region. Based on an analysis of Milpitas' existing strengths, regional trends, and the city's competitive advantages, Strategic Economics identified four industry groups that represent opportunities for growth:

ADVANCED MANUFACTURING AND R&D

Milpitas has a unique strength in attracting and retaining R&D and advanced manufacturing. These firms are at the forefront of new technological innovations. Milpitas offers many advantages for advanced manufacturing and R&D, including its supply of flexible, low-cost R&D and industrial buildings, and its strategic location at the border of Santa Clara and Alameda Counties. Milpitas is an excellent location for companies that need both skilled manufacturing labor and highly educated researchers and engineers, with close proximity to other Silicon Valley cities.

There are opportunities to diversify the range of high-technology industries located in Milpitas. Currently, Milpitas is highly specialized in computer and electronics design and manufacturing; in the future, there is potential to attract other types of high-tech manufacturing and R&D, like nanotechnology, biotechnology, clean tech, etc. Existing vacancies in large business parks in Milpitas represent an opportunity to attract new users, although this would likely require reinvestment in these spaces by property owners or tenants.

SOFTWARE AND INFORMATION SERVICES

The software and information services sector is one of the largest and fastest-growing industries in Santa Clara County. This sector encompasses businesses specialized in software, programming,

internet, social media, and other app-based technologies. While this sector is not concentrated in Milpitas, it has grown exponentially in Santa Clara County in the last decade. Companies in this sector tend to locate in office buildings (less so in office/flex or R&D space) and have been one important contributor to high demand for office development across Santa Clara County. Milpitas may be able to attract more of this business activity in the future, especially as smaller startups are getting priced out of Mountain View, Sunnyvale, and Cupertino.

The introduction of BART service at the Milpitas Transit Center presents a tremendous opportunity for creating a transit-oriented, mixed-use district in what is currently designated as "Manufacturing Area South" in the Milpitas General Plan Update (see Figure 1).[4] As new residential projects are completed, ground floor retail opens, and infrastructure investments are made, the area surrounding the Milpitas Transit Center could, in the longer term, attract office or R&D users. However, this will likely require preserving sites for commercial development and investing in public infrastructure, as mentioned above. Doing so may require partnerships with Santa Clara Valley Transportation Authority (VTA), since the agency owns much of the land at or near the Milpitas Transit Center.

Logistics/ Distribution

Warehouse and distribution space is in very high demand across the region. Milpitas has been attracting new warehouse development projects, including in some of the City's prime employment areas. Businesses seek this space in Milpitas because of the city's availability of relatively large and low-cost space (compared to the more centrally located Silicon Valley cities), proximity to households and businesses in the Silicon Valley region, and convenient freeway access.

Warehouse and distribution projects generate few jobs, consume large amounts of land, and offer relatively low-skill, low-wage job opportunities compared to other types of industries and commercial space. Milpitas' newly built warehouse and distribution development projects are very large, one-story buildings with low job densities. Furthermore, while the tenants of these new warehouse and distribution projects are technology businesses, the space is mostly being used for storage and last-mile distribution.

Retail and Restaurants

The number and diversity of restaurants and retail centers in Milpitas is a strength, both economically and culturally. Prior to the impacts of the COVID-19 pandemic, restaurants were performing very well, with sales increasing significantly in the last several years. However, the share of sales generated by retail stores was declining, matching national trends. Several retail centers continue to perform well in Milpitas, and remain some of the largest contributors to the City's fiscal health (such as the Great Mall, McCarthy Center, and Milpitas Square).

Some of the city's older retail centers are underperforming. They may present an opportunity for redevelopment, especially those located along major arterials, such as the Serra Center.

Enhancing Midtown and the Transit Area Specific Plan (TASP) areas as pedestrian-oriented districts with public amenities can help to support more retail and restaurants in these areas. The continued addition of housing and, potentially, workers in the TASP will create an opportunity to attract retail uses

[4] In October 2019, the Milpitas City Council provided final direction on the Preferred Land Use Map, as part of the General Plan Update process. Available at: https://milpitas.generalplan.org/

that complement the regional destination at the Great Mall. Midtown creates opportunities to focus on the area's unique mix of local businesses, the creation of a potential gateway at Serra Center, and the potential benefits from adding a mix of housing that will provide greater vibrancy.

SMALL BUSINESSES

Small businesses employ about 16,000 workers, accounting for one-third of all jobs in Milpitas. Industrial and office-based small businesses represent about one third of all small businesses in Milpitas. Small industrial businesses include auto repair, small manufacturers, and other production and distribution companies, and are declining slightly in Milpitas. However, there has been significant growth in small office-based businesses, which include startup companies as well as traditional services firms (e.g. consulting, engineering, real estate services). Retail, personal services, restaurants, and drinking places represent 29 percent of small businesses in Milpitas, and are also growing.

In Milpitas, small businesses are concentrated in established employment areas, such as Manufacturing Area North, Southwestern Employment Area, and Midtown (see Figure 1). All of these areas contain low-cost spaces that can accommodate a wide range of industrial, office, and retail businesses. Serra Center and Manufacturing Area South, which have been identified as potential redevelopment areas, have relatively few small businesses.

The City of Milpitas plays an important role in supporting the health and growth of small businesses, in partnership with other organizations like the Milpitas Chamber of Commerce. There is a need to streamline the permitting and change in tenancy processes at the City, which can help reduce costs for small businesses. In addition, small businesses require resources for technical assistance and direct outreach; better wayfinding from the Milpitas Transit Center; and more marketing and branding.

WORKFORCE DEVELOPMENT AND EDUCATION

Milpitas' employers offer a wide variety of job opportunities, with a combination of high skill, high-wage workers in computer, mathematical, and engineering occupations, as well as more middle-wage, middle-skill workers in some of the manufacturing occupations. On the whole, residents in Milpitas have slightly higher educational attainment levels than what is required for most jobs in Milpitas. The majority of Milpitas' residents commute outside of the city for work. Attracting more firms in advanced manufacturing, R&D, software, and information sciences would help to create more opportunities for Milpitas' residents to work closer to home.

At the same time, many of Milpitas' employers struggle to find highly skilled workers for job openings, given the low overall unemployment rate in the region (as of February 2020). Training and preparing young people entering the workforce, as well as under-employed adults, are top priorities for local firms. Several partner organizations, like the school districts, community colleges, NOVA, and others, collaborate extensively with the City and private employers to implement a variety of programs, courses, and resources, especially in the advanced R&D and manufacturing sectors. However, stakeholders and community members report that housing and transportation costs are among some of the major constraints to workforce and economic development, especially for employee recruitment and retention.

Analytical Methodology and Approach

The Strategic Economics Team (the consultant team) analyzed employment and businesses in Milpitas. The data analysis included:

- Workforce characteristics, including occupation, education, and commute patterns;
- Jobs by industry type over time, including a review of the health, growth, and needs of small businesses in Milpitas;
- Real estate market conditions for office, R&D, industrial, and retail uses; and
- Fiscal considerations.

In addition to the data analysis, the consultant team and the Office of Economic Development conducted outreach to residents, employers, and stakeholders in the community. The consultant team also attended meetings with the City Council and Economic Development and Trade Commission to discuss economic development priorities, present preliminary data analysis, and receive feedback.

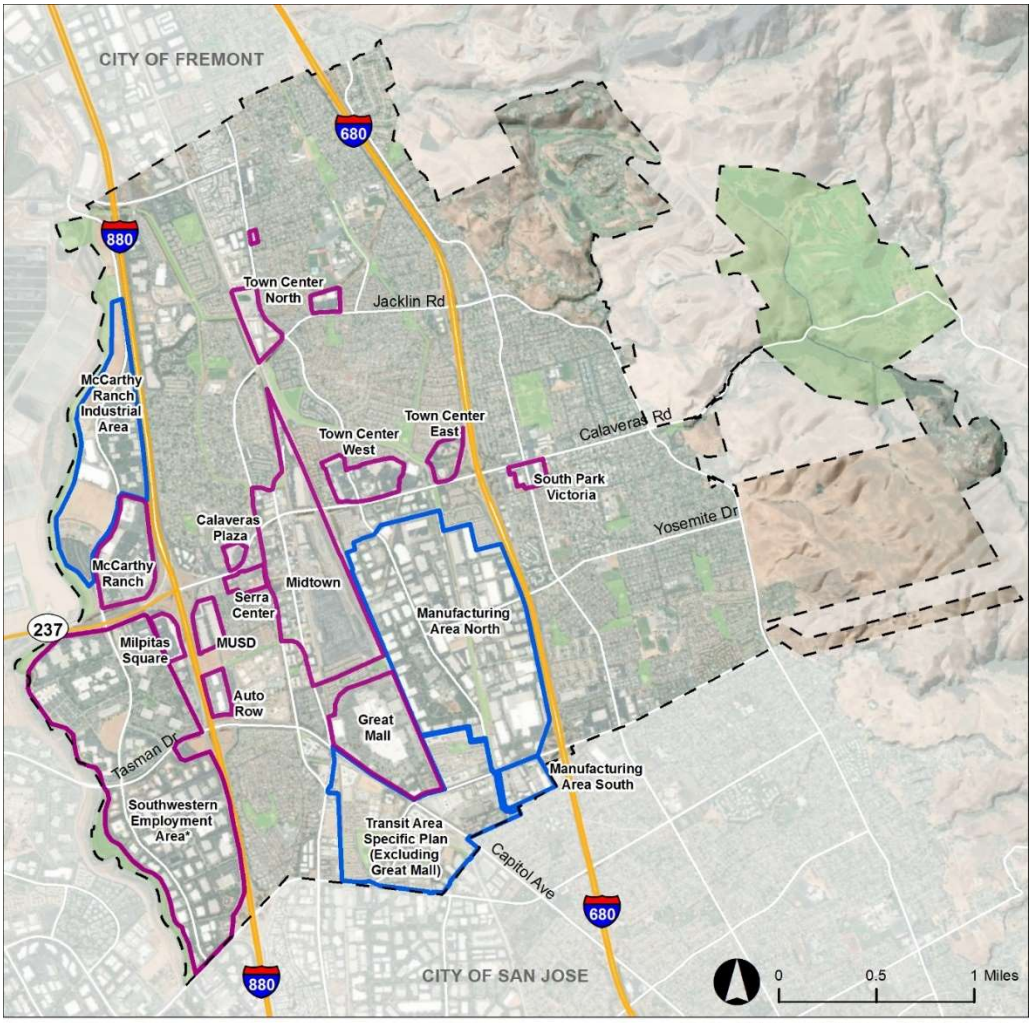
The analysis of small businesses, the retail real estate market analysis, and the sales tax performance analysis include assessments of trends and conditions by subarea. The subareas referenced in these sections are mapped in Figure 9. They include:

- **Subareas as defined by the City's tracking of sales tax revenues via consultant MuniServices:** The "Sales Tax Subareas" shown in the map in Figure 9 represent boundaries for which sales tax data were available from the City of Milpitas for this report's retail and tax revenue analyses. The subareas defined by the sales tax tracking system do not always conform to the better-known "Opportunity Areas" specified in Milpitas' General Plan Update. [5]
- **Four additional major employment areas in Milpitas:** These four subareas capture key employment nodes in Milpitas and were analyzed as part of this report's small business analysis. Manufacturing Area North, Manufacturing Area South, and the McCarthy Ranch Industrial Area conform to the General Plan Update Opportunity Area boundaries.[6] Boundaries for the "Transit Area Specific Plan" were adjusted to exclude the Great Mall, since the small business analysis was primarily focused on independent businesses rather than the small stores at the mall that are typically part of large national chains.

Although this report includes selective subarea analyses, the report does not include a comprehensive subarea analysis. The City of Milpitas is leading a separate study--entitled "Milpitas General Plan Opportunity Area Assessment and Development Strategy"—that will examine the General Plan Update Opportunity Areas in more detail.

[5] Documents related to the General Plan Update are available at: https://milpitas.generalplan.org/
[6] Ibid.

FIGURE 9. REFERENCE MAP OF THE SMALL BUSINESS AND SALES TAX SUBAREAS IN MILPITAS



Reference Map of Small Business and Sales Tax Analysis Subareas in Milpitas

- Sales Tax Subareas (as tracked by the City of Milpitas)
- Other Major Employment Subareas
- Milpitas City Limit
- Highways

*Southwestern Employment Area encompasses MuniServices' Oak Creek North and Oak Creek South subareas.

Sources: MuniServices, 2019; CoStar, 2019; City of Milpitas, 2019; Strategic Economics, 2020.

STRATEGICECONOMICS

Workforce and Jobs-Skills Match

This section describes existing characteristics of Milpitas' workforce in terms of occupation, educational attainment, and commute patterns. When possible, workers in Milpitas are compared to Milpitas residents to assess the City's overall job-skill match.

Findings on occupations are based on 2019 data provided by NOVA, the workforce development board for Silicon Valley, presented at the 2-digit and 6-digit Standard Occupational Classification (SOC) code. Findings on commutes and educational attainment are based on 2017 data from the U.S. Census Longitudinal Employer-Household Dynamics (LEHD).

OCCUPATIONS

Milpitas has a very diverse workforce, with occupations at a range of skill levels and wages. Figure 10, which displays the top 20 occupations in Milpitas by number of workers, demonstrates the City's wide range of occupations. The top three occupations, which each have more than 1,500 workers, include software developers and programmers, retail salespersons, and electrical/electronics assemblers. These are very different occupations with diverging income and skill levels.

Milpitas has a large number of high skill, high wage computer, mathematical, and engineering occupations. This includes software developers and programmers, electrical and electronics engineers, industrial engineers, computer hardware engineers, and computer and information analysts.

There is also a concentration of various skilled trade production occupations in Milpitas—this is relatively unique within Silicon Valley. The largest production occupations in Milpitas include electrical and electronics assemblers, miscellaneous assemblers, fabricators, and production workers, semiconductor processors, machinists, and other assorted inspectors, testers, and samplers. These occupations are relatively concentrated in Milpitas compared to Santa Clara County. These tend to be middle-wage jobs with opportunities for upward mobility that, while requiring specialized skills and training, do not necessarily require very advanced degrees (see text box, below, on typical wage levels in the San Francisco Bay Area).

Many workers in Milpitas hold occupations in logistics. These include laborers and material movers, truck drivers, and industrial truck/tractor operators. These are generally low to mid-wage jobs, that require mid or low skill levels.

Milpitas also has a large number of service industry workers, especially in retail and restaurants. Some of these occupations, such as retail salespersons, fast food and counter workers, waiters and waitresses, cashiers, and cooks, tend to be lower skill, lower paying jobs. Such low wages make it difficult for workers to afford housing in Silicon Valley, especially given rapidly rising

DEFINING WAGE LEVELS IN THE SAN FRANCISCO BAY AREA

Definitions of low, middle, and high wage jobs vary, especially in diverse and rapidly growing regions such as the Bay Area. One common source used as a benchmark for wage levels is the Bay Area Economic Prosperity Strategy published by the policy think tank SPUR. The study analyzed median wages across the region's different counties, and based on this analysis defined typical wage levels as follows:

- Lower-wage: Less than $36,000 per year
- Middle-wage: Between $36,000 and $62,000 per year
- Higher-wage: More than $62,000 per year

Source: SPUR "Economic Prosperity Strategy", 2014. Available at: https://www.spur.org/publications/spur-report/2014-10-01/economic-prosperity-strategy

housing costs across the region. Workers may need to take on more than one job in order to make ends meet.

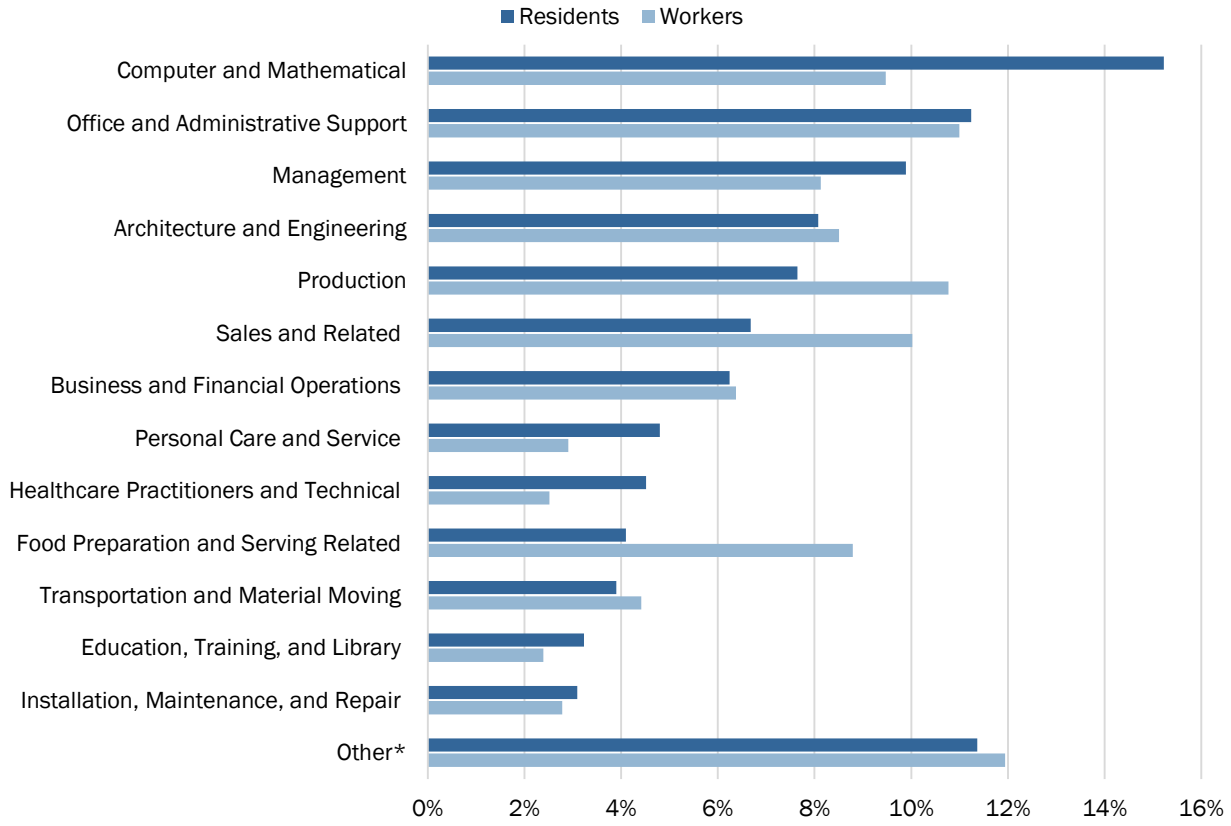
Overall, Milpitas residents tend to have a slightly higher share of mathematical, computer, engineering occupations than Milpitas workers, while Milpitas workers have a higher share of production occupations. Figure 11 summarizes the share of Milpitas workers and Milpitas residents by 2-digit SOC codes. Residents of Milpitas have a larger share of people employed in computer and mathematical occupations compared to Milpitas workers, but a lower share of people employed in production, sales, and food preparation/serving occupations. This suggests that a share of workers in these occupations do not live in Milpitas.

FIGURE 10. TOP 20 OCCUPATIONS OF MILPITAS WORKERS BY BROAD CATEGORY, 2019

SOC Code	Occupation	Milpitas Jobs, 2019	Average Annual Wages*
15-1130	Software Developers and Programmers	2,827	$132,700
41-2030	Retail Salespersons	1,708	$32,400
51-2020	Electrical, Electronics, & Electromechanical Assemblers	1,666	$44,000
17-2070	Electrical and Electronics Engineers	1,280	$133,900
35-3020	Fast Food and Counter Workers	1,261	$28,300
53-7060	Laborers and Material Movers, Hand	1,092	$35,800
17-3020	Engineering Technicians, Except Drafters	996	$68,900
35-3030	Waiters and Waitresses	985	$31,600
41-2010	Cashiers	963	$29,700
35-2010	Cooks	951	$32,000
43-6010	Secretaries and Administrative Assistants	931	$55,600
41-4010	Sales Representatives, Wholesale and Manufacturing	912	$89,200
11-1020	General and Operations Managers	884	$161,700
43-9060	Office Clerks, General	789	$47,000
51-2090	Miscellaneous Assemblers and Fabricators	781	$37,300
37-2010	Building Cleaning Workers	696	$35,200
53-3030	Driver/Sales Workers and Truck Drivers	659	$46,400
15-1120	Computer and Information Analysts	631	$120,500
43-5080	Stock Clerks and Order Fillers	610	$33,000
41-1010	First-Line Supervisors of Sales Workers	588	$57,200
	Total All Occupations	**53,016**	

*Average annual wage based on data provided by NOVA.
Source: NOVA, 2019; Strategic Economics, 2020.

FIGURE 11. SHARE OF MILPITAS RESIDENTS AND MILPITAS WORKERS BY OCCUPATION, 2019



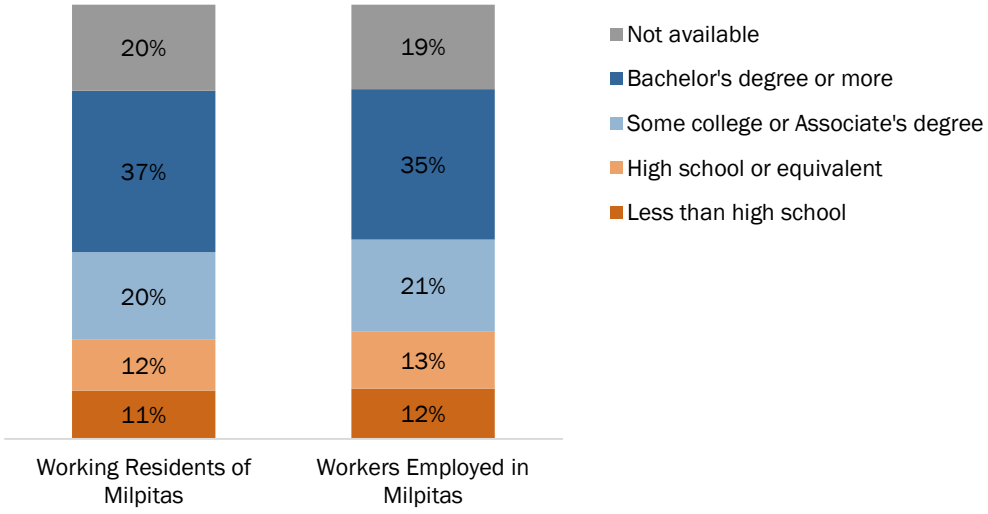
*Other includes occupations in: Healthcare Support, Building and Grounds Cleaning and Maintenance, Construction and Extraction, Arts, Design, Entertainment, Sports, and Media, Protective Service, Community and Social Service, Life, Physical, and Social Science, Legal, and Farming, Fishing, and Forestry.
Note: Occupation data includes all "Covered Employment," which includes all private and public sector jobs covered by the Unemployment Insurance Program.
Note: "Management" occupations include executives, managers, and administrators that plan, direct, or coordinate activities of their business or institution.
Source: NOVA, 2019; U.S. Census ACS 2013-2017 5-year estimates; Strategic Economics, 2020.

EDUCATIONAL ATTAINMENT

On average, employed residents of Milpitas have slightly higher educational attainment than Milpitas workers. As seen in Figure 12, the percent of employed residents in Milpitas that have a bachelor's degree or more is 37 percent, compared to 35 percent of workers in Milpitas. Note that the data does not track the share of workers with more advanced degrees, such as master's or doctorate degrees, as a separate category.

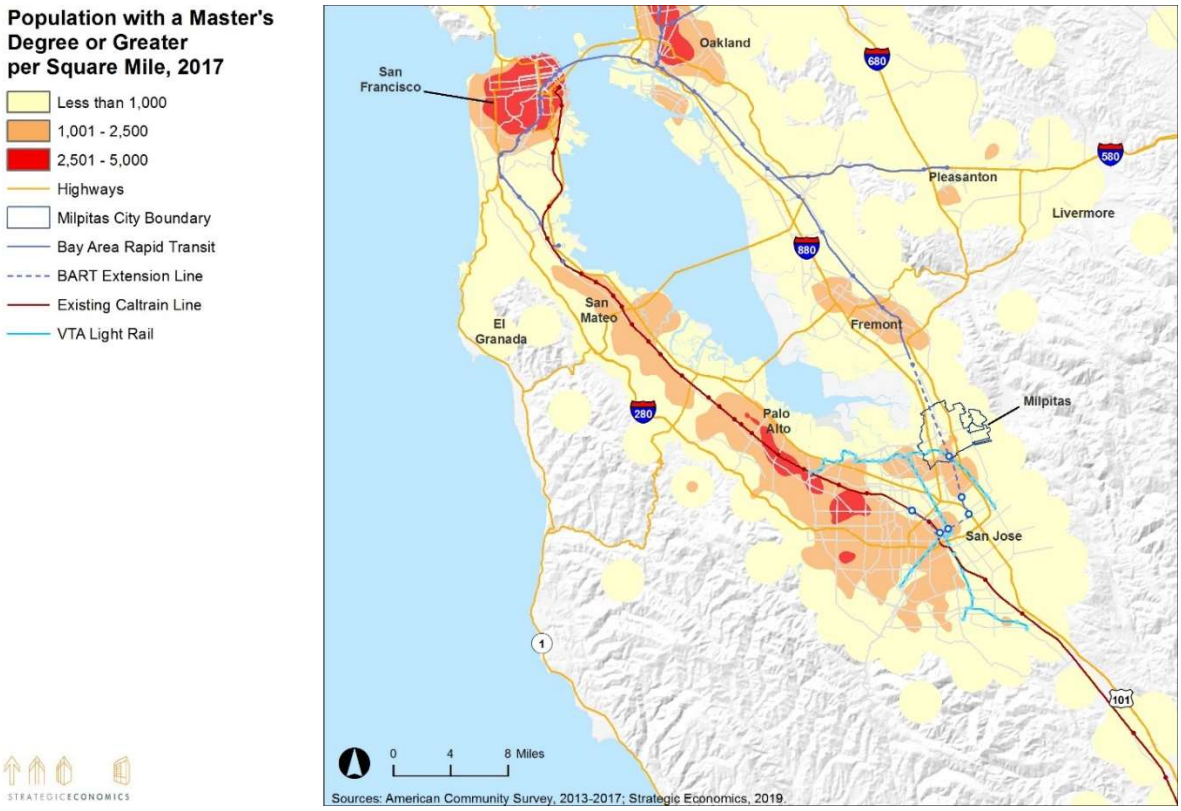
Milpitas is strategically located to attract workers of diverse levels of educational attainment. As illustrated in Figure 13, areas with the highest concentrations of residents with master's degrees in the Bay Area are western Santa Clara County (Menlo Park, Palo Alto, Mountain View, Sunnyvale), San Francisco, and Oakland/Berkeley. Although Milpitas is located outside these largest concentrations of residents with master's degrees, the city is well located geographically to attract both highly educated residents of western Santa Clara County and residents of San José, Fremont, and other parts of Alameda County with more diverse levels of educational attainment.

FIGURE 12. EDUCATIONAL ATTAINMENT OF MILPITAS WORKERS AND MILPITAS RESIDENTS, 2017



Source: U.S. Census Longitudinal Employer-Household Dynamics, 2017; Strategic Economics, 2020.

FIGURE 13. DENSITY OF RESIDENT POPULATION WITH A MASTER'S DEGREE OR GREATER IN THE BAY AREA, 2017



COMMUTE PATTERNS

With a net import of workers, Milpitas is a jobs-rich community. As seen in Figure 14, there are more outside workers commuting into Milpitas for work than there are Milpitas residents leaving Milpitas for work. Milpitas' jobs-to-employed-residents ratio is 1.47 (Figure 15), which is considerably higher than other neighboring cities such as San José or Fremont.

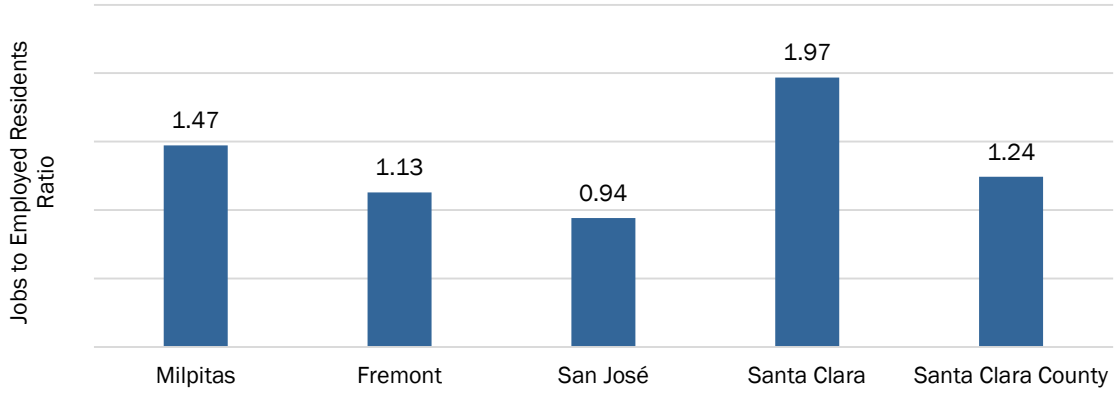
About 12 percent of Milpitas' working residents both work and live in Milpitas. This is typical for a small city in a large and dynamic area like Silicon Valley. For example, in the City of Santa Clara, about 15 percent of employed residents live and work in Santa Clara. This share is higher in Fremont (19 percent), but lower in Union City and Newark. Other than Milpitas, the top employment destination of employed residents of Milpitas is San José (27 percent), the City of Santa Clara (8 percent), Fremont (8 percent) and Sunnyvale (6 percent). The top 15 employment destinations of employed residents of Milpitas are listed by city in Figure 16.

FIGURE 14. EMPLOYED RESIDENTS AND WORKERS OF MILPITAS BY HOME AND WORK LOCATION

	Count	Share
Total Employed Residents Living in Milpitas	**38,073**	**100%**
Employed Residents Living and Employed in Milpitas	*4,382*	*11.5%*
Employed Residents Living in Milpitas but Employed Outside	*33,691*	*88%*
Total Workers Employed in Milpitas	**51,549**	**100%**
Workers Employed and Living in Milpitas	*4,382*	*8.5%*
Workers Employed in Milpitas but Living Outside	*47,167*	*91%*

Source: Longitudinal Household Employment Dynamics, 2017; Strategic Economics, 2019.

FIGURE 15. JOBS TO EMPLOYED RESIDENTS RATIO IN MILPITAS AND SELECTED JURISDICTIONS, 2017



Source: Longitudinal Household Employment Dynamics, 2017; Strategic Economics, 2019.

FIGURE 16. TOP 15 EMPLOYMENT DESTINATIONS OF EMPLOYED RESIDENTS OF MILPITAS, 2017

Employment Destination (City)	Employed Residents of Milpitas	Share of Total
San José	10,274	27%
Milpitas	4,382	12%
Santa Clara	3,119	8%
Fremont	2,912	8%
Sunnyvale	2,377	6%
Mountain View	1,502	4%
Palo Alto	1,275	3%
San Francisco	1,130	3%
Cupertino	738	2%
Pleasanton	458	1%
Newark	408	1%
Campbell	399	1%
Redwood City	393	1%
Menlo Park	337	1%
Oakland	316	1%
All Other Cities	8,053	21%
Total Employed Residents of Milpitas	**38,073**	**100%**

Source: Longitudinal Household Employment Dynamics, 2017; Strategic Economics, 2019.

Businesses and Jobs

This section examines employment growth trends by industry type from 2009 to 2018, comparing Milpitas to Santa Clara County. Strategic Economics identified the types of industry sectors that have been performing well in Milpitas, those that provide future opportunities for growth, and those that may require additional support and investment to be more successful. This section concludes with an overview of small businesses in Milpitas, their role in the local economy, and an overview of their health, growth, and needs.

DATA SOURCES

The findings presented in this section are based on data from the California Employment Development Department (EDD) for the City of Milpitas and Santa Clara County in 2009, 2013, and 2018. Note that 2018 is the most recent year available; 2009 and 2013 were selected in order to summarize the local economy's performance since recovering from the Great Recession over the last decade (2009 to 2018) and the last five years (2013 to 2018).

The industry and sub-industry sectors described throughout this section conform to the North American Industry Classification System, commonly referred to as "NAICS." NAICS is a standardized set of industry and sub-industry classifications, each of which is assigned a NAICS code ranging from high-level 2-digit industry codes to more detailed 6-digit industry codes.

To define industry groups that have a particular strength in Milpitas, Strategic Economics employed a metric known as the "location quotient." This metric, explained in detail on page 58, calculates the relative concentration of a particular industry group in Milpitas compared to Santa Clara County.

EMPLOYMENT BY INDUSTRY AND GROWTH TRENDS

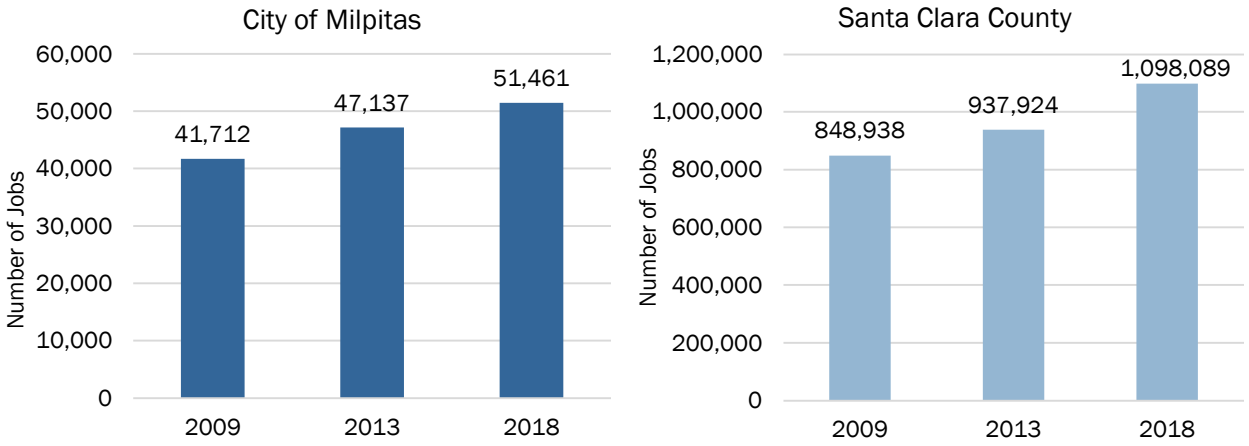
As of 2018, Milpitas had an estimated 51,500 jobs, with continued job growth since 2009. The City of Milpitas experienced a 23 percent increase in jobs since 2009, from 41,700 jobs in 2009 to 51,500 jobs in 2018 (Figure 17). Santa Clara County, which encompasses most of Silicon Valley, experienced even faster job growth during this time period, with a 29 percent increase since 2009. These high growth rates reflect Silicon Valley's major economic expansion since recovering from the Great Recession, driven by strong employment growth in the technology sector and other related industries.

Many different types of industries are thriving in Milpitas, providing a wide range of jobs and indicating that Milpitas has a healthy industry mix. This diverse mix includes industries that are connected regionally, nationally, and globally, as well as industries that tend to serve local residents and workers. The largest industries in Milpitas, as measured by total employment, are shown in Figure 18. Growth trends from 2009 to 2018 are summarized in Figure 19 and Figure 20.

- **Manufacturing.** This is Milpitas' largest industry sector, accounting for 26 percent of all jobs. By comparison, manufacturing jobs make up 15 percent of jobs in Santa Clara County. Employment in the manufacturing sector was stable between 2009 and 2013, but increased by 8 percent between 2013 and 2018. Manufacturing jobs grew at a comparable rate of 10 percent in Santa Clara County during this same period. Businesses in the manufacturing sector tend to be nationally and globally connected, trading and exporting goods to outside communities. Most manufacturing jobs in Milpitas are in advanced and high tech manufacturing, with only a small share of "traditional" manufacturing (e.g. food, beverage, wood products).

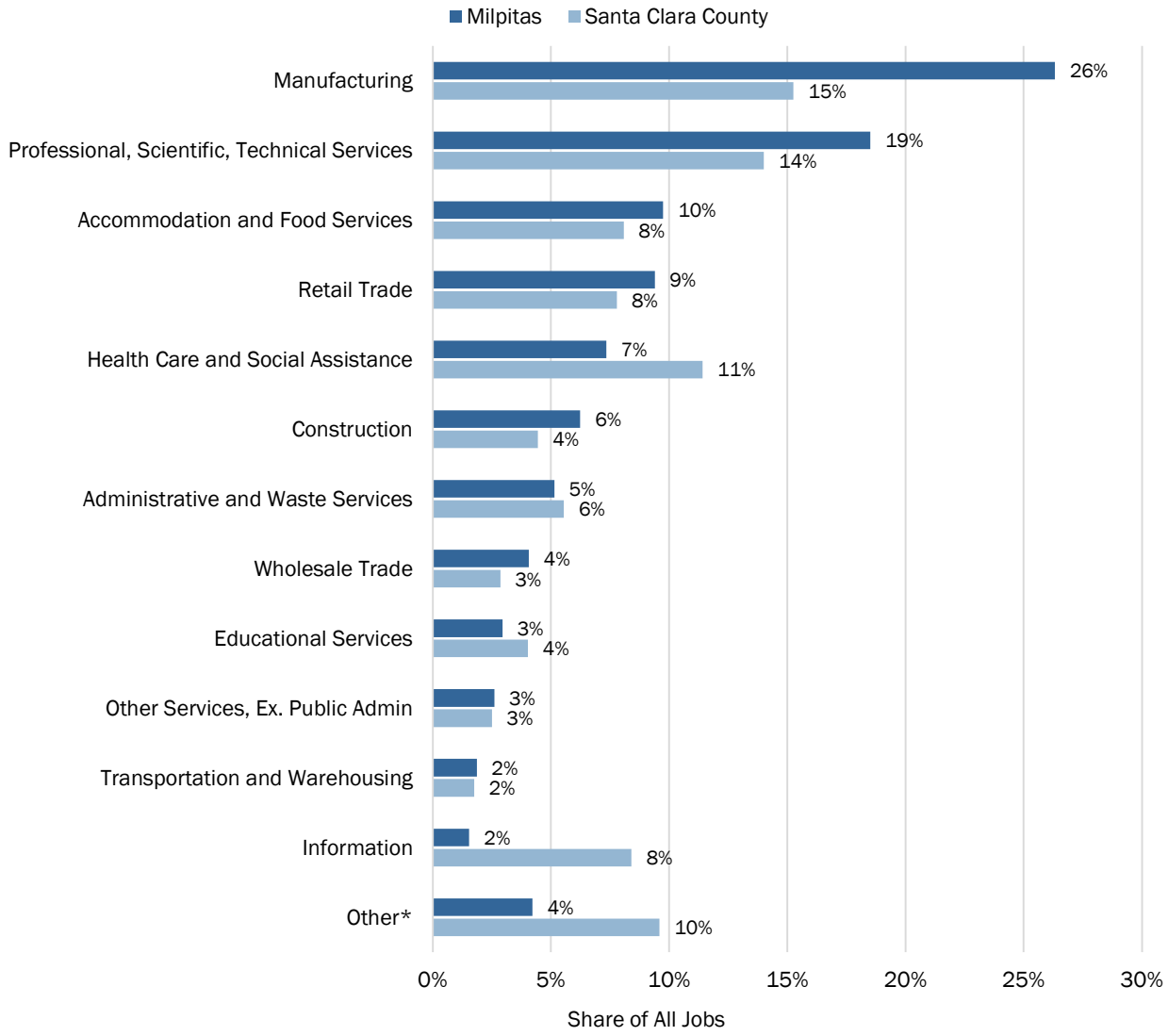
- **Professional, Scientific, and Technical Services (PSTS).** This is the second largest industry by employment in Milpitas, with 19 percent of all jobs in the City. From 2009 to 2018, PSTS jobs in Milpitas grew at a healthy pace, but not as fast as Santa Clara County overall. It is important to note that Cisco, the City's largest employer, accounts for a large share of these PSTS jobs. Since 2017, Cisco has cut jobs in Milpitas and vacated two major campuses. Note that in February 2020, Cisco issued another notice stating that additional employees would be laid off at their one remaining Milpitas campus (560 McCarthy Blvd). However, even without counting Cisco, Milpitas experienced a net positive gain in PSTS jobs in the last decade.
- **Accommodation and Food Services.** This is the third largest sector in Milpitas, with 10 percent of all jobs in the City. Jobs in this sector have increased since 2009, matching a national shift away from traditional retail toward dining and drinking. "Accommodation" jobs (hospitality and hotel) also increased in Milpitas, in conjunction with strong hotel performance.
- **Retail trade.** Milpitas has a large number of jobs in retail trade (9 percent), and a mix of regional-serving and local-serving retail. For example, the Great Mall is a major regional retail destination drawing customers from a wide trade area, and auto dealerships also tend to draw from a regional trade area. Milpitas also has smaller, more local-serving retail centers as well. Since 2009, retail jobs declined slightly. At the County level, retail job growth has stagnated in the last five years.
- **Health Care and Social Assistance.** This sector is primarily household-serving. Jobs in this sector grew rapidly, increasing from approximately 1,800 jobs in 2009 to 3,800 jobs in 2018, as Milpitas' local population ages.

FIGURE 17. TOTAL NUMBER OF JOBS IN MILPITAS AND SANTA CLARA COUNTY, 2009 TO 2018



Note: Employment for Cisco Systems Inc. was manually adjusted using business license data provided by the City of Milpitas.
Source: California Employment Development Department, 2009, 2013, and 2018; Strategic Economics, 2020.

FIGURE 18. SHARE OF TOTAL JOBS BY INDUSTRY IN MILPITAS AND SANTA CLARA COUNTY, 2018



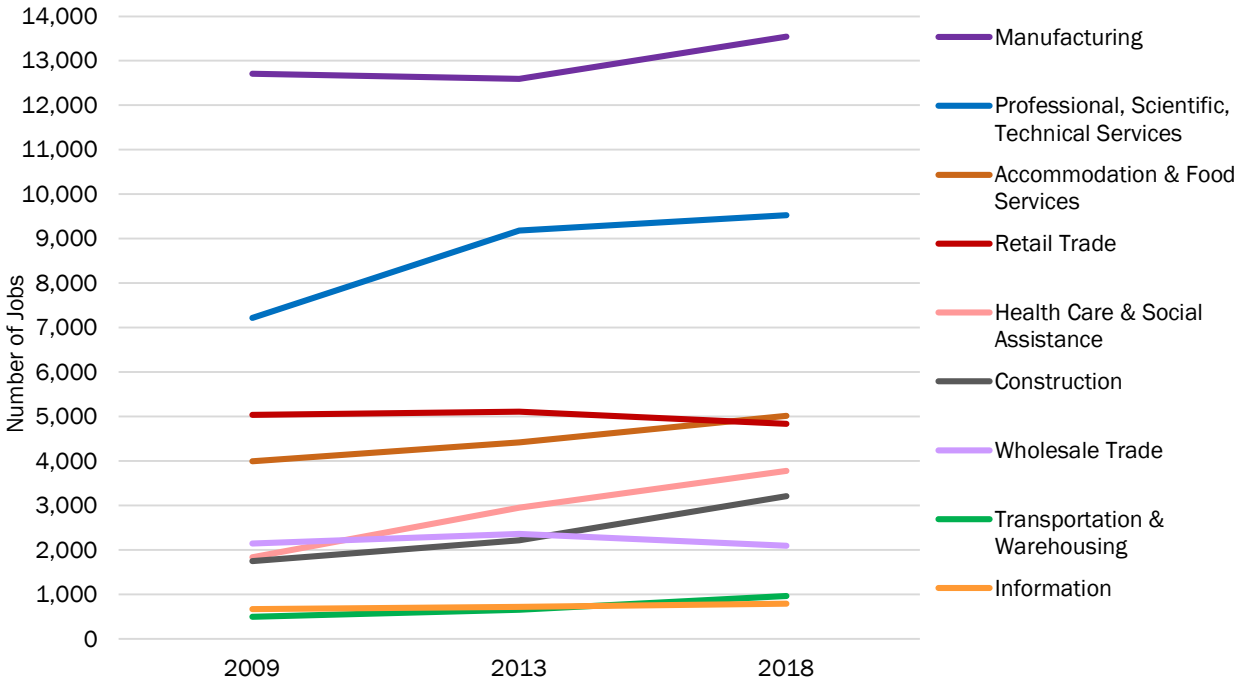
*Other includes: Real Estate and Rental and Leasing; Public Administration; Finance and Insurance; Arts, Entertainment, and Recreation; Management of Companies and Enterprises; Unclassified; Agriculture, Forestry, Fishing & Hunting; Utilities; Mining.

Note: Due to inaccuracies in the California EDD data, employment estimates for Cisco Systems Inc. were adjusted using business license data provided by the City of Milpitas.

Note: Although several general contractor and construction companies are located in Milpitas (e.g. Devcon Construction, XL Construction Corporation), the job count and share for Construction jobs likely does not represent the number of workers on-site, and may instead reflect an overcount that includes construction crews working across various sites in and outside Milpitas. Similarly, jobs in the Administrative and Waste Services category are typically overcounted since this category includes employment agencies and security services companies (e.g. Jointek Group, Aerotek, Admiral Security Services) that do not employ all of their workers in their recorded location.

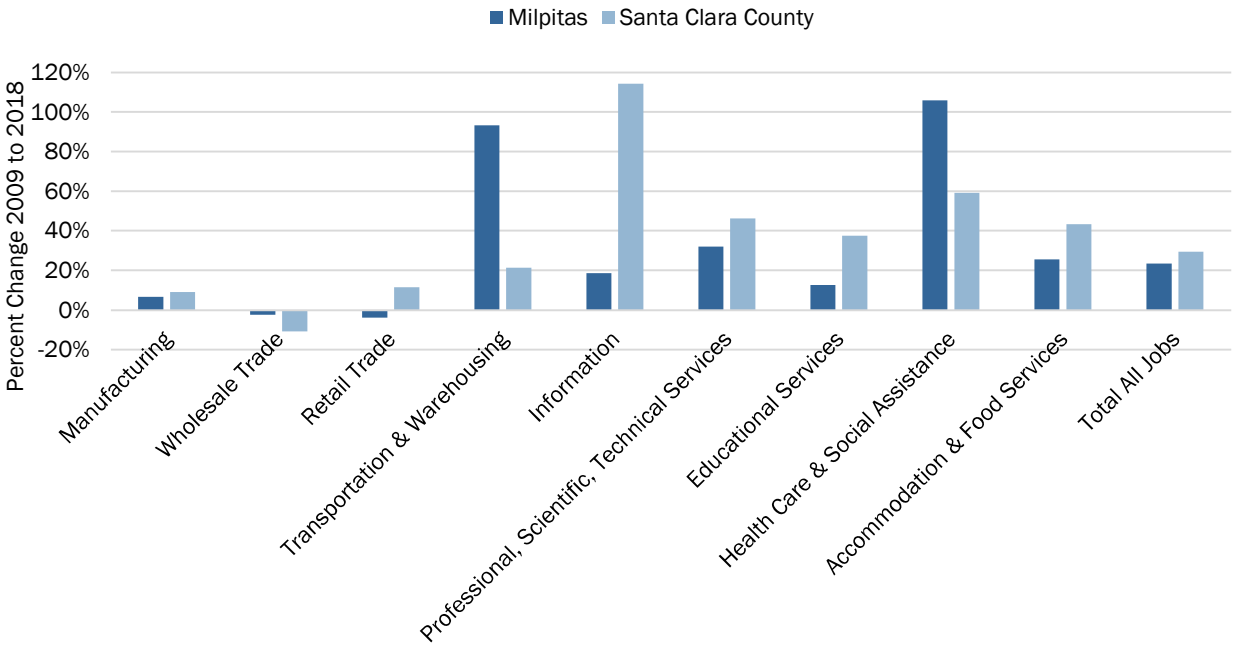
Source: California Employment Development Department, 2009, 2013, and 2018; City of Milpitas, 2020; Strategic Economics, 2020.

FIGURE 19. NUMBER OF JOBS FOR TOP INDUSTRY SECTORS IN MILPITAS, 2009 TO 2018



Note: Employment for Cisco Systems Inc. was manually adjusted using business license data provided by the City of Milpitas.
Source: California Employment Development Department, 2009, 2013, and 2018; City of Milpitas, 2020; Strategic Economics, 2020.

FIGURE 20. JOB GROWTH IN MILPITAS AND SANTA CLARA COUNTY, 2009 TO 2018



Note: Employment for Cisco Systems Inc. was manually adjusted using business license data provided by the City of Milpitas.
Source: California Employment Development Department, 2009, 2013, and 2018; City of Milpitas, 2020; Strategic Economics, 2020.

KEY INDUSTRY GROUPS: STRENGTHS AND OPPORTUNITIES

Strategic Economics identified five key industry groups that represent opportunities for growth in Milpitas. These industry groups, shown in Figure 21, were selected based on the following criteria:

- **Existing strength and competitiveness in Milpitas.** These are industry sectors that are already significantly concentrated in Milpitas, and have experienced either stable or positive job growth, such as the computer design and manufacturing industry group. To measure industry concentration, Strategic Economics used the location quotient (LQ) metric, which is defined in the text box below.
- **Innovative and growing industries in Santa Clara County and the Silicon Valley region.** The region has strengths in many industries. Some of these are already present and strong in Milpitas, such as the computer design and manufacturing industry. However, there are other industries that are present and growing in Silicon Valley but that have not been historically strong in Milpitas. Examples include the software, internet, social media, and apps industry, as well as high-tech manufacturing and R&D in biotechnology & pharmaceuticals, medical devices, clean technology, and aerospace.[7]

Analyzing these industry groups can help inform the City's economic development efforts, in order to catalyze and expand on existing strengths, and/or create new opportunities by capturing growth in sectors that are strong in the broader region and tied to global demand and trade.

WHAT IS A LOCATION QUOTIENT?

A location quotient (LQ) is a metric used to understand the relative concentration of an industry in a study area (in this case, Milpitas), compared to a reference geography (in this case, Santa Clara County). LQs are used to assess an area's specialization, weaknesses, and opportunities for growth within a broader region. The LQ of a given industry A in Milpitas, compared to Santa Clara County, is calculated using the following formula:

$$LQ\ for\ Industry\ A = \frac{(Jobs\ in\ Industry\ A\ in\ Milpitas)/(Total\ Jobs\ in\ Milpitas)}{(Jobs\ in\ Industry\ A\ in\ Santa\ Clara\ County)/(Total\ Jobs\ in\ Santa\ Clara\ County)}$$

LQs are generally interpreted using the rules of thumb below. Note that these vary based on the aggregation level of the industry and the size of the study area and reference geography.

- LQ > 1.2 indicates a generally high concentration relative to the reference geography;
- LQ between 0.8 and 1.2 indicates a normal or average distribution of that industry compared to the reference geography;
- LQ < 0.8 indicates a relatively low concentration relative to the reference geography.

[7] Silicon Valley Leadership Group, "Silicon Valley Competitiveness and Innovation Project - 2019 Update", available at: https://www.svcip.com/files/SVCIP_2019.pdf

FIGURE 21. TARGETED INDUSTRY GROUP DEFINITIONS AND PERFORMANCE

Industry Group	Definition (NAICS)	Description	Local Business Example*	Jobs in Milpitas, 2018	Percent of Milpitas Jobs, 2018	Percent of Santa Clara County Jobs, 2018	Location Quotient**
Computer/ Electronics Design and Manufacturing	- 334: Computer and Electronic Product Manufacturing - 335: Electrical Equipment and Appliances - 5415: Computer Systems Design and Related Services	Computer, electronics, and related components manufacturing and computer systems design and programming	KLA, Western Digital, Analog Devices, Headway Technologies, Renesas, Onanon (manufacturing), and Cisco, FireEye, Aerohive Networks (design)	17,029	33%	18%	1.79 (High)
Other Advanced Manufacturing and R&D Services	- 332: Fabricated Metal Product Manufacturing - 333: Machinery Manufacturing - 327: Nonmetallic Mineral Product Manufacturing - 5413: Architectural & Engineering Services - 5415: Management & Technical Consulting Services - 5417: Scientific Research & Development	Array of other high-tech manufacturing, primarily industrial machinery and materials science, and advanced scientific and engineering research	Nanometrics, Flex, View, Johnson & Johnson Vision, Nanolab Technologies, Cyient, Nanosys, BioVision	4,696	9%	6%	1.42 (High)
Software and Information Services	51: Information	Software development and programming, including apps, internet, digital content. Includes telecommunications.	ABBYY Software, ZL Technologies, Esgyn, Lucent Technologies	796	2%	8%	0.18 (Low)
Logistics	- 42: Wholesale Trade - 48-49: Transportation and Warehouse	Storage, distribution, and transportation (primarily trucking and freight services) of durable and nondurable goods	Future Electronics, Bottomley Distribution Company, TransPak	3,059	6%	5%	1.29 (High)
Retail and Restaurants	- 44-45: Retail Trade - 722: Food Services and Drinking Places	Wide variety of retail stores and eating & drinking places	Wal-Mart, Dave & Buster's, etc.	9,253	18%	15%	1.20 (Average)

*Since companies self-select their industry NAICS codes and often must select a single code that applies to the entire company's operations, the local Milpitas operations of some "Local Business Examples" may include a variety of activities that do not conform to the Industry Group category. **Location quotient is compared to Santa Clara County.
Source: California Employment Development Department, 2009, 2013, and 2018; Strategic Economics, 2020.

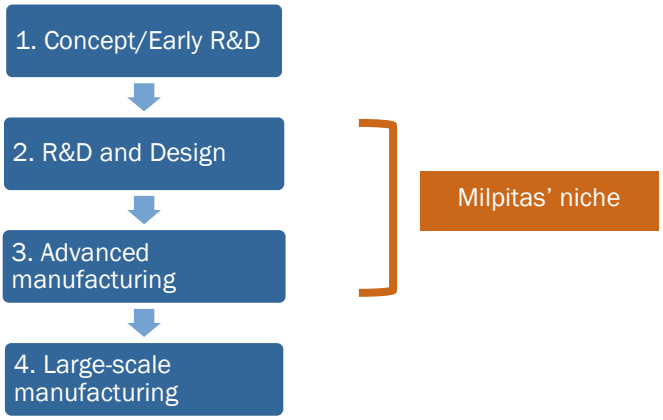
Advanced Manufacturing and Research & Development Industry Groups

Milpitas is highly specialized in advanced manufacturing and R&D. This encompasses two distinct industry groups: computer/electronics design and manufacturing, and other advanced manufacturing and R&D services, as described in Figure 21. There are important similarities across these industry groups, which are described below.

Advanced manufacturing businesses often locate in Milpitas as they shift into the R&D/design and prototyping/small scale production phase of their lifecycle. Figure 22 is a simplified summary of the typical innovation cycle of a new product. It illustrates how products usually begin with high-level, conceptual R&D (stage 1), then move into more detailed design and R&D work (stage 2), then into advanced and specialized prototyping and manufacturing (stage 3), and eventually shift to larger-scale manufacturing (stage 4). Milpitas generally has a niche in stages 2 and 3 of this process.

Advanced manufacturing companies are drawn to Milpitas by workforce access and the flexible building stock. Companies often locate in Milpitas as they require more and lower cost space than is available in central Silicon Valley locations such as Palo Alto, Mountain View, and Sunnyvale. This is especially relevant to stage 2 and 3 companies as they expand their operations. Milpitas offers an abundance of low-cost, flexible real estate inventory. Milpitas is also a strategic location in the region, offering access to a highly educated workforce and capital investment while also providing relative proximity to a diverse workforce in Alameda County that includes workers in production occupations.

Figure 22. Typical Innovation Cycle of a New Manufactured Product



Source: Strategic Economics, 2020.

Computer and Electronics Design and Manufacturing Industry Group

Milpitas is highly specialized in computer and electronics design and manufacturing. This industry group includes about one third of all jobs in Milpitas, with a location quotient (LQ) of 1.79. This represents a major industry cluster, in that it encompasses companies working across the production chain, from design, to programming, to R&D, to manufacturing activities. The main products designed and manufactured in Milpitas are semiconductors, electronic instruments, computers and peripheral equipment, and other electronic components.

Milpitas has the opportunity to leverage this existing specialization to capture additional future growth of this industry group in Silicon Valley. Milpitas experienced a net decline in computer manufacturing

jobs, but a significant gain in computer systems design jobs, balancing out to a 6 percent increase from 2009 to 2018. In Santa Clara County, both computer manufacturing jobs and computer systems design jobs increased since 2009, resulting in a net increase of 31 percent for the industry group as a whole. While the loss of manufacturing jobs in Milpitas should be monitored, and may be a cause for concern moving forward, continued growth in the broader region is promising for Milpitas, and creates opportunities for Milpitas to capture some of this future growth.

OTHER ADVANCED MANUFACTURING AND R&D INDUSTRY GROUP

Various other high-tech manufacturing and R&D businesses are concentrated in Milpitas. This industry group includes about nine percent of jobs in Milpitas, with a LQ of 1.42. This industry group includes companies deploying advanced and specialized manufacturing processes (i.e., involving the use of innovative technologies, machinery, and/or software). Companies in this sector produce a range of products, such as industrial machinery, high-tech materials, and optical instruments. This sector also includes businesses specialized in advanced R&D, such as engineering, nanotechnology, biotechnology, laboratory testing, and other scientific and technical services.

Milpitas can build on its strength in advanced manufacturing to diversify the types of companies and products represented by businesses in this industry group. This sector is growing relatively rapidly in Milpitas compared to Santa Clara County, indicating strong performance for companies that are already located or expanding in Milpitas. However, there is an opportunity for Milpitas to broaden the diversity of its advanced manufacturing companies; for example, the City of Milpitas could seek to expand in other clusters such as clean tech, biotech, and life sciences.

SOFTWARE AND INFORMATION SERVICES INDUSTRY GROUP

The software and information services industry group grew rapidly in Santa Clara County, but Milpitas has consistently had few jobs in this sector. The information sector (NAICS 51) was the fastest growing 2-digit NAICS sector in Santa Clara County in the last decade, with a 114 percent increase in employment since 2009 (net gain of nearly 50,000 jobs), reflecting Silicon Valley's post-recession tech boom. However, these jobs only represent two percent of Milpitas employment, with a LQ of 0.19.

Milpitas' weakness in this industry group is likely due to the City's distance from the core Silicon Valley locations and workforce. Milpitas sits at the border of Santa Clara and Alameda Counties. While this is a strength for attracting a diverse workforce, it also makes it difficult to attract companies that have typically been located in locations such as Palo Alto, Mountain View, Sunnyvale, and Cupertino.

Milpitas may have an opportunity to attract smaller software and information services startups that are being priced out of higher cost Silicon Valley locations such as Palo Alto, Mountain View, Sunnyvale, and Cupertino. With major tech corporations growing rapidly in the last decade in cities such as Mountain View, Cupertino, and Sunnyvale, smaller firms are experiencing increased displacement pressure (higher rents, older buildings being redeveloped). There may be an opportunity for these smaller businesses to relocate to a more affordable place like Milpitas.

LOGISTICS INDUSTRY GROUP

Relative to Santa Clara County, Milpitas has a slight concentration of trucking, warehouse, and distribution jobs due to Milpitas' strategic location and warehouse space. Companies that fall in this sector include storage, supplier, distributor, and trucking companies. The concentration of these businesses in Milpitas reflects the city's supply of relatively low-cost space, strategic location at the

intersection of major highways, and proximity to dense residential and employment districts elsewhere in the region. These attributes are exemplified by Amazon's recent decisions to locate in two industrial distribution centers in Milpitas (Bridge Point Silicon Valley and McCarthy Creekside Industrial Center) and Apple's recent lease of warehouse storage space (McCarthy Creekside Industrial Center).

Warehousing and distribution businesses tend to have low job densities and high levels of automation. With the rise of e-commerce and other delivery services, the transportation and warehousing (NAICS 48-49) industry has grown at the County level, although wholesale trade jobs (NAICS 42) have been in decline. A similar trend is occurring in Milpitas. However, companies engaged in transportation and warehousing tend to have a very low number of employees per square foot, so growth in real estate does not necessarily translate to significant job growth.

RETAIL AND RESTAURANTS INDUSTRY GROUP

Milpitas has a large number of retail and restaurant jobs. One major employment contributor is the Great Mall, a regional outlet mall that draws customers from a large trade area. Great Mall has continued to diversify its tenants in the face of large department store closures, including the recent attraction of Legoland Discovery Center in 2019 to in a space previously occupied by a Sears Outlet. Great Mall also has many clothing and accessories stores. In addition, Milpitas has a wide variety of restaurants specialized in diverse cultures and cuisines, as well as shopping centers and grocery stores focused on Asian products. A more detailed analysis is described in the Commercial Real Estate Market section of this report.

Although retail jobs have declined since 2009, restaurant jobs have increased in Milpitas (barring impacts from the COVID-19 pandemic response). Reflecting national trends, changing consumer preferences, and the rise of online shopping, employment in Milpitas' retail trade sector has declined steadily in the last decade (four percent decrease since 2009), but employment in restaurants has continued to grow at a healthy pace (32 percent increase since 2009).

SMALL BUSINESSES IN MILPITAS

This section describes existing small businesses in Milpitas, by business size and industry mix, and examines their growth trends and contribution to Milpitas' overall economy. Trends by subarea are also analyzed, especially subareas of change, as small businesses in these areas may be vulnerable to displacement. This section concludes with an overview of the major challenges faced by small businesses in Milpitas even prior to the COVID-19 pandemic, based on interviews with the Chamber of Commerce, brokers, and other stakeholders. Findings from this section can help guide the City's small business retention efforts.

CHARACTERISTICS OF SMALL BUSINESSES

In this report, a small business is defined as having between 2 and 49 employees. As a subcategory within small businesses, a microbusiness is defined as having between 2 and 9 employees.[8] A

[8] Businesses with fewer than 1 employee per year on average were excluded from the sample. Businesses that reported between 1 and 2 employees per year on average are analyzed separately from small businesses, because the vast majority of these 1-employee businesses are located in residential areas, with many consisting of in-home care assistants. These businesses are less vulnerable to displacement. Findings for the City as whole are based on EDD annual averages, whereas findings by subarea are based on data from the second quarter of 2009 and 2018.

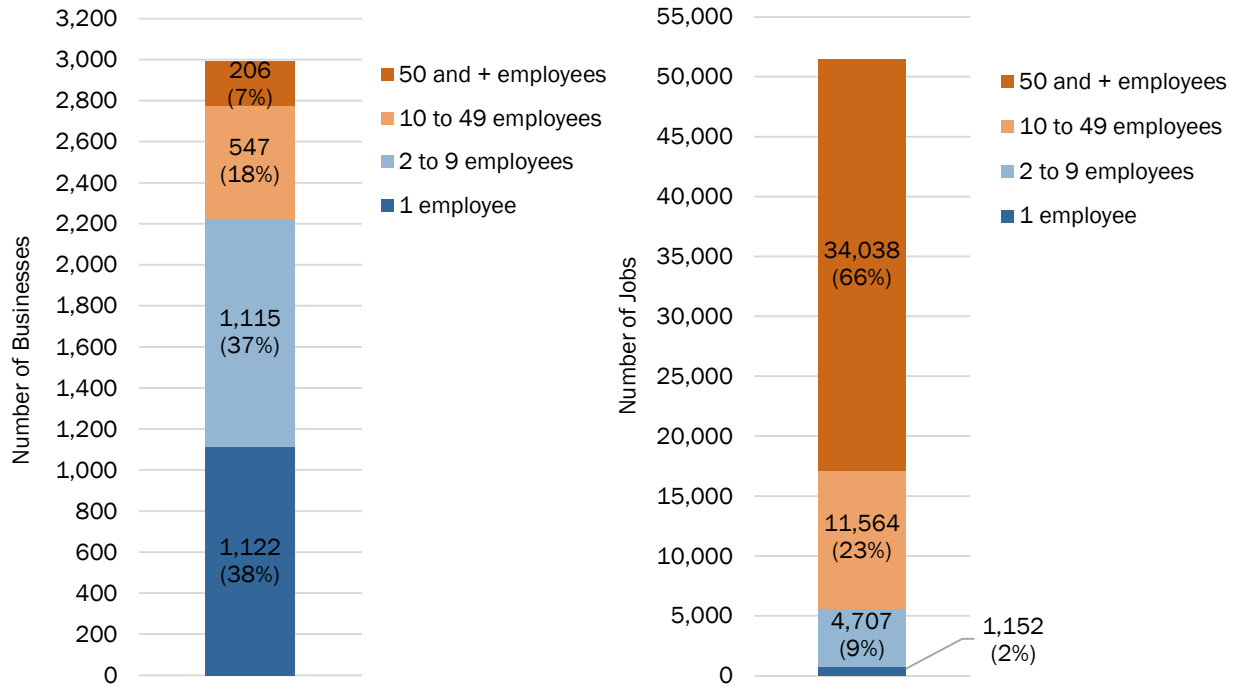
simplified industry categorization is used to analyze the industry mix of small businesses, instead of the 2-digit NAICS codes used in previous sections.

Citywide Small Business Trends

In 2018, there were 1,660 small and microbusinesses in Milpitas, accounting for over half of all businesses citywide. Figure 23 illustrates businesses and jobs in Milpitas by business size. In 2018, Milpitas was home to about 3,000 businesses, of which 1,100 were microbusinesses and 550 were small businesses with 10 to 49 employees.[9] Businesses with only 1 employee are not considered small businesses for the purposes of this analysis.[10]

In 2018, small businesses in Milpitas employed about 16,000 workers, accounting for one third of all jobs citywide. As seen in Figure 23, microbusinesses account for 9 percent of all jobs, and small businesses with 10 to 49 employees account for 23 percent of all jobs. The vast majority of jobs in the City are generated by a small number of large employers (50 or more employees).

Figure 23. Business Count and Employment in Milpitas by Business Size, 2018



Note: Employment for Cisco Systems Inc. was manually adjusted using business license data provided by the City of Milpitas.
Source: California Employment Development Department, 2009, 2013, and 2018; Strategic Economics, 2020.

[9] Note that the EDD data may overestimate the number of businesses because of inconsistent tracking of businesses with multiple locations and/or buildings.
[10] As noted above, the vast majority of these 1-employee businesses are located in residential areas, with many consisting of in-home care assistants. These businesses are less vulnerable to displacement.

Small businesses in Milpitas represent a wide diversity of industries. The most common types of small businesses are listed below and summarized in Figure 24:

- **Industrial and office-based small businesses** represent about one third of all small businesses in Milpitas. These include smaller startup companies as well as traditional office-based businesses (e.g. consulting, engineering, real estate services). Small industrial businesses include repair shops, small manufacturers, and other production and distribution companies.
- **Retail, personal services, restaurants, and drinking places** represent another large industry group in Milpitas. Together, these types account for 29 percent of small businesses in Milpitas.
- **Education, medical and social assistance** represents the largest category of small businesses in Milpitas; however, this category mostly includes in-home caregivers and is therefore not the primary focus of this study.[11]

FIGURE 24. EXISTING CHARACTERISTICS OF SMALL BUSINESSES IN MILPITAS, 2018

Type of Business	Number of Small Businesses, 2018	Percent of Small Businesses, 2018	Small Business Jobs, 2018	Percent of Small Business Jobs, 2018
Education, Medical, Social Assistance	456	27%	2,997	18%
Industrial*	281	17%	3,349	21%
Office-Based*	254	15%	2,334	14%
Retail & Personal Services	243	15%	2,843	17%
Food Services, Drinking Places	227	14%	3,041	19%
Other*	65	4%	515	3%
Financial Services	56	3%	440	3%
Auto-Related*	50	3%	396	2%
Hotels & Entertainment	17	1%	279	2%
Religious, Nonprofit, Civic	14	1%	78	0%
Total	**1,662**	**100%**	**16,271**	**100%**

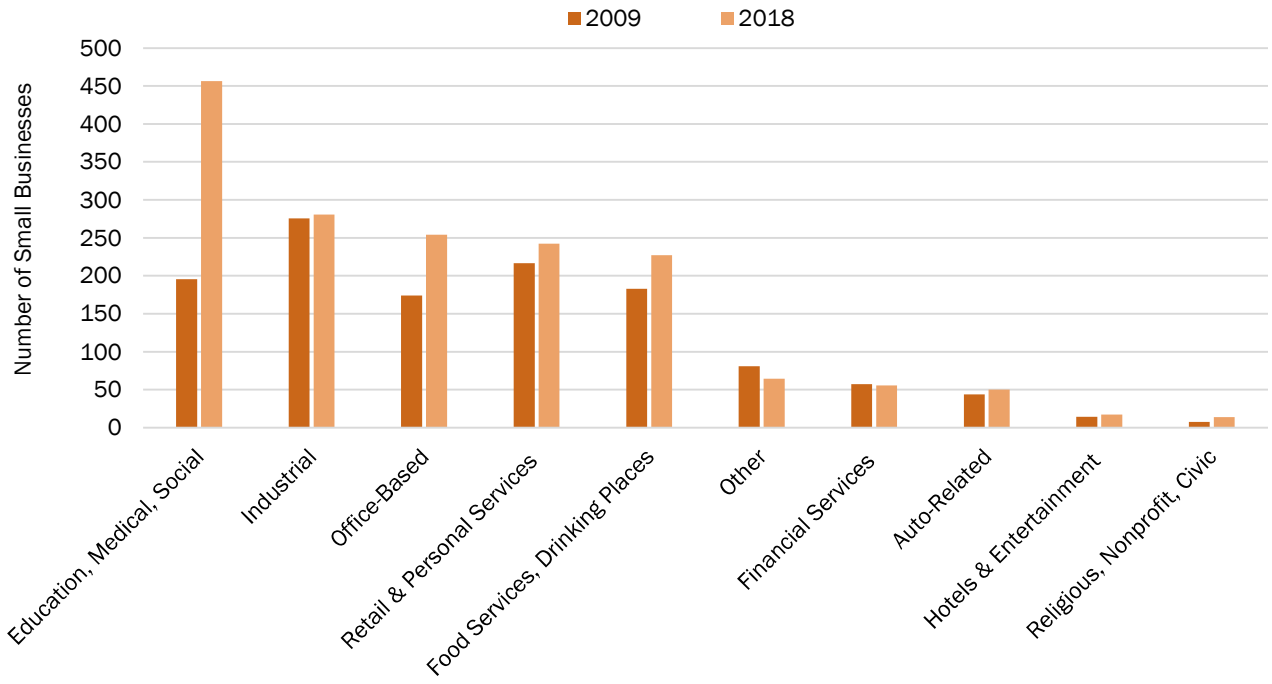
*Industrial includes: manufacturing, production, distribution, and construction businesses.
Office-based includes: businesses focused on professional, scientific, and technical services, information services, management of companies, and real estate services.
Other includes: other services; non-store retailers, and unclassified businesses.
Auto-related includes: motor vehicle parts and dealers, repair and maintenance businesses, and gasoline stations.
Small businesses are defined as having between 2 and 50 employees.
Source: California Employment Development Department, 2009, 2013, and 2018; Strategic Economics, 2020.

The total number of small businesses in Milpitas increased from 2009 to 2018, with the strongest growth in office-based and restaurant establishments. As seen in Figure 25, a significant portion of the increase in small businesses is attributable to the education, medical and social assistance category.[12] However, even without counting this category, small businesses in Milpitas experienced net positive growth. In particular, small office-based businesses and restaurants increased significantly. In contrast, industrial small businesses and retail small businesses stagnated, or even declined slightly between 2009 and 2018. The decline in industrial small businesses may be due to

[11] Businesses classified as NAICS code 624120 (Services for the Elderly and Disabled) includes almost entirely in-home caregivers enrolled in the State's In-Home Supportive Services Program(IHSS) managed by the California Department of Social Services. Data anomalies over time in this category render some of the trends over time inconclusive.
[12] Ibid.

certain industrial areas of the City undergoing redevelopment into residential areas, such as the Transit Area Specific Plan area, described in more detail in the following section.

FIGURE 25. NUMBER OF SMALL BUSINESSES BY TYPE, 2009 AND 2018



Small businesses are defined as having between 2 and 50 employees.
Other includes Other Services; Unclassified; Nonstore Retailers.
Source: California Employment Development Department, 2009, 2013, and 2018; Strategic Economics, 2020.

SUBAREA SMALL BUSINESS TRENDS

Small business trends by subarea are described below and in Figure 26 and Figure 27. The subareas referenced in this section are shown in Figure 9. The analysis focuses on a subset of subareas, including major retail and employment areas, and areas that are positioned for redevelopment, and trends are based on data for the second quarter of 2009 and 2018.

The Manufacturing Area North subarea includes the largest number of small businesses. Manufacturing Area North, an industrially-zoned area, is one the largest employment areas in Milpitas. It holds nine percent of all small businesses in the city, most of which are industrial and office-based small businesses. Manufacturing Area North is also home to many larger businesses (see Figure 27), indicating that it is an attractive location for a wide range of business sizes. However, the number of small businesses remained stagnant between 2009 and 2018, while the number of larger businesses increased.

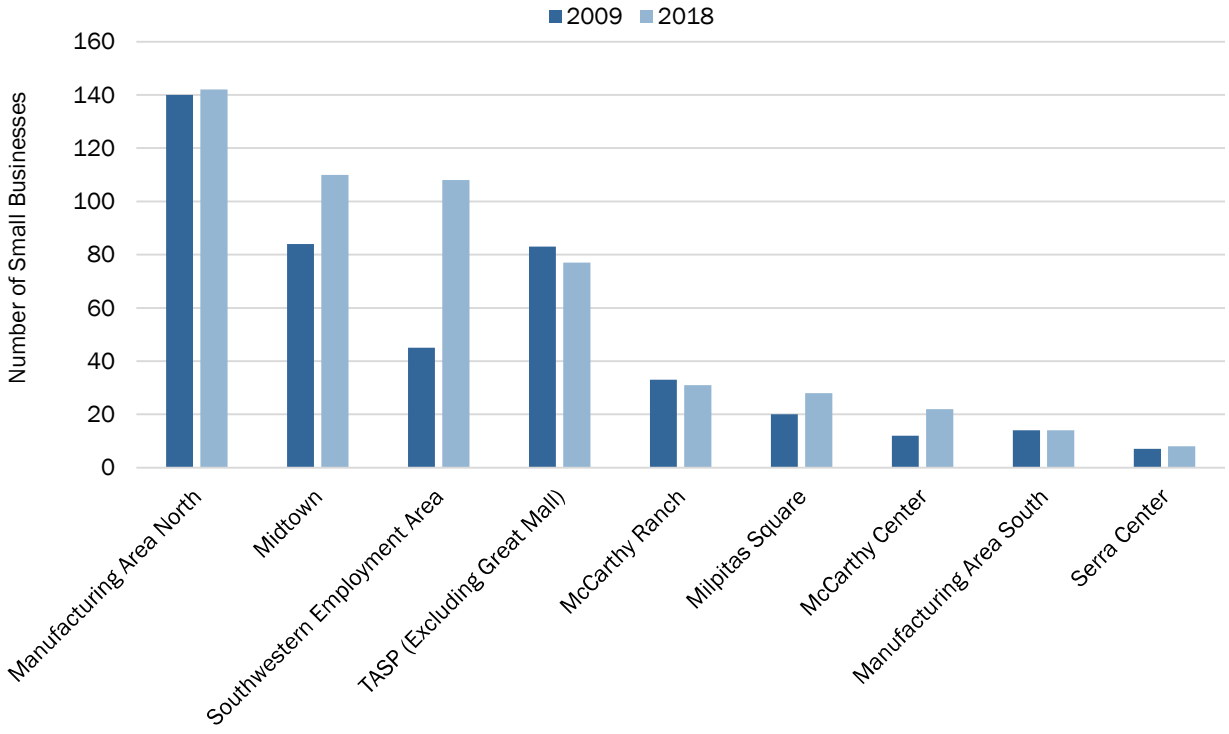
The Southwestern Employment Area and Midtown experienced significant increases in the number of small businesses between 2009 and 2018. In 2018, these subareas were the second and third largest in terms of number of small businesses. The Southwestern Employment Area is an important employment subarea within the city, and since 2009, it gained a significant number of small industrial and office-based businesses. The number of large businesses in this subarea grew as well. In Midtown, the increase in small businesses is mostly due to education, medical, and social assistance

businesses (in-home caregivers), but there was also a small increase in the number of eating and drinking establishments.

The Transit Area Specific Plan (TASP) area (excluding the Great Mall) experienced a net decrease in both small and large businesses from 2009 to 2018. This reflects this area's transition over the last decade from an industrial area to an increasingly residential area.

Serra Center and Manufacturing Area South, subareas that may be positioned for possible redevelopment, appear to have few small businesses. Manufacturing Area South, which is being considered for a future Innovation District, had very few (14) small businesses in 2018, and the overall number of small businesses remained constant between 2009 and 2018. The Serra Center is an older retail center that may represent future reinvestment or redevelopment opportunities for its owner given its location as a prominent gateway to the Midtown Specific Plan area. Serra Center only had eight to nine small businesses in both 2009 and 2018. This is in line with previous findings from this report noting low retail sales per square foot for the Serra Center.

FIGURE 26. NUMBER OF SMALL BUSINESSES BY SUBAREA, 2009 Q2 AND 2018 Q2



Note: Small businesses are defined as having between 2 and 50 employees. Data is shown for the second quarter of each year.
Source: California Employment Development Department, 2009, 2013, and 2018; Strategic Economics, 2020.

FIGURE 27. NUMBER OF SMALL AND LARGE BUSINESSES BY SUBAREA, 2009 Q2 AND 2018 Q2

	Number of Small Businesses (2 to 49 employees)			Number of Businesses with 50+ employees		
	2009	2018	Change	2009	2018	Change
Manufacturing Area North	140	142	2	26	40	14
Midtown	84	110	26	3	3	0
Southwestern Employment Area	45	108	63	24	42	18
TASP (Excluding Great Mall)	83	77	-6	13	10	-3
McCarthy Ranch	33	31	-2	10	5	-5
Milpitas Square	20	28	8	2	4	2
McCarthy Center	12	22	10	4	14	10
Manufacturing Area South	14	14	0	0	1	1
Serra Center	7	8	1	1	0	-1
*All Other Subareas**	*806*	*1,127*	*321*	*63*	*75*	*12*
Total	**1,251**	**1,667**	**423**	**146**	**194**	**48**

*This includes the Great Mall and all other parts of the city not covered by the subareas shown in Figure 1.
Source: California Employment Development Department, 2009, 2013, and 2018; Strategic Economics, 2020.

KEY TRENDS AND ISSUES

The City of Milpitas plays an important role in supporting the health and growth of small businesses. This section summarizes key trends and issues relevant to small businesses in Milpitas prior to their emergency needs triggered by the COVID-19 pandemic, based on interviews with the Milpitas Chamber of Commerce and other small business owners who participated in the survey and community workshop event.

- **Requirements for permitting and change in tenancy.** Efforts to streamline the City's processes for permitting can help reduce costs incurred by small businesses. The Certificate of Occupancy (COO) requirement is especially burdensome, as it requires approval any time there is a change of tenant. The City is addressing issues related to permitting and the development review process through a separate study led by the Matrix Consulting Group.[13]
- **Technical assistance and direct outreach.** The City is developing an online Business Resource Center and offers some technical assistance to small businesses on a project-by-project basis, such as a program that matches new business owners with experienced entrepreneurs. Expanding resources of this kind, as well as increasing direct outreach to businesses to establish relationships with City staff, were cited as important needs within the small business community.
- **Wayfinding and accessibility to/from the new Milpitas Transit Center.** Small businesses wish to leverage the new BART service planned for the Milpitas Transit Center. Improving "last-mile" connections to the Milpitas Transit Center was cited as a key priority to attract more customers. Businesses also mentioned the importance of wayfinding in the City, especially around the Milpitas Transit Center.
- **Public realm, amenities, and walkable districts.** Stakeholders cited a lack of "sense of place" and of a walkable, mixed use district or corridor in Milpitas as a top concern. The lack of amenities—such as public gathering spaces, arts and cultural spaces, entertainment and nightlife options—was also a recurring concern raised by small businesses. Addressing these issues could be especially beneficial for small retailers and restaurants and drinking and

[13] Matrix Consulting Group for the City of Milpitas, "Report on the Evaluation of the Development Review Process" April 2019.

entertainment establishments. The Midtown Specific Plan envisions revitalization of Main Street into a more walkable, mixed use district.

- **Marketing and City branding.** There is a general agreement among small businesses that Milpitas lacks a specific brand and broader recognition within the region, especially as a business destination.
- **Labor shortage.** Under current market conditions, unemployment rates are extremely low and housing costs are extremely high, which has led to some small businesses having trouble finding, recruiting and retaining qualified employees.
- **Space availability.** Business owners expressed a need to better connect prospective tenants with available space.

Commercial Real Estate Market Conditions

The performance of commercial real estate in Milpitas reflects the community's ability to attract and retain different kinds of businesses. The location decisions of these businesses illustrate the benefits and drawbacks of locating in the city. Rising rents, development activity, and reinvestment for different building types indicate whether businesses perceive value in locating in Milpitas.

This section provides an assessment of the built environment in Milpitas, with a focus on commercial real estate, to provide a fuller picture of the City's ability to attract and retain businesses and jobs. This section summarizes existing conditions and trends for each of the following real estate markets:

- Office/flex, R&D, and industrial manufacturing space[14]
- Warehouse and distribution space
- Retail and restaurants space
- Hotel space

Figure 28 summarizes Milpitas' previously described key industry groups presented and the most likely type of real estate these industry groups would occupy, based on current market patterns. Hospitality (hotels) is included as well.

The findings described below are based on real estate market data obtained from the CoStar Group (CoStar), interviews with brokers and developers, and focus group meetings with industry stakeholders.

FIGURE 28. RELATIONSHIP BETWEEN KEY INDUSTRY GROUPS AND REAL ESTATE NEEDS

Type of Real Estate	Milpitas Key Industry Group
Office, R&D, and industrial manufacturing space	- Computer & electronics design & manufacturing - Other advanced manufacturing and R&D services - Software & information services (Office & R&D space only)
Warehouse and distribution space	Logistics
Retail space	Retail & restaurants
Hotel	Hospitality

Source: Strategic Economics, 2020.

[14] Note that the distinctions between office, office/flex, R&D, and industrial manufacturing real estate product types are not always clear. Real estate needs vary significantly by business and by industry, and individual businesses may engage in a wide variety of activities. For example, some advanced manufacturing companies may need space for prototyping and manufacturing, as well as office and R&D uses on-site. In contrast, other companies may prefer to locate office-based activities and manufacturing activities in separate buildings. High tech companies may also have other needs, for example for storage space.

OFFICE, R&D, AND MANUFACTURING

This section describes existing inventory and growth trends for office, R&D, and industrial manufacturing markets in Milpitas, including how the history of Milpitas' building stock reflects the community's evolving market position. Rents, vacancies, and recent development activity are also reviewed.

PAST GROWTH TRENDS AND EXISTING INVENTORY

Milpitas experienced a first commercial development boom in the 1980s in response to Silicon Valley's rapid economic expansion focused on semiconductor and computer hardware innovations. Milpitas grew primarily as greenfield residential subdivisions through the 1970s. It was not until the late 1970s and 1980s that Milpitas experienced significant commercial growth, as semiconductor and computer hardware technologies took off in Silicon Valley, and as Highway 237 opened up easier access. Buildings from this period are classified as manufacturing and warehouse/distribution (see Figure 29), and are concentrated between Highway I-680 and the railroad tracks, west of Highway I-880 south of Tasman Drive, and around what is today the Milpitas Transit Center (see Figure 32).

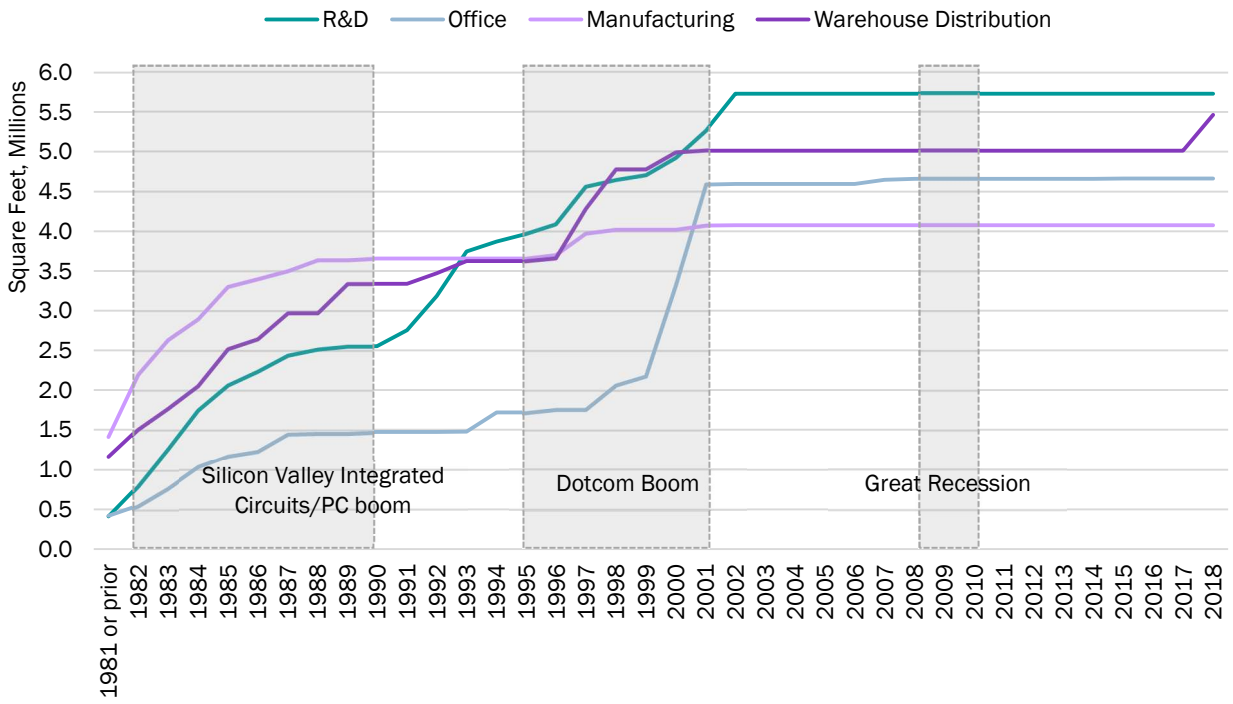
Milpitas experienced a second major phase of development in the mid-1990s and early 2000s during the Dot-Com Boom. With the adoption of the Internet, Silicon Valley's economy continued to grow rapidly. As seen in Figure 29 and Figure 32, new commercial development in Milpitas from the mid-1990s to the early 2000s was concentrated between Highway I-880 and Coyote Creek, directly north and south of Highway 237. Buildings from this period are classified as office and R&D by CoStar.

Milpitas' stock of commercial space can flexibly adapt to the needs of a variety of users. As shown in Figure 30, Milpitas includes about 14.5 million square feet of office, R&D, and manufacturing space. This inventory is flexible and includes a diversity of building types and sizes, summarized in Figure 31, which can accommodate businesses in need of different types of space. Office buildings tend to have smaller floorplates and a higher number of stories, whereas R&D and manufacturing buildings have larger floorplates and fewer stories. Also, a large portion of the building stock in Milpitas consists of large suburban-style business parks, built as several buildings surrounded by surface parking. Major business parks include:

- McCarthy Center (classified as office by CoStar, 1 million square feet)
- Tasman Technology Center (classified as R&D by Costar, 610,000 square feet)
- Cisco's active campus (classified as office by CoStar, 1.1 million square feet)
- The Tasman/Alder/McCarthy Park, also known as the Peery Arrillaga site, formerly occupied by Cisco (classified as R&D by CoStar, 250,000 square feet)
- Park Point (formerly Campus Center) site (R&D, 472,000 square feet)

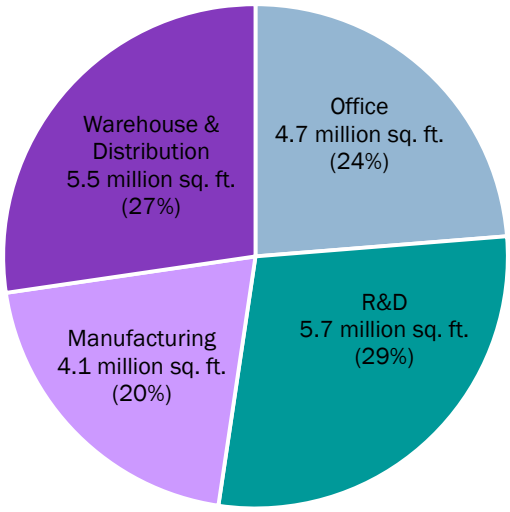
No new office, R&D, or manufacturing development has occurred in Milpitas since the early 2000s. Since the Dot-Com Bust, commercial development activity in Milpitas has been very limited, despite tremendous growth in the tech sector across Silicon Valley. For example, since 2011, nearly 22 million square feet of office space have been completed in Santa Clara County. This space is largely in communities like Mountain View, Cupertino, and Santa Clara, which are located closer to the largest concentration of residents holding advanced degrees (as shown in the map in Figure 13) and closer to venture capital firms concentrated in Palo Alto.

FIGURE 29. EXISTING COMMERCIAL INVENTORY IN MILPITAS BY YEAR BUILT



Source: CoStar, 2019; Strategic Economics, 2020.

FIGURE 30. EXISTING COMMERCIAL INVENTORY IN MILPITAS BY TYPE, 2019 Q2



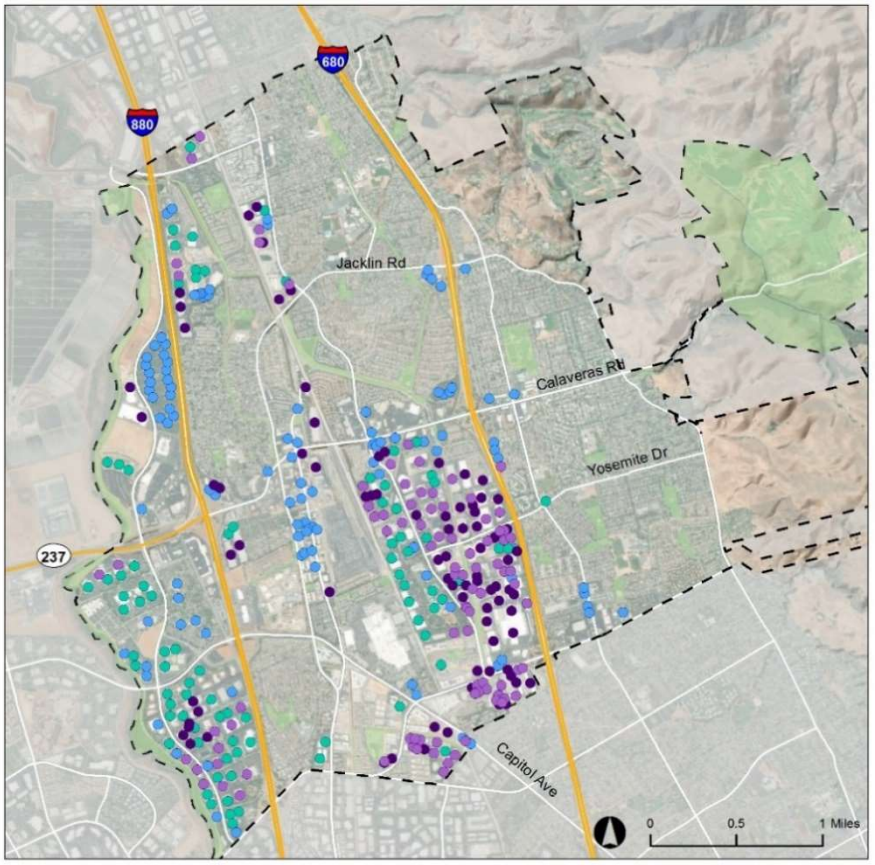
Source: CoStar, 2019; Strategic Economics, 2020.

FIGURE 31. MILPITAS COMMERCIAL BUILDING CHARACTERISTICS, 2019 Q2

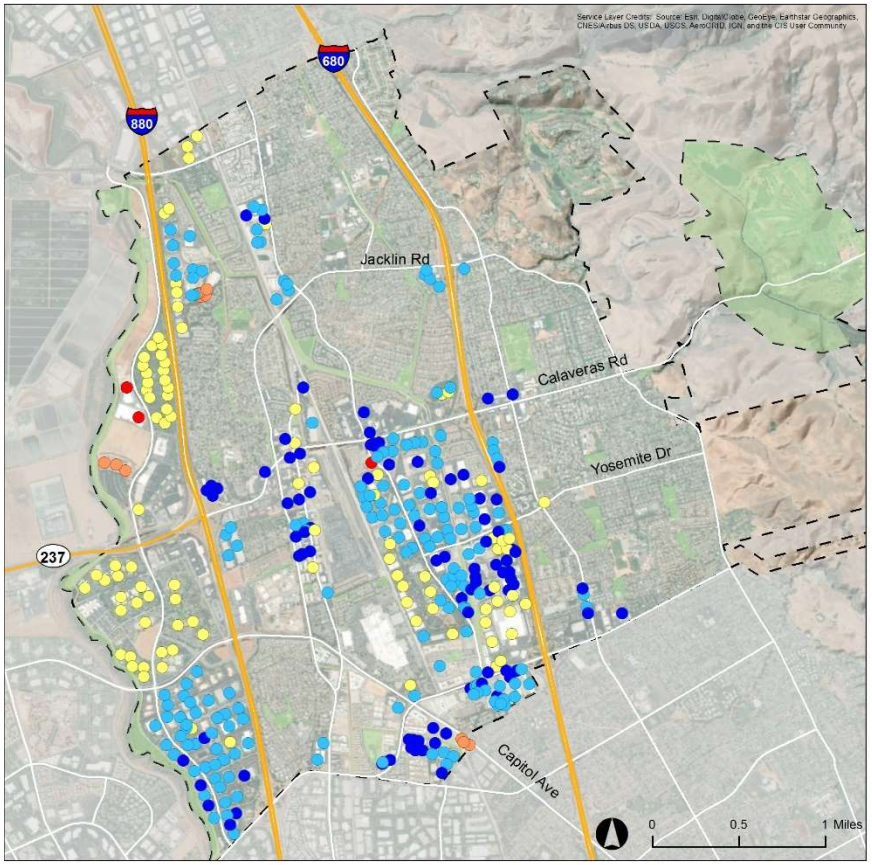
	Office	R&D	Manufacturing	Warehouse & Distribution
Supply				
Number of Buildings	110	85	91	82
Total Inventory (Sq. Ft.)*	4,749,000	5,733,000	4,070,000	5,467,000
Building Characteristics				
Average Floor Size (Sq. Ft.)	22,000	49,300	42,600	70,400
Average Building Size (Sq. Ft.)	45,400	67,500	43,700	72,000
Average Number of Stories	1.9	1.4	1.1	1.2

*Rounded to nearest thousand.
Source: CoStar, 2019; Strategic Economics, 2020.

FIGURE 32. EXISTING COMMERCIAL INVENTORY IN MILPITAS BY USE (LEFT) AND YEAR BUILT (RIGHT)



Sources: Strategic Economics, 2019; City of Milpitas, 2019; Costar, 2019.



Sources: Strategic Economics, 2019; City of Milpitas, 2019; Costar, 2019.

Rents and Vacancy Rates

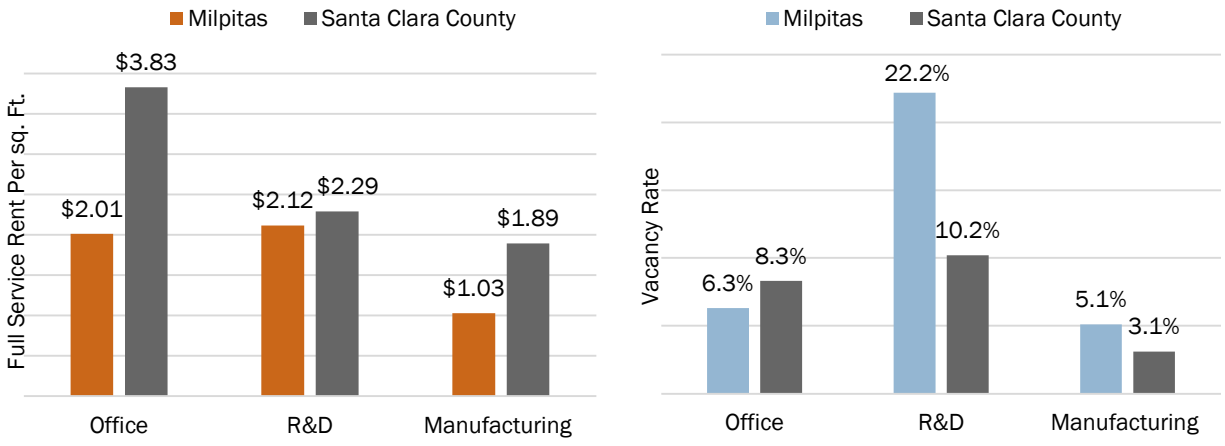
Milpitas' commercial inventory provides low cost space compared to other Silicon Valley markets, which is an advantage to some types of manufacturing and R&D firms. As shown in Figure 33, office, R&D, and manufacturing rents are significantly lower in Milpitas than Santa Clara County overall. Office space, in particular, is low-priced compared to the region (note that Milpitas has very little Class A office space). Businesses that are drawn to Milpitas often require cheaper space, for instance for R&D and prototyping. These types of firms would have difficulty finding comparable affordable spaces in other Silicon Valley cities.

Vacancy rates were low for office and manufacturing space in Milpitas as of the second quarter of 2019. As seen in Figure 33, Milpitas has a low vacancy rate for manufacturing space (5 percent). Vacancy is similarly low across Santa Clara County (3 percent), reflecting the high demand for this limited space in Silicon Valley. Milpitas also has a low vacancy rate for office space (6 percent), which is slightly lower than Santa Clara County's office market vacancy (8 percent).

However, the R&D vacancy rate is very high in Milpitas, as several major tenants have vacated large campuses. R&D vacancies in Milpitas have increased since 2016, reaching 22 percent in 2019 (Figure 34). This is due to a few large advanced manufacturing and R&D firms vacating their campuses in recent years, as summarized in Figure 35. For example, Cisco vacated two campuses, as the company has been consolidating operations in its San José headquarters, and Micron, which moved to a vacant campus in North San José. By comparison, the vacancy rate for R&D space in Santa Clara County has been in decline since 2010.

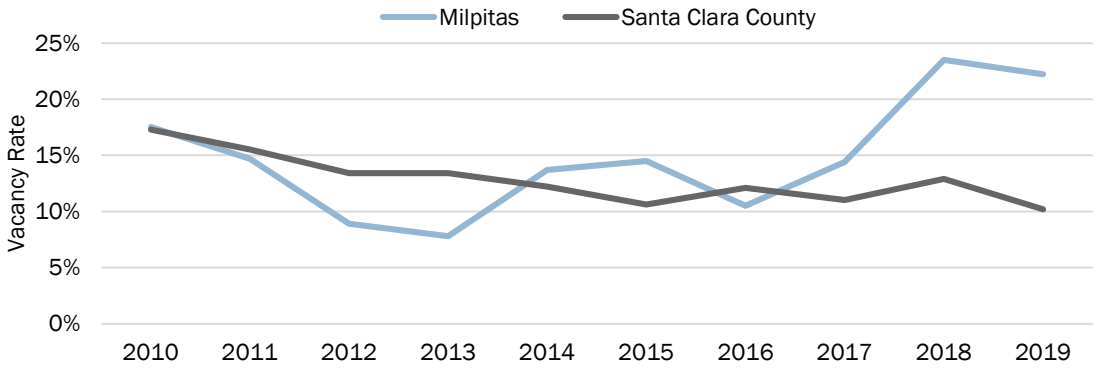
There may be opportunities for business attraction in vacated R&D spaces, but they will require reinvestment and additions of amenities increasingly expected by workers. These vacant buildings represent an opportunity for Silicon Valley tenants looking for a large space at a lower cost than other nearby markets. However, many of these buildings and campuses will require significant upgrades if property owners wish to attract a high-tech office user. Brokers interviewed for this analysis often cited that, due to very high competition for high-skilled talent, on-site amenities such as a gym, day-care center, café, restaurant, or other leisure space, have become increasingly important for recruiting office tenants. It is unlikely that Milpitas will attract development until vacant space is absorbed.

FIGURE 33. RENTS (LEFT) AND VACANCY RATES (RIGHT) IN MILPITAS AND SANTA CLARA COUNTY, 2019 Q2



Source: CoStar, 2019; Strategic Economics, 2020.

FIGURE 34. R&D VACANCY RATE IN MILPITAS AND SANTA CLARA COUNTY, 2010 TO 2019



Source: CoStar, 2019; Strategic Economics, 2020.

FIGURE 35. EXAMPLE R&D VACANCIES IN MILPITAS

Business Park	Address Vacated	Square Feet	Year Vacated	Current Status
Park Point	115-135 N McCarthy Blvd	472,000	2017 (vacated by Cisco)	What was previously called Campus Center included a three-building campus and a 35-acre vacant parcel. The buildings were purchased by Embarcadero Capital Partners in 2019 and are being re-marketed as Park Point, a modern, creative tech campus. The adjacent 35-acre vacant parcel is being developed as a warehouse distribution center (see Figure 30).
Peery Arrillaga Site	McCarthy/Alder/ Tasman Dr	375,000	2017 (vacated by Cisco)	Peery Arrillaga (property owner) owns a large amount of property in Silicon Valley. To date, no proposals have been made public regarding this site
Overton Moore Properties (OMP) site	909-1001 S Milpitas Blvd	350,000	2016 (former LifeScan headquarters)	A proposal has been submitted to redevelop this site into a one-story, 500,000 square foot industrial building.
Micron, formerly leasing in the Tasman Tech Park	700 E Tasman Dr	180,000	2018-2019	Micron Technology left its location in Milpitas and moved to a three-building, 541,000 sq. ft. campus in North San José

Source: Personal communication with local office, R&D, and industrial brokers; CoStar, 2019; Strategic Economics, 2019.

DEVELOPMENT OPPORTUNITIES AND CHALLENGES

Recent development trends in Silicon Valley indicate that tech office/R&D tenants favor locations in mixed-use, transit-oriented locations. For example, mixed-use office projects near transit currently under construction near Caltrain stations include Coleman Highline/Gateway Crossings (Santa Clara), Cityline (Sunnyvale), and San Antonio Village (Mountain View). Several large mixed-use projects are proposed at planned BART stations, such as Market Park (Berryessa) and the Google Transit Village (Diridon). Transit access, walkable environments, and retail/entertainment options are increasingly seen as essential to attract talented workforce in an extremely competitive labor market.

With Silicon Valley's major economic expansion and rapidly increasing rents, office development has started to shift south and southeast toward Milpitas in recent years. Companies and office

development have started to shift away from the traditional core of Silicon Valley (Palo Alto, Mountain View, Menlo Park) down south/east along Highway 101 and the Caltrain corridor towards Sunnyvale, Santa Clara, and North San José—as seen in Figure 36. This shift is due to increasing rents in the historic center of Silicon Valley, and the need for additional space for expansion.

Despite these trends, Milpitas remains a challenging market location for attracting office/R&D tenants and development. Despite these trends, new office development hasn't reached Milpitas, and the City hasn't attracted high tech office/R&D users. Constraints that help explain this trend are listed below:

- Milpitas is not easily accessible to the highly educated workforce located further west in Santa Clara, San Mateo, and San Francisco, due to the lack of transit access (Caltrain, BART) and worsening congestion on major freeways across the region.
- In an environment of competitive tech growth, access to amenities has become essential to attract talented workforce. Milpitas lacks amenities such as upscale dining, bars, community gathering spaces, and outdoor mixed-use shopping and entertainment districts. Businesses have also noted the lack of conference space and event space in Milpitas.
- Office development activity is unlikely while R&D vacancies are still so high; existing vacant campuses will likely need to be absorbed before new development occurs.
- Under current conditions, rents do not support new Class A office or office/R&D development in Milpitas, based on interviews with area developers and the preliminary results of a study currently being completed for the Milpitas Office of Economic Development.[15]
- Stakeholders cited Milpitas' lack of name recognition or brand as a business destination, especially compared to competing cities in Santa Clara County or Alameda County. This may be an impediment to attracting higher end office users and development.

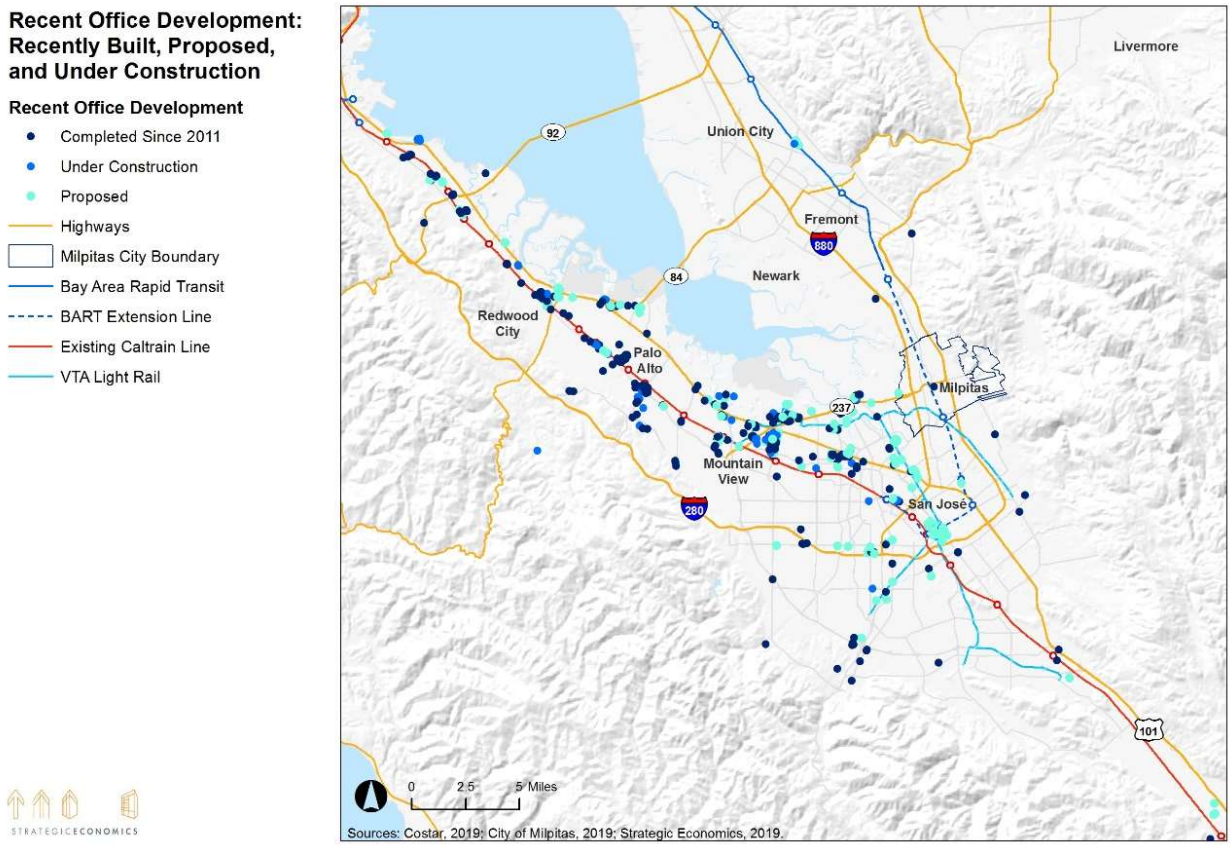
There is long-term potential for office and/or R&D development in a newly designated "Innovation District" near the Milpitas Transit Center, but this may require preserving sites that might otherwise be developed with residential or low density uses. The new BART service offered at the Milpitas Transit Center will, in the short-term, connect Milpitas to the East Bay and San Francisco. In the longer-term, once the BART Phase 2 extension is completed and improvements are made to VTA's light rail service, Milpitas will also be better connected to the rest of Santa Clara County. Furthermore, new residential development activity in the Transit Area Specific Plan and the Midtown Specific Plan areas will continue to transform the area into a more lively, mixed use environment, which is the type of environment that office users have been favoring in the last several years. However, because it will take time for infrastructure investments and residential development activity to take place, there may be a need to preserve well-located sites for future office or R&D development.

Leveraging the opportunities created by the new Milpitas Transit Center will require significant infrastructure and mobility investments. A recurring issue raised by a wide range of stakeholders is the pressing need to improve first and last mile connections from the new Milpitas Transit Center to the city's employment areas. With wide thoroughfares and heavy traffic along Great Mall Parkway and Montague Expressway, the area surrounding the Milpitas Transit Center remains very auto-oriented. The Southwestern Employment Area, one of Milpitas' largest employment areas, is about two miles from the Milpitas Transit Center with poor pedestrian or bicycle route options. Although a VTA light-rail line serves these areas, service is infrequent and the station is removed from most buildings.

[15] Economic Planning Systems (EPS), for the City of Milpitas, "Milpitas General Plan Opportunity Area Assessment and Development Strategy," August 2019.

Manufacturing Area North, another large employment node, is closer to the Milpitas Transit Center; however, the environment is not pedestrian or bicycle-friendly. Infrastructure and mobility investments needed to improve first and last-mile connections from the Milpitas Transit Center include street network improvements, pedestrian/bicycle facilities, VTA light-rail service improvements, and other micro-mobility options.

FIGURE 36. RECENT OFFICE DEVELOPMENT ACTIVITY IN SANTA CLARA COUNTY



WAREHOUSE & DISTRIBUTION

This section describes existing inventory and growth trends for warehouse and distribution space in Milpitas, including the city's advantages and disadvantages for businesses seeking this space. Rents, vacancies, and recent development activity are also summarized.

Milpitas has a relatively large supply of low-cost warehouse and distribution space. Milpitas has historically been a strong location for warehouse and distribution uses within the region (Figure 29). The city is in a strategic location for intra-regional distribution to residential areas, as well as business-to-business storage needs, with access to major highways connecting to the South Bay and East Bay (Highway 237, Highway 880, and Highway 680). Milpitas currently has 5.5 million square feet of warehouse and distribution space (Figure 30). Despite rapid rent growth in Santa Clara County overall, Milpitas rents remain significantly lower than the County (Figure 37).

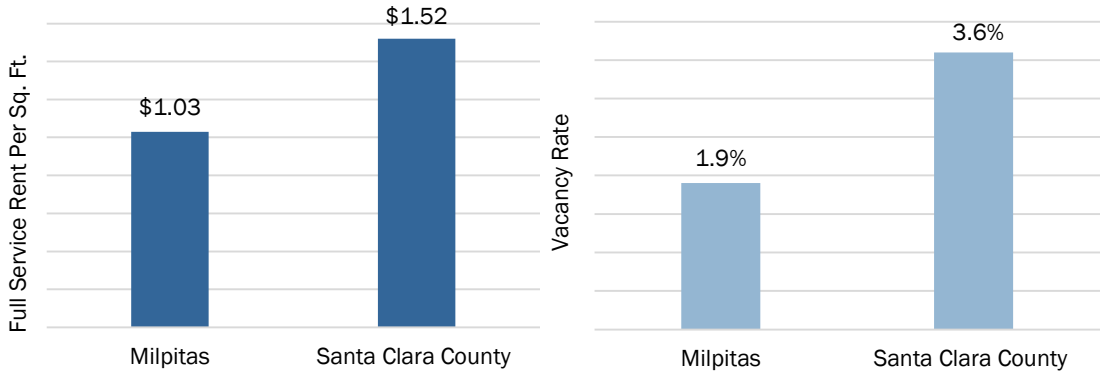
Milpitas is a strong market for warehouse and distribution, as reflected by very low vacancy rates. Warehouse and distribution space is in extremely high demand across Silicon Valley and the Bay Area more generally. Not only is the supply of available space generally limited in Silicon Valley, but demand

has been increasing as e-commerce businesses seek last-mile distribution centers, other major tech employers need storage space, and a variety of other businesses need space for autonomous vehicle operations or large 3-D printers.[16] Santa Clara County's warehouse & distribution vacancy rate has been very low for several years, and Milpitas has had similarly low vacancies, falling below two percent in 2019 (Figure 37).

Developers are eager to pursue new warehouse and distribution development projects in Milpitas. As described in the previous section, Milpitas has not attracted any office, R&D, or manufacturing development since the early 2000s. However, a new warehouse and distribution project was completed in 2018, and additional projects are under construction and in early proposal stages, as summarized in Figure 38. Some of the tenants leasing these new spaces are major tech companies such as Apple and Amazon. However, rather than leasing office spaces in Milpitas, they are building and leasing warehousing and distribution spaces to store equipment or reach customers. Milpitas is attractive for warehousing because of its low rents, highway access, and proximity to other higher cost Silicon Valley cities. However, warehouse and distribution centers tend to have low job densities and limited sales tax revenue potential.

New warehouse and distribution projects in Milpitas are larger floor-plate buildings that meet modern standards required by the majority of tenants. As reported by brokers, tenants looking for new warehousing/distribution space prefer one-story buildings with large floorplates (usually at least 100,000 square feet, but can be up to 300,000 square feet), high ceilings (32-36 feet clear ceiling heights), high power capacity, truck docking areas, as well as a small amount of office space (e.g. 30,000 to 40,000 square feet). Projects recently completed and in the pipeline in Milpitas generally meet these criteria (Figure 38).

FIGURE 37. WAREHOUSE AND DISTRIBUTION RENTS (LEFT) AND VACANCY RATES (RIGHT), 2019 Q2



Source: CoStar, 2019; Strategic Economics, 2019.

[16] San José Spotlight, Janice Bitters. "Big tech drives changes in Silicon Valley's industrial, manufacturing landscape", December 6, 2019. Available at: https://sanjosespotlight.com/big-tech-drives-changes-in-silicon-valleys-industrial-manufacturing-landscape/

FIGURE 38: CITY OF MILPITAS WAREHOUSE AND DISTRIBUTION DEVELOPMENT PIPELINE

Project / Address	Status	Square Feet	Existing Tenants
McCarthy Creekside Industrial Center, 407-907 N McCarthy Blvd	Phase I: Completed in 2018 Phase II: Under Construction	Phase I: 400,000 sq. ft. (two buildings) Phase II: 350,000 sq. ft. (three buildings)	Phase I: Apple, mostly for storage Phase II: Amazon, to use as a delivery center
Bridge Point Silicon Valley, 205 N McCarthy Blvd	Under Construction. Bridge Properties, an industrial developer, acquired the 35-acre vacant parcel in 2019.	722,000 sq. ft. (two buildings)	Amazon to occupy one 330,000 sq. ft. building
Overton Moore Properties (OMP) site, 1000 Gibraltar St.	Proposed plans to demolish and redevelop an existing R&D campus into one-story warehouse & distribution building(s).	500,000 sq. ft.	Unknown

Source: Economic Planning Systems and City of Milpitas, 2019; Silicon Valley Business Journal, 2020; Strategic Economics, 2020.

RETAIL & RESTAURANTS

This section describes the performance of retail and restaurants in Milpitas by type and location. The findings include summaries of the existing retail inventory in Milpitas, rents, vacancies, and recent development activity. Using sales tax revenue data provided by the City of Milpitas via MuniServices, the overall health of certain types of retail stores is also summarized.[17] Note that the data predate the economic impacts of the COVID-19 pandemic, which has resulted in the shutdown or limiting of operations for most restaurants and retail stores.

Milpitas has a large and diverse offering of retail stores and restaurants, mostly concentrated in suburban-style shopping centers. As seen in Figure 39, Milpitas has nearly 5 million square feet of retail, of which three quarters is located in retail centers of different sizes and trade areas. Milpitas has an ethnically diverse array of retail and restaurants, and a significant portion of retail in Milpitas is specialized in Asian products, such as in the Milpitas Square retail center.

Milpitas has major regional retail destinations that attract shoppers (and sales tax revenues) from beyond the city. The largest centers are the Great Mall, a 1.4 million square feet super-regional mall, and McCarthy Ranch, a 415,000 square feet power center.

Retail rents and vacancies in Milpitas are similar or lower than the County average. As seen in Figure 40, retail vacancies are around two percent in Milpitas, similar to Santa Clara County's vacancy rate (3.5 percent). This indicates that the market is generally performing well. Rents is Milpitas are around $2.60 per square foot, which is relatively low compared to Santa Clara County ($2.85 per square foot).

Small amounts of retail development activity in Milpitas have occurred, mostly as ground floor retail in new residential projects. With residential projects being built around the new Milpitas Transit Center, retail demand is also expected to grow. However, to ensure that these new ground floor retail spaces are successful, infrastructure improvements will be needed to increase the area's walkability and

[17] Sales tax revenue is generated by many different types of users, including general retail, restaurants and food stores, business to business sales, construction, and other users. However, this section focuses solely on general retail and restaurant and food stores. Overall sales tax trends are analyzed later in this report. Also note that citywide retail performance is measured using sales tax revenue (not actual sales, which would include non-taxable items such as groceries) in Figures 32 and 33, and retail center performance is measured using taxable sales per retail square foot, in Figure 34.

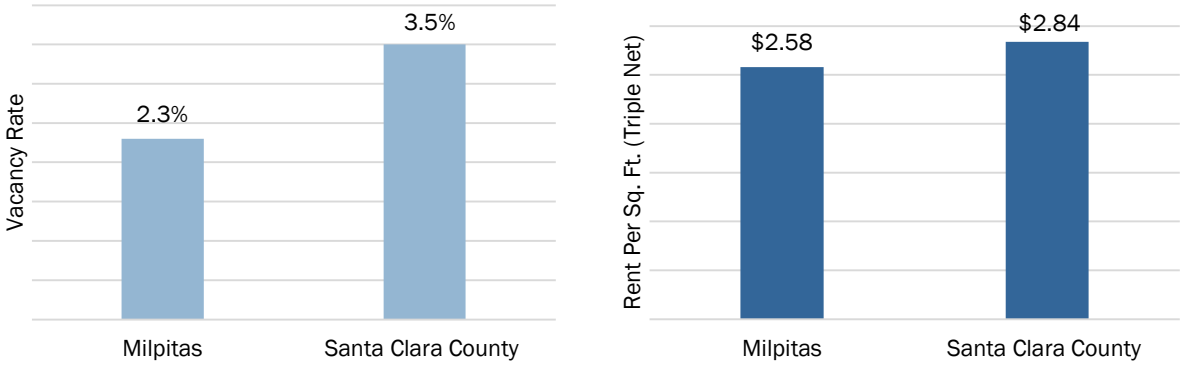
accessibility. In addition, one new retail project, the Sprig Center located on N McCarthy Boulevard south of Dixon Landing Road, recently added 75,000 square feet to the City's inventory leased by Floor & Décor.

FIGURE 39. MILPITAS RETAIL INVENTORY BY CENTER TYPE

	Retail Square Feet	Percent of Total
Shopping Center		
Super-Regional Mall	1,368,000	28%
Power Center	416,000	8%
Community Center	426,000	9%
Neighborhood Center	1,161,000	24%
Strip Center	331,000	7%
Subtotal	*3,702,000*	*75%*
Not in Shopping Center	1,233,000	25%
Total	**4,935,000**	**100%**

Source: CoStar, 2019; Strategic Economics, 2019.

FIGURE 40. RETAIL VACANCY RATE (LEFT) AND RENTS IN MILPITAS AND SANTA CLARA COUNTY, 2019 Q2



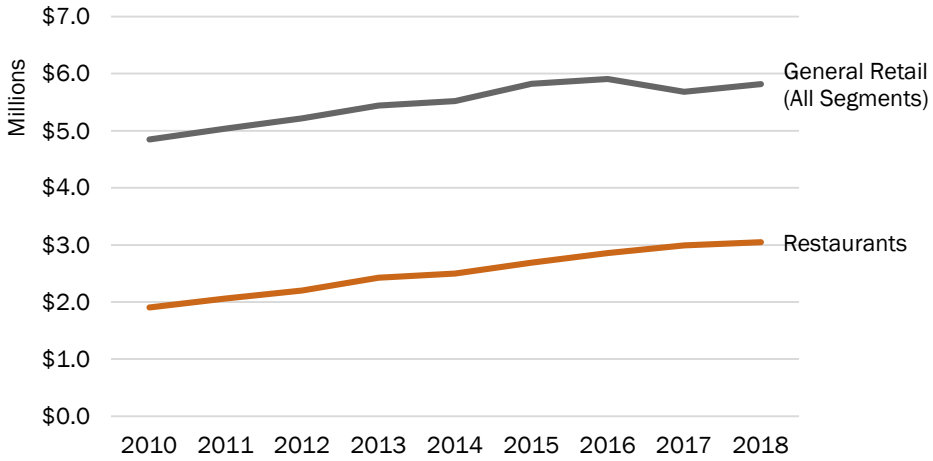
Source: CoStar, 2019; Strategic Economics, 2019.

Dining and drinking establishments performed very well in Milpitas in recent years (although these businesses will suffer severe negative impacts from COVID-19 restrictions today and in the coming months). Based on sales tax revenue trends shown in Figure 41 and Figure 42, restaurants in Milpitas perform very well and have experienced rapid growth in sales in the last few years. This is in line with broader regional and national trends, whereby consumer preferences increasingly favor eating and drinking places. In addition, the ethnic diversity of restaurants in Milpitas is often cited as a major strength and reason for this success. Milpitas' restaurant mix lacks fine dining restaurants, however.

However, traditional retail has stagnated in recent years, matching regional and national trends. General retail as a category has flattened in recent years, even though not all sub-categories have performed similarly. For example, department stores have experienced declining taxable sales for several years, while miscellaneous retail and apparel stores only flattened more recently. These trends are in line with broader national patterns. As online shopping has become more common, consumer preferences have shifted away from traditional retail and towards more experiential retail.

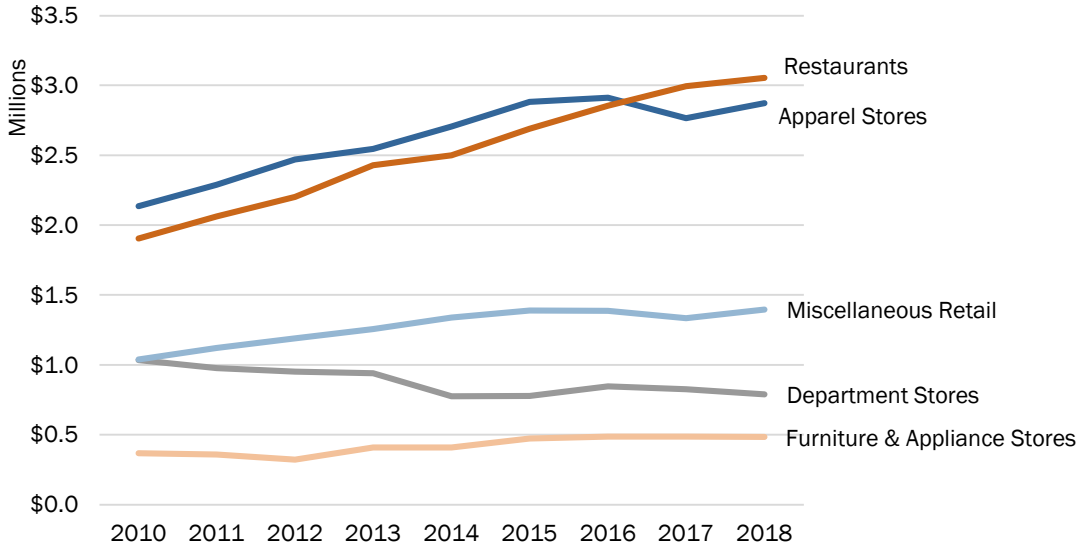
Milpitas currently lacks a mixed use, walkable district as well as certain types of amenities and public spaces. As described previously, Milpitas lacks a walkable, mixed use, downtown-like district or corridor. In addition, Milpitas lacks certain amenities such as public gathering spaces, entertainment and nightlife establishments, and arts/cultural uses. These types of amenities and environment could be especially beneficial for retailers and eating and drinking establishments.

FIGURE 41. MILPITAS GENERAL RETAIL AND RESTAURANTS ANNUAL SALES TAX REVENUE, 2010 TO 2018



Source: MuniServices, 2019; Strategic Economics, 2019.

FIGURE 42. MILPITAS ANNUAL SALES TAX REVENUE FOR SELECT SEGMENTS, 2010 TO 2018



Miscellaneous retail includes specialty stores, jewelry stores, personal services, and others (art, gift, novelty stores, cigar stores, newsstands, stationery/book stores).
Source: MuniServices, 2019; Strategic Economics, 2019.

Retail performance varies significantly by retail center or subarea, with the Serra Center area exhibiting especially low sales per square foot. Figure 43 summarize major retail subareas tracked by the City of Milpitas, including each subarea's location, retail inventory, major sales tax generators, and average taxable sales per retail square foot. Figure 44 illustrates the location of these subareas within the City

of Milpitas. Certain retail centers, like the Great Mall, Milpitas Square, and Town Center North, perform well, with taxable sales per square foot at or above $250. McCarthy Ranch also has a high taxable sales amount per square foot, but sales growth has slowed significantly since 2010 due to the loss of major tenants; this decline may reverse as these spaces are re-tenanted. Other centers have very low taxable sales per square foot. The Serra Center subarea, in particular, has had sales of less than $100 per square foot.

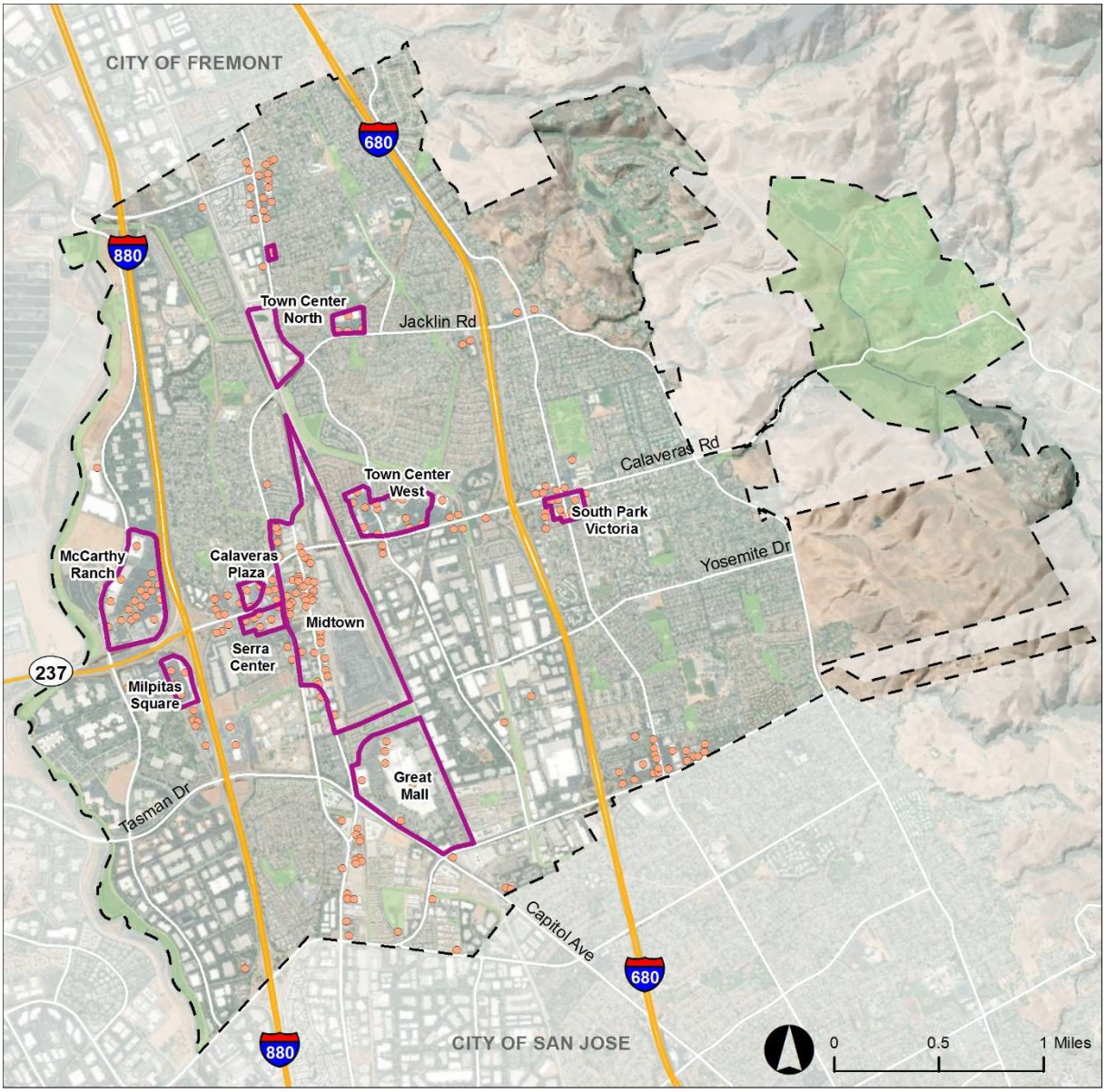
Note that grocery stores have low taxable sales per square foot, as most their sales are non-taxable. Therefore, estimates in Figure 43 likely underestimate the performance of grocery-anchored centers (Milpitas Square, Town Center North, Calaveras Plaza, South Park Victoria at Calaveras).

FIGURE 43. MILPITAS RETAIL SUBAREA PERFORMANCE

Retail Subarea	Sales Tax Generators	Retail Sq. Ft.	Taxable Sales per Sq. Ft., 2018
The Great Mall	Century Theatres, Kohl's, Marshalls, Bed Bath & Beyond, Dick's Sporting Goods....	1.4 million	$354
McCarthy Ranch	Best Buy, PetSmart, Ross Dress For Less	540,000	$306
Milpitas Square	99 Ranch Market, Gen Korean BBQ House, Mayflower Seafood Restaurant	180,000	$249
Town Center North	Smart & Final, 24 Hr Fitness, Lion Supermarket	150,000	$244
Calaveras Plaza	Grocery Outlet, Paris Baguette, Burger King	87,000	$203
South Park Victoria at Calaveras	Ocean Supermarket, T-Mobile, Dollar Plus	91,000	$190
Town Center West	Big 5 Sporting Goods, Safeway, Staples, CVS, Marina Grocery	320,000	$148
Midtown	An-Jan Feed & Pet Supply, Sea Link Café, Baja Cactus	290,000	$102
Serra Center	Big Lots, Serra Theatres, Walgreens	117,000	$86

Source: CoStar, 2019; MuniServices, 2019; Strategic Economics, 2019.

FIGURE 44. REFERENCE MAP OF RETAIL-FOCUSED SALES TAX SUBAREAS IN MILPITAS



Sources: MuniServices, 2019; CoStar, 2019; City of Milpitas, 2019; Strategic Economics, 2020.

STRATEGICECONOMICS

HOTEL

This section describes hotel performance, opportunities, and potential future challenges. The findings include analysis of existing hotel inventory in Milpitas, the main drivers of hotel demand, recent development activity, and hotel performance metrics based on data provided by HVS.[18]

Note that the hotel analysis was performed prior to the impacts of efforts to combat the COVID-19 pandemic. Due to travel restrictions, the hotel and travel market has now rapidly declined to its worst ever performance, and will take time to recover as restrictions are gradually eased. However, the general competitive advantages and disadvantages of hotels in Milpitas will remain the same as market conditions change.

Milpitas has a large inventory of hotels, with over 2,600 hotel rooms (see Figure 45). As of September 2018, STR reported 19 hotels in Milpitas, including a mix of economy, midscale, and upscale hotels.[19] All of these properties were built between the early 1980s and the early 2000s. Note that hotels generate significant Transient Occupancy Tax revenue in Milpitas.

Hotel demand in Milpitas is driven primarily by weekday business travel. Between 60 and 80 percent of hotel demand in Milpitas is driven by business travel (Figure 46).[20] This includes corporate accounts from major firms in Milpitas, such as Cisco, KLA, Western Digital, and Flex, as well as other individual business travel. This is consistent with Santa Clara County's regional hotel market, which is also driven by business and employment growth. In addition, local industry stakeholders in Milpitas emphasized that certain industry sectors generate more travel than others (e.g. high-tech companies, versus distribution companies).

Prior to the impact of COVID-19 related travel restrictions, hotels in Milpitas had healthy occupancy rates and the city attracted new development in recent years. Since 2011, hotel occupancy in Milpitas fluctuated between 76 and 79 percent (Figure 47). Occupancy peaked in 2015 at 79 percent, and decreased to 77 percent in subsequent years, likely in response to the addition of new rooms elsewhere in the region from 2015 onwards. In comparison, Santa Clara County occupancy rates hovered around 79-80 percent in 2018. 2019 revenue per available room (RevPar) was slightly lower in Milpitas (around $133) compared to Santa Clara County ($160).[21]

Weekend occupancy remains challenging, given limited demand for leisure travel to Milpitas. Milpitas hotel owners and managers interviewed for this study reported low occupancies on weekends. There are few leisure travelers in Silicon Valley generally, and major destinations are especially limited in Milpitas. In comparison, cities such as San José or Santa Clara benefit from their local convention center, or other recreational destinations like the Levi Stadium or California's Great America Amusement Park. Hotel industry stakeholders in Milpitas report that they only benefit from demand for these destinations if there is very high "compression" (unmet demand) in nearby markets. BART service at the new Milpitas Transit Center may create new opportunities to capture demand from

[18] HVS for the City of Milpitas, "Transient Occupancy Tax Analysis", November 2018. Available at: http://www.ci.milpitas.ca.gov/_pdfs/council/2018/112018/item_21b.pdf

[19] This includes 2,437 rooms (15 hotels) reported by HSV and an additional 247 rooms (four hotels) not reported by HVS. See above for the link to the HVS report.

[20] HVS reported that 60 percent of accommodated-room-nights were driven by business demand. Local hospitality experts in Milpitas reported a slightly higher share, around 80 percent. See above for link to the HVS report.

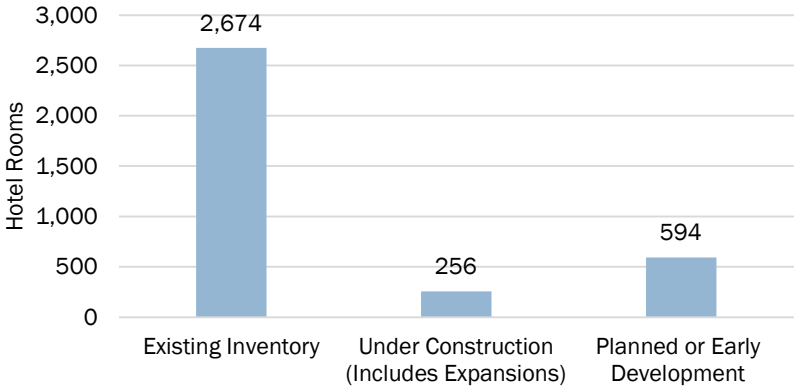
[21] Hotel Online, "Silicon Valley Supply Growth Rates Increasing in Step with Demand Growth", March 7, 2019. Available at: https://www.hotel-online.com/press_releases/release/silicon-valley-supply-growth-rates-increasing-in-step-with-demand-growth/

tourism in San Francisco, especially for travelers who are willing to travel longer distances in exchange for cheaper rates—although the pool of travelers willing to travel this far is likely very limited.

In recent years, increased traffic congestion negatively impacted the trade of area of hotels in Milpitas as visitors prioritized proximity to their destinations over lower prices. Hotel industry stakeholders report that the typical trade area for business travel has usually been around three miles. In other words, they attract business travel from companies within Milpitas, but also in nearby employment areas such as North San José, Santa Clara, and Fremont. However, this has become more challenging in the last few years due to increased congestion along Highway 237. Local hotel owners and managers interviewed for this study are concerned this trend will worsen.

Milpitas is experiencing a new wave of hotel development activity—the first since the early 2000s—but there are concerns that regional oversupply will limit performance and development activity in coming years—an issue now worsened by the economic downturn associated with combatting the COVID-19 pandemic. Increased demand for hotels in Milpitas, and across Santa Clara County, has been driven by regional employment growth. No new hotel development had occurred in Milpitas since 2002, but as seen in Figure 45, hotels currently under construction in Milpitas are expected to add 250 rooms to the city's existing supply. Hotels that are in early proposal stages would add an additional 600 rooms, but there is significant uncertainty that these projects will break ground in the current market cycle.[22]

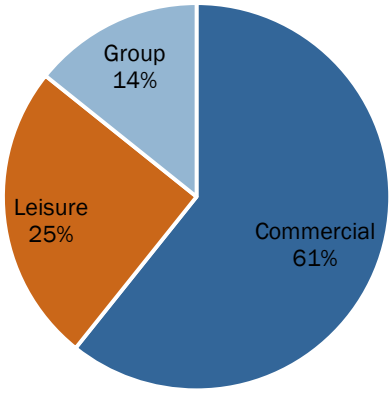
FIGURE 45. EXISTING, UNDER CONSTRUCTION, AND PLANNED HOTEL ROOMS IN MILPITAS, 2018



Note: Existing inventory includes 2,437 rooms (15 hotels) reported by HSV and 247 rooms (four hotels) not reported by HVS.
Source: STR, as reported in the HVS Report, November 2018; Strategic Economics, 2020.

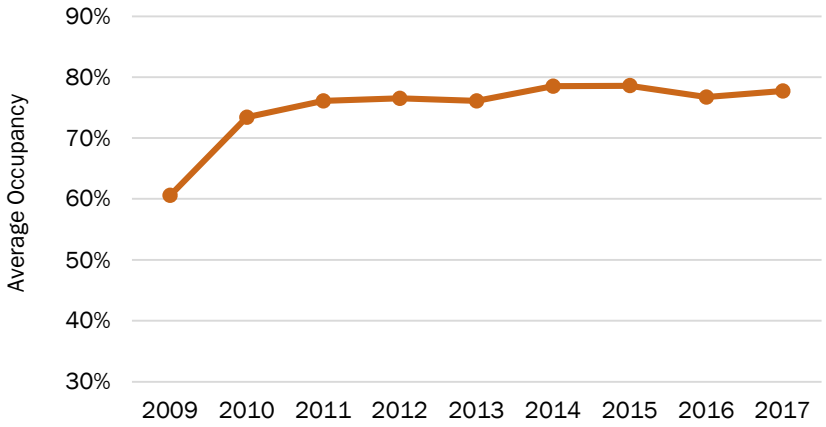
[22] Mercury News, "More than 1,000 hotel rooms headed for North San José," August 2019, available at: https://www.mercurynews.com/2019/08/12/900-plus-hotel-rooms-head-north-san-jose-google-apple/

FIGURE 46. SHARE OF HOTEL DEMAND IN MILPITAS BY SEGMENT, 2018



Commercial includes corporate and business travel. Leisure includes sightseeing, recreation, visiting friends or relatives. Group includes bookings of 10 or more rooms per night.
Source: STR, as reported in the HVS Report, November 2018; Strategic Economics, 2020.

FIGURE 47. AVERAGE OCCUPANCY IN MILPITAS, 2011 TO 2017



Source: STR, as reported in the HVS Report, November 2018; Strategic Economics, 2020.

Fiscal Performance

Cities engage in economic development activities partly out of recognition that a healthy economy and business environment should in turn support tax and fee revenues for the City. Those revenues then allow the City to provide a greater level of services for the community. The City of Milpitas relies on a variety of revenue sources to support its General Fund. The General Fund is used to provide essential public services such as police, fire, parks, and community services. This section illustrates the relationship between real estate types and public revenue sources in Milpitas.

The following analysis of Milpitas' fiscal conditions was completed prior to restrictions put in place to combat the COVID-19 pandemic. The enormous impacts of these restrictions on business activity will likely result in dramatic and immediate declines in sales tax, transient occupancy tax, and fee revenues, as well as possible longer-term stagnation or declines in property tax revenues if a deeper recession results in lower property values and a slowdown in development activity.

FISCAL CONDITIONS

This section summarizes the composition of Milpitas' General Fund by revenue source. Findings are based on anticipated revenues for fiscal year 2019-2020, as outlined in the City's FY 2019-2020 budget. Results are summarized in Figure 48.[23]

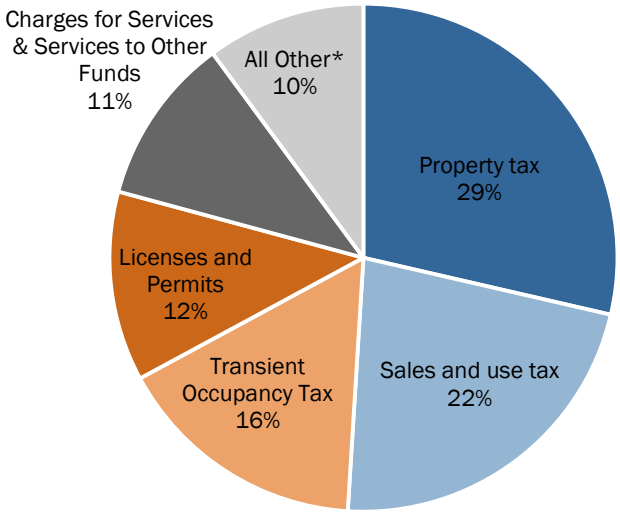
The largest source of revenue in Milpitas is property taxes, which are enhanced through higher-intensity development and property sales. In fiscal year 2019-2020, total General Fund revenues in Milpitas are expected to reach $121.6 million. As seen in Figure 48, property taxes contributed 29 percent of this total. Property tax revenue is tied to land use type and density. Both residential and commercial uses contribute to property taxes, and new development or redevelopment often provide a boost in property tax revenue because these changes trigger a reassessment of property value. Denser development concentrates more value on a given site, and therefore also provides a higher assessed value compared to comparable lower density development.

Sales and use tax is the second largest revenue source, derived both from retail sales and business to business sales. A large share of Milpitas' General Fund revenue is generated by sales and use tax (22 percent). Milpitas receives approximately one percent of the value of taxable transactions. A wide variety of businesses contribute to the sales tax. The sales tax includes retail sales as well as sales occurring between businesses (business to business sales), such as office equipment, electronic equipment, and other industrial needs. More information on trends in sales tax revenue is included in the next section.

The Transient Occupancy Tax (TOT), or hotel tax, is another major source, and depends on the supply and performance of hotels in Milpitas. The City's TOT revenue is anticipated to represent 16 percent of General Fund revenue in FY 2019-2020, or $19 million annually. The TOT rate is currently set at 14 percent, a change that became effective in January 2019 after voter approval of Measure R in the prior year.[24]

[23] City of Milpitas, "Budget in Brief Fiscal Year 2019-2020", available at: http://www.ci.milpitas.ca.gov/_pdfs/2019_2020BudgetInBrief.pdf
[24] The tax rate set by Measure R can be increased or decreased by City Council, provided it does not exceed the voter-approved maximum rate of 14 percent.

FIGURE 48. ANTICIPATED GENERAL FUND REVENUE BY SOURCE, FISCAL YEAR 2019-2020 BUDGET



*All Other includes: the real estate transfer tax, the business license tax, franchise fees, and the use of reserves.
Source: City of Milpitas Budget in Brief, Fiscal Year 2019-2020, 2019; Strategic Economics, 2020.

CONNECTION BETWEEN CITY REVENUES AND REAL ESTATE

This section highlights the relationship between selected real estate product types and the categories of tax revenue they usually generate.

As seen in Figure 49, uses such as office, R&D, manufacturing, and retail contribute mostly sales tax and property tax. Hotels additionally generate Transient Occupancy Tax. Warehouse and distribution spaces mostly generate property tax. Generally speaking, all commercial real estate types are important for a healthy economy, and each contribute to the City's overall economic and fiscal picture in different ways.

FIGURE 49. RELATIONSHIP BETWEEN REAL ESTATE AND GENERAL FUND REVENUES

Real Estate	Major Revenues Generated
Office, R&D, and industrial manufacturing space	Property tax; Sales tax (B2B)*
Warehouse & distribution space	Property tax
Retail space	Property tax; Sales tax (retail)*
Hotel	Property tax; Sales tax; Transient Occupancy Tax

*"B2B" refers to business-to-business taxable transactions, as opposed to retail transactions.
Source: Strategic Economics, 2020.

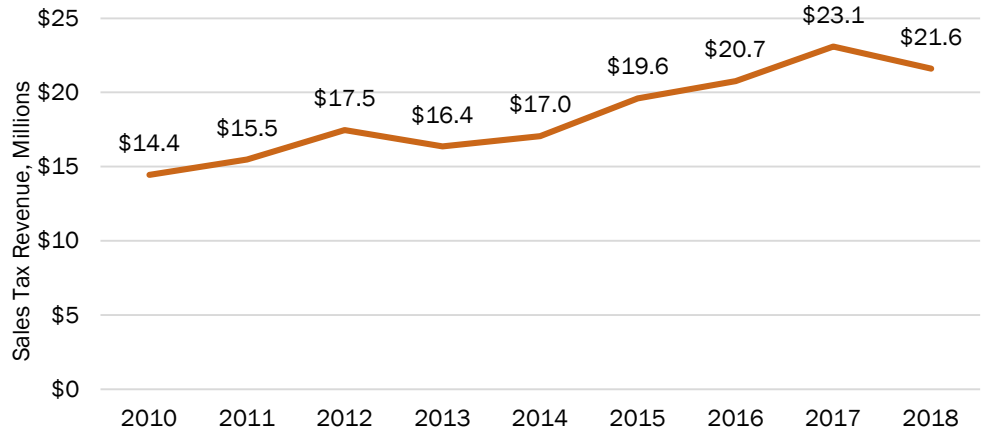
TRENDS IN SALES AND USE TAX

Milpitas receives sales tax revenue from a variety of businesses. Sales tax data provided by the City (via their contractor Muni Services) is broken out into seven broad categories:

- Business to business (B2B), which includes all sales occurring between businesses, such as office equipment, electronic equipment, and other industrial needs;
- General retail, which includes retail sales of consumer goods, both soft goods such as apparel and hard goods such as appliances and furniture;
- Restaurants and food stores, which includes all eating and drinking places, grocery stores, and liquor stores;
- Automobile sales and service, which includes gas stations, automobile dealerships, and other auto-related stores;
- Construction, which includes retail stores and wholesalers specialized in selling building materials;
- Miscellaneous and Unclassified – note that these categories represents a minor share of total sales tax revenue and are therefore not included in the analysis below.

Citywide sales tax revenue in Milpitas increased steadily between 2010 and 2018, despite a small peak and dip between 2016 and 2018, and likely significant declines in 2020 and beyond due to the COVID-19 pandemic. As seen in Figure 50, sales and use tax revenue increased by 50 percent since 2010, from $14.4 million annually in 2010 to $21.6 million annually in 2018. There has been a year-over-year increase in sales tax revenue every year except for 2017 to 2018. This is due to an unusual trend in business to business revenue, explained in the following paragraph.

FIGURE 50. CITYWIDE SALES TAX REVENUE (NOT ADJUSTED FOR INFLATION)



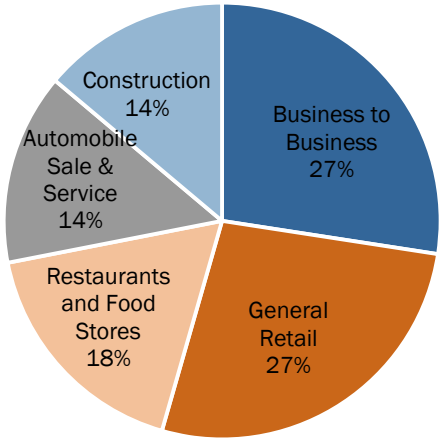
Source: MuniServices, 2019; Strategic Economics, 2020.

A large share of sales tax in Milpitas comes from business to business transactions, which are linked to businesses found in office and industrial areas of the City; however, this category has fluctuated significantly year over year. About 27 percent of total sales tax revenue comes from B2B sales (Figure 51). As seen in Figure 52, this category has increased by 37 percent since 2010, but has been very volatile as individual businesses vacate or locate in the City's various office and industrial areas.

Sales tax revenue from general retail has flattened in the last few years while revenue from restaurants and food stores has increased significantly, reflecting broader trends favoring dining, drinking, and "experience" focused businesses. Today, general retail represents 27 percent of total sales tax revenue, and revenues from restaurants and food stores represents 17 percent (Figure 51). However, from 2010 to 2018, revenue from general retail grew by only 20 percent, while revenue from restaurants and food stores grew by 56 percent, which exceeds the City's overall growth rate.

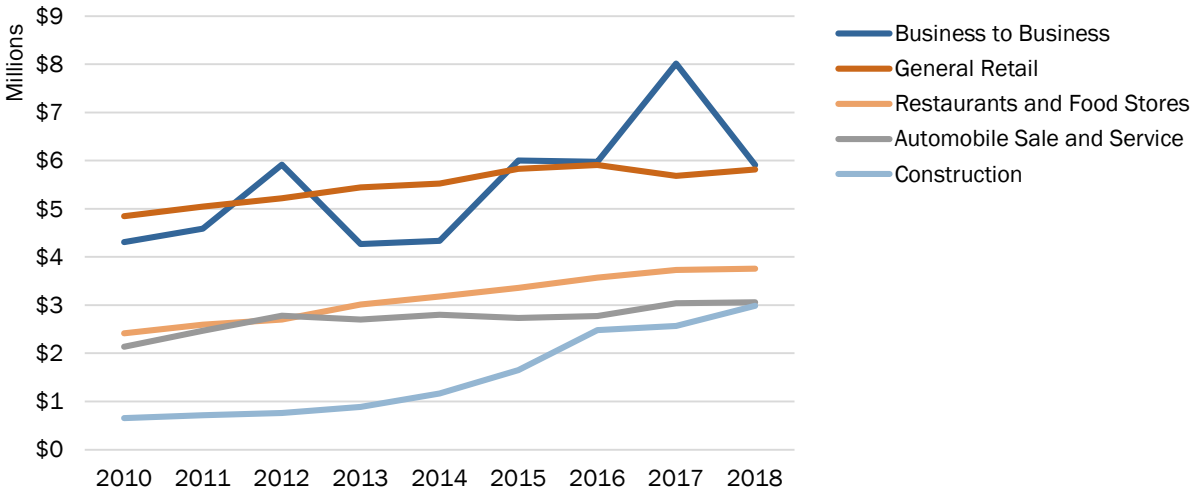
Sales tax revenue from construction also increased dramatically since 2010. This is in part related to the large amount of development activity (especially residential) in Milpitas in the last decade.

FIGURE 51. CITYWIDE SALES TAX REVENUE BY CATEGORY, 2018



Source: MuniServices, 2019; Strategic Economics, 2020.

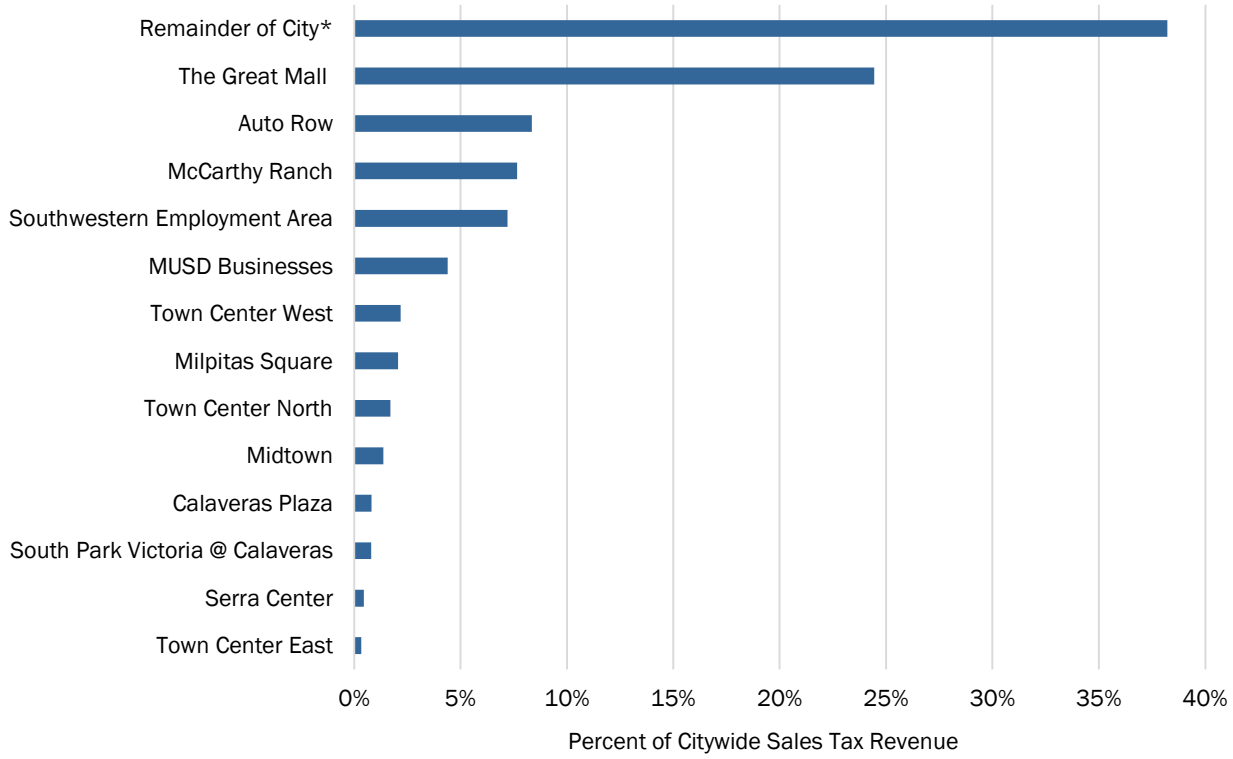
FIGURE 52. CITYWIDE SALES TAX REVENUE BY CATEGORY (NOT ADJUSTED FOR INFLATION), 2010 TO 2018



Source: MuniServices, 2019; Strategic Economics, 2020.

Different areas within the city generate substantially different sales tax revenue for the City, but the City does not currently track many subareas generating business-to-business sales tax revenue (Figure 53)**.** The sales tax subareas are shown in Figure 44. For example, the Great Mall, Auto Row, McCarthy Ranch, and Southwestern Employment Area all generate high revenues, while others, like the Serra Center and South Park Victoria at Calaveras, generate very little revenue. It is important to note that the "Remainder of City" subarea category includes all areas not tracked as sales tax subareas by MuniServices, such as Manufacturing Area North and the larger McCarthy Industrial Area (including McCarthy Center and the zone west of McCarthy Blvd), which generate significant B2B revenue (see sales tax subareas shown in Figure 44).

FIGURE 53. SALES AND USE TAX REVENUE BY SUBAREA, 2018



*"Remainder of City" includes all sales tax revenue generation that did not come from the subareas identified by Muni Services. This includes a large share of industrial and office employment areas in the City, which are major generators of business to business sales tax revenue.

Education and Workforce Development

This section summarizes existing education and workforce initiatives in Milpitas, and outlines broader trends, opportunities, and concerns around the future of the workforce in Milpitas, with an emphasis on building skills and opportunities for Milpitas residents. Findings are based on interviews with key education and workforce organizations and stakeholders in Milpitas. These findings help to clarify how the City can prioritize and support education and workforce development efforts. These efforts will be more important than ever due to the mass layoffs occurring as a result of efforts to combat the COVID-19 pandemic.

EXISTING PARTNERS AND INITIATIVES

The City of Milpitas promotes education and workforce development for Milpitas students, residents, and workers through its engagement with an array of local and regional partners. Workforce development and education programs are implemented through mission-specific organizations and institutions such as school districts, community colleges, workforce development agencies, and other non-profit organizations. The City plays an essential role by acting as an intermediary between these partners and Milpitas employers, coordinating between organizations, and assisting with implementation of specific programs.

Examples of partners working to advance educational and workforce opportunities in Milpitas include:

- Milpitas Unified School District (MUSD)
- Milpitas High School
- Milpitas Adult School
- San José City College, Milpitas Extension (located in Milpitas)
- San José Evergreen Valley Community College (located in southeast San José)
- San José State University (located in Downtown San José)
- NextFlex, an institute of Manufacturing USA
- NOVA, the workforce development board for Silicon Valley

These organizations collaborate extensively with local companies, City staff, and with each other, to implement a variety of programs, events, and resources. Many of the efforts underway aim to enable Milpitas' diverse population to benefit from the rapid economic growth occurring in the City, especially in the advanced tech, R&D, and manufacturing sectors. Existing initiatives are summarized below.

FlexFactor. The FlexFactor program, hosted by NextFlex[25] in partnership with the City of Milpitas, Evergreen Valley College (EVC) and MUSD, is in its fourth iteration in Milpitas. The City of Milpitas is providing funding for the current iteration. FlexFactor is a four-week entrepreneurship program for high school students that exposes them to the diversity of professional opportunities in the advanced manufacturing sector. The Office of Economic Development facilitates the connection to companies, while MUSD coordinates with students to implement the program. EVC provides dual enrollment to the students, college credit, and in 2019 partially funded an iteration of the program with the City of Milpitas. Students gain a hands-on understanding of the college application process, learn about

[25] NextFlex is a nonprofit that is also known as America's Flexible Hybrid Electronics Manufacturing Institute.

employment opportunities in local manufacturing companies, and develop their own manufacturing innovation that they eventually pitch to a panel of experts.

Manufacturing Day. In 2017, the City of Milpitas organized its first Manufacturing Day in partnership with MUSD. The event has been held annually since then. This event brings together students, educators, and Milpitas-based manufacturers. It gives students the chance to visit companies in Milpitas and introduces them to the range of career opportunities in manufacturing. The event also helps companies meet potential future candidates to address their shortage of skilled labor.

New college programs and courses focused on advanced manufacturing and skilled trades. For example, the Milpitas Extension offers a four class certificate in coding, data science, and business entrepreneurship to provide students with opportunities to enter the tech sector. Evergreen Valley Community College is also developing a new program focused on information modeling and CAD. San José State, through the College of Engineering, also connects students to industry through seminars and experiential learning.

Other targeted outreach efforts. The Milpitas Adult School and the NOVA Workforce Development Board have developed various efforts and outreach for adults coming out of the Elmwood Correctional Facility, adults attending English as a Second Language classes, and people with disabilities.

KEY TRENDS AND ISSUES

Several challenges were raised by stakeholders in relation to workforce and education in Milpitas. The main issues are listed below:

Shortage of workers in skilled trade occupations. Across the Bay Area, workforce development boards and organizations such as the Association of Manufacturers Bay Area (AMBAy Area) are noting a shortage of workers in skilled trade positions, such as electronic technicians, machinists, welders, and industrial/mechanics maintenance workers. This is due to the combination of existing workers entering retirement, and the younger workforce not having the right training to meet the skills requirements. Some stakeholders mentioned that high school students, in particular, should be more exposed to skilled trade opportunities—this is in part the aim of initiatives such as Manufacturing Day. Several companies in Milpitas rely on these types of positions, so this is an issue that could affect Milpitas' advanced manufacturing industry sectors.

Need for STEM literacy across all occupations. In general, stakeholders noted that workers across the spectrum of industry sectors increasingly require basic digital literacy and even basic STEM knowledge. These skills also encourage upward mobility within a given industry.

Housing and transportation costs. Housing costs are a significant challenge for businesses that need to hire middle- or low-wage workers. Prohibitive housing costs in Milpitas and surrounding communities mean that workers are forced to live, and commute from, further and further away. This makes recruitment and retention difficult for Milpitas companies. In fact, some companies reported challenges with recruitment and retention even for higher wage workers. This issue was raised by a variety of different stakeholders.

APPENDIX: SUMMARY OF COMMUNITY WORKSHOP AND ONLINE SURVEY

COMMUNITY WORKSHOP AND ONLINE SURVEY SUMMARY

Milpitas Economic Development Strategy

The City of Milpitas is preparing a new Economic Development Strategy that will guide the City's efforts over the next five years to enhance the diverse local economy, create workforce development opportunities and cultivate an entrepreneurial environment. Economic development and job growth are priorities for the Milpitas City Council.

A community workshop was held on October 24, 2019 at 6 pm at City Hall to discuss and gather feedback on the following topics:

- Identifying forward-looking economic growth opportunities in Milpitas based on broader regional and global trends;
- Retaining and expanding existing businesses and industries;
- Attracting emerging technologies;
- Preparing the local workforce for future jobs;
- Encouraging commercial and industrial development and reinvestment; and
- Investing in the City's fiscal health.

The workshop material was also available for input in person after the workshop, as the feedback boards were at City Hall through November 2019 and at the Milpitas High School library in December 2019. In addition, in November 2019 an online survey was launched to gather input from the community on Milpitas' needs and priorities related to the Milpitas Economic Development Strategy project. Approximately 50 members of the community or stakeholders participated in person, and approximately 60 individuals completed the online survey.

The following summary includes key takeaways of input from both the workshop and related activities, and the online survey.

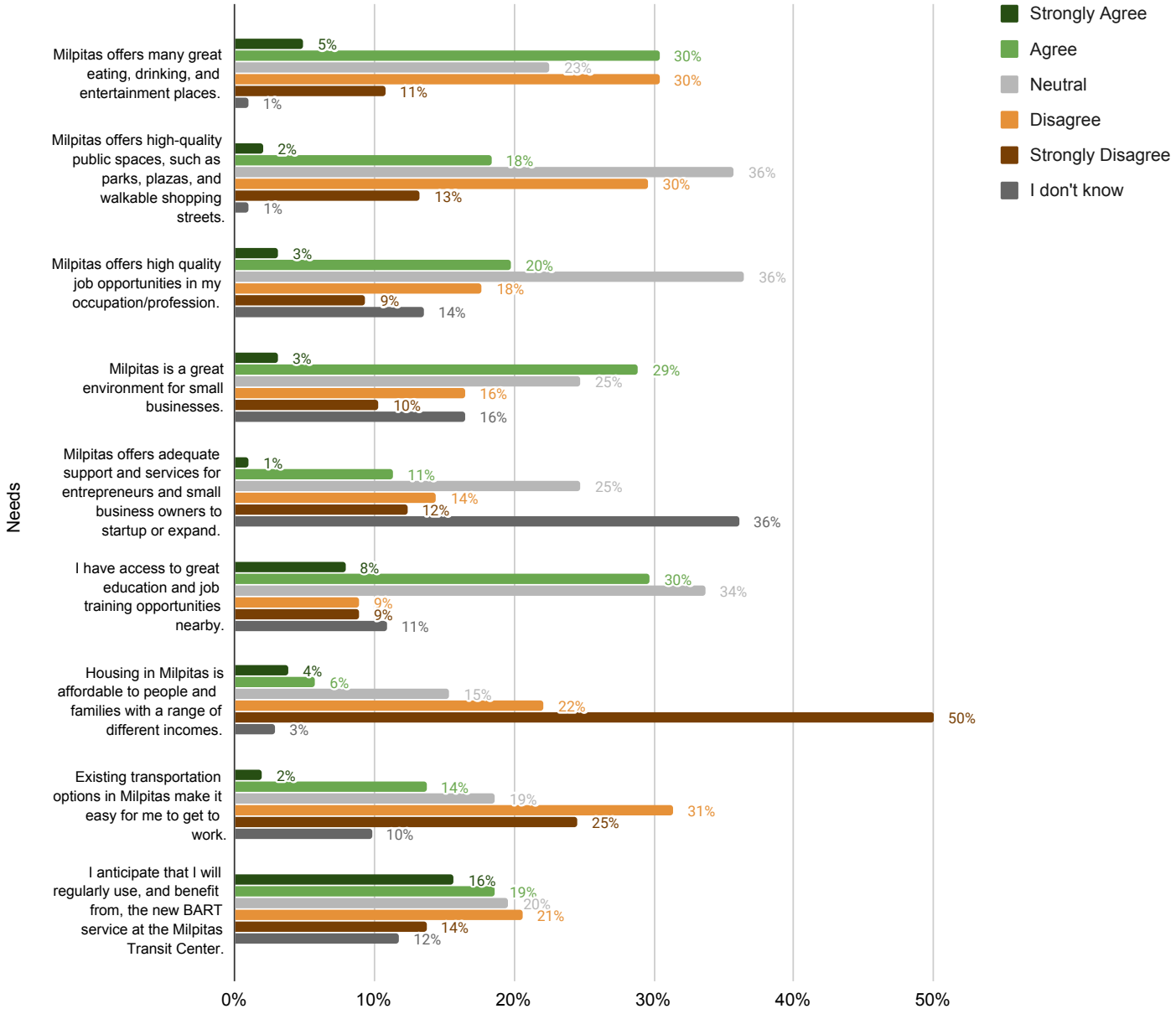
MEETING THE CURRENT NEEDS

Participants were asked to rank how well the following needs are being met in Milpitas. Of the nine needs, ***Housing in Milpitas is affordable to people and families with a range of different incomes*** received the most ***Strongly Disagree*** votes.

Figure 1.1 summarizes the input received related to how well the City of Milpitas is meeting the community's current needs. The following introduction accompanied the question about how well Milpitas is meeting the community's current needs.

We want to understand how well your needs in the areas of employment, education, transportation, housing, and recreation are met in Milpitas. Please indicate your level of agreement with each statement below.

Figure 1.1: Meeting Current Needs Graphic



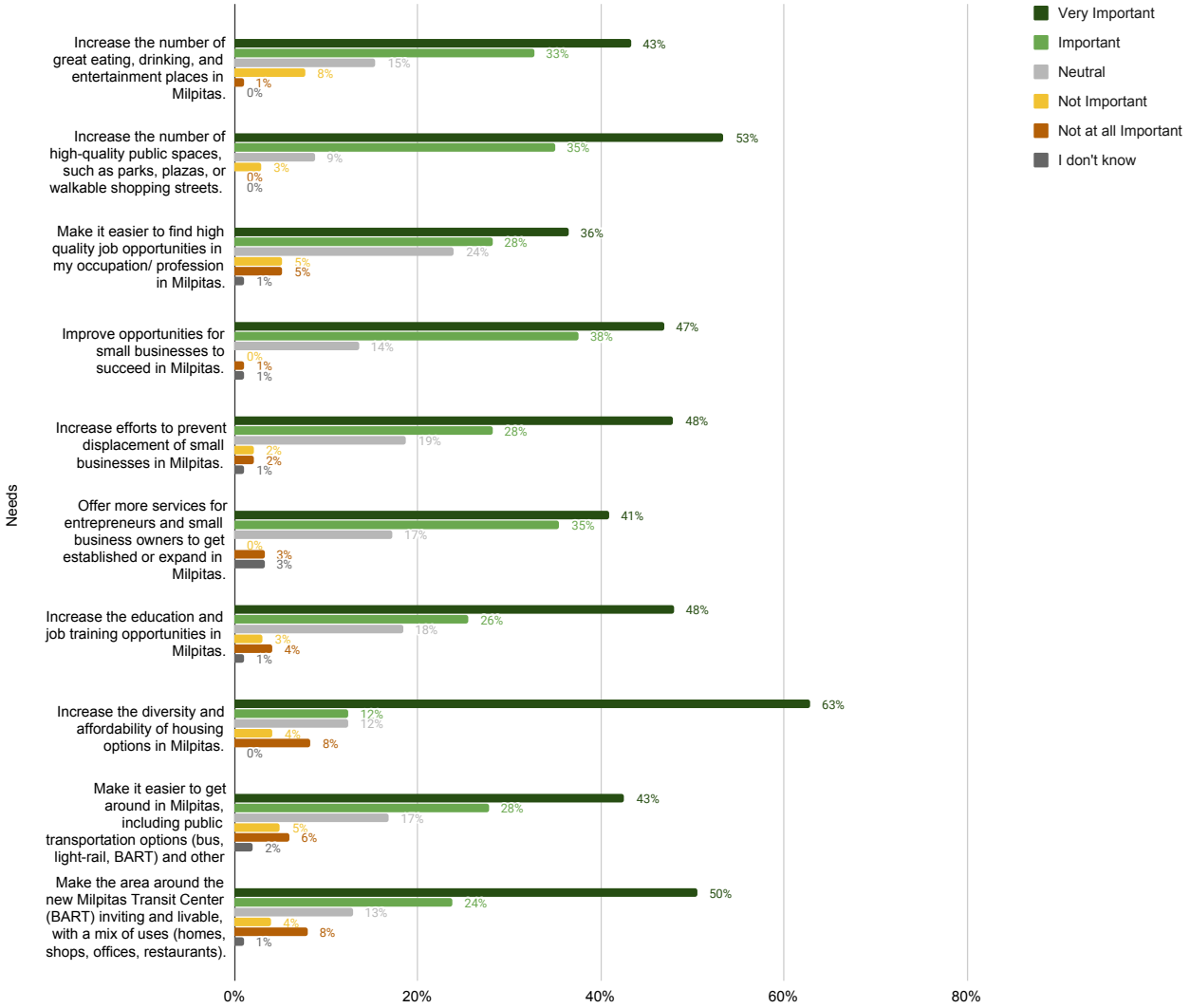
MOST IMPORTANT NEEDS FOR THE FUTURE OF MILPITAS

Participants were also asked to rank on a scale of ***Very Important to Not Important at All,*** the future needs in Milpitas. The future need with the most ***Very Important*** votes was *Increase the diversity and affordability of housing options in Milpitas.* This is consistent with the input received on the Meeting Current Needs question, indicating that housing was an important topic for workshop and survey participants. The need that received the most combined ***Very Important*** and ***Important votes*** combined was *Increase the number of high-quality public spaces, such as parks, plazas, or walkable shopping streets.*

Figure 2.1 depicts the importance of each future need. The following introduction accompanied the question about how well Milpitas is meeting the community's current needs.

Of the needs identified in the previous question, we want to know which are the most important to you. This will inform the priorities set forth in the City's new Economic Development Strategy. Please select how important each action is for you.

Figure 2.1: Future Needs Graphic



ADDITIONAL IDEAS

Through both sources of feedback (in person and online), participants were also asked to share any additional ideas. The most noted topics were Housing and Public Spaces, followed by Amenities and Services, and Expanded Opportunity for Businesses, as represented in the graphic below. Following the graphic are the transcribed notes from the feedback boards, generally organized by topic.

Figure 3.1: Word cloud of the most common Additional Ideas

<u>Transcribed summary of additional ideas, organized by topic.</u>

Aesthetics

- I have been in this area for over 35 years and I don't like the insane ugly building that is going on. I understand that things change and progress must happen but did anyone think about how it would look and feel?
- Find a way to encourage residents to honor the rules about trash totes not being visible from the street except in the 24 hours before and after expected trash pickup.

Amenities / Services

- Better boba shops (x3)
- Cocktail bars and restaurants
- Downtown Bar
- More grocery stores

- Community based mental health resources
- Smaller and more mobility friendly grocery stores
- Make new stores and more near food
- Consider the idea of the PRT.
- Get going on an "American" supermarket near the Transit Center.
- Push for more public parks --- WITH accessible parking. In-lieu fees are NOT the universal solution. The "park" at the Great Mall end of Apex is a joke.
- With all the new buildings around the new BART station there is still no grocery store, congestion is worse and having BART there is not going to lessen it much
- More services at Senior Center
- Would like to see more small restaurants with American Cuisine.
- Not a place to spend an evening out.

Community and Access

- Enhance Downtown Milpitas (x3)
- Enhance Midtown
- Making the city a little more accessible for people to go places, have more cultural events, art & craft festivals to introduce people to entrepreneurs & small businesses.
- Show more of the City's culture
- Improve access to the city

Diversity

- It stifles the community, only bringing in one type of person, and one acceptable way of life. That's not healthy for us a city. We need to make it possible to live here on a wider range of incomes and lifestyles.

Expanding Business/Employment

- Milpitas should focus on being the most Business-Friendly city in California. If Milpitas has that reputation many High-tech companies will want to establish their Headquarters in Milpitas or at least have a major presence in Milpitas.
- Allow businesses to open faster and support expansions, which I have heard Milpitas is decent at, but not great.
- Bring the businesses that can employ those who would like to work closer to home that does not involve restaurants or retail.
- provide more opportunities for setting up businesses.
- More corporations in Cisco Building
- Class A office buildings
- Permit process is slow and unfriendly. There is no sense of support between the building department and small businesses like ours. They just make demands and often contradict each other between fire and building. Very disappointing.
- Expanded Business will, in turn, bring high-paying jobs, and with it, employees with incomes who can afford the high price homes.

Governance

- Milpitas is becoming the 'gateway' into the Silicon Valley.
- Our elected officials need to focus on Better governance

Growth

- Growth for growth sake is ridiculous.
- City is growing too fast
- Milpitas is too crowded
- No additional building in our foothills.

High-Quality Public Space

- More parks but BETTER parks. Make Milpitas more liveable and enjoyable to be in
- While a downtown would be great, I would much rather see some distribution of wealth to the things that impact most of us (affordable housing, larger roadways, and more schools).
- If the city of Milpitas could Get control and take over to; make Main Street Not Industrial but multicultural inviting.
- We do have a lot of parks, however their use is for toddlers to 3rd/4th grade. With the population increase, there is a shortage of parks/ fields for athletics. There's nothing in the increasing population to S Milpitas. We need more fields with lights to accommodate practices/league play.
- Highly paid employees will want high quality public spaces, parks, high quality shopping centers, restaurants, Community theater, walkable shopping streets like Castro Street in Mountain View or Santana Row. It all starts at the TOP with a Business-Friendly City.
- Cultural Venue
- More community gathering space
- Convention/meeting space
- Upgrade parks (remodel)
- Skate parks around Milpitas
- Needed: more greenery and flowers by side of the foot paths
- I have lived in Milpitas for 20 years because it used to be affordable and is still relatively affordable, compared to rest of Silicon Valley. Because of course due to the proximity to jobs around the "golden triangle" (880,101,237). I have tolerated the lack of vision for a liveable city for economic survival. On the weekends, we leave town for other destinations nearby for restaurants, walking, shopping, outdoors. I have watched as countless housing developers have wooed city council to vote against the educated, better judgement of trained City Planning staff and as a result we have ad hoc housing projects tucked all over the city, next to industrial uses and still have no central, community friendly "sense of place" in Milpitas, no downtown. It's just a bedroom community with cheap discount stores. The main street connector project (from library to great mall) had promise but I don't see how we will ever have a downtown Mountain View, or Willow Glen or Los Gatos with all the hodge podge of development that is set back from the street with cars and parking in front .. you need to be bold, provide incentives to property owners to re-develop under appropriate "Mixed uses" (retail, dining, on ground floor, housing above) use eminent domain as needed and for goodness sake put the buildings up next to the (slightly wider) sidewalks and parking behind (or in structures behind) so that people have a reason to walk, see the sites be with others .. Later you can enhance the street with amenities, like lighting, trees & benches. But first you have to envision main street like Santana Row (but it will take another 20 years to make a dent). I will have moved on by then. Good luck Milpitas BTW - BART will be good for commuters going out of area but otherwise not much benefit to City residents. It's still easier to go everywhere by car. Only when gas is $6 or $7 maybe. Otherwise the Transit hub area will be the City's main drain of resources in the future due to housing density and safety concerns due to population passing through. So again, doubt there will be the will, focus or budget to do anything substantial on main street. Milpitas is "no place"

Housing

- Bring rent control to Milpitas, similar to San Jose.

- Milpitas needs significantly more housing and less zoning regulations. Allow development to grow and expand because I need employees. It would be very helpful if they live close to where they work. Overall, don't like fear of growth stop you. We are growing and need to have housing for those coming or those that we currently here, will continue to be forced out and leave. I am 4th generation here and too many of my friends and family have left because cities didn't create enough housing. Don't worry about affordable housing because with enough housing it will be affordable. prices will go down once we build enough.
- Housing costs should be in line with the salaries of those who live in the city or who are looking for an affordable place to live.
- Milpitas is becoming the 'gateway' into the Silicon Valley. Our elected officials need to focus on Access to affordable housing. Only by proactively addressing these issues will Milpitas be able to lay a foundation for continued success as this unique region and economy continue to grow.
- Honestly, I think housing prices are the biggest problem; everyone who is not a) directly working for a major tech company and b) living with others who are c) also working with the major tech companies can't even hope to establish themselves here.
- City is ruining small suburban town by trying to be a big city with high density housing.
- No more high-density housing.
- The cost of housing is out of control.
- Affordable housing #1 priority in Milpitas
- Need Affordable housing
- Milpitas is getting crowded. We don't need any more apartments.
- Too many apartments
- Apartment or housing for low income families
- We don't need more apartments. They're way too expensive anyways. Too much construction.
- Less crowded apartments, spread them out more

Identity

- Needed: Branding through art, threading through city pulling it together
- Make Milpitas not known for trash/how smelly we are but more food places to decorate the city more.
- There is no theme to Milpitas. The area around BART and Great Mall is a hodge-podge. Crowded and unattractive.
- I think of Milpitas as a "commuter" city, where many people live but understand they must venture out to find a nice downtown to stroll through.
- This should be a small, suburban town

Maintenance

- Our infrastructure (schools and roads particularly) need to better match the increased housing development before increasing the burden on roads by adding more businesses.
- Clearing weeds and litter around the roadways would also be nice. Thank you!

Mobility

- Need safer sidewalks (x2)
- Pedestrian/bike bridge at E Curtner Ave to Yosemite Dr over the train tracks
- More transit to community colleges because high school students need transit for summer classes

Outreach

- Seniors and older adults seem to be neglected in your econ development program, yet they are the ones with disposable income. they have limited investment opportunities here so they just send money offshore

- Project Website
- City Homepage/ EDS

Parking

- You will never get lots of people shopping here unless you include parking
- Parking issue at major destinations

Safety

- In residential neighborhoods, increase the number of speed limit signs to remind "cowboys" to limit to 25 mph.
- Milpitas is becoming the 'gateway' into the Silicon Valley.
- Our elected officials need to focus on Public safety
- How can city of Milpitas make the residents feel safe

Students/Education

- Students do not get much sleep, not to mention the early wakeup for school, would recommend changing the school hours from 8-3pm to 10-5pm
- If students take the same class but with a different teacher, the classes should have the same difficulty.

Traffic

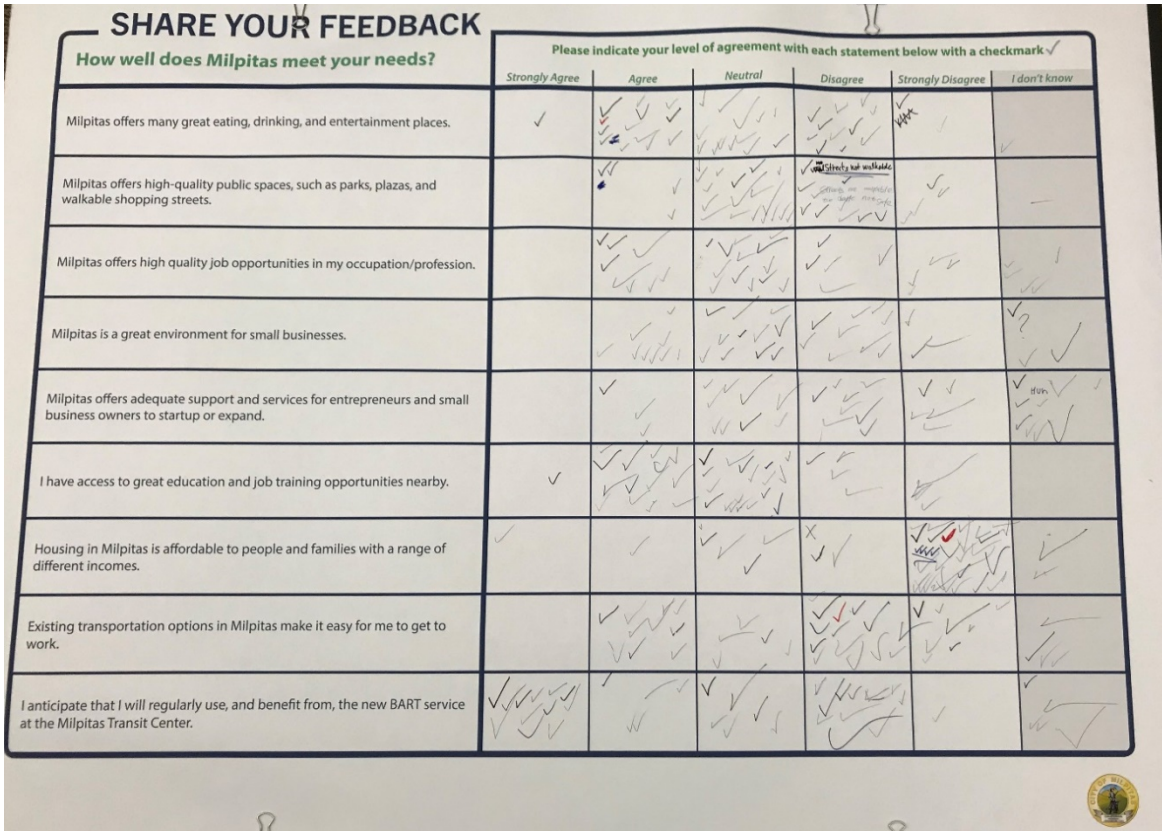
- Better control of traffic for us residents.
- We must do something about the traffic issues and unsafe streets, such as those surrounding Spangler school. The intersection on Calaveras and Abbott is like getting through the game Frogger.
- Stop building until you can fix the traffic and cut down on crime. Make Milpitas a nice city to live in again.
- Improve traffic flow
- Too much traffic and more coming
- Improve the north/south traffic flow during commute hours, when the whole World seems to be pouring through the east/west roadways.

Transit

- People will be driving to BART. parking in the new buildings is not adequate
- Need a really cheap shuttle service to transport commuters from the new BART station to major employment zones.

APPENDIX

The following are pictures of the feedback boards and from the workshop.

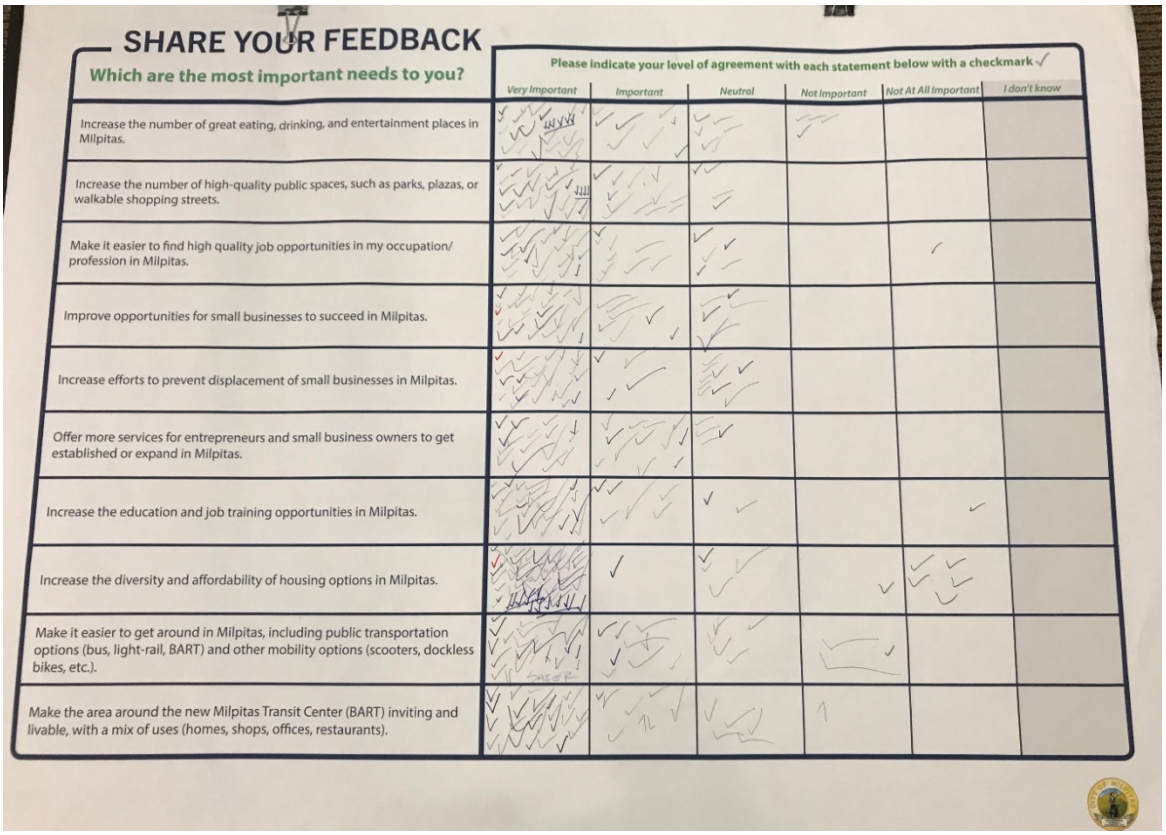


SHARE YOUR FEEDBACK

How well does Milpitas meet your needs?

Please indicate your level of agreement with each statement below with a checkmark ✓

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	I don't know
Milpitas offers many great eating, drinking, and entertainment places.	✓	✓		✓	✓	
Milpitas offers high-quality public spaces, such as parks, plazas, and walkable shopping streets.		✓		✓ Streets not walkable	✓	
Milpitas offers high quality job opportunities in my occupation/profession.		✓	✓	✓	✓	✓
Milpitas is a great environment for small businesses.		✓	✓	✓	✓	✓ ?
Milpitas offers adequate support and services for entrepreneurs and small business owners to startup or expand.		✓	✓	✓	✓	✓ ?
I have access to great education and job training opportunities nearby.	✓	✓	✓	✓	✓	
Housing in Milpitas is affordable to people and families with a range of different incomes.	✓	✓	✓	✓	✓	✓
Existing transportation options in Milpitas make it easy for me to get to work.		✓	✓	✓	✓	✓
I anticipate that I will regularly use, and benefit from, the new BART service at the Milpitas Transit Center.	✓	✓	✓	✓	✓	✓

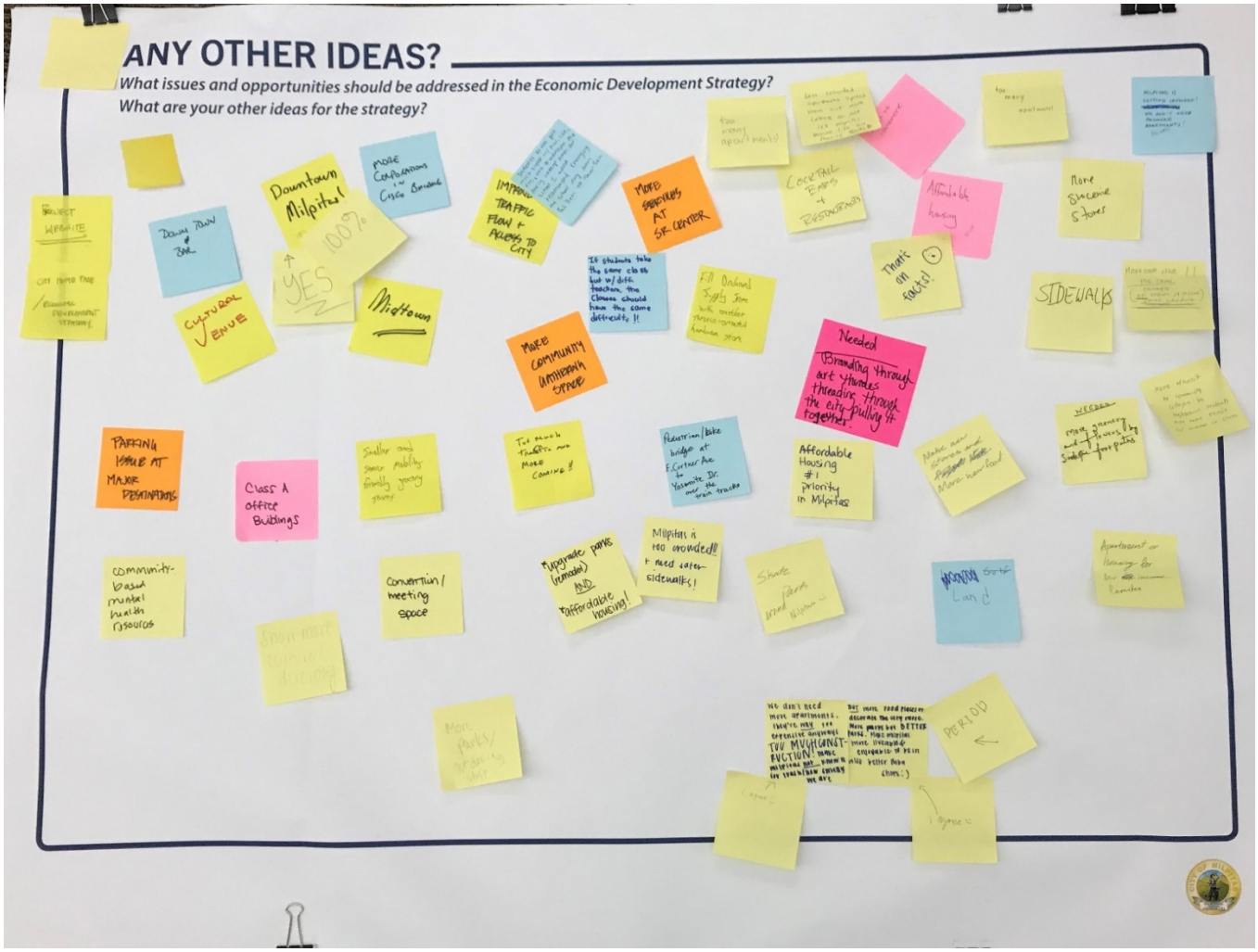


SHARE YOUR FEEDBACK

Which are the most important needs to you?

Please indicate your level of agreement with each statement below with a checkmark ✓

	Very Important	Important	Neutral	Not Important	Not At All Important	I don't know
Increase the number of great eating, drinking, and entertainment places in Milpitas.	✓	✓	✓	✓		
Increase the number of high-quality public spaces, such as parks, plazas, or walkable shopping streets.	✓	✓	✓			
Make it easier to find high quality job opportunities in my occupation/ profession in Milpitas.	✓	✓	✓		✓	
Improve opportunities for small businesses to succeed in Milpitas.	✓	✓	✓			
Increase efforts to prevent displacement of small businesses in Milpitas.	✓	✓	✓			
Offer more services for entrepreneurs and small business owners to get established or expand in Milpitas.	✓	✓	✓			
Increase the education and job training opportunities in Milpitas.	✓	✓	✓		✓	
Increase the diversity and affordability of housing options in Milpitas.	✓	✓	✓	✓	✓	
Make it easier to get around in Milpitas, including public transportation options (bus, light-rail, BART) and other mobility options (scooters, dockless bikes, etc.).	✓	✓		✓		
Make the area around the new Milpitas Transit Center (BART) inviting and livable, with a mix of uses (homes, shops, offices, restaurants).	✓	✓	✓	1		


ANY OTHER IDEAS?
What issues and opportunities should be addressed in the Economic Development Strategy?
What are your other ideas for the strategy?
Downtown Milpitas!
YES
100%
Midtown
CULTURAL VENUE
MORE COMMUNITY GATHERING SPACE
Needed
Branding through art threaded through the city pulling it together.
SIDEWALKS
Affordable Housing #1 priority in Milpitas
Class A office Buildings
community-based mental health resources
Conv/tion/ meeting space
typewater parks (remodel) AND Affordable housing!
Milpitas is too crowded!! + need safer sidewalks!
PERIOD






CITY OF MILPITAS
AGENDA REPORT
(AR)

Item Title:	**Receive report on the Community Identification and Brand Study (Phase I) and provide direction to staff on scope and implementation of the Study (Phase II)**
Category:	Community Development
Meeting Date:	5/5/2020
Staff Contact:	**Ashwini Kantak, Assistant City Manager, 408-586-3053**
Recommendations:	1. Receive report on the Community Identification and Brand Study (Phase I). 2. Provide direction to staff on scope and implementation of the Community Identification and Brand Study (Phase II).

Background:

Milpitas has been experiencing tremendous growth and, according to the US Census, was recently ranked the 2nd fastest growing city in the state and the 8th fastest growing city in the nation. With this fast pace of growth come significant changes in demographics as the City welcomes new members to the community while nurturing those who have resided here for decades. With a diverse resident population of more than 80,000 and a total service population of approximately 127,000, Milpitas prides itself on accomplishing the community's vision of preserving a close-knit community and rich cultural diversity as it moves with innovation into the future.

Milpitas has been recognized as one of the top 10 Best Cities for Science, Technology, Engineering and Mathematics (STEM) Workers, with roughly 28% of jobs in the city falling into the STEM category. Additionally, Milpitas was ranked for the 3rd highest job growth among 515 qualifying cities by Wallet Hub.

Milpitas has always been well connected to the San Francisco Bay Area with its ideal location between two major freeways (I-880 and I-680), State Route 237, and a County expressway and including a bus and light rail network. With the imminent opening of the BART extension and Milpitas Transit Center in 2020, the City is poised to attract more jobs and accommodate over 7,000 new housing units.

This transformational time in the City's history will be reflected in several visioning and strategic efforts underway such as a new Economic Development Strategy, a Recreation and Parks Master Plan, a Trail, Bike, and Pedestrian Master Plan, and major updates to the City's General Plan, Transit Area Specific Plan, and Mid-Town Specific Plan. With these long-term planning efforts and place-making initiatives underway, it is timely to modernize and strengthen the City's brand.

Analysis:

In 2019, the City engaged the firm Articulate Solutions to conduct a Community Identification and Brand Study. The purpose of this Study was to understand the unique attributes and impressions of the City as seen through the lens of various groups during this time of transformation and to develop a strong and modernized brand to attract economic development, guide placemaking in the City, and complement several other long-term planning initiatives and their implementation.

The scope of this Study was developed to be accomplished in multiple Phases - Phase I included a needs assessment, historical research, current identity marks, brand assets, community engagement, and findings about the City's unique attributes. Phase II, if directed to proceed, will develop brand collateral for wayfinding, placemaking, and economic development, based on the input received during Phase I. Phase II will als

include work related to the City's website to make the content more accessible and user friendly and to align with the new brand.

Phase I

The consultant began work on the Study in 2019 and participated in a tour of Milpitas and researched the history of Milpitas. The consultant also engaged various stakeholders and target audiences through focus group discussions, online surveys, and community meetings. Stakeholders were broadly categorized in the following groups:

1. Internal: Planning Commission, City Council, Commissions, other departments within City, City employees
2. Residents
3. Businesses and non-profit groups currently based in Milpitas
4. Developers, real estate brokers, and contractors looking to build in Milpitas
5. Other Milpitas community partners (e.g. Chamber of Commerce, School District)
6. Other cities and regional partners (e.g. Fremont, San Jose)

There were a few key themes that rose to the top.

1. **Diversity** was a theme that came up repeatedly in conversations and was the top word used to reflect Milpitas. The City of Milpitas includes a diverse mix of races, cultures, ages, and backgrounds. While that in itself is not unusual in the Bay Area, it became clear that in Milpitas these different groups are not separated into "silos"; rather, they all live, work, and recreate together. This spirit of integration and inclusiveness has been part of this community since its earliest days.

2. Milpitas is also a very **Friendly** community; this was something the consultant noted that they experienced first-hand in all of their stakeholder interviews, meetings, and other interactions. The people of Milpitas were very friendly, down-to-earth, and welcoming. They acknowledged that the city has opportunities for improvement but are genuinely excited to share the good things that are experienced here.

3. Another key aspect of Milpitas is that it has always been a **Crossroads.** Main Street was once the main connecting road between Oakland and San Jose. The City is now located between two major freeways (680 and 880) and between two major cities (San Jose and Fremont) in the heart of Silicon Valley. And, the BART extension to Milpitas will provide a vital new connection between the South Bay, San Francisco, and East Bay. Milpitas is a place where people literally and figuratively come together.

In addition to these three top themes, the consultant also heard from the stakeholders that this is an exciting time of opportunity for Milpitas and that the history of the origins of the City is strongly woven into its fabric. Other top archetypes for the City were compassionate, wholesome, and progressive.

Other unique attributes and key assets of the City that were identified included: restaurants, shopping at the Great Mall, undeveloped hillsides, parks and open spaces, golf courses, good schools, and fun activities for families.

Phase I was completed in February 2020, prior to the start of the COVID-19 pandemic and thus does not address any potential changes to the City's economy or growth outlook. The study findings are being presented to the City Council, in conjunction with the Economic Development Strategy as the two are closely linked and the Study supports several of the strategies recommended in the Economic Development Strategy. Due to the inherent connection between the two, a combined community workshop for the Economic Development Strategy and Community Identification and Brand Study was held on October 24, 2019.

Connection to Economic Development Strategy and other Long-Term Planning Initiatives

The stakeholder input for the proposed Economic Development Strategy indicates an area of challenge is due to the lack of a strong Milpitas brand. The proposed Economic Development strategy also includes a sp

strategy (Strategy 34) that describes the need for consistent modern branding based on the City's goals for business attraction and retention. Other strong linkages include promoting the City's diverse restaurants and retail businesses, placemaking, and attraction of high-tech companies through a demonstration partnership policy. Connecting all of these strategies would benefit immensely in creating a strong and recognizable brand.

Updates to the City's General Plan and Transit Area Specific Plan (TASP) are currently underway, and the Council has given direction to staff on a new strategic focus for updating the Midtown Specific Plan. These efforts include renaming the TASP to "Milpitas Metro Specific Plan" and the Midtown Specific Plan to the "Milpitas Gateway/Main Street Specific Plan". A citywide branding program will provide guidance and direction in developing a unified theme that ties these areas to the larger city while strengthening the unique qualities and characteristics of each neighborhood. Development regulations and design guidelines included in each plan will create a distinct sense of place through the physical design of buildings and public infrastructure as well as other placemaking elements such as landscaping, signage, and public gathering areas. The careful and deliberate design and placement of branding elements, both strong and subtle, will connect residents to their community and help generate a strong sense of community pride and identity.

Thus, leveraging our strengths as a friendly, diverse, safe city, which is well connected to the rest of the Bay Area, will help Milpitas build a strong brand that will not only complement our economic development efforts but also our General Plan build out, placemaking, and the City's overall vision for the future.

Next Steps

The focus of Phase II will be to formalize touchpoints and align the City of Milpitas brand to support the City's General Plan, drive economic development (business attraction and retention), and boost community affiliation/engagement. Specific projects are still to be determined, but several opportunity areas are outlined below. Based on Council input and after the COVID-19 emergency has ended, staff will work with the consultant to finalize the Phase II scope of work.

1. Develop a unique identification (logo) mark that can be used in addition to the official City Seal to drive brand awareness/place identification; create a comprehensive communications template and style guide with guidelines and design templates for applying brand to all City communications tools, to drive consistency, awareness and influence;
2. Refresh the City website design to align with updated brand
3. Develop gateway and wayfinding signage to reinforce the new brand, drive a sense of place and affiliation; and
4. Identify other potential projects as needed in alignment with economic development.

Based on preliminary scope, Phase II is anticipated to take 6-12 months. Using this time, as economic activity is expected to be in early recovery, to develop a strong and modern brand will allow the City to be well positioned for the future as several projects underway come online, the Milpitas Transit Center has been operational for a few months, and the City is facilitating economic recovery in Milpitas.

Policy Alternative:

Alternative 1: Do not Proceed with Phase II of the Community Identification and Brand Study after the COVID-19 emergency has ended.

Pros: In this time of fiscal uncertainty, the City could divert approximately $60,000 for other purposes.

Cons: This would delay the development of a strong and modern brand to attract economic development and compliment local economic recovery, and support placemaking and several long-term planning initiatives.

Reason not recommended: Despite the current fiscal climate and uncertainty because of COVID-19, initiating Phase II of the Study is timely since it is linked to the success of many other important long-term efforts. The consultant costs for Phase II have already been budgeted and encumbered. Using the next several months, as economic activity is expected to be in early recovery, to develop a strong and modern brand will allow th

to be well positioned for the future as the development projects are complete, BART is operational, and the City facilitates local economic recovery.

Fiscal Impact:
There are no additional consultant costs for Phase II since these have already been factored into the current contract. Phase II consultant costs are estimated to be approximately $60,000 and actual costs will depend on approved scope.

California Environmental Quality Act:
This action does not qualify as a "Project" under the California Environmental Quality Act (CEQA) Guidelines Section 15378 as this action has no potential to result in either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment.

Recommendations:
1. Receive report on the Community Identification and Brand Study (Phase I).
2. Provide direction to staff on scope and implementation of the Community Identification and Brand Study (Phase II).

Attachment:
Community Identification and Brand Study (Phase I)

CITY OF MILPITAS

Community Identification and Brand Study

FEBRUARY 18, 2020

1183

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A CREATIVE SERVICES AGENCY

Articulate Solutions, Inc.
P 408.842.2275 F 408.852.0384
65 Fifth Street STE 100 Gilroy CA 95020
articulate-solutions.com

City of Milpitas
Community Identification and Brand Study

February 18, 2020

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65 Fifth Street STE 100 Gilroy CA 95020
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EXECUTIVE SUMMARY

A strong City brand, like a product or company brand, helps to increase awareness and positive perception—which can in turn stimulate investment and growth. A successful municipal brand can also build community pride and attract more people to live, work, and play. Branding provides a simple and direct way to establish a community's unique identity and promote its vision, values and voice to the general public.

In 2019 and 2020, the City of Milpitas engaged the Articulate Solutions creative team to conduct an in-depth Community Identification and Brand Study to build a strong understanding of the history, key attributes, and core values of the City of Milpitas.

Articulate Solutions conducted a series of stakeholder interviews with small groups of city leaders representing different departments within the City of Milpitas, took a guided tour of Milpitas, and conducted additional research into books and articles about Milpitas, its history, and its recent growth. The Community Identification and Brand Study also includes input from online surveys of community residents and business owners and a community meeting. Articulate Solutions also conducted additional research into existing brand usage and other city brands to use as reference.

KEY TAKEAWAYS

Reflecting on all the research that has been done, the Articulate Solutions team came away with five key insights about the Milpitas community that will inform the creative work in the next phase.

1. **Diversity** was a theme that came up again and again in our conversations and was the top word selected to reflect Milpitas. The City of Milpitas includes a diverse mix of races, cultures, ages, and backgrounds. While that in itself is not unusual in the Bay Area, we learned that in Milpitas these different groups are not separated into "silos"; rather, they all live, work, and play together. This spirit of integration and inclusiveness has been part of this community since its earliest days.

2. Milpitas is also a very **Friendly** community (the #2 brand archetype vote-getter); this was something we experienced first-hand in all of our stakeholder interviews, meetings, and other interactions. The people of Milpitas are very friendly, down-to-earth, and welcoming. They acknowledge that the city has some opportunities for improvement but are genuinely excited to share the good things that are going on here.

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3. Another key aspect of Milpitas is that it has always been a **crossroads**. Main Street was once the main connecting road between Oakland and San Jose. The City now sits between two major freeways (680 and 880) and between two major cities (San Jose and Fremont) in the heart of Silicon Valley. And the BART extension to Milpitas will provide a vital new connection between the South Bay, San Francisco, and East Bay. Milpitas is a place where people literally and figuratively come together.

4. Although not many people chose “Exciting” as a word to describe Milpitas, this IS a very **exciting time** for the City and the entire community. The strong tech economy and new BART extension and transit village are spurring new housing, job growth, and business development. With so much upcoming change, this is the perfect time for Milpitas to establish a unique brand identity that will help provide a sense of continuity moving forward.

5. We learned a lot about the **history** of Milpitas and understand the need to be respectful of certain historic symbols (like the Minuteman and corn fields) that are important to some longtime members of the community but may not resonate as well with people who have moved here more recently. While it will be difficult to please everyone, we should be sensitive to these cultural touchstones.

The complete Community Identification and Brand Study results are summarized in the pages that follow.

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STAKEHOLDER MEETINGS

On February 28, 2019, Ned Thomas, Planning Director, served as an unofficial "tour guide" as he took Katherine Filice, Jason Raby, Julie Jackson, and Jenny Arellano from Articulate Solutions on a driving tour around Milpitas. This informal tour gave the Articulate Solutions team a good overview of the city's geography, key landmarks, existing signage, and history.

Following the tour, the Articulate Solutions team was introduced to members of the City's Communications Group at their regular monthly meeting. At that meeting, Katherine Filice explained the goals of a Community Identification and Brand Study and how the process would work.

Four different stakeholder interview sessions with small groups of City of Milpitas leaders were held on May 9, May 23, and May 24, 2019 at City Hall in Milpitas. Attendees were as follows:

- Alex Andrade: Economic Development Director
- Liz Brown: Interim Director of Human Resources
- Jane Corpus: Assistant Director of Finance
- Armando Corpuz: Police Chief
- Ned Thomas: Planning Director
- Steve Erickson: Engineering Director/City Engineer
- Sharon Goei, Director of Building and Housing
- Ashwini Kantak: Assistant City Manager
- Mary Lavelle: City Clerk
- Renee Lorentzen, Recreation Services Manager
- Mike Luu, Information Services Director
- Steven McHarris: Deputy City Manager (now City Manager)
- Tony Ndah, Deputy Public Works Director
- Brian Sherrard, Fire Chief
- Jennifer Yamaguma: Public Information Officer

These meetings were informal, friendly and conversational. Articulate Solutions posed a few general questions, but the goal was just to have an open discussion about the key attributes of the City and community of Milpitas. The topics that were discussed are summarized below.

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TARGET AUDIENCES

Different departments within the City of Milpitas interact with different segments of the population and thus have very different target audiences. Some of them (like Recreation) may deal directly with residents and the general public, while others (like Engineering) work mostly with developers and contractors.

Across the different meetings, these target audiences could be grouped into the following general categories:

- Residents (with families being a special point of focus for current Mayor)
- Businesses and non-profit groups currently based in Milpitas
- Developers, real estate brokers, and contractors looking to build in Milpitas
- Internal: Planning Commission, City Council, Commissions, other departments within City, City employees
- Other Milpitas agencies (e.g. Chamber of Commerce, School District)
- Other cities and regional partners (e.g. Fremont, San Jose)

UNIQUE ATTRIBUTES

In each discussion, we asked participants to share their own ideas about what makes Milpitas special and unique. Although we received a wide variety of answers, the following were the most common responses:

- Ethnically and culturally diverse population
- Convenient central location (close to jobs throughout Silicon Valley)
- Lower costs than neighboring cities
- Connectivity (freeways, BART, light rail)
- Public safety
- Multigenerational connections (families living together)
- Fewer economic and ethnic boundaries (compared to other local communities)
- Compact size (not too big or too small)
- Outstanding levels of service from City

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KEY SELLING POINTS

Related to the previous question, we also asked stakeholders to share some specific things that people like most about living and working in Milpitas. Responses included:

- Restaurants
- Shopping (especially Great Mall)
- Undeveloped hillsides
- Parks and open spaces
- Golf courses
- Good schools
- Fun activities for families (e.g. Big Al's)

HISTORY

Stakeholders also provided some insight into Milpitas' history and significant events that shaped the City's development, including:

- Two original adobe buildings have been maintained and preserved.
- Main Street used to be the main connecting road between Oakland and San Jose.
- "The Corner" (Serra/Main) used to be the main crossroads in the region.
- Ford Plant moved to Milpitas in 1954, spurring job growth and housing development.
- Milpitas "Minutemen" resisted being annexed into San Jose and maintained independence in 1961. The Minuteman is featured on the City Seal and the statue in front of City Hall but is a somewhat controversial symbol.
- Great Mall built in former Ford factory building (1994).
- Diverse groups of immigrants have called Milpitas home over the years.

LOOKING TO THE FUTURE

We asked participants to share their hopes and visions for both the short-term and long-term future for Milpitas. They shared a variety of responses, including:

- New Transit Hub (opened December 2019) and BART station (scheduled for 2020)
- Add even more transit-oriented housing (7,000 units to be available soon)
- Work more collaboratively as a regional partner (with San Jose, Fremont, and rest of Silicon Valley and Bay Area)
- Keep housing affordable
- Become a more tech-oriented city with increased automation

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65 Fifth Street STE 100 Gilroy CA 95020
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- Make more data-driven decisions
- Maintain consistent levels of outstanding service
- Continue to welcome and celebrate diversity
- Eliminate odor issues
- Communicate more with community

BRAND ARCHETYPES

At the end of each session, we gave stakeholders a printed list of about 80 different words and asked them to mark the ones they felt best described the City of Milpitas.

The top two vote-getters by a fairly wide margin were “Diverse” and “Friendly.” The next three were “Compassionate,” “Wholesome,” and “Progressive.”

These archetypes will help guide the development of the City of Milpitas branding materials.

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65 Fifth Street STE 100 Gilroy CA 95020
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COMMUNITY SURVEYS

January 2019 Community Survey

The City of Milpitas and FM3 Research conducted a community-wide survey in January 2019. This survey focused on City government and services but also included some general insights about the community that are valuable to this Community Identification and Brand Study. Some of the key findings from this January survey are summarized below.

- In general, respondents were positive about living in Milpitas. 74% rated the Quality of Life in Milpitas as "Good" or "Excellent." 83% say they are proud to live in Milpitas and that it is a great place to raise a family.
- Diversity is highly valued. 85% agree that different cultures are celebrated in Milpitas, and 83% say Milpitas' diversity is an asset to the City.
- Words and phrases that over 80% of respondents think best describe Milpitas include the following:
    - You can be yourself (91%)
    - Safe (87%)
    - Accepting (83%)
    - Growing (83%)
    - Diverse (82%)
    - Good place to live, play and work (81%)
    - Great location (81%)
- When asked which forms of communication they were most likely to pay attention to, respondents prioritized:
    - Information from friend or neighbor (89%)
    - E-newsletter from City (85%)
    - Text from City (82%)
    - Community event (81%)
    - Website publicized to local residents (81%)
- The forms of communication that were *lowest* ranked were:
    - Ad in newspaper (51%)
    - Nextdoor post (53%)
    - Facebook post (58%)
    - Radio ad (61%)
- 83% of respondents conducted the survey in English; 7% in Spanish; 5% in Vietnamese; 5% in Chinese.

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July 2019 Resident and Business Surveys

Articulate Solutions developed very brief online surveys that were posted through OpenTownHall in July 2019. Only 42 total responses were received, which may reflect "survey fatigue" after the larger-scale community survey had already been conducted in January.

Insights from the survey results include:

- What people love most about living in Milpitas (more than one response allowed):
  - Central location (56%)
  - Safe neighborhoods (56%)
  - Parks and open spaces (46%)
  - Cultural diversity (39%)
- Words that best describe the Milpitas community:
  - Diverse (59%)
  - Safe (49%)
  - Welcoming (37%)
  - Growing (34%)
- Milpitas' cultural diversity and small-town feel were recurring themes in the open-ended responses to "What makes Milpitas a unique and special place to live, work and play?" Some of these responses included:
  - Milpitas still has a small town feel to it.
  - People, hardworking mindset, family friendly
  - Milpitas has strong ethics and tries to maintain its small-town vibes while being at the heart of Silicon Valley's busy lifestyle
  - Small size, exciting mix of events, engaged police force, a bunch of activities for kids, great library and schools that are improving every year
  - Nice place to raise kids with very good schools. Safe and friendly neighborhoods.
  - Milpitas has created opportunities for me to work, own a home and raise a family. The fact that Milpitas is a tight-knit community has afforded me the ability to network and connect with community members, public and government officials who know remember your name. If I were to go to any other city, I will not see the same type of respect and community feeling. When people connect in Milpitas, there is nothing but respect given like that of family.
  - The relationship between the community and our police / fire responders. Public Safety truly cares about us and makes genuine efforts to get to know us. They continue to offer other services that other cities do not. Also, Milpitas is diverse but the community is not segregated like many other diverse cities.

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- It's a great small city in the middle of everything. We have lots of good restaurants and great shops.
- Small town with all the amenities of big city. Safe environment, diverse population and welcoming citizens. Lots of employers.
- Milpitas has been a great place to raise a family in Silicon Valley. We appreciate the diversity and the welcoming feel of this place. We have nice parks and beautiful hills.
- I've lived in Milpitas for almost 72 years. I'm glad to see there are many types of employment. At my age, I'm glad I can still hike and go to the movies. The sports center also has something for everyone to improve their health and make new friends at the same time.
- Lots of free parks, close to Silicon Valley, good shopping and dining options
- Closeness to the nature and natural environment
- Milpitas's best feature is its location. We've great county and city parks and diverse and growing community.
- Booming area with great middle class. Lots of kids and families. Need to remove the landfill then it's perfect!
- I love my tiny town. Yes, I call Milpitas my tiny town. It feels like a small town with all the unique restaurants and civic buildings in the heart of the town. Within a 10 minute drive from the Bay Trails, or the sprawling farms just up Calaveras Blvd, it hardly feels like Silicon Valley. The various small parks within neighborhoods gives the city a sedated vibe. The part that I love most about my tiny town is the cultural diversity. In the summer time, when I come home from work and see neighborhood kids play kickball, with parents chatting with each other on the park benches, I smile; because it looks like the United Nations.

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P 408.842.2275 F 408.852.0384
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October 2019 Community Meeting

To gather more feedback directly from community members, Articulate Solutions set up a table at the Economic Development Strategy Community Workshop on October 24, 2019. Approximately 30 residents attended for the meeting, and some of those stopped by to fill out surveys and write post-it notes about what they think makes Milpitas special.

Some insights gained from this event included:

- Survey responses were similar to the online survey results, with “Friendly” and “Diverse” being the words most often chosen to describe Milpitas.
- The Sunnyhills housing development, built in 1950s as one of America’s first racially integrated housing communities, remains a symbol of how Milpitas has always been diverse, yet integrated.
- One lifelong resident said he “loves” the Minuteman as a symbol of Milpitas.
- A visitor who is originally from Mexico said she loved the name "Milpitas" because it made her think of gardens, orchards, crops, etc. She translates it as "little corn fields" and says for her it evokes "the land of the corn," which is very important in Mexican culture.
- One member of the Arts Commission, however, strongly dislikes using corn as a symbol of the city and would like to see more public art throughout the City.
- One person said, “Milpitas doesn’t have a personality yet.”
- One person praised Milpitas for “its diversity and its willingness to accept a multitude of changes brought about by BART and current economic challenges.”

Attending this workshop was also beneficial to the Articulate Solutions team, as we got to learn more about the City of Milpitas’s economic development goals and strategy. The timing of this Community Identification and Branding Study seems to align well with the City’s overall plans. Establishing a well-defined brand and using it consistently will help project a more credible image, which can help attract, retain and expand business opportunities in Milpitas.

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ADDITIONAL RESEARCH

BOOKS, ARTICLES, VIDEO

To broaden our knowledge about the history of Milpitas, members of the Articulate Solutions team read the book *Images of America: Milpitas*, reviewed various websites about Milpitas, and watched a video ("Calling Milpitas Home") that was prepared for the City's 60th anniversary in 2014.

Some key learnings from these resources include:

- Various translations of "Milpitas" include: "A thousand gardens," "Land of a thousand flowers," "Little cornfields"
- Natural resources have always been important: agriculture, grass-carpeted hills, native oak trees
- Milpitas has been a "crossroads" throughout history: between Mission San Jose and Mission Santa Clara; from San Francisco to gold country; 880/680/237 freeways connecting East Bay Area to San Jose
- Important buildings and landmarks include: original adobe buildings; American elms; O'Toole estate/Elmwood Jail; Milpitas Grammar School (now library); Main Street, Ed Levin Park
- Important historical events: train (1869); Ford plant (1953); incorporation as City (1954); rejection of annexation by San Jose (1961); 680 freeway (1975); Great Mall (1994)
- Ethnic and cultural diversity has always been a characteristic of Milpitas that is highly valued by residents

Articulate Solutions also reviewed recent articles about Milpitas, the City's economic development, and updates to the General Plan published in *Silicon Valley Business Journal* in 2019.

Based on these articles, some important areas of focus for the City of Milpitas include:

- Promoting health and wellness (walking and biking, healthy food, safe neighborhoods, etc.)
- Creating a distinct sense of place
- Attracting high quality jobs and businesses (esp. STEM, advanced manufacturing)
- Pursuing transit-oriented development opportunities (at and around new BART station)
- Encouraging adaptive reuse (e.g. Ford Plant → Great Mall) to build on strengths while looking to future
- Embracing entrepreneurship and creativity ("Invest – Innovate – Inspire")

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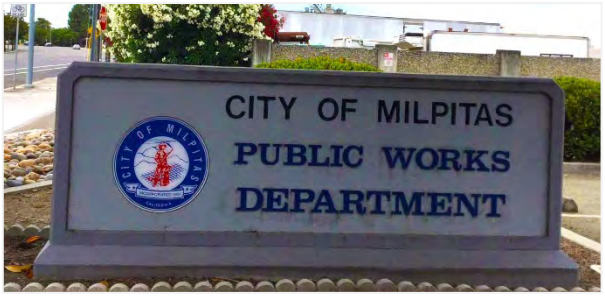
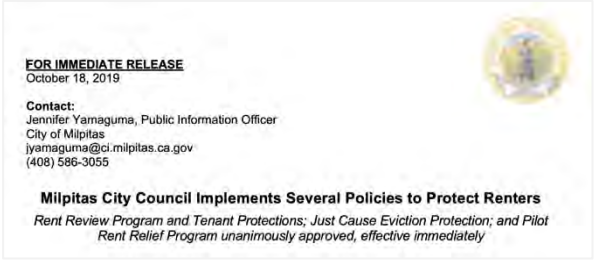
EXISTING BRAND USE

The official seal of the City of Milpitas is a circular mark that features symbol of a Minuteman holding a musket, his hand resting on a plow, against a background of the Milpitas foothills and an agricultural field. A banner includes the City's incorporation date of January 26, 1954. The symbolism evokes both the City's independent spirit and its agricultural heritage.

The City does have a basic style guide that was established in a Branding Proposal from November 2015. This guide includes recommended font (Verdana), color palette (including Blue, Yellow, and Light Blue) and templates for official letterhead, business cards, email signatures, and presentations. However, several stakeholders stated that these guidelines are only loosely followed. The images below show the city seal being used in a variety of applications.





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The following are some other logo marks used by various city agencies, community groups, schools and businesses in Milpitas:

MILPITAS CHAMBER OF COMMERCE
THE GATEWAY TO SILICON VALLEY

MILPITAS RECREATION AND COMMUNITY SERVICES


MILPITAS
General Plan Update

MILPITAS TROJANS

MILPITAS 1954 CALIFORNIA POLICE

ROTARY
MILPITAS ROTARY CLUB

The Milpitas Beat

Milpitas
Silicon Valley
...life @ your pace

Milpitas Sanitation

MILPITAS
UNIFIED SCHOOL DISTRICT

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65 Fifth Street STE 100 Gilroy CA 95020
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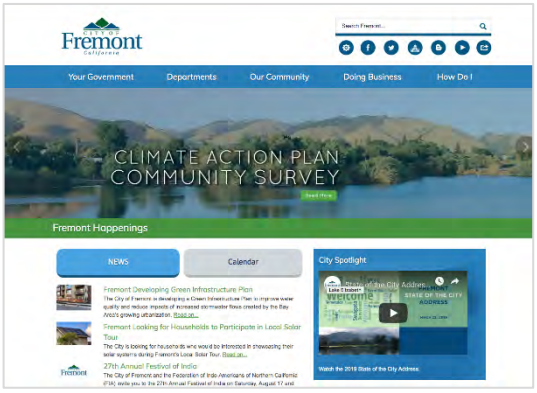
OTHER SILICON VALLEY CITY BRANDS

For reference and inspiration, Articulate Solutions researched the logo marks, website home pages and taglines for other cities and communities in the Silicon Valley and Bay Area. Note that many cities have both a logo mark in addition to the “official” city seal.

City of Cupertino

City of Fremont



City of Gilroy

“A Community with a Spice for Life”

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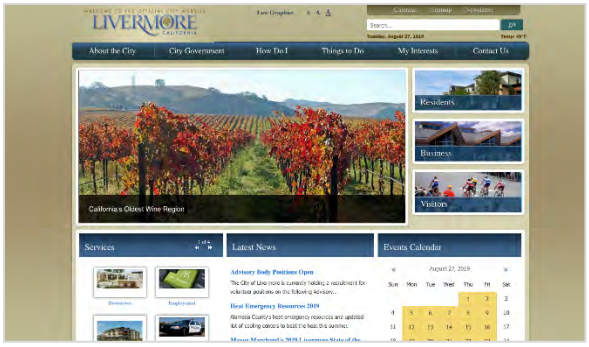
City of Livermore

"The Gateway to the Central Valley"



City of Mountain View

City of Palo Alto

"Birthplace of the Silicon Valley"

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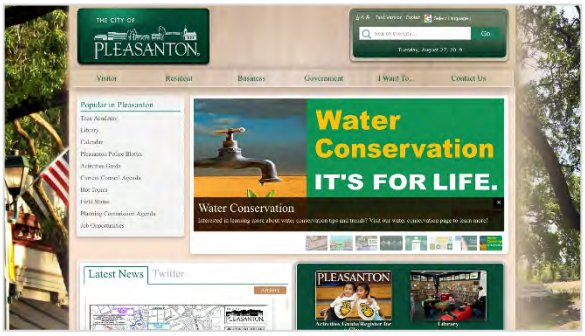
City of Pleasanton

"It's all the name implies."



Redwood City

"Climate Best by Government Test"

City of San Jose

"Capital of Silicon Valley"

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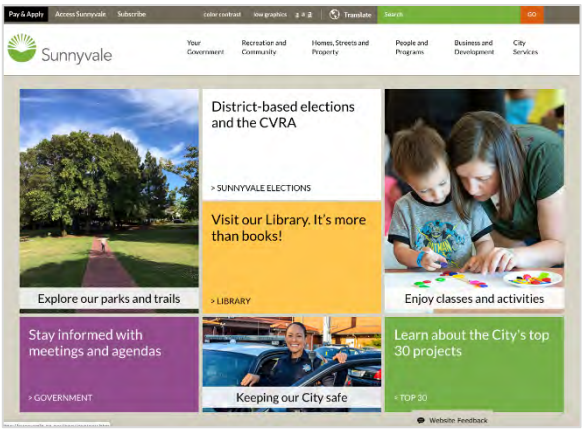
City of San Ramon

City of Santa Clara

"The Center of What's Possible"

City of Sunnyvale

"A thriving community that innovates our world"



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City of Union City

"Where Innovation Grows"

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CONCLUSION AND NEXT STEPS

This Community Identification and Brand Study provides an essential foundation for understanding the history, values, unique attributes, and overall personality of the City of Milpitas. All of these elements fit together to create the City's brand. The next steps are to formalize and align that brand to support the City's general plan, drive economic development, and boost community engagement.

The first step in formalizing the brand is to create a **Style Guide**. This will be a comprehensive document that may include updates to: usage of the city seal, revised logo mark, color palette, recommended fonts, and other core brand elements. Once established and approved, these guidelines will be applied to all City communications including business stationery, flyers, posters, e-newsletters, and other materials.

The City of Milpitas **website** is a critical tool for both economic development and community engagement. Using the Style Guide as a reference, the website design should be refreshed so that it aligns with the City's updated brand and other materials. Additional evaluation of ADA compliance should be addressed.

Gateway and **wayfinding** signage are effective ways to create a sense of "place" that helps to define boundaries, boost community pride, welcome visitors, and drive business growth. A comprehensive plan for new gateway signage at key entry points as well as wayfinding signs to important landmarks would be a powerful way to reinforce the new City of Milpitas brand.

The Articulate Solutions creative team looks forward to working in collaboration with the City Manager's office as well as the Economic Development team on these projects.

CITY OF MILPITAS
AGENDA REPORT
(AR)

Item Title:	**Review Fiscal Year 2019-20 Third Quarter Financial Status Report and Related Budget Amendments due to COVID-19 Pandemic Anticipated Revenue Losses**
Category:	Leadership and Support Services
Meeting Date:	5/5/2020
Staff Contact:	Walter C. Rossmann, 408-586-3111
Recommendation:	Review the FY 2019-20 Quarterly Financial Status Report for the quarter ending March 31, 2020 and approval budget amendments to rebalance the FY 2019-20 Amended General Fund Budget due to COVID-19 Pandemic anticipated revenue losses.

Background:

On June 11, 2019, the City Council approved the Fiscal Year (FY) 2019-20 Adopted Operating Budget in the amount of $247.9 million and the General Fund Budget in the amount of $121.6 million. After adoption of the budget, staff monitors and tracks revenues and expenditures for all funds with an emphasis on the General Fund and Enterprise Funds. In accordance with the Council approved Budget Guidelines, the City Manager has the authority to make revisions involving transfers from the appropriated contingency reserve account provided that the Council is notified in writing of the revision, giving the reason, the amount of the revision and the year-to-date total amount of revisions. For FY 2019-20 the appropriated contingency reserve was budgeted at $1.1 million.

During the April 7, 2020 City Council meeting, staff presented the preliminary fiscal impact related to COVID-19 with an updated FY 2021-2030 Ten-Year General Fund Financial Forecast (Forecast). The Forecast was based on economic data and local anecdotal observations available mid- to late March as well as revenue loss experience from past recessions with a focus on the Great Recession of 2008/2009. Based on the data available at that time, staff expected a cumulative revenue shortfall in Transient Occupancy Tax (TOT), sales tax and fees related to construction activity in the amount of $5 million in comparison to budget estimates for the current fiscal year.

Analysis:

This staff report provides a quarterly update on budget versus actual expenditures and revenues of the General, Water and Sewer Funds, the City's major operating funds, based on unaudited financial reports for FY 2019-20 as of March 31, 2020. Further, this staff report includes recommendations to rebalance the FY 2019-20 Amended General Fund Budget due to COVID-19 Pandemic anticipated net revenue losses in the amount of $7.1 million.

The summary information below as well as the attachments provide an overview of the financial status for the General, Water, and Sewer funds for FY 2019-20 as of March 31, 2020, a variance analysis of budget versus actual expenditures and revenues for the third quarter of FY 2019-20 as well as prior year actual expenditures and revenues for the third quarter of FY 2018-19 for comparison purposes. Major revenue sources and expenditures are discussed below.

General Fund Revenues

For the nine months ending March 31, 2020, the General Fund has received $68.7 million, or 57.5%, of the FY 19-20 amended operating budget of $119.5 million. The amended budget is comprised of $118.8 million of the adopted budget and budget amendments totaling of $0.7 million. An update on major revenue sources is provided below.

- Property Taxes and Redevelopment Property Tax Trust Fund: For the nine months ending March 31, 2020, $19.2 million, or 52.5%, of the $36.6 million of the amended budget has been received. Revenues are 5% higher than last year at the same time. Property Tax estimates from the County of Santa Clara are projected to remain stable for the remainder of the current fiscal year.

- Sales & Use Tax: For the nine months ending March 31, 2020, $16.4 million, or 59.0%, of the $27.7 million amended budget has been received. Revenues are 10% less than last year at the same time which is due to a change in the timing of payments received by the California Department of Tax and Fee Administration (CDTFA). The CDTFA shortened its clean-up payment from 3 months after a quarter end to 2 months after a quarter end resulting in a shift of sales tax receipts by one month of sales tax revenue this year compared to last year. Therefore, year-to-date, one less month of sales tax has been received. After adjusting for the CDFTA's timing of payment, sales tax proceeds received year-to-date are in excess of budgeted estimates. However, revenues for Sales Tax are projected to be lower in the 4th quarter due to the Shelter in Place order for the COVID-19 Virus. Staff is recommending a budget adjustment to decrease Sales Tax revenues by $350,000. The revised Sales Tax estimate of $27.4 million is 0.6% above the adopted budget revenues.

- Franchise Fees: For the nine months ending March 31, 2020, $2.5 million, or 49.7%, of the $4.9 million budget has been received. Revenues are 4.5% higher than last year at the same time. Staff is recommending a budget amendment to increase budgeted estimates for Franchise Fees by $400,000 based on historical receipts. The revised Franchise Fee estimate $5.3 million is 8.1% above adopted budgeted revenues.

- Hotel/Motel (TOT) Tax: For the nine months ending March 31, 2020, $9.8 million, or 53.0%, of the $18.6 million amended budget has been received. Revenues are 22.8% higher than last year at the same time which is due to the increase in the TOT rate to 14% approved by the Council on 11/20/18. However, revenues for TOT are below budgeted estimates due to the Shelter-in-Place order and substantive reduction of business and leisure travel related to the COVID-19 Virus. Staff is recommending a budget adjustment to decrease TOT revenues by $6,400,000. The revised TOT estimate of $12.2 million is 37.7% below adopted budgeted revenues.

- License and Permits: For the nine months ending March 31, 2020, $8.5 million, or 63.4%, of the $13.4 million amended budget has been received. Revenues are 20.5% less than last year at the same time which is due to less building permits being issued. Staff is recommending that this revenue source be decreased by $750,000. The revised License and Permits estimate of $12.7 million is 14.0% below adopted budgeted revenues.

- Charges for Services: For the nine months ending March 31, 2020, $5.1 million, or 72.6%, of the $7.1 million amended budget has been received. Revenues are 2.4% higher than last year due to increased Planning revenue as well as an increase of reimbursements for overhead and labor associated with billable staff time. Revenue received for the third quarter, as projected, is on track to meet the budgeted estimate. Impacts to recreation fees due to cancellation of classes and activities are expected to be offset with reduction in expenditures.

General Fund Expenditures

For the nine months ending March 31, 2020, the General Fund has utilized $90.7 million, or 72.6%, of the FY 19-20 amended operating budget of $125.0 million. The amended budget is comprised of $121.6 million of the adopted budget, $2.7 million of carryover encumbrances from the previous fiscal year for goods and services as well as approximately $740,000 of increased department appropriations as approved by Council dur

past nine months of the fiscal year. At the end of the third quarter, total expenditures plus encumbrances are below the par of 75% by 2.4% or $3.0 million primarily due to vacancies. Regardless, staff will monitor expenditures to ensure that departments will not exceed their appropriations.

Appropriated Contingency Reserve

In accordance with the Council approved budget guidelines, the table below provides information regarding the purpose of transfers from the appropriated contingency reserve (Reserve), the dollar amounts of each transfer and the year-to-date total. Year-to-Date, the Interim City Manager authorized three transfers from the Reserve with a total of $92,450. The balance in the Reserve as of March 31, 2020 is $1,007,550.

Date Authorized	Description	Amount
8/1/2019	City Council Retreat Facilitation Contract	$17,800
10/7/2019	Communication Function Study Contract	57,500
3/3/2020	Performing Arts Feasibility Study Contract	17,150
	Total	**$92,450**

General Fund Budget Amendment Recommendations

As described above, revenues related to Licenses and Permits have decreased. This decrease in revenue is the first data indicating a slow-down in economic activity. For the first nine months of the current fiscal year, Licenses and Fees generated $8.5 million with an average revenue amount of $1 million for the first eight months of the fiscal year. In the month of March, this revenue category only generated approximately $350,000 in revenue potentially signifying a substantive drop in construction activity and revenue for the coming months.

Further, based on information that some hotels in town closed its doors due to the tremendous drop in travel activity and the ongoing shelter-in-place order, staff is recommending an increased reduction in TOT, Sales Tax, and Licenses and Permits revenue categories in the amount of $2.5 million from $5.0 million, as presented to the City Council on April 7, to $7.5 million. This reduction in revenues in the amount of $7.5 million is recommended to be offset with $400,000 in increased revenues in the franchise fee revenue category. The revenues for franchise fees are recommended for adjustment in alignment with historical revenue receipts.

In order to rebalance the General Fund FY 2019-20 Amended Budget, staff recommends offsetting the net $7.1 million in estimated revenue loss with a $7.1 million reduction in the General Fund Unassigned Reserve reducing the reserve balance from $9.2 million to $2.1 million. With this recommended action, the total General Fund Unassigned and Committed Reserves of $82.8 million will be reduced by $7.1 million to $75.7 million.

It is important to note that the actual impact to our City revenues related to COVID-19 will not be fully understood until actual tax proceeds are received. The City is scheduled to receive monthly TOT remittances for the month of March by April 30th. First quarter sales tax numbers will be available from the State by end of May/early June. However, the Sales Tax numbers will be skewed because the Governor issued an executive order providing a 90-day extension in state and local taxes, including sales tax. The California Department of Tax and Fee Administration (CDTFA) will offer a 90-day extension for businesses to file tax returns and pay taxes, as long as the business files a return less than $1 million.

Staff will continue to monitor revenue receipts in the coming months and may recommend further revenue estimate reductions prior to or as part of closing the current fiscal year budget.

Water Maintenance & Operation (M&O) Fund Financial Status (Attachment 3)

Revenues: For the nine months ending March 31, 2020, $25.2 million of charges for services, or 75.0%, of the $33.6 million budgeted has been received. Total revenue received amounts to $25.6 million, or 74.8%, of the $34.3 million budgeted.

Expenditures: For the nine months ending March 31, 2020, $20.5 million, or 70.2%, of the $29.2 million amended budgeted has been spent.

Sewer Maintenance & Operation (M&O) Fund Financial Status (Attachment 3)

Revenues: For the nine months ending March 31, 2020, $14.6 million of charges for services, or 76.5%, of the $19.1 million budgeted has been received. Total revenue received amounts to $14.9 million, or 75.6%, of the $19.7 million budgeted.

Expenditures: For the nine months ending March 31, 2020, $10.9 million, or 74.0%, of the $14.8 million amended budgeted has been spent.

Fiscal Impact:
If Council approves the recommendations outlined in this report, the General Fund Unassigned Reserve balance will be reduced by $7.1 million from $9.2 million to $2.1 million and the total General Fund Unassigned and Committed Reserves of $82.8 million will be reduced by $7.1 million to $75.7 million. Staff will continue to monitor revenue receipts in the coming months and may recommend further revenue estimate reductions prior to or as part of closing the current fiscal year budget.

California Environmental Quality Act:
Not applicable.

Recommendation:
Review the FY 2019-20 Quarterly Financial Status Report for the quarter ending March 31, 2020 and approve budget amendments to rebalance the FY 2019-20 Amended General Fund budget due to COVID-19 pandemic anticipated revenue losses.

Attachments:
1. FY 2019-2020 Revenue Report for Fiscal Year-To-Date March 31, 2020
2. FY 2019-2020 General Fund Expenditures by Department March 31, 2020
3. FY 2019-2020 Water and Sewer Funds Financial Status for Fiscal Year-To-Date March 31, 2020
4. Budget Change Form

CITY OF MILPITAS

General Fund Revenues
For Fiscal Year-To-Date March 31, 2020

General Fund Revenues	FY20 Adopted Budget	FY20 Mid-Year Budget Changes	FY20 Amended Budget	FY20 Revenue As of 3/31/20		FY20 Percentage of Budget	FY19 Revenue As of 3/31/19	Percentage Inc (Dec) FY20 / FY19
Property Taxes	$ 28,391,781	$ 1,073,000	$ 29,464,781	$ 15,748,289		53.45%	$ 15,727,385	0.13%
RFTTF Distributions	6,414,919	699,000	7,113,919	3,489,055		49.05%	2,575,141	35.49%
Sales and Use Taxes	27,200,042	525,000	27,725,042	16,368,898	*	59.04%	18,199,605	-10.06%
Other Taxes	1,128,000	-	1,128,000	891,314		79.02%	848,193	5.08%
Franchise Fees	4,937,000	-	4,937,000	2,455,213		49.73%	2,350,589	4.45%
Hotel/Motel Tax	19,557,639	(983,000)	18,574,639	9,843,868		53.00%	8,015,291	22.81%
License & Permits	14,748,486	(1,314,000)	13,434,486	8,520,292		63.42%	10,719,862	-20.52%
Fines and Forfeitures	501,810	-	501,810	262,914		52.39%	295,801	-11.12%
Interest Income	1,267,000	-	1,267,000	1,212,192		95.67%	1,067,604	13.54%
Intergovernmental	1,445,927	536,129	1,982,056	389,201		19.64%	467,253	-16.70%
Charges for Services	6,960,914	113,000	7,073,914	5,155,919		72.89%	5,017,526	2.76%
Other Revenue Sources	241,000	-	241,000	276,970		114.93%	228,911	20.99%
Operating Transfers In	5,993,002	26,564	6,019,566	4,121,315	**	68.47%	6,355,432	-35.15%
Total General Fund Revenue	**$118,787,520**	**$675,693**	**$119,463,213**	**$68,735,439**		**57.54%**	**$71,868,591**	**-4.36%**

* Change in Accounting of payments from the California Department of Tax and Fee Administration. In Fiscal Year 2019-2020, the City received seven months of Sales Tax revenue, while in Fiscal Year 2018-2019, the City received eight months of Sales Tax revenue through the quarter ended March 31st.

** Change in timing of recognition of revenues. In Fiscal Year 2019-2020, the City is entering transfers on a quarterly basis, as the transfers are available, which is more accurate to actual experience. In Fiscal Year 2018-2019 and prior, the City entered all of these transfers in December

General Fund Expenditures by Department

Percent of Year 75% — **For Fiscal Year-To-Date March 31, 2020**

Department/Division	FY 2019-20 Adopted Budget	FY 2019-20 Budget Amendment As of 3/31/20	FY 2019-20 Carryover Encumbrances	FY 2019-20 Amended Budget	FY 2019-20 Exp. incl. Encumbr. As of 03/31/2020	FY 2019-20 Exp. w/o Encumbr. As of 03/31/2020	FY 2019-20 Percent of Amended Budget		FY 2018-19 Exp. incl. Encumbr. As of 03/31/2019	Percent Exp & Enc Inc (dec.) FY20/FY19	
City Council	587,319		-	587,319	249,786	249,786	42.53%	(a)	809,157	-69.13%	(b)
City Manager	2,332,184	-	21,719	2,353,903	1,583,767	1,461,268	67.28%		1,464,298	8.16%	
City Clerk	626,844	-	-	626,844	454,496	454,496	72.51%		531,363	-14.47%	
Economic Development	939,806	-	185,157	1,124,963	683,723	577,029	60.78%	(c)	585,283	16.82%	
Policy Planning	**4,486,153**	**-**	**206,876**	**4,693,029**	**2,971,772**	**2,742,579**	**63.32%**		**3,390,101**	**-12.34%**	
Building Safety & Housing	**6,693,391**	**(498,256)**	**85,560**	**6,280,695**	**4,502,673**	**4,029,616**	**71.69%**		**4,103,828**	**9.72%**	
City Attorney	**1,190,364**	**125,000**	**-**	**1,315,364**	**1,241,560**	**743,338**	**94.39%**	(d)	**867,010**	**43.20%**	
Finance	**4,367,077**	**(137,700)**	**193,342**	**4,422,719**	**3,210,241**	**2,981,473**	**72.59%**		**2,892,863**	**10.97%**	
Public Works	**9,258,950**	**(246,411)**	**339,692**	**9,352,231**	**7,383,868**	**5,745,375**	**78.95%**		**6,136,035**	**20.34%**	
Engineering	**3,998,574**	**(225,574)**	**110,002**	**3,883,002**	**2,673,333**	**2,443,759**	**68.85%**		**2,745,717**	**-2.64%**	
Planning	**1,920,315**	**(8,153)**	**78,130**	**1,990,292**	**1,549,742**	**1,429,120**	**77.87%**		**1,245,854**	**24.39%**	
Police	**36,375,936**	**(1,055,915)**	**383,975**	**35,703,996**	**25,614,786**	**25,272,028**	**71.74%**		**22,808,555**	**12.30%**	
Fire	**26,640,966**	**764,592**	**212,383**	**27,617,941**	**19,880,754**	**19,575,084**	**71.98%**		**17,483,987**	**13.71%**	
Information Technology	**3,549,603**	**(263,623)**	**253,780**	**3,539,760**	**2,322,964**	**2,295,994**	**65.62%**	(e)	**2,078,002**	**11.79%**	
Human Resources	**2,045,669**	**(51,637)**	**85,704**	**2,079,736**	**1,610,506**	**1,416,080**	**77.44%**		**1,152,591**	**39.73%**	(f)
Recreation	**6,463,227**	**(83,240)**	**209,600**	**6,589,587**	**4,540,246**	**4,317,292**	**68.90%**		**3,939,179**	**15.26%**	
Non-Departmental	**7,786,761**	**2,421,407**	**509,333**	**10,717,501**	**6,417,202**	**5,747,317**	**59.88%**		**6,012,181**	**6.74%**	
Transfers Out	**6,800,000**			**6,800,000**	**6,800,000**	**6,800,000**	**100.00%**	(g)	**9,134,245**	**74.45%**	
Total	**121,576,986**	**740,490**	**2,668,377**	**124,985,853**	**90,719,647**	**85,539,055**	**72.58%**		**83,990,148**	**8.01%**	

(a) Vacancy Savings from Intern positions ($130,000) and lower expenditures for communitiy promotions ($20,000), supplies and services ($10,000), and membership, trainings, and conferences ($30,000)
(b) Funding for the County Library was moved from the City Council to the Non-Departmental budget in F19-20.
(c) Vacancy and contractual services savings ($150,000)
(d) Annual contract expenditures for Best, Best, and Krieger is encumbered.
(e) Vacancies for information analyst positions ($260,000)
(f) New position for current year - Employee Relations Officer
(g) Transfers Out - General Government CIP Fund ($4 million), Affordable Housing and Community Benefit Fund ($2 million), Equipment Fund ($300,000), Rate Assistance Program ($100,000), and Storm Drain CIP Fund ($500,000).

City of Milpitas

Water and Sewer Financial Status

For Fiscal Year-To-Date March 31, 2020

Percent of Year 75%

Revenue Water Fund	FY 2019-20 Adopted Budget	FY 2019-20 Budget Amendments As of 03/31/2020		FY 2019-20 Amended Budget	FY 2019-20 Revenue As of 03/31/2020	FY 2019-20 Percent of Amended Budget	FY 2018-19 Revenue As of 03/31/2019	Percent Revenue (dec.) FY20/FY19
Revenue:								
Revenue from Investments	516,000			516,000	389,549	75.49%	303,623	28.30%
Charges for Services	33,629,267			33,629,267	25,229,995	75.02%	22,794,693	10.68%
Miscellaneous Revenue	130,000			130,000	17,601	13.54%	26,606	-33.85%
Operating Transfer In	3,089			3,089	3,089	100.00%	13,444	-77.02%
Total Water Fund Revenue	34,278,356	0	0	34,278,356	25,640,234	74.80%	23,138,366	10.81%

Expense Water Fund	FY 2019-20 Adopted Budget	FY 2019-20 Budget Amendments As of 03/31/2020	FY 2018-19 Carryover Encumbrances	FY 2019-20 Amended Budget	FY 2019-20 Exp. incl. Encumbr. As of 03/31/2020	FY 2019-20 Percent of Amended Budget	FY 2018-19 Exp. incl. Encumbr. As of 03/31/2019	Percent Exp & Enc Inc (dec.) FY20/FY19
Expenses:								
Personnel Services	4,027,954			4,027,954	3,055,929	75.87%	2,475,774	23.43%
Services and Supplies	2,654,897		243,685	2,898,582	2,174,883	75.03%	1,525,990	42.52%
Wholesale Water Purchase	18,860,000			18,860,000	12,680,317	67.23%	8,415,622	50.68%
Debt Service	225,225			225,225	0	0.00%	-	0.00%
Capital Outlay	110,000		0	428,169	509,757	119.06%	10,130	4932.15%
Operating Transfer Out	2,741,851			2,741,851	2,056,388	75.00%	2,029,413	1.33%
Total Water Fund Expenses	28,619,927	0	243,685	29,181,781	20,477,274	70.17%	14,456,929	41.64%

Percent of Year 75%

Revenue Sewer Fund	FY 2019-20 Adopted Budget	FY 2019-20 Budget Amendments As of 03/31/2020		FY 2019-20 Amended Budget	FY 2019-20 Revenue As of 03/31/2020	FY 2019-20 Percent of Amended Budget	FY 2018-19 Revenue As of 03/31/2019	Percent Revenue (dec.) FY20/FY19
Revenue:								
Revenue from Investments	375,000			375,000	118,365	31.56%	215,965	-45.19%
Charges for Services	19,132,127			19,132,127	14,640,556	76.52%	12,955,146	13.01%
Miscellaneous Revenue	60,000			60,000	-5	-0.01%	-	0.00%
Operating Transfer In	119,878			119,878	119,878	100.00%	13,444	791.68%
Total Sewer Fund Revenue	19,687,005	0	0	19,687,005	14,878,794	75.58%	13,184,555	12.85%

Expense Sewer Fund	FY 2019-20 Adopted Budget	FY 2019-20 Budget Amendments As of 03/31/2020	FY 2018-19 Carryover Encumbrances	FY 2019-20 Amended Budget	FY 2019-20 Exp. incl. Encumbr. As of 03/31/2020	FY 2019-20 Percent of Amended Budget	FY 2018-19 Exp. incl. Encumbr. As of 03/31/2019	Percent Exp & Enc Inc (dec.) FY20/FY19
Expenses:								
Personnel Services	3,069,935			3,069,935	1,684,565	54.87%	1,914,075	-11.99%
Services and Supplies	1,550,907		468,110	2,019,017	1,521,566	75.36%	886,857	71.57%
Treatment Plant	7,045,200			7,045,200	6,077,094	86.26%	3,209,599	89.34%
Debt Service	1,033,038			1,033,038	428,750	41.50%	493,414	86.89%
Capital Outlay	47,292		47,292	47,292	47,574	100.60%	-	0.00%
Operating Transfer Out	1,568,485			1,568,485	1,176,364	75.00%	1,244,456	94.53%
Total Sewer Fund Expenses	14,314,857	0	515,402	14,782,967	10,935,913	73.98%	7,748,401	41.14%

City of Milpitas, California

BUDGET CHANGE FORM

Type of Change	From*		To*	
	Account	Amount	Account	Amount
Check one:	100-2940	$350,000	100-3110	$350,000
	100-3130	$400,000	100-2940	$400,000
☒ Budget Appropriation	100-2940	$6,400,000	100-3150	$6,400,000
	100-2940	$750,000	100-3210	$750,000
☐ Budget Transfer				

Review the FY 2019-20 Quarterly Financial Status Report for the Quarter Ending March 31, 2020 and Approval of Budget Amendments to Rebalance the FY 2019-20 Amended General Fund Budget due to COVID-19 Pandemic Anticipated Revenue Losses.

Background:

On June 11, 2019, the City Council approved the Fiscal Year (FY) 2019-20 Adopted Operating Budget in the amount of $247.9 million and the General Fund Budget in the amount of $121.6 million. After adoption of the budget, staff monitors and tracks revenues and expenditures for all funds within an emphasis on the General Fund and Enterprise Funds.

During the April 7, 2020 City Council meeting, staff presented the preliminary fiscal impact related to COVID-19 with an updated FY 2021-2030 Ten-Year General Fund Financial Forecast (Forecast). The Forecast was based on economic data and local anecdotal observations available mid- to late March as well as revenue loss experience from past recessions with a focus on the Great Recession of 2008/2009. Based on the data available at that time, staff expected a cumulative revenue shortfall in Transient Occupancy Tax (TOT), sales tax and fees related to construction activity in the amount of $5 million in comparison to budget estimates for the current fiscal year.

Analysis:

This staff report provides a quarterly update on budget versus actual expenditures and revenues of the General, Water and Sewer Funds, the City's major operating funds, based on unaudited financial reports for FY 2019-20 as of March 31, 2020. Further, this staff report includes recommendations to rebalance the FY 2019-20 Amended General Fund Budget due to COVID-19 Pandemic anticipated net revenue losses in the amount of $7.1 million.

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- Property Taxes and Redevelopment Property Tax Trust Fund: For the nine months ending March 31, 2020, $19.2 million, or 52.5%, of the $36.6 million of the amended budget has been received. Revenues are 5% higher than last year at the same time. Property Tax estimates from the County of Santa Clara are projected to remain stable for the remainder of the current fiscal year.

- Sales & Use Tax: For the nine months ending March 31, 2020, $16.4 million, or 59.0%, of the $27.7 million amended budget has been received. Revenues are 10% less than last year at the same time which is due to a change in the timing of payments received by the California Department of Tax and Fee Administration (CDTFA). The CDTFA shortened its clean-up payment from 3 months after a quarter end to 2 months after a quarter end resulting in a shift of sales tax receipts by one month of sales tax revenue this year compared to last year. Therefore, year-to-date, one less month of sales tax has been received. After adjusting for the CDFTA's timing of payment, sales tax proceeds received

year-to-date are in excess of budgeted estimates. However, revenues for Sales Tax are projected to be lower in the 4th quarter due to the Shelter in Place order for the COVID-19 Virus. Staff is recommending a budget adjustment to decrease Sales Tax revenues by $350,000. The revised Sales Tax estimate of $27.4 million is 0.6% above the adopted budget revenues.

• Franchise Fees: For the nine months ending March 31, 2020, $2.5 million, or 49.7%, of the $4.9 million budget has been received. Revenues are 4.5% higher than last year at the same time. Staff is recommending a budget amendment to increase budgeted estimates for Franchise Fees by $400,000 based on historical receipts. The revised Franchise Fee estimate $5.3 million is 8.1% above adopted budgeted revenues.

• Hotel/Motel (TOT) Tax: For the nine months ending March 31, 2020, $9.8 million, or 53.0%, of the $18.6 million amended budget has been received. Revenues are 22.8% higher than last year at the same time which is due to the increase in the TOT rate to 14% approved by the Council on 11/20/18. However, revenues for TOT are below budgeted estimates due to the Shelter-in-Place order and substantive reduction of business and leisure travel related to the COVID-19 Virus. Staff is recommending a budget adjustment to decrease TOT revenues by $6,400,000. The revised TOT estimate of $12.2 million is 37.7% below adopted budgeted revenues.

• License and Permits: For the nine months ending March 31, 2020, $8.5 million, or 63.4%, of the $13.4 million amended budget has been received. Revenues are 20.5% less than last year at the same time which is due to less building permits being issued. Staff is recommending that this revenue source be decreased by $750,000. The revised License and Permits estimate of $12.7 million is 14.0% below adopted budgeted revenues.

• Charges for Services: For the nine months ending March 31, 2020, $5.1 million, or 72.6%, of the $7.1 million amended budget has been received. Revenues are 2.4% higher than last year due to increased Planning revenue as well as an increase of reimbursements for overhead and labor associated with billable staff time. Revenue received for the third quarter, as projected, is on track to meet the budgeted estimate. Impacts to recreation fees due to cancellation of classes and activities are expected to be offset with reduction in expenditures.

Policy Alternative:

1. Not applicable.

Fiscal Impact:

If Council approves the recommendations outlined in this report, the General Fund Unassigned Reserve balance will be reduced by $7.1 million from $9.2 million to $2.1 million and the total General Fund Unassigned and Committed Reserves of $82.8 million will be reduced by $7.1 million to $75.7 million. Staff will continue to monitor revenue receipts in the coming months and may recommend further revenue estimate reductions prior to or as part of closing the current fiscal year budget.

California Environmental Quality Act:

Not applicable.

Recommendation:

Review the FY 2019-20 Quarterly Financial Status Report for the Quarter Ending March 31, 2020 and Approval of Budget Amendments to Rebalance the FY 2019-20 Amended General Fund Budget due to COVID-19 Pandemic Anticipated Revenue Losses.

Attachments:

1. FY 2019-2020 Revenue Report for Fiscal Year-To-Date March 31, 2020
2. FY 2019-2020 General Fund Expenditures by Department March 31, 2020
3. FY 2019-2020 Water and Sewer Funds Financial Status for Fiscal Year-To-Date March 31, 2020
4. Budget Change Form

☒ **Check if City Council Approval required.** **Meeting Date**: May 05, 2020

Requested by:	**Department Head:** Walter C. Rossmann	**Date:** May 05, 2020
Reviewed by:	**Finance Director:** Walter C. Rossmann	**Date:** May 05, 2020

Date approved by City Council, if required: **Confirmed by:**

CITY OF MILPITAS
AGENDA REPORT
(AR)

Item Title:	**Receive Report and Provide Direction on next steps regarding Potential Revenue Tax Measures to be placed on the Ballot for the November 3, 2020 General Election**
Category:	Leadership and Support Services
Meeting Date:	5/5/2020
Staff Contact:	**Ashwini Kantak, 408-586-3053 and Walter C. Rossmann, 408-586-3111**
Recommendation:	Receive report and provide direction on next steps regarding potential revenue tax measures to be placed on the ballot for the November 3, 2020 General Election.

Background:
At the April 14, 2020 FY 2020-2025 Capital Improvement Program Study Session, in response to previous Council direction, staff presented various funding options including use of General Fund reserves and potential tax revenue ballot measures for the replacement and/or rehabilitation of infrastructure such as the Police/Public Works building, Fire Stations, or Recreation buildings or a potential Performing Arts Center.

Staff presented funding needs for critical infrastructure assets and discussed the need for a long-term funding strategy. Due to the current economic condition and to preserve generational equity for the utilization and payment of municipal infrastructure, staff presented options for issuing debt backed through new tax revenues. Potential tax measures discussed included a ¼ cent sales tax measure, a general obligation bond measure, and a parcel tax measure. Staff further presented that $5 million of additional revenue per year would be needed to pay off $89 million of debt over thirty years assuming a 3.71% interest cost. Staff also recommended, that if the Council were to pursue a ¼ cent sales tax measure that it should be placed on the ballot as a general tax measure. Due to the economic sensitivity of sales tax, only a portion of the additional new revenue should be used for payment of future debt service. Additionally, focusing a tax measure on an infrastructure program requires 2/3 voter approval versus a general tax measure requires 50% + 1 voter approval. Per Government Code section 53724, placing a measure on the ballot requires a minimum of four (4) affirmative votes from the Council for a general tax measure and three (3) affirmative votes from the Council for a special tax measure.

In addition to potential funding options for infrastructure, staff discussed considerations for a successful ballot measure. These considerations included the current economic conditions, community outreach campaign including the scoping of the funds potentially received from a tax measure, grassroots community support, and refinement of polling language through focus groups and two rounds of polling. Typically, such steps require multiple Council deliberations over 9 to 15 months before Election Day.

At the April 21, 2020 City Council meeting, the City Council, by consensus, asked staff to return at the next possible City Council meeting with an analysis and timeline for a potential Sales Tax and/or Cannabis Sales Tax Measure to be placed on the ballot for the November 3, 2020 General Election.

Analysis:
Based on Council direction from the April 21, 2020 Council meeting, this report provides additional information regarding the considerations and steps to be taken to place a potential Sales Tax and/or Cannabis Sales Tax Measure on the ballot for the November 3, 2020 General Election.

General Sales Tax Measure (1/4 cent)
The FY 2020-21 Proposed Budget assumes $28.4 million in sales tax revenue based on economic conditions related to COVID-19 as understood as of late March. A ¼ cent sales tax measure would generate approximately $7.1 million in additional revenue. This revenue can be used for several General Fund funded City services and/or for critical public safety and other infrastructure needs. If partially used for infrastructure, staff would recommend issuing debt and the ongoing new revenue stream would be used as source for the annual debt service. Given the economic volatility of the revenue source, staff estimates that approximately $115 million in infrastructure financing could be paid for as a result of these additional revenues.

Polling was conducted for a ½ cent Sales Tax Measure in June 2016. Although the polling showed more than a majority support for the measure, City Council at that time did not approve placing it on the November 2016 ballot.

If City Council directs staff to proceed with this measure, staff will contract with a firm to poll potential voters for this tax measure. Polling will likely occur in late May/early June with the results presented to the City Council at the June 16 Council meeting. Based on the polling result and Council direction, ballot measure language would be brought forward for Council approval at the August 4, 2020 City Council meeting in order to meet the deadline for submission of the ballot measure to the County Registrar of Voters by August 7, 2020.

After submission of the ballot measure language, with the assistance of a consultant and in close coordination with the City Attorney, staff will conduct limited educational outreach about the ballot measure but will not advocate for the measure.

Costs for this measure are estimated to be approximately $90,000 and will include $40,000 for the polling, $30,000 for the ballot measure, and $20,000 for other miscellaneous costs.

Cannabis Tax Measure
On August 7, 2018, a Cannabis Tax Measure was brought forward for Council consideration, and the estimated revenue was based on assumptions about the number and types of cannabis establishments. The revenue range of $370,000 to $1.67 million was based on assumptions that cultivation, manufacturing, retail, distribution, and testing lab uses would be allowed in the City. The lower end of the revenue range assumed the issuance of seven permits and the higher end of the revenue range assumed the issuance of 13 permits for cannabis establishments.

The City Council did not approve moving forward with the cannabis tax measure but instead asked staff to work with the Council Cannabis Subcommittee on recommendations related to cannabis establishments and community benefit agreements. Staff worked with the Council Subcommittee and various community groups to develop recommendations for buffer zones and up to ten (10) storefront and non-storefront retail establishments.

These recommendations were brought forward to Council in October 2018; however, based on community input, these recommendations were not approved by Council. On January 15, 2019, Council adopted an ordinance prohibiting all medical and adult-use commercial cannabis activities, including but not limited to, commercial cultivation, delivery, distribution, manufacturing, microbusinesses, retail/dispensaries and testing laboratories in the City.

In order for a tax to be levied on cannabis establishments, the City will need to also allow the use of cannabis establishments, either through Council action or through voter approval. If it is determined that voters should decide whether to allow cannabis establishments in the City and how to tax them, two separate measures will need to be placed on the ballot.

Based on the Subcommittee and staff work in 2018, cultivation, manufacturing, and testing uses did not appear to be viable. Additionally, the use of buffer zones limited the number of retail establishments. Therefore, staff contacted HdL, the consultant the City previously hired to support the cannabis effort from 2018. Based on two to six retail establishments and a tax rate of 4%-6%, HdL estimates a revenue range between $240,000

$1.26 million. This information is based on the current cannabis retail and tax environment in Santa Clara County.

Staff recommends, that if the Council wishes to poll for a Cannabis Tax Measure, that the measure would be presented to potential voters responding to the poll as a general tax measure. As stated above, a general tax measure requires 50% + 1 voter approval.

Unlike the Sales Tax Measure, a Cannabis Use Measure and a Cannabis Tax Measure would require consulting support for upfront analytical work and outreach prior to conducting polling. This upfront work effort will involve review of the updated regulatory Cannabis framework and current regional retail environment as well as outreach and discussion with the current City Council to validate the buffer zones and type and number of establishments.

Costs for these two measures are estimated to be approximately $150,000, including $40,000 for the polling, $20,000 for a cannabis consultant, $60,000 for the two ballot measures, and $30,000 for other miscellaneous costs.

Given the current state of emergency in the City and estimated time to complete the upfront work prior to commencing polling work, staff recommends Council consider deferring discussion of these two measures for a future ballot; placing the measures on the November 2020 does not appear to be feasible, unless it is determined that they should proceed with very limited additional analysis and outreach.

Fiscal Impact:
The cost for consultant services, depending on Council decision which measures will advance for polling, are estimated between $40,000 and $100,000 and the cost for each ballot measure is estimated at $30,000. Including miscellaneous additional costs, the costs range between $90,000 for the Sales Tax Measure only and $240,000 for all three measures. For the Cannabis Sales Tax effort, staff has factored in additional resources for updates on the regulatory Cannabis framework and current regional retail environment. Further, depending on Council decision to place one or two Cannabis related measures on the ballot, the educational outreach effort is also anticipated to require additional resources in comparison to a Sales Tax measure.

If Council directs staff to move forward with one or more ballot measures, expenditures for the current fiscal year will be paid from the appropriated contingency reserve. Funding requests for expenditures scheduled to occur in FY 2020-21 will be brought forward, as needed, for Council consideration through an amendment of the FY 2020-21 Budget.

California Environmental Quality Act:
Not applicable.

Recommendation:
Receive report and provide direction on next steps regarding potential revenue tax measures to be placed on the ballot for the November 3, 2020 General Election.

Attachments:
Comments received from residents

E-MAIL COMMENTS SUBMITTED – REGARDING AGENDA ITEM NO. 11

PROPOSED TAX BALLOT MEASURES

MILPITAS CITY COUNCIL MEETING

MAY 5, 2020

Mary Lavelle

From: Stacy Brobst <ssbrobst@yahoo.com>
Sent: Thursday, April 30, 2020 9:35 AM
To: Rich Tran; Bob Nuñez; Anthony Phan; Karina Dominguez; Carmen Montano
Cc: Mary Lavelle
Subject: Vote on marijuana tax

Dear Mayor and City Council,
Please go forward with putting a marijuana tax on the November ballot. Our citizens should be able to vote on this so everyone in the city has a say. It shouldn't only be the loudest people able to get a seat in the room that are heard. This Coronavirus crisis means our city needs more money and this is a great way to get it. We shouldn't be letting our tax money go to San Jose and Fremont.
Thank you,
Stacy Brobst
27 year resident of The Pines
Sent from my iPhone

From: martha browne <marthaamazonia@gmail.com>
Sent: Wednesday, April 29, 2020 6:08:16 PM
To: Karina Dominguez <kdominguez@ci.milpitas.ca.gov>
Subject: [BULK] Cannabis clubs

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links.

Hello Esteemed Council member,
I am writing to say I am in FAVOR of Cannabis Clubs as a source of revenue in Milpitas. Currently consenting adults are going to San Jose and other cities to purchase their cannabis.
Milpitas is missing out!
Please do not listen to the "Better Milpitas" crowd (some of whom don't even live in Milpitas) and their outdated propaganda and scare tactics.
Marijuana is LEGAL in California and is not going away.
Thank you,
Martha Lamdin Bates
Lifelong Milpitas resident
And CADC-II(certified alcohol and drug counselor)

Mary Lavelle

From: shanshanbian@qq.com on behalf of 边姗姗 <susan.223@hotmail.com>
Sent: Wednesday, April 29, 2020 10:33 PM
To: Mary Lavelle
Subject: Opposing the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,

Susan Bian

485 Cascadita Ter, Milpitas, CA95035

Mary Lavelle

From: Rooozane C <ruxinch@gmail.com>
Sent: Wednesday, April 29, 2020 9:19 PM
To: Rich Tran; Bob Nuñez; Karina Dominguez; Anthony Phan; Carmen Montano; Steven McHarris; Mary Lavelle
Subject: [BULK] Opposing the proposed cannabis tax ballot measure
Importance: Low

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

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Sincerely,

Rozanne Chen
913 Rain Dance, Milp

1220

Mary Lavelle

From: Yin Cheng <cincych@yahoo.com>
Sent: Wednesday, April 29, 2020 3:32 PM
To: Steven McHarris
Subject: Opposing the proposed cannabis tax ballot measure

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links.

April 29, 2020

Mayor Richard Tran & Council Members

City of Milpitas

455 E. Calaveras Blvd

Milpitas, CA 95035

RE: Opposing the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

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Sincerely, Yin Cheng
1619 Conway

1221

Mary Lavelle

From: Kim Sawchu <sk88travel@gmail.com>
Sent: Thursday, April 30, 2020 5:57 PM
To: Mary Lavelle
Subject: Opposing proposed cannabis tax ballot measure

Dear City Clerk,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

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Sincerely,
Kim Chu
66 Duttonwood Lane, Milpitas
Milpitas resident since 1988

1222

Mary Lavelle

From: Nina Dai <dlq23@yahoo.com>
Sent: Wednesday, April 29, 2020 11:29 PM
To: Mary Lavelle
Subject: Opposing the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,

As residents of Milpitas for over ten years, we strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, we will not support any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

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Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now.

We urge you to STOP putting the cannabis tax measure on the ballot, for yourselves and all the citizens, esp. at this difficult time of state-wide healthy crisis. We need to work together for the best safety and real interests of the people of our Milpitas city, not the opposite!! Thank you for your real consideration.
Regards,
Nina. D families

Sent from my iPhone

Mary Lavelle

From: Dudeie Dude <slljwl2015@gmail.com>
Sent: Wednesday, April 29, 2020 3:29 PM
To: Anthony Phan; Carmen Montano; Karina Dominguez; Steven McHarris
Subject: Opposing the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

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Sincerely,
LILI SONG, 433 Desert Holly St, Milpitas

Mary Lavelle

From: Lu Fang <summerfrogfl@hotmail.com>
Sent: Thursday, April 30, 2020 11:26 AM
To: Rich Tran
Subject: Opposing the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

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Sincerely,

Lu Fang

883 Celebration Dr.
Milpitas, CA 95035

1225

Mary Lavelle

From: Ling Gong <woshi.sl2@gmail.com>
Sent: Thursday, April 30, 2020 1:56 PM
To: Mary Lavelle
Subject: Opposing the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

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Sincerely,

Ling Gong 1531 big basin dr. Milpitas CA 95035

Mary Lavelle

From: Linh Hankins <linh.hankins@gmail.com>
Sent: Wednesday, April 29, 2020 6:32 PM
Subject: Opposing the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,

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Sincerely,

Linh And Gary Hankins

884 Kizer St, Milpitas

Sent from my iPhone

Mary Lavelle

From: ZXS Huang <minsmarf@gmail.com>
Sent: Thursday, April 30, 2020 1:22 PM
To: Steven McHarris; Mary Lavelle
Subject: [BULK] RE: Opposing the proposed cannabis tax ballot measure

Importance: Low

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

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Sincerely,

Min Huang

1677 Centre Point Milpitas, CA 95035

1228

Mary Lavelle

From: Paul Kwan <paulttkwan@hotmail.com>
Sent: Wednesday, April 29, 2020 11:07 PM
To: Steven McHarris; Mary Lavelle
Subject: Opposing the proposed cannabis tax ballot measure

Hi,

I am surprised that Mayor Tran and two City Council members proposed cannabis tax ballot measure. Do you recall how many Milpitas residents attended City Council meetings from Nov., 2018 to Jan., 2019 against pot shops in our small and beautiful city. I petty sure you know that the majority of Milpitas (more than 74%) oppose any cannabis shop in Milpitas. If you insist to push this cannabis tax ballot measure, "Good Luck", you will suffer the lost in the coming election.

About 15 months ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of cannabis. It is unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

You know that the cannabis tax revenue basically has not given rise to meaningful net revenue in other regions. On the contrary, cannabis will lower the property value and make the city not safe. As you actually voted against the tax in the past, why are you proposing marijuana tax now against the will of Milpitas citizens?

As a voter of Milpitas, I strongly oppose to the introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will put all my efforts and motivate thousands Milpitas voters not to vote for any of you who push irresponsibly for the above-mentioned ballot measure. Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens.

Thank you.

Paul Kwan

Milpitas Voter

1229

Mary Lavelle

From: Sophia <sophialy87@hotmail.com>
Sent: Wednesday, April 29, 2020 4:41 PM
Subject: Opposing the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,
As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.
Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!
About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens? resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran?s not keeping this pivotal promise and Council Member Phan?s relentless efforts for pot!
Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?
Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition

blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,
Sophia L.

Mary Lavelle

From: Jen Lee <jenlee95035@gmail.com>
Sent: Wednesday, April 29, 2020 9:23 PM
To: Mary Lavelle
Subject: Opposing the proposed cannabis tax ballot measure

Dear City Clerk,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,

Jen H Lee

2197 Cuesta Dr. Milpitas, CA.95035

Mary Lavelle

From: Rich Tran
Sent: Wednesday, April 29, 2020 10:27 PM
To: Sergio Odintsov
Cc: Council Meeting; Bob Nuñez; Karina Dominguez; Anthony Phan; Carmen Montano; Steven McHarris
Subject: Re: Public comment for 5/5/2020 opposing cannabis tax ballot measure

Received, thank you for your concerns.

Mayor Rich Tran

On Apr 29, 2020, at 5:14 PM, Sergio Odintsov <sergio1tsov@gmail.com> wrote:

My name is Sergey Odintsov.

I live in 1823 Strawberry ln Milpitas CA 95035.

As a 4 years Milpitas resident, I would like to express that my entire family strongly oppose the proposed cannabis tax ballot measure. Please vote "NO" on this issue.

I sincerely hope our mayor and city council members can put our neighborhood safety, citizens' healthy, kids' future and the quality of life in the first place and seek the best interest of Milpitas residents not the special interest groups. I strongly urge you to vote "NO" on cannabis issue.

I respectfully request our city council to vote "NO" on the cannabis tax ballot measure. Bring back cannabis tax is the first step to bring back cannabis revenue to open cannabis stores:

1. In 2018, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana.
2. Crime rate increase including robbery and theft due to the cash-only cannabis business nature
3. Potential rising number of Driving-under-influence (DUI) cases that has occurred in other cities with cannabis dispensaries

4. Higher risk of exposure to second hand marijuana smoke for school-aged children
5. Easier access to marijuana edibles/candies and drugs for youngsters and negative moral values for next generation
6. City will spend lots of extra money to rehab and cure the aftermath and problems

I highly recommend our city council to vote "NO" on cannabis issue.

Thank you.

Sergey Odintsov

Mary Lavelle

From: Gmail <lienquach1776@gmail.com>
Sent: Wednesday, April 29, 2020 10:13 PM
To: Rich Tran; Bob Nuñez; Karina Dominguez; Anthony Phan; Carmen Montano; Steven McHarris; Mary Lavelle; Lien Quach
Subject: [BULK] RE: Opposing the proposed cannabis tax ballot measure
Importance: Low

RE: **Opposing the proposed cannabis tax ballot measure**

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,

Lien Quach
3361 La Crosse Dr.

Mary Lavelle

From: juweria rahman <ummehadniyah@yahoo.com>
Sent: Wednesday, April 29, 2020 11:57 PM
To: Steven McHarris
Subject: Opposing the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,

Juweria,

Milpitas, CA, 95035

Mary Lavelle

From: Sean Shen <jasminesean2008@gmail.com>
Sent: Thursday, April 30, 2020 1:10 PM
To: Anthony Phan
Subject: [BULK] RE: Opposing the proposed cannabis tax ballot measure

Importance: Low

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

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Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,

Zhongnan Shen

2108 Shiloh Ave, Milptas, CA 95035

Mary Lavelle

From: Lili wangll <scwangll@yahoo.com>
Sent: Thursday, April 30, 2020 10:35 AM
To: Steven McHarris
Subject: Opposing the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,

Li Tan

Parc Place Dr.

Mary Lavelle

From: esther tsang <tsangesther@hotmail.com>
Sent: Thursday, April 30, 2020 3:40 PM
To: Steven McHarris; Mary Lavelle
Subject: Re: Opposing the proposed cannabis tax ballot measure

Dear Sirs,

I am writing to express my strong opposition to the introduction of the cannabis tax ballot measure.

In fact, Mayor Tran and all council members voted to permanently ban marijuana business in our city two year ago. Now, Mayor Tran and two council members changed their minds to push for the cannabis tax. I feel upset, frustrated and angry as Mayor Tran and these council members fail to keep their promises and not represent the majority will of the Milpitas residents!

The pushing of such tax ballot will definitely harmful and ruin our small city. It will encourage marijuana addiction among the youth, shattering families, increasing traffic accident, bringing crime and decreasing our property value. There is no point to promote this cannabis tax ballot measure.

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens.

Hope the Mayor and all Council Members to follow the majority residents' will and be considerate to the residents' wellbeing. Hope they will make a right decision that helps to keep our Milpitas city safe. Thank you.

Sincerely,

Esther Tsang

Milpitas resident

Mary Lavelle

From: Bin Wang <binwangsc@gmail.com>
Sent: Wednesday, April 29, 2020 9:24 PM
To: Mary Lavelle
Subject: RE: Opposing the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens.

Thank you.

Sincerely,

Bin Wang

2222 Pinard st, Milpitas, CA 95035

1240

Mary Lavelle

From: mjwang89@gmail.com
Sent: Thursday, April 30, 2020 12:07 AM
To: Mary Lavelle
Subject: RE: Opposing the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,

Mengjie Wang
625 Barcelona Loop, Milpitas

Mary Lavelle

From: Alan Wong <akw_3@yahoo.com>
Sent: Thursday, April 30, 2020 10:55 AM
To: Rich Tran; Bob Nuñez; Karina Dominguez; Anthony Phan; Carmen Montano; Steven McHarris; Mary Lavelle
Cc: vicki_young@pacbell.net
Subject: [BULK] NO on CANNABIS --- Opposing the proposed cannabis tax ballot measure
Importance: Low

My name is Alan K Wong.

I live in 78 Meadowland Drive, Milpitas. CA. (1993 - Now) — Previous 536 Alexander Way. Milpitas (1985-1993).

As a longtime 35 years Milpitas resident, I would like to express that my entire family strongly oppose the proposed cannabis tax ballot measure. Please vote "NO" on this issue.

I sincerely hope our mayor and city council members can put our neighborhood safety, citizens' healthy, kids' future and the quality of life in the first place and seek the best interest of Milpitas residents not the special interest groups. I strongly urge you to vote "NO" on cannabis issue.

Thank you.
AKW

Mary Lavelle

From: sherlyn wong <siewying0313@gmail.com>
Sent: Wednesday, April 29, 2020 6:46 PM
To: Mary Lavelle
Subject: [BULK] Opposing the proposed cannabis tax ballot measure

Importance: Low

Dear City Clerk, Lavelle,

I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Siewying

Mary Lavelle

From: George Xie <georgexieteam@gmail.com> 283 N. Abbott Ave.
Sent: Thursday, April 30, 2020 11:08 AM
To: Rich Tran; Bob Nuñez; Karina Dominguez; Anthony Phan; montano@ci.milpitas.ca.gov; Steven McHarris; Mary Lavelle
Subject: [BULK] Opposing the proposed cannabis tax ballot measure
Importance: Low

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, a registered voter, I strongly oppose to your introduction of the cannabis tax ballot measure.

I hate this issue was brought up relentlessly and against Major opposition of Milpitans.

Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

1244

Mary Lavelle

From: xin xin <xinxin4083066572@gmail.com>
Sent: Wednesday, April 29, 2020 10:30 PM
To: Steven McHarris
Subject: RE: Opposing the proposed cannabis tax ballot measure

April 29, 2020

Mayor Richard Tran & Council Members

City of Milpitas

455 E. Calaveras Blvd

Milpitas, CA 95035

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

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Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist

this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,

Xin Xin, 834 N Abbott Ave Milpitas

Mary Lavelle

From: Tingna Xu <tingnaxu1120@gmail.com>
Sent: Wednesday, April 29, 2020 3:10 PM
To: Council Meeting
Subject: Opposing the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,
Tingna Xu
2190 Cuesta Dr, Milpitas

Mary Lavelle

From: amy yan <ay687@yahoo.com>
Sent: Thursday, April 30, 2020 1:51 PM
To: Mary Lavelle
Subject: Oppose cannabis tax ballot

RE: Opposing the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,
As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.
Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!
About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!
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Sincerely,
Amy Yan
687 Ann place
Milpitas, Ca. 95035

Sent from my iPhone

Mary Lavelle

From: D Yu <yu_tester@yahoo.com>
Sent: Thursday, April 30, 2020 12:14 PM
To: Mary Lavelle
Subject: [BULK] RE: Opposing the proposed cannabis tax ballot measure

Importance: Low

Dear Council Member,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Regards,
Diana

Mary Lavelle

From: kinglongzh <kinglongzh@gmail.com>
Sent: Wednesday, April 29, 2020 4:18 PM
To: Steven McHarris
Subject: [BULK] RE: Opposing the proposed cannabis tax ballot measure

Importance: Low

April 29, 2020

Mayor Richard Tran & Council Members

City of Milpitas

455 E. Calaveras Blvd

Milpitas, CA 95035

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,

Dennis Zhang, 834 N Abbott Ave Milpitas

--

kinglong

Mary Lavelle

From: Yu Zheng <yuzheng108@gmail.com>
Sent: Wednesday, April 29, 2020 10:30 PM
To: Steven McHarris
Subject: [BULK] Opposing the proposed cannabis tax ballot measure

Importance: Low

April 29, 2020

Mayor Richard Tran & Council Members

City of Milpitas

455 E. Calaveras Blvd

Milpitas, CA 95035

RE: Opposing the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

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Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

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Sincerely, Yu Zheng

1619 Conway St.

EMAIL COMMENTS SUBMITTED – REDARDING AGENDA ITEM NO. 11

PROPOSED TAX BALLOT MEASURES

MILPITAS CITY COUNCIL MEETING

MAY 5, 2020

Karen Chew

From: Mary Lavelle
Sent: Friday, May 01, 2020 1:04 PM
To: Karen Chew
Subject: Fw: Opposing the Proposed Cannabis Tax Ballot Measure

---

From: Steven McHarris <smcharris@ci.milpitas.ca.gov>
Sent: Friday, May 1, 2020 8:49 AM
To: Mary Lavelle <mlavelle@ci.milpitas.ca.gov>
Subject: FW: Opposing the Proposed Cannabis Tax Ballot Measure

From: Nuzhat Ahmad <njahmad22@gmail.com>
Sent: Thursday, April 30, 2020 9:30 PM
To: Steven McHarris <smcharris@ci.milpitas.ca.gov>
Subject: Opposing the Proposed Cannabis Tax Ballot Measure

Dear City Manager McHarris,
As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.
Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!
About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!
Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?
Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be

sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens.
Thank you.
Sincerely,
Altaf Ahmad
Nuzhat Ahmad
Sabrina Ahmad
Omar Ahmad
Amina Ahmad

690 Princess Place
Milpitas, CA 95035

"Strive always to excel in virtue and truth"

Sent from my iPhone

1255

Karen Chew

From: Mary Lavelle
Sent: Friday, May 01, 2020 1:02 PM
To: Karen Chew
Subject: Fw: No Cannabis Sales Tax.

From: Guangde Chen <guangde.chen@gmail.com>
Sent: Thursday, April 30, 2020 9:29 PM
To: Rich Tran <rtran@ci.milpitas.ca.gov>
Cc: Steven McHarris <smcharris@ci.milpitas.ca.gov>; Mary Lavelle <mlavelle@ci.milpitas.ca.gov>
Subject: No Cannabis Sales Tax.

Dear Mayor,

I has been living in Milpitas for more than five years.
I am following all the topics related to Cannabis in Milpitas.
We don't need any Cannabis sales tax as you mentioned in one meeting two years ago because it will create a lot of trouble for the community.

I definitely say "NO" to Cannabis Sales Tax.

Thanks for your excellent service to all of us!

Cody Chen

Karen Chew

From: Mary Lavelle
Sent: Friday, May 01, 2020 1:04 PM
To: Karen Chew
Subject: Fw: Opposing the proposed cannabis tax ballot measure

---

From: Steven McHarris <smcharris@ci.milpitas.ca.gov>
Sent: Friday, May 1, 2020 8:48 AM
To: Mary Lavelle <mlavelle@ci.milpitas.ca.gov>
Subject: FW: Opposing the proposed cannabis tax ballot measure

From: Simon Chu <sk888travel@gmail.com>
Sent: Thursday, April 30, 2020 10:40 PM
To: Steven McHarris <smcharris@ci.milpitas.ca.gov>
Subject: Opposing the proposed cannabis tax ballot measure

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links.
Dear City Manager,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.
Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!
About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!
Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens? Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.
Sincerely,
Simon Chu
66 Duttonwood Lane, Milpitas
Milpitas resident since 1988

1257

Karen Chew

From: Mary Lavelle
Sent: Friday, May 01, 2020 4:12 PM
To: Karen Chew
Subject: Fwd: Opposing the proposed cannabis tax ballot measure

Sent from my iPhone

Begin forwarded message:

From: Xiao He <xiaoohe@gmail.com>
Date: May 1, 2020 at 4:01:23 PM PDT
To: Mary Lavelle <mlavelle@ci.milpitas.ca.gov>
Subject: RE: Opposing the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,

Xiao He

1409 Coyote Creek Way , Milpitas

Karen Chew

From: Mary Lavelle
Sent: Friday, May 01, 2020 1:06 PM
To: Karen Chew
Subject: Fw: Opposition to the proposed cannabis tax ballot measure

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From: Steven McHarris <smcharris@ci.milpitas.ca.gov>
Sent: Friday, May 1, 2020 12:05 PM
To: Mary Lavelle <mlavelle@ci.milpitas.ca.gov>
Subject: FW: Opposition to the proposed cannabis tax ballot measure

From: Tony Hsiao <hsiao.us@gmail.com>
Sent: Friday, May 1, 2020 11:15 AM
To: Steven McHarris <smcharris@ci.milpitas.ca.gov>
Subject: Opposition to the proposed cannabis tax ballot measure

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links.
Important Subject: Opposition to the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

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Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

1260

Tony Hsiao

Karen Chew

From: Mary Lavelle
Sent: Friday, May 01, 2020 1:01 PM
To: Karen Chew
Subject: Fw: Opposing the proposal of cannabis tax ballot measure

From: ling li <lingfeng_99@yahoo.com>
Sent: Thursday, April 30, 2020 7:33 PM
To: Mary Lavelle <mlavelle@ci.milpitas.ca.gov>
Subject: Opposing the proposal of cannabis tax ballot measure

Dear Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

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Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

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Sincerely,

Your name, Address
Lingfeng
198 rose drive
Milptas

Sent from my iPhone

1262

Karen Chew

From: Mary Lavelle
Sent: Friday, May 01, 2020 1:00 PM
To: Karen Chew
Subject: Fw: Opposing the proposed cannabis tax ballot measure

From: Steven McHarris <smcharris@ci.milpitas.ca.gov>
Sent: Thursday, April 30, 2020 6:35 PM
To: Mary Lavelle <mlavelle@ci.milpitas.ca.gov>
Subject: FW: Opposing the proposed cannabis tax ballot measure

From: Lili Luo <luolili@gmail.com>
Sent: Thursday, April 30, 2020 3:46 PM
To: Rich Tran <rtran@ci.milpitas.ca.gov>; Bob Nuñez <bnunez@ci.milpitas.ca.gov>; Karina Dominguez <kdominguez@ci.milpitas.ca.gov>; Anthony Phan <aphan@ci.milpitas.ca.gov>; Carmen Montano <cmontano@ci.milpitas.ca.gov>; Steven McHarris <smcharris@ci.milpitas.ca.gov>
Subject: RE: Opposing the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

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Thank you.
Sincerely,
Lili Luo

Karen Chew

From: Mary Lavelle
Sent: Friday, May 01, 2020 1:04 PM
To: Karen Chew
Subject: Fw: [BULK] Opposing the proposed cannabis tax ballot measure

---

From: Steven McHarris <smcharris@ci.milpitas.ca.gov>
Sent: Friday, May 1, 2020 8:48 AM
To: Mary Lavelle <mlavelle@ci.milpitas.ca.gov>
Subject: FW: [BULK] Opposing the proposed cannabis tax ballot measure

From: Ginna Sern <ginnasern@gmail.com>
Sent: Thursday, April 30, 2020 10:58 PM
To: Steven McHarris <smcharris@ci.milpitas.ca.gov>
Subject: [BULK] Opposing the proposed cannabis tax ballot measure
Importance: Low

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

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Sincerely,

Ginna Sern

97 Berrendo Drive

Milpitas, CA 95035

Karen Chew

From: Mary Lavelle
Sent: Friday, May 01, 2020 1:05 PM
To: Karen Chew
Subject: Fw: [BULK] Fwd: Oppose cannibis tax measure

From: Jennifer Strohfus <jenniferstrohfus@gmail.com>
Sent: Friday, May 1, 2020 9:37 AM
To: Mary Lavelle <mlavelle@ci.milpitas.ca.gov>
Subject: [BULK] Fwd: Oppose cannibis tax measure

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links.

---------- Forwarded message ---------
From: **Jennifer Strohfus** <jenniferstrohfus@gmail.com>
Date: Fri, May 1, 2020, 9:27 AM
Subject: Oppose cannibis tax measure
To: Rich Tran <rtran@ci.milpitas.ca.gov>
Cc: <bnunez@ci.milpitas.ca.gov>, <cmontano@ci.milpitas.ca.gov>, <kdominguez@ci.milpitas.ca.gov>, <aphan@ci.milpitas.ca.gov>

Honorable Milpitas mayor Tran,

2018 Milpitas city council 5 out 5 voted Yes on completely banning permitting commercialization of cannibis in Milpitas. You were one of them. Appreciate your yes vote.
Now the new city council has a new proposal to bring commerical cannibis back to our community. The online city council meeting has been scheduled on May 5, 2020
I know that the cannibis tax measure is not about money collection. It is the first step of selling cannibis in my neighborhood.
I, as a longtime Milpitas resident, want to keep my neighborhood safe, keep my kids away from being ruined by drugs, and don't want drug addicts hangout in my neighborhood, please vote NO on cannibis tax measure.
Thank you for being a good mayor of listening your voters voice.

Thank you.
City council email:
rtran@ci.milpitas.ca.gov
bnunez@ci.milpitas.ca.gov
cmontano@ci.milpitas.ca.gov
kdominguez@ci.milpitas.ca.gov
aphan@ci.milpitas.ca.gov

Jennifer Strohfus

1267

Karen Chew

From: Mary Lavelle
Sent: Friday, May 01, 2020 1:01 PM
To: Karen Chew
Subject: Fw: NO to cannabis on ballot

From: Steven McHarris <smcharris@ci.milpitas.ca.gov>
Sent: Thursday, April 30, 2020 6:36 PM
To: Mary Lavelle <mlavelle@ci.milpitas.ca.gov>
Subject: FW: NO to cannabis on ballot

From: Padma Subbaraya <padmarani@gmail.com>
Sent: Thursday, April 30, 2020 6:12 PM
To: Steven McHarris <smcharris@ci.milpitas.ca.gov>
Subject: NO to cannabis on ballot

Dear City Manager Mr Harris,
As a citizen of Milpitas for 21years, I strongly oppose to your introduction of the cannabis tax ballot measure. I'm disappointed that this issue has come up again after it was permanently banned in the city. Please do anything/everything you can to keep cannabis out of our city.
Sincerely,
Padma Subbaraya
Glenview Dr
Milpitas CA 95035

--
"Its not enough to be compassionate. You must act." -Dalai Lama

Karen Chew

From: Mary Lavelle
Sent: Friday, May 01, 2020 1:04 PM
To: Karen Chew
Subject: Fw: [BULK] Opposing the proposed cannabis tax ballot measure

---

From: Steven McHarris <smcharris@ci.milpitas.ca.gov>
Sent: Friday, May 1, 2020 8:47 AM
To: Mary Lavelle <mlavelle@ci.milpitas.ca.gov>
Subject: FW: [BULK] Opposing the proposed cannabis tax ballot measure

From: aiminzam <aiminzam@gmail.com>
Sent: Friday, May 1, 2020 1:28 AM
To: Steven McHarris <smcharris@ci.milpitas.ca.gov>
Subject: [BULK] Opposing the proposed cannabis tax ballot measure
Importance: Low

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Aimin Zhang 1917 Momentum Dr. Milpitas, CA

Karen Chew

From: Mary Lavelle
Sent: Friday, May 01, 2020 1:41 PM
To: Karen Chew
Subject: Fwd: No cannabis in Milpitas

Sent from my iPhone

Begin forwarded message:

From: qing zhang <qingqingzhang@gmail.com>
Date: May 1, 2020 at 1:26:26 PM PDT
To: Mary Lavelle <mlavelle@ci.milpitas.ca.gov>
Cc: Jiang Lu <jianglu@gmail.com>
Subject: No cannabis in Milpitas

Dear Ms. Lavelle,

We have lived in Milpitas for ten years. We are registered voters. Our family strongly oppose this proposed cannabis tax ballot measure, which wastes time and money. We sincerely vote No on this issue.

Best regards,

Qing Zhang
Jiang Lu

Karen Chew

From: Mary Lavelle
Sent: Friday, May 01, 2020 1:02 PM
To: Karen Chew
Subject: Fw: Opposing the proposed cannabis tax ballot measure

---

From: Zhang Ray <rayzhang.cfl@gmail.com>
Sent: Thursday, April 30, 2020 9:44 PM
To: Rich Tran <rtran@ci.milpitas.ca.gov>; Bob Nuñez <bnunez@ci.milpitas.ca.gov>; Karina Dominguez <kdominguez@ci.milpitas.ca.gov>; Anthony Phan <aphan@ci.milpitas.ca.gov>; Carmen Montano <cmontano@ci.milpitas.ca.gov>; Steven McHarris <smcharris@ci.milpitas.ca.gov>; Mary Lavelle <mlavelle@ci.milpitas.ca.gov>
Subject: Opposing the proposed cannabis tax ballot measure

Hello Mayor Tran and Council Members.

Not Marijuana again

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Cannabis tax revenue basically did not give rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Bottom line, this marijuana Business only creates higher Crime rates in our city!

Thank You,
Ray Zhang

Karen Chew

From: Mary Lavelle
Sent: Friday, May 01, 2020 1:02 PM
To: Karen Chew
Subject: Fw: [BULK] Opposing the proposed cannabis tax ballot measure

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From: Aihua Zhu <aihzhu2@gmail.com>
Sent: Thursday, April 30, 2020 10:25 PM
To: Anthony Phan <aphan@ci.milpitas.ca.gov>; Bob Nuñez <bnunez@ci.milpitas.ca.gov>; Carmen Montano <cmontano@ci.milpitas.ca.gov>; Karina Dominguez <kdominguez@ci.milpitas.ca.gov>; Rich Tran <rtran@ci.milpitas.ca.gov>
Cc: Mary Lavelle <mlavelle@ci.milpitas.ca.gov>; Steven McHarris <smcharris@ci.milpitas.ca.gov>
Subject: [BULK] Opposing the proposed cannabis tax ballot measure

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links.

Dear Mayor Tran and Council Members :

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to place a "permanent ban" on marijuana in the city due to tenacious opposition of Milpitas citizens. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise.

Please stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens.

Sincerely,
Aihua Zhu
94 Images Circle, Milpitas, CA 95035

Karen Chew

From: Mary Lavelle
Sent: Friday, May 01, 2020 1:01 PM
To: Karen Chew
Subject: Fw: Regarding Cannabis Ballot Measure

From: Yaohua Li <liyaohua.bupt@gmail.com>
Sent: Thursday, April 30, 2020 7:11 PM
To: Rich Tran <rtran@ci.milpitas.ca.gov>; Bob Nuñez <bnunez@ci.milpitas.ca.gov>; Karina Dominguez <kdominguez@ci.milpitas.ca.gov>; Anthony Phan <aphan@ci.milpitas.ca.gov>; Carmen Montano <cmontano@ci.milpitas.ca.gov>
Cc: Steven McHarris <smcharris@ci.milpitas.ca.gov>; Mary Lavelle <mlavelle@ci.milpitas.ca.gov>
Subject: Regarding Cannabis Ballot Measure

Dear Mayor Tran, Vice Mayor Dominguez, City Council Members,

I am a Milpitas resident and I love my city. I urge you to give enough thought before making the decision to put the cannabis issue on ballot.

An issue on ballot is very expensive in terms of the political resources from the government, and for people in favor or against the issue. A controversial ballot measure would be exponentially more expensive, as both sides would spend huge amount of resources to "win the battle". For controversial measures, regardless of the voting result, the losing side would want to vote again in the next time.

We could look at how MILPITAS voters (NOT broadly CA or SCC voters) voted back in 2016 on Prop 64. This can more or less reflect how the Milpitas voters thought.

I also would like you to think about those who don't have a vote (yet), especially the large amount of (new) immigrants. They work as hard (if not harder) as voters and they pay as much taxes as voters. I am one of those (new) immigrants and I want my voice heard too.

Lastly, I would like to remind that the city just made a decision on cannabis not very long time ago. I wish you all were serious when making the decision last time, because we should not go back and forth on the same topic again and again. This is for the consideration of limited/valuable political resources.

Thank you all,
Yaohua

CITY OF MILPITAS

455 EAST CALAVERAS BOULEVARD, MILPITAS, CALIFORNIA 95035-5479
GENERAL INFORMATION: 408-586-3000, www.ci.milpitas.ca.gov

e-mails received
May 1 – 4, 2020

5/05/2019
Agenda Item No. 11

ATTACHMENT RELATED TO AGENDA ITEM RECEIVED AFTER AGENDA PACKET DISTRIBUTION

Mary Lavelle

From: Victor Group <vjgroup@gmail.com>
Sent: Monday, May 04, 2020 5:44 PM
To: Rich Tran; Bob Nuñez; Karina Dominguez; Anthony Phan; Carmen Montano; Steven McHarris; Mary Lavelle
Subject: [BULK] I Support the proposed cannabis tax ballot measure

Importance: Low

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly agree with your introduction of the cannabis tax ballot measure. Please move forward with this. Otherwise, in the upcoming election, I will not vote for any of you who push to ignore this opportunity for a huge tax revenue stream. California voters already made it clear in proposition 64 that they support legalization and taxation of cannabis in California. About two years ago, I was deeply disappointed that the Milpitas City council members voted to ban the sale and taxation of marijuana in the city. I would guess the council members voted for the ban because a few very vocal people from the city took over a meeting to spread fear. Those people (say at most 500 out of 78,000 or so) would not listen when the mayor twice told them not to applaud. They were booing speakers. They were yelling from their seats. They thought it was appropriate to call Councilwoman Grilli in the middle of the night and to threaten her and her business. Most of all they were saying things that are just not true. Let's examine a few of the things they said:

There will be a cloud of smoke over the city. There are already people smoking in the city and there is no cloud. It is not legal to smoke outside. It is much more likely there would be a cloud of smoke from cigarettes than marijuana. Having a regulated dispensary in the city that we could tax beyond sales tax (I believe the extra tax in San Jose is 10%) would provide money for more police officers who could respond to the calls when there were people smoking in public (yes it already happens, I've seen it myself in my local park).

There would be marijuana (or more marijuana) in schools. There has been marijuana in schools since the 1960s. It might be harder for children to get marijuana if there were regulated businesses (who check ID) as opposed to the dealers who not provide them with marijuana. There could also be money for enhanced education about marijuana from the tax. If you look at the statistics from Colorado, the rate of marijuana smoking in children 18 and under has fallen since it became legal there.

There will suddenly be lots of people driving under the influence of marijuana in the city. There are already people driving under the influence in the city. With a tax we would have more money for more enforcement.

Marijuana will be kept out of the city with a ban. There is already marijuana here. There will continue to be people smoking and using edibles in the city whether we have regulated dispensaries and a tax, or whether people continue to buy in San Jose and give the tax money to them.

Please give people a voice by adding the ballot measure to this November's ballot. Please don't make the decision for us.

Thank you,

-Victor Group

1102 S Abel St APT 502 Milpitas, CA
Milpitas resident for over 6 years

Mary Lavelle

From: Steven McHarris
Sent: Monday, May 04, 2020 5:41 PM
To: Mary Lavelle
Subject: FW:

Sent from my Verizon, Samsung Galaxy smartphone

-------- Original message --------
From: Bhasker Banjara <dr_banjara@yahoo.com>
Date: 5/4/20 5:24 PM (GMT-08:00)
To: Steven McHarris <smcharris@ci.milpitas.ca.gov>
Subject:

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links.

RE: **Opposing the proposed cannabis tax ballot measure**

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,

Dr. Bhasker Banjara

1574 Clear Lake Ave. Milpitas

Sent from Yahoo Mail on Android

Mary Lavelle

From: suwarna banjara <suwarnabanjara@icloud.com>
Sent: Monday, May 04, 2020 5:12 PM
To: Mary Lavelle

RE: **Opposing the proposed cannabis tax ballot measure**

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,

Suwarna Banjara
1574 Clear Lake Ave.

Mary Lavelle

From: jing bian <dudubian@gmail.com>
Sent: Sunday, May 03, 2020 8:36 PM
To: rtan@ci.milpitas.ca.gov; Bob Nuñez; Carmen Montano; kdomingue@ci.milpitas.ca.gov; Anthony Phan; Mary Lavelle
Subject: [BULK] opposing the proposed cannabis tax ballot measure

Importance: Low

Dear Mayor Tran and Council Members,

As a long-term resident of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. In 2018 Milpitas city council 5 out of 5 voted Yes on completely banning permitting commercialization of cannibis in Milpitas. You were one of them. I am really appreciate your yes vote.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Most importantly cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Please note that a large number of your supporters will not support you any more if you insist on this! Please make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens.

Thank you.

Sincerely,

Jing, Resident of Milpitas

Mary Lavelle

From: jing bian <dudubian@gmail.com>
Sent: Sunday, May 03, 2020 11:49 PM
To: Rich Tran; Bob Nuñez; Karina Dominguez; Anthony Phan; Carmen Montano; Steven McHarris; Mary Lavelle
Subject: [BULK] Fwd: opposing the proposed cannabis tax ballot measure

Importance: Low

Dear Mayor Tran and Council Members,

As a long-term resident of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. In 2018 Milpitas city council 5 out of 5 voted Yes on completely banning permitting commercialization of cannibis in Milpitas. You were one of them. I am really appreciate your yes vote.

Please continue to say no to marijuana to make our city clean and healthy.

And I don't think cannabis tax revenue basically can given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Please put stop in putting the cannabis tax measure on the ballot, for yourselves and all the citizens.

Thank you.

Sincerely,

Jing, Resident of Milpitas

Mary Lavelle

From: Bin(Bill) Chen <b.chen.ic@gmail.com>
Sent: Monday, May 04, 2020 12:36 PM
To: Mary Lavelle
Subject: [BULK] Fwd: Opposing the proposed cannabis tax ballot measure

Importance: Low

Dear Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,

Bin Chen

Mary Lavelle

From: Sandy Chen <sandychen0607@yahoo.com>
Sent: Sunday, May 03, 2020 4:25 PM
To: Mary Lavelle
Subject: [BULK] Opposing the proposed cannabis tax ballot measure

Importance: Low

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

I am stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. Marijuana will cause big problems to the city in traffic accidents, crime, youth addition, decreased property value, etc.

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis anymore. It is unacceptable that the ban has to be re-decided again now. We are outraged by Mayor Tran's not keeping this pivotal promise. Although Mayor Tran knew most citizens would vote against cannabis tax ballot measure, he chose to use taxpayers' money to bring back the ballot and tried to wear out people's patience to slip through this measure. I make it here very clear: I will not vote anyone for re-election in November who will support for cannabis tax ballot measure on Tuesday's meeting, and I will convince my relatives and friends not to vote for him or her either, since they sacrifice city's safe environment and most citizens' interest to get the cannabis money.

I hope Mayor Tran can change his position for the goodness of Milpitas people. Please stand firm against this cannabis tax ballot measure, and focus to make Milpitas a safer and better place to live and work.

best regards,

Hui S. Chen
90 Calypso Lane
Milpitas

Mary Lavelle

From: Yi Chen <nysmcy@gmail.com>
Sent: Sunday, May 03, 2020 8:21 PM
To: Mary Lavelle
Subject: RE: Opposing the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,

As a resident of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

Back in 2018, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you anymore if you insist on this! Please be sagacious and make the right decision now. That is to stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,

Yi Chen

2106 Cuesta Dr, Milpitas, CA 95035

Mary Lavelle

From: Ed Cheng <drc9988@gmail.com>
Sent: Monday, May 04, 2020 4:25 PM
To: Rich Tran; Bob Nuñez; Carmen Montano; Karina Dominguez; Anthony Phan; Mary Lavelle
Subject: Opposing the proposed cannabis tax ballot measure
Attachments: Fax to Milpitas.pdf

Dear All,

Please read my signed letter as attached below.

Dear Mayor Tran and Council Members,

As a practicing family doctor in San Jose, I have many patients who are residents and voters in Milpitas. They express to me their grief concern on their personal safety and wellness in their community.

They strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, you will not get their votes for this irresponsible action on your support of the above-mentioned ballot measure against they desire.

As noted in many Santa Clara county, Milpitas voters are stunned and upset by this ballot measure, the approval of which will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause social-economic problems to the community safety and harmony especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens about 2 years ago. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided against the community preference. Many of my patients are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

On public record, Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of my patients who voted for you, will not support you anymore if you insist on this! Please show your public responsibility and make the intelligent decision now.

Please help to stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you for your kind and wise decision.

Sincerely,

Edward Cheng, MD PhD
Leading Physician
Physician Medical Urgent Care
Cell: 408-799-3131

1286

Mary Lavelle

From: MAGGIE CHENG <mcheng29900@gmail.com>
Sent: Friday, May 01, 2020 9:53 PM
To: Mary Lavelle
Subject: Opposition to the Proposed Cannabis Tax Ballot Measure

May 1, 2020

Mayor Richard Tran & Council Members
City of Milpitas
455 E. Calaveras Blvd
Milpitas, CA 95035

RE: Opposing the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens.

Thank you.

Sincerely,

Maggie Cheng

Mary Lavelle

From: Chunyan Du <betty_duchunyan@yahoo.com>
Sent: Monday, May 04, 2020 4:04 PM
To: Mary Lavelle
Subject: Opposing the proposed cannabis tax ballot measure

Dear City Clerk,
As a resident in Milpitas, I oppose the proposed cannabis tax ballot measure.
Milpitas residents deserve to have a safe and family friendly environment.
Thank you for your consideration!

Regards,
Betty

Mary Lavelle

From: Lynn Fox <foxlynn@me.com>
Sent: Monday, May 04, 2020 11:34 AM
To: ctrain@ci.milpitas.ca.gov; Bob Nuñez; Carmen Montano; kdominquez@ci.milpitas.ca.gov; Anthony Phan; Mary Lavelle; rtran@ci.milipitas.ca.gov
Subject: Opposition to Cannabis Tax Measure
Attachments: 20 Reasons to Vote NO in 2020 - Cannabis.pdf

Importance: High

To: Mayor Rich Tran City of Milpitas rtran@ci.milipitas.ca.gov

Cc: Members of the City Council
Bob Nunez bnunezz@ci.millipitas.ca.gov
Carmen Montana cmontana@ci.milipitas.ca.gov
Karen Dominquez kdominguez@ci.milipitas.ca.gov
Anthony Phan aphan@ci.milipitas.ca.gov

City Clerk mlavelle@ci.milpitas.ca.gov

Re: Opposition to Cannabis Tax Measure

Dear Mayor and Council Members: As an teacher educator for over 45 years, I strongly urge you to vote no against any measure to proliferate the use of marijuana for tax income. As with any business, one must look at REAL COSTS in addition to income. In the case of this dangerous drug, the human, environmental and economic costs vastly exceed any economic benefit by three or more times what you would benefits from any money you might receive. Remember too that Marijuana is FEDERALLY illegal to sale, transport across State lines and to support the use by Youth. As a teacher of teachers, adolescents and children most of my life, I know they are vulnerable and need good role models, vs. people and leaders who support a law for the revenue vs. what they should do morally and for the safety of citizens, families and communities.

Just a few FACTS:

Cannabis ingested in any form causes numerous adverse impacts to the body and brain: especially teens and youth up to age of 25:

a). cause permanent brain damage and loss of IQ by up to 8 points. b.) Increased risk of psychosis 5 times c.) suicide rate increased 7 times. d.) major cause of mental illness e.) can cause psychotic breaks leading to violent acts of violence and mass murders.

ADDICTION RATES YOU SHOULD KNOW ABOUT:

1 in 6 adolescents and 1in 9 adults will be become addicted.

People who are addicted can't work effectively or not at all.

Often they have to turn to crime and public service for support.

Homeless people throughout our great state reflect the outcome of drug use and addiction. Marijuana has become the drug of choice in the youth population. They think it is OK as it so called :medical MJ.

Smoking, dabbing and MJ **vaping has made it much worse. Vaping attacks the lungs and respiratory system, causing death in many cases. Combining that with the Covid-19 problem, and it is a recipe for disaster. Marijuana ingested in any form, including edibles, also diminishes one's auto-immune system.**

The public health and safety. is the first and most important responsibility of elected officials at all levels. I urge you to **defeat any measure to proliferate the use of this marijuana.** The costs will dramatically exceed any tax benefits, as has been the case everywhere. Safe and safeguard our youth, families and community under your WATCH!

Thank you for doing the right thing for your constituents.
Sincerely, Dr. C. Lynn Fox
Professor Emerita San Francisco State University, College of Ed.Co-Author of textbook by HarperCollins: *Creating Drug Free Schools and Communities: A Comprehensive Approach*

See attachment: 20 Reasons to Vote NO on Cannabis/Marijuana in your City

Mary Lavelle

From: song gao <s_gao@apple.com>
Sent: Sunday, May 03, 2020 6:57 PM
To: Mary Lavelle
Subject: RE: Opposing the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,

Song Gao, 1917 Momentum Dr, Milpitas CA 95035

Mary Lavelle

From: Fanghe Gong <lucy.gfh@gmail.com>
Sent: Monday, May 04, 2020 12:09 PM
To: Mary Lavelle
Subject: Opposing the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Regards,
Lucy Gong
1989 Lee Way, Milpitas

Mary Lavelle

From: Gloria Gong <fanghegong@gmail.com>
Sent: Monday, May 04, 2020 12:12 PM
To: Rich Tran
Subject: Opposing the proposed cannabis tax ballot measure

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links.

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

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Regards,
Fanghe Gong
1451 Nightshade Rd #30

Mary Lavelle

From: Steven McHarris
Sent: Friday, May 01, 2020 4:35 PM
To: Mary Lavelle
Subject: FW: Opposing the proposed cannabis tax ballot measure

Sent from my Verizon, Samsung Galaxy smartphone

-------- Original message --------
From: Xiao He <xiaoohe@gmail.com>
Date: 5/1/20 4:01 PM (GMT-08:00)
To: Steven McHarris <smcharris@ci.milpitas.ca.gov>
Subject: RE: Opposing the proposed cannabis tax ballot measure

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links.

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

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Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,

Xiao He

1409 Coyote Creek Way , Milpitas

Mary Lavelle

From: Guogui Huang <gary.gg.huang@gmail.com>
Sent: Monday, May 04, 2020 11:47 AM
To: Rich Tran; Bob Nuñez; Karina Dominguez; Anthony Phan; Carmen Montano; Steven McHarris; Mary Lavelle
Subject: Opposing the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

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Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,

Guogui Huang

1502 Mount Diablo Ave. Milpitas, 95035.

1296

Mary Lavelle

From: wenhuihuo@yahoo.com
Sent: Monday, May 04, 2020 11:01 AM
To: Mary Lavelle
Subject: No cannabis

No cannabis Tax and store.

Mary Lavelle

From: gina kong <gkong_95035@yahoo.com>
Sent: Friday, May 01, 2020 5:03 PM
To: Mary Lavelle
Subject: RE: Opposing the proposed cannabis tax ballot measure

Dear City Clerk,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

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Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,

Tong Kong

650 Grayson Way, Milpitas

1298

Mary Lavelle

From: Gengwu Li <gengwuli@gmail.com>
Sent: Sunday, May 03, 2020 10:44 PM
To: Mary Lavelle
Subject: [BULK] Opposing the proposed cannabis tax ballot measure

Importance: Low

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

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Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,

GENGWU LI

1409 Coyote Creek Way,Milpitas

1299

Mary Lavelle

From: qinxue Li <qinxueli@yahoo.com>
Sent: Sunday, May 03, 2020 6:43 PM
To: Rich Tran; Bob Nuñez; Karina Dominguez; Anthony Phan; Carmen Montano; Steven McHarris; Mary Lavelle
Subject: Opposing the proposed cannabis tax ballot measure,

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

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Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,

Jerry Li

697 Carino Ter, Milpitas, CA95035

1300

Mary Lavelle

From: Shane Li <shane@confometrx.com>
Sent: Monday, May 04, 2020 11:38 AM
To: Mary Lavelle
Subject: Letter to the mayor of Milpitas

Honorable Milpitas mayor Tran,

2018 Milpitas city council 5 out 5 voted Yes on completely banning permitting commercialization of cannibis in Milpitas. You were one of them. Appreciate your yes vote.

Now the new city council has a new proposal to bring commerical cannibis back to our community. The online city council meeting has been scheduled on May 5, 2020

I know that the cannibis tax measure is not about money collection. It is the first step of selling cannibis in my neighborhood.

I, as a longtime Milpitas resident, want to keep my neighborhood safe, keep my kids away from being ruined by drugs, and don't want drug addicts hangout in my neighborhood, please vote NO on cannibis tax measure.

Thank you for being a good mayor of listening your voters voice.

Thank you.
Shane

Mary Lavelle

From: lilian liang <lilianliang18@gmail.com>
Sent: Monday, May 04, 2020 12:08 PM
To: Mary Lavelle
Subject: [BULK] Opposing the proposed cannabis tax ballot measure

Importance: Low

Dear City Clerk,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,

Lilian Liang
1562 Hidden Creek

1302

Mary Lavelle

From: Tom Lin <tlin95035@gmail.com>
Sent: Friday, May 01, 2020 1:11 PM
To: Mary Lavelle
Subject: NO marijuana in Milpitas

No marijuana in Milpitas to toxic our kids PLEASE--
Tom

Mary Lavelle

From: Robert Liu <robliu@comcast.net>
Sent: Monday, May 04, 2020 11:34 AM
To: Rich Tran
Cc: Bob Nuñez; Carmen Montano; Karina Dominguez; Anthony Phan; Mary Lavelle
Subject: Opposition to the proposed cannabis tax ballot measure

Honorable Milpitas mayor Tran,

2018 Milpitas city council 5 out 5 voted Yes on permanently banning permitting commercialization of cannabis in Milpitas. You were one of them. Appreciate your yes vote.

Now the new city council has a new proposal to bring commercial cannabis back to our community. The online city council meeting has been scheduled on May 5, 2020

I know that the cannabis tax measure is not about money collection. It is the first step of selling cannabis in my neighborhood.

I, as a longtime Milpitas resident, want to keep my neighborhood safe, keep my kids away from being ruined by drugs, and don't want drug addicts hangout in my neighborhood, please vote NO on cannabis tax measure.

Thank you for being a good mayor of listening your voters voice.

Thank you.
Sincerely,
Robert Liu

Mary Lavelle

From: meigui li <meiguili0919@gmail.com>
Sent: Sunday, May 03, 2020 1:04 PM
To: Mary Lavelle
Subject: [BULK] Opposing the proposed cannabis tax ballot measure

Importance: Low

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

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Sincerely,

Shuwei Liu, 1263 Calle De Cuestanada, Milpitas,CA,95035

Mary Lavelle

From: Xiaolin Luo <xiaolinshirley@gmail.com>
Sent: Sunday, May 03, 2020 7:07 PM
To: Mary Lavelle
Subject: No

Sent from my iPhone

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

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Sincerely,

Xiaolin Luo

41 Parc Place Dr

Mary Lavelle

From:	anne@daretoreinvent.com
Sent:	Monday, May 04, 2020 12:08 PM
To:	Rich Tran; Bob Nuñez; Carmen Montano; Karina Dominguez; Anthony Phan
Cc:	Mary Lavelle
Subject:	Proposed Cannabis Tax Ballot Measure

May 5, 2020

Mayor Richard Tran & Council Members
City of Milpitas
455 E. Calaveras Blvd
Milpitas, CA 95035

RE: Opposing the proposed cannabis tax ballot measure
Dear Mayor Tran and Council Members,

I'm writing to strongly oppose your proposal to put a cannabis tax on the ballot.

About two years ago, Milpitas City council members, at the urging of citizens of Milpitas, voted to ban marijuana in the city. A t the time, Mayor Tran promised not to push for cannabis due to the strong objections.

Your attempt to put a cannabis tax measure on the ballot at this time is a failure to keep this promise to the people. A cannabis tax measure will open the door to legalizing pot shops in Milpitas – in direct violation of the will of the people!!

The pot industry will attempt to argue that allowing pot to be sold in Milpitas will bring in much needed tax revenue. That is not the case in other jurisdictions that have legalized pot.

According to a study by the Centennial Institute in Colorado (where pot has been commercialized) for every dollar gained in tax revenue, Coloradans spent approximately $4.50 to mitigate the effects of legalization in terms of increased burden to the healthcare system, increased rates of addiction, and fatal car accidents caused by marijuana impaired drivers and worker productivity.
http://www.ccu.edu/centennial/policy-briefs/marijuana-costs/.

I find it especially atrocious that during the COVD pandemic you are attempting to introduce a drug into Milpitas that medical experts tell us increases users' risks for suffering complications from COVID 19, impairs their immune function and interferes with rational thinking so they cannot communicate clearly with health professionals attempting to help them. https://www.cnn.com/2020/04/10/health/smoking-weed-coronavirus-wellness/index.html

1307

According to a recent article from Dr. Stanton Glantz of UCSF, people should stop smoking and vaping both tobacco and marijuana to reduce their risk of Covid complications. tobacco.ucsf.edu/reduce-your-risk-serious-lung-disease-caused-corona-virus-quitting-smoking-and-vaping. He urges cities as well to protect the public from this risk.

"This would also be a good time for cities, states private employers and even individual families to strengthen their smoke free laws and policies – including e-cigarettes -- to protect nonsmokers from the effects of secondhand smoke and aerosol on their lungs and to create an environment that will help smokers quit."

TO PUT A CANNABIS TAX ON THE BALLOT IN THE MIDDLE OF A PANDEMIC TO RAISE MONEY FROM SALES OF A DRUG THAT IS SO INJURIOUS TO PEOPLE'S HEALTH WOULD BE A GROSS VIOLATION OF YOUR DUTY TO PROTECT THE PEOPLE OF MILPITAS.

I strongly urge you to rethink this misguided course of action and not vote to put a cannabis tax measure on the ballot.

Thank you

Sincerely,

Anne

Anne Martin

Certified Master Dream Coach
www.daretoreinvent.com
(415) 830-2373

Mary Lavelle

From: Roger Morgan <rogermorgan339@gmail.com>
Sent: Saturday, May 02, 2020 6:17 PM
To: ctrain@ci.milpitas.ca.gov; Bob Nuñez; Carmen Montano; kdominquez@ci.milpitas.ca.gov; Anthony Phan; Mary Lavelle
Subject: [BULK] Opposition to Cannabis Tax Measure
Attachments: Tri-fold - Battle For The Brain.pdf

Importance: Low

Take Back America Campaign

1692 Aitken Rd., Lincoln, Calif. 95648 (916) 434 5629 rogermorgan339@gmail.com
www.tbac.us

May 2, 2020

Mayor Rich Tran
City of Milpitas
rtran@ci.milipitas.ca.gov

Cc: Members of the City Council
Bob Nunez bnunezz@ci.millipitas.ca.gov
Carmen Montana cmontana@ci.milipitas.ca.gov
Karen Dominquez kdominguez@ci.milipitas.ca.gov
Anthony Phan aphan@ci.milipitas.ca.gov

City Clerk mlavelle@ci.milpitas.ca.gov

Re: Opposition to Cannabis Tax Measure

Dear Mayor and members of the Council:

I urge you to vote no against any measure to proliferate the use of marijuana for tax income. As with any business, one must look at costs in addition to income. In the case of this dangerous drug, the human, environmental and economic costs vastly exceed any economic benefit.

Cannabis ingested in any form causes numerous adverse impacts to the body and brain. In young people particularly it can cause permanent brain damage and loss of IQ by up to 8 points. It elevates the risk of psychosis 5 times and suicide 7 times. It is a major cause of mental illness. In some individuals it causes psychotic breaks leading to violent acts of violence and mass murders. One in six adolescents and one in ten adults will be become addicted. People who are mentally ill or addicted can't work effectively, if at all, so they have to turn to crime and public service for support. The throngs of homeless people throughout our great state reflect the outcome of drug use and addiction, which almost always starts with marijuana.

In addition to all of the historic harms of smoking and dabbing marijuana, vaping has made it much worse. Vaping attacks the lungs and respiratory system, causing death in many cases. Combining that with the Covid-19 problem, and it

is a recipe for disaster. Marijuana ingested in any form, including edibles, also diminishes one's auto-immune system. Just what we don't need as we all try to survive the pandemic.

The first and most important responsibility of elected officials at all levels is public health and safety. I urge you to defeat any measure to proliferate the use of this drug. The costs will dramatically exceed any tax benefits, as has been the case everywhere. The value of even one life saved is priceless.

Thank you for doing the right thing for your constituents.

Sincerely

Roger Morgan
Founder

Mary Lavelle

From: Charles Mori <charlestoshiyasumori@gmail.com>
Sent: Sunday, May 03, 2020 10:54 PM
To: Rich Tran; Bob Nuñez; Carmen Montano; Karina Dominguez; Anthony Phan; Mary Lavelle
Subject: No to commercial cannibis

Honorable Milpitas mayor Tran,

This is Charles Toshiyasu Mori, a Milpitas resident (1011 Ternura Loop, Milpitas, CA95035).

2018 Milpitas city council 5 out 5 voted Yes on completely banning permitting commercialization of cannibis in Milpitas. You were one of them. Appreciate your yes vote.

Now the new city council has a new proposal to bring commercial cannibis back to our community. The online city council meeting has been scheduled on May 5, 2020

I know that the cannibis tax measure is not about money collection. It is the first step of selling cannibis in my neighborhood.

I, as a longtime Milpitas resident, want to keep my neighborhood safe, keep my kids away from being ruined by drugs, and don't want drug addicts hangout in my neighborhood, please vote NO on cannibis tax measure.

Thank you for being a good mayor of listening your voters voice.

Thank you.
Charles Mori

Mary Lavelle

From: Judy Ng <jyynoble@yahoo.com>
Sent: Saturday, May 02, 2020 4:14 PM
To: Mary Lavelle
Subject: RE: Opposing the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,

Judy Ng 138 Edgewater Dr. Milpitas, CA 95035

Mary Lavelle

From: Pallavi pandit <coolgalca@gmail.com>
Sent: Monday, May 04, 2020 5:13 PM
To: Mary Lavelle
Subject: Opposing the proposed cannabis tax ballot measure

May 4, 2020

Mayor Richard Tran & Council Members

City of Milpitas

455 E. Calaveras Blvd

Milpitas, CA 95035

Subject: **Opposing the proposed cannabis tax ballot measure**

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,

Pallavi Pandit

2216 Shiloh Ave, Milpitas, CA 95035

Mary Lavelle

From: Natalia Petrov <natachusec@gmail.com>
Sent: Monday, May 04, 2020 11:08 AM
To: Mary Lavelle
Subject: Opposing the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely, Natalia Petrov, 56 hemlock ct Milpitas

Mary Lavelle

From: yali <yalicanada@hotmail.com>
Sent: Monday, May 04, 2020 12:25 PM
To: Rich Tran; Bob Nuñez; Karina Dominguez; Anthony Phan; Carmen Montano; Steven McHarris; Mary Lavelle
Subject: Opposing the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,

Yali Rao

1502 Mount Diablo Ave. Milpitas, 95035

Mary Lavelle

From: Zeping Rao <zeping.rao@gmail.com>
Sent: Monday, May 04, 2020 2:34 PM
To: Mary Lavelle
Subject: [BULK] Opposing the proposed cannabis tax ballot measure

Importance: Low

Dear City Clerk and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,

zeping,rao Terra Alta Ct, Milpitas
发自我的iPhone

Mary Lavelle

From: hong shi <shihong2010@gmail.com>
Sent: Sunday, May 03, 2020 9:47 PM
To: Mary Lavelle
Subject: Opposing the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,

Hong Shi

1466 Saratoga Drive,

Milpitas, CA 95035

1318

Mary Lavelle

From: Joe sun <tojoesun@yahoo.com>
Sent: Monday, May 04, 2020 5:37 PM
To: Mary Lavelle
Subject: Opposing cannabis tax ballot measure

Dear Mayor and Council Members,

Having been a Milpitas resident for 30 years, I really appreciate your great leadership in the City of Milpitas. Whatever you do sets the tone for the City. Introducing cannabis taxes will send a signal to our children that it is OK to use it, and this will worsen the drug use crisis among our youth. As the leaders of the City, shouldn't you promote a healthy life style? Please keep Milpitas as family friendly as it has always been. Thanks!

Joe

Mary Lavelle

From: K T <qfactor_a@hotmail.com>
Sent: Saturday, May 02, 2020 5:56 PM
To: Mary Lavelle
Subject: Opposing the proposed cannabis tax ballot measure

Dear City Clerk Mary Lavelle,

As a citizen of Milpitas, I strongly oppose to the introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for the person who push irresponsibly for the above-mentioned ballot measure and will reject it too.

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. You also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by your not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,

King Tam
2354 Cresthaven St, Milpitas

Mary Lavelle

From: Cj Tie <cuijuan@gmail.com>
Sent: Monday, May 04, 2020 2:33 PM
To: Rich Tran; Bob Nuñez; Karina Dominguez; Anthony Phan; Carmen Montano; Steven McHarris; Mary Lavelle
Subject: [BULK] "NO" on the cannabis tax ballot measure.

Importance: Low

My name is Joyce Tie. I live in 1609 Greenwood Way, Milpitas, CA 95035.

I respectfully request our city council to vote "NO" on the cannabis tax ballot measure. Bring back cannabis tax is the first step to bring back cannabis revenue to open cannabis stores:

1. In 2018, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. **WHY again???**
2. Marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc
3. Higher risk of exposure to second hand marijuana smoke for school-aged children. I have two kid, one in elementary and one in middle school.
4. Potential rising number of Driving-under-influence (DUI) cases that has occurred in other cities with cannabis dispensaries
5. Crime rate increase including robbery and theft due to the cash-only cannabis business nature
6. It will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people.
7. Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions .
8. Milpitas is so well located in such a Convenient central location. Easy access to highway, BART, light rail, public transportation make it an ideal location for fast distribute Marijuana to nearby cities, company working force, teenagers and even kids etc.

We all love Milpitas. So I highly recommend our city council to vote "NO" on cannabis issue. Thank you.

Best,
Cuijuan (Joyce) Tie

Mary Lavelle

From: lichi wan <lichi_wan@hotmail.com>
Sent: Monday, May 04, 2020 4:22 PM
To: Mary Lavelle
Subject: Opposing the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,
Lichi Wan
1145 Kovanda Way

Mary Lavelle

From: Zhimin Wan <zhiminwan9@gmail.com>
Sent: Sunday, May 03, 2020 1:01 AM
To: Mary Lavelle
Subject: Re: Opposing the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

I am stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. Marijuana will cause big problems to the city in traffic accidents, crime, youth addition, decreased property value, etc.

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis anymore. It is unacceptable that the ban has to be re-decided again now. We are outraged by Mayor Tran's not keeping this pivotal promise. Although Mayor Tran knew most citizens would vote against cannabis tax ballot measure, he chose to use taxpayers' money to bring back the ballot and tried to wear out people's patience to slip through this measure. I make it here very clear: I will not vote anyone for re-election in November who will support for cannabis tax ballot measure on Tuesday's meeting, and I will convince my relatives and friends not to vote for him or her either, since they sacrifice city's safe environment and most citizens' interest to get the cannabis money.

I hope Mayor Tran can change his position for the goodness of Milpitas people. Please stand firm against this cannabis tax ballot measure, and focus to make Milpitas a safer and better place to live and work.

best regards,

Zhimin Wan

Mary Lavelle

From: 王菲 <kathleen69052@gmail.com>
Sent: Monday, May 04, 2020 2:20 PM
To: Mary Lavelle
Subject: Fwd: Opposing the proposed cannabis tax ballot measure

Dear City Clerk and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,

Fei Wang,

390 riesling ave, milpitas, 95035

1324

Mary Lavelle

From: qinling wang <helaine.qinling@gmail.com>
Sent: Monday, May 04, 2020 4:43 PM
To: Mary Lavelle
Subject: [BULK] Fwd: Opposing the proposed cannabis tax ballot measure

Importance: Low

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,

Helaine Wang

Mary Lavelle

From: MS Wang <wangmarsha@gmail.com>
Sent: Monday, May 04, 2020 12:22 PM
To: Rich Tran; Bob Nuñez; cmontano@ci.milpitas.ca; Karina Dominguez; Anthony Phan; Mary Lavelle
Subject: no to weeds dispensary in Milpitas

Honorable Milpitas mayor Tran,

2018 Milpitas city council 5 out 5 voted Yes on completely banning permitting commercialization of cannibis in Milpitas. You were one of them. Appreciate your yes vote.

Now the new city council has a new proposal to bring commerical cannibis back to our community. The online city council meeting has been scheduled on May 5, 2020

I know that the cannibis tax measure is not about money collection. It is the first step of selling cannibis in my neighborhood.

I, as a longtime Milpitas resident, want to keep my neighborhood safe, keep my kids away from being ruined by drugs, and don't want drug addicts hangout in my neighborhood, please vote NO on cannibis tax measure.

Thank you for being a good mayor of listening your voters voice.

Thank you.

Marsha Wang

Mary Lavelle

From: wons <wangmarsha@gmail.com>
Sent: Monday, May 04, 2020 12:28 PM
To: Rich Tran; Bob Nuñez; cmontano@ci.milpitas.ca; Karina Dominguez; Anthony Phan; Mary Lavelle
Subject: Fw: no to weeds dispensary in Milpitas

Honorable Milpitas mayor Tran,

2018 Milpitas city council 5 out 5 voted Yes on completely banning permitting commercialization of cannabis in Milpitas. You were one of them. Appreciate your yes vote.

Now the new city council has a new proposal to bring commercial cannabis back to our community. The online city council meeting has been scheduled on May 5, 2020

I know that the cannabis tax measure is not about money collection. It is the first step of selling cannabis in my neighborhood.

I, as a longtime Milpitas resident, want to keep my neighborhood safe, keep my kids away from being ruined by drugs, and don't want drug addicts hangout in my neighborhood, please vote NO on cannabis tax measure.

Thank you for being a good mayor of listening your voters voice.

Thank you.

Stella Wang

Mary Lavelle

From: Hotmail <wingsk2004@hotmail.com>
Sent: Sunday, May 03, 2020 10:46 PM
To: Mary Lavelle
Subject: Opposing the proposed cannabis tax ballot measure

> Dear Mayor Tran and Council Members,
>
> As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.
>
> Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!
>
> About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!
> Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?
>
> Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.
>
> Sincerely,
>
> Wing
> 05/03/2020
>

Mary Lavelle

From: Hon Hin Wong <whh113@gmail.com>
Sent: Sunday, May 03, 2020 8:49 PM
To: Mary Lavelle
Subject: Opposing the proposed cannabis tax ballot measure

Dear City clerk,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.
Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!
About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!
Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens? Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.
Sincerely

Sent from my iPhone

Mary Lavelle

From: Dino Wong <dinotk@yahoo.com>
Sent: Saturday, May 02, 2020 10:53 PM
To: Bob Nuñez; Karina Dominguez; Anthony Phan; Carmen Montano
Cc: Steven McHarris; Mary Lavelle
Subject: Opposing the cannabis tax ballot measure proposal

Dear Mayor Tran and Council Members,

As a voting resident of Milpitas, I strongly oppose to the cannabis tax ballot measure proposal.

The voice of the Milpitas residents two years ago opposing the sale of cannabis is still loud & clear to me. What is that louder voice that drowns our voices?

For me, the negative impact on Milpitas residents' health, safety & productivity far outweighs the potential tax benefit. After all, the additional tax dollar to fix the mess created by cannabis sale can't be neglected.

Please make the wise choice not to go against the will of the majority of the Milpitas residents. I will definitely vote against any candidates that support the introduction of the measure.

Sincerely,

Tak Kwong Wong 138 Edgewater Dr. Milpitas, CA 95035

Mary Lavelle

From: Frank Wu <frank.wu0102@gmail.com>
Sent: Saturday, May 02, 2020 11:27 PM
To: Rich Tran; Bob Nuñez; Karina Dominguez; Anthony Phan; Carmen Montano
Cc: Steven McHarris; Mary Lavelle
Subject: [BULK] Opposing Proposed Cannabis Tax Ballot Measure

Importance: Low

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links.

Dear Mayor Tran and Council Members,

I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas residents?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens.

Thank you.
Sincerely,
Frank

Mary Lavelle

From: J. Xiong <jt.xiong99@gmail.com>
Sent: Sunday, May 03, 2020 7:04 PM
To: Rich Tran
Cc: Bob Nuñez; Carmen Montano; Anthony Phan; Karina Dominguez; Mary Lavelle
Subject: Please vote NO

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links.

Honorable Milpitas mayor Tran,

2018 Milpitas city council 5 out 5 voted Yes on completely banning permitting commercialization of cannibis in Milpitas. You were one of them. Appreciate your yes vote.

Now the new city council has a new proposal to bring commerical cannibis back to our community. The online city council meeting has been scheduled on May 5, 2020

I know that the cannibis tax measure is not about money collection. It is the first step of selling cannibis in my neighborhood.

I, as a longtime Milpitas resident, want to keep my neighborhood safe, keep my kids away from being ruined by drugs, and don't want drug addicts hangout in my neighborhood, please vote NO on cannibis tax measure.

Thank you for being a good mayor of listening your voters voice.

Thank you.

JT Xiong

cc:

rtran@ci.milpitas.ca.gov

bnunez@ci.milpitas.ca.gov

cmontano@ci.milpitas.ca.gov

kdominguez@ci.milpitas.ca.gov

aphan@ci.milpitas.ca.gov

City clerk:
mlavelle@ci.milpitas.ca.gov

Mary Lavelle

From: Winnie Xu <bbq2605@yahoo.com>
Sent: Monday, May 04, 2020 4:33 PM
To: Rich Tran; Bob Nuñez; Carmen Montano; kdominguez@ci.milpitas.gov; Anthony Phan
Cc: Mary Lavelle
Subject: Opposing Cannabis Tax Ballot Measure

Honorable Mayor and City council Members,

My entire family strongly opposes the proposed cannabis tax ballot measure. We all believe that is not about the money collection, but cannabis selling.

PLEASE VOTE "NO" ON THIS ISSUE.

Thank you for caring our communities and listening to your voters' voices.

Sincerely,

Winnie

Mary Lavelle

From: Steven McHarris
Sent: Monday, May 04, 2020 2:53 PM
To: Mary Lavelle
Subject: FW: Opposing the proposed cannabis tax ballot measure

From: Emma Liu <emmaliu88@ymail.com>
Sent: Monday, May 4, 2020 2:52 PM
To: Steven McHarris <smcharris@ci.milpitas.ca.gov>
Subject: Opposing the proposed cannabis tax ballot measure

Dear City Manager,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!
Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you for your time and consideration on my comment.

Sincerely,
Yan

Mary Lavelle

From:	yiting yan <yi_ting@sbcglobal.net>
Sent:	Monday, May 04, 2020 3:27 PM
To:	Rich Tran; Bob Nuñez; Carmen Montano; Karina Dominguez; Anthony Phan; Council Meeting
Cc:	Rich Tran; Bob Nuñez; Carmen Montano; Karina Dominguez; Anthony Phan; Mary Lavelle
Subject:	Vote No on cannibis tax measure.

Honorable Milpitas mayor Tran,

2018 Milpitas city council 5 out 5 voted Yes on completely banning permitting commercialization of cannibis in Milpitas. You were one of them. Appreciate your yes vote.

Now the new city council has a new proposal to bring commerical cannibis back to our community. The online city council meeting has been scheduled on May 5, 2020

I know that the cannibis tax measure is not about money collection. It is the first step of selling cannibis in my neighborhood.

I, as a longtime Milpitas resident, want to keep my neighborhood safe, keep my kids away from being ruined by drugs, and don't want drug addicts hangout in my neighborhood, please vote NO on cannibis tax measure.

Thank you for being a good mayor of listening your voters voice.

Thank you.

City council email:

rtran@ci.milpitas.ca.gov

bnunez@ci.milpitas.ca.gov

cmontano@ci.milpitas.ca.gov

kdominguez@ci.milpitas.ca.gov

aphan@ci.milpitas.ca.gov

City clerk:
mlavelle@ci.milpitas.ca.gov

Yiting Christine Yan 4082637555 yi_ting@sbcglobal.net

Mary Lavelle

From: Shuke Yan <shuke2021@gmail.com>
Sent: Sunday, May 03, 2020 11:01 PM
To: Mary Lavelle
Subject: Opposing the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,

Shuke Yan

1237 Daniel Ct. Milpitas

Mary Lavelle

From: Steven McHarris
Sent: Monday, May 04, 2020 6:27 AM
To: Mary Lavelle
Subject: FW: Strongly opposing the proposed cannabis tax ballot measure

Sent from my Verizon, Samsung Galaxy smartphone

-------- Original message --------
From: Jack Yang <zjyangcmu@gmail.com>
Date: 5/3/20 11:42 PM (GMT-08:00)
To: Steven McHarris <smcharris@ci.milpitas.ca.gov>
Subject: Strongly opposing the proposed cannabis tax ballot measure

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links.

Dear McHarris City Manager,

As a citizen of Milpitas with deep love, I strongly oppose to the introduction of the cannabis tax ballot measure.

As it was said "**The power is with the people in our democracy**", YES back in December 2018, with the immense amount of community members who flooded council meetings in strong opposition to cannabis, the Milpitas Council voted 4-0 in favor of a **PERMANENT** ban on cannabis businesses, along with any outdoor growing of the plants. Mayor Tran also **promised** (yes, it's documented) not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now!

I believe that as a Council member who represents the voice of those who live in Milpitas, I wonder what made someone want to **eat his own words**? Did he or will he get money from them? Please!!!

We love Milpitas - let's stop putting the cannabis tax measure on the ballot, for yourselves, your families and all the citizens. Thank you.

Best Regards,
Jack Yang
Citizen of Milpitas

Mary Lavelle

From: Kai Yao <yaosk@hotmail.com>
Sent: Sunday, May 03, 2020 10:14 PM
To: Mary Lavelle
Subject: Re: Opposing the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! **We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!**

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,
Kai, Resident of Milpitas

Mary Lavelle

From: haifang you <haifangyou@gmail.com>
Sent: Sunday, May 03, 2020 12:08 AM
To: Mary Lavelle
Subject: [BULK] Opposing the proposed cannabis tax ballot measure

Importance: Low

Dear City Clerk and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago.

Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Victoria You

Terra Alta Ct Milpitas, CA, 95035

Sent from my iPhone

Mary Lavelle

From: J.C. Young <jc_young@yahoo.com>
Sent: Sunday, May 03, 2020 1:26 PM
To: Rich Tran; Bob Nuñez; Carmen Montano; Karina Dominguez; Anthony Phan
Cc: Mary Lavelle
Subject: Please vote "No" on cannabis tax ballot measure

Mary Lavelle

From: Vicki Young <vicki_young@pacbell.net>
Sent: Monday, May 04, 2020 1:34 PM
To: Rich Tran; Karina Dominguez; Carmen Montano; Anthony Phan; Bob Nuñez
Cc: Mary Lavelle
Subject: No to both tax measures

Honorable Mayor and Council Members,

I would like to applaud you for your great leadership leading our city through the Covid pandemic. I have noticed some of you busy making masks and distributing masks to the needy communities with your extreme busy schedules. Thank you again.

While Milpitas families and businesses are struggling with the corvid pandemic, I hope city will not rush to multiple new tax measures including the contentious cannabis business tax.

Please vote "NO" to both tax measures.

Sincerely,

Vicki

173 Meadowland Dr.

Sent from my iPhone

Mary Lavelle

From: Baozhen Yu <baozhen.yu@gmail.com>
Sent: Monday, May 04, 2020 3:22 PM
To: Rich Tran; Bob Nuñez; Karina Dominguez; Anthony Phan; Carmen Montano; Steven McHarris; Mary Lavelle
Subject: Opposing the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

For the sake of the future of the our and your kids, for the safety of every citizen, for the fate of our city, please stop this. Don't make Milpitas become a city of drugs and crime.

Sincerely,

Baozhen Yu

2214 Yosemite Dr, Milpitas, CA

Mary Lavelle

From: Sarah Yu <sarahsyu36@gmail.com>
Sent: Monday, May 04, 2020 4:20 PM
To: Rich Tran; Anthony Phan; Carmen Montano; Steven McHarris; Mary Lavelle
Subject: [BULK] RE: Opposing the proposed cannabis tax ballot measure

Importance: Low

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

Cannabis tax revenue basically has not given rise to meaningful net revenue in other regions, and you actually voted against the tax more than two years ago. Why are you proposing marijuana tax now against the will of Milpitas citizens?

Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,

Sarah Yu

Homme Way

Mary Lavelle

From: Vivian Yu <viviany99@gmail.com>
Sent: Sunday, May 03, 2020 8:12 PM
To: Mary Lavelle
Subject: Fwd: Opposing the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

About two years ago, Milpitas City council members voted to ban marijuana in the city due to tenacious opposition of Milpitas citizens. Mayor Tran also promised not to push for cannabis due to numerous citizens' resolute rejection of marijuana. It is incomprehensible and unacceptable that the ban has to be re-decided again now! We are outraged by Mayor Tran's not keeping this pivotal promise and Council Member Phan's relentless efforts for pot!

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Any council member/mayor pushing for cannabis will cause most, if not all, of the Milpitas voters to oust you in the upcoming election in addition to blocking this ballot measure. Please note that a large number of your supporters will not support you any more if you insist on this! Please be sagacious and make the right decision now. That is stop putting the cannabis tax measure on the ballot, for yourselves and all the citizens. Thank you.

Sincerely,

Hui Yu

1970 Mazey Street

Milpitas

Sent from my iPhone

Mary Lavelle

From: yatou zhang <mingmama08@gmail.com>
Sent: Sunday, May 03, 2020 7:05 PM
To: Mary Lavelle
Subject: Opposing the proposed cannabis tax ballot measure

Dear Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

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Sincerely,

Your name: Emy

Meadowland dr. Milpitas CA 95035

Mary Lavelle

From: 巫山除却 <caihong7822@gmail.com>
Sent: Friday, May 01, 2020 11:40 PM
To: Carmen Montano; Mary Lavelle; Rich Tran; Steven McHarris
Cc: Anthony Phan; Bob Nuñez; Karina Dominguez
Subject: Opposing the proposed cannabis tax ballot measure

Opposing the proposed cannabis tax ballot measure
CAIHONG ZHENG
1606 Hidden Creek Lane,Milpitas

Mary Lavelle

From: Olivia <possible0305@gmail.com>
Sent: Sunday, May 03, 2020 6:45 PM
To: Mary Lavelle
Subject: Opposing the proposed cannabis tax ballot measure

Dear Mayor Tran and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

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Sincerely,

Olivia Zheng

Sent from my iPhone

Mary Lavelle

From: Xingbing Zhu <xingbing.zhu@gmail.com>
Sent: Monday, May 04, 2020 1:24 PM
To: Mary Lavelle
Subject: Opposing the proposed cannabis tax ballot measure

Dear City Clerk and Council Members,

As a citizen of Milpitas, I strongly oppose to your introduction of the cannabis tax ballot measure. Please definitely stop pushing for this. Otherwise, in the upcoming election, I will not vote for any of you who push irresponsibly for the above-mentioned ballot measure and will reject it too.

Milpitas voters are stunned and upset by this ballot measure since, if approved, it will inevitably lead to the issue of legalization of marijuana which is an easily addictive Category I Prohibited Drug pernicious to human beings especially the young people. It is beyond doubt that marijuana will cause calamitous problems to the city especially in traffic accidents, crime, youth addiction, decrease in property value, etc., and even U.S. Surgeon General has come out to warn against it!

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Sincerely,

Xingbing Zhu

2019 Terra Alta Ct, Milpitas

CITY COUNCIL
AGENDA ITEM REQUESTS

Request No.	Topic	Submitted by:	A, F, or CM	Date requested or Rec'd Form	To CC Rules Subcomm:	on City Council meeting agenda this date:
2020						
16	Request to Adopt Resolution similar to County's re: xenophobia, discrimination	Dominguez	A	4/21/2020		5/5/2020
15	Support community distribution of masks	Dominguez	A	4/7/2020		4/21/2020
14	Proclamation & support for face coverings	Montano	A	4/7/2020		4/21/2020. CC directed City Mgr to issue regs
13	Establish coronavirus testing site in Milpitas	Phan	A	4/7/2020		done
12	Community Workforce Agreement	Nuñez	A	2/18/2020		
11	Discuss having 4th of July parade	Nuñez	A	2/18/2020		
10	Responsible Construction Ordinance	Phan	A	2/4/2020		
9	Support for Laura's Law	Phan	A	2/4/2020		5/5/2020
8	Parade for MHS Trojans Football	Tran, City Manager	A	1/21/2020		1/28/2020
7	Request for Dumpster Days	Tran	A	1/7/2020		
6	Resolution in support of elimination of discrimination v. women	Dominguez	A	1/7/2020		5/5/2020
5	Proposed ban on vaping, restrict smoking	Montano	A	1/7/2020		3/3/2020
4	Street/traffic calming update	Nuñez	A	1/7/2020		3/3/2020
3	Report on parking in The Pines	Nuñez	A	1/7/2020		2/18/2020
2	Report on speed cameras like Fremont (radar displays) - no enforcement	Phan	A	1/7/2020		
1	Info. on new SB 50 (housing, transit bill)	Phan	A	1/7/2020		memo
2019						
10	Maintain Dagupan, P.I. as a Sister City	Tran, Montano	F	9/17/2019	9/20/2019	done
9	Have "Dumpster Days"	Tran, Montano	F	9/17/2019	9/20/2019	
8	Add Green Bike Lanes	Tran, Montano	F	9/17/2019	9/20/2019	1/28/2020
7	Establish Railroad quiet zone	Tran, Montano	F	9/17/2019	9/20/2019	

CITY COUNCIL
AGENDA ITEM REQUESTS

6	Rename Augustine Park to include "Sunnyhills"	Tran, Montano	F	9/17/2019	9/20/2019	2/4/2020
5	Community Theater, perhaps with MUSD	Nuñez, Phan	F	8/20/2019	8/23/2019	5/14/2020 @CIP Study Session
4	Consider Community Museum and Park on Main St.	Nuñez, Phan	F	8/20/2019	8/23/2019	
3	Rename Dixon Landing Rd. as Barack Obama Blvd	Nuñez, Phan	F	8/20/2019	8/23/2019	
2	policy for Proclamations and Commendations	Nuñez, Phan	F	8/20/2019	8/23/2019	
1	policy for Social Media	Nuñez, Phan	F	8/20/2019	8/23/2019	

A: @Announcements
F: on a Form
CM: to City Manager

April 21, 2020

Mayor Rich Tran
City of Milpitas
455 E. Calaveras Blvd.
Milpitas, CA 95035

Re: Agenda Item 13. Receive and Direct Staff on Scheduling Agenda Items Requested by City Councilmembers – Community Workforce Agreement

On behalf of the Associated Builders and Contractors Northern California Chapter (ABC NorCal) and its nearly 500 essential construction and construction related firms representing 21,000 merit shop construction workers, we greatly appreciate your dedication and professionalism in response to the outbreak of the coronavirus (COVID 19). We would like to acknowledge the extensive effort all local governments have exhibited to work collaboratively with our industries to support the local economy while protecting the public safety.

We were all shocked to learn that a record number of Americans have filed for first-time unemployment - higher than anytime in US history. With the speed of the crash of the economy, we are sure that you share our concern and ongoing desire to keep some elements of the economy moving. The construction industry is predicated on maintaining a safe workplace. Our members provide an essential service to the public that should continue.

Our members have been implementing strict measures to ensure the safety of our workforce and the community during these times. They have significantly enhanced and modified their safety and stop work plans to effectively mitigate the risk for workers and their families. Our industry remains committed to the health and welfare of our workforce and the public while continuing to build a better California. The work performed by these frontline men and women is not only helping to ease a negative impact on public health but is also helping to create a better quality of life for all of our residents.

The scale of this global crisis is unprecedented, and so is the scope of the local government response. California cities of all sizes are coordinating across jurisdictional lines, enacting emergency measures to slow the spread of the coronavirus pandemic, taking action to protect individuals and small businesses on the economic margins, while spending such sums as necessary to protect public health.

There is no question Cities and towns across the Bay Area will need financial assistance to persevere through the hardship resulting from rising costs and decreasing tax revenue and fees due to COVID-19. As you continue to face unprecedented challenges on the frontlines of responding to the coronavirus outbreak in your community and doing what is necessary to ensure the health and safety of their residents, we believe now is not the time to be prioritizing a community workforce agreement.

Every contractor survey that has ever been conducted about Community Workforce Agreements (CWAs) show they decrease competition, increase costs and are a disincentive to bid.

Also known as Project Labor Agreements (PLAs), we have consistently found them to create barriers for local, minority and women-owned construction employers and their employees from participating in building their community because they contain provisions that do not allow for the complete utilization of their skilled and trained workforces and exclude the men, women, and veterans who have graduated from state approved, unilateral apprenticeship training programs in pursuit of a construction career that provides stability for them, their family and their community.

It is our number one priority that our state and federally approved apprentices have ample training opportunities to fulfill their required on the job training hours in order to graduate from our apprenticeship program and become journeymen and women. PLAs/CWAs take away that opportunity.

Let's not push construction professionals away from well-paying career opportunities within their community. Let's continue to keep the work open for those essential workers who want to work, support their families and their community.

Thank you for your consideration of this request to remove the community workforce agreement from your list of council agenda item requests. Instead, let's work together on solutions that will remove barriers and maximize opportunities for all Milpitas taxpayers and residents. Please include this correspondence in your April 21, 2020 meeting minutes. Please contact me at nicole@abcnorcal.org or 925-960-8513.

Sincerely,

Nicole Goehring
V.P. Government and Community Affairs
ABC NorCal

Cc: Vice Mayor Bob Nuñez
Councilmember Karina R. Dominguez
Councilmember Carmen Montano
Councilmember Anthony Phan

About ABC:

ABC NorCal represents nearly 500 companies, both large and small, across Northern California. We are the construction professionals in your community, building your community. ABC NorCal is committed to helping people earn, learn and build construction careers in their communities. In addition to providing work opportunities in the industry, we ensure folks are trained, safe and delivering the highest quality product possible.

For over forty years ABC NorCal has done its part in training a skilled workforce in the construction trades, training over 1,500 state and federally approved apprentices, journey workers, and craft trainees each year, a vital component to the sustainability of the industry. Our diverse apprentices, journey workers and craft trainees come from all walks of life – some are fresh out of high school, some are starting a second career and some are desiring a fresh start. They emerge from the programs with a good-paying job; health benefits and the skills and training that can take their career in many directions. It is truly a path of endless opportunities.

ABC NorCal, along with its partner programs have proven track records that reduce recidivism rates, improve job readiness skills, and create long-term employment. Our partnership is a vital piece of ensuring a pathway out of poverty for the participants and a critical service to the Northern California construction community. ABC NorCal is a National Center for Construction Training & Education (NCCER) Accredited Training Facility and Assessment center.

With the state facing a Craft Professional Demand of 533,136 through December 2022, we remain committed to be the solution provider for a diverse skilled and trained workforce to build and rebuild California.

CITY OF MILPITAS

455 EAST CALAVERAS BOULEVARD, MILPITAS, CALIFORNIA 95035-5479
GENERAL INFORMATION: 408-586-3000, www.ci.milpitas.ca.gov

5/05/2019
Agenda Item No. 12

ATTACHMENT RELATED TO AGENDA ITEM RECEIVED AFTER AGENDA PACKET DISTRIBUTION

Mary Lavelle

From: ericchristen <ericdchristen@gmail.com>
Sent: Monday, May 04, 2020 8:05 AM
To: Rich Tran; Bob Nuñez; Karina Dominguez; Carmen Montano; Anthony Phan
Cc: Christopher Diaz; Mary Lavelle; Steven McHarris; dborenstein@bayareanewsgroup.com
Subject: [BULK] What you need to know about union-only Project Labor Agreements (PLAs).
Attachments: PLA Cost to Workers.pdf; Minority_revised.pdf; City of Selma PLA.jpg; 2003-09-29 San Jose USD Contractor PLA Survey - Final Results.pdf; EBMUD PLA Contractor Survey.doc

Importance: Low

Mayor and Councilmembers,

My name is Eric Christen and I am the Executive Director of the Coalition for Fair Employment in Construction (CFEC). Formed 21 years ago to oppose Project Labor Agreements (PLAs) CFEC seeks to educate those considering their use and why that would be a terrible idea. At your February 18 council meeting Councilman Nunez asked to have this issue brought forward at a future city council meeting.

Project Labor Agreements (PLAs) are banned in 24 states and 11 entities have done the same in California Why? Because, in California's case, they implicitly and explicitly discriminate against the 85% of the workforce who are union-free.

PLAs create barriers for local, minority and women-owned construction employers and their employees from participating in building their community because they contain provisions that do not allow for the full utilization of their own workforces and force union-free workers to pay into union pension plans they will never vest in. This is wage theft. (see attached)

Furthermore, studies show these types of agreements increase project costs – anywhere from 10-30% above prevailing wage because they restrict competition. Open competition is healthy and increases quality. It levels the playing field and local money is invested into the community. With the construction market so busy right now and with more work than workers, why would you do anything that makes is less likely you'll attract bidders. If you want to see what this means in real life here is what happened to the City of Selma where they received ONE BID! Their new police station was supposed to have beeen awarded already but despite having 10 pre-qualified bidders only 1 ended up bidding the project. Why? As you can see **from the attached document**, staff lays the fault squarely at the feet of the PLA.

And finally, PLAs exclude the men, women, and veterans who have chosen to enter into state approved, unilateral apprenticeship training programs in pursuit of a construction career from the opportunity to work and gain the invaluable on-the-job training experience that provides stability for them, their family and their community.

For these reasons we ask you to consider the following:

1. Continue to bid your work with fair and open competition. What problems exist that this solution in the form of a PLA is to remedy? There are none.
2. Hold a study session on the issue of PLAs where both sides are allowed to fully present their side of the issue and where you can ask questions of the participants.
3. Survey contractors who do work for you and ask them about PLAs. When the San Jose Unified School District and East Bay Municipal Utility District did this they found they would receive 50% FEWER bidders and as a result they chose not to employ a PLA. (see attached)

Best regards,

Eric Christen
Executive Director
Coalition for Fair Employment in Construction
www.opencompca.com

CITY OF MILPITAS
AGENDA REPORT
(AR)

Item Title:	**Hear Request of Councilmember Phan and Mayor Tran in Support of "Laura's Law"**
Category:	Reports of Mayor and Councilmembers
Meeting Date:	4/21/2020
Staff Contact:	**Councilmember Anthony Phan, 408-586-3032** **Mayor Rich Tran, 408-586-3029**
Recommendation:	Hear Request of Councilmember Phan and Mayor Tran in Support of "Laura's Law" and consider directing staff to send a letter of support to the county.

Background:
On February 4, 2020, Councilmember Phan requested his colleagues to consider directing staff to research and consider Council support locally of "Laura's Law" related to mandatory conservatorship by the County of Santa Clara for those with severe mental health illness.

Recommendation:
Hear Request of Councilmember Phan and Mayor Tran in support of "Laura's Law" and consider directing staff to send a letter of support to the county.

Attachments:
Memorandum by Councilmember Phan and Mayor Tran
City of San Jose Letter of Support
Report to San Jose City Council with Attachments

MEMORANDUM

455 East Calaveras Boulevard, Milpitas, California 95035-5479
PHONE: 408-586-3000, FAX: 408-586-3056, www.ci.milpitas.ca.gov

TO: City Manager Steve McHarris
City Attorney Chris Diaz
CC: City Clerk Mary Lavelle

DATE: 02/03/2020

FROM: Mayor Rich Tran

Councilmember Anthony Phan

SUBJECT: County Implementation of Laura's Law and Enhanced Conservatorships

RECOMMENDATION

Place the following item on the February 18, 2020 Agenda for Council discussion and action; Direct the City Manager to submit a letter from the City Council to the Santa Clara County Board of Supervisors and the County Executive's Office to request County implementation of Laura's Law (Assisted Outpatient Treatment) and strengthened conservatorship policies, and add these objectives to the City's legislative priorities.

BACKGROUND

In Santa Clara County, homelessness has become a crisis. Nearly 10,000 individuals are currently homeless in Santa Clara County, and these numbers are projected to continue to increase at an alarming rate. Last year, homelessness increased at a drastic increase of 31.3% in Santa Clara County.[1]

According to the U.S. Department on Housing and Urban Development, it is estimated that on average, amongst homeless individuals nationally, 45% are mentally ill and 25% are seriously mentally ill. Locally, Santa Clara County statistics show data based on self-reported responses that parall national numbers, with 42% of homeless respondents indicating that they suffer from mental illness of some form and 35% of respondents reporting having experienced alcohol or substance abuse.

BACKGROUND ON LAURA'S LAW AND CONSERVATORSHIP

Laura Wilcox was a teenage college student shot to death in 2001, by a severely mentally deranged individual. Despite pleas from his own family and recommendation from his social worker, the individual actively refused psychiatric treatment and continued to be defiant, as he increasingly became delusional and paranoid, in the events leading up to the shooting.

In 2002, Assisted Outpatient Treatment Demonstration Project Act, also known as Laura's Law, was signed into law by Governor Gray Davis. The legislation aims to help individuals suffering with severe mental health needs by mandating their access to assisted outpatient treatment. The policy applies to those who meet a specific set of exhaustive requirements to demonstrate

[1] "County of Santa Clara, City of San Jose Release Results of 2019 Homeless Census." County News, County of Santa Clara, 16 May 2019, www.sccgov.org/sites/opa/newsroom/Pages/2019homelesscensus.aspx.

their history of non-compliance, such as if they were hospitalized or jailed at least twice within 36 months.

The policy heavily relies on County implementation and enforcement. In California, twenty Counties have opted to implement Laura's Law, with Bay Area Counties including Contra Costa, Marin, San Mateo, San Francisco and San Mateo.

In 2018, Senate Bill 1045 was signed into law, allowing the City and County of San Francisco, Los Angeles, and San Diego Counties to pilot a 5-year program of housing-based conservatorship. The bill establishes conservatorships to individuals suffering from both a severe mental illness and a substance use disorder. Ultimately, the bill increases the responsiveness of courts to individuals lacking capacity to take care of their health and welfare. Senate Bill 40, passed in 2019, similarly addresses procedures regarding 5150 psychiatric holds and expands conservatorship provisions for these often-neglected individuals, many of whom at high risk of harming themselves.

ANALYSIS

Expanding a framework for conservatorship and County implementation of Laura's Law will expand access to critical services and treatment for our community's most vulnerable struggling with severe mental health needs.

Although we acknowledge these policies will help a relatively smaller population of people who are homeless, and that there is much more work to be done to address the crisis in homelessness, however it will go a long way and positively change many lives. Furthermore, it will make our community safer for our residents and our first responders in public safety, who risk their lives every day. In tragic scenarios where officers have no choice but to use deadly force to stop dangerous individuals with severe mental health needs from harming others, it is unacceptable to write off the case as a situation that could not have been avoided.

Our County has the ability to save lives, make our community safer, and prevent these tragedies from occurring. The implementation of Laura's Law and expanded conservatorship will serve as much-needed reform to our negligent and flawed system which has failed our community's most vulnerable people.

The City of Milpitas should support County implementation of Laura's Law and work with the Board of Supervisors and County Administration to expand conservatorship programs through efforts in adding Santa Clara County to Senate Bill 1045 and related legislation.

Dear Santa Clara County Board of Supervisors,

As community leaders, we recognize that Santa Clara County has a mental health crisis. Of the homeless in our County, 42% reported mental illness, yet current efforts in the County to address this issue are tragically lacking.

Homeless individuals who lack capacity because of a severe mental illness to provide for their basic human needs cannot continue to fall victim to uninhabitable living conditions, drug and alcohol abuse, and risks of harm to themselves or others on the streets. It is imperative that we consider the benefits of Laura's Law and strengthened conservatorship in Santa Clara County.

Laura's Law passed the California State Legislature in 2002, aiming to remedy the issues posed by mentally ill individuals occupying the streets: introducing court-mandated assisted outpatient treatment for those who are likely to benefit from it. To date, 20 counties in California have done just this, including the Bay Area Counties of San Mateo, Alameda, Contra Costa, Marin, and San Francisco-- achieving a high degree of success. Specifically, In San Francisco County, 91% of patients saw reduced hospitalization, with 88% reducing their time spent incarcerated and 74% reducing their use of Psychiatric Emergency Services. Not only that, but in Nevada County, where Laura's Law was first implemented, the law has saved between $1.82 to $2.52 per $1.00 invested in the program. Laura's Law is saving lives, saving money, and giving people the help that they need.

Furthermore, in pursuit of the most comprehensive care for suffering residents, conservatorship for substance abusers and the mentally ill also must be re-examined. While Santa Clara County's LPS Conservatorship was an important first step starting in 1972, now is the time to revisit and strengthen this piece of legislation.

In September of 2018, the State of California passed Senate Bill 1045, which provides for the formation of a 5-year pilot program consisting of housing based conservatorship policies in San Francisco and Los Angeles Counties. SB 1045 increases the responsiveness of courts to individuals lacking capacity to take care of their health and welfare in by making available a conservatorship when those individuals are suffering from both a severe mental illness as well as a substance use disorder, something we are unable to achieve under the current standard. Individuals that fail to qualify as "gravely disabled" often get stuck in a chronic cycle of coming in and out of 72-hour psychiatric holds, and are victims of a dysfunctional system that is in desperate need of reform. We would like to see Santa Clara County advocate for inclusion in this or comparable legislation that effectively treats the most vulnerable in our County.

For all these reasons and more, we urge the County to act to strengthen conservatorship laws and to adopt Laura's Law.

Signed:

Johnny Khamis
Councilmember, City of San José

Raul Peralez
Councilmember, City of San José

Lisa Dailey
Treatment Advocacy Center

Steve Leonardis
Mayor, Town of Los Gatos

Paul Resnikoff
Councilmember, City of Campbell

Katherine Decker
Registered Nurse

Stephani Rideau
Parent of Homeless Mentally Ill Adult

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Memorandum

TO: HONORABLE MAYOR AND CITY COUNCIL

FROM: Lee Wilcox

SUBJECT: **COUNTY OF SANTA CLARA BEHAVIORAL HEALTH PROGRAMS**

DATE: January 22, 2020

Approved [signature] Date 1-22-20

INFORMATION

At the November 20, 2019 Rules and Open Government Committee, the Administration was directed to submit a letter from the City of San José Mayor and City Council to the Santa Clara County Board of Supervisors and the County Administration requesting implementation of Laura's Law (Assisted Outpatient Treatment) as well as a strengthening of conservatorship policies for residents that struggle with serious mental illness. This item was again discussed at the December 10, 2019 City Council meeting under item 3.6[1] where a request was made for additional information regarding the Santa Clara County's expansion of Behavioral Health Services for adults and older adults, which was scheduled for implementation in fall 2019.

In response to Council direction, on December 12, 2019 a letter was submitted to the Santa Clara County Board of Supervisors on behalf of the City of San José Mayor and City Council (*Attachment A*).

Attached to this memorandum are two reports authored by Toni Tullys, Director of the County's Behavioral Health Services. The first report was submitted to the Health and Hospital Committee on August 22, 2019 providing an update on Assisted Outpatient Treatment (*Attachment B*). It summarizes the 2002 California Assembly Bill 1421 (Laura's Law) and its implementation in California through April 2017 as summarized by the State of California's Department of Health Care Services, Mental Health and Substance Use Disorder Services in its July 2018 Report. This memo also outlines the County's Behavior Health Services expansion of programs for its adult system of care.

[1] https://sanjose.legistar.com/LegislationDetail.aspx?ID=4263938&GUID=32623866-8137-46E7-8D24-DFCECA1C562B&Options=&Search=

The second memorandum was submitted to the Board of Supervisors on December 17, 2019 as part of a report requested by Supervisors Chavez and Cortese (Board Referral Item Number 16 ID#98761 approved on November 5, 2019)[2], which directed the Behavioral Health Services Department to provide options for consideration relating to the provision of safe places and support services for members of the community with high needs, who are severely mentally ill, dually diagnosed, and unhoused (*Attachment C*).

The Administration understands the Mayor and City Council's shared interest in ensuring that adequate and high quality resources are available and accessible to residents struggling with mental illnesses, substance use, or both. As part of its work in helping draft the Community Plan to End Homelessness, the City Manager's Office and Housing Department are working with their County partners to better assess the existing capacity of behavioral health resources against the need in the community. As the City moves from the planning and community engagement phases of this process to implementation of a San José-specific operational plan, the Administration will continue to advocate for the resources necessary to close any existing resource gaps.

/s/
LEE WILCOX
Chief of Staff, City Manager's Office

For questions, please contact Sarah Zárate, Assistant to the City Manager, at (408) 535-5601.

Attachments:
Attachment A: December 12, 2019 Letter to Board of Supervisors regarding Conservatorship in Santa Clara County
Attachment B: County of Santa Clara Behavioral Health Services Update on Assisted Outpatient Treatment (Laura's Law)
Attachment C: County of Santa Clara Behavioral Health Services Report on Safe Places and Support Services for Mentally Ill/Dually Diagnosed Individuals

[2] http://sccgov.iqm2.com/Citizens/Detail_LegiFile.aspx?Frame=SplitView&MeetingID=11147&MediaPosition=&ID=99307&CssClass=

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

City Council

200 E. Santa Clara St., 18th Fl., San José, CA 95113 tel (408) 535-4900

December 12, 2019

Board of Supervisors
County of Santa Clara
70 West Hedding Street
San Jose, CA 95110

Re: Conservatorship in Santa Clara County

Dear Santa Clara County Board of Supervisors,

We write on behalf of the City of San José to encourage the County to pursue additional options in addressing mental health treatment for homeless individuals, including conservatorship. Currently the County of Santa Clara staff, Destination: Home, and City of San José staff are working to finalize a new Community Plan to End Homelessness—better aligning our goals and strategies. As we embark on implementing this plan we must collectively align our operations, resources, and policies to meet these goals.

To that end, we share the position outlined in the November 5, 2019 memo from Supervisors Chavez and Cortese that "the County of Santa Clara needs to act with urgency as it relates to providing safe places and supportive services to very vulnerable members of our community who are severely mentally ill, dually-diagnosed, unhoused and unable to proactively access community-based mental health services."

According to the 2019 City of San José Homeless Census and Survey, 42% of homeless survey respondents reported a psychiatric or emotional condition in the City of San José. Homeless individuals who lack capacity because of a severe mental illness to provide for their basic human needs cannot continue to fall victim to uninhabitable living conditions, drug and alcohol abuse, and risks of harm to themselves or others on the streets. It is imperative that we examine conservatorship options, including implementing Laura's Law in Santa Clara County for outpatient services and inpatient options to address a portion of this population's needs.

As you know, the State of California passed Laura's Law in 2002 to introduce court-mandated assisted outpatient treatment for those who are likely to benefit from it. To date, 20 counties in California have implemented Laura's Law, including the Bay Area Counties of San Mateo, Alameda, Contra Costa, Marin, and San Francisco. In San Francisco County, 91% of patients saw reduced hospitalization, with 88% reducing their time spent incarcerated, and 74% reducing their use of Psychiatric Emergency Services. Not only that, but in Nevada County, where Laura's Law was first implemented, the law has saved between $1.82 to $2.52 per $1.00 invested in the

program. Laura's Law is saving lives, saving money, and giving people the help that they need.

Additionally, in September of 2018, the State of California passed Senate Bill 1045, which allows the City and County of San Francisco, Los Angeles, and San Diego Counties to pilot a 5-year program of housing-based conservatorship. SB 1045 increases the responsiveness of courts to individuals lacking capacity to take care of their health and welfare by making available a conservatorship when those individuals are suffering from both a severe mental illness as well as a substance use disorder. Individuals that fail to qualify as "gravely disabled" often get stuck in a chronic cycle of coming in and out of 72-hour psychiatric holds, and are victims of a dysfunctional system that is in desperate need of reform. We encourage Santa Clara County to advocate for inclusion in this or comparable legislation that effectively treats the most vulnerable in our County.

We are heartened that the County is examining additional service needs for homeless individuals, including those suffering mental health disease and drug addiction. We share your goals of ending homelessness in our community, and look forward to continuing to collaborate on solutions.

Sincerely,

Mayor Sam Liccardo
on behalf of the City of San José City Council

C. County Administration
City Manager

COUNTY OF SANTA CLARA
Behavioral Health Services

DATE: August 22, 2019

TO: Health and Hospital Committee

FROM: Toni Tullys, Director, Behavioral Health Services

SUBJECT: Update on Assisted Outpatient Treatment (Laura's Law)

On June 19, 2019, at the request of Supervisor Ellenberg, the Behavioral Health Services Department (the Department) was asked to provide an update on Assisted Outpatient Treatment (AOT), also known as Laura's Law, at the August 2019 Health and Hospital Committee.

On September 13, 2017, the Department provided a detailed report to the Board of Supervisors (Board) through the Health and Hospital Committee related to the possible implementation of Assisted Outpatient Treatment (also known as Laura's Law), which allows using the judicial system when constituents are in high need of mental health services (LF # 88121). The report describes the history of the AOT legislation, the 2004 development of the Mental Health Services Act (MHSA), which emphasized voluntary programs, and the AOT goals, eligibility criteria and court process.

In 2002, California Assembly Bill 1421 (Laura's Law) authorized the provision of AOT which is defined as categories of outpatient services that have been ordered by a court per California Welfare and Institution Code (WIC) 5346. The bill was a result of a Nevada County shooting death of three people, including Laura Wilcox, by an individual with mental illness who was not participating in treatment. While the law was passed, it was not funded, leaving County Boards of Supervisors to decide whether or not they would implement AOT and how they would fund the program. Each County Board of Supervisors must approve AOT implementation in their county. Per state statute, no voluntary mental health programs may be reduced as a result of the implementation of AOT.

Update on California's AOT Implementation

While Nevada County implemented AOT in 2008 and Yolo County in 2013, the majority of counties who chose to implement AOT did not begin implementation until 2015-2016. As reported in the Department's September 2017 AOT report, 14

counties had implemented the program, three had adopted AOT, but had not implemented, and one county was considering AOT. Currently, 20 counties have implemented AOT as an available tool for people with serious mental illness who are unable and/or unwilling to participate in treatment and meet the criteria for AOT in the WIC 5346. The 20 counties are:

1. Alameda
2. Contra Costa
3. El Dorado
4. Kern
5. Los Angeles
6. Marin
7. Mendocino
8. Nevada
9. Orange
10. Placer
11. San Diego
12. San Francisco
13. San Luis Obispo
14. San Mateo
15. Santa Barbara
16. Shasta
17. Solano County
18. Stanislaus
19. Ventura
20. Yolo

AOT Evaluations and Results

In July 2018, the California Department of Health Care Services (DHCS) Mental Health and Substance Use Disorder Services released a report on Laura's Law: Assisted Outpatient Treatment Demonstration Project Act of 2002 (Attached). DHCS is required to establish criteria and collect outcomes data from counties that choose to implement the AOT program and to produce an annual report on the program's effectiveness, which is due to the Governor and Legislature annually by May 1. The attached report is based on May 2016 - April 2017 data, which was provided by six counties: Contra Costa, Los Angeles, Nevada, Orange, Placer and San Francisco. The Report Summary stated that there are three important developments for this reporting period:

1) Two additional counties provided data on AOT clients as compared to the previous reporting period,
2) The six counties that provided data to DHCS reported a positive impact on the three data items emphasized by the statute governing AOT (WIC Sections 5345-5349.5) – homelessness, hospitalizations, and incarcerations, and
3) Counties continue to report that few individuals require court involvement to participate in AOT services.

There were 63 court-ordered involved individuals in the six counties that provided data. A total of 380 individuals were served voluntarily by the six counties reporting data and the majority were in Los Angeles and Orange counties.

The programs reported that the majority of their AOT referrals responded to the initial invitation to participate in voluntary services and did not require a court petition or process. Counties reported that this is due to a successful engagement process, as most individuals referred for assessment accept the first offer for voluntary services. Many individuals due to their symptoms, do not immediately access mental health services, but may accept a voluntary service in response to county engagement efforts and to avoid a court process.

DHCS also identified several limitations of this analysis. While the data has increased since additional counties have implemented AOT programs, the number of court-ordered participants remains small and counties were not using standardized measures. There was no comparison and/or control group, so it was unknown as to whether the improvements were a result of AOT program services, or other factors. The report was based on aggregated outcomes of the 63 individuals from the six counties that reported court-ordered services.

In conclusion, the DHCS report indicated that the program was successful in reducing the need for hospitalizations and/or incarcerations, largely due to an increased amount of support and increasing employment during the reporting period.

Contra Costa and San Francisco Counties recently completed extensive evaluations of their AOT pilot programs. Contra Costa completed their evaluation in October 2018, following two and a half (2 ½) years of implementation, and served 80 individuals in the Assertive Community Treatment (ACT) program; 63 volunteered and 17 were court-ordered. San Francisco completed their three-year evaluation in March 2019 and 89 out of 129 individuals in the AOT program voluntarily engaged in services; 85 individuals remained connected to a treatment provider at the time of the evaluation. The AOT team provided clinical case management to 43 of these individuals (26 voluntary and 17 court ordered). Both counties reported positive client outcomes (decrease in crisis services, inpatient psychiatric hospitalization and incarceration), cost savings, and small numbers of court-ordered individuals.

Summary of Findings

A significant majority of individuals that have been referred and meet the criteria for AOT programs voluntarily accept services and achieve positive outcomes, including reductions in crisis/emergency psychiatric services, inpatient psychiatric hospitalization, homelessness and incarceration. There are small numbers of court-ordered clients in AOT programs, which cannot show statistical significance.

However, court-ordered clients have demonstrated individual progress and some have achieved the same types of positive outcomes as the voluntary clients.

Counties have developed and learned from AOT pilots, implemented AOT outreach, engagement and clinical teams to serve the population, and utilized Full Service Partnerships (FSPs) or ACT teams for clinical services. Consistent outreach and peer support have been important components to engage and support individuals in AOT services.

AOT program costs may vary based on each county, but the primary costs are for direct service staff, which often includes a program manager, clinical staff, peer workers and administrative support. Orange County and Nevada County estimated the AOT mental health treatment costs at $35,000 to $40,000 per person per year. This aligns with the estimated cost for the Department's new ACT program for adults with serious mental illness that need intensive outpatient services.

In reviewing the evaluations and discussing AOT services with county and consultant colleagues, AOT can be a useful tool to identify, engage and treat a small group of people with serious mental illness who would otherwise be unable to participate in services that they need. However, the data on court-ordered individuals enrolled is limited, and while AOT has produced positive outcomes, it will not engage every person with serious mental illness into services or every loved one that a family member cares about.

Expansion of Behavioral Health Services for Adults and Older Adults

Over the past year, the Department has implemented several new programs to address gaps, expand the continuum of care, outreach and engage individuals for services, and track and evaluate client/consumer outcomes. The intent of the new programs is to connect Adults/Older Adults into the appropriate services for their needs.

New programs include the County-operated In-home Outreach Team (IHOT), which will outreach to Emergency Psychiatric Services (EPS) clients/consumers and connect them to services, and the IHOT community-based teams that will serve clients/consumers and families across the county. For individuals in crisis, there is a Crisis Text Line (text RENEW to 74141) and Adult Mobile Crisis Response Teams that assess individual needs over the phone, identify and connect callers to services, and make home visits when needed. These new services are available 24/7.

Vendors have been selected to provide ACT and Forensic ACT (FACT) services, which are evidence-based and the highest level of outpatient services for individuals with serious mental illness. While these are new services in Santa Clara County, ACT and FACT have demonstrated positive and consistent consumer outcomes for many years and are designed for individuals coming out of hospitals or custody and/or those who need intensive and frequent services. In addition, new Intensive

Full Service Partnerships (FSPs) will provide "whatever it takes" mental health services for Transitional Age Youth, Adults and Older Adults. The ACT, FACT and Intensive FSPs will provide 800 new service slots for adult consumers. Substance Use Treatment Services has increased outpatient services by 220 slots and anticipates serving an additional 800 clients in the next year. Detoxification beds also have been increased from 28 to 36 with an expectation to serve over 500 clients.

The Department's expansion of Adult/Older Adult services was designed to outreach, engage, connect, and support individuals with serious mental illness and substance use disorders in voluntary, evidence-based services. The new ACT/FACT programs and Intensive FSPs are the same services utilized in the AOT programs. Implementation is planned for October 2019 and the Department expects an increase in the number of people receiving these intensive services and a decrease in EPS visits, psychiatric hospitalization, incarceration and homelessness over time.

Attachment:

- DHCS Laura's Law: Assisted Outpatient Treatment Demonstration Project Act of 2002, July 2018

Laura's Law: Assisted Outpatient Treatment Demonstration Project Act of 2002

For the Reporting Period
May 2016 – April 2017

Department of Health Care Services
Mental Health and Substance Use Disorder Services

JULY 2018

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EXECUTIVE SUMMARY

Assembly Bill (AB) 1421 (Thomson, Chapter 1017, Statutes of 2002) established the Assisted Outpatient Treatment Demonstration Project Act of 2002 in Welfare and Institutions Code (WIC) Sections 5345 – 5349.5, known as Laura's Law (named after one of the individuals killed during a 2001 incident in Nevada County, California).Laura's Law requires the Department of Health Care Services (DHCS) to establish criteria and collect outcomes data from counties that choose to implement the AOT program and produce an annual report on the program's effectiveness, which is due to the Governor and Legislature annually by May 1. Using data provided by participating counties, DHCS is required to provide an evaluation of the effectiveness of the county programs in developing strategies to reduce the clients' risk for homelessness, hospitalizations, and involvement with local law enforcement. This report serves as the May 1, 2017 annual report and provides outcomes for the May 2016 – April 2017 reporting period.

The table below shows a list of counties that have received Board of Supervisors approval to operate an AOT program, counties that submitted an AOT report to DHCS and, of those, which county AOT reports provided data to DHCS during this reporting period. Seventeen counties have Board of Supervisors approval to operate an AOT program: Alameda, Contra Costa, El Dorado, Kern, Los Angeles, Mendocino, Nevada, Orange, Placer, San Diego, San Francisco, San Luis Obispo, San Mateo, Santa Barbara, Stanislaus, Ventura, and Yolo[1]. During this reporting period, 12 counties submitted reports to DHCS: Alameda, Contra Costa, Kern, Los Angeles, Mendocino, Nevada, Orange, Placer, San Francisco, San Mateo, Ventura, and Yolo. Six of these counties had data to report on AOT court ordered or settled[2] individuals: Contra Costa, Los Angeles, Nevada, Orange, Placer and San Francisco. The remaining six programs did not have court-ordered individuals or had too little data for the reporting year to report to DHCS, but provided information on their programs' progress. Accordingly, this report reflects aggregate outcomes for 63 individuals from the six counties that reported court-ordered or settled AOT client data to DHCS. This is more than double the number of participants compared to the previous 2015-16 reporting period, which included 28 court-involved individuals in AOT programs.

Participating County Implementation and Reporting Status (as of April 2017)*

County	Board of Supervisors Approval	Submitted a Report to DHCS	Report Included AOT Data
Alameda	X	X	
Contra Costa	X	X	X
El Dorado	X		
Kern	X	X	

[1] Stanislaus County received board of supervisor approval to implement a pilot program in April 2018. Since this occurred after the reporting period, data for Stanislaus is not reflected in this report.
[2] Court "settled" means that the individual receives services through a court settlement, rather than a hearing.

County	Board of Supervisors Approval	Submitted a Report to DHCS	Report Included AOT Data
Los Angeles	X	X	X
Mendocino	X	X	
Nevada	X	X	X
Orange	X	X	X
Placer	X	X	X
San Diego	X		
San Francisco	X	X	X
San Luis Obispo	X		
San Mateo	X	X	
Santa Barbara	X		
Stanislaus	X		
Ventura	X	X	
Yolo	X	X	

*Stanislaus County received board of supervisor approval to implement a pilot program in April 2018. Since this occurred after the reporting period, data for Stanislaus is not reflected in this report.

2016-17 Report Summary

There are three important developments for this reporting period: 1) two additional counties provided data on AOT clients as compared to the previous reporting period, 2) the six counties that provided data to DHCS reported a positive impact on the three data items emphasized by the statute governing AOT (WIC Sections 5345-5349.5) – homelessness, hospitalizations, and incarcerations, and 3) counties continue to report that few individuals require court involvement to participate in AOT services. In this reporting period, there were 63 court-involved individuals in the six counties that provided data[3].

Laws governing AOT programs require individuals whose cases are court-ordered or settled to receive services in a program that also provides the same services to individuals who are participating in the program voluntarily. Individuals referred for an AOT assessment must be offered voluntary services first before a court petition is considered. The programs reported that the majority of their AOT referrals responded to the initial invitation to participate in voluntary services, and did not require a court petition or process. Counties report that this is due to a successful initial engagement process, as most individuals referred for assessment accept the first offer for voluntary services. Many individuals, due to the symptoms of their mental illness, do not initially access local mental health services, but may accept a voluntary services offer

[3] 380 individuals were served voluntarily by the six counties reporting data, the majority were in Los Angeles and Orange counties.

in response to county engagement efforts and to avoid a court process.

Due to the small number of court-ordered or settled individuals in each county AOT program, health privacy laws prevent DHCS from reporting specific numbers on each of the required outcomes. This report reflects the following aggregate findings for the AOT program clients, using data for the six counties that reported data from their AOT services, which were provided during this reporting period:

- Homelessness decreased amongst individuals participating in the program.
- Hospitalization decreased amongst individuals participating in the program.
- Contact with law enforcement decreased amongst individuals participating in the program.
- Most individuals remained fully engaged with services.
- Some individuals were able to secure employment.
- Little victimization[4] was reported for individuals in the program.
- Violent behavior decreased during the reporting period for some individuals.
- Some clients had co-occurring diagnoses. Many of those individuals were able to reduce substance use.
- Some clients were subject to enforcement mechanisms[5] ordered by the court during AOT. Some of these individuals were involuntarily evaluated, many had additional status hearings, and many received medication outreach.
- Many individuals achieved moderate to moderately high levels of social functioning.
- Some clients agreed to participate in satisfaction surveys and indicated high levels of satisfaction with services.

There are several noteworthy limitations of DHCS' analysis. Although the reportable data has increased since additional counties have implemented AOT programs, court-ordered participant numbers remain small and counties are not using standardized measures. This makes it difficult to make a comparable evaluation across counties, and further, there is no comparison and/or control group, so it is unknown as to whether or not all of the improvements in participant outcomes were a result of AOT program services or if other factors were involved. Some of the measures are based on self-reports and/or recollections of past events, which may or may not be accurate or reliable. Furthermore, individuals were followed for different periods of time (e.g., individual A may have been followed for one week, while individual B may have been followed for the entire reporting year). As with other programs that have transitory populations in different phases of program completion, there may be carry over data from the prior reporting year. Despite these limitations, the data submitted by counties indicate improvements to many of the reported outcomes for individuals who were served during this reporting period.

[4] Victimization is based on county definitions and reports of victimization include descriptions of the incidents.
[5] Examples of enforcement mechanisms used by courts include, but are not limited to, involuntary evaluation, increased number of status hearings, and medication outreach.

INTRODUCTION

AB 1421 (Thomson, Chapter 1017, Statutes of 2002) established the Assisted Outpatient Treatment (AOT) Demonstration Project Act of 2002, known as Laura's Law. AB 1569 (Allen, Chapter 441, Statutes of 2012) extended the sunset date for the AOT statute from January 1, 2013, to January 1, 2017; and AB 59 (Waldron, Chapter 251, Statutes of 2016) extended the sunset date for the AOT statute until January 1, 2022, and added the Governor as a direct recipient of this report. The program was transferred from the former Department of Mental Health (DMH) to the Department of Health Care Services (DHCS) and incorporated into DHCS' county mental health performance contracts with the enactment of SB 1009 (Committee on Budget and Fiscal Review, Chapter 34, Statutes of 2012).

DHCS is required to annually report to the Governor and Legislature on the effectiveness of AOT programs by May 1 of every year. Pursuant to WIC Section 5348, effectiveness of AOT programs is evaluated by determining whether persons served by these programs:

- Maintain housing and participation/contact with treatment;
- Have reduced or avoided hospitalizations; and
- Have reduced involvement with local law enforcement, and the extent to which incarceration was reduced or avoided.

To the extent data are provided by participating counties, DHCS must also report on:

- Contact and engagement with treatment;
- Participation in employment and/or education services;
- Victimization;
- Incidents of violent behavior;
- Substance use;
- Required enforcement mechanisms;
- Improved level of social functioning;
- Improved independent living skills; and
- Satisfaction with program services.

The AOT statute provides a process for designated individuals who may refer someone to the county mental health department for an AOT petition investigation. In order for an individual to be referred to the court process, the statute requires certain criteria to be met, voluntary services to be offered, and options for a court settlement rather than a hearing to be provided.

BACKGROUND

The statutory requirements for Laura's Law do not require counties to provide AOT programs and do not appropriate any additional funding to counties for this purpose. For many years, only Nevada County operated an AOT program. The passage of SB 585 (Steinberg, Chapter 288, Statutes of 2013) authorized counties to utilize specified funds for Laura's Law services, as described in WIC Sections 5347 and 5348. Since the enactment of this legislation, an increasing number of counties have implemented AOT. See Appendix A for a history of AOT in California.

Implementation of Laura's Law

The table below shows a list of counties who have received Board of Supervisors approval to operate an AOT program, counties that submitted an AOT report to DHCS and, of those, which county AOT reports provided data to DHCS during this reporting period. Seventeen counties have Board of Supervisors approval to operate an AOT program: Alameda, Contra Costa, El Dorado, Kern, Los Angeles, Mendocino, Nevada, Orange, Placer, San Diego, San Francisco, San Luis Obispo, San Mateo, Santa Barbara, Stanislaus, Ventura, and Yolo.[6] Most AOT programs are still in early implementation stages and have few or no clients who are court-ordered or settled.

The following 12 counties submitted reports to DHCS on their AOT programs for the reporting period: Alameda, Contra Costa, Kern, Los Angeles, Mendocino, Nevada, Orange, Placer, San Francisco, San Mateo, Ventura, and Yolo. Of these, Contra Costa, Los Angeles, Nevada, Orange, Placer, and San Francisco counties had data to report based on the individuals participating in their AOT programs that were court-ordered and/or settled. Kern and Yolo Counties reported on their programs, but did not yet have any individuals in AOT programs or did not have enough data to include. Alameda, Mendocino, San Mateo, and Ventura Counties reported on their new programs, but did not have clients during most of the reporting period, and therefore did not have enough data to include.

Participating County Implementation and Reporting Status (as of April 2017)*

County	Board of Supervisor Approval	Submitted a Report to DHCS	Report Included AOT Data
Alameda	X	X	
Contra Costa	X	X	X
El Dorado	X		
Kern	X	X	
Los Angeles	X	X	X
Mendocino	X	X	
Nevada	X	X	X
Orange	X	X	X

[6] Stanislaus County received board of supervisor approval to implement a pilot program in April 2018. Since this occurred after the reporting period, data for Stanislaus is not reflected in this report.

County	Board of Supervisor Approval	Submitted a Report to DHCS	Report Included AOT Data
Placer	X	X	X
San Diego	X		
San Francisco	X	X	X
San Luis Obispo	X		
San Mateo	X	X	
Santa Barbara	X		
Stanislaus	X		
Ventura	X	X	
Yolo	X	X	

* Stanislaus County received board of supervisor approval to implement a pilot program in April 2018. Since this occurred after the reporting period, data for Stanislaus is not reflected in this report.

DATA COLLECTION AND REPORTING METHODOLOGY

Most counties have implemented their AOT programs as part of their Mental Health Services Act (MHSA) Full Services Partnership (FSP) programs. Welfare and Institutions Code §5348(d) sets forth the reporting requirements for both the counties and the State and lists the required data elements that, if available, must be included. As a result, counties obtain data for AOT clients from some or all of the following sources:

- Client intake information
- MHSA FSP Outcome Evaluation forms
  - Partnership Assessment Form – The FSP baseline intake assessment.
  - Key Event Tracking (KET) – Tracks changes in key life domains such as employment, education, and living situation.
  - Quarterly Assessment – Tracks the overall status of a partner every three months. The Quarterly Assessment captures data in different domains than the KETs, such as financial support, health status, and substance use.
- "Milestones of Recovery Scale" (MORS) [7]
- Global Assessment of Functioning – Indicates the level of presence of psychiatric symptoms.

[7] This scale was developed from funding by a Substance Abuse and Mental Health Services Administration grant and designed by the California Association of Social Rehabilitation Agencies and Mental Health America Los Angeles researchers Dave Pilon, Ph.D., and Mark Ragins, M.D., to more closely align evaluations of client progress with the recovery model. Data collected from the MORS is used with other instruments in the assessment of individuals functioning level in the Social Functioning and Independent Living Skills sections. Engagement was determined using a combination of MORS score improvement, contact with treatment team tolerance and social activity.

- Mental Health Statistics Improvement Program Consumer Surveys – Measure matters that are important to consumers of publicly funded mental health services in the areas of access, quality, appropriateness, outcomes, overall satisfaction, and participation in treatment planning

Counties collected and compiled the required information into written reports, which were submitted to DHCS. Due to the small population sizes reported, AOT clients may be identifiable. DHCS is committed to complying with federal and state laws pertaining to health information privacy and security.[8] In order to protect clients' health information and privacy rights, summary numbers for each of the specified outcomes cannot be publicly reported. In order for DHCS to satisfy its AOT program evaluation reporting requirement, as well as protect individuals' health information, DHCS adopted standards and procedures to appropriately and accurately aggregate data, as necessary.

[8] Federal laws: Privacy Rule and the Security Rule contained in the Health Insurance Portability and Accountability Act and clarified in Title 45 Code of Federal Regulations Part 160 and Subparts A and E of 164. State Laws: Information Practices Act and California Civil Code Section 1798.3, et. seq.

FINDINGS FOR REPORTING PERIOD May 1, 2016 – April 30, 2017

Based on county-reported data, there are very few individuals entering the AOT programs as a result of court orders or settlements. Individuals referred for an AOT assessment must be offered voluntary services before a court petition is considered. The programs reported that the majority of their AOT referrals responded to the initial invitation to voluntary services and did not require a court petition or process. Counties report that this is due to a successful initial engagement process, as most individuals referred for assessment accept the first offer for voluntary services.

Although 16 counties have implemented AOT programs, the data summarized in this report reflect the six counties that had data for court-ordered or settled individuals. Data for these counties are aggregated, with highlights of each program listed first. The six counties' AOT programs collectively served a total of 63 court involved individuals. This is more than double the number of participants as compared to the last reporting period, in which 28 individuals were in AOT programs.

Part I: County Programs Serving AOT Court-Involved Individuals – Contra Costa, Los Angeles, Nevada, Orange, Placer, and San Francisco

County Program Unique Highlights

Contra Costa County reported that, during its first year of operation, 91 percent of individuals referred for assessment for AOT services accepted voluntary services.

Los Angeles County reported serving voluntary clients since 2010 in a pilot AOT program. The county then fully implemented and expanded its AOT program in 2015. This is the first reporting year that Los Angeles has had court-ordered or settled AOT participants. As with the other counties, the Los Angeles court-ordered or settled participants are a fraction of its overall number of AOT participants.

Nevada County has had the longest running AOT program, dating back to 2008. Consistently over that time, the majority of the referred individuals accepted the program's invitation to participate in voluntary services rather than requiring a court-order or settlement.

Orange County noted that, while there was overall improvement in housing over the reporting period, participants still experienced challenges finding and maintaining housing.

Placer County continues to be in the early stages of providing AOT services to individuals and has a small number of participants.

San Francisco County has developed an AOT Care Team, which is responsible for AOT court petitions and advocating for AOT individuals with preexisting charges to be referred to collaborative courts such as Behavioral Health Court. Behavioral Health Court is focused on family support including offering resources such as a Family Liaison, information, and assistance navigating the mental health and criminal justice systems. San Francisco County continues to host a quarterly conference call with other counties that have implemented AOT to share information and experiences of AOT programs.

Demographic Information

Counties reported that the majority of participating individuals were Caucasian males between ages 26 and 59. This is similar to the information from the last reporting period, which indicated the majority of individuals in the programs were males identifying as Caucasian between 26 and 59 years of age. Some counties reported seeing more racial diversity in their AOT populations, and more female participants.

Homelessness/Housing

In the previous reporting period, homelessness among those served decreased. For this reporting period, counties reported modest reductions in homelessness, with the majority of clients obtaining and maintaining housing while in the AOT program.

Hospitalization

In the last reporting period, many of the individuals who were hospitalized prior to receiving AOT services experienced decreases in their hospitalization days. This reporting period, most programs reported that the majority of clients with psychiatric hospitalizations prior to AOT either reduced their days of hospitalization during AOT or entirely eliminated hospitalizations.

Law Enforcement Contacts

In the last reporting period, programs reported law enforcement contacts (measured as “days of incarceration”) were reduced for all individuals that had experienced incarceration days prior to AOT. For this reporting period, this trend continues as all programs reported reductions in law enforcement contact for participants in AOT programs.

Treatment Participation / Engagement

For the previous reporting period, participants’ ability to engage and participate in treatment varied significantly. Counties indicated that programs focused on assisting individuals with critical symptoms who were reluctant to approach treatment, and most participants were able to achieve at least moderate levels of engagement. For this reporting period, the majority of the participants again were able to engage in treatment and remain in contact with their programs. This continues to result in positive outcomes for reducing hospitalizations, incarcerations, and homelessness.

Employment

In the prior reporting period, few clients were employed while in the program. Generally, clients were either not far enough along in treatment to gain employment or the AOT program had not yet implemented employment services as a component. For this reporting period, there was an increased level of employment for individuals across programs, including some participation in education.

Victimization

For the previous reporting period, there were few reported instances of victimization for participants prior to AOT program participation, and none reported for individuals during their AOT program participation. For this reporting period, there were again few reports of victimization, with some programs reporting that individuals were reluctant to share such information via the questionnaires that were used. These programs indicate that they will modify their questionnaires and/or programs to provide more comfortable means for individuals to share such sensitive information.

Violent Behavior

In the prior reporting period, counties reported an overall decrease in violent behavior. In the current reporting period, some programs reported violent episodes for individuals who were struggling with initial phases of stability, and other programs reported that the AOT program participants displayed decreased violent behavior or that they did not collect data on this outcome measure.

Substance Abuse

During the last 2015-16 reporting period, one AOT program reported a decrease in substance use for the majority of its clients; however, most AOT programs could not report on the AOT program's impact on substance use due to lack of information provided by the participants.

For the 2016-17 reporting period, all programs reported varying levels of challenges with participant substance use. The majority of individuals in AOT have co-occurring diagnoses, meaning that they have both mental health and substance use disorder diagnoses. This presents a complication for programs to support individuals in recovery from both issues. In some cases, the majority of individuals in the programs relapsed during AOT, while other programs reported the majority were able to avoid substance use.

Enforcement Mechanisms

For the last reporting period, medication outreach (e.g., visiting clients to discuss medication, helping prepare medication boxes) was the enforcement mechanism used most often to support individuals who experienced challenges in managing and regularly administering their own medications. Some programs used status hearings as a vehicle to help individuals re-focus on their treatment goals and self-care when they were

missing appointments and their mental health was beginning to decompensate.

For this reporting period, the most common enforcement mechanisms used were additional status hearings, with a small group of individuals receiving orders for hospitalization for the purpose of psychiatric evaluation. Some programs provided medication outreach as a regular support for their participants.

Social Functioning

For the prior reporting period, all AOT programs provided DHCS with anecdotal information on clients' increased social functioning, generally credited to the staff's ability to develop good rapport with the clients.

For this reporting period, overall, AOT programs reported increased social functioning and considered the participants' ability to interact with staff and tolerate therapeutic interactions a significant outcome in this area.

Independent Living Skills

For the last reporting period, most programs communicated to DHCS that the participants needed guidance with a wide array of independent living skills, such as medication management, money management, housing maintenance, and activities of daily living (e.g., dental hygiene), especially those who were generally homeless or frequently hospitalized prior to the court order.

During this period, programs reported that the majority of individuals improved in their independent living skills, as indicated by improved scores on the Milestone of Recovery Scale, and demonstrated strengthened skills in stress management, improved hygiene, food preparation, and transportation.

Satisfaction with Services

For the last reporting period, most AOT programs leveraged the annual Mental Health Statistics Improvement Program to report satisfaction with services. Because satisfaction surveys are voluntary, some clients refused to complete them. AOT Programs that surveyed clients and families found that the majority responded positively about the program and services.

For this reporting period, the majority of surveyed individuals were also satisfied with their services. Some programs have or are developing their own survey tool to capture individual responses that are unique to AOT programs rather than utilizing a pre-established survey, which include services beyond AOT.

Part II: Programs with No AOT Court Ordered Individuals – El Dorado, Kern, Mendocino, San Diego, San Luis Obispo, San Mateo, Santa Barbara, Ventura, and Yolo Counties

County Program Unique Highlights

El Dorado County is implementing AOT by conducting a pilot program and currently has voluntary clients.

Kern County began services in Fall 2015 and continues to have only voluntary clients during both the current and previous reporting periods.

Mendocino County has implemented a four-slot pilot program for AOT and had no court-ordered or settled participants.

San Diego County just completed the first year of their new program with no court-ordered or settled participants.

San Luis Obispo County is still in the early stages of implementing their new program.

San Mateo County assembled a team consisting of a Clinical Services Manager, one half-time Psychologist, one Psychiatric Social Worker, one half-time Deputy Public Guardian and two half-time Peer Support Workers that travel throughout the county to evaluate individuals and provide referrals to services if needed. San Mateo County includes a Peer Support Worker to enhance engagement and support for individuals encountering the AOT program.

Santa Barbara County did not have a full year of the new program for this reporting period and did not have any court-ordered or settled participants.

Ventura County recently began receiving individuals, but did not have any during the reporting period.

Yolo County has a five slot AOT program, which was implemented three years ago. To date, it has only voluntary individuals have utilized the program.

Summary of Programs

The numbers of individuals participating in AOT services statewide has increased since more counties have implemented AOT programs. Programs report that ongoing efforts to develop robust engagement and support strategies have led to more engaged participation in AOT programs and voluntary participation in AOT services. With continued success in this area, programs are likely to maintain low numbers of individuals that require court involvement.

LIMITATIONS

There are several noteworthy limitations of DHCS' analysis. Although participating counties have provided additional data, court ordered client numbers remain small. The small population size makes it difficult to determine if the data allows for statistically significant conclusions. Additionally, counties are not using standardized measures, which makes it difficult to make comparisons across counties. Further, there is no comparison and/or control group, so it is unknown as to whether or not the improvements were a result of AOT program services, or other factors. Some of the measures are based on self-reports and/or recollections of past events, which may or may not be accurate or reliable. Furthermore, individuals were followed for different periods of time (e.g., individual A may have been followed for one week, while individual B was followed for the entire reporting period). As with other programs that have transitory populations in different phases of program completion, there may be carry over data from the prior reporting period.

Despite these limitations, DHCS' analysis suggests improved outcomes for AOT program participants served during the reporting period. Notably, the majority of individuals referred for an assessment opt to engage in voluntary AOT program services after being offered those services as part of the assessment process.

DISCUSSION

The data provided by counties suggest that individuals have benefited from participation in AOT programs, as evidenced by reductions in hospitalizations, homelessness, contact with law enforcement, and substance use. With respect to individuals that have both substance use and mental health issues, it is important to understand that concurrently recovering from both represents enormous challenges and requires a great deal of support and counseling. Some counties found that there were challenges with participants relapsing and at times relapses lead to further psychiatric hospitalizations.

Prior to participating in an AOT program, many individuals' experience with mental health treatment mainly involved locked facilities or hospitalization. Therefore, many clients had to adjust to forming relationships with supportive community mental health workers and to receiving intensive services outside of a locked setting. The success of this adjustment was indicated by the engagement by most individuals in AOT programs overall, whether voluntary or involuntary, and by the majority of individuals who completed a satisfaction survey indicating that they were satisfied with the services and supports.

Counties continue to report that only a small fraction of their overall AOT program populations (voluntary plus involuntary individuals) require a court order or settlement to participate. This suggests that counties are maintaining a strong effort to engage individuals in voluntary services and avoiding the court petition process.

CONCLUSION

Seventeen counties currently have Board of Supervisors approval to operate an AOT program. During this reporting period, 12 counties submitted reports to DHCS, six of which had data to report on AOT court-ordered or settled individuals. The other reporting AOT programs did not have court-ordered or settled client data to report to DHCS, but provided information on their programs' progress. This report includes aggregate outcomes from 63 individuals from the six counties that reported court-ordered or settled AOT client data to DHCS.

The data indicates that the program was successful in reducing the need for hospitalizations and/or incarcerations, largely due to an increased amount of support, and increasing employment during this reporting period. DHCS recommends continuing to monitor the progress and effectiveness of the services in the programs as counties develop and expand their programs, and ensuring that any other counties that choose to implement Laura's Law report data to DHCS, as required.

Appendix A

History of Involuntary Treatment and the Development of Laura's Law in California

Among significant reforms in mental health care, the Lanterman-Petris-Short (LPS) Act (Chapter 1667, Statutes of 1967) created specific criteria by which an individual could be committed involuntarily to an inpatient locked facility for a mental health assessment to eliminate arbitrary hospitalizations. To meet LPS criteria, individuals must be a danger to themselves or others, or gravely disabled due to a mental illness (unable to care for daily needs). Following LPS, several state hospitals closed in 1973 to reduce the numbers of individuals housed in hospitals, and the intent at the time was to have communities provide mental health treatment and support to these discharged patients. However, due to limited funding, counties were unable to secure the resources necessary to provide adequate treatment or services. As a result, many of the individuals released from the hospitals ended up homeless or imprisoned with very little or no mental health treatment.[9]

In 1999, the state of New York (NY) passed a law that authorized court-ordered AOT for individuals with mental illness and a history of hospitalizations or violence requiring that they participate in community-based services appropriate to their needs. The law was named Kendra's Law in memory of a woman who died after being pushed in front of a New York City subway train by a man with a history of mental illness and hospitalizations. Kendra's Law defines the target population to be served by the AOT programs as "….mentally ill people who are capable of living in the community without the help of family, friends and mental health professionals, but who, without routine care and treatment, may relapse and become violent or suicidal, or require hospitalization." The program is required in all counties in NY and the individuals served by court order have priority for services. Kendra's Law improved a range of important outcomes for its recipients,[10] but differs from California's Laura's Law in two significant ways. It requires that all counties in NY implement AOT programs, and requires that the clients accessing these programs have priority for services.

Patterned after Kendra's Law, California passed AB 1421 (Thomson, Chapter 1017, Statutes of 2002), known as Laura's Law, that provides for court-ordered community

[9] For additional historical information, see Laura's Law legislative report 2011 at: http://www.dhcs.ca.gov/services/MH/Documents/4LaurasLawFinalReport.pdf

[10] See Kendra's Law, Final Report on the Status of Assisted Outpatient Treatment Outcomes for Recipients during the First Six Months of AOT [Office of Mental Health, State of New York 2005, http://www.omh.ny.gov/omhweb/kendra_web/finalreport/outcomes.htm] and the New York State Assisted Outpatient Treatment Program Evaluation [Swartz, MS et al. Duke University School of Medicine, Durham, NC, June, 2009, http://www.macarthur.virginia.edu/aot_finalreport.pdf].

treatment for individuals with a history of hospitalization and contact with law enforcement. It is named after a woman who was one of three killed in Nevada County by an individual with mental illness who was not following his prescribed mental health treatment. The legislation established an option for counties to utilize courts, probation, and mental health systems to address the needs of individuals who are unable to participate on their own in community mental health treatment programs without supervision. Laura's Law authorizes counties to implement an AOT program and specifies that funding for established community services may not be reduced to accommodate the program. Laura's Law has resulted in reductions in homelessness, incarceration, and hospitalization for these individuals.

County of Santa Clara
Santa Clara Valley Health & Hospital System
Mental Health Services

99307

DATE: December 17, 2019

TO: Board of Supervisors

FROM: Toni Tullys, Director, Behavioral Health Services

SUBJECT: Report on Safe Places and Support Services for Mentally Ill/Dually Diagnosed Individuals

RECOMMENDED ACTION

Under advisement from November 5, 2019 (Item No. 16): Receive report relating to safe places and support services for individuals who are mentally ill and dually diagnosed. (Behavioral Health Services Department)

FISCAL IMPLICATIONS

This is an informational report; therefore, there is no net fiscal impact as a result of this action.

CONTRACT HISTORY

Not applicable.

REASONS FOR RECOMMENDATION

At the request of Supervisor Chavez and Supervisor Cortese, Board Referral Item Number 16 (ID# 98761) approved on November 5, 2019, directs the Behavioral Health Services Department (Department) to provide a report on December 17, 2019 with options for consideration relating to the provision of safe places and support services for members of the community with high needs, who are severely mentally ill (SMI), dually diagnosed, and unhoused.

The following report addresses the options available to enhance engagement and provide support to provide for this population's safety and wellbeing. In addition, these options would help ensure that traditionally hard to engage members of the community would be able to gain access to and sustain participation in services that are safe and available day and night.

To better evaluate the potential options for enhancing engagement with services, included below is an overview of the support services the County currently provides for high needs, SMI, dual diagnosed, and unhoused people.

This Fall, in an effort to increase the services available for this population, the Department stood up the Assertive Community Treatment (ACT) Program, Forensic Assertive Community Treatment (FACT) Program and the In-Home Outreach Team (IHOT). Additionally, the Department has selected vendors to provide Intensive Full-Service Partnerships (IFSPs), which are based on the ACT model. These services will provide 800 new service slots for adult/older adult consumers. Substance Use Treatment Services (SUTS) has increased outpatient services by 220 slots and anticipates serving an additional 800 clients in the next year. Community-based detoxification beds also have been increased from 28 to 36 with an expectation of serving over 500 clients.

To ensure that clients/consumers and family members could provide their suggestions on the new and expanded services, the Department held a Peer and Family Support Services Discussion Group Meeting on December 5, 2019. Clients/consumers, peer workers, family members and National Alliance on Mental Illness (NAMI) staff met with Department leaders and senior managers to share their ideas for the service delivery system.

Intensive Services Launched Fall 2019

The ACT program is a long-standing evidence-based practice that has been widely used across the country for individuals with intensive mental health needs. With fidelity to the ACT model, outcomes are positive for high need clients. The ACT program will provide a comprehensive approach to serve 200 severely mentally ill individuals and will assist the homeless, severely mentally ill and individuals with both mental illness and substance use disorders by using a multi-disciplinary team approach to care. The treatment will include a psychiatrist, nurse, case managers, and peer support workers. The program is characterized by 1) low client to staff ratio, 2) a shared caseload among team members providing a coordinated care approach to service delivery, and 3) 24-hour staff availability. Referrals for this level care of care can occur through system partners such as the Office of the Public Guardian (OPG), the Office of Supportive Housing (OSH), and Whole Person Care (WPC).

The FACT Program serves high-risk criminal justice-involved adults (ages 18 to 59) and older adults (ages 60 and over) with severe and persistent mental health and/or co-occurring conditions that result in substantial functional impairments or symptoms. Due to the recalcitrant nature of their symptoms, these individuals are more likely to experience a high utilization and repetitive cycle of incarceration, homelessness, substance use, crisis, and/or hospitalization.

The FACT team, upon making a determination that the consumer has a history of chronic homelessness, will complete the Vulnerability Index – Service Prioritization Decision Assistance Tool (VI-SPDAT) to quickly assess the health and social needs of homeless individuals - matching them with the most appropriate services, support and housing interventions available. Immediate assistance with securing supported housing arrangements, including linkage to safe and permanent housing upon graduation from FACT, will be provided to these individuals.

The provision of FACT services will result in a diversion of individuals from correctional/judicial systems and higher levels of care which in turn will help reverse the cycle of ongoing criminal justice involvement. From the inception of treatment, FACT teams will address housing challenges for this population by conducting the VI-SPDAT which will play a critical role in addressing resistance from participants around housing, finding appropriate housing options for this population, and teaching participants skills necessary to live independently. This will prepare the individual for a more seamless transition into long-term permanent housing.

Pay for Success "Partners in Wellness" Update and Outcomes

On October 18, 2019, the Department submitted an off-agenda report to the Board of Supervisors on the outcomes to date of the County's Pay for Success "Partners in Wellness" program. (Attached) In 2015, the Office of the County Executive ("County") recognized that the Department cared for many high-need individuals who make extensive use of 24-hour psychiatric services (e.g., EPS, Barbara Aarons Pavilion, Institutes of Mental Disease (IMDs) and contract inpatient psychiatric hospitals) without finding stable recovery in the community. This was obviously hard on those clients and posed significant fiscal and logistical challenges for the county. To serve such individuals more effectively, while also being a good steward of public funds, the County launched a highly innovative "pay for success" mental health initiative in 2016.

The Department contracted with Telecare Corporation, the selected vendor in a procurement process, to provide a package of ACT and Supported Housing to individuals who both experience serious mental illness and have a history of extensive, repeated 24-hour psychiatric service utilization.

The Telecare agreement included two key components. First, individuals were randomly assigned to Telecare versus standard services, which will allow a rigorous assessment of the project's conclusion about its clinical impact on clients. Second, under a novel financial agreement, Telecare would receive financial bonuses if it were unusually successful at reducing unnecessary 24-hour psychiatric utilization and would face financial penalties if they were not successful in this task.

During the first evaluation period (January 1, 2017 – June 30, 2017) and the second evaluation period (July 1, 2017 -June 30, 2018), Telecare patients required substantially lower than expected 24-hour psychiatric services. This included Telecare exceeding targets for reduced use of acute BAP services by 50% and use of IMDs by over 60%. For both periods, Telecare received the maximum pay for success bonus because they had overperformed so significantly. Analysis of the third evaluation period (July 1, 2018 – June 30, 2019) is nearly complete and while not finalized, again indicates very strong performance by Telecare at reducing psychiatric utilization.

As noted above, the Department has implemented ACT across the Adult and Older Adult (AOA) System with the goal of improving outcomes for all clients that would benefit from this level of care.

In-Home Outreach Team Launched Fall 2019

The IHOT is comprised of county-operated and contracted providers. This program is designed to 1) serve as an after-care program for individuals referred by law enforcement to the Mobile Crisis Response Team (MCRT). The IHOT will provide intensive outreach services by engaging the individuals and linking them to on-going services. The county-operated IHOT will also coordinate with Emergency Psychiatric Services (EPS) and provide outreach and engagement services to individuals who do not meet the criteria for inpatient hospitalization but require assistance in linkage to on-going outpatient services. Finally, the IHOT will serve as a care coordination team for individuals who may be receiving services through the OSH or through a conservatorship.

Enhanced Street Outreach and Engagement

Since the implementation of the Homeless Mentally Ill Outreach and Treatment (HMIOT) program, over 200 VI-SPDAT assessments have been completed. When HMIOT identifies homeless individuals with mental illness, they are referred to the HMIOT clinical outreach team. Currently, over 40 clients are enrolled and actively working with the clinical outreach team for continual engagement, crisis intervention, and linkage to services. Among those enrolled in HMIOT program, there was zero utilization of EPS. This is a 100% reduction in EPS services. The clinical outreach team responds to special cases addressing the needs of the homeless severely mentally ill individuals on the streets. As needed and as appropriate these individuals are assessed, provided with basic needs, interim housing/shelter, and continual follow up until they are linked to services. Among those who are enrolled with the clinical outreach team, over 50% are enrolled in Permanent Supportive Housing (PSH) programs, waiting for housing to become available.

Expansion of Wellness and Drop-In Centers

The Department continues to work on implementing culturally specific wellness and drop-in centers countywide. A Request for Proposal (RFP) to expand Wellness Centers and other community-based support services will be released in December 2019. These centers are designed to help create access and linkage to behavioral health treatment for unserved and underserved individuals and their families using strategies that are non-stigmatizing. Unlike the traditional Medi-Cal authorized services, the drop-in centers will operate using an open-door policy, whereby individuals not diagnosed with behavioral health-related disorders will also be welcome and free to attend. These wellness or drop-in centers can be co-located with non-clinical cultural services. These centers are expected to begin operations in July 2020.

The Call Center: "No Wrong Door" Approach

Through the use of updated workflows, additional staff training, and technology enhancements, the Call Center has implemented a concept typically referred to as the "No Wrong Door" approach. While supporting the Department's compliance with network adequacy requirements, this concept has also proved to be beneficial in supporting individuals with coexisting mental health and substance abuse problems. Using this approach, individuals are connected to the appropriate services, resulting in "no wrong door" for access to these services. This includes services related to "same-day" access, and/or direct access to both mental health and substance use treatment services. With the new and expanded levels of care, individuals can more easily be directed or transitioned to levels of service which best meet their needs.

Crisis Stabilization Unit and Sobering Center

These are two distinct services that are offered by the Department. The Crisis Stabilization Unit (CSU) program provides up to 23 hours of psychiatric care to individuals experiencing a mental health crisis. The CSU provides crisis intervention, crisis stabilization, limited medical evaluation, and support. The program offers linkages to culturally and linguistically appropriate follow-up care for outpatient individuals within the Department's continuum of care. Individuals can be brought in by law enforcement, be referred by community providers, or receive referrals from the EPS for follow-up care and coordination.

The Sobering Center provides up to 23 hours of care to individuals that are under the influence of alcohol. This program provides support during the individual's stay while they dissipate the effects of alcohol intoxication. Staff assess the health and social needs of individuals and make referrals to appropriate community resources upon discharge from the program. Referrals are principally from local law enforcement agencies, followed by the EPS and/or the Emergency Department (ED), and individuals who voluntarily enter the program.

Both programs serve the community and provide alternative services to incarceration. Individuals that are provided housing are either affected by a mental health crisis or have relapsed to alcohol use that can negatively affect their permanent housing. These interim

services allow for stabilization and augmented case management services to address the stressors that have resulted in crisis or abuse of alcohol.

Expansion of Walk-In Shelter Beds (Short-Term Needs)

As of April 2019, there were 98 programs with a total unit capacity of 1,742. Over the past year, these programs have collectively served almost 7,500 individuals.

Inclement weather utilization increased from 27% to 44% over the past year. This increase is due to improved coordination with partners such as the National Weather Service, 211, Alert SCC, and the City of San Jose. In addition, through increased outreach and advanced inclement weather episode notification to homeless individuals; there was an enhanced awareness of the availability of beds that resulted in higher utilization. The majority of individuals and families accessing shelter and transitional programs are assessed at entry. The assessment provides information about the level of need for the household, as well as adds the household to the community queue for housing programs. During this reporting period, the individuals enrolled in the shelter and transitional programs had the following characteristics:

- Forty percent (40%) of shelter participants and 23% of transitional participants were assessed in the Permanent Supportive Housing range, indicating they may need permanent assistance to obtain and retain stable housing. Thirty-six percent (36%) of shelter participants and 43% of transitional participants were assessed at the Rapid Rehousing level, indicating a need for time-limited assistance to obtain and retain housing. The number of participants assessed at these levels far exceeds the resources available to serve all participants accessing either program.
- Participants of both shelter and transitional programs indicated a significant number of challenges related to personal wellness, demonstrating a need to address a wide range of issues to increase the participants' ability to obtain and maintain stable housing. This includes 51% of shelter participants and 25% of transitional participants reporting abuse or trauma and 27% of shelter participants and 12% of transitional participants reported a mental health issue or concern.
- Approximately a quarter (23%) of participants leaving shelter and half (48%) of the participants leaving Transitional Housing are exiting to a permanent destination. Until additional housing programs are available to serve participants (as they leave either of these programs), this percentage will likely remain stable.

New Adult Residential Treatment Program

The Department is implementing a new Adult Residential Treatment (ART) program designed for individuals who can take part in programs in the general community, but who without the supportive counseling in a therapeutic setting would be at risk of hospitalization. Without the long-term unlocked residential treatment, these individuals are more likely to be hospitalized. The ART program's goal is to provide a structured recovery-oriented residential setting that assists consumers to improve life skills and reduce functional impairments. The ART will serve individuals diagnosed with SMI and substance use disorders. The program is expected to engage adults and older adults with complex risk factors that include violence, homelessness, neglect, justice-involved and those exposed to trauma.

The ART RFP was released on November 20, 2019, with the intent of selecting one or more vendors by May 12, 2020 with an estimated contract start date on July 1, 2020. The RFP is requesting proposals that can provide both direct services and manage facility needs.

Measures to Increase and Prevent Decline of Board and Care Homes and Beds

The AOA System of Care is working with the OSH and Facilities and Fleet (FAF) to purchase board and care homes that have plans to close and go out of business. To support potential purchase(s) for the SMI/co-occurring population, the Department included the County's maximum allowable Mental Health Services Act (MHSA) funding ($8 million) in the MHSA Plan Update to purchase and operate residential care facilities; this funding can be used for up to ten (10) years. By purchasing and preventing the closure of these homes, the intention is to mitigate the displacement of consumers currently living in these homes and abate further homelessness.

In addition, the Department recently received the Los Angeles County Mental Health Department (LADMH) report on stabilizing board and care facilities, recognizing the critical importance of maintaining and increasing these facilities. This report was approved by the Los Angeles County Board of Supervisors on November 12, 2019 and the Department, with OSH, plans to follow up with the LADMH team in December 2019.

In an effort to increase and prevent the decline of the board and care homes and beds, the AOA System of Care Division Director convenes a quarterly stakeholder meeting with the State Community Care Licensing staff and the Public Guardian Office. This meeting is used to collaborate and discuss ways to provide on-going support for existing board and care facilities that are struggling to maintain their licensure due to several deficiencies in their facility.

Hospital Discharge Transition Treatment Team

The Department continues to work on reducing the use of inpatient psychiatric hospital services for individuals diagnosed with serious mental illness. The readmission rate measures the unplanned readmissions of individuals who have been discharged from acute psychiatric

hospitals within the past 30 days. The AOA Hospital Liaison implemented a practice management solution to improve data captured at the Barbara Aarons Pavilion (BAP) and contract hospitals to allow for more efficient intervention.

To address the readmission rate, a pilot project using an Inpatient Liaison was instituted at the BAP in 2017, with the aim to provide care coordination for patients discharging from the hospital. Care coordination has improved for consumers transitioning from inpatient hospitals back into the community. In addition, the Inpatient Liaison has improved relationships with the Outpatient Treatment Team service providers and inpatient providers by instituting quarterly meetings with the inpatient and outpatient providers to discuss challenging issues that affect clients. Another area of improvement is the Inpatient Liaison's ability to flag consumers with two hospitalizations, through early identification and proactive case management of these high-risk patients, thereby reducing readmissions. The AOA System continues to track the monthly readmission rate, which is currently 10.7 %, a slight increase in the readmission rate due to several high-need, high acuity clients waiting for state hospital beds.

New Step Down Service Option to Support Wellness and Recovery

The new Wellness and Recovery Medication Services (WARMS) was initially piloted in County-operated mental health clinics and has been fully implemented at the Downtown Mental Health and Narvaez Clinics. WARMS was developed to support adult outpatient clients in maintaining their level of wellness with case management, peer support and medication support that is provided every 4-12 weeks from a psychiatrist and licensed psychiatric technician. For this lower level of care, clients continue to receive: 1) an annual mental health assessment, 2) ongoing treatment planning, and 3) light touch case management. In the past fiscal year, mental health contract providers communicated their interest in implementing WARMS to support their outpatient level of care. Currently, there are six (6) contract providers utilizing this option, and in the next fiscal year, the program will be expanded to all AOA outpatient providers.

Exploration of Medical-Detoxification Services (MHTC)

The MHTC is a service benefit covered under the Drug Medi-Cal Organized Delivery System Waiver (DMC-ODS). This would not be a "center," but rather a medical service provided in a hospital setting. The Department is working with Valley Medical Center leadership to explore implementation of an MHTC service that would provide medical detoxification and supportive treatment for clients. The intervention addresses severe addiction to drugs and/or alcohol that requires medical supervision as the individual detoxes from the substance. For individuals who are severely addicted to alcohol and other drugs, such as benzodiazepines, detoxification can be life-threatening during the early stages of detoxification. This is further exacerbated when an individual also has a chronic health condition that can further complicate the detoxification process.

To manage detoxification in these circumstances, medical interventions (including the administering of medication to minimize the deleterious effects of the detoxification process) are required. The services offered through SUTS are routinely provided to individuals that are homeless, involved with the criminal justice system, and have co-occurring mental health symptoms. These augmented services would effectively address and stabilize individuals with acute addiction issues who are involved with all system partners that also serve this population.

Enhanced Lanterman-Petris-Short (LPS) Act Conservatorship

Mental health conservatorships, also known as LPS conservatorships, are established to provide mental health services for Santa Clara County residents who are gravely disabled (unable to provide for their food, clothing or shelter) due to serious mental illness. These individuals have been found by the Court unable or unwilling to accept voluntary treatment. Mental health conservatorships are also known as Lanternam-Petris-Short conservatorships or "LPS", named after the state Assemblyman and Senators who wrote the legislation. The law went into effect in 1972. This procedure is established in the California Welfare and Institutions Code (WIC).

Mental health conservatorship is a legal procedure through which the Superior Court appoints a conservator of the person to authorize psychiatric treatment, including the use of psychotropic medications and placement in a locked facility. The conservatee must meet the narrow definition of grave disability due to a serious mental disease.

LPS conservatorships may only be initiated by a psychiatrist while a client is in an acute psychiatric setting. Only psychiatric facilities (including jail psychiatry), may make referrals for conservatorships. Clinicians have discretion about when to refer; the treating physician may choose not to refer if it is believed that a client will recover before the hold expires. If a person reaches the 17-day limit for a hospital hold, they must be released unless a conservatorship is in place.

LPS conservatorships start with a 72-hour psychiatric hold (also known as a Welfare and Institution Code (WIC) Section 5150 hold). If clients continue to be considered gravely disabled and need additional intensive treatment, a psychiatric clinician may file for a 14-day hold (WIC Section 5250 hold). Under these WIC provisions, a patient can be held for a maximum of 17 days without conservatorship. After the first three days, the client has the right to a hearing and representation by the Public Defender.

Upon receiving a referral, the Public Guardian Conservator will determine if the referral is appropriate (that the client is a Santa Clara County resident and is on an involuntary hospital hold). If deemed appropriate, the Public Guardian Conservator works with County Counsel to petition the Superior court to grant a temporary conservatorship (T-con). This ensures that

the client will continue to receive appropriate care during the judicial process. Once the T-con is granted, the Public Conservator completes an investigation, including consulting with the psychiatrist, reviewing medical records and meeting with family (if appropriate). The Public Guardian Conservator then works with County Counsel to file a petition with the Court for continued conservatorship. If the T-con expires before the petition is ready, the Court may grant a 30-day extension.

Proposed conservatees are appointed representation by an attorney from the Office of the Public Defender. If the Court determines that the client is gravely disabled due to serious mental illness and are unable or unwilling to accept voluntary treatment, the client is placed on a "permanent" conservatorship, which lasts up to one year. The client has a right to appeal the conservatorship and may request a trial.

The Public Guardian Conservator works with the Department's 24-Hour Care team to place the client in treatment, which generally includes finding an appropriate residential facility based on the physician's recommendation and the needs of the client. The Public Guardian Conservator:

- Prepares reports for the Court
- Recommends appropriate level of placement, seeking the best and most independent living environment available, within the conservatee's abilities and resources
- Monitors psychiatric care in collaboration with treatment team
- Consents to medical treatment and psychiatric medications when authorized
- Advocates on behalf of conservatees
- Provides case management for clients

A general LPS conservatorship lasts for a year or until it is determined that the conservatee no longer meets the legal criteria for conservatorship. At the end of the year, if the conservatee continues to meet the criteria for conservatorship, County Counsel files a petition for renewal of conservatorship.

Implementation of Assisted Outpatient Treatment (AOT)

In 2002, California passed The Assisted Outpatient Treatment Demonstration Project Act, aka Laura's Law, authorizing the provision of assisted outpatient treatment (AOT). As explained in reports to the Health and Hospital Committee (HHC) on September 13, 2017 (ID# 88121) and August 22, 2019 (ID# 97937),[1] this law allows courts, in certain circumstances after following a specific set of procedures, to order people to receive

[1] These reports are attached to this report for ease of reference.

involuntary outpatient mental health services.[2] The 2002 law did not provide any funding for implementing AOT[3] and specifies that funding for voluntary mental health programs may not be reduced as a result of the implementation of AOT. Each County Board of Supervisors must approve AOT implementation in its county.

Currently, 20 counties have implemented AOT and are able to use the court system to enroll in involuntary outpatient treatment people with serious mental illness who are unable and/or unwilling to participate in treatment and meet the criteria established in Welfare & Institutions Code § 5346. As part of the AOT process, before AOT proceedings can begin, the person must have been offered an opportunity to participate in a treatment plan and continue to fail to engage in treatment. So far, the vast majority of people involved in an AOT program voluntarily engaged with services before court proceedings began.

The most recent information available about the outcomes of those 20 AOT programs is derived from data six counties provided[4] to the California Department of Health Care Services (DHCS) for the 2016-2017[5] time period. During that time period, there were 63 court-involved individuals in the six reporting counties. All of the data collected indicates that those 63 people benefited from being connected to treatment via AOT: homelessness, hospitalization, and contact with law enforcement decreased; some people secured employment; and most individuals remained fully engaged with services at the end of their court ordered treatment. However, none of the reports used standardized measures, followed participants for a standard period of time, included a large enough sample size, or compared the AOT participants to a control group that did not face the threat of court order to enter treatment. Given these limitations, the utility of this outcome data is quite limited and cannot demonstrate a causal relationship between the AOT process and the outcomes for the participants.[6]

As detailed in other sections of this report, Santa Clara County recently stood up new FACT, ACT, and FSP services. These services use evidence-based practices to provide the level of care most AOT participants would require, using a "whatever it takes" approach. The Department has also been making efforts to expand the breadth and methods of its community engagement. AOT participants have the option of engaging Mobile Crisis Response Team, In-Home Treatment program, Crisis Text Line, Homeless Mentally Ill Outreach and Treatment program, and call center. With the recent expansion of services and

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[2] Please see the September 13, 2017 report for more detailed description of the goals of AOT (packet pages 585-86), eligibility criteria (586-87), court process (587), and service program requirements (588).
[3] Orange County and Nevada County estimated treatment costs at $35,000-$40,000 per person per year.
[4] The other counties did not have enough data to report.
[5] Most of the counties currently using AOT, did not begin implementation until 2015-2016.
[6] San Francisco and Contra Costa Counties have also released evaluation reports on their AOT implementation. These coun[illegible] reported similar findings and the utility of their data is similarly limited.

continued efforts at voluntary engagement, the Department is already providing many of the beneficial pieces associated with AOT in Santa Clara County.

At the August 22, 2019 HHC meeting, Supervisors Ellenberg and Simitian asked the Department to provide the HHC with quarterly reports on the progress of these new services and include in those reports an analysis of the possibility of implementing an AOT program. Given how new the ACT, FACT, and FSP services are to the County, these reports will allow the HHC to keep a close eye on their implementation and gauge their effectiveness.

The recommended action supports the County of Santa Clara Health System's Strategic Road Map goals by increasing the number of healthy life years through improving access to safe, supportive, and effective care.

CHILD IMPACT

The recommended action would have a positive impact on children by providing information on projects and resources for homeless, dually diagnosed, and severely mentally ill clients from this target population.

SENIOR IMPACT

The recommended action would have a positive impact on seniors by providing information on projects and resources for homeless, dually diagnosed, and severely mentally ill clients from this target population.

SUSTAINABILITY IMPLICATIONS

The recommended action balances public policy and program interests and enhances the Board of Supervisors' sustainability goals of social equity and safety by outlining and developing processes and procedures to address the needs and engage homeless individuals, dually diagnosed and SMI individuals in Santa Clara County.

BACKGROUND

At the August 22, 2019 HHC, the Department provided information on the Fiscal Year (FY) 2019 Work Plan and accomplishments, including expansion of the AOA System's crisis continuum, diversion and post justice services and planned implementation of new and expanded services (ID# 97937). These services include Assertive Community Treatment, Forensic Assertive Community Treatment, Intensive Full-Service Partnerships and the In-Home Outreach Teams. In addition, the Blackbird House, a new Peer Respite program operated by Caminar, opened its door in December 2018. The Department also reviewed the FY2020 Work Plan (ID# 97937) which includes new services in both County-operated programs and RFPs for new contract provider services. These services were designed to meet the needs of clients with intensive mental health and substance use issues.

CONSEQUENCES OF NEGATIVE ACTION

Failure to approve recommended action would result in the inability of the Board of Supervisors to receive a report on the current and future projects, plans, and services that would help engage house, and serve homeless, dually diagnosed, and SMI individuals.

LINKS:

- Linked To: 98761 : 98761
- Linked To: 88121 : 88121
- Linked To: 97937 : 97937

CITY OF MILPITAS
AGENDA REPORT
(AR)

Item Title:	**Adopt a Resolution in Support of the Principles of the Convention on the Elimination of All Forms of Discrimination Against Women**
Category:	Reports of Mayor and Councilmembers
Meeting Date:	4/21/2020
Staff Contact:	**Councilmember Dominguez, 408-586-3031** **Councilmember Phan, 408-586-3032**
Recommendation:	Adopt a Resolution in support of the principles of the United Nations Convention on the Elimination of All Forms of Discrimination Against Women.

Background:
The Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) is a landmark international agreement that affirms principles of fundamental human rights and equality for women around the world. To date, 187 out of 193 United Nations member states have ratified CEDAW. The United States is one of only six countries—along with Iran, Sudan, Somalia, Palau and Tonga—that have not ratified CEDAW. CEDAW defines discrimination and provides a practical blueprint to promote human rights and open opportunities for women and girls in all areas of society. The treaty calls on each ratifying country to overcome barriers to discrimination in the political, social, economic, and cultural fields. This includes addressing issues of domestic violence, trafficking, affordable health care and child care, economic security, pay inequities, paid family leave, and educational and vocational opportunities.

Among the international human rights treaties, the Convention takes an important place in bringing the female half of humanity into the focus of human rights concerns. The spirit of the Convention is rooted in the goals of the United Nations: to reaffirm faith in fundamental human rights, in the dignity, and worth of the human person, in the equal rights of men and women.

Analysis:
The Convention of Elimination of All Forms of Discrimination Against Women lays out specific universal standards that affirm the fundamental rights of women and girls and offers a framework to foster gender equality and eliminate discrimination against women. It defines what constitutes discrimination against women broadly to encompass policies that negatively affect women's human rights, and offers a blueprint to create more equitable opportunities and outcomes for the City of Milpitas.

By using an intersectional approach, the City of Milpitas, can help women by building policies that address all aspects of their identity. CEDAW seeks to foster not only equal opportunities, but also more equitable outcomes. Furthermore, the City of Milpitas will be able to form outcomes that will help prevent workplace violence, discrimination and sexual harassment.

Recommendation:
Adopt a resolution in support of the principles of the United Nation Convention on The Elimination of All Forms of Discrimination Against Women, referenced as "CEDAW."

Attachments
Resolution

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MILPITAS IN SUPPORT OF THE PRINCIPLES OF THE CONVENTION ON THE ELIMINATION OF ALL FORMS OF DISCRIMINATION AGAINST WOMEN

WHEREAS, the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) is a comprehensive international women's rights treaty that calls for appropriate measures, such as legislation, to ensure women's rights and equality in all aspects of life, including in the political, social, economic, cultural, and civil fields; and the CEDAW was adopted by the United Nations General Assembly in 1979 and ratified by 187 countries but the United States remains one of only six countries that have not ratified the treaty; and

WHEREAS, the spirit of the Convention is rooted in the goals of the United Nations to affirm faith in fundamental human rights, in the dignity and worth of the human person, and in the equal rights of men and women and as CEDAW provides a comprehensive framework for challenging the various forces that have created and sustained discrimination based upon sex; and

WHEREAS, CEDAW, sometimes called an International Bill of Rights for Women, obligates those countries which have ratified or acceded to it to take all appropriate measures to ensure the full development and advancement of women in all spheres; political, educational, employment, health care, economic, social, legal, marriage and family relations, as well as to modify the social and cultural patterns of conduct of men and women to eliminate prejudice, customs and all other practices based on the idea of inferiority or superiority of either sex; and

WHEREAS, fifty-two countries, including the United States, signed CEDAW during the 1980 Mid-Decade Conference for Women in Copenhagen, Denmark, and to date 161 countries, representing over half of the world's countries, have now ratified or acceded to the Convention, and yet the United States has not ratified or acceded to it; and

WHEREAS, municipal governments have an appropriate and legitimate role in affirming the importance of international law in our communities as universal norms and to serve as guides for public policy; and

WHEREAS, there are vast gender disparities at the local, state, and national level; women, particularly women of color, disabled women, Native women, immigrant women, trans women, and women from marginalized communities suffer from unequal pay in Santa Clara County; and

WHEREAS, CEDAW provides a comprehensive framework for governments to examine their policies and practice in relation to women and girls and to rectify discrimination based on gender; and

WHEREAS, the adoption would further support the initiative of the California State Legislature in endorsing ratifications of CEDAW, when by resolution in 1997, it encouraged the United States Senate to ratify the Convention.

NOW, THEREFORE, the City Council of the City of Milpitas hereby finds, determines, and resolves as follows:

1. The City Council has considered the full record before it, which may include but is not limited to such things as the staff report, testimony by staff and the public, and other

materials and evidence submitted or provided to it. Furthermore, the recitals set forth above are found to be true and correct and are incorporated herein by reference.

2. The City Council supports the principles of the United Nations Convention on The Elimination of All Forms of Discrimination Against Women referenced as "CEDAW."

3. The City Council hereby directs staff to come back with an ordinance to implement in the City of Milpitas using the principles of the United Nations Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) in city operations.

PASSED AND ADOPTED this _____ day of _____, 2020, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

Mary Lavelle, City Clerk

APPROVED:

Rich Tran, Mayor

APPROVED AS TO FORM:

Christopher J. Diaz, City Attorney

M E M O R A N D U M

Date: 04/29/2020

To: City Manager Steve McHarris, City Attorney Chris Diaz

CC: City Clerk Mary Lavelle

Subject: See Below

From: Councilmember, Karina Dominguez

Councilmember, Carmen Montano

Subject: RESOLUTION DENOUNCING STIGMATIZATION, HATEFUL RACISM, AND XENOPHOBIA IN MILPITAS DURING AND POST COVID 19

BACKGROUND

One unfortunate side effect of the Novel Coronavirus (COVID-19) pandemic has been the blatant stigmatization, hateful racism and xenophobia attitudes against members of our community in the past several months. While the point of origin of this specific Novel Coronavirus may have been identified in Wuhan, China, it is absolutely inappropriate to infer responsibility to an entire ethnic community globally and worst, to act upon those inferences. Phrases such as "Chinese Virus" and the "Wuhan Virus" coined by our divisive national figureheads have led to increasing anxiety, tension and fear towards Asian Americans, Immigrants and even health care workers. COVID-19 is a public health issue, not a racial one and characterizing it as such only encourages hate crimes and incidents against citizens of Milpitas. Throughout the Bay Area we have been receiving information of individuals who have been verbally accosted waiting in line at grocery stores and physically attacked.

We must collectively think of the well-being and safety of our residents and stand with all members of our community. No community should be met with hostility or have to fear their safety during this difficult time.

The County of Santa Clara recently adopted a resolution (see Attachment #1) against the discrimination of our API community. In Milpitas we have a diverse population and we need to stand firmly with all of our neighbors. There is zero tolerance in Milpitas for COVID-19 related discrimination against any member of our community.

Attachment #1

WHEREAS, in Santa Clara County, one of the first minority-majority counties in the nation, Asians have been the largest racial group since 2014, and currently, Asians make up nearly 38 percent of the county's population; and

WHEREAS, the County of Santa Clara Board of Supervisors wishes to affirm its commitment to the well-being and safety of Asian American community members and ensure they know they are not alone and that they can speak out to help stop the spread of bigotry;

NOW, THEREFORE, BE IT RESOLVED by the Board of Supervisors of the County of Santa Clara, California, that:

1. The County denounces xenophobia and anti-Asian sentiment and does not support the Trump administration's rhetoric and racist remarks regarding the COVID-19 virus.

2. The County joins cities, counties, and states across the country in affirming its commitment to the safety and well-being of Asian Americans and in combating hate crimes targeting Asian Americans and Pacific Islanders.

3. The County will continue its efforts to protect residents and victims of hate, and to prosecute and curb hate acts related to COVID-19 in partnership with nonprofits, the County of Santa Clara's District Attorney's office, the San José Police Department, and others.

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4. The County calls upon all counties, cities, and local governments across the United States to adopt similar commitments to reaffirm their solidarity with Asian American communities and commit to combatting hate.

PASSED AND ADOPTED by the Board of Supervisors of the County of Santa Clara, State of California, on _____ by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
CINDY CHAVEZ, President
Board of Supervisors

Signed and certified that a copy of this document has been delivered by electronic or other means to the President, Board of Supervisors.
ATTEST:

_____
MEGAN DOYLE
Clerk of the Board of Supervisors

APPROVED AS TO FORM AND LEGALITY:

_____ for
JAMES R. WILLIAMS
County Counsel

RECOMMENDATION

Adopt the attached resolution in support of denouncing stigmatization, hateful racism and xenophobia in Milpitas during and post COVID-19.

Attachment #2

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MILPITAS IN SUPPORT OF DENOUNCING STIGMATIZATION, HATEFUL RACISM, AND XENOPHOBIA IN MILPITAS DURING AND POST COVID 19

WHEREAS, the COVID-19 health crisis has fueled a disturbing stigmatization, hateful racism and xenophobia in the diverse communities in our region: and

WHEREAS, these incidents include shunning and verbal harassment to workplace discrimination and even physical assault. A large percentage involves spitting and coughing at passersby who appear to be Asian; and

WHEREAS, the use of anti-Asian terminology and rhetoric related to COVID-19, such as the "Chinese virus", "Wuhan virus," and "Kung-flue" is inaccurate and stigmatizing, tends to incite fear and xenophobia, and may put Asian-Americans at risk of retaliation; and

WHEREAS, Milpitas richness comes from our diverse population that we must continue to celebrate and protect; and

WHEREAS, Santa Clara County District Attorney Jeff Rosen stated: "This virus has no ethnicity. If you hurt or threaten someone because of those things, you'll have a lot more to worry about than COVID-19."

WHEREAS, report and call 911 when you witness or are a victim of an assault such as a deliberating coughing, sneezing, or physical threatening actions. These assaults are hate crimes.

NOW, THEREFORE, the City Council of the City of Milpitas hereby finds, determines, and resolves as follows:

1. The City Council has considered the full record before it, which may include but is not limited to such things as the staff report, testimony by staff and the public, and other materials and evidence submitted or provided to it. Furthermore, the recitals set forth above are found to be true and correct and are incorporated herein by reference.

2. The City Council supports the resolution to

PASSED AND ADOPTED this day of , 2020, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

ATTEST: **APPROVED:**

Mary Lavelle, City Clerk **Rich Tran, Mayor**

APPROVED AS TO FORM:

Christopher J. Diaz, City Attorney

MILPITAS CITY COUNCIL MEETING

PREVIEW AGENDA LIST

MAY 19, 2020

PRESENTATION
Proclaim Public Works Week for May 17 – 23, 2020

CONSENT CALENDAR
1) Receive City Council calendars for May and June 2020 (Mary Lavelle)
2) Approve City Council meeting minutes of May 5, 2020 (Mary Lavelle)
3) Approve Agreement for Utility Electronic Bill Presentment + Payment (Zachary Devine, J. Corpus)
4) Approve Contract for Co. to assist with Homeless Encampment Clean-up (Tony Ndah)
5) Approve Plan for Spending annual COPS Grant funds for Milpitas Police (Police Captain)
6) Approve and Authorize Contract with County Provider for Emergency Medical Dispatching service (Jared Hernandez)
7) Receive Report of Annual (current) General Plan Progress (Ned Thomas)
8) Approve Amendment to Agreement with DeNovo Group for (new) General Plan Update services (Ned Thomas)

PUBLIC HEARINGS
9) Adopt a Resolution Confirming Assessments and Order Levy to Collect Assessments for FY 2020-21, LLMD No. 95-1 McCarthy Ranch (Kan Xu)
10) Adopt a Resolution Confirming Assessments and Order Levy to Collect Assessments for FY 2020-21, LLMD No. 98-1 Sinclair Horizon (Kan Xu)
11) Introduce Ordinance to Establish New Ambulance Service Fee (Geoff Maloon, Walter Rossmann, City Attorney)

COMMUNITY SERVICES
12) Present Final Report of Energy and Water Conservation Savings (Tony Ndah)

REPORTS – from Mayor, Councilmembers and/or Subcommittees

PREVIEW NEXT AGENDA
13) Preview list of items for June 2, 2020 regular City Council meeting (Mary Lavelle)