M E M O R A N D U M

Planning Division

Date: June 25, 2008

To: Planning Commission

Through: James Lindsay, Planning Director

From: Cindy Hom, Junior Planner

Subject: Item 4: Sinclair Renaissance Project

The memo contains a minor correction to Page 10, Table 2 (Wall Heights) of the Sinclair Renaissance Residential Project Staff Report. The correction pertains to the height of the south sound wall. The wall indicated is 13-feet. The correct height is 11-feet.

The memo also contains additional comments received from the public. Please see attachments.

AGENDA ITEM: 4

MILPITAS PLANNING COMMISSION AGENDA REPORT

PUBLIC HEARING

Meeting Date: June 25, 2008

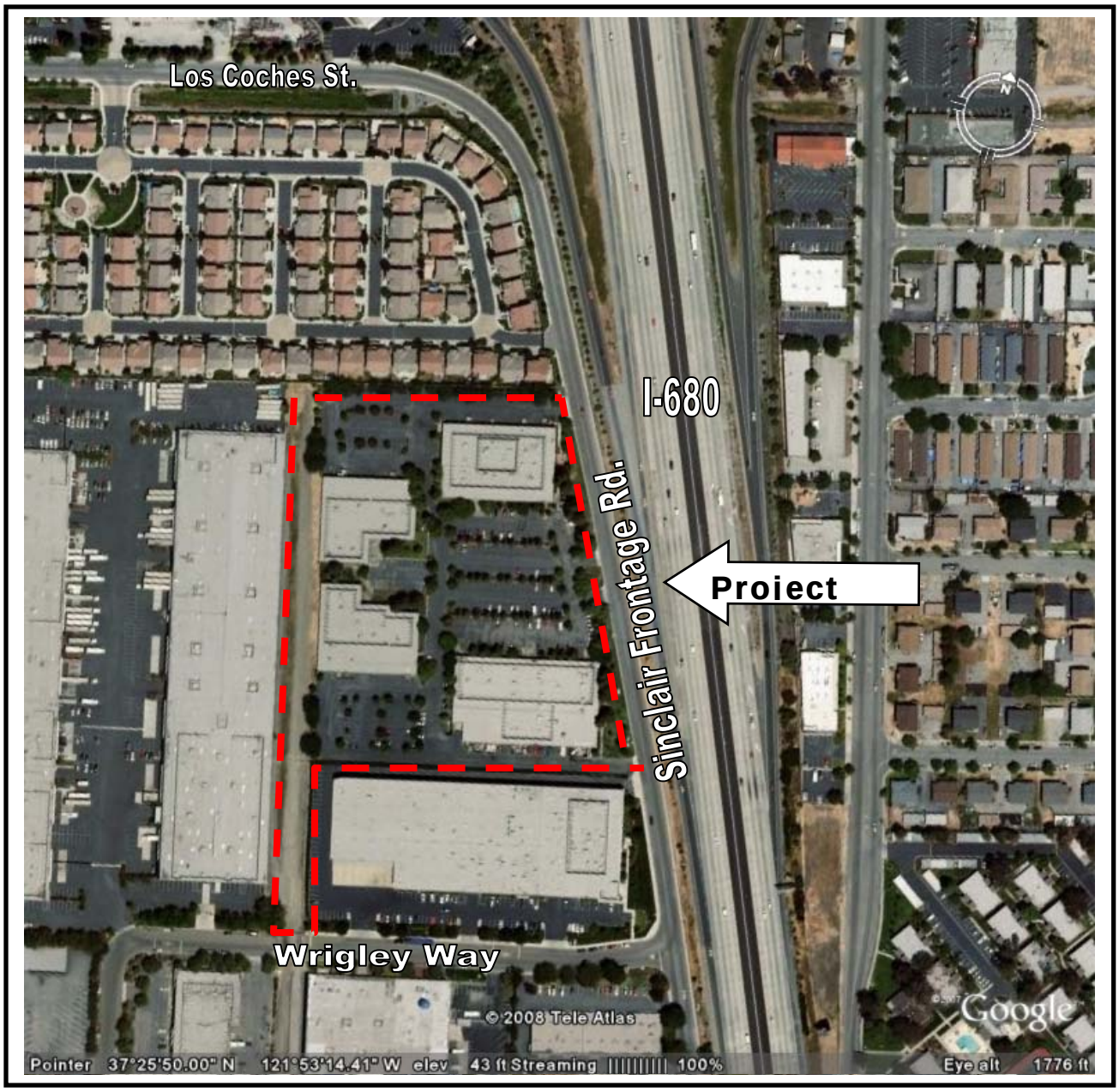
APPLICATION:	**GENERAL PLAN AMENDMENT NO. GM2006-2, ZONE CHANGE NO. ZC2007-8, "S" ZONE NO. SZ2007-10, PLANNED UNIT DEVELOPMENT NO. PD2007-1, VESTING TENTATIVE MAP NO. MA2007-4, and ENVIRONMENTAL IMPACT ASSESSMENT NO. EA2007-6, Sinclair Renaissance Residential Project**
APLICATION SUMMARY:	A request for a General Plan Amendment, Zone Change, Planned Unit Development, Site and Architecture Review, and Vesting Tentative Map to allow for the demolition of an existing low-rise industrial business park that contains approximately 121,746 square feet of building floor space located on a 9.65 acre site on the west side of Sinclair Frontage Road, south of Los Coches Street and to redevelop the site with 80 detached, two-story, single family residential homes, .34 acre private park and installation of associated site improvements and landscaping.
LOCATION:	245-373 Sinclair Frontage Road (APN 86-29-061, 062, 075, 076, and 042)
APPLICANT/OWNER:	Stephen Allen, Mission Peak Homes, 40480 Encyclopedia Cir., Fremont, CA 94538
RECOMMENDATION:	**Staff recommends that the Planning Commission:** **1. Close the public hearing; and** **2. Adopt Resolution No. 08-020 and recommend approval to the City Council subject to conditions of approval.**
PROJECT DATA:	
General Plan/ Zoning Designation:	Manufacturing and Warehousing (MFG)/Heavy Industrial (M2)
Overlay District:	N/A
Specific Plan:	N/A
Site Area:	9.65 Acres
CEQA Determination:	A Mitigated Negative Declaration has been prepared and circulated for this project.
PLANNER:	Cindy Hom, Assistant Planner

PJ: 3211

ATTACHMENTS:

A. Planning Commission Resolution No. 08-020 – Exhibit 1. Conditions of Approval, Exhibit 2. General Plan Map Amendment, and Exhibit 3: Zoning Sectional District Map
B. Project Plans
C. Project Description Letter
D. Mitigated Negative Declaration
E. Initial Study
F. Public Comment letter from Miller Starr Regalia
G. Applicant response letter dated 6/3/08
H. Tree Report prepared by HortScience dated December 2006
I. Traffic and Parking Impact Report prepared by Fehr and Peers dated
J. Stormwater Control Plan prepared by Carlson, Barbee, and Gibson dated November 2007.
K. Noise Study prepared by Edward Pack & Associated dated
L. Geotechnical Report prepared by KC Engineering Company dated October 2006.

LOCATION MAP



No scale

BACKGROUND
On March 10, 1983, the Planning Commission approved "S" Zone permit for the development of four (4) low-rise concrete tilt-up industrial buildings and installation of various site improvement at the project site. Ancillary improvements have been completed to the site since.

On May 14, 2007, Stephen Allen, Mission Peak Homes, submitted an application for the following request:

- A General Plan Amendment to change the land use designation from "Manufacturing and Warehousing " to "Single Family Moderate Density,"
- A Zone Change to change the underlying zoning of the site from "Heavy Industrial" to "Single Family Residential minimum 3,000 square foot with the "S" Combining District" to ensure consistency between the modified General Plan land use designation and City zoning,
- Vesting Major Tentative Map to create residential and common lots (parks) and assign responsibility for maintaining infrastructure,
- Planned Unit Development to allow for diverse development standards for setbacks, and
- S-Zone permit (since changed to Site Development Permit) for site and architectural review of a new residential subdivision consisting (80) detached, two-story single family homes, .34 acre private park, and associated site improvements.

The application is submitted pursuant to Milpitas Municipal Codes: XI-1-4.00 (Tentative Maps), XI-10-42.02 (Site Development Permit), XI-10-45.07 (Planned Unit Development Approval), XI-10-64.02 (Zoning Ordinance Administration and Amendments) and California Government Code Section 65350 (General Plan Amendment) for Planning Commission and City Council review and approval.

PROJECT DESCRIPTION
The proposed project area is a 9.65-acre site consisting of five parcels (APN 86-29-061, 062, 075, 076, and 042) developed with four single-story, concrete tilt up industrial buildings, 190 non-native trees, various site improvements, and an abandon railroad spur located along the western edge of the project site.

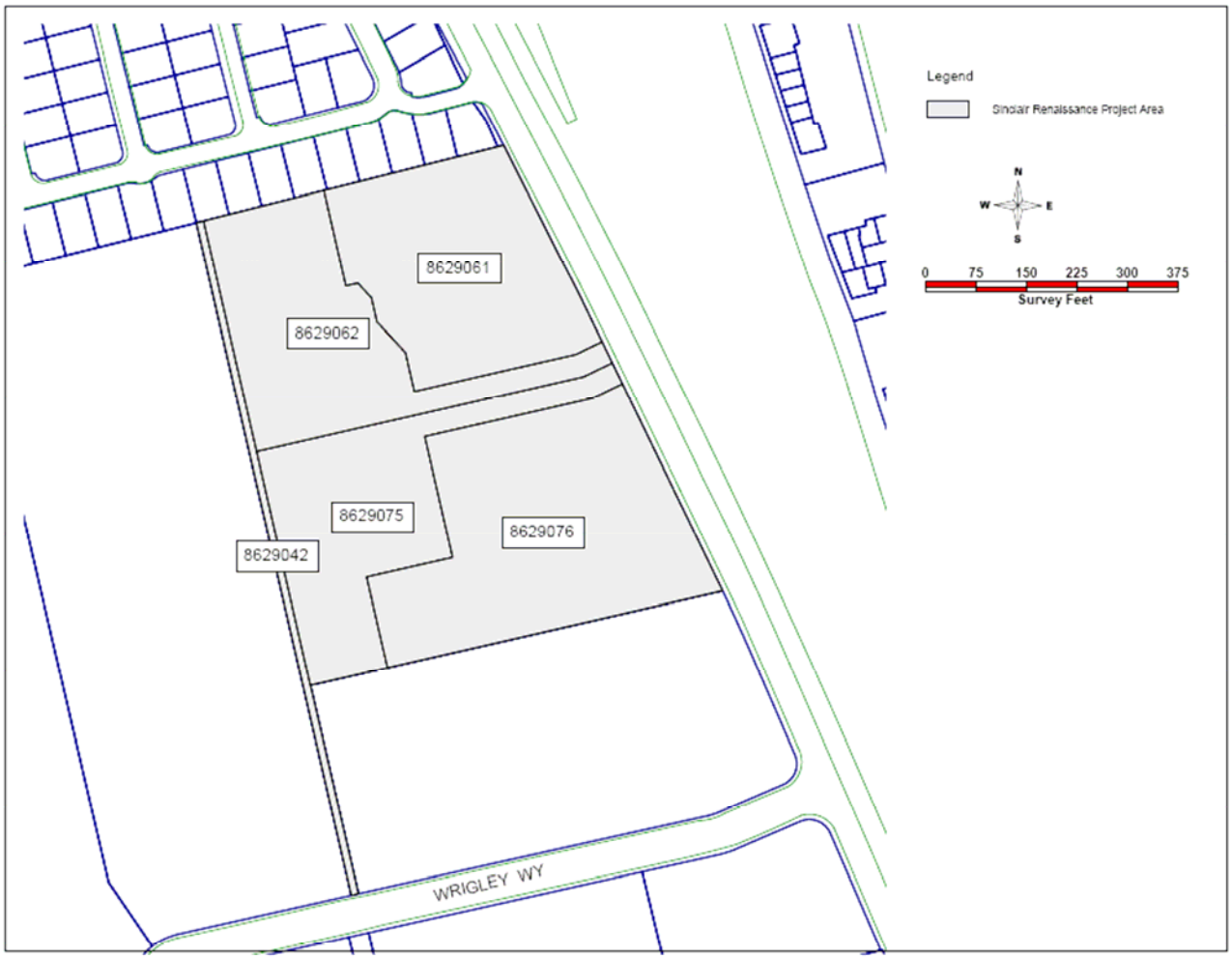
The subject property is located on the west side of Sinclair Frontage Road, approximately 450 feet south of the intersection with Los Coches Street in Milpitas, California. The project site is bounded by single-family residential homes to the north, manufacturing and warehousing buildings to the west and south, Sinclair Frontage Road and Interstate 680 to the east. The surrounding zoning includes Single Family Residential with minimum lot sizes at 3,000 square feet (R1-3) to the north and Heavy Industrial (M2) to the west and south. A vicinity map of the subject site location is included on the previous page.

The project proposes to demolish the existing 121,746 square foot low-rise industrial park and construct a new residential subdivision consisting of 80 detached, two-story residential homes, .34-acre private park, and associated site improvements. The proposed new residential homes range in size from approximately 2,057-2,227 square feet with 3-4 bedroom configurations.

Land Use Change
The project proposes a General Plan Amendment to re-designate the 9.65-acre site from "Manufacturing and Warehousing" to "Single Family Moderate Density". To be consistent with the

General Plan, a zoning amendment of the project area from "Heavy Industrial" (M2) to Single Family Residential minimum 3,000 square foot lots (R1-3) is proposed. The project area consists of five parcels. The five parcels to be rezoned are shown in Figure 1.

Figure 1. General Plan Amendment and Rezone Project Area Map



The proposed land use changes a will ensure consistency of the project with those guiding and implementing documents. See "Adopted plans and consistency" section of this report for more detail.

Vesting Tentative Map

The Vesting Major Tentative Map application has been submitted to subdivide the five existing parcels in the project area to create 80 residential lots and nine common area parcels (Parcel A-I) as shown on the Tentative Map Exhibit (Sheet TM-1). Common area parcels include streetscape parcels (Parcel A, B, E and F) along Sinclair Frontage Road and the proposed entry road, a .34 acre private park (Parcel D), a new Emergency Vehicle Access (EVA) road (Parcel C) located along the west property line that extends to Wrigley Way, and the private street system (Parcel G, H, and I). The Tentative Map also includes proposed grading, utility, and on/off-site improvement plans.

Planned Unit Development
The applicant is requesting a Planned Unit Development approval to deviate from the development standards (indicated in bold text) provided in the R1-3 zoning district and summarized in Table 1 below.

Table 1
R1-3 Development Standards

	Zoning Ordinance	*Proposed*
Density (Maximum)	6-15 Units/Gross Acre	**8.29/Gross Acre**
Lot Area	3000 sq. ft.	**3,150**
Lot Width	30’	**45’**
Setbacks (Minimum)		
Front to Primary Structure	20’	**12’**
Front to Street-facing Garage		**18’**
Interior Side	5’ one side	**4’ with a5’exception for side porch conditions**
Street Side (Corner Lots)	10’	**7’ porch** **10’ living space**
Rear	15’ one-story 20’ two-story	**15’ (Plan 1 & 2)** **5’ (Plan 3 & 4)**
Building Height (Maximum)	30’	**30’**
Parking	2 permanently maintained off street parking spaces	**2 covered parking spaces (garage parking)** **2 uncovered parking spaces (driveway parking) and 31 on-street parking within the development.]**
Driveway Dimensions	10’x20’	**10’x18’**

The project proposes reduced front, side and rear setbacks that will enable the project to maintain a compact urban form and meet the required density of the zoning district. The project also proposes modified driveway dimensions due to the reduced front setbacks. As proposed, the project provides articulated front elevations with enhanced entryways and landscaped front yards. Corner units will utilize wrapped porches that provide neighborhood friendly orientation to streets. The project also takes into consideration reduced rear yard setback. As proposed, placements of windows are offset to ensure adequate privacy. In addition, rear elevations incorporated architectural details for visual aesthetics.

PUD Findings

A Planned Unit Development may be granted providing the following findings can be made by the City:

1. *The proposal will result in an intensity of land use no higher than and standards of open spaces at least as high as permitted or specified otherwise for such development in the General Plan, Zoning Ordinance and Subdivision Ordinance.*

   As proposed, the project is not proposing a higher density than allowed in the General Plan and the R1-3 zoning district. The project proposes g a density of approximately 8.29 units per gross acre, which is within the General Plan density requirement of 6 to 15 units per gross acre Single Family Moderate Density.

2. *The proposal will not create traffic congestion pursuant to the California Environment Quality Act (CEQA), or any impacts will be mitigated by traffic improvements, or if the impacts cannot be mitigated, necessary findings shall be made by the City pursuant to CEQA.*

   A Transportation Impact Analysis was prepared by Fehr and Peers Traffic Transportation Consultants to analyze potential traffic and parking impacts (Attachment I). The proposed project is estimated to generate approximately 187 net new daily trips, 38 net new AM peak-hour trips, and 51 new PM peak-hour trips. The project would generate less than 100 net new peak-hour trips on a typical weekday. Project conditions would maintain LOS D or better on studied intersections. As such, the project would have a less than significant impact. However, under the Year 2030 conditions, the project is expected to have a cumulative impact on during the PM peak-hour for the following two segments:
   - Northbound Milpitas Boulevard between Montague and Yosemite Drive.
   - Eastbound Yosemite Drive between Milpitas Boulevard and Sinclair Frontage Road.

   To mitigate this cumulative impact, the project applicant shall pay a traffic impact fee for their proportionate contribution towards the Calaveras Boulevard (SR 237) Overpass Widening Project, Montague Expressway Widening Project, and South Milpitas Boulevard Smart Corridor Project.

3. *The maximum density shall be the upper density per gross acre as noted in the General Plan designation.*

   The project is proposing a density that is consistent with the upper range of the allowable units per gross acre for the R1-3 zoning district.

4. *Development of the site under the provisions of the Planned Unit Development will result in a public benefit not otherwise attainable by application of the regulations of general zoning districts.*

   The design flexibility provided by the PUD is allowing the project to develop urban infill site in an efficient manner. By allowing deviations from the strict application of the R1-3 zoning district, the applicant is able to provide detached single-family homes with front and back yards, which is unique in urban infill developments and contributes to the diversity of new housing units within the City.

5. *The proposed PUD is consistent with the General Plan.*

The project will be consistent with the General Plan guiding principles and implementing policies as analyzed in the "Adopted Plans and Ordinances Consistency" Section of this staff report.

6. *The proposed development will be in harmony with the character of the surrounding neighborhood and will have no adverse effects upon the adjacent or surrounding development.*

   The project proposal provides detached single-family residential homes that are in the same character and relatively the same density as the existing residential development to the north. Land use compatibility with adjacent industrial uses is a concern. However, with the implementation of mitigation measures, such as sound walls to mitigate off-site noise, these compatibility concerns are lessened. Future residents will be given full disclosure that they will be residing next to I-680 and are located next to a Heavy Industrial zone. Moreover, businesses will need to adhere to local, state, and federal regulation regarding the use of chemicals and hazardous material and business operations.

PUD Conditions

The benefit of a Planned Unit Development is the uniformity and consistency of the project, which also helps to maintain property values and overall appearance of the site. To maintain the consistency of the development over time ***staff recommends*** the following conditions of the PUD:

1. Re-roof materials shall be limited to concrete tiles.
2. Building color changes shall be to the approval of the Planning Division.
3. All garage doors shall be roll-up doors only.
4. No garage conversions shall be allowed.
5. Decorative street paving shall be maintained in perpetuity.
6. Landscape and irrigation shall be maintained in perpetuity.
7. Sound walls shall be maintained in perpetuity.
8. Private park and passive play areas shall be maintained in perpetuity. Repair and replacement of park amenities shall be to the approval of the Planning Division.
9. Front yard coverage is limited to vehicle driveways and paved walkways only. New curb cuts or driveway extensions are strictly prohibited.
10. Exterior modifications shall be consistent with architectural design of the home in terms of colors, materials, and styles. Mixing of different styles is strongly discouraged. Architectural modification will require Home Owner Association approval prior to city approval.
11. Require Conditions Covenants and Restrictions (CC&Rs) to include property disclosure statements to all future residents regarding noise due to the proximity of I-680 and adjacent industrial uses.
12. Any modifications to the PUD development standards and special conditions will require an amendment to the Planned Unit Development Approval and require Planning Commission review and approval.

Site and Architecture Review

Site Layout and Access
The proposed layout of the project area entails a grid pattern with the homes orientated to the main loop road and driveway aisles. The proposed private park is centrally located near the front of the development on the west side of the entry road. A landscaped passive play area is proposed at the southwest corner of project area and connects to the proposed emergency access road.

The proposed residential development will be served by a private street system with the main access from Sinclair Frontage Road and a new 20-foot wide emergency vehicle access located on the southwest portion of the project site near Wrigley Way. The private street system consists of a 36-foot wide entry road, 32-foot wide loop road, and two 25-foot wide driveway alleys that run east-west. Vehicle and pedestrian circulation will be provided by the loop road and entry road that will be improved with 4-foot sidewalks on both sides of the road.

Parking
The project provides a total of (351) parking spaces, which includes (160) covered parking spaces (garage parking), (160) uncovered parking spaces (driveways), and (31) on-street guest parking spaces that are located on left side of the loop road.

Site Improvements
Proposed site improvements are summarized in the sections below:

Demolition – During construction it is proposed that approximately (190) non-native trees will be removed. A tree report was performed to survey the conditions of the trees and project impacts. The tree report dated December 2006 was prepared by HortScience. (Attachment H) Based on the tree survey, there are 115 trees that are greater than 37-inches in circumference and are deemed protected per Milpitas Municipal Code X-2-7.01. Any removal of "protected" trees shall be replaced at a ratio of 1:3. Out of the 190 trees to be removed, 115 are deemed "protected" trees. However the applicant is proposing to replant 350 new trees consisting of 24-inch box trees and 15-gallon trees. As conditioned, the applicant shall obtain a tree removal permit prior to the removal of any trees. For any tree that cannot be mitigated due to lack of available planting area or construction conflict, the applicant shall be required to pay a tree mitigation fee to the City of Milpitas. The funds will be deposited in the City's Tree Replacement Fund and will be used to plant trees within the City of Milpitas.

Grading and Drainage – Under existing conditions, there is cross drainage between properties, which is not permitted per current city engineering development standards. Currently, there is cross lot drainage from the adjacent property to south that drains onto the project site. The project site has portions of the property that drains to Wrigley and portions of the project site that drains across to the adjacent property to the west. There is an existing V-ditch that also drains across the project site. To correct this condition, the project proposes to grade the site and increase the pad elevations at various locations to achieve an appropriate drainage pattern, and to accommodate installation of underground utilities. The proposed grading will require construction of retaining walls along the west and north boundaries and is depicted on the sections shown on the Grading and Utility Plan (Sheet TM-03).

Sound wall – Due to the proximity to I-680 and adjacent industrial land uses, a noise study that was prepared for the project by Edward Pack & Associates dated December 2006. (Attachment K) As a result, a sound wall will be required for noise attenuation purposes. The proposed sound wall will be

located on the eastern, southern, and western boundaries of the project site, which are depicted on the Utility and Grading Plan (Sheet TM-03) and are summarized in Table 2.:

Table 2: Wall Heights

Cross Sections (Sheet TM-03)	Location	Height (max)
B-B	North property line	11' (6' wall on top of a 5'-6" retaining wall)
C-C	West property line	13' (6' wall on top of a 7' retaining wall)
D-D	South property line	16' tall wall that steps down to 13'*
E-E	EVA Parcel	3'-6" existing retaining wall. Proposes off-site area to be filled

* The applicant is requesting to raise the height of wall additional 3-feet to due to the noise concern raised during the Community Meeting. The bottom of the wall will be designed to be retaining for potential backfill in the future should the adjacent property owner decide to make site improvements.

The proposed sound wall consists of pre-cast concrete walls. The sound wall on Sinclair Frontage will be approximately 16-feet tall and proposes a style design which matches the existing sound wall install on the Sinclair Horizon project in terms of height, color, materials, and style. The proposed sound wall will be articulated with the following:

- Decorative wall cap,
- Pilasters columns at corners and spaced every 25 ±-feet on center,
- 2-inch raised halo panels, and
- Tiered landscaping consisting of (40) Chinese Pistache trees, evergreen vines, and various groundcover and shrubbery.

The south and west sound wall proposes a 'Mediterranean' style and consists of pre-cast walls and pilasters columns. ***Staff recommends*** adding decorative wall caps to architecturally blend and complement the proposed sound wall located on Sinclair Frontage Road. As conditioned, the sound wall and retaining walls will be designed and engineered in accordance with the recommendations and design considerations contained in the Geotechnical Report prepared by KC Engineering dated October 2006. (Attachment L).

Open Space– The project proposes a 0.34 acre park that will be improved with a play structure, picnic seating areas, landscape amenities consisting of 24-inch box Raywood Ash trees, Flowering Pear trees, and Bronze Loquat trees and various groundcover. The project plans also proposes a non-illuminated concrete sign wall consisting of cultured stone, decorative cast stone wall cap, and a stucco sign band with laser cut steel letters.

In addition, the project will also provide a 0.18-acre passive play area improved with landscaping consisting of bench and trellis as well as various landscaping that includes 24-inch box Flowering Pear trees and Purple Plum trees located at the southwest corner of the project site, near the proposed EVA access road. ***Staff recommends*** as a condition of approval that an additional bench and trellis be add to the opposite side of the passive play area to provide symmetry and to encourage use of the area.

The proposed EVA road will be improved with an asphalt concrete surface, bollards, and landscaping that consist of Purple Leaf Plum trees, Crape Myrtle trees, and groundcover along the linear segment between the residential homes and Wrigley Way.

As proposed, the site will be comprehensively landscaped with new plantings that includes various groundcover, shrubs, vines, and (350) new tress consisting of various trees species that includes Red Maples, Eastern Redbud, Bronze Loquat tress, Raywood Ash trees, Crape Myrtles, Chinese Pistache trees, Purple Leaf Plum Trees, and Flowering Pear trees. Areas proposed with landscape amenities include the following areas:

- Street frontages along Sinclair Frontage Rd.,
- Along the edges of entry road and EVA access road,
- Private open space areas (private park and passive play areas),
- Front yards on all residential lots and;
- Installation of one 15-gallon box Eastern Redbud tree in the rear yard of each residential lot.

Stormwater control measure will be implemented throughout the project and proposes the following:

- Utilize landscape and pervious surfaces for infiltration and disconnect impervious areas on the site,
- Bubble up area drain system on all lots to disconnect roof drainage and treat the flow as it passes through vegetated lawn area,
- Installation of a structural stormwater treatment unit a the point of connection at the southwest corner of the project site, and
- Earth swales.

Area Lighting - The project will provide 48 new 14-foot tall decorative streetlights that will be placed along the entry road, loop road and driveway alleys. The proposed streetlight includes house side shields to prevent unwanted glares. The applicant also proposes five 14-foot decorative light standards that will be installed in the private park and passive play areas. The proposed area lights consist of decorative carriage style light fixtures constructed with spear ornament and detailed edging mounted on top of a decorative post shown on the Landscaping Details (Sheet L-03). A lighting plan was submitted and demonstrates safe and efficient lighting.

Building Architecture, Colors, and Materials
The project proposed four plan types consisting of Craftsman, Spanish, and Tuscan style architecture that utilizes "S" style and flat concrete tiles for the roof, wood construction, stucco walls with sand finish, stone veneer, and metal accents. To enhance the appearance of the residential homes, the applicant is proposing to incorporate architectural elements that includes but not limited to metal and tile accent pieces, wooden shutters, metal awnings, metal railings, wooden porch rails, decorative corbels, outlookers, kickers, and foam trim. The project proposes twelve color schemes than consist mainly of earth tones. Articulation on the front elevations for each plan type are distinctive so that it provides design and color variation that encourages interesting street scene.

ADOPTED PLANS AND ORDINANCES CONSISTENCY

General Plan
The table below outlines the project's consistency with applicable General Plan Guiding Principles and Implementing Policies:

Table 3
General Plan Consistency

Policy	Consistency Finding
Guiding Principle 2.a-G-2: Maintain a relatively compact form.	The project maintains compact form by proposing a single-family moderate density (6-15 units per gross acre) residential project on 9.65-acre site.
Guiding Principle 2.a-G-3: Provide for a variety of housing types and densities that meet the needs of individuals and families	The project offers detached single-family homes on 3,000 square foot lots that meet the needs of individuals and families in a traditional neighborhood setting.
Implementing Policy 2.a-I-2: Promote develop within the incorporated limits which acts to fill in the urban fabric, rather than providing costly expansion of urban services into outlying areas.	The project is proposes to redevelop an existing industrial park that has 80% vacancy. The site would be an urban infill project and will not induce sprawl or require new public infrastructure to service the new residential development.
Implementing Policy 2.b-I-3: Providing housing opportunities in Milpitas by meeting the City's regional fair-share housing obligations.	The project would contribute 80 new single-family residential units towards regional housing goals.
Implementing Policy 2.b-I-2 Consider locating housing in close proximity to industrial developments where they can be served by existing city services and facilities	The project is located adjacent to industrial developments that would help locate housing near employment centers. The project would be served by existing city services and facilities.

Zoning Ordinance
The project conforms to the R1-3-S Zoning District in terms of land use and density. As proposed the project meets the ordinance regulations for a Planned Unit Development as analyzed in the sections above. The project is consistent with purpose and intent of Site and Architectural Review Ordinance in that it provides for an aesthetic and harmonious development. As proposed, the project is in the same character and relative same density as the existing residential development to the north and with implementation with mitigation measure will be compatible with surrounding industrial uses. As proposed, the project utilizes good design principles in that the site design provides a grid pattern layout and that the homes are articulated with Craftsman, Spanish, and Tuscan architecture and details that provide good aesthetics and architectural interest.

State Subdivision Map and Milpitas Subdivision Ordinance
The State Subdivision Map Act defers to the local ordinance with respect to the approval of a tentative tract map. The City's Subdivision Ordinance requires design and improvement consistent with the General Plan. As proposed, and discussed above the project is consistent with the General Plan.

Per MMC XI-1-9.02, every subdivider must provide park and recreational facilities in form of land to be dedicated, payment of a fee, or combination of both. The project proposes no pubic park space and 0.42 acres of private open space. Pursuant to MMC XI-9.08, a credit for private open space may be obtained up to 40% of the total required parkland dedication provided project meets the ordinance standards and City Council finds it in the public interest to do so. Based on the project proposal, 1.08 acre of parkland is required and therefore 0.65-acres is subject to payment. Therefore, the applicant shall pay a park-in-lieu fee in the amount of *$1,556,695.*

C.3 Stormwater Requirements
In accordance with C.3 requirements, the applicant submitted a Stormwater C.3 Report prepared by Carlson Barbee, and Gibson dated November 2007 (Attachment J). The project proposal demonstrates compliance with C.3 requirements as discussed in the open space section of the staff report.

ENVIRONMENTAL REVIEW
The Planning Division conducted an initial environmental assessment of the project in accordance with the California Environmental Quality Act (CEQA). An Initial Study and Mitigated Negative Declaration (EA2007-6) were prepared and circulated for this project (Attachment F and G). The environmental assessment determined there would be no significant impacts related to this project. Further discussion of potential impacts is included in the attached Environmental Assessment No. EA2007-6. A mitigation monitoring program ensures that any potential environmental impacts are lessened to a less than significant level. The twenty-day public review period was held from May 8, 2008 to May 28, 2008. One public comment to the Mitigated Negative Declaration was received at the time of this staff report preparation and is provided with this staff report (Attachment H). Any additional comments received will be presented at the Planning Commission hearing.

COMMUNITY MEETING
A community meeting was held on May 7, 2008 in the City Hall Committee Conference Room. Notices of the meeting were sent to properties within a 1,000-foot radius. Three people attended the meeting. Two were neighboring residence and the property owner from Crain Cutter. The issues raised were in regards to the wall heights, views onto adjacent residential properties, grading, and traffic concerns. The applicant has addressed these concerns by increasing the height of walls. Enclosed with this staff report is a copy of the Applicant's response to the neighbor concerns. (Attachment G)

PUBLIC COMMENT/OUTREACH
Staff publicly noticed the application in accordance with City and State law. As of the time of writing one comment was received from the public regarding the proposed private park.

CONCLUSION
In conclusion, by changing the land use designation changes, the project is consistent with the proposed land use. The project encourages compact urban infill development, provides for a variety of housing

types and densities to meet the demands of varying families, and provides housing opportunities in Milpitas by contributing to the City's regional fair-share housing obligations.

As proposed the project meets the ordinance regulations for a Planned Unit Development as analyzed in the PUD Findings discussed above. The project is consistent with purpose and intent of Site and Architectural Review Ordinance in that the project is aesthetic and harmonious with the surrounding development because it is in keeping with the same character and density as the existing residential development to the north. Implementation of mitigation measures will ensure the project will be compatible with surrounding uses. As proposed, the project utilizes good design principles in that the site design provides a grid pattern layout and that the homes are articulated with Craftsman, Spanish, and Tuscan architecture and details that provide good aesthetics and architectural

The project complies with the California Environmental Quality Act Guidelines. An Initial Study and Mitigated Negative Declaration (EA2007-6) were prepared and circulated for this project. A mitigation monitoring program for the project ensures that any potential environmental impacts are lessened to a less than significant level.

RECOMMENDATION

STAFF RECOMMENDS THAT the Planning Commission adopt Resolution No. 08-020 recommending the City Council take the following actions: approve General Plan Amendment No. GM2006-2, Zone Change No. ZC2007-8, "S" Zone No. SZ2007-10, Planned Unit Development No. PD2007-1, Vesting Tentative Map No. MA2007-4, and Environmental Impact Assessment No. EA2007-6, subject to the attached Conditions of Approval.

Attachments:

A. Planning Commission Resolution No. 08-020 – Exhibit 1. Special Conditions of Approval, Exhibit 2. General Plan Map Amendment, and Exhibit 3: Zoning Sectional District Map
B. Project Plans
C. Project Description Letter
D. Mitigated Negative Declaration
E. Initial Study
F. Public Comment letter from Miller Starr Regalia
G. Applicant response letter dated 6/3/08
H. Tree Report prepared by HortScience dated December 2006
I. Traffic and Parking Impact Report prepared by Fehr and Peers dated
J. Stormwater Control Plan prepared by Carlson, Barbee, and Gibson dated November 2007.
K. Noise Study prepared by Edward Pack & Associated dated
L. Geotechnical Report prepared by KC Engineering Company dated October 2006.

RESOLUTION NO. 08-020

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MILPITAS, CALIFORNIA, APPROVING GENERAL PLAN AMENDMENT NO. GM2006-2, ZONE CHANGE NO. ZC2007-8, "S" ZONE NO. SZ2007-10, PLANNED UNIT DEVELOPMENT NO. PD2007-1, VESTING TENTATIVE MAP NO. MA2007-4, and ENVIRONMENTAL IMPACT ASSESSMENT NO. EA2007-6, SINCLAIR RENAISSANCE RESIDENTIAL PROJECT, A REQEUST TO CHANGE THE LAND USE DESIGNATION OF 9.65 ACRES FROM INDUSTRIAL TO RESIDENTIAL AND TO DEVELOP AN 80-LOT RESIDENTIAL SUBDIVISION WITH ASSOCIATED SITE IMPROVEMENTS LOCATED AT 245-373 SINCLAIR FRONTAGE ROAD (APN 86-29-061, 062, 075, 076, and 042), ZONED HEAVY INDUSTRIAL WITH S-COMBINING DISTRICT (M2).

WHEREAS, on May 14, 2007 an application was submitted by Stephen Allen, Mission Peak Homes, 40480 Encyclopedia Cir., Fremont, CA 94538, to request for a General Plan Amendment, Zone Change, Planned Unit Development Approval, Vesting Tentative Map, and Site and Architectural Review to allow for the demolition of an existing four building industrial park and to redevelop the 9.65 site with 80 new detached, two-story single family homes, 0.34 private park, and associated site improvements located at 245-373 Sinclair Frontage Road located within the Heavy Industrial Zoning District (APN 86-29-061, 062, 075, 076, and 042), and

WHEREAS, the General Plan amendment would change the land use designation of 9.65 acres of land zoned Manufacturing and Warehousing to Single Family Residential Moderate Density (6-15 unit/gross acre) (Planning Application P-GM2006-2), as further shown on Exhibit A; and

WHEREAS, the amended land use designation would change the corresponding zoning designation from Heavy Industrial to Single Family Residential minimum 3,000 sq. ft. lots for the project site as further shown on Exhibit B; and

WHEREAS, the Planning Commission reviewed the Mitigated Negative Declaration prepared for this project in accordance with the California Environmental Quality Act which determined less than significant impacts on the environment from the development of the Sinclair Renaissance Residential Project.

WHEREAS, on June 25, 2008, the Planning Commission held a duly noticed public hearing on the subject application, and considered evidence presented by City staff, the applicant, and other interested parties.

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

Section 1: The recitals set forth above are true and correct and incorporated herein by reference.

Section 2: Pursuant to and in accordance with the provisions of the California Environmental Quality Act, California Public Resources Code §§ 21000, et seq. (CEQA), an Initial Study/Mitigated Negative Declaration was prepared and properly circulated for public review wherein it was determined that environmental impacts could be reduced to a level of less than significant through implementation of project requirements and mitigation measures; and

Section 3: This General Plan amendment is accompanied by a proposal to change the Zoning District for the Property to Single Family Residential minimum lot size 3,000 with "S" Zone Overlay District "R1-3-S" to ensure consistency with the General Plan; and

Section 4: The Project conforms to the Milpitas Zoning Ordinance in that the proposed residential land use is permitted in the R1-3 Zoning District. As proposed the project meets the ordinance regulations for a Planned Unit Development in terms of density, site design, and architectural compatibility. The project is aesthetic and harmonious with the surrounding development because it is in keeping with the same character and density as the neighboring residential development to the north. Implementation of mitigation measures will ensure the project will be compatible with surrounding uses.

Section 5: The Planning Commission held a properly noticed public hearing on June 25, 2008 wherein the Planning Commission heard staff's report, took public testimony, considered the requested amendments and recommended the City Council approve the General Plan Amendment No.GM2006-2, Zone Change No. 2007-8, "S" Zone No. SZ2007-10, Planned Unit Development NO. PD2007-1, Vesting Tentative Map No. MA2007-4, and Environmental Impact Assessment No. EA2007-6.

PASSED AND ADOPTED at a regular meeting of the Planning Commission of the City of Milpitas on June 11, 2008

_____
Chair

TO WIT:

I HEREBY CERTIFY that the following resolution was duly adopted at a regular meeting of the Planning Commission of the City of Milpitas on June 11, 2008, and carried by the following roll call vote:

COMMISSIONER	**AYES**	**NOES**	**OTHER**
Cliff Williams			
Gunawan Ali-Santosa			
Lawrence Ciardella			

Alexander Galang			
Sudhir Mandal			
Gurdev Sandhu			
Noella Tabladillo			
Aslam Ali			

EXHIBIT 1

CONDITIONS OF APPROVAL
GENERAL PLAN AMENDMENT NO. GM2006-2, ZONE CHANGE NO. ZC2007-8, "S" ZONE NO. SZ2007-10, PLANNED UNIT DEVELOPMENT NO. PD2007-1, VESTING TENTATIVE MAP NO. MA2007-4, and ENVIRONMENTAL IMPACT ASSESSMENT NO. EA2007-6, SINCLAIR RENAISSANCE RESIDENTIAL PROJECT

Planning Division

1. GENERAL: The owner or designee shall develop the approved project in conformance with the approved plans and color and materials sample boards approved by the Planning Commission on June 11, 2008, in accordance with these Conditions of Approval.

   Any deviation from the approved site plan, floor plans, elevations, materials, colors, landscape plan, or other approved submittal shall require that, prior to the issuance of building permits, the owner or designee shall submit modified plans and any other applicable materials as required by the City for review and obtain the approval of the Planning Director or Designee. If the Planning Director or designee determines that the deviation is significant, the owner or designee shall be required to apply for review and obtain approval of the Planning Commission, in accordance with the Zoning Ordinance. (P)

2. GENERAL: General Plan Amendment No.GM2006-2, Zone Change No. 2007-8, "S" Zone No. SZ2007-10, Planned Unit Development NO. PD2007-1, Vesting Tentative Map No. MA2007-4, and Environmental Impact Assessment No. EA2007-6 approvals become null and void if the project is not commenced within 18 months from the date of approval. Pursuant to Section 64.04-2 of the Zoning Ordinance of the City of Milpitas, since the project requires the issuance of a building permit, the project shall not be deemed to have commenced until the date of the building permit is issued and a foundation is completed. (P)

3. GENERAL: Pursuant to Section 64.04-1, the owner or designee shall have the right to request an extension of General Plan Amendment No.GM2006-2, Zone Change No. 2007-8, "S" Zone No. SZ2007-10, Planned Unit Development NO. PD2007-1, Vesting Tentative Map No. MA2007-4, and Environmental Impact Assessment No. EA2007-6 if said request is made, filed and approved by the Planning Commission prior to expiration dates set forth herein. (P)

4. GENERAL: This use shall be conducted in compliance with all appropriate local, state, and federal laws and regulations, and in conformance with the approved plans. (P)

5. SOUND WALL: Sound walls height shall not exceed height following heights noted in the following table: (P)

Location	Height (max) – measure from project pad elevation
North property line	11’ (6’ wall on top of a 5’-6” retaining wall)
West property line	13’ (6’ wall on top of a 7’ retaining wall)
South property line	16’ tall wall that steps down to 13’

6. SOUND WALL: The north and west sound walls shall include decorative wall caps to architecturally blend and complement the proposed sound wall located on Sinclair Frontage Road. (P)
7. OPEN SPACE: Applicant shall provide additional bench and overhead trellis amenities on the southeast portion of the passive play area. (P)
8. LANDSCAPING: Prior to building permit issuance, the following modifications shall be incorporated in revised landscaping plans to the approval of the Planning Division: (P)
   a. Structural (amended) soil shall be used for all landscaping in the public right-of-way.
   b. All landscape structures shall be of long-lasting and high-quality materials.
   c. All ground transformer, utilities, and mechanical equipment shall be located underground or screen from all views. (P)
9. SETBACKS: Interior lots with wrapped porch conditions shall maintain a 5-foot setback.
10. COLOR PERMUTATIONS: Prior to building permit issuance, all color permutations for all buildings shall be submitted to the Planning Division for review and approval. (P)
11. PARK-IN-LIEU FEE: The project applicant shall pay a park in-lie fee in the amount of $1,556,695 prior to certificate of occupancy. (P)

<u>PLANNED UNIT APPROVAL CONDITIONS</u>

12. Re-roof materials shall be limited to concrete tiles. (P)
13. Building color changes shall be to the approval of the Planning Division. (P)
14. All garage doors shall be roll-up doors only. (P)
15. No garage conversions shall be allowed. (P)
16. Decorative street paving shall be maintained in perpetuity.
17. Landscape and irrigation shall be maintained in perpetuity. (P)
18. Sound walls shall be maintained in perpetuity. (P)
19. Private park and passive play areas shall be maintained in perpetuity. Repair and replacement of park amenities shall be to the approval of the Planning Division. (P)

20. Front yard coverage is limited to vehicle driveways and paved walkways only. New curb cuts or driveway extensions are strictly prohibited. (P)

21. Exterior modifications shall be consistent with architectural design of the home in terms of colors, materials, and styles. Mixing of different styles is strongly discouraged. Architectural modification will require Home Owner Association approval prior to city approval. (P)

22. Require Conditions Covenants and Restrictions (CC&Rs) to include property disclosure statements to all future residents regarding noise due to the proximity of I-680 and adjacent industrial uses. (P)

23. Any modifications to the PUD development standards and special conditions will require an amendment to the Planned Unit Development Approval and require Planning Commission review and approval. (P)

<u>Environmental Mitigation Measures</u>

24. The project shall comply with all mitigation measures as contained in the mitigation monitoring program for the Sinclair Renaissance Project. (P)

25. AQ MM1**:** The applicant shall adhere to the following BAAQMD Best Management Practices during all phases of constructions:
    a. Water all active construction areas at least twice daily or as often as need to control dust emissions.
    b. Cover all trucks hauling soil, sand, gravel and other loose material and/or ensure that all trucks hauling materials maintain at least two feet of freeboard.
    c. Sweep daily or as often as needed with water sweepers all paved access roads, parking areas, and staging areas at the construction site to control dust.
    d. Sweep public streets daily or as often as needed to keep streets free from visible soil material.
    e. Enclose, cover, water twice daily or apply non-toxic soil binders to exposed stockpiles.
    f. Replant vegetation in disturbed areas as quickly as possible.

26. BIO MM1**:** The applicant shall conduct a preconstruction survey for nesting raptors between September and January by a qualified ornithologist or wildlife biologist to ensure that no raptor nest will be disturb during demolition and construction activities. The survey shall be conducted no more than 14 day prior to the initiation of demolition/construction activities during the early part of the breeding season (January to April) and no more than 30 days prior to the initiation of these activities during the later part of the breeding season (May to August). During the survey, the ornithologist/biologist will inspect all trees for raptors nest. If an active raptor nest is found close enough to the demolition/construction area to be disturbed, the ornithologist/biologist (in consultation with the California Department of Fish and Game) will determine the extent of the construction free buffer zone to be established around the nest. The project will main the buffer zone, allowing no intrusion or impact to the tree(s) until after the young have fledge and are functioning independently of the nest. (P)

27. BIO MM2: In accordance with MMC X-2-7.01, the applicant shall obtain a tree removal permit prior to the removal of any trees. For any tree that cannot be mitigated due to lack of available planting area or construction conflict, the applicant shall be required to pay a tree mitigation fee to the City of Milpitas. Reimbursement to the City for the value of the tree(s) to removed will be determine by an arborist certified by the International Society of Aboriculture utilizing the current edition for the "Guide for Plant Appraisal, Inter Society of Aboriculture." The funds will be deposited in the City's Tree Replacement Fund and will be used to plant trees within the City of Milpitas. (P)

28. CUL MM1: All ground disturbing activities shall be monitored by a qualified archaeologist to ensure that any discovery of significant archaeological materials and/or human remains is handled in accordance with approved guidelines. (P)

29. GEO MM1**:** The applicant shall comply with the findings and recommendations contained in the Geotechnical Investigation Report, dated October 2006, prepared by KC Engineering Company. To ensure compliance with this mitigation, the applicant shall submit a letter from a licensed geotechnical engineer certifying that all of their recommendations have been incorporated into the construction drawings prior to issuance of any grading or building permit. Additionally, prior to obtaining a final, a certificate of occupancy, or any occupancy for the buildings, the applicant shall submit a letter from a licensed geotechnical engineer certifying that all of their recommendations have been satisfied. (P)

30. GEO MM2: The following measures are included in the project to reduce potential construction related erosion impacts:

    a. All excavation and grading work will be scheduled in the dry weather months or construction sites will be weatherized to withstand or avoid erosion.

    b. Stockpiles and excavated soils will be covered with secured tarps or plastic sheeting.

    c. Vegetation in disturbed areas will be replanted as quickly as possible.

    d. Project will also adhere to the Regional Water Quality Control Board's best management practices to reduce construction related and post construction runoff impacts. (P)

31. HAZ MM1: The project sponsor shall sample the soil within the project site to determine the presence or absence of pesticides and herbicides. If soil sampling indicates the presence of any contaminant in hazardous concentrations, the California Regional Water Quality Control Board (RWQCB) and Department of Toxic Substance Control (DTSC) shall be contacted to determine the level of any necessary remediation efforts. If required, the project sponsor shall remediate these soils in compliance with applicable laws. (P)

32. HAZ MM2: Existing local, state and federal regulations and enforcement are effective forms of hazard mitigation for toxic gas safety and preventing any possible offsite consequences from catastrophic release.

33. NOI MM1**:** The applicant shall incorporate and adhere to the recommendations and design standards set forth in the Traffic Noise Assessment dated December 15, 2006, prepared by Edward L. Pack Associates. (P)

34. NOI MM2**:** Construction of 16-foot tall acoustically effective noise control barrier along the property line contiguous with Sinclair Frontage Road, a 12-foot acoustically-effective barrier at the south side of Lot 43 and north side of Lot 1, and a 16-foot that steps down to 8-feet tall along the southern property line according to the following schedule: (P)

Lot #	**Required Height of Fence**
Lot 6	16 ft. stepped down to 11 ft.
Lot 7	11 ft.
Lot 8	10 ft.
Lot 9	9 ft.
Lot 10	9 ft.
Lot 11	8 ft.
Lot 12	8 ft.
Lot 13	8 ft.
Lot 14	8 ft.
Lot 15	8 ft.
Lot 16	8 ft.
Lot 17	8 ft.

35. NOI MM3: Maintain closed at all times all first floor windows and glass doors of living spaces within 420 ft. of the centerline of the I-680 and with direct or side orientation towards the freeway. Install windows and glass doors rated minimum Sound Transmission Class (STC) 28. A disclosure statement shall be provided to all future property owners affected stating that windows and glass doors must be maintain the STC rating 28 or higher that were installed at the time of construction to main acceptable DNL noise exposures for single-family residents of 45 dB NDL. (P)

36. NOI MM4: Maintain closed at all times all second floor windows and glass doors of living spaces within 420 ft. of the centerline of I-680 and with a direct or side orientation towards the freeway. At the living spaces within 340 ft. of the centerline, install windows and glass doors rated minimum STC 33. A disclosure statement shall be provided to all future property owners stating that windows and glass doors must maintain the STC rating 33 or higher that were installed at the time of construction to main acceptable DNL noise exposures for single-family residents of 45 dB NDL**.** (P)

37. NOI MM5: At living spaces between 340 ft. and 420 ft. of the centerline, install windows and glass doors rated minimum STC 27. A disclosure statement shall be provided for all future property owners affected stating that windows and glass doors must maintain the STC rating 27 or higher that were installed at the time of construction to main acceptable DNL noise exposures for single-family residents of 45 dB NDL. (P)

38. NOI MM6: At the second floors of Lot 1 (east and north faces) and of Lot 43 (east and south facades) install windows and glass doors rated minimum STC 38. A disclosure statement shall be provided to all future property owners affected stating that windows and glass doors must maintain the STC rating 38 or higher that were installed at the time of construction to main acceptable DNL noise exposures for single-family residents of 45 dB NDL. (P)

39. NOI MM7: Second floor windows for homes located on lots 6-17 shall install windows and glass doors rated minimum STC 28. A disclosure statement shall be provided to all future property owners affected stating that windows and glass doors must maintain the STC rating 28 or higher that were installed at the time of construction to main acceptable DNL noise exposures for single-family residents of 45 dB NDL.

40. NOI MM8: Provide mechanical ventilation for all residential living spaces that have closed window requirements. (P)

41. NOI MM9: Prior to building permit issuance, applicant shall submit acoustical test report of all sound rated windows and doors. The report shall be review by a qualified acoustician to ensure that the chosen windows and doors will adequately reduce traffic noise to acceptable levels**.** (P)

42. NOI MM10: Pursuant to the City of Milpitas Municipal Code, no person shall engage or permit others to engage in construction of any building or related road or walkway, pool or landscape improvement or in the construction operations related thereto, including delivery of construction materials, supplies, or improvements on or to a construction site except within the hours of 7:00 AM to 7:00 PM on weekdays and weekends. (P)

43. NOI MM11**:** The contractor shall be required to use available noise suppression devices and properly maintain and muffle internal combustion engine-driven construction equipment. (P)

44. NOI MM12: The contractor shall be required to use noise barriers or noise control blankets to shield stationary equipment from nearby noise-sensitive receptors. (P)

45. NOI MM13: The contractor shall designate a disturbance coordinator and post the name and phone number of this person at easy reference points for the surrounding land uses. The disturbance coordinator would respond to all complaints about noise and take the necessary steps to reduce the problem. (P)

46. PUB MM1: The project applicant shall pay a park in-lie fee in the amount of $1,556,695 prior to certificate of occupancy. (P)

47. TRA MM 10**:** To mitigate this cumulative impact, the project applicant shall pay a traffic impact fee for their fair share contribution towards the Calaveras Boulevard (SR 237) Overpass Widening Project, Montague Expressway Widening Project, and South Milpitas Boulevard Smart Corridor Project. (P)

Engineering Division

48. GENERAL: Prior to any building permit issuance, final map shall be recorded. (E)

49. GENERAL: Prior to building permit issuance, the developer shall obtain approval from adjacent property owners on the west and South for construction and future maintenance of the proposed retaining and perimeter walls. (E)

50. GENERAL: Prior to any work within public right of way or City easement, the developer shall obtain an encroachment permit from City of Milpitas Engineering Division. (E)

51. GENERAL: It is the responsibility of the developer to obtain any necessary permits or approvals from affected agencies and private parties, including but not limited to, Pacific Gas and Electric, SBC, Comcast, Santa Clara Valley Water District, Santa Clara Valley Transportation Agency, City and County of San Francisco, and City of Milpitas Engineering Division. Copies of any approvals or permits must be submitted to the City of Milpitas Engineering Division. (E)

52. GENERAL: The developer shall call Underground Service Alert (U.S.A.) at (800) 642-2444, 48 hrs prior to construction for location of utilities. (E)

53. GENERAL: Prior to start of any construction, the developer shall submit a construction schedule and monitoring plan for City Engineer review and approval. The construction schedule and monitoring plan shall include, but not be limited to, construction staging area, parking area for the construction workers, personnel parking, temporary construction fencing, construction information signage and establish a neighborhood hotline to record and respond to neighborhood construction related concerns. The developer shall coordinate their construction activities with other construction activities in the vicinity of this project. The developer's contractor is also required to submit updated monthly construction schedules to the City Engineer for the purpose of monitoring construction activities and work progress. (E)

54. GENERAL: The Flood Insurance Rate Map (FIRM) issued by the Federal Emergency Management Agency (FEMA) under the National Flood Insurance Program shows this site to be in Flood Zone "X".(E)

55. GENERAL: The developer shall obtain information from the US Postal Services regarding required mailboxes. Structures to protect mailboxes may require Building, Engineering and Planning Divisions review. (E)

56. FINAL MAP: At the time of final map approval, the developer shall submit a grading plan and a drainage study prepared by a registered Civil Engineer. The drainage study shall analyze the existing and ultimate conditions and facilities. The study shall be reviewed and approved by the City Engineer and the developer shall satisfy the conclusions and recommendations of the approved drainage study prior to final map approval of the first phase of development. (E)

57. CFD: Prior to any building permit issuance, the developer shall submit an executed petition to annex the subject property into the CFD 2005-1, with respect to the property, the special taxes levied by Community Facility District (CFD 2005-1) for the purpose of maintaining the public services. The petition to annex into the CFD shall be finalized concurrently with the final map recordation or prior to any building permit issuance, whichever occurs first. The developer shall comply with all rules, regulations, policies and practices established by the State Law and/or by the City with respect to the CFD including, without limitation, requirements for notice and disclosure to future owners and/or residents. (E)

1. FINAL MAP: Prior to final map approval, the developer shall obtain design approval and bond for all necessary public improvements along Sinclair Frontage Road including but not limited to damaged curb, gutter and pavement replacement, slurry seal of the Sinclair Frontage Road to Wrigley Way new sidewalk installation, signage and striping, two vehicular feedback signs installation, street lights, fire hydrants, bus stop, Water main line installation, and storm drain, sewer and water services. Plans for all public improvements shall be prepared on Mylar (24”x36” sheets) with City Standard Title Block and submit a digital format of the Record Drawings (AutoCAD format is preferred) upon completion of improvements. The developer shall also execute a secured public improvement agreement. The agreement shall be secured for an amount of 100% of the engineer’s estimate of the construction cost for faithful performance and 100% of the engineer’s estimate of the construction cost for labor & materials. The locations of facilities such as water meters, RP backflow preventers, sewer clean outs, etc. shall be placed so access is maintained and kept clear of traffic. All improvements must be in accordance with the City of Milpitas standard and specification, and all public improvements shall be constructed to the city Engineer’s satisfaction and accepted by the City prior to building occupancy permit issuance of the first production unit. (E)

58. FINAL MAP: Prior to recordation of any final map, the developer shall submit to the City a digital format of the final map (AutoCAD format). All final maps shall be tied to the North America Datum of 1983 (NAD 83), California Coordinate of 1983, zone 3. (E)

59. FINAL MAP: The developer shall dedicate on the final map necessary public service utility easements, street easements and easements for water and sanitary sewer purposes. (E)

60. FINAL MAP: Prior to final map approval, the developer shall establish a homeowner association. The homeowner association shall be responsible for the maintenance of the landscaping, walls, private streetlights, common area and private streets and shall have assessment power. This information shall be clearly included in the Conditions, Covenants, and Restrictions (CC&R) and recorded documents. The CC&R document shall be submitted for review and approval by the City Engineer. (E)

61. FINAL MAP: Prior to the final map approval, the developer shall dedicate adequate right of way for pedestrian purposes crossing the driveways. (E)

62. UTILITIES: In accordance with Chapter 5, Title VIII (Ord. 238) of Milpitas Municipal Code, for new and/or rehabilitated landscaping 2500 square feet or larger the developer shall:
    a. Provide separate water meters for domestic water service & irrigation service. Developer is also encouraged to provide separate domestic meters for each tenant.
    b. Comply with all requirements of the City of Milpitas Water Efficient Ordinance (Ord No 238). Two sets of landscape documentation package shall be submitted by the developer or the landscape architect to the Building Division with the building permit plan check package. Approval from the Land Development Section of the Engineering Division is required prior to building permit issuance, and submittal of the Certificate of Substantial Completion is required prior to final occupancy inspection.

Contact the Land Development Section of the Engineering Division at (408) 586-3329 for information on the submittal requirements and approval process. (E)

63. UTILITIES: Prior to issuance of any building permits, the developer shall obtain approval from the City Engineer of the water, sewer, and storm drain studies for this development. These studies shall identify the development's effect on the City's present Master Plans and the impact of this development on the trunk lines. If the results of the study indicate that this development contributes to the over capacity of the trunk line, it is anticipated that the developer will be required to mitigate the overflow or shortage by construction of a parallel line or pay a mitigation charge, if acceptable to the City Engineer. (E)

64. UTILIES: It is anticipated that the on-site private storm drainage system will collect a certain amount of public stormwater runoff from Sinclair Frontage Road. Prior to building permit issuance, the developer shall enter into an agreement with the City for collecting, accepting, treating and conveying public runoff through private drainage system. (E)

65. UTILITIES: The developer shall submit the following items with the building permit application and pay the related fees prior to building permit issuance:

    a. Storm water connection fee of **$89,630** based on $1100 per parcel and $4792 per acre for the park. The water, sewer and treatment plant fee will be calculated at the time building plan check submittal.
    b. Water Service Agreement(s) for water meter(s) and detector check(s).
    c. Sewer Needs Questionnaire and/or Industrial Waste Questionnaire.

Contact the Land Development Section of the Engineering Division at (408) 586-3329 to obtain the form(s). (E)

66. UTILITIES: Prior to building permit issuance, the developer shall pay its fair share cost of purchasing adequate public system sewage capacity for the development. Fees shall consist of treatment plant fees up to the Master Plan level and connection fees. Impact fees for discharges above master plan levels for sewage collection system infrastructure improvements, and regional plant capacity needs (above the master plan capacities), as determined by the City Engineer. This amount is estimated to be **$81,695**, as of *October 2006*, to be adjusted by ENR at the time of payment. This impact fee is in addition to the City existing connection fee and treatment plant fee. (E)

67. UTILITIES: The issuance of building permits to implement this land use development will be suspended if necessary to stay within (1) available water supplies, or (2) the safe or allocated capacity at the San Jose/Santa Clara Water Pollution Control Plant, and will remain suspended until water and sewage capacity are available. No vested right to the issuance of a Building Permit is acquired by the approval of this land development. The foregoing provisions are a material (demand/supply) condition to this approval. (E)

68. UTILITIES: Prior to any building permit issuance, the developer shall provide for adequate sewage pumping capacity at the Milpitas Main Sewage Pump Station for the respective developments. The developer can fulfill this obligation by payment of **$ 24,835** to the City for this purpose. This amount is as of *October 2006*, and to be adjusted by ENR at the time of payment. This impact fee is in addition to the City existing connection fee and treatment plant fee. (E)

69. UTILITIES: Prior to building permit issuance; the developer shall pay its fair share cost of purchasing adequate public system water for the respective developments, including costs for capacity and storage needs above master plan capacities, as determined by the City Engineer. This amount is estimated to be **$292**, as of *October 2006*, to be adjusted by ENR at the time of payment. This impact fee is in addition to the City existing connection fee and treatment plant fee. (E)

70. UTILITIES: Prior to building permit issuance, the developer must pay all applicable development fees, including but not limited to, connection fees (water, sewer and storm), treatment plant fee, plan check and inspection deposit, and 2.5% permit automation fee. (E)

71. UTILITIES: In accordance with Milpitas Municipal Code XI-1-7.02-2, the developer shall underground all existing wires and remove the related poles within the proposed subdivision, with the exception of transmission lines supported by metal poles carrying voltages of 37.5KV or more do not have to be undergrounded. All proposed utilities within the subdivision shall also be undergrounded. Show all existing utilities within and bordering the proposed subdivision, and clearly identify the existing PG&E wire towers and state the wire voltage. (E)

72. UTILITIES: All existing public utilities shall be protected in place and if necessary relocated as approved by the City Engineer. No permanent structure is permitted within

City easements and no trees or deep rooted shrub are permitted within City utility easements, where the easement is located within landscape areas. (E)

73. TRAFFIC: Prior to any building permit issuance, the developer shall pay a Traffic Impact fee of **$25,284** toward the Montague Expressway Widening project.

74. TRAFFIC: Prior to any building permit issuance, the developer shall pay a "fair share" contribution of **$5,600** towards the Calaveras Boulevard Widening and Improvement Project. (E)

75. TRAFFIC: Prior to building occupancy permit issuance, the developer shall pay **$50,000** or bond for the future improvement along Sinclair Frontage Road. The improvements along Sinclair frontage Road shall be in accordance with the Traffic Study findings and recommendations. (E)

76. TENTATIVE MAP: The tentative map and all final maps shall designate all common lots and easements as lettered lots or lettered easements. (E)

77. SIGHT DISTANCE: The developer shall not obstruct the noted sight distance areas as indicated on the City standard drawing #405. Overall cumulative height of the grading, landscaping & signs as determined by sight distance shall not exceed 2 feet when measured from street elevation.

78. SOLID WASTE: Per Chapter 200, Solid Waste Management, V-200-3.10, General Requirement, applicant/ property owner shall not keep or accumulate, or permit to be kept or accumulated, any solid waste of any kind and is responsible for proper keeping, accumulating and delivery of solid waste. In addition, according to V-200-3.20 Owner Responsible for Solid Waste, Recyclables, and Yard Waste, applicant / property owner shall subscribe to and pay for solid waste services rendered. Prior to occupancy permit issuance (start of operation), the developer shall submit evidence to the City that a minimum level of refuse service has been secured using a Service Agreement with Allied Waste Services (formally BFI) for commercial services to maintain an adequate level of service for trash and recycling collection. After the applicant has started its business, the developer shall contact Allied Waste Services commercial representative to review the adequacy of the solid waste level of services. If services are determined to be inadequate, the developer shall increase the service to the level determined by the evaluation. For general information, contact BFI at (408) 432-1234. (E)

79. STORMWATER: The developer shall comply with Regional Water Quality Control Board's C.3 requirements and implement the following:
    a. At the time of building permit plan check submittal; the developer shall submit a "final" Stormwater Control Plan and Report. Site grading, drainage, landscaping and building plans shall be consistent with the approved Stormwater Control Plan.
    b. The Plan and Report shall be prepared by a licensed Civil Engineer and certify that measures specified in the report meet the C.3 requirements of the Regional

Water Quality Control Board (RWQCB) Order, and shall be implemented as part of the site improvements.

80. STORMWATER: Prior to building permit issuance, the developer shall submit an Operation and Maintenance (O&M) Plan for the long-term operation and maintenance of C-3 treatment facilities, and prior to Building final inspection, the developer shall execute and record the City approved O&M Agreement for the operation, maintenance and annual inspection of the C.3 treatment facilities. (E)

81. STORMWATER: All building permit applications shall be consistent with the developer's approved Stormwater Control Plan and approved special conditions. Permit applications shall include drawings and specifications necessary to implement all measures described in the approved Plan. Drawings submitted for permit applications shall show the details and methods of construction for site design features, including but not limited to pervious pavements, self-retaining areas, treatment BMPs, permanent source control BMPs, measures to limit directly connected impervious area, and other features that control stormwater flow and potential stormwater pollutants. Any changes to the approved Stormwater Control Plan shall require Site & Architectural ("S" Zone) Amendment application review. (E)

82. STORMWATER: Prior to issuance of Certificate of Occupancy, the dedveloper shall submit a Stormwater Control Operation and Maintenance (O&M) Plan, acceptable to the City, describing operation and maintenance procedures needed to insure that treatment BMPs and other stormwater control measures continue to work as intended and do not create a nuisance (including vector control). The treatment BMPs shall be maintained for the life of the project. The stormwater control operation and maintenance plan shall include the applicant's signed statement accepting responsibility for maintenance until the responsibility is legally transferred. (E)

83. STORMWATER: The U.S. Environmental Protection Agency (EPA) has empowered the San Francisco Bay Regional Water Quality Control Board (RWQCB) to administer the National Pollution Elimination Discharge System (NPDES) permit. The NPDES permit requires all dischargers to eliminate as much as possible pollutants entering our receiving waters. Construction activities which disturb 1 acres or greater are viewed as a source of pollution, and the RWQCB requires a Notice of Intent (NOI) be filed, along with obtaining an NPDES Construction Permit prior to the start of construction. A Storm Water Pollution Prevention Plan (SWPPP) and a site monitoring plan must also be developed by the developer, and approved by the City prior to permit issuance for site clearance or grading. Contact the RWQCB for questions regarding your specific requirements at (800) 794-2482. For general information, contact the City of Milpitas at (408) 586-3329. (E)

84. TREE REMOVAL Per Milpitas Municipal Code Chapter 2, Title X (Ord. No. 201), the developer may be required to obtain a permit for removal of any existing tree(s). Contact the Street Landscaping Section at (408) 586-2601 to obtain the requirements and forms. (P) (E)

85. DEMOLITION: All utilities shall be properly disconnected before the building can be demolished. Show (state) how the water service(s), sewer service(s) and storm service(s) will be disconnected. The water service shall be locked off in the meter box and disconnected or capped immediately behind the water meter if it is not to be used. The sanitary sewer shall be capped off at the clean out near the property line or approved location if it is not to be used. The storm drain shall be capped off at a manhole or inlet structure or approved location if it is not to be used. (E)

86. DEMOLITION: Prior to demolition permit issuance, the Applicant, or Contracted Designee, shall submit Part I of a Recycling Report on business letterhead to the Building Division, for forwarding to the Engineering Section. This initial report shall be approved by the City's Utility Engineering/Solid Waste Section prior to demolition permit issuance. The report shall describe these resource recovery activities:
    a. What materials will be salvaged.
    b. How materials will be processed during demolition.
    c. Intended locations or businesses for reuse or recycling.
    d. Quantity estimates in <u>tons</u> (both recyclable and for landfill disposal). Estimates for recycling and disposal tonnage amounts by material type shall be included as separate items in all reports to the Building Division before demolition begins.
    e. Applicant/Contractor shall make every effort to salvage materials for reuse and recycling. (E)

87. DEMOLITION: Prior to building permit issuance, applicant shall submit Part II of the Recycling Report to the Building Division, for forwarding to the City's Utility Engineering/Solid Waste Section, that confirms items 1 – 4 of the Recycling Report, especially materials generated and actual quantities of recycled materials. Part II of the Recycling Report shall be supported by copies of weight tags and/or receipts of "end dumps." Actual reuse, recycling and disposal tonnage amounts (and estimates for "end dumps") shall be submitted to the Building Division for approval by the Utility Engineering/Solid Waste Section prior to inspection by the Building Division. (E)

88. DEMOLITION: All demolished materials including, but not limited to broken concrete and paving materials, pipe, vegetation, and other unsuitable materials, excess earth, building debris, etc., shall be removed from the job site for recycling and/or disposal by the Applicant/Contractor, all to the satisfaction of the City Engineer or designee. The Applicant/Contractor shall, to the maximum extent possible, reuse any useful construction materials generated during the demolition and construction project. The Applicant/Contractor shall recycle all building and paving materials including, but not limited to roofing materials, wood, drywall, metals, and miscellaneous and composite materials, aggregate base material, asphalt, and concrete. The Applicant/Contractor shall perform all recycling and/or disposal by removal from the job site. (E)

89. TENTATIVE MAP: Make changes as noted on Engineering Services Exhibit "T"(dated 3/28/2008) and submit a Mylar of the revised tentative map to the Planning Division

within three weeks of this tentative map approval. No application for the review of the parcel map or improvement plans will be accepted until this condition is satisfied. (E)

City of Milpitas
Sinclair Renaissance Residential Project
General Plan Amendment
June 2008

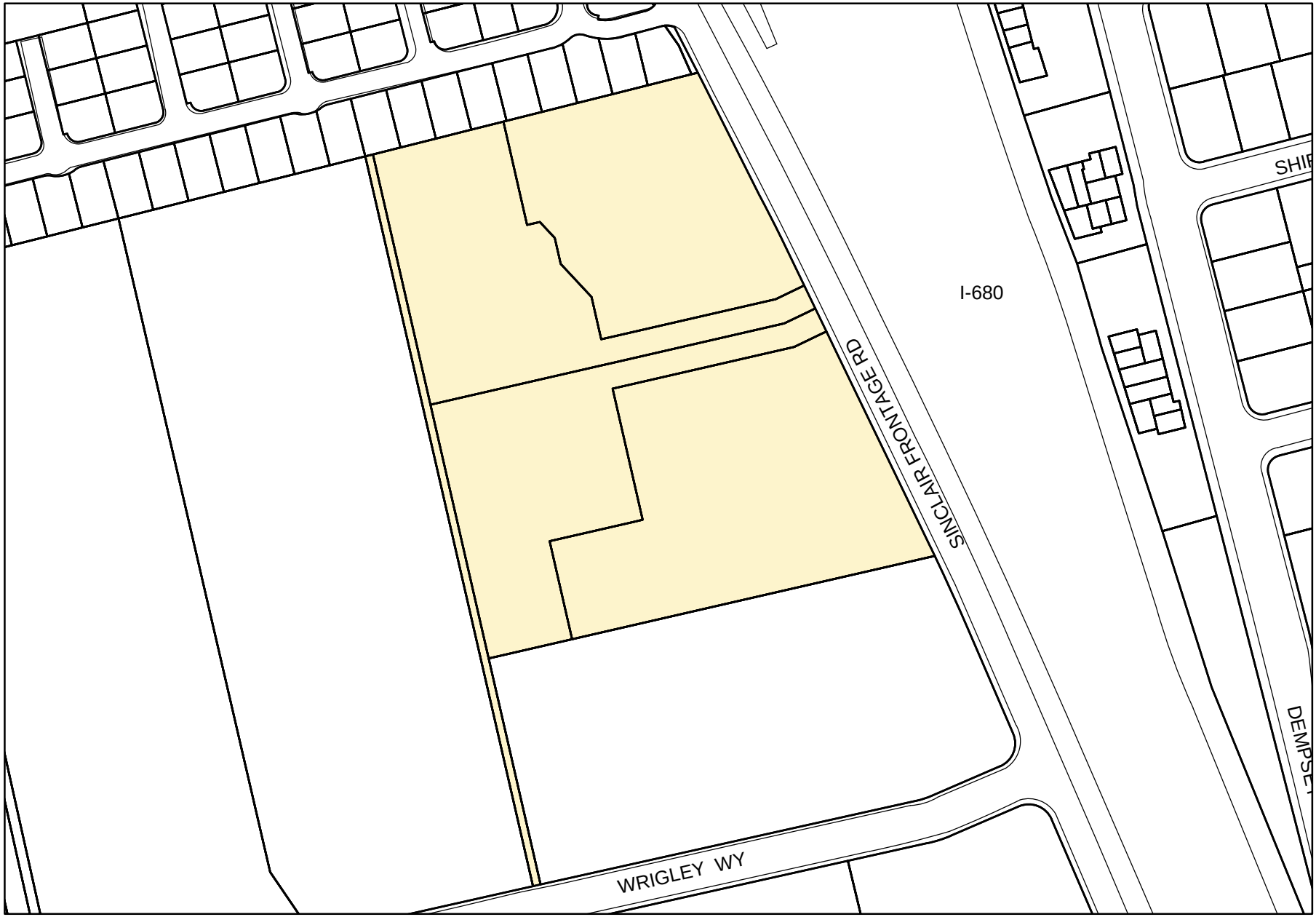
N
W E
S

0 75 150 225 300 375
Survey Feet

Map Exhibit No. 1

Legend

Single Family Moderate Density (6-15 units/gross acre)



Resolution No. _____

Application NO.: GM2006-2, ZC2007-8, SZ2007-10, PD2007-1, and MA2007-4

Map prepared by the GIS Staff of the City of Milpitas

City of Milpitas
Sinclair Renaissance Residential Project
New Zoning Designations
Sectional District Map No. 572

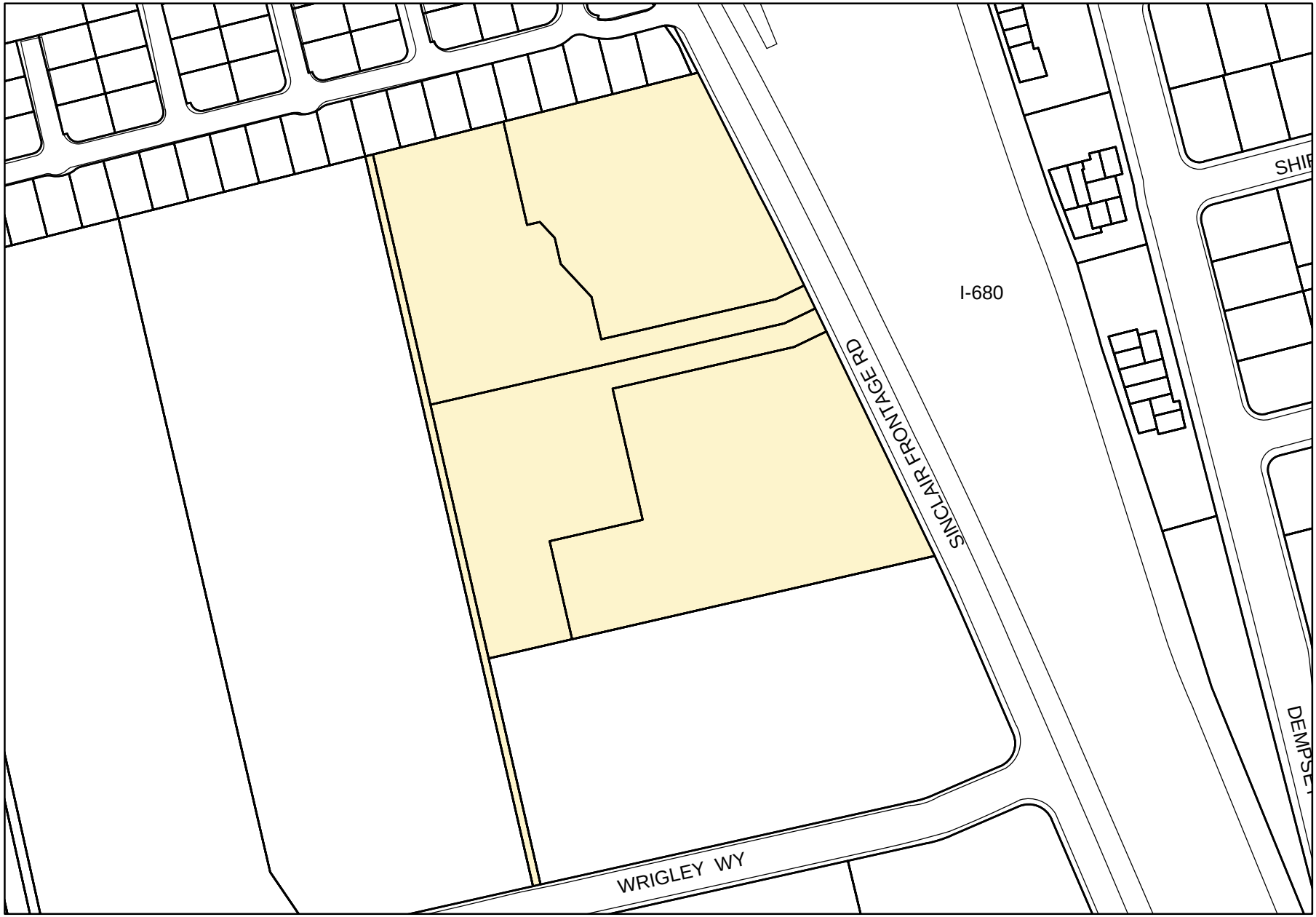
N
W E
S

0 75 150 225 300 375
Survey Feet

Map Exhibit No. 2

Legend

Singel Family Residential minimum lot size 3,000 sq. ft. (R1-3)



Ordinance No. 38.779

Application NO.:GM2006-2, ZC2007-8, SZ2007-10, PD2007-1, and MA2007-4

Map prepared by the GIS Staff of the City of Milpitas

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		CIVIL PLANS
2	TM-01	VESTING TENTATIVE MAP - EXISTING PROPERTY
3	TM-02	VESTING TENTATIVE MAP - SITE PLAN
4	TM-03	VESTING TENTATIVE MAP - GRADING AND UTILITY PLAN
5	TM-04	VESTING TENTATIVE MAP - FIRE TRUCK ACCESS AND STRIPING EXHIBIT
6	TM-05	VESTING TENTATIVE MAP - CITY NOTES AND CONDITIONS
7	C1	PLANNED UNIT DEVELOPMENT - DEVELOPMENT PLAN
		LANDSCAPE PLANS
8	L-01	PRELIMINARY LANDSCAPE PLAN
9	L-02	LANDSCAPE TYPICALS
10	L-03	LANDSCAPE DETAILS
11	L-04	LANDSCAPE ELEVATIONS
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18	A-05	PLAN 1 FRONT ELEVATIONS
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OWNER/DEVELOPER

THE MISSION PEAK COMPANY
40480 ENCYCLOPEDIA CIRCLE
FREMONT, CA 94538
(510) 354-0888
CONTACT: STEPHEN ALLEN

CIVIL ENGINEER

CARLSON, BARBEE & GIBSON, INC.
6111 BOLLINGER CANYON ROAD, SUITE 150
SAN RAMON, CA 94583
(925) 866-0322
CONTACT: LEE ROSENBLATT

LANDSCAPE ARCHITECT

VANDERTOOLEN ASSOCIATES, INC.
855 BOURDEAUX WAY, SUITE 240
NAPA, CA 94558
(707) 224-2299
CONTACT: STEPHANIE BERSCH

ARCHITECT

KTGY GROUP, INC.
17992 MITCHELL SOUTH
IRVINE, CA 92614
(949) 851-2133
CONTACT: DOUG HEATON

FEBRUARY 25, 2008

THE MISSION PEAK COMPANY

vanderToolen associates
vTa
LANDSCAPE ARCHITECTS
855 Bordeaux Way, Suite 240
Napa CA 94558
tel: 707 224 2299
fax: 707 224 0821
vta@vtanapa.com
2017 K Street, Suite 176
Sacramento, CA 95816
tel: 916 446 7815
fax: 916 446 7051

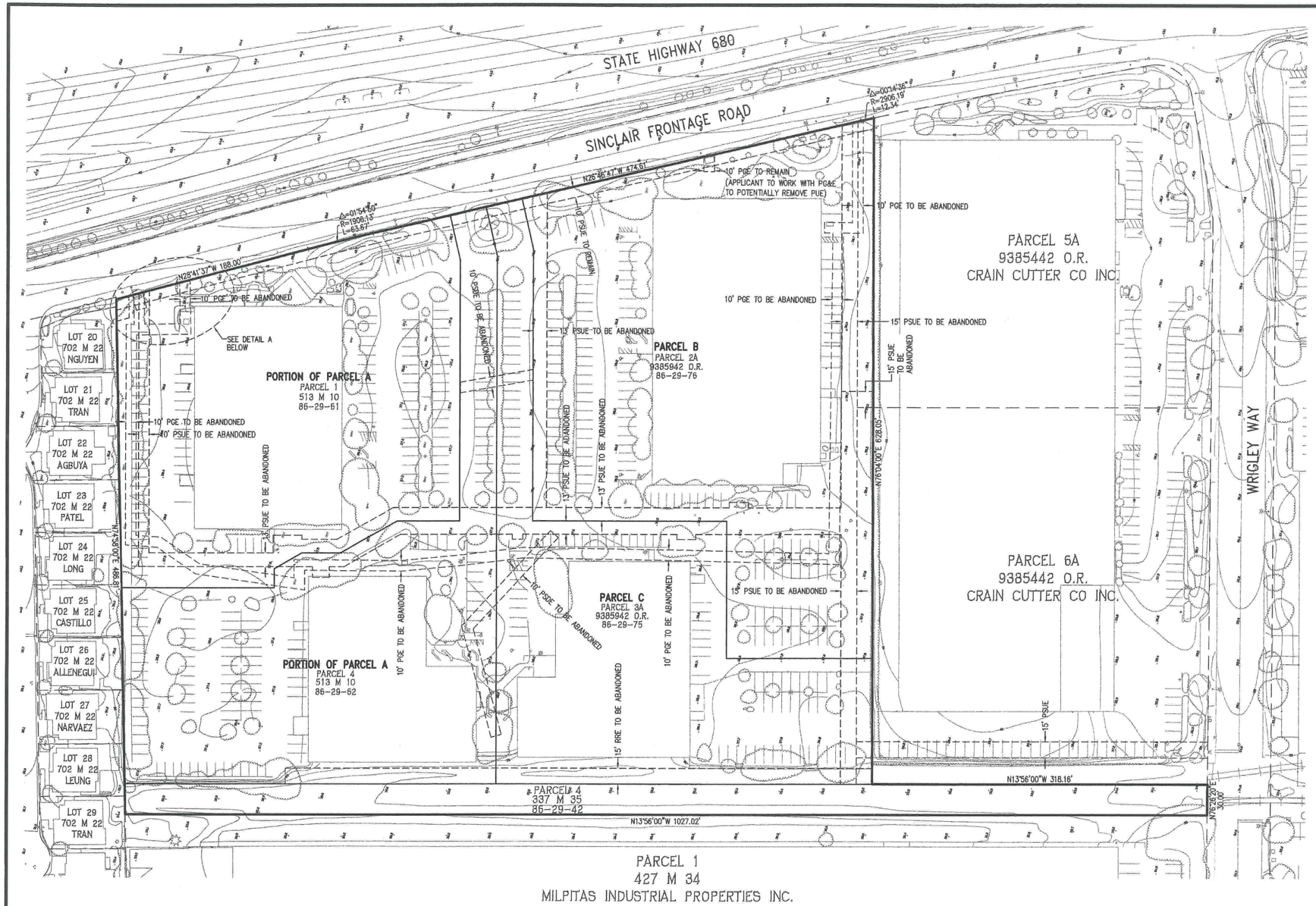
SINCLAIR RENAISSANCE

PLANNED UNIT DEVELOPMENT

MILPITAS, CALIFORNIA

KTGY GROUP, INC.
Architecture ▪ Planning

cbg
Carlson, Barbee & Gibson, Inc.
CIVIL ENGINEERS • SURVEYORS • PLANNERS



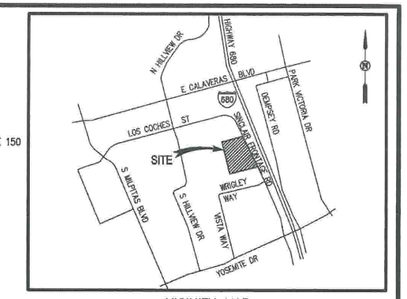
CONTACTS

1. OWNER/SUBDIVIDER: THE MISSION PEAK COMPANY
40480 ENCYCLOPEDIA CIRCLE
FREMONT, CA 94538-2446
(510) 354-0888
STEPHEN ALLEN

2. ENGINEER: CARLSON, BARBEE & GIBSON, INC.
6111 BOLLINGER CANYON ROAD, SUITE 150
SAN RAMON, CA 94583
(925) 866-0322
LEE ROSENBLATT, RCE 65469

3. SOILS ENGINEER: KC ENGINEERING COMPANY
865 COTTING LANE SUITE A
VACAVILLE, CA 95688
(707) 447-4025

4. TOPOGRAPHIC SOURCE: AERIAL TOPOGRAPHY COMPILED BY:
AEROMETRIC SURVEYS
915 CLAREMONT STREET
SAN MATEO, CA 94402



VICINITY MAP
(NTS)

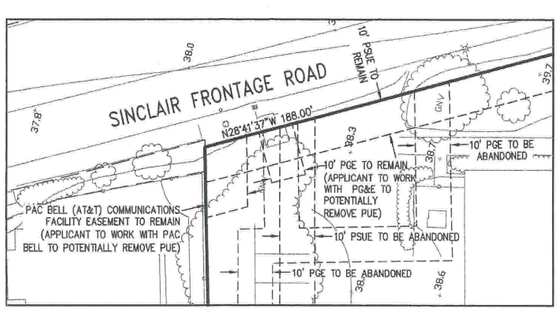
GENERAL NOTES

1. ASSESSORS PARCEL NO: 086-29-042
086-29-061
086-29-062
086-29-075
086-29-076
2. SITE ADDRESS: 350 SINCLAIR FRONTAGE ROAD
MILPITAS, CA 95035
3. SITE AREA: 9.65± ACRES
4. PROPOSED ZONING: R1-3
5. EXISTING USE: OFFICE SPACE
PROPOSED USE: SINGLE-FAMILY RESIDENTIAL
80 SINGLE FAMILY LOTS, 12 PARCELS
6. MINIMUM LOT SIZE: 45' X 70' (3,150 SF)
7. BENCHMARK: CITY OF MILPITAS BENCHMARK CAL-HIL: BRASS DISK IN MONUMENT WELL AT THE INTERSECTION OF EAST CALAVERAS BLVD AND HILLVIEW AVENUE.EL: 26.005 FEET
8. EXISTING STRUCTURES: ALL EXISTING BUILDINGS, PAVEMENT, AND TREES WITHIN BOUNDARY TO BE REMOVED.
9. EXISTING UTILITIES: ALL EXISTING UTILITIES WITHIN BOUNDARY TO BE REMOVED UNLESS OTHERWISE NOTED.
10. STREETS: ALL STREETS WITHIN THE SUBDIVISION WILL BE PRIVATE STREETS AND WILL BE PRIVATELY MAINTAINED. ALL STREETS WILL BE WITHIN PSUE'S (MINIMUM LONGITUDINAL SLOPE = 0.6%).
11. STREET TREES: STREET TREES SHALL BE PROVIDED AS REQUIRED BY THE CITY, INSTALLED PER CITY STD NO. 448 AND WILL BE PRIVATELY MAINTAINED BY THE HOMEOWNERS ASSOCIATION.
12. STREET LIGHTS: STREET LIGHTS ON PRIVATE STREETS WILL BE PRIVATELY MAINTAINED.
13. WALLS: ALL WALLS WILL BE PRIVATE FACILITIES AND PRIVATELY MAINTAINED.
14. PUBLIC UTILITIES: PROPOSED WATER FACILITIES WITHIN THE SUBDIVISION WILL BE CONSTRUCTED PER LOCAL STANDARDS AND DEDICATED TO THE CITY OF MILPITAS.
15. PRIVATE UTILITIES: PROPOSED STORM DRAIN AND SANITARY SEWER FACILITIES WITHIN THE SUBDIVISION WILL BE PRIVATELY MAINTAINED, EXCEPT AS NOTED.
16. STORM DRAIN: PROPOSED STORM DRAIN FACILITIES WILL BE PRIVATE FACILITIES AND WILL BE PRIVATELY MAINTAINED BY THE HOMEOWNERS ASSOCIATION.
17. WATER PROPOSED WATER FACILITIES WITHIN THE SUBDIVISION WILL BE CONSTRUCTED PER CITY OF MILPITAS STANDARDS AND DEDICATED TO THE CITY.
18. SANITARY SEWER PROPOSED SANITARY SEWER FACILITIES WILL BE PRIVATE FACILITIES AND WILL BE PRIVATELY MAINTAINED BY THE HOMEOWNERS ASSOCIATION.
19. LANDSCAPING ALL LANDSCAPING TO BE PRIVATELY OWNED AND MAINTAINED.
20. FLOOD ZONE: ZONE D
REFER TO:
FLOOD INSURANCE RATE MAP
PANEL 060344-0003 G (JUNE 22, 1998)
21. WELLS ONSITE: NONE
22. GAS & ELECTRIC: PG&E
23. TELEPHONE: AT&T
24. CABLE TV: COMCAST
25. DIMENSIONS: ALL DIMENSIONS ARE PRELIMINARY AND SUBJECT TO FINAL MAP.
26. FINAL MAP MULTIPLE MAPS MAY BE FILED FOR THIS SITE.
27. PHASING MULTIPLE CONSTRUCTION AND DRE PHASES WILL BE REQUIRED FOR THIS SITE.

LEGEND

EXISTING	PROPOSED	DESCRIPTION
		SUBDIVISION BOUNDARY
		PROPERTY LINE
		CURB, GUTTER AND SIDEWALK
		CENTERLINE
x 100.0	x 100.0	SPOT ELEVATIONS
PSUE		PUBLIC SERVICE UTILITY EASEMENT
PSDE*		PRIVATE STORM DRAIN EASEMENT
PUE*		PUBLIC UTILITY EASEMENT
PGE*		PG&E EASEMENT
RRE*		RAILROAD EASEMENT
1		LOT NUMBER
PARCEL B		TITLE REPORT PARCEL REFERENCE

*NOTE: ALL EXISTING EASEMENTS TO BE QUITCLAIMED OR ABANDONED UNLESS OTHERWISE SPECIFIED.



DETAIL A
SCALE: 1"=20'

SUBDIVISION TENTATIVE MAP

This Map has been reviewed by the City Engineer.

City Engineer **Date**

Recommended for Approval by the Milpitas Planning Commission, this _____ day of _____ 200____ , and Approved by the Milpitas City Council this_____ day of _____ 200 _____.

Planning and Neighborhood Services Director **Date**

SHEET INDEX

TM-01 TITLE SHEET-EXISTING PROPERTY
TM-02 SITE PLAN
TM-03 GRADING AND UTILITY PLAN
TM-04 FIRE TRUCK ACCESS AND STRIPING EXHIBIT
TM-05 CITY NOTES AND CONDITIONS

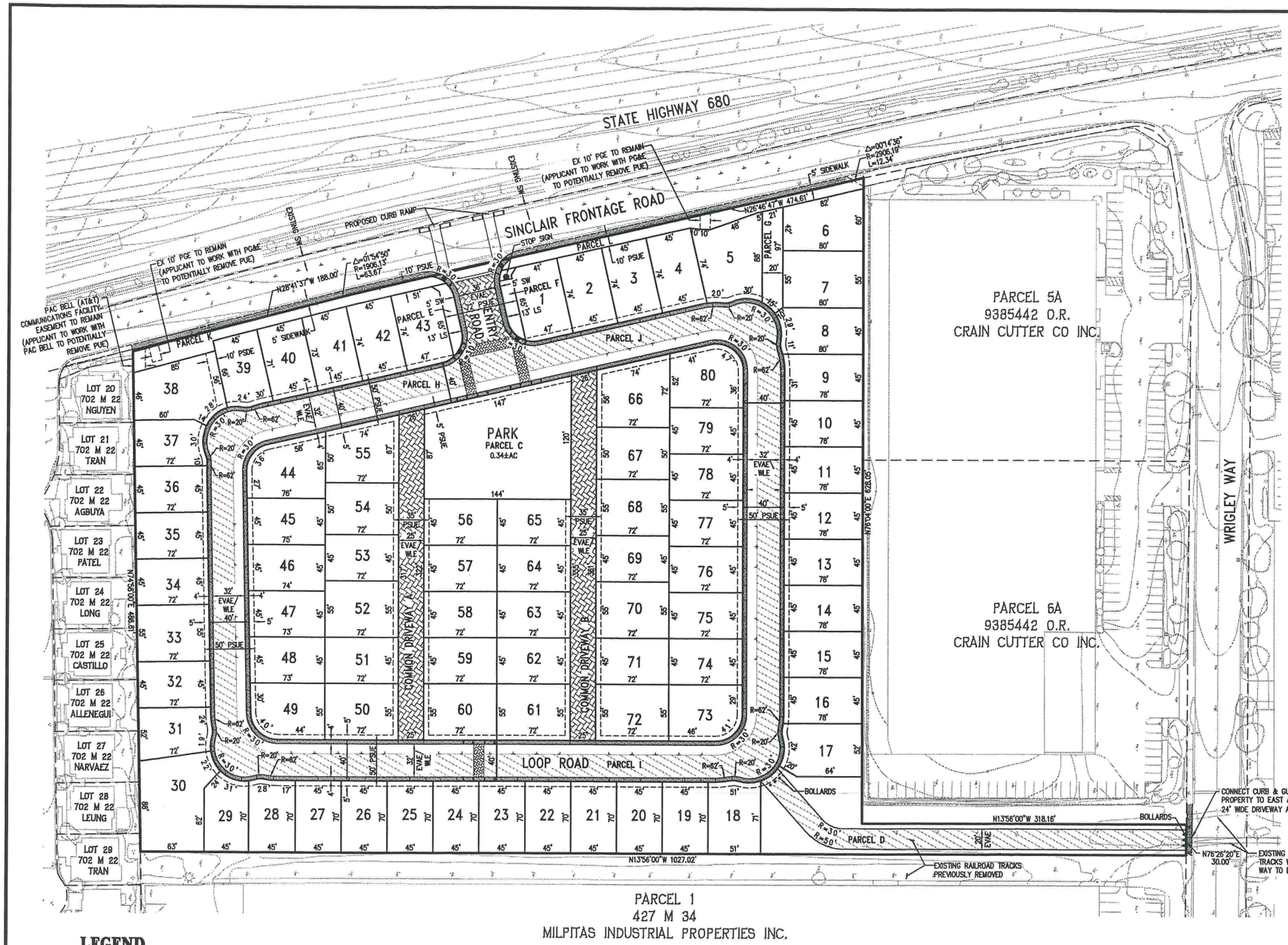
VESTING TENTATIVE MAP
EXISTING PROPERTY
SINCLAIR RENAISSANCE

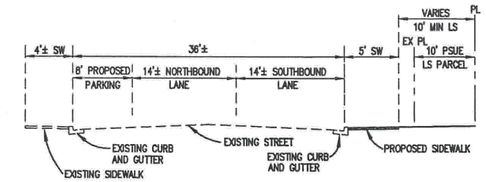
CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

0' 50' 150' 200'
SCALE: 1" = 50' DATE: FEBRUARY 25, 2008

cbg Carlson, Barbee & Gibson, Inc.
CIVIL ENGINEERS • SURVEYORS • PLANNERS
6111 BOLLINGER CANYON ROAD, SUITE 150
SAN RAMON, CALIFORNIA 94583
TEL (925) 866-0322
FAX (925) 866-8575

SHEET NUMBER
TM-01
2 OF 52

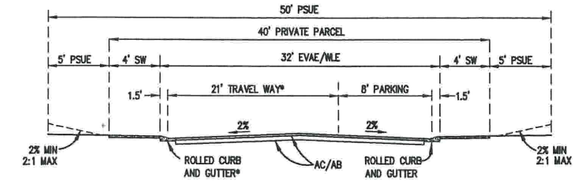




SINCLAIR FRONTAGE ROAD

NOT TO SCALE

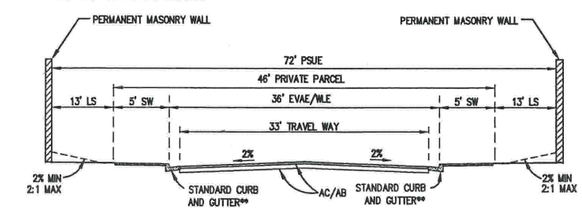
NOTES:
1. NO COMMERCIAL VEHICLE PARKING ON SINCLAIR FRONTAGE ROAD
2. PROPOSED LANE CONFIGURATION AND STRIPING PER TRAFFIC STUDY



TYPICAL 32' STREET SECTION (LOOP ROAD)

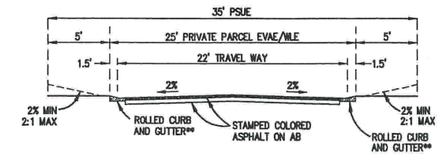
NOT TO SCALE

* 21' FIRE LANE SHOWN ON PLANS
CURB TO BE PAINTED RED AND STENCILED "NO PARKING FIRE LANE"



TYPICAL 36' STREET SECTION (ENTRY ROAD)

NOT TO SCALE
NOTE: NO PARKING ON ENTRY ROAD
** CURB TO BE PAINTED RED AND STENCILED "NO PARKING FIRE LANE"



TYPICAL 25' COMMON DRIVEWAY SECTION

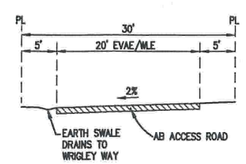
NOT TO SCALE
NOTE: NO PARKING ON COMMON DRIVEWAY
** CURB TO BE PAINTED RED AND STENCILED "NO PARKING FIRE LANE"

LEGEND

EXISTING	PROPOSED	DESCRIPTION
		SUBDIVISION BOUNDARY
		PROPERTY LINE
		CURB, GUTTER AND SIDEWALK
		CENTERLINE
x 100.0	x 100.0	SPOT ELEVATIONS
	PSDE	PRIVATE STORM DRAIN EASEMENT (HOA)
	PSUE	PUBLIC SERVICE UTILITY EASEMENT
	PGE	PG&E EASEMENT
	EVAE	EMERGENCY VEHICLE ACCESS EASEMENT
	WLE	WATER LINE EASEMENT
	1	LOT NUMBER
		FIRE LANE (COMMON DRIVEWAYS A & B ALSO TO HAVE EVA/FIRE ACCESS, SEE SHEET TM-04)
		STAMPED COLORED ASPHALT
		PROPOSED PARKING

GENERAL NOTES

1.	EXISTING ZONING:	INDUSTRIAL
2.	PROPOSED ZONING:	R1-3
3.	EXISTING LAND USE:	OFFICE SPACE MANUFACTURING AND WAREHOUSING (GENERAL PLAN)
4.	PROPOSED LAND USE:	PLANNED UNIT DEVELOPMENT SINGLE FAMILY RESIDENTIAL
5.	TOTAL SITE AREA:	9.65± AC
6.	TOTAL NUMBER OF LOTS:	80 LOTS; 12 PARCELS
7.	DENSITY:	8.3 UNITS/AC
8.	PARKING:	RESIDENT (GARAGE) 160 STALLS RESIDENT (DRIVEWAY) 160 STALLS GUEST 31 STALLS OFF-SITE (FRONTAGE) 21 STALLS TOTAL 372 STALLS
9.	TOTAL IMPERVIOUS SURFACE:	5.8± AC



EVA SECTION

NOT TO SCALE

VESTING TENTATIVE MAP
SITE PLAN
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

0' 50' 150' 200'

SCALE: 1" = 50' DATE: FEBRUARY 25, 2008

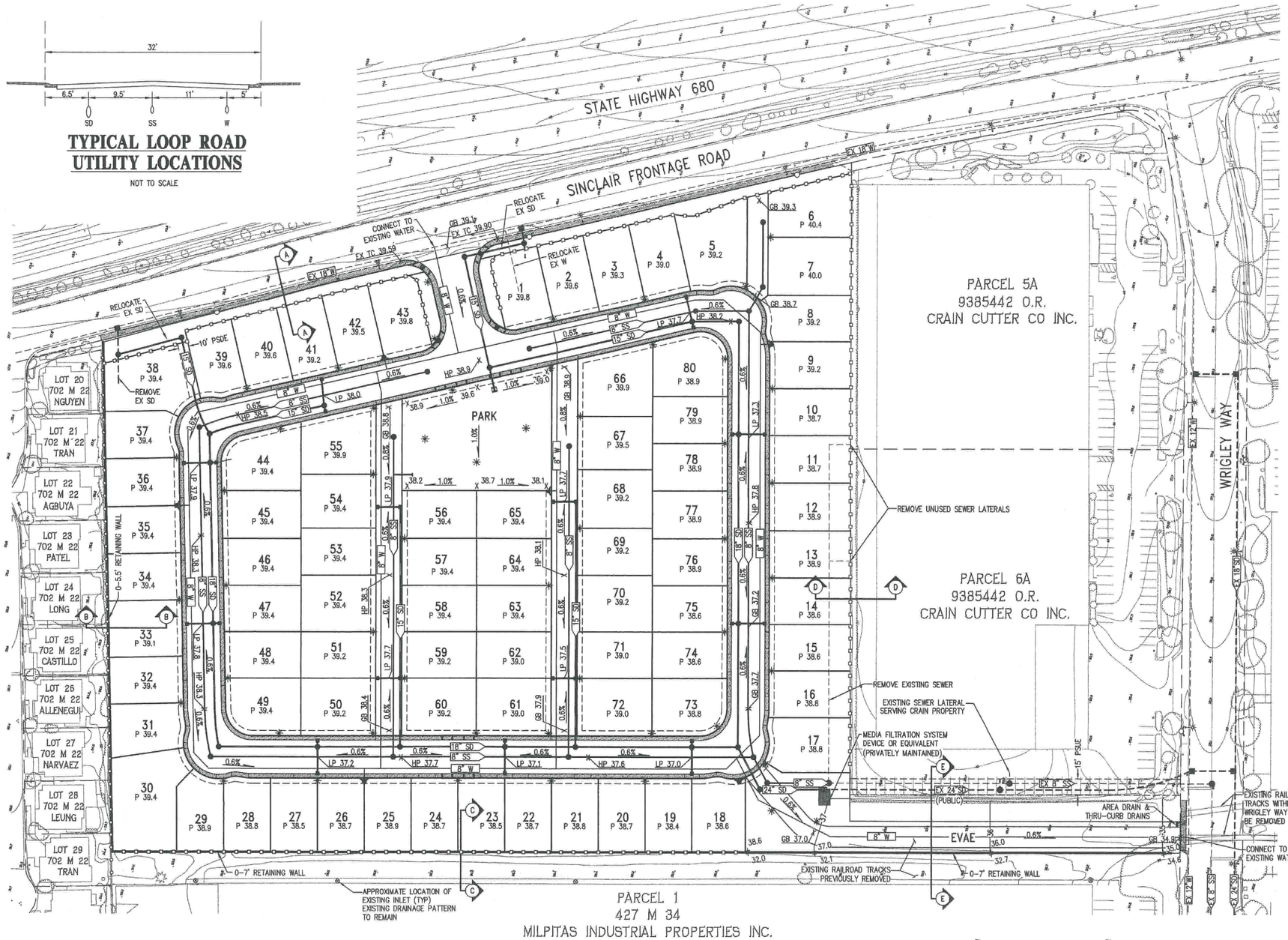
Carlson, Barbee & Gibson, Inc.
CIVIL ENGINEERS • SURVEYORS • PLANNERS
6111 BOLLINGER CANYON ROAD, SUITE 180
SAN RAMON, CALIFORNIA 94583
TEL (925) 866-0322
FAX (925) 866-8575

SHEET NUMBER
TM-02
3 OF 52

G:\1432\ACAD\TM\TM-02.DWG

TYPICAL LOOP ROAD UTILITY LOCATIONS

NOT TO SCALE

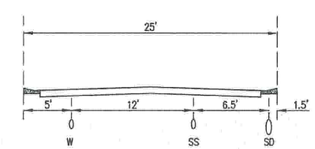


UTILITY NOTES

1. PUBLIC UTILITIES: PROPOSED WATER FACILITIES WITHIN THE SUBDIVISION WILL BE CONSTRUCTED PER LOCAL STANDARDS AND DEDICATED TO THE CITY OF MILPITAS
2. PRIVATE UTILITIES: PROPOSED STORM DRAIN AND SANITARY SEWER FACILITIES WITHIN THE SUBDIVISION WILL BE PRIVATELY MAINTAINED BY THE HOMEOWNER'S ASSOCIATION
3. STORM DRAIN: PRIVATE (HOA MAINTAINED)
   MIN SLOPE OF PROPOSED STORM DRAIN PIPE = 0.002
   MIN SIZE OF PROPOSED STORM DRAIN PIPE IS 12"
   STORM DRAIN FACILITIES MAY BE RCP OR HDPE N-12 PIPE
4. WATER: CITY OF MILPITAS
5. SEWER: PRIVATE (HOA MAINTAINED)
   MIN SLOPE OF PROPOSED SEWER PIPE = 0.0033
   MIN SIZE OF PROPOSED SEWER MAIN IS 8"
6. GAS & ELECTRIC: PG&E
7. TELEPHONE: AT&T
8. CABLE TV: COMCAST

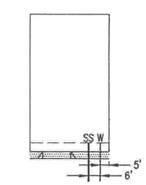
LEGEND

EXISTING	PROPOSED	DESCRIPTION
		PROPERTY LINE
		CURB, GUTTER AND SIDEWALK
		CENTERLINE
x 777.0	x TC 777.70	SPOT ELEVATIONS
EX SD	SD	STORM DRAIN LINE (PRIVATE)
EX SS	SS	SANITARY SEWER (PRIVATE)
EX W	W	WATER (PUBLIC)
		PERIMETER MASONRY WALL
		SANITARY SEWER MANHOLE
		STORM DRAIN MANHOLE
		CURB INLET
		FIELD INLET
		FIRE HYDRANT
		STREETLIGHT
	20	LOT NUMBER
	PSUE	PUBLIC SERVICE UTILITY EASEMENT
	PSDE	PRIVATE STORM DRAIN EASEMENT
	WLE	WATER LINE EASEMENT (SEE TM-02)



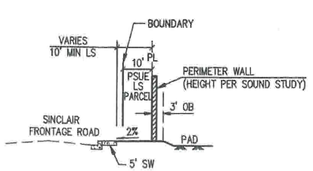
TYPICAL DRIVEWAY UTILITY LOCATION

NOT TO SCALE



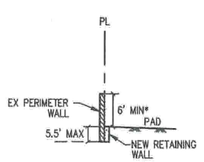
TYPICAL UTILITY CONNECTIONS

NOT TO SCALE



SECTION A-A

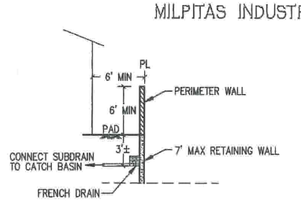
NOT TO SCALE



SECTION B-B

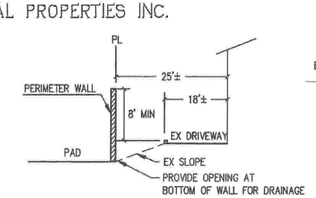
NOT TO SCALE

* ADDITIONAL COURSES MAY BE REQUIRED



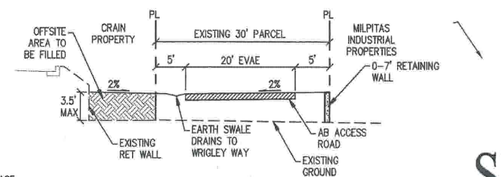
SECTION C-C

NOT TO SCALE



SECTION D-D

NOT TO SCALE



SECTION E-E

NOT TO SCALE

VESTING TENTATIVE MAP
GRADING AND UTILITY PLAN
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

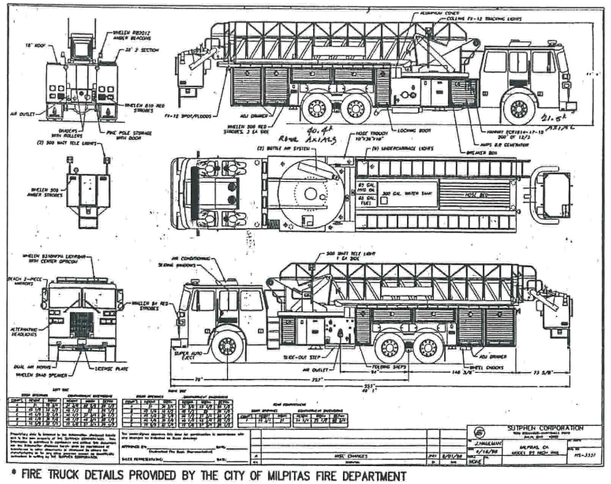
0' 50' 150' 200'

SCALE: 1" = 50' DATE: FEBRUARY 25, 2008

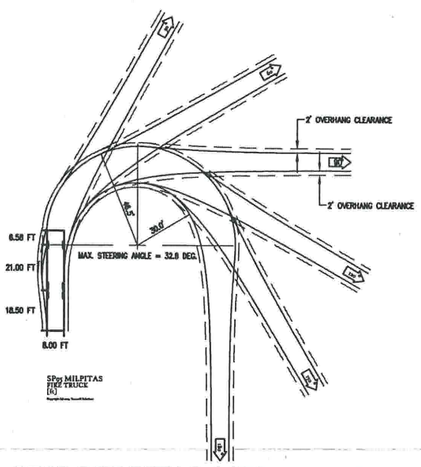
Carlson, Barbee & Gibson, Inc.
CIVIL ENGINEERS • SURVEYORS • PLANNERS
6111 BOLLINGER CANYON ROAD, SUITE 150
SAN RAMON, CALIFORNIA 94583
TEL (925) 866-0322
FAX (925) 866-5575

SHEET NUMBER

TM-03



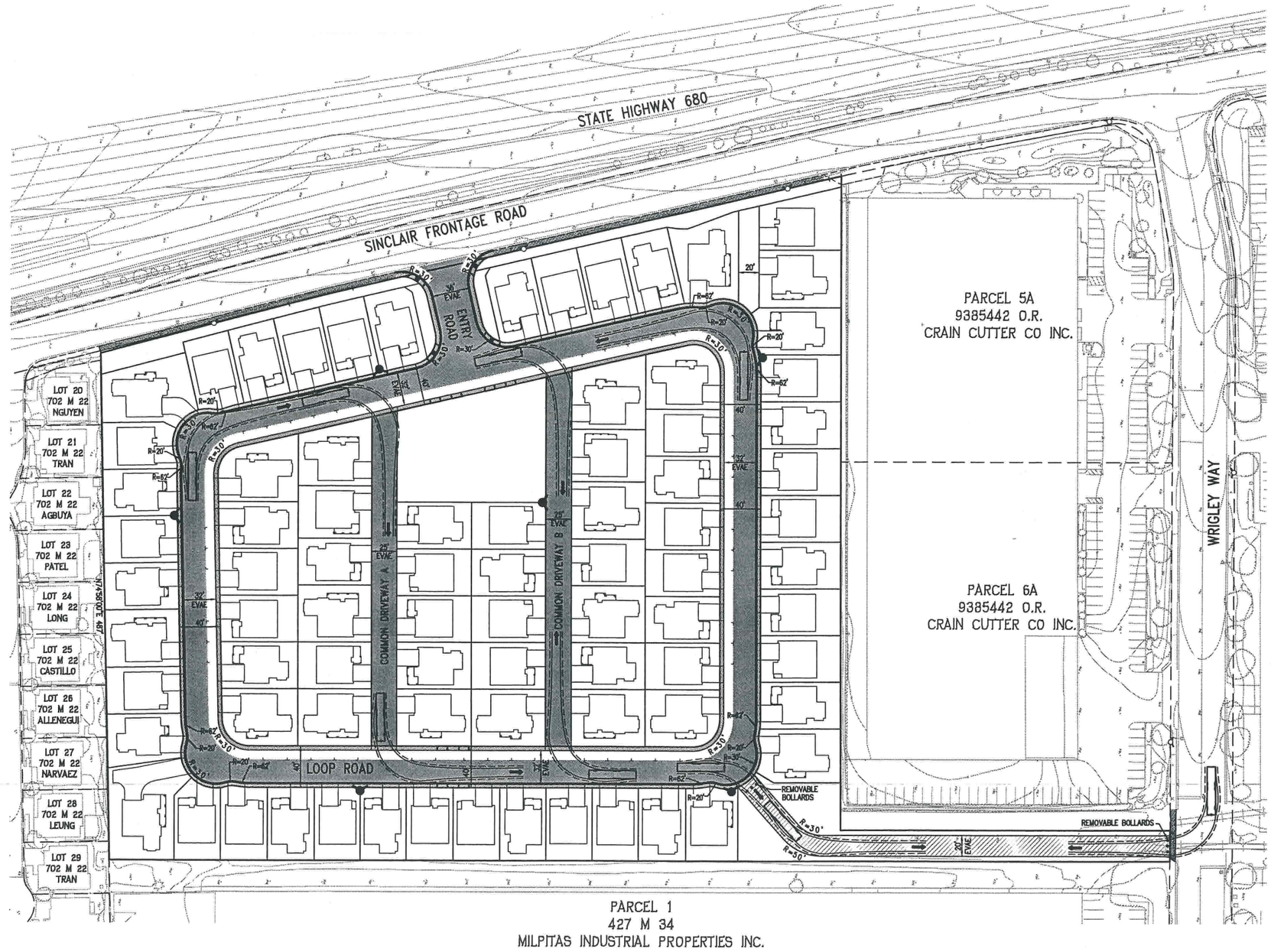
* FIRE TRUCK DETAILS PROVIDED BY THE CITY OF MILPITAS FIRE DEPARTMENT



SP95 MILPITAS FIRE TRUCK

NOT TO SCALE

NOTE: MOST RESTRICTIVE TURN SHOWN ON PLAN FOR EACH TURNING MOVEMENT



LEGEND

- FIRE APPARATUS ACCESS ROADS (PAVED)
- EMERGENCY VEHICLE ACCESS EASEMENT (EVAE) (AB)
- PROPOSED FIRE HYDRANT
- EXISTING FIRE HYDRANT
- CURB TO BE PAINTED RED AND STENCILED "NO PARKING FIRE LANE"

VESTING TENTATIVE MAP
FIRE TRUCK ACCESS AND STRIPING EXHIBIT
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

0' 50' 150' 200'

SCALE: 1" = 50' DATE: FEBRUARY 25, 2008

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SHEET NUMBER
TM-04
5 OF 52

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PENDING CITY NOTES AND CONDITIONS

VESTING TENTATIVE MAP
CITY NOTES AND CONDITIONS

SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

0' 50' 150' 200'

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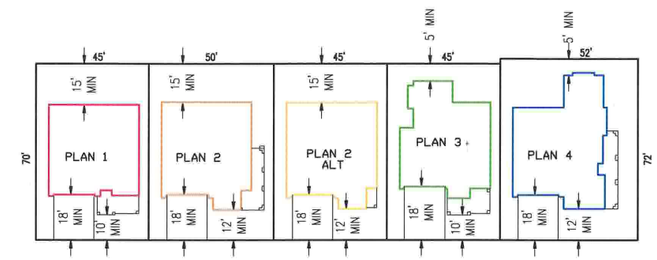
SHEET NUMBER
TM-05

PLAN	TOTAL	%
1	17	21%
2	3	4%
2-ALT	17	21%
3	24	30%
4	19	24%
TOTAL	80	100%



TYPICAL LOT SIZE

PLAN 1, 2ALT, 3: 45'x70'
PLAN 2: 50'x70'
PLAN 4: 52'x72'

SETBACKS:

FRONT
GARAGE: 18' MIN
LIVING SPACE: 12' MIN
PORCH: 10' MIN

REAR
PLAN 1 & 2: 15' MIN
PLAN 3 & 4: 5' MIN

SIDE
4' MIN

CORNER
LIVING SPACE: 10' MIN
PORCH: 7' MIN

NOTES:

1. ARCHITECTURAL POPOUTS INCLUDING SECOND STORY OVERHANG, BAY WINDOWS, MEDIA, FIREPLACES, NOOKS, ETC. MAY PROJECT 2' INTO SETBACK
2. SETBACKS MAY BE REDUCED AT CORNERS AND KNUCKLES
3. DUE TO LANDSCAPE PARCELS, LOTS 1 AND 43 TO BE CONSIDERED INTERIOR LOTS

PLANNED UNIT DEVELOPMENT
DEVELOPMENT PLAN
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

0' 40' 120' 160'

SCALE: 1" = 40' DATE: FEBRUARY 25, 2008

Carlson, Barbee & Gibson, Inc.
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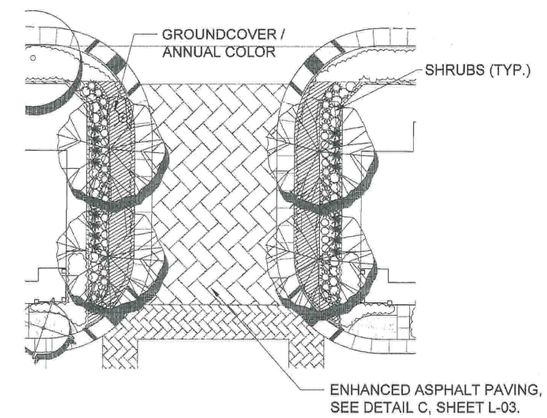
SHEET NUMBER
C1
7 OF 52

PROPOSED PLANT PALETTE

BOTANICAL NAME	COMMON NAME	SIZE	SPACING	QTY
TREES				
ACER RUBRUM	RED MAPLE	24" BOX	30' O.C.	44
CERCIS CANADENSIS	EASTERN REDBUD	15 GAL.	20' O.C.	80
ERIOBOTRYA DEFLEXA	BRONZE LOQUAT	24" BOX	25' O.C.	2
FRAXINUS OXYCARPA 'RAYWOOD'	RAYWOOD ASH	24" BOX	30' O.C.	24
LAGERSTROEMIA INDICA	CRAPE MYRTLE	24" BOX	20' O.C.	47
PISTACIA CHINENSIS	CHINESE PISTACHE	24" BOX	40' O.C.	21
PRUNUS CERASIFERA	PURPLE LEAF PLUM	24" BOX	20' O.C.	103
PYRUS CALLERYANA	FLOWERING PEAR	24" BOX	25' O.C.	24
SHRUBS / GROUNDCOVERS				
ABELIA GRANDIFLORA	GLOSSY ABELIA	5 GAL.	4' O.C.	
ARBUTUS UNEDO	STRAWBERRY TREE	15 GAL.	8' O.C.	
AGAPANTHUS AFRICANUS	LILY OF THE NILE	5 GAL.	3' O.C.	
BERBERIS THUNBERGII	JAPANESE BARBERRY	5 GAL.	3' O.C.	
CEANOTHUS SPECIES	WILD LILAC	5 GAL.	5' O.C.	
COTONEASTER LACTEUS	RED CLUSTERBERRY	5 GAL.	3' O.C.	
DIETES BICOLOR / VEGATA	FORTNIGHT LILY	5 GAL.	3' O.C.	
ESCALLONIA EXONIENSIS	ESCALLONIA	5 GAL.	5' O.C.	
HEMEROCALLIS SPECIES	DAYLILY	1 GAL.	2' O.C.	
LANTANA MONTEVIDENSIS	TRAILING LANTANA	1 GAL.	2' O.C.	
NANDINA DOMESTICA 'COMPACTA'	HEAVENLY BAMBOO	5 GAL.	4' O.C.	
PHORMIUM TENAX	NEW ZEALAND FLAX	5 GAL.	4' O.C.	
PHOTINIA FRASERI	FRASER PHOTINIA	5 GAL.	5' O.C.	
PLUMBAGO AURICULATA	CAPE PLUMBAGO	5 GAL.	3' O.C.	
RHAPHIOLEPIS INDICA	INDIA HAWTHORNE	5 GAL.	5' O.C.	
ROSEMARINUS OFFICINALIS 'PROSTRATUS'	SPREADING ROSEMARY	1 GAL.	2' O.C.	
SOLLYA HETEROPHYLLA	AUSTRALIAN BLUEBELL	5 GAL.	5' O.C.	
VIBERNUM TINUS 'SPRING BOQUET'	SPRING BOQUET VIBERNUM	5 GAL.	5' O.C.	
XYLOSMA CONGESTUM 'COMPACTA'	SHINY XYLOSMA	5 GAL.	3' O.C.	
VINES				
JASMINUM POLYANTHUM	PINK JASMINE	5 GAL.	10' O.C.	
PARTHENOCISSUS TRICUSPIDATA	BOSTON IVY	5 GAL.	10' O.C.	
ROSA BANKSIAE	LADY BANKS' ROSE	5 GAL.	10' O.C.	



ENLARGED ENTRY PLAN

SCALE: 1"=20'-0"

TREE COUNT

STREET TREES:	115
SECONDARY TREES:	80
PARK TREES:	75
REAR YARD TREES:	80
TOTAL TREES:	350

PRELIMINARY LANDSCAPE PLAN
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

0' 40' 120' 160'

SCALE: 1" = 40' DATE: FEBRUARY 25, 2008

vanderToolen associates LANDSCAPE ARCHITECTS

SHEET NUMBER L-01

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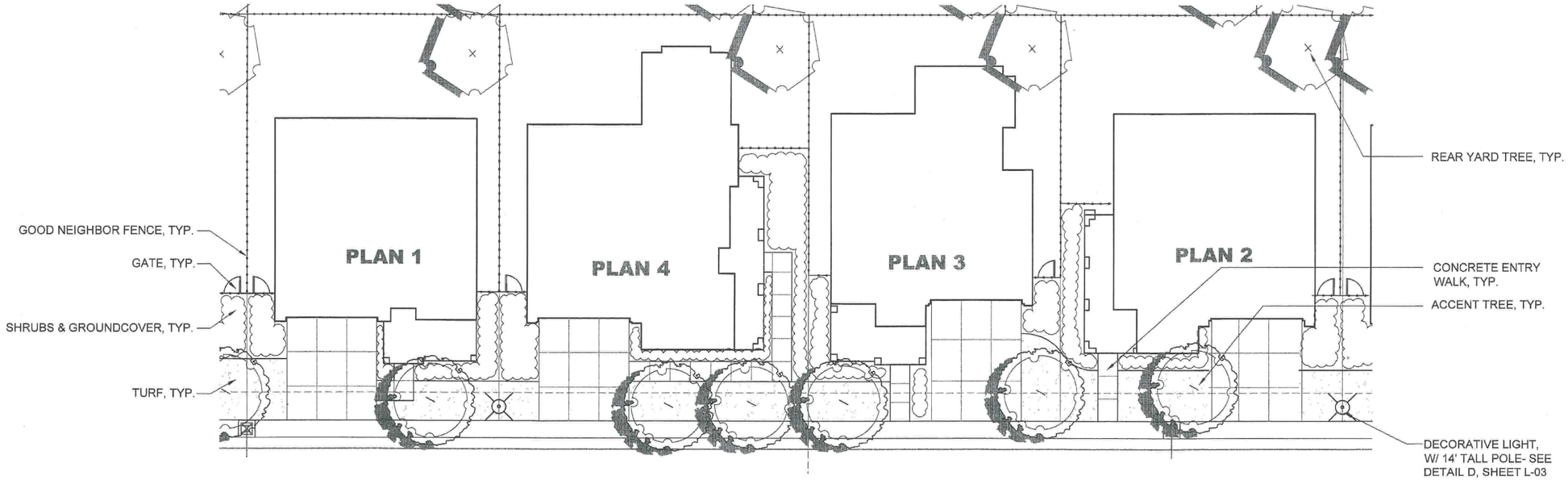
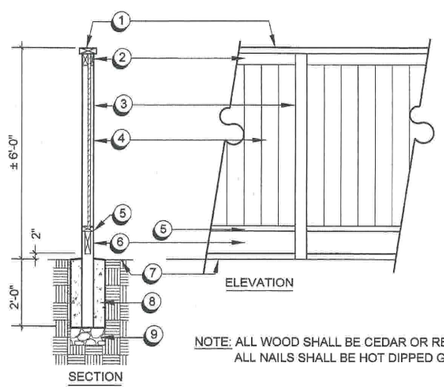


ENLARGED TYPICAL FRONT YARD PLANS

SCALE: 1"=10'-0"



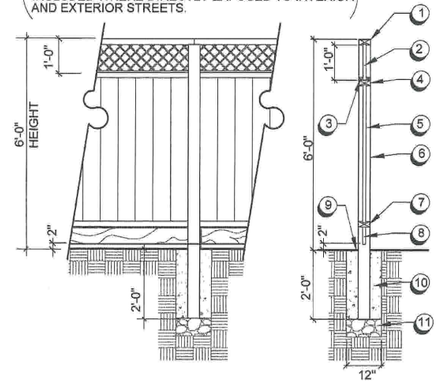
1. 2" x 6"
2. 2" x 4 " IN BACK 1" x 4 " IN FRONT
3. 4" x 4"@ 8' O.C.
4. 5/8" x 6" BOARDS
5. 2" x 4" NOTCHED TO RECEIVE BOARDS
6. 2" x 8" KICKBOARD
7. FINISH GRADE
8. 12" DIA. CONCRETE FOOTING
9. 6" AGG. DRAIN ROCK

NOTE: ALL WOOD SHALL BE CEDAR OR REDWOOD CONSTRUCTION GRADE. ALL NAILS SHALL BE HOT DIPPED GALVANIZED.

A GOOD NEIGHBOR FENCE

SCALE: 1/2 "= 1'-0"

TYPICAL 6' GOOD NEIGHBOR FENCE W/ LATTICE INCLUDED WHERE DIRECTLY EXPOSED TO INTERIOR AND EXTERIOR STREETS.



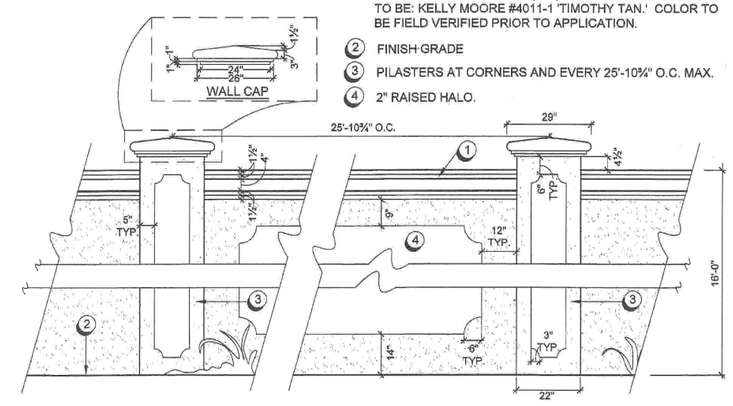
1. 2" x 4" TOP RAIL DADO
2. DIAGONAL WOOD LATTICE
3. 2(1" x 1") CLEATS BOT
4. 2' x 4" MID RAIL DADO
5. 1" x 6" FENCE BOARDS
6. 4" x 4" POST @ 8' O.C.
7. 2" x 4" BOT RAIL DADO
8. 2" x 8" KICKBOARD
9. TOP OF FOOTING AT TOP OF GRADE
10. CONCRETE FOOTING
11. 6" AGG. DRAIN ROCK

NOTE: ALL MATERIALS TO BE CONSTRUCTION GRADE CEDAR OR REDWOOD.

B GOOD NEIGHBOR FENCE W/ LATTICE

SCALE: 1/2" = 1'-0"

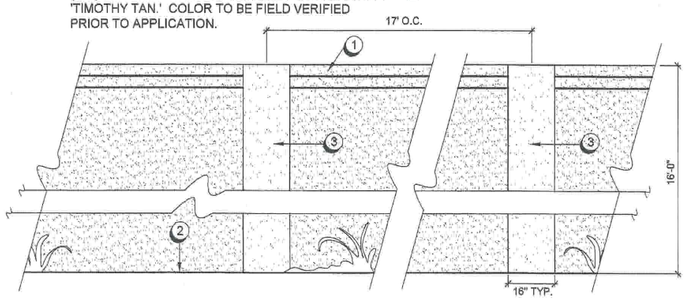
1. SOUNDWALL TO BE 'MARINA' STYLE AS MANUFACTURED BY SIERRA PRECAST INC. (408)-779-1000. WALL COLOR TO BE: KELLY MOORE #4011-1 'TIMOTHY TAN.' COLOR TO BE FIELD VERIFIED PRIOR TO APPLICATION.
2. FINISH GRADE
3. PILASTERS AT CORNERS AND EVERY 25'-10¾" O.C. MAX.
4. 2" RAISED HALO.



C FRONTAGE SOUNDWALL

SCALE: 1/2" = 1'-0"

1. SOUNDWALL TO BE 'MEDITERRANEAN' STYLE AS MANUFACTURED BY SIERRA PRECAST INC. (408)-779-1000. COLOR TO BE: KELLY MOORE #4011-1 'TIMOTHY TAN.' COLOR TO BE FIELD VERIFIED PRIOR TO APPLICATION.
2. FINISH GRADE
3. PILASTER AT CORNERS AND EVERY 17' O.C. MAX.



D NON-FRONTAGE SOUNDWALL

SCALE: 1/2" = 1'-0"

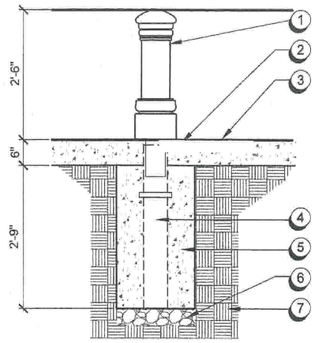
LANDSCAPE TYPICALS
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

vanderToolen associates LANDSCAPE ARCHITECTS

DATE: FEBRUARY 25, 2008

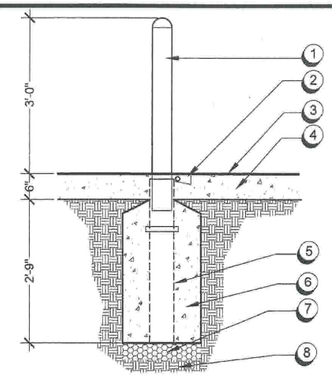
SHEET NUMBER L-02



1. 6-5/8" O.D. BOLLARD. SEE CONSTRUCTION CALL-OUT LEGEND.
2. PAYMENT SOCKET PER MANUFACTURER'S RECOMMENDATIONS
3. FINISH SURFACE.
4. BOLLARD FOOTING SLEEVE. INSTALL PRIOR TO CONCRETE FOOTING AND PAVING.
5. CONCRETE FOOTING
6. CLASS II AGGREGATE BASE. DEPTH TO BE 4" COMPACTED TO 95%.
7. COMPACTED SUBGRADE OR ENGINEERED FILL.

NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE W/ MANUFACTURER'S SPECIFICATIONS.

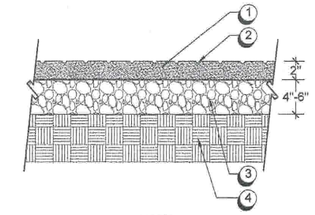
A DECORATIVE REMOVABLE BOLLARD
SCALE: 3/4" = 1'-0"



1. 4-1/2" O.D. BOLLARD
2. PAYMENT SOCKET PER MANUFACTURER'S RECOMMENDED
3. FINISH GRADE
4. A.C. PAVING OR CONCRETE PAVING
5. BOLLARD FOOTING SLEEVE. INSTALL PRIOR TO CONCRETE FOOTING AND PAVING.
6. CONCRETE FOOTING
7. CLASS AGGREGATE BASE. DEPTH TO BE 4" COMPACTED TO 95%.
8. COMPACTED SUBGRADE TO 95% RELATIVE COMPACTION.

NOTE:
1. BOLLARD BY TIMBER FORM MODEL #2190-3-R OR APPOVED EQUAL.
2. COLOR TO BE BLACK.

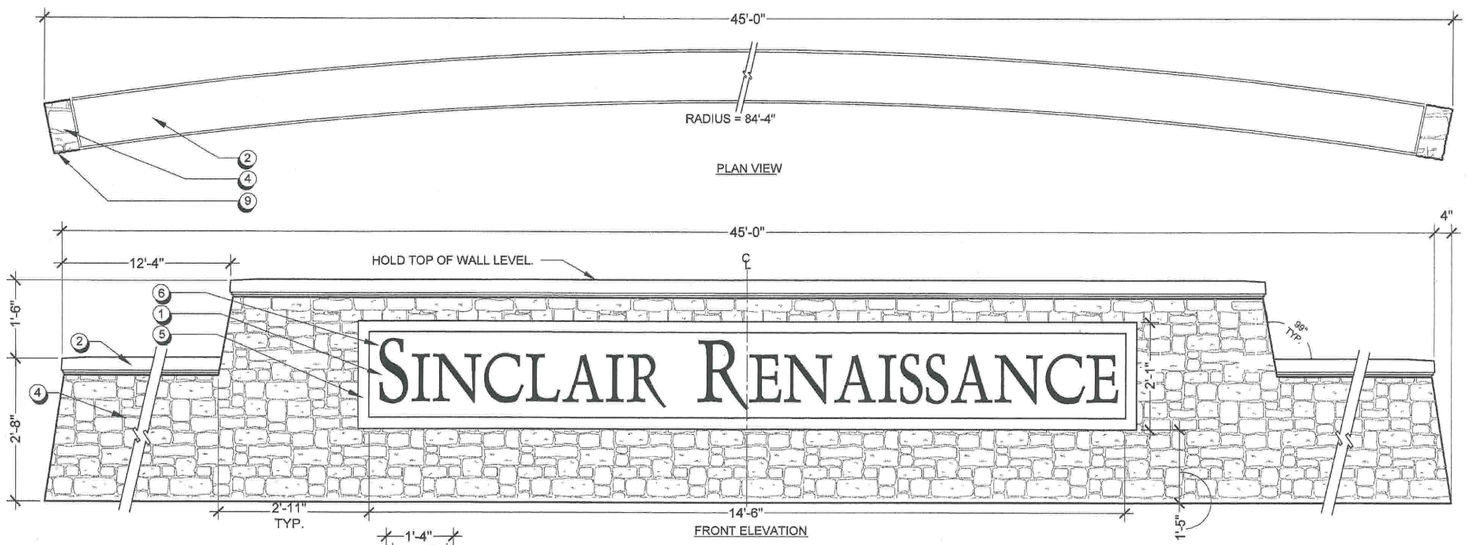
B REMOVABLE BOLLARD
SCALE: 3/4" = 1'-0"

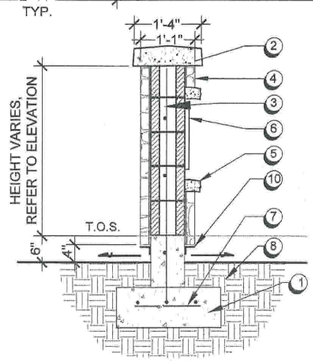


1. 2" THICK STREETPRINT STAMPED ASPHALT. COLOR TO BE 'BEDROCK'.
2. STREETPRINT GROUT LINE MIN. DEPTH 1/4" - PATTERN TO BE 'ASHLAR SLATE'.
3. CLASS II AGGREGATE BASE, COMPACTION, & THICKNESS PER SOIL'S REPORT RECOMMENDATION.
4. COMPACTED SUBGRADE OR ENGINEERED FILL.

NOTE:
* STREETPRINT PAVING TO BE INSTALLED BY A LICENSED STREETPRINT CONTRACTOR. TO CONTACT A LOCAL REPRESENTATIVE, CALL 888-581-2299.

C STAMPED ASPHALT PAVING
SCALE: 1-1/2" = 1'-0"

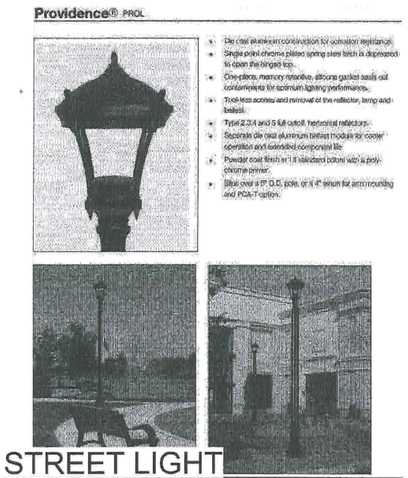




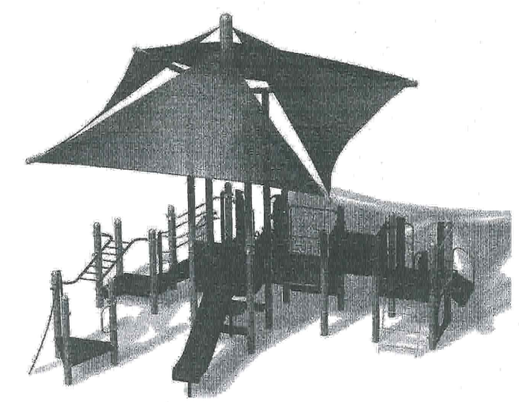
SIDE SECTION

1. LA HABRA STUCCO FINISH OVER SCRATCH COAT. COLOR TO BE X-86 SANDSTONE (BASE 200) SAND FINISH. CONTACT 209-983-8808
2. NAPA VALLEY CAST STONE EASED EDGE PEAKED WALL CAP (WCM-PKS-16). COLOR TO BE AUBURN. 707-258-3340
3. CMU BLOCK
4. CULTURED STONE - ROMANA OLD COUNTRY FIELDSTONE (CSV-368168) AVAILABLE THROUGH PACIFIC COAST BLDG SUPPLY 707-253-7866
5. CULTURED STONE BUCKSKIN SILL (SWT-1371). AVAILABLE THROUGH PACIFIC COAST BLDG SUPPLY 707-253-7866
6. LASER CUT STEEL LETTERS, COPPER PLATED WITH VERDIGRIS FINISH. MOUNT TO WALL WITH EPOXY.
7. REBAR AND FOOTINGS PER STRUCTURAL ENGINEER.
8. SUBGRADE. COMPACT TO 95%.
9. BATTERED END.
10. GALVINIZED STEEL LEDGER.

E CURVED ENTRY SIGN WALL
SCALE: 3/4 = 1'-0"



D PARK & STREET LIGHT
SCALE: NONE



F PLAY STRUCTURE
SCALE: NONE

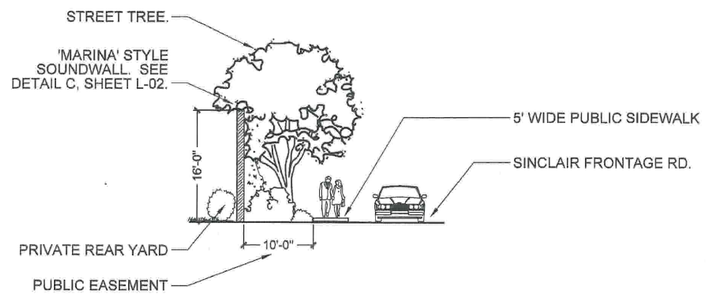
LANDSCAPE DETAILS
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

vanderToolen associates LANDSCAPE ARCHITECTS

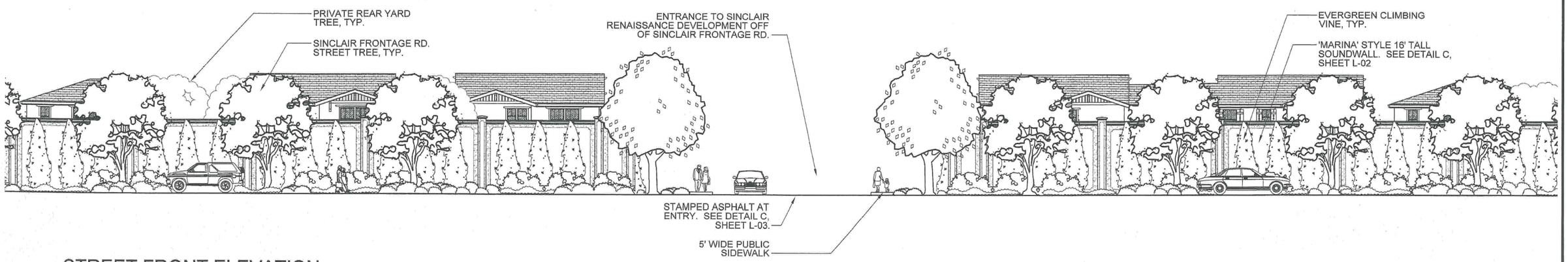
DATE: FEBRUARY 25, 2008

SHEET NUMBER L-03



STREET FRONT SECTION

SCALE: 1"=10'-0"



STREET FRONT ELEVATION

SCALE: 1"=10'-0"

LANDSCAPE ELEVATIONS
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

DATE: FEBRUARY 25, 2008

vanderToolen associates
LANDSCAPE ARCHITECTS

SHEET NUMBER
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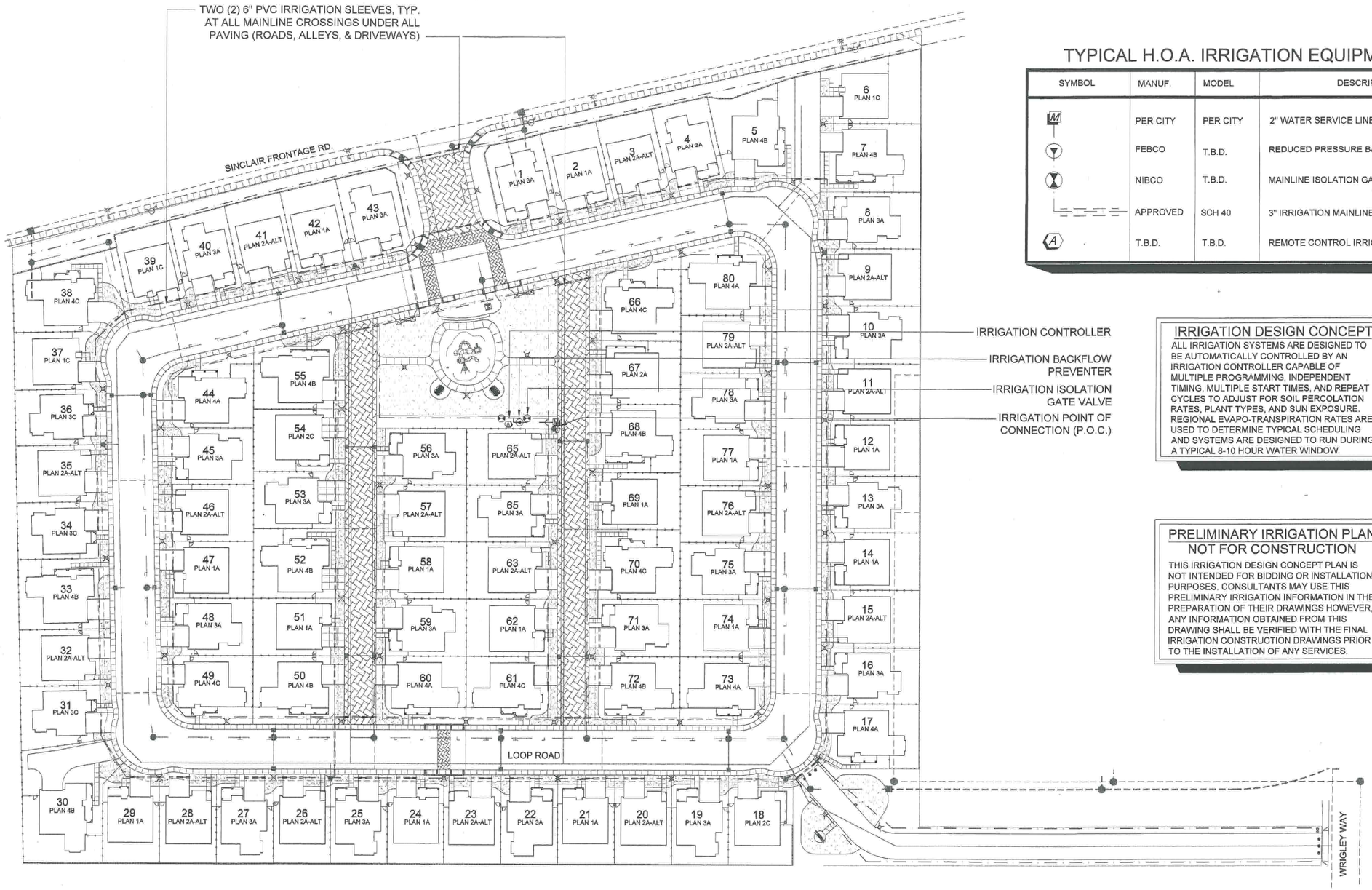

TYPICAL H.O.A. IRRIGATION EQUIPMENT LEGEND

SYMBOL	MANUF.	MODEL	DESCRIPTION
M	PER CITY	PER CITY	2" WATER SERVICE LINE AND 2" WATER METER
	FEBCO	T.B.D.	REDUCED PRESSURE BACKFLOW PREVENTION DEVICE
	NIBCO	T.B.D.	MAINLINE ISOLATION GATE VALVE
	APPROVED	SCH 40	3" IRRIGATION MAINLINE & TWO (2) 6" SLEEVES
A	T.B.D.	T.B.D.	REMOTE CONTROL IRRIGATION CONTROLLER

IRRIGATION DESIGN CONCEPT

ALL IRRIGATION SYSTEMS ARE DESIGNED TO BE AUTOMATICALLY CONTROLLED BY AN IRRIGATION CONTROLLER CAPABLE OF MULTIPLE PROGRAMMING, INDEPENDENT TIMING, MULTIPLE START TIMES, AND REPEAT CYCLES TO ADJUST FOR SOIL PERCOLATION RATES, PLANT TYPES, AND SUN EXPOSURE. REGIONAL EVAPO-TRANSPIRATION RATES ARE USED TO DETERMINE TYPICAL SCHEDULING AND SYSTEMS ARE DESIGNED TO RUN DURING A TYPICAL 8-10 HOUR WATER WINDOW.

PRELIMINARY IRRIGATION PLAN NOT FOR CONSTRUCTION

THIS IRRIGATION DESIGN CONCEPT PLAN IS NOT INTENDED FOR BIDDING OR INSTALLATION PURPOSES. CONSULTANTS MAY USE THIS PRELIMINARY IRRIGATION INFORMATION IN THE PREPARATION OF THEIR DRAWINGS HOWEVER, ANY INFORMATION OBTAINED FROM THIS DRAWING SHALL BE VERIFIED WITH THE FINAL IRRIGATION CONSTRUCTION DRAWINGS PRIOR TO THE INSTALLATION OF ANY SERVICES.

PRELIMINARY IRRIGATION MAINLINE PLAN
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

0' 40' 120' 160'

SCALE: 1" = 40' DATE: FEBRUARY 25, 2008

vanderToolen associates
LANDSCAPE ARCHITECTS

SHEET NUMBER
L-05
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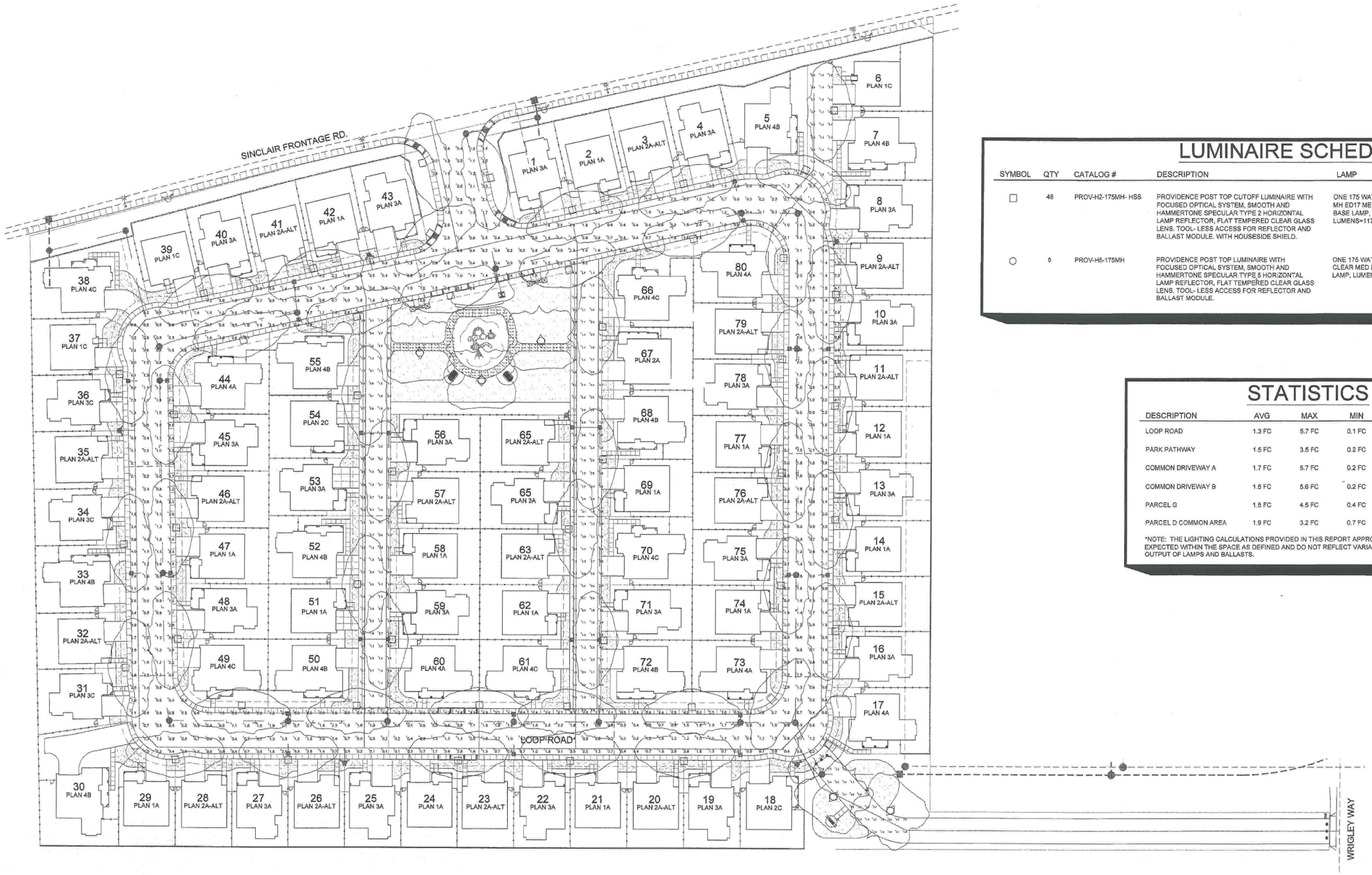

LUMINAIRE SCHEDULE

SYMBOL	QTY	CATALOG #	DESCRIPTION	LAMP	ARRANGEMENT	LUMENS	LLF	WATTS
□	48	PROV-H2-175MH- HSS	PROVIDENCE POST TOP CUTOFF LUMINAIRE WITH FOCUSED OPTICAL SYSTEM, SMOOTH AND HAMMERTONE SPECULAR TYPE 2 HORIZONTAL LAMP REFLECTOR, FLAT TEMPERED CLEAR GLASS LENS. TOOL- LESS ACCESS FOR REFLECTOR AND BALLAST MODULE. WITH HOUSESIDE SHIELD.	ONE 175 WATT CLEAR, MH ED17 MEDIUM BASE LAMP, LUMENS=11700	SINGLE	11700	0.72	213
○	5	PROV-H5-175MH	PROVIDENCE POST TOP LUMINAIRE WITH FOCUSED OPTICAL SYSTEM, SMOOTH AND HAMMERTONE SPECULAR TYPE 5 HORIZONTAL LAMP REFLECTOR, FLAT TEMPERED CLEAR GLASS LENS. TOOL- LESS ACCESS FOR REFLECTOR AND BALLAST MODULE.	ONE 175 WATT ED17 CLEAR MED BASE MH LAMP, LUMENS=11700	SINGLE	11700	0.72	213

STATISTICS

DESCRIPTION	AVG	MAX	MIN	MAX/MIN	AVG/MIN
LOOP ROAD	1.3 FC	5.7 FC	0.1 FC	57.0:1	13.0:1
PARK PATHWAY	1.5 FC	3.5 FC	0.2 FC	17.5:1	7.5:1
COMMON DRIVEWAY A	1.7 FC	5.7 FC	0.2 FC	28.5:1	8.5:1
COMMON DRIVEWAY B	1.5 FC	5.6 FC	0.2 FC	28.0:1	7.5:1
PARCEL G	1.5 FC	4.5 FC	0.4 FC	11.3:1	3.8:1
PARCEL D COMMON AREA	1.9 FC	3.2 FC	0.7 FC	4.6:1	2.7:1

*NOTE: THE LIGHTING CALCULATIONS PROVIDED IN THIS REPORT APPROXIMATE THE LIGHT LEVELS EXPECTED WITHIN THE SPACE AS DEFINED AND DO NOT REFLECT VARIABLES IN THE ACTUAL LIGHT OUTPUT OF LAMPS AND BALLASTS.

PRELIMINARY LIGHTING PLAN
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

0' 40' 120' 160'

SCALE: 1" = 40' DATE: FEBRUARY 25, 2008

vanderToolen associates
LANDSCAPE ARCHITECTS

SHEET NUMBER
L-06
13 OF 52

4CR 1A 3BR 2B

CONCEPTUAL STREET SCENE
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1' DATE: February 25th, 2008

KTGY GROUP, INC.
ARCHITECTURE PLANNING
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SHEET NUMBER
A-01

4AR 4B 4CR

CONCEPTUAL STREET SCENE
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1'

DATE: February 25th, 2008

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SHEET NUMBER
A-02

PERSPECTIVE

SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

DATE: February 25th, 2008

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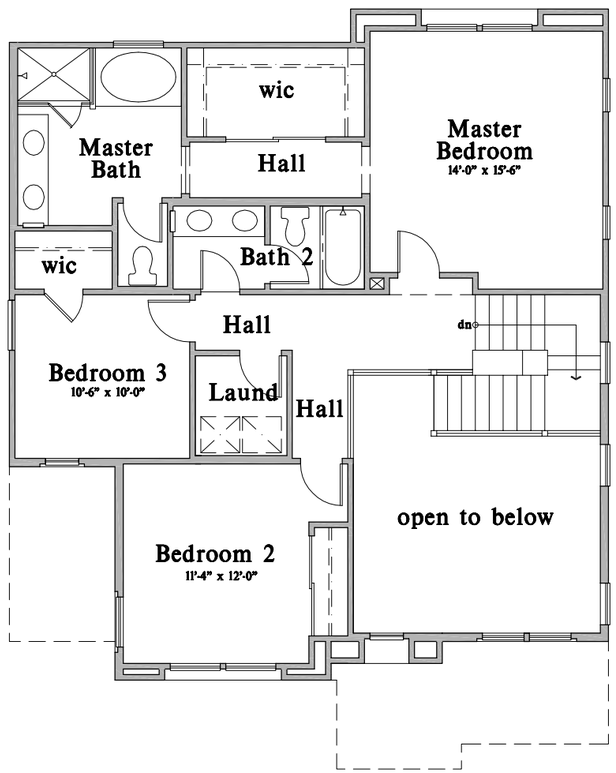
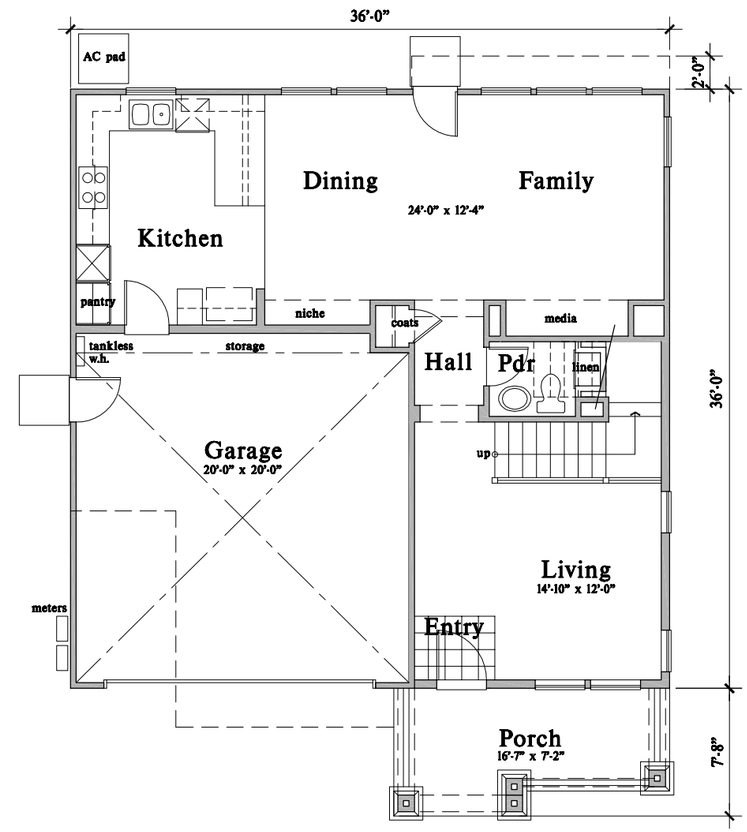
SHEET NUMBER
A-03



Second Floor

Floor Plan
3 Bedrooms
2 1/2 Bath
2057 Sq Ft



First Floor

PLAN 1
FLOOR PLAN
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1'

DATE: February 25th, 2008

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SHEET NUMBER
A-04
17 of 52

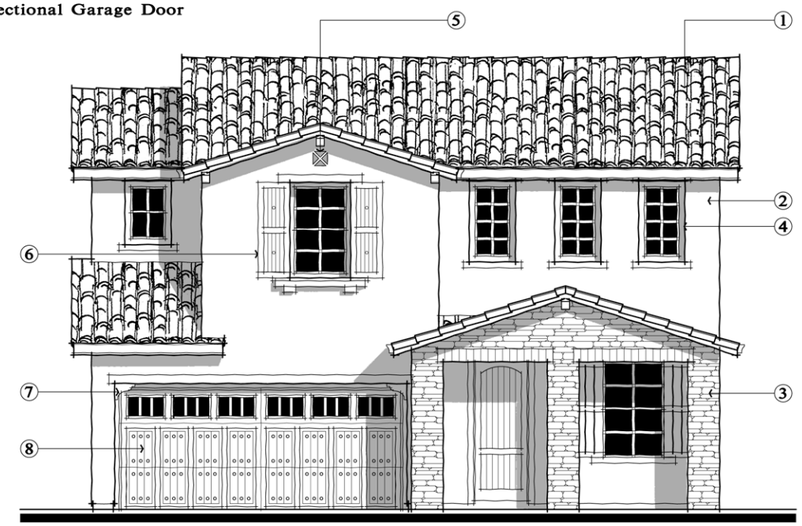
1A CRAFTSMAN

CRAFTSMAN MATERIAL LEGEND

1. Flat Tile Roof
2. Stucco w/ Sand Finish
3. Stucco Finish Trim Surrounds
4. Board & Batten @ Gable Ends
5. Tapered Porch Columns w/ Stone Veneer Base
6. Wood Railing
7. Outlookers & Kickers
8. Corbels w/ trowel finish stucco
9. Wood Sectional Garage Door

TUSCAN MATERIAL LEGEND

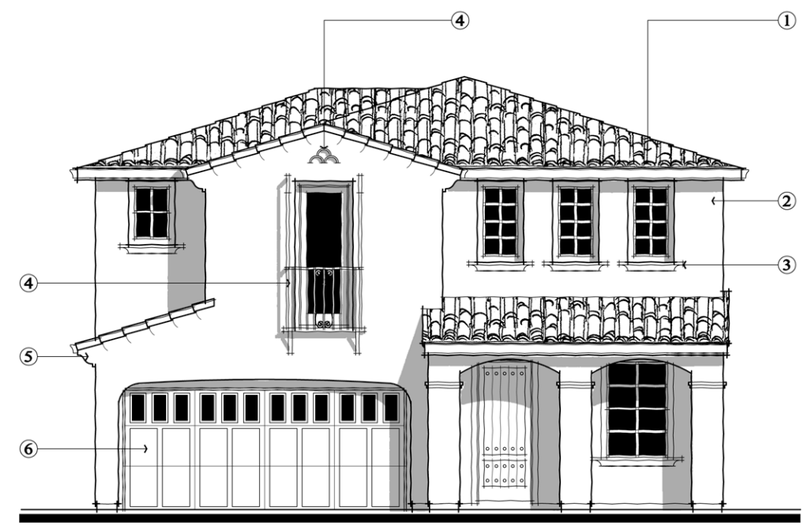
1. "S" Tile Roof
2. Stucco w/ Sand Finish
3. Stone Veneer
4. Stucco Finish Trim Surrounds
5. Decorative 2" Recess @ Gable Ends
6. Shutters
7. Corbels
8. Wood Sectional Garage Door



1B TUSCAN

SPANISH MATERIAL LEGEND

1. "S" Tile Roof
2. Stucco w/ Sand Finish
3. Stucco Finish Trim Surrounds
4. Decorative Clay Pipe @ Gable Ends
5. Decorative Eave Corbels
6. Wood Sectional Garage Door



1C SPANISH

PLAN 1
FRONT ELEVATIONS
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1' DATE: February 25th, 2008

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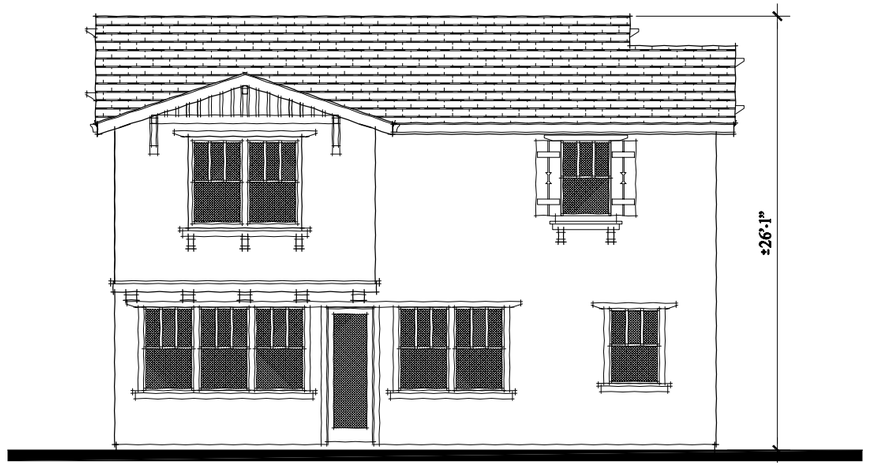
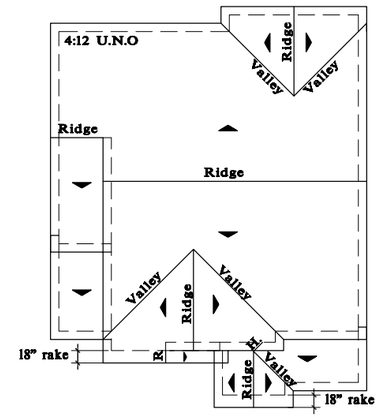
SHEET NUMBER
A-05

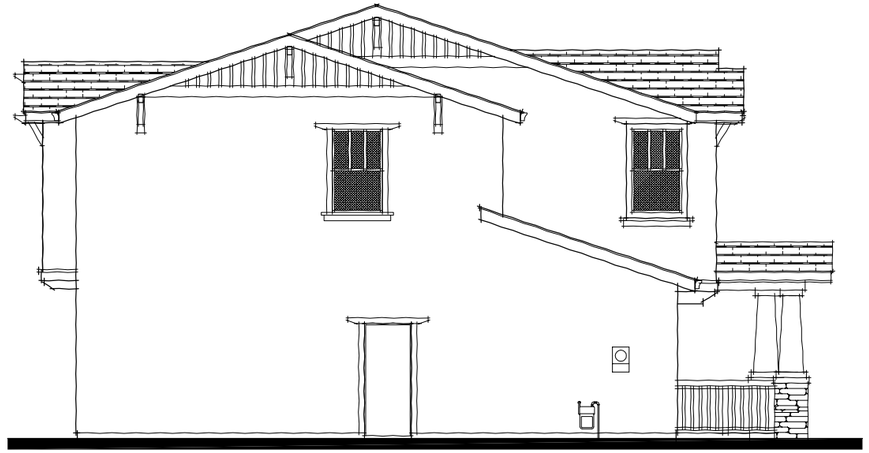


Rear Elevation

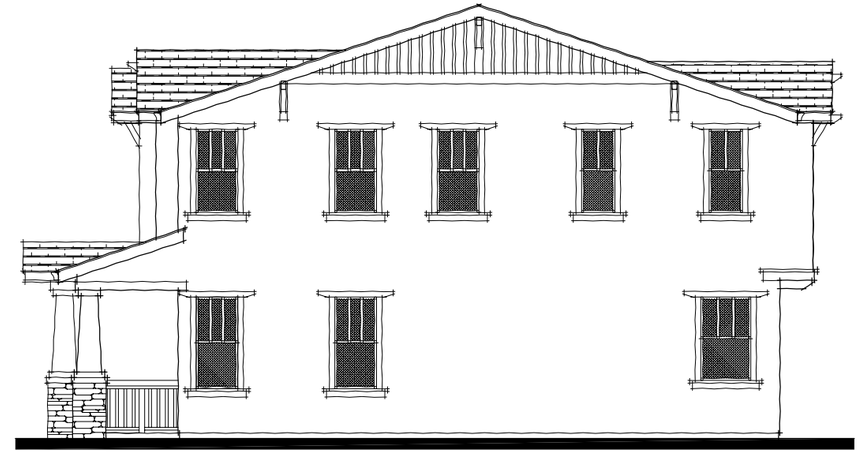


Roof Plan

0 8
4 16



Left Elevation



Right Elevation

PLAN 1A
WRAP ELEVATIONS
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1'

DATE: February 25th, 2008

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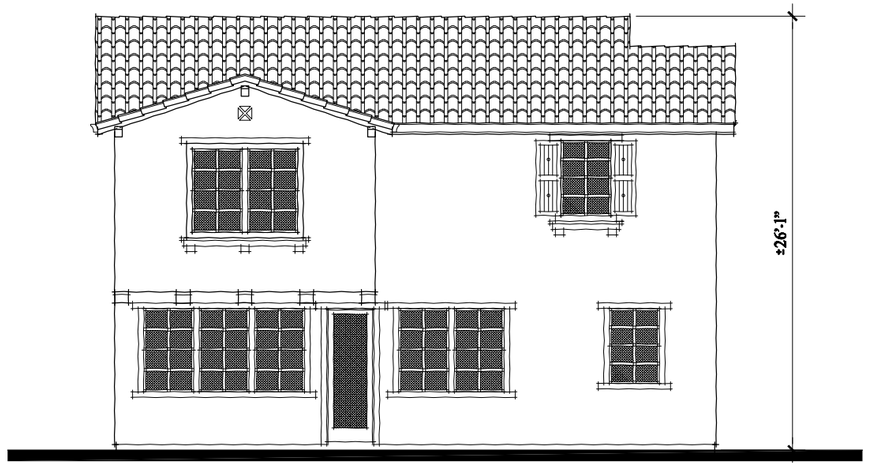
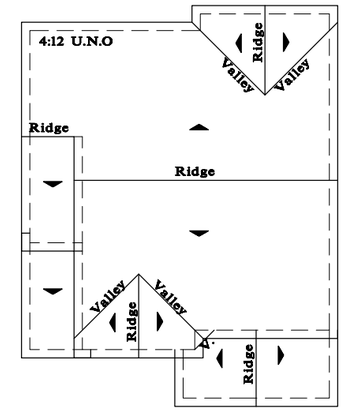
SHEET NUMBER
A-06

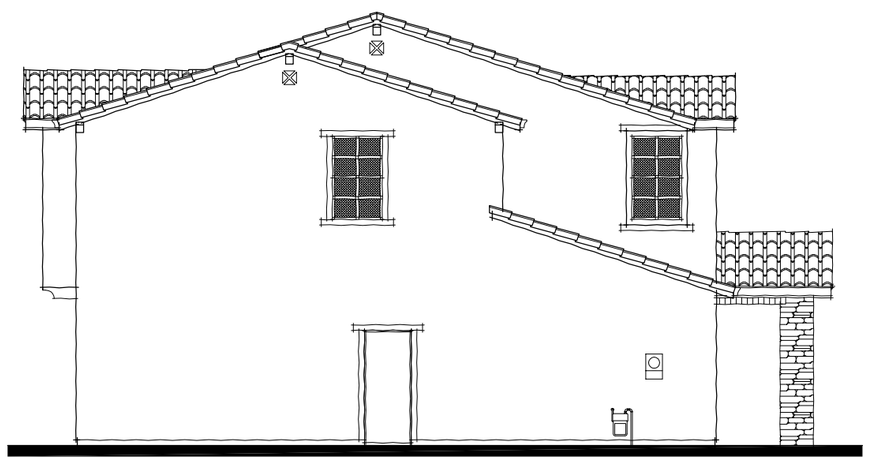


Rear Elevation

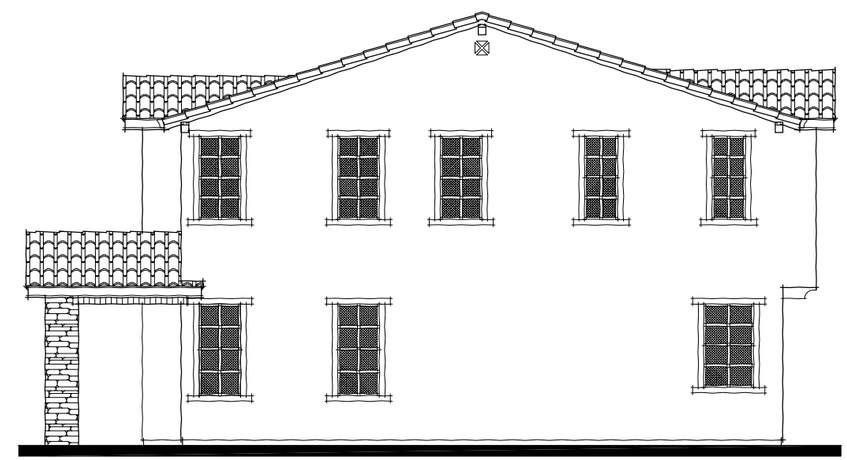


Roof Plan

0 8
4 16



Left Elevation



Right Elevation

PLAN 1B
WRAP ELEVATIONS
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1'

DATE: February 25th, 2008

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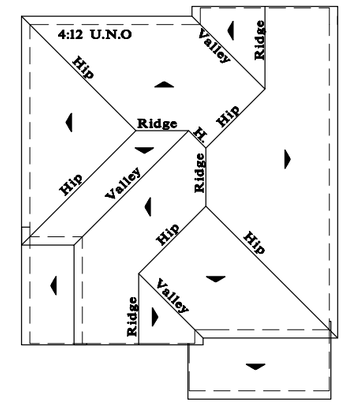
SHEET NUMBER
A-07

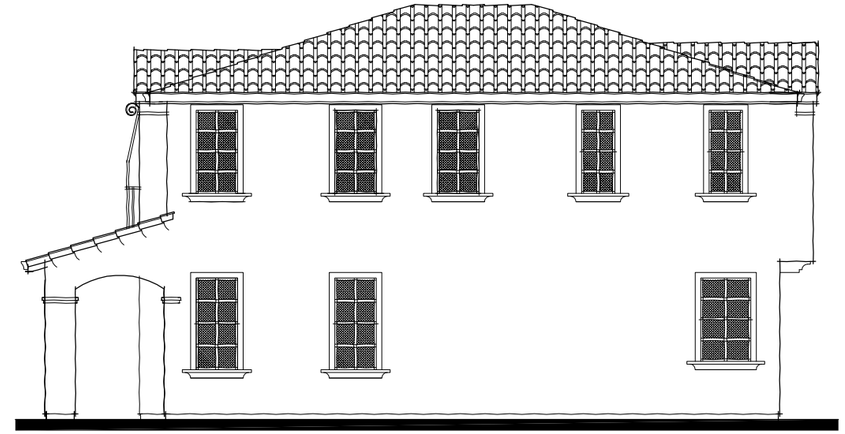
Rear Elevation



Roof Plan

0 8
4 16

Left Elevation



Right Elevation

PLAN 1C
WRAP ELEVATIONS
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1'

DATE: February 25th, 2008

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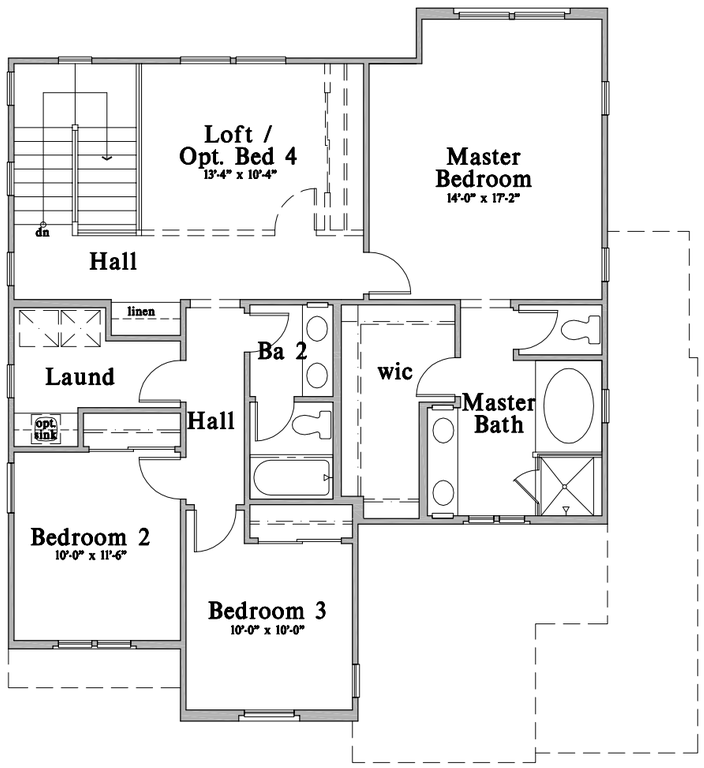
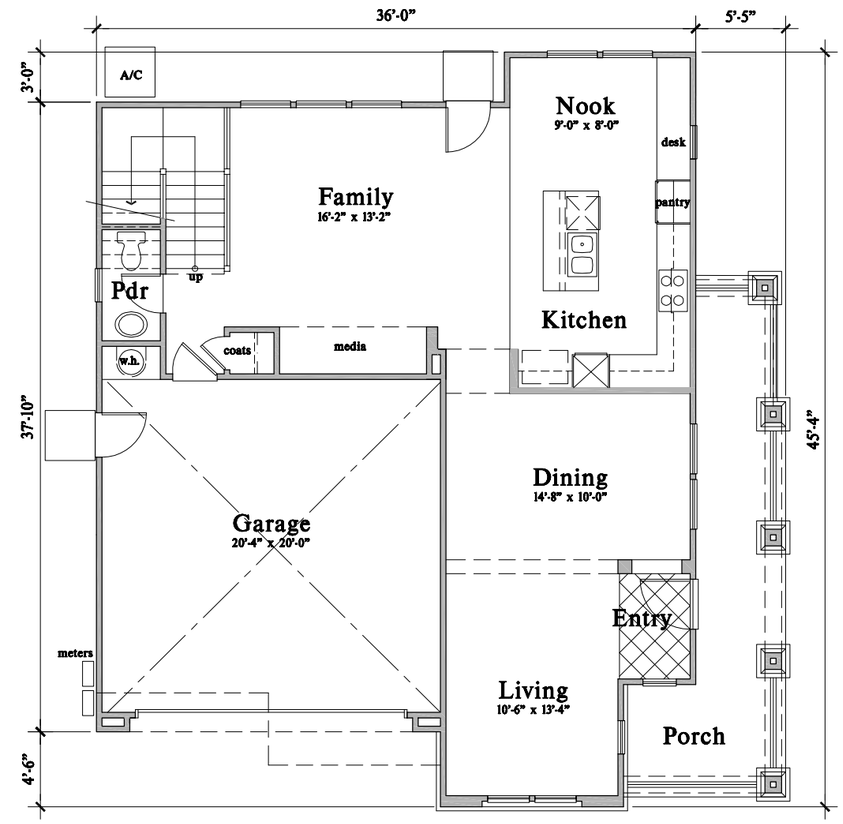
SHEET NUMBER
A-08



Second Floor

Floor Plan

3 Bedrooms
Loft / Opt. Bed 4
2 1/2 Bath
2150 Sq Ft



First Floor

PLAN 2
FLOOR PLAN
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1'

DATE: February 25th, 2008

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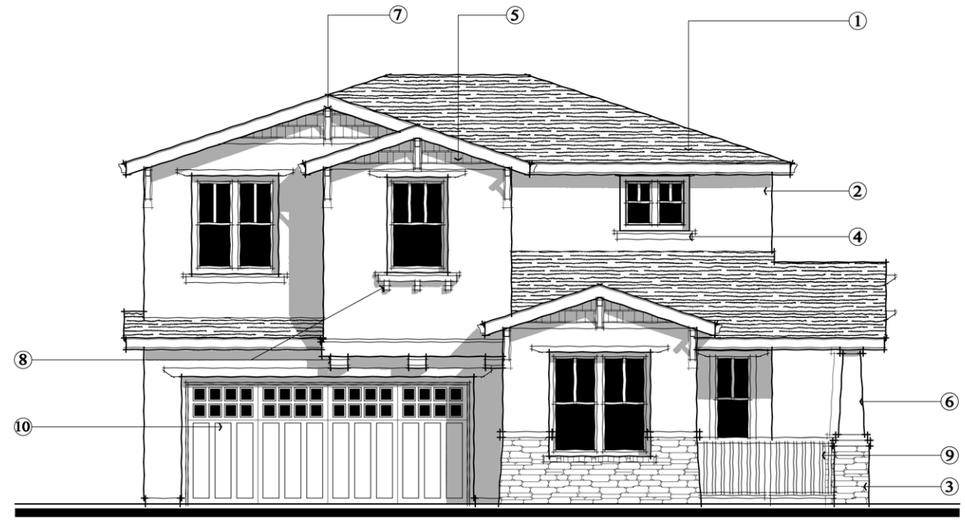
SHEET NUMBER
A-09
22 of 52



2A CRAFTSMAN

CRAFTSMAN MATERIAL LEGEND

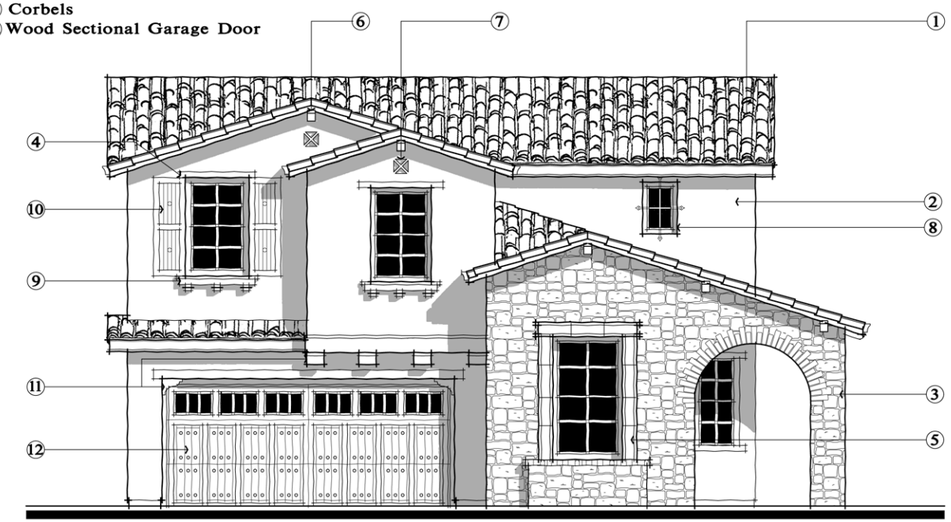
1. Flat Tile Roof
2. Stucco w/ Sand Finish
3. Stone Veneer
4. Stucco Finish Trim Surrounds
5. Fiber Cement Shingles
6. Tapered Porch Columns w/ Stone Veneer Base
7. Outlookers & Kickers
8. Corbels w/ trowel finish stucco
9. Wood Railing
10. Wood Sectional Garage Door

TUSCAN MATERIAL LEGEND

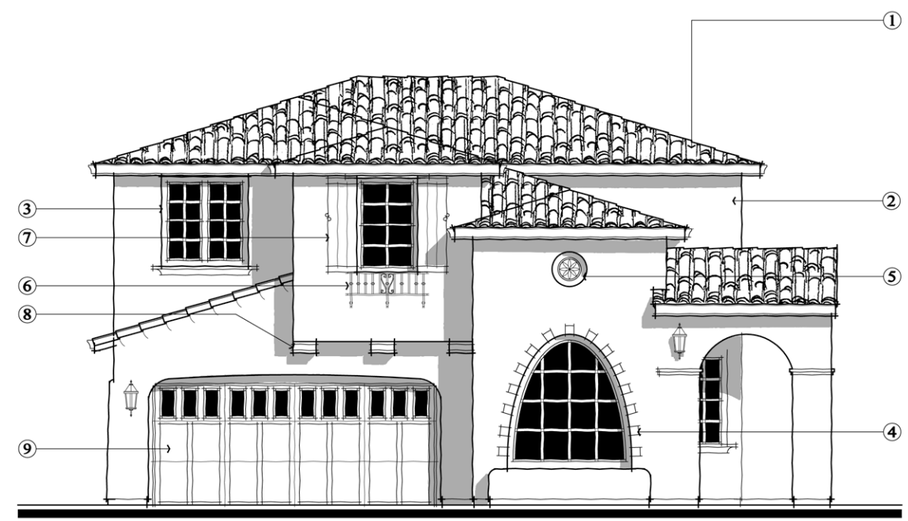
1. "S" Tile Roof
2. Stucco w/ Sand Finish
3. Stone Veneer
4. Stucco Finish Trim Surrounds
5. Precast Concrete Trim Surround
6. Outlookers at Gable Ends
7. Decorative 2" Recess @ Gable Ends
8. Recessed Window w/ Metal Grate
9. Decorative Potshelf
10. Shutters
11. Corbels
12. Wood Sectional Garage Door

SPANISH MATERIAL LEGEND

1. "S" Tile Roof
2. Stucco w/ Sand Finish
3. Stucco Finish Trim Surrounds
4. Decorative Tile Trim Surround
5. Decorative Recess @ Gable End
6. Decorative Metal Pot Shelf
7. Shutters
8. Corbels
9. Wood Sectional Garage Door



2B TUSCAN



2C SPANISH

PLAN 2
FRONT ELEVATIONS
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1' DATE: February 25th, 2008

KTGY GROUP, INC.
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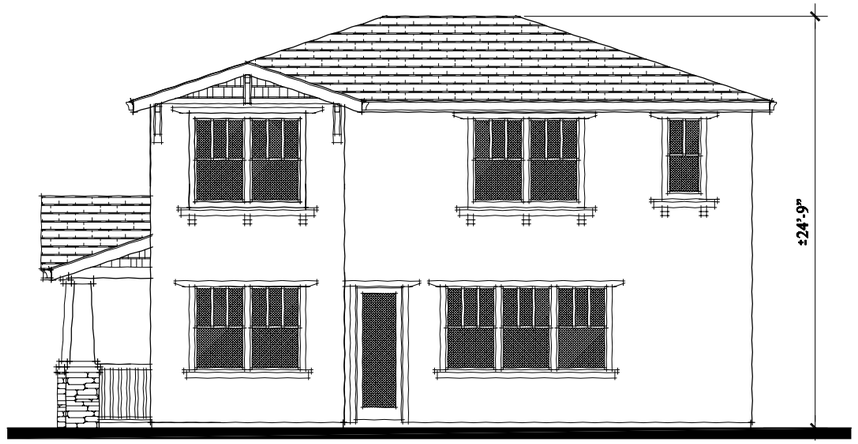
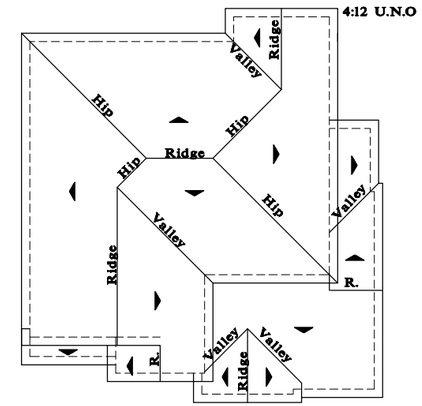
SHEET NUMBER
A-10
23 of 52

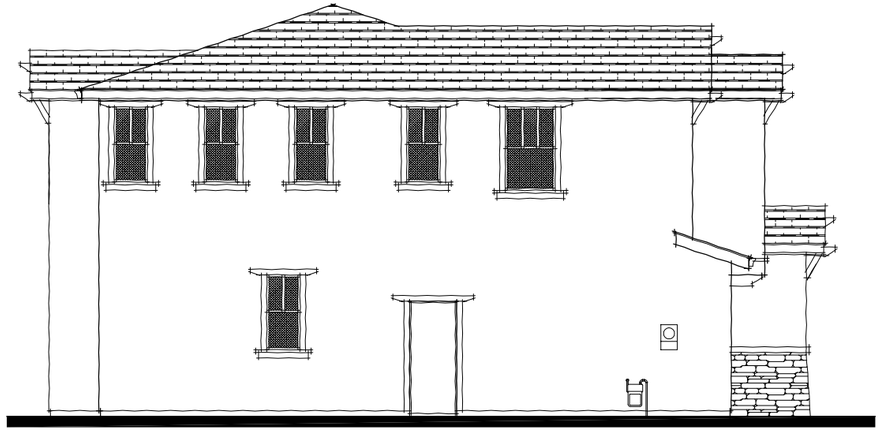


Rear Elevation



Roof Plan

0 8
4 16



Left Elevation

Right Elevation
(corner)

PLAN 2A

WRAP ELEVATIONS

SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1'

DATE: February 25th, 2008

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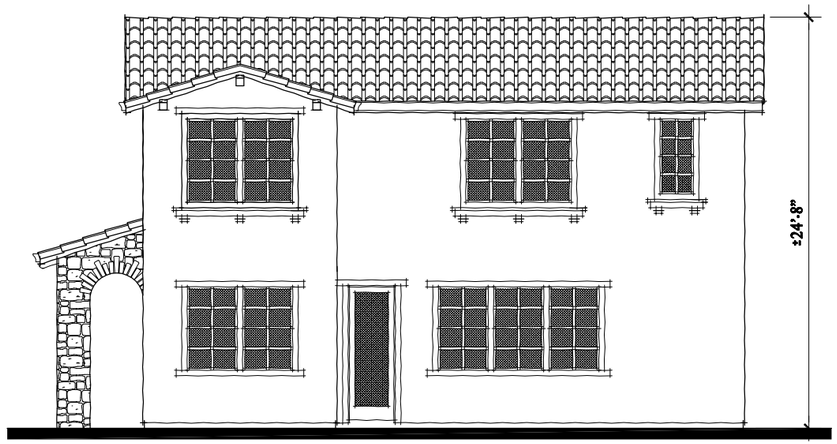
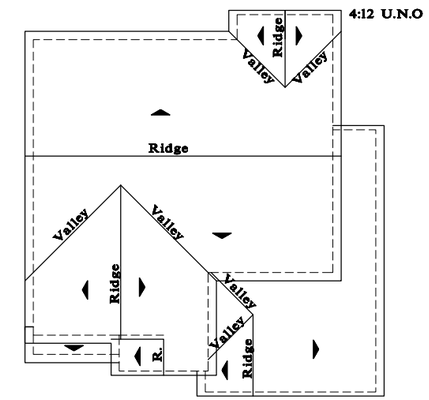
SHEET NUMBER
A-11
24 of 52

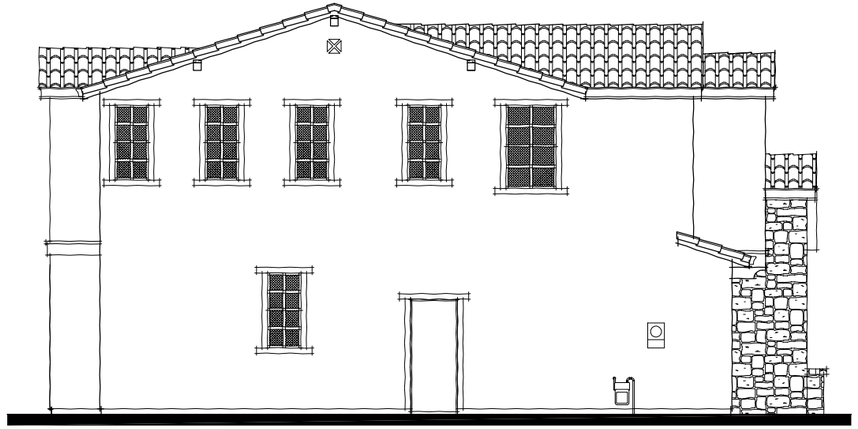


Rear Elevation

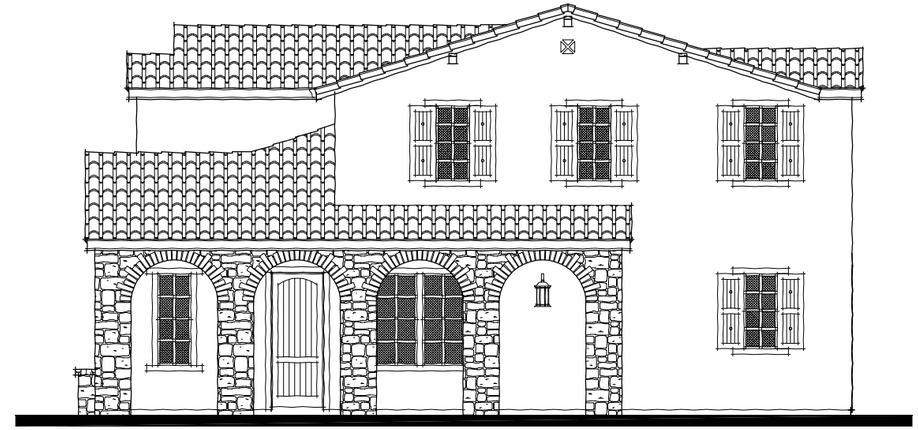


Roof Plan

0 8
4 16



Left Elevation



Right Elevation
(corner)

PLAN 2B
WRAP ELEVATIONS
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1'

DATE: February 25th, 2008

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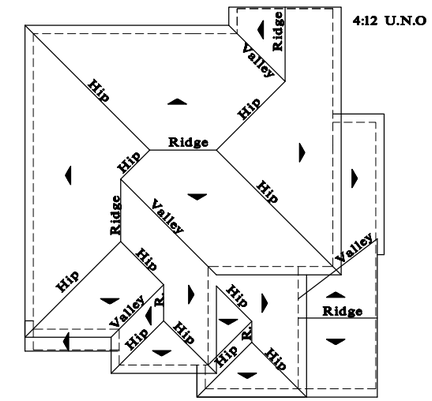
SHEET NUMBER
A-12
25 of 52

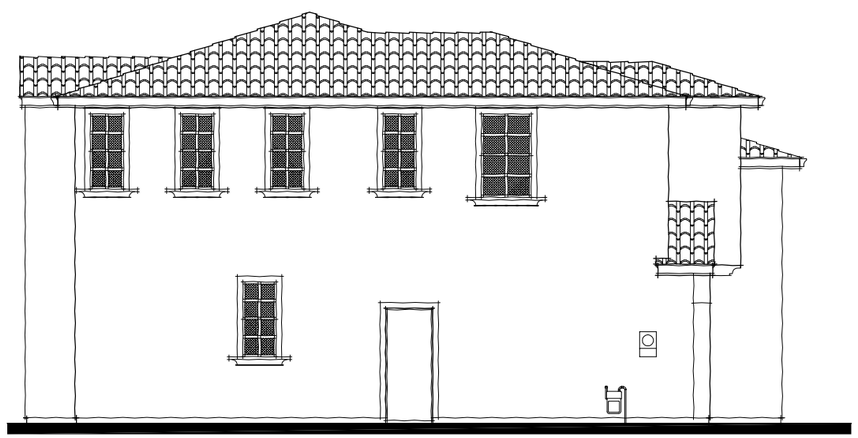
Rear Elevation



Roof Plan

0 8

4 16



Left Elevation

Right Elevation
(corner)

PLAN 2C

WRAP ELEVATIONS

SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1'

DATE: February 25th, 2008

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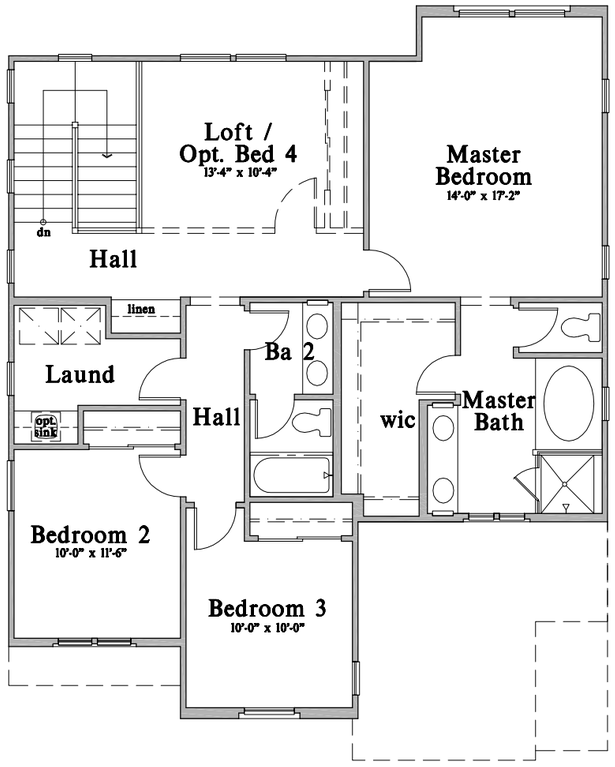
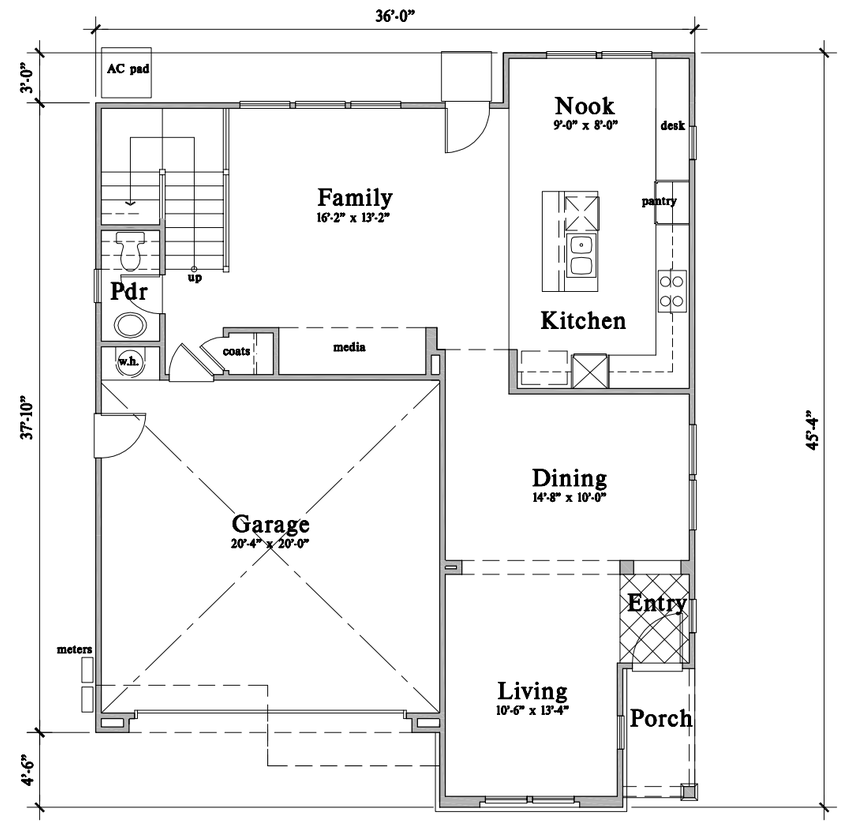
SHEET NUMBER
A-13
26 of 52



Second Floor

Floor Plan
3 Bedrooms
Loft / Opt. Bed 4
2 1/2 Bath
2145 Sq Ft



First Floor

PLAN 2 ALT
FLOOR PLAN
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1' DATE: February 25th, 2008

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SHEET NUMBER
A-14
27 of 52

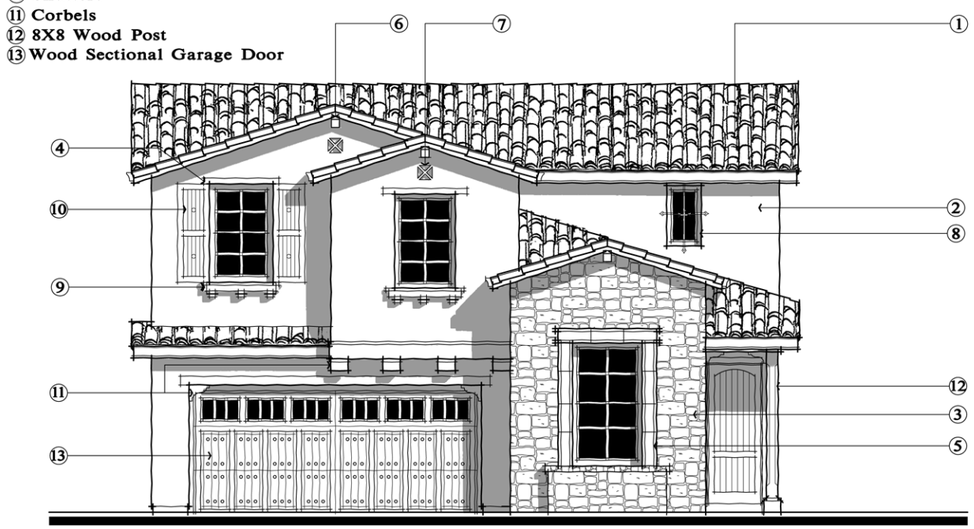
2alt A CRAFTSMAN

CRAFTSMAN MATERIAL LEGEND

1. Flat Tile Roof
2. Stucco w/ Sand Finish
3. Stone Veneer
4. Stucco Finish Trim Surrounds
5. Fiber Cement Shingles
6. Tapered Porch Column
7. Outlookers & Kickers
8. Corbels
9. Wood Sectional Garage Door

TUSCAN MATERIAL LEGEND

1. "S" Tile Roof
2. Stucco w/ Sand Finish
3. Stone Veneer
4. Stucco Finish Trim Surrounds
5. Precast Concrete Trim Surround
6. Outlookers at Gable Ends
7. Decorative 2" Recess @ Gable Ends
8. Recessed Window w/ Metal Grate
9. Decorative Potshelf
10. Shutters
11. Corbels
12. 8X8 Wood Post
13. Wood Sectional Garage Door



2alt B TUSCAN

SPANISH MATERIAL LEGEND

1. "S" Tile Roof
2. Stucco w/ Sand Finish
3. Stucco Finish Trim Surrounds
4. Decorative Tile Trim Surround
5. Decorative Recess @ Gable End
6. Decorative Metal Pot Shelf
7. Shutters
8. Corbels
9. 8X8 Wood Post
10. Wood Sectional Garage Door

2alt C SPANISH

PLAN 2 Alt
FRONT ELEVATIONS
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1' DATE: February 25th, 2008

KTGY GROUP, INC.
ARCHITECTURE PLANNING
17592 MITCHELL SOUTH
IRVINE, CALIFORNIA 92614
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SHEET NUMBER
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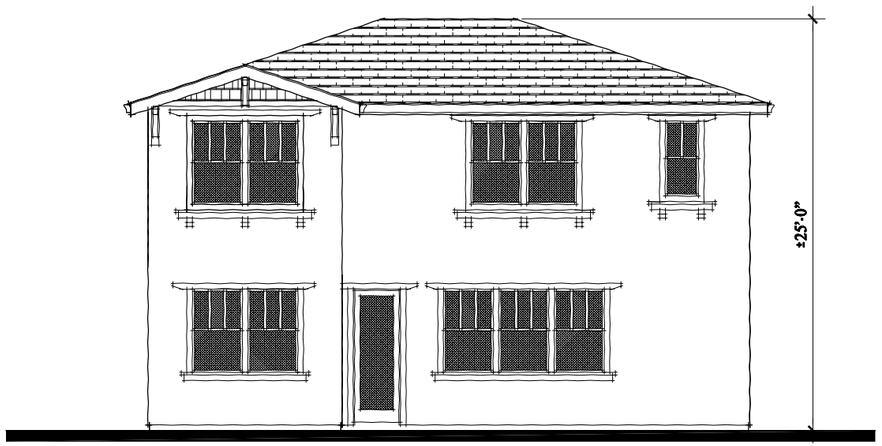
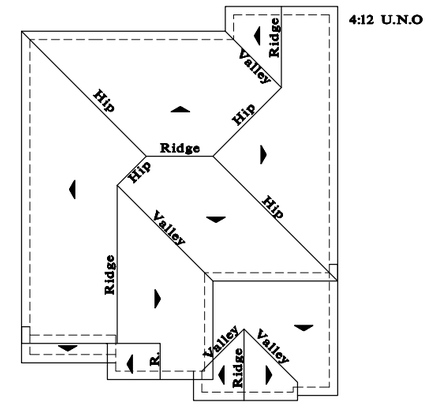
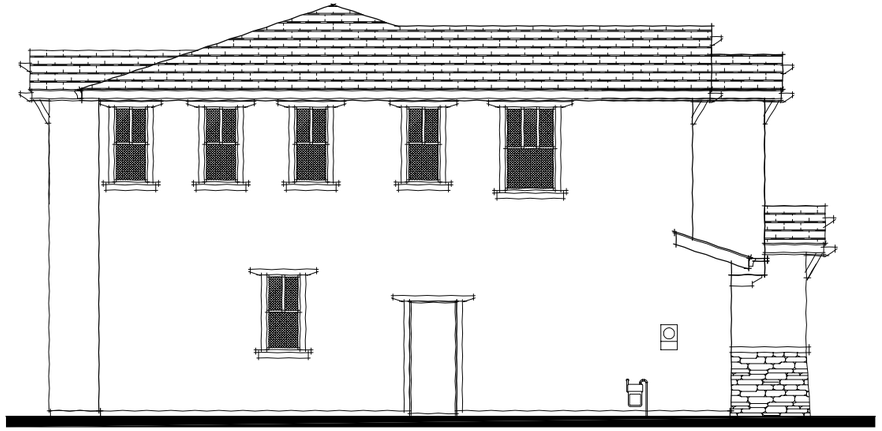


Rear Elevation

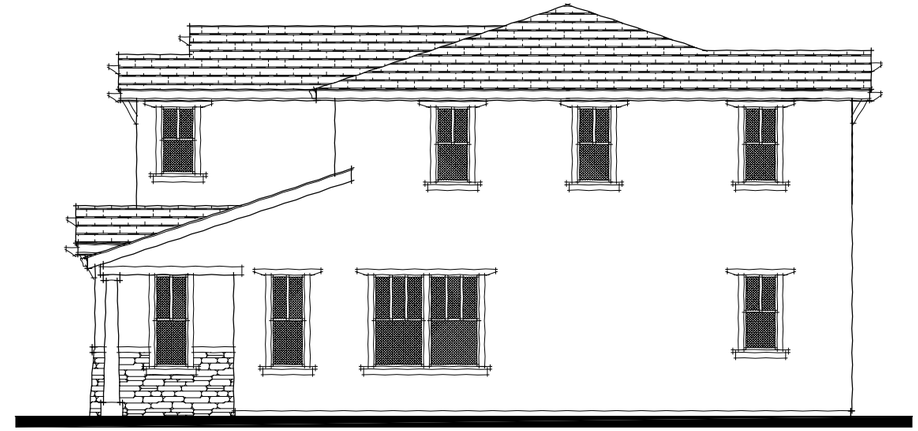


Roof Plan

0 8
4 16



Left Elevation



Right Elevation

PLAN 2A ALT
WRAP ELEVATIONS
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1' DATE: February 25th, 2008

KTGY GROUP, INC.
ARCHITECTURE PLANNING
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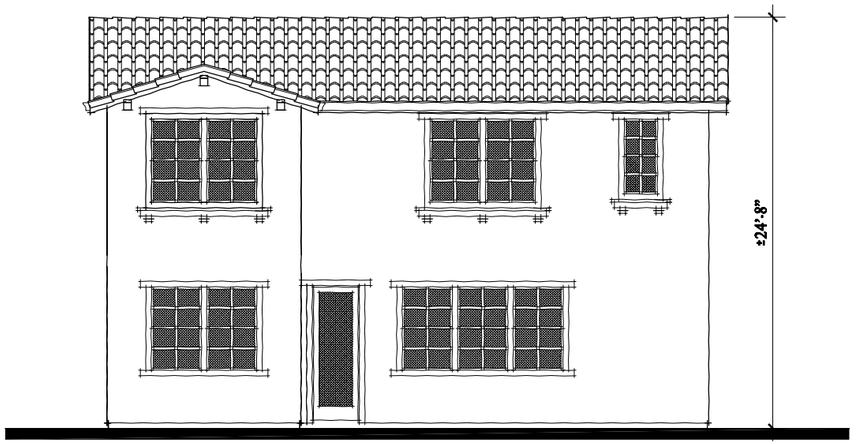
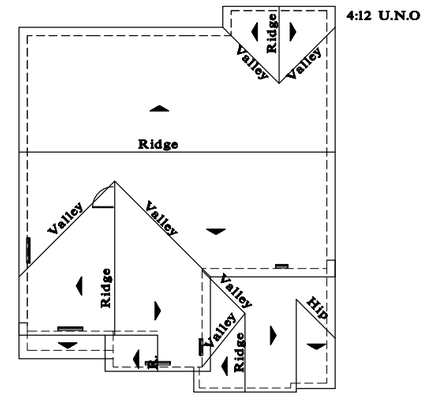
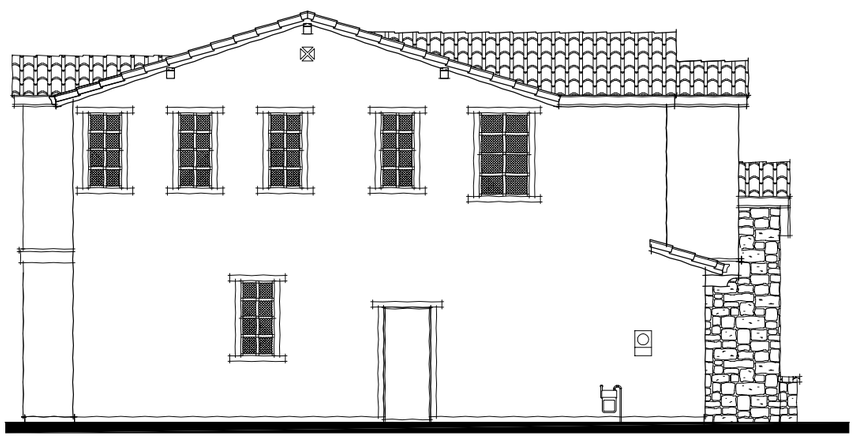


Rear Elevation

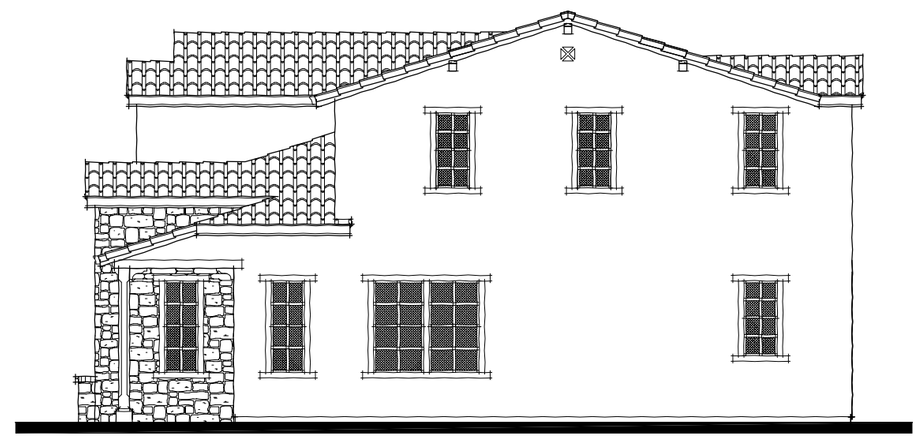


Roof Plan

0 8
4 16



Left Elevation



Right Elevation

PLAN 2B ALT
WRAP ELEVATIONS
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1'

DATE: February 25th, 2008

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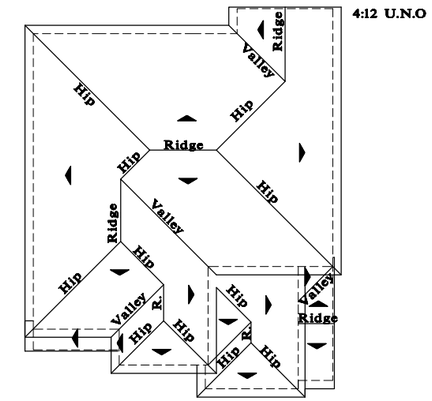
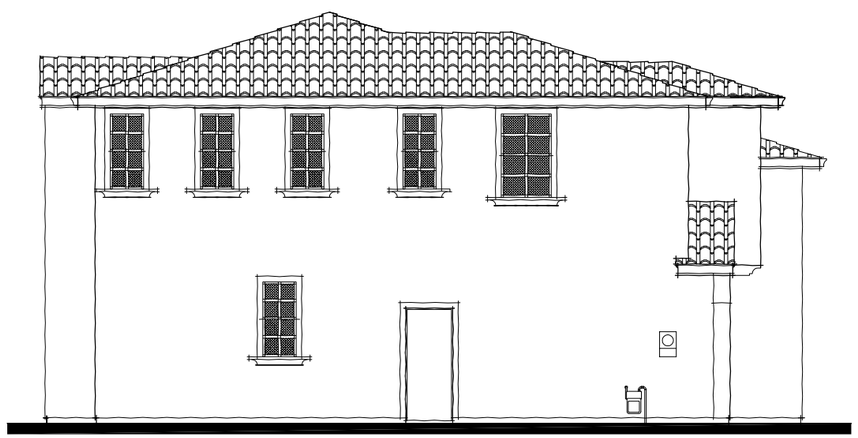
Rear Elevation



Roof Plan

0 8
4 16



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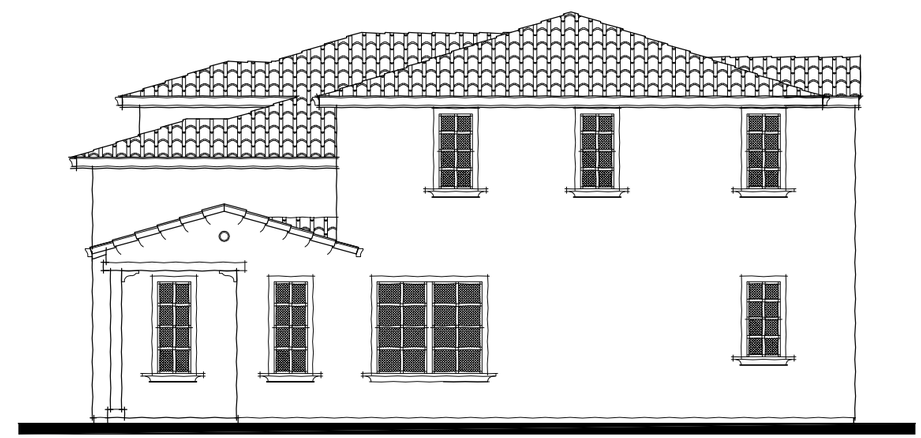

Right Elevation

PLAN 2C ALT
WRAP ELEVATIONS
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1'

DATE: February 25th, 2008

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SHEET NUMBER
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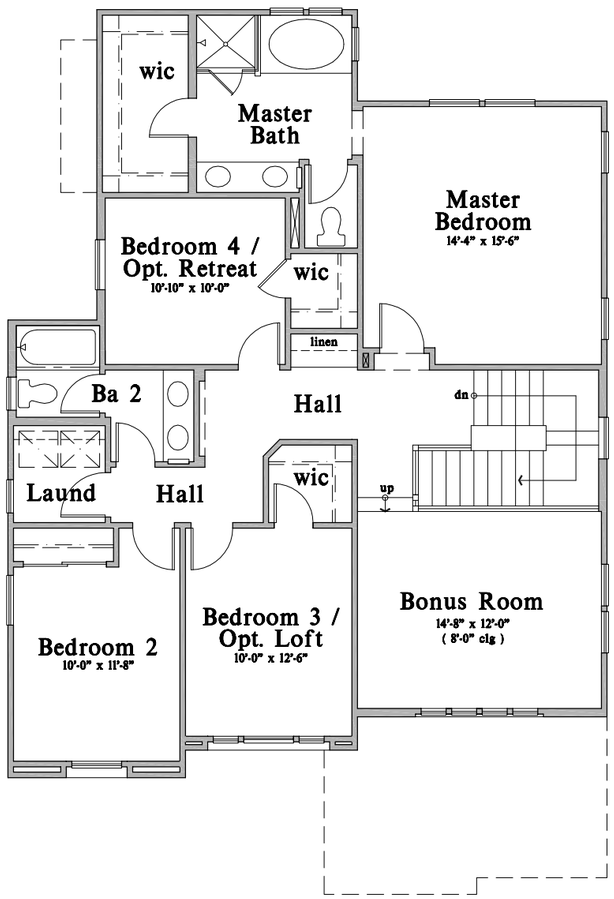
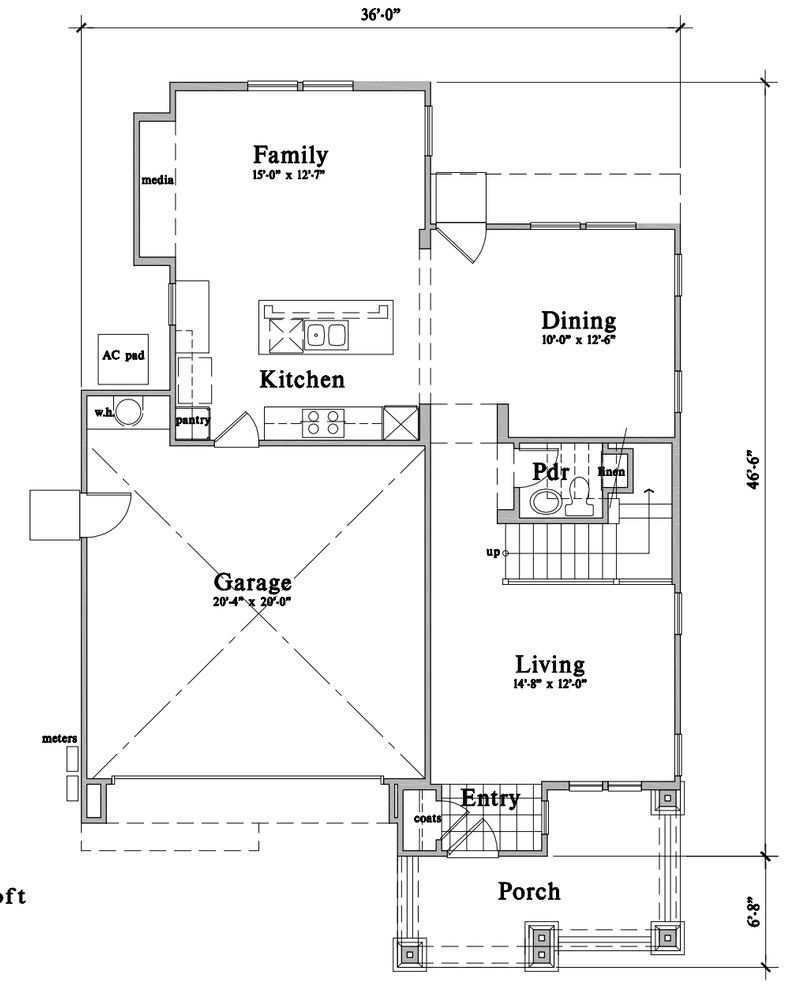


Second Floor

Floor Plan
4 Bedrooms
Bonus Room
Opt. Retreat / Opt. Loft
2 1/2 Bath
2227 Sq Ft



First Floor

PLAN 3
FLOOR PLAN
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1' DATE: February 25th, 2008

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3A CRAFTSMAN

CRAFTSMAN MATERIAL LEGEND

1. Flat Tile Roof
2. Stucco w/ Sand Finish
3. Stucco Finish Trim Surrounds
4. Board & Batten at Gable Ends
5. Tapered Porch Columns w/ Stone Veneer Base
6. Outlookers & Kickers
7. Shutters
8. Corbels w/ trowel finish stucco
9. Wood Railing
10. Wood Sectional Garage Door

TUSCAN MATERIAL LEGEND

1. "S" Tile Roof
2. Stucco w/ Sand Finish
3. Stone Veneer
4. Stucco Finish Trim Surrounds
5. Recessed Window w/ Metal Grate
6. Decorative 2" Recess at Gable End
7. Decorative Metal Pot Shelf
8. Corbels
9. Wood Sectional Garage Door

SPANISH MATERIAL LEGEND

1. "S" Tile Roof
2. Stucco w/ Sand Finish
3. Stucco Finish Trim Surrounds
4. Decorative Clay Pipes
5. Decorative Eave Corbels
6. Decorative Metal Pot Shelf
7. Shutters
8. Corbels
9. Wood Sectional Garage Door

3B TUSCAN

3C SPANISH

PLAN 3
FRONT ELEVATIONS
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1' DATE: February 25th, 2008

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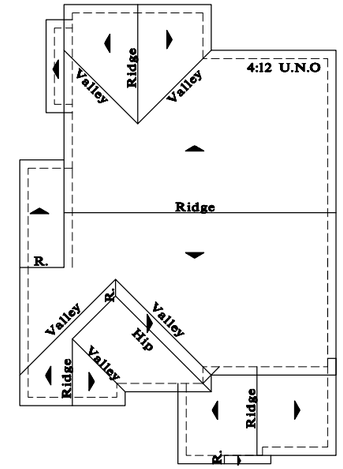
SHEET NUMBER
A-20

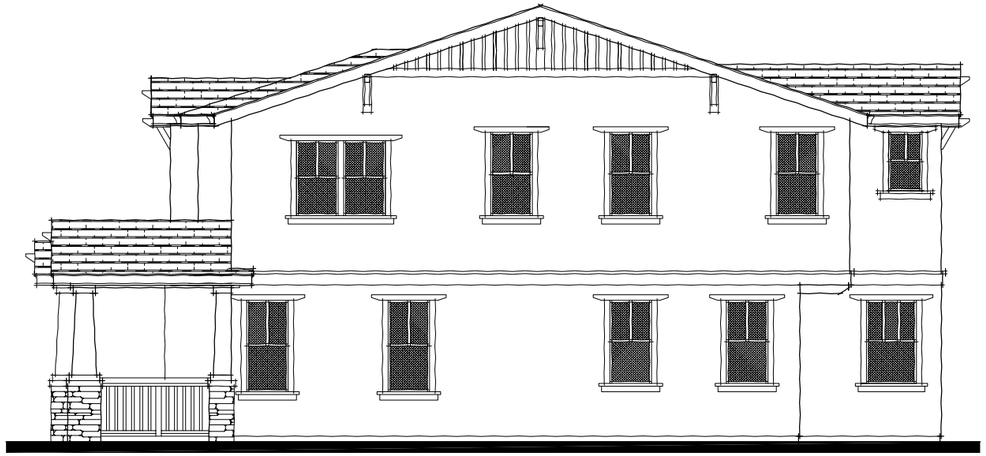
Rear Elevation



Roof Plan

0 8
4 16

Left Elevation



Right Elevation

PLAN 3A
WRAP ELEVATIONS
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1' DATE: February 25th, 2008

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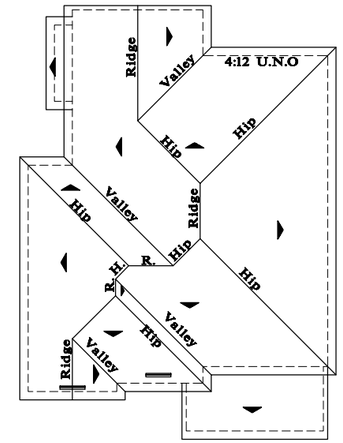
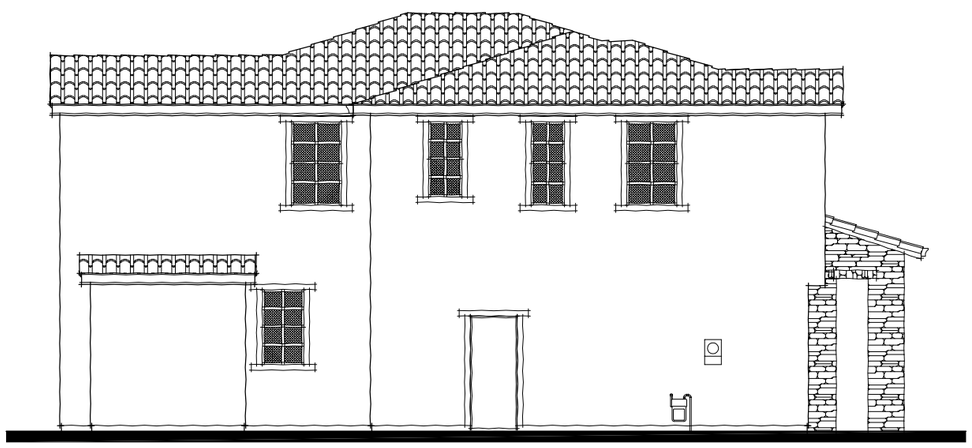
Rear Elevation

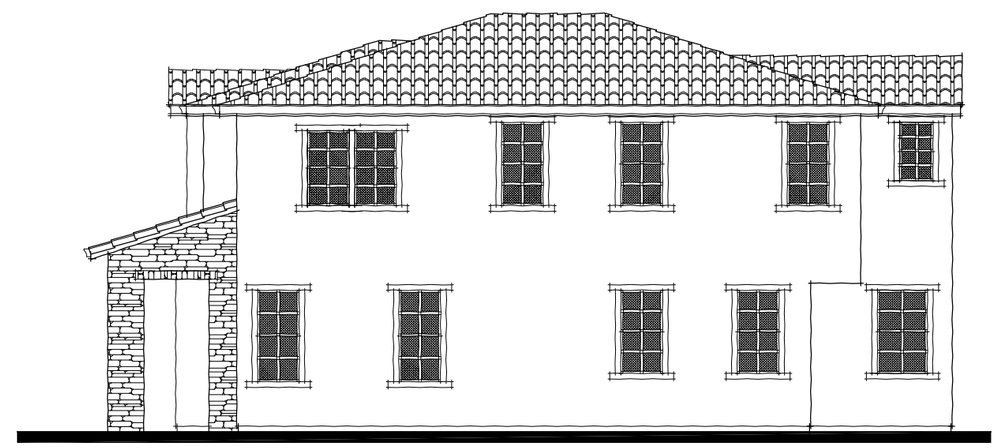


Roof Plan

0 8
4 16



Left Elevation



Right Elevation

PLAN 3B
WRAP ELEVATIONS
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1'

DATE: February 25th, 2008

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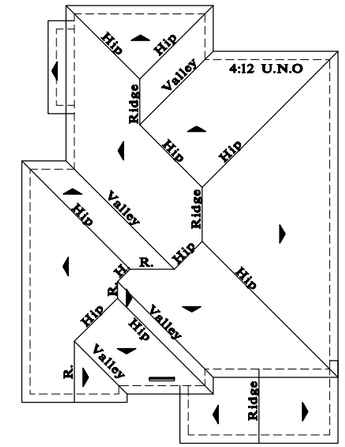
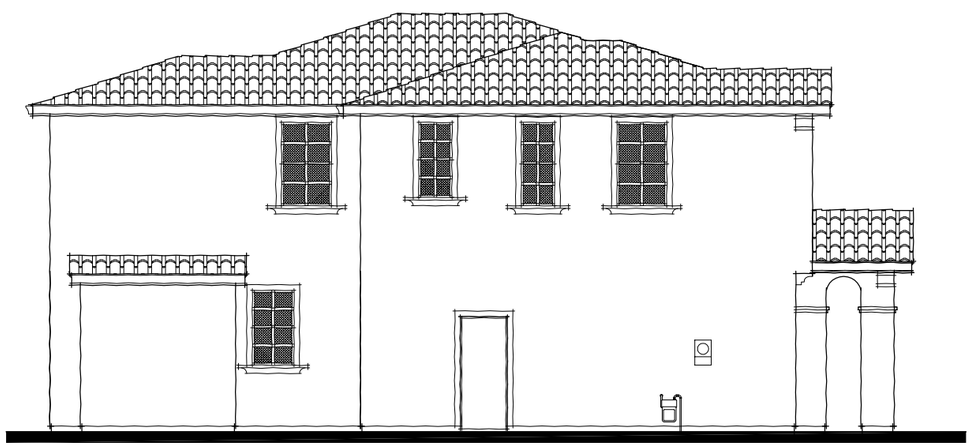
Rear Elevation

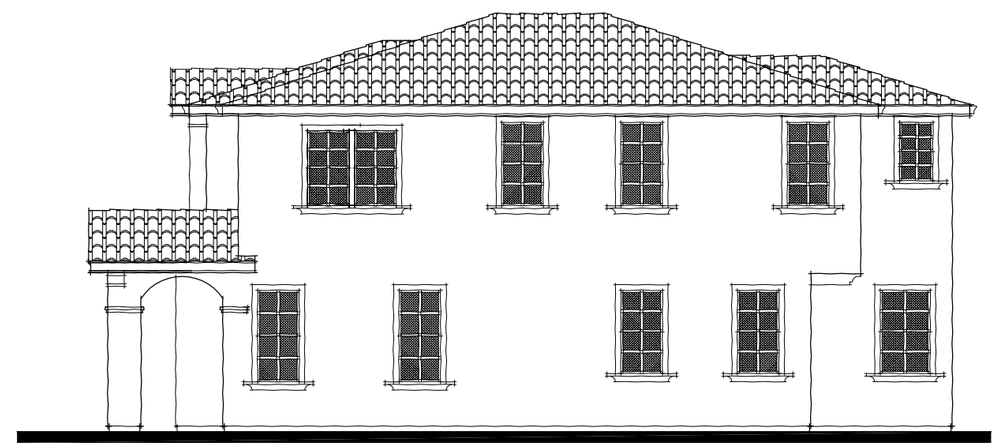


Roof Plan

0 8
4 16



Left Elevation



Right Elevation

PLAN 3C
WRAP ELEVATIONS
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1'

DATE: February 25th, 2008

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SHEET NUMBER
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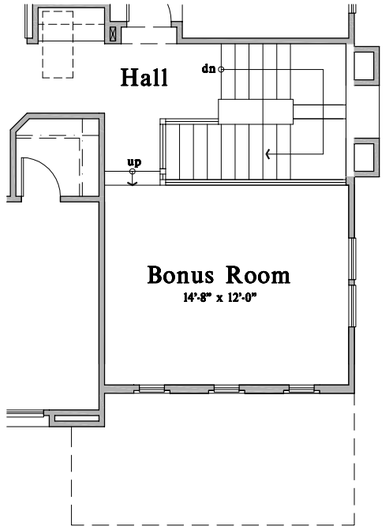
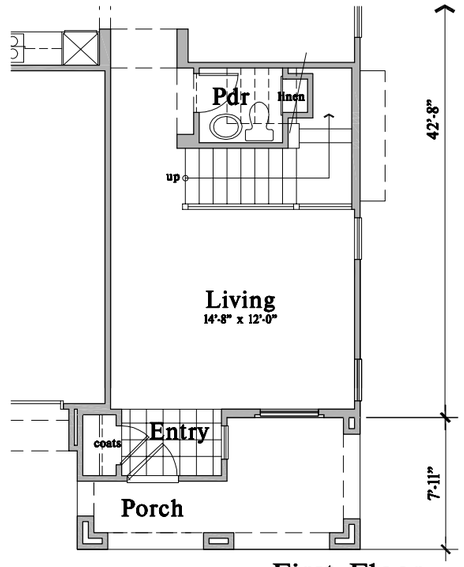
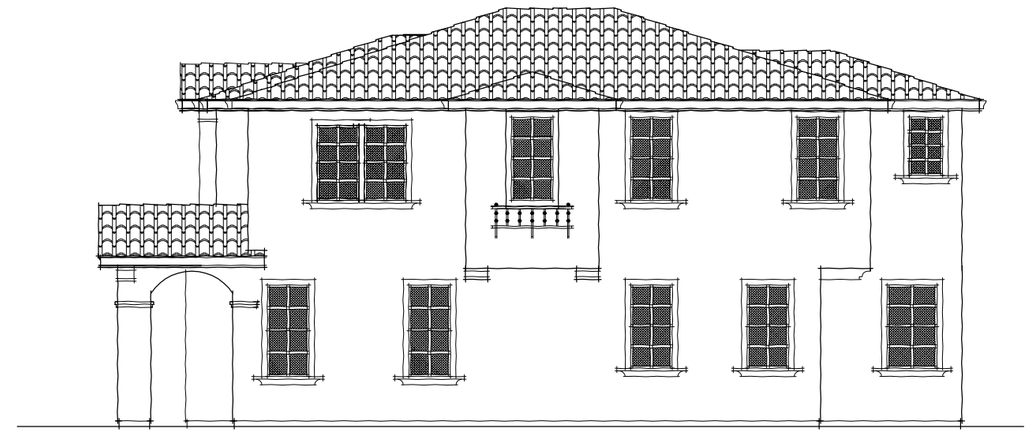


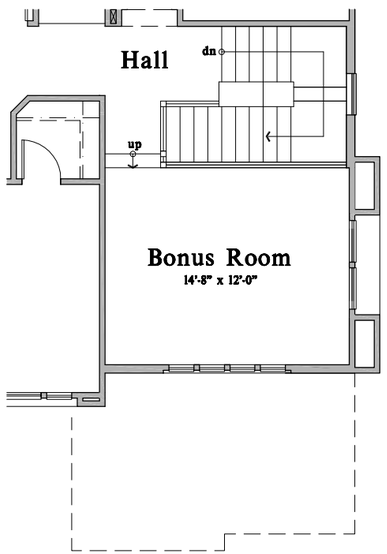
Second Floor



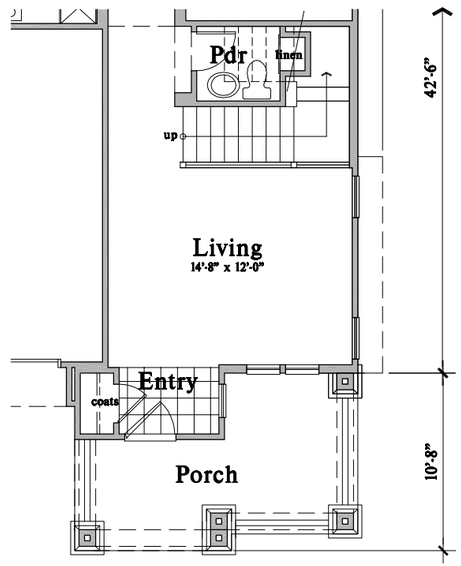
First Floor



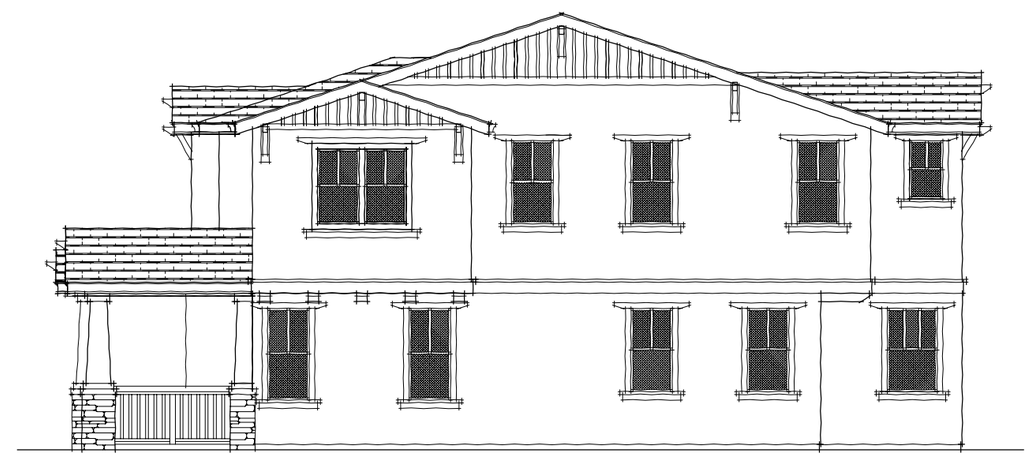
Right Elevation
Plan 3C Alt on Lot 43 only



Second Floor



First Floor



Right Elevation
Plan 3A Alt on Lot 1 only

PLAN 3 Alt
(Lots 1 & 43 only)
PARTIAL PLANS & ELEVATIONS

SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1'

DATE: February 25th, 2008

KTGY GROUP, INC.
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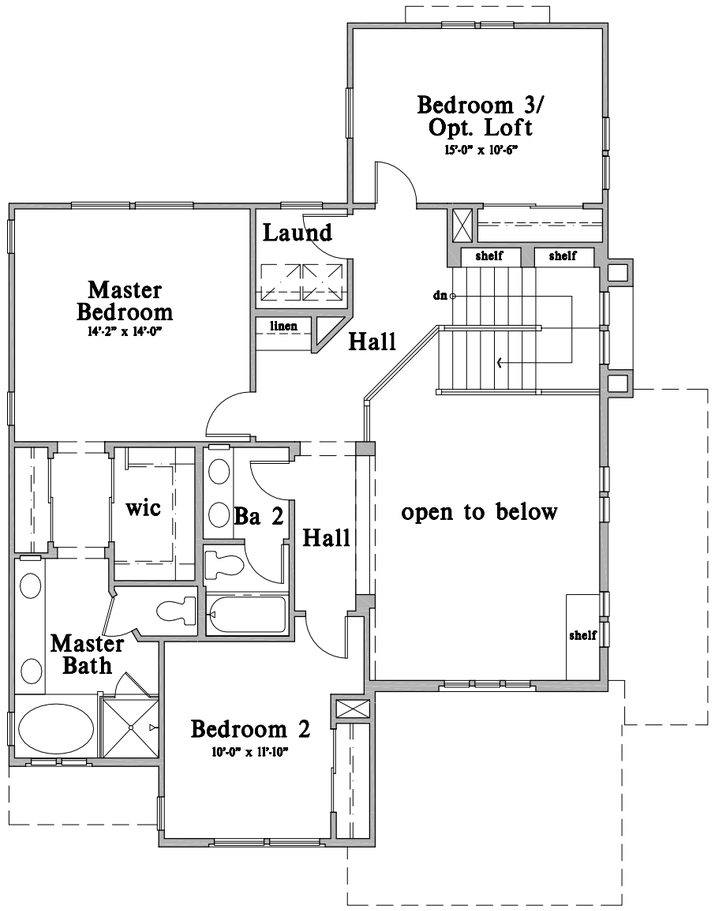
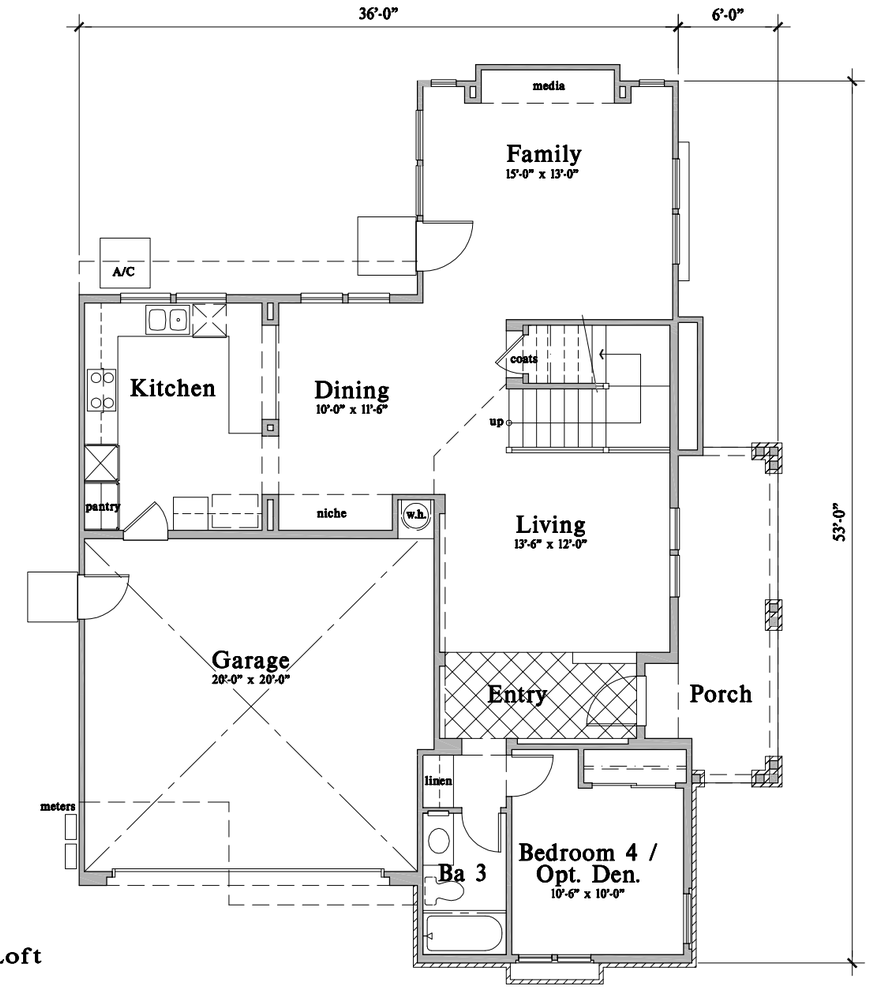


Second Floor



First Floor

Floor Plan
4 Bedrooms
Opt. Den. / Opt. Loft
3 Bath
2171 Sq Ft

PLAN 4
FLOOR PLAN
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1'

DATE: February 25th, 2008

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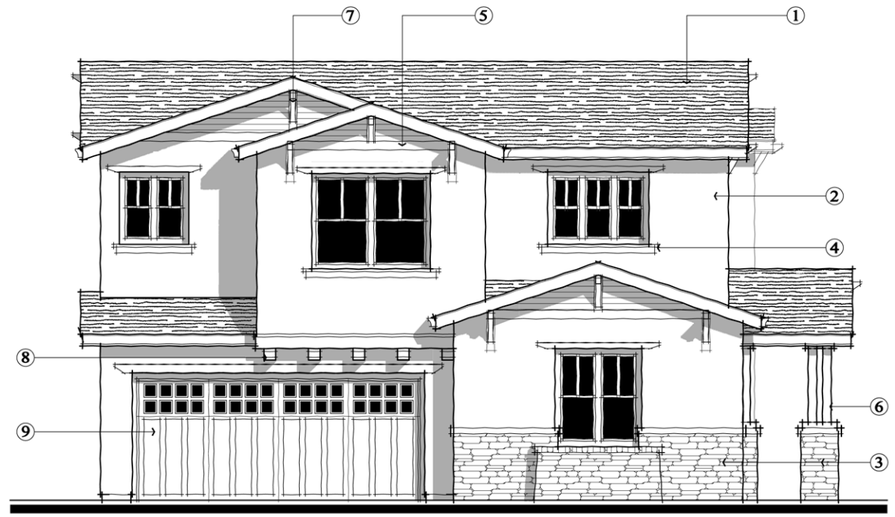


4A CRAFTSMAN

CRAFTSMAN MATERIAL LEGEND

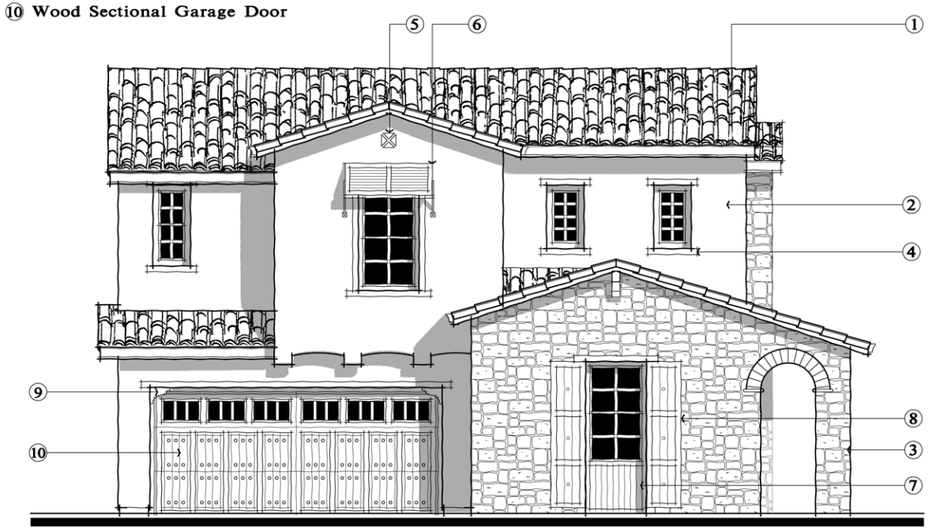
1. Flat Tile Roof
2. Stucco w/ Sand Finish
3. Stone Veneer
4. Stucco Finish Trim Surrounds
5. Cement Based Lap Siding
6. 6X6 Posts w/ Stone Veneer Base
7. Outlookers & Kickers
8. Corbels
9. Wood Sectional Garage Door

TUSCAN MATERIAL LEGEND

1. "S" Tile Roof
2. Stucco w/ Sand Finish
3. Stone Veneer
4. Stucco Finish Trim Surrounds
5. Decorative 2" Recess at Gable End
6. Decorative Metal Awning
7. Enhanced Sill Detail
8. Shutters
9. Corbels
10. Wood Sectional Garage Door

SPANISH MATERIAL LEGEND

1. "S" Tile Roof
2. Stucco w/ Sand Finish
3. Stucco Finish Trim Surrounds
4. Decorative 2" Recess at Gable Ends
5. Enhanced Sill Detail
6. Shutters
7. Rafter Tails
8. Wood Sectional Garage Door



4B TUSCAN

4C SPANISH

PLAN 4
FRONT ELEVATIONS
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1'

DATE: February 25th, 2008

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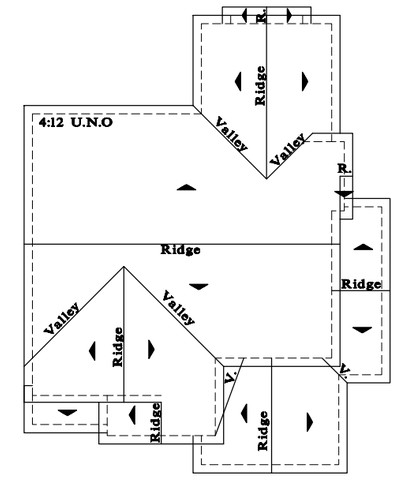
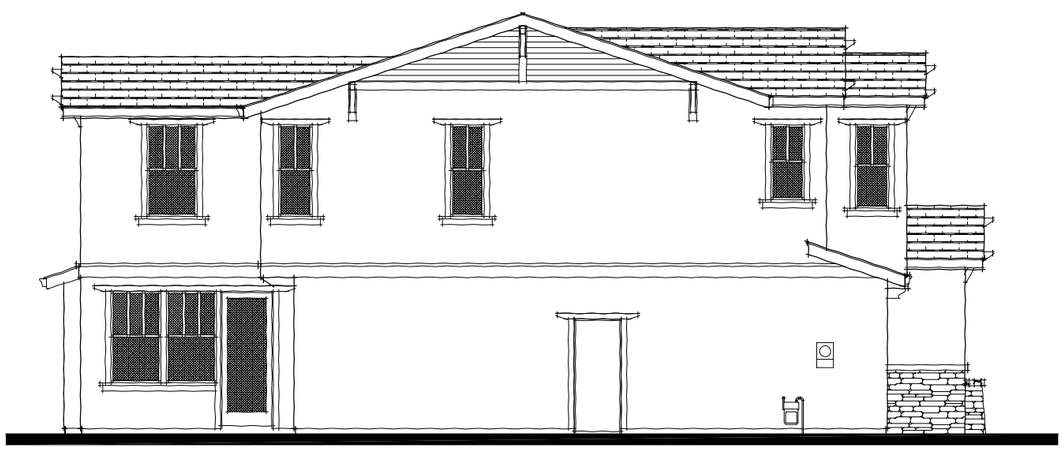
SHEET NUMBER
A-26

Rear Elevation



Roof Plan

0 8
4 16



Left Elevation

Right Elevation
(corner)

PLAN 4A
WRAP ELEVATIONS
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1' DATE: February 25th, 2008

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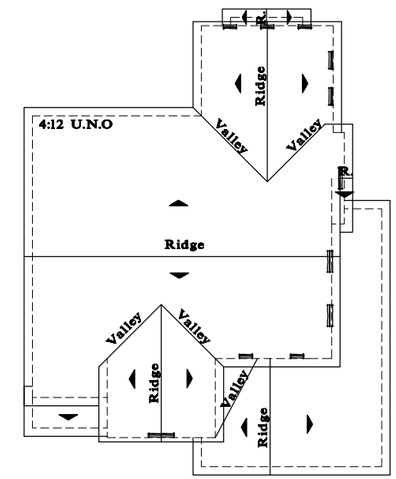
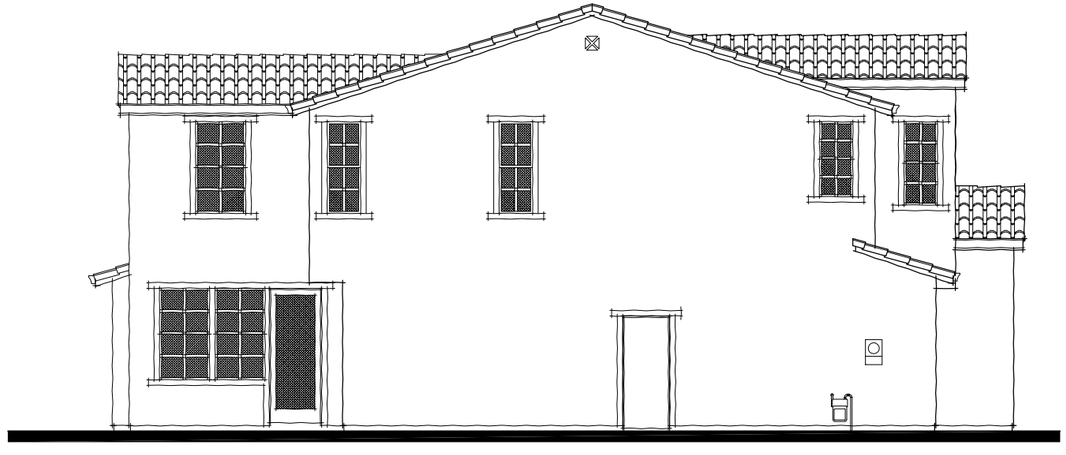
SHEET NUMBER
A-27

Rear Elevation

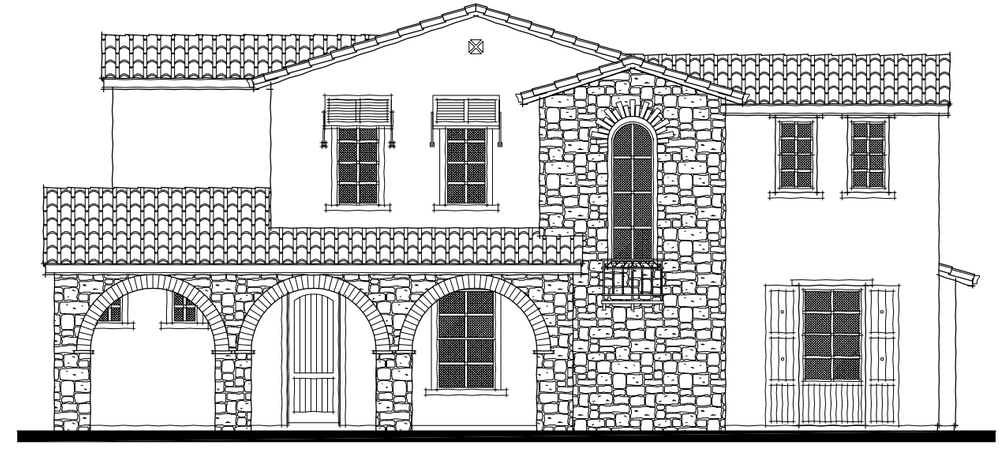


Roof Plan

0 8
4 16



Left Elevation



Right Elevation
(corner)

PLAN 4B
WRAP ELEVATIONS
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1' DATE: February 25th, 2008

KTGY GROUP, INC.
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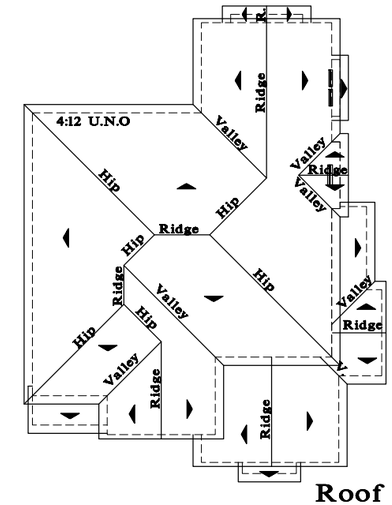
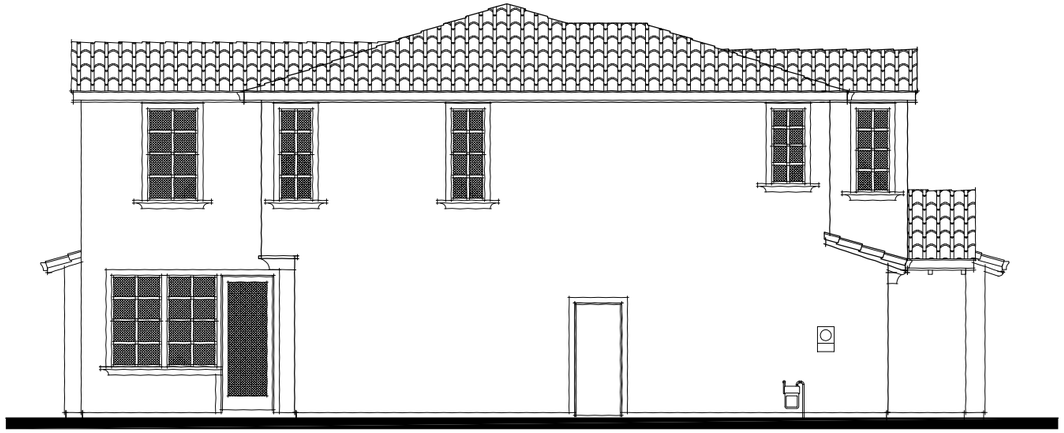
A-28

Rear Elevation



Roof Plan

0 8
4 16



Left Elevation

Right Elevation
(corner)

PLAN 4C
WRAP ELEVATIONS
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1'

DATE: February 25th, 2008

KTGY GROUP, INC.
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SHEET NUMBER
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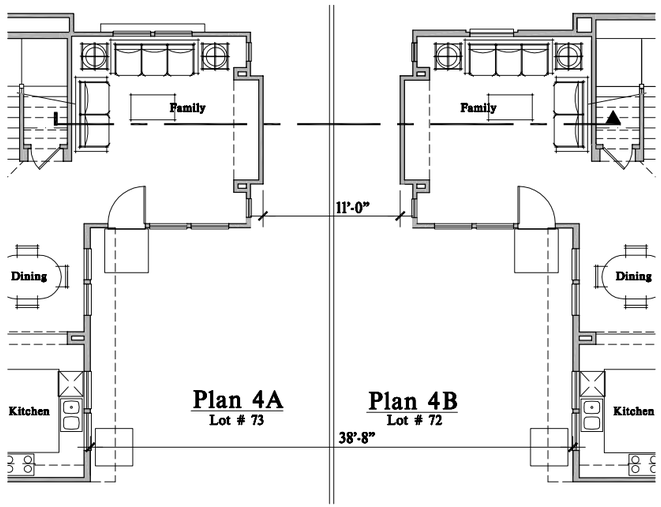
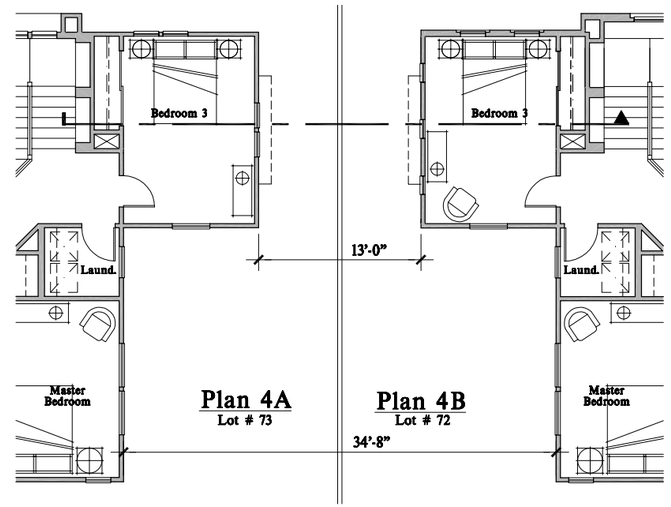
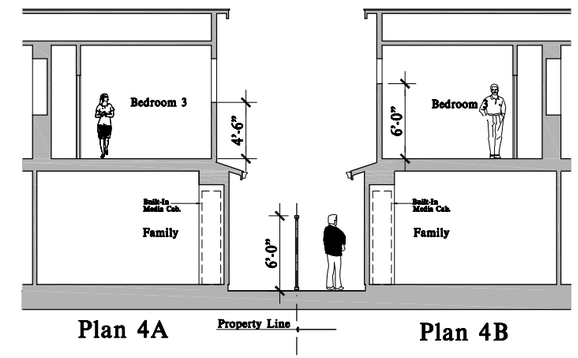
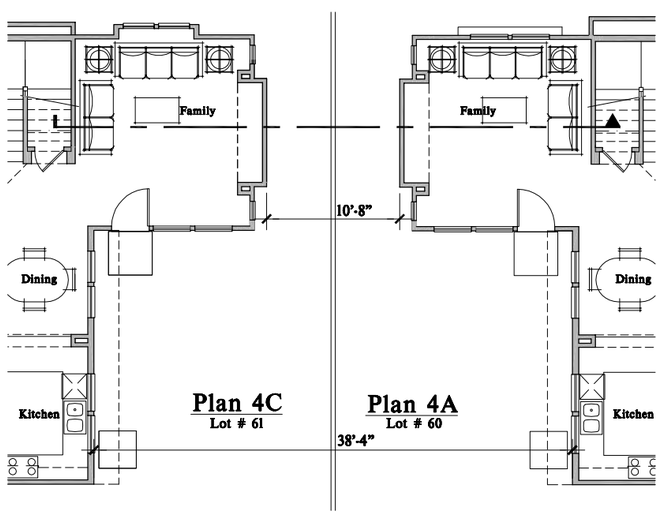


First Floor

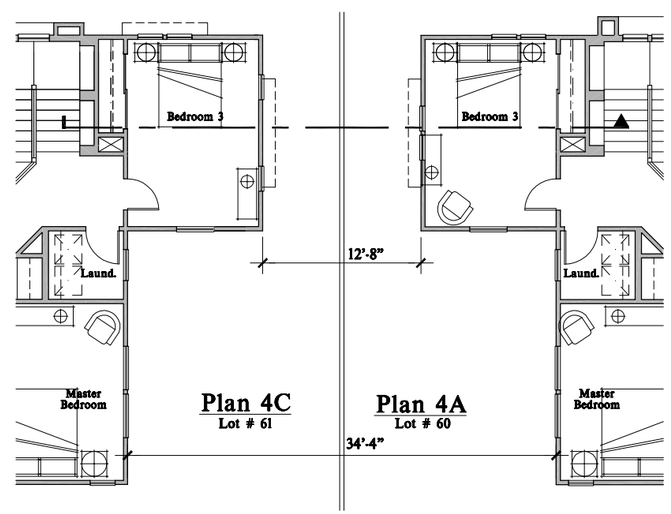


Second Floor

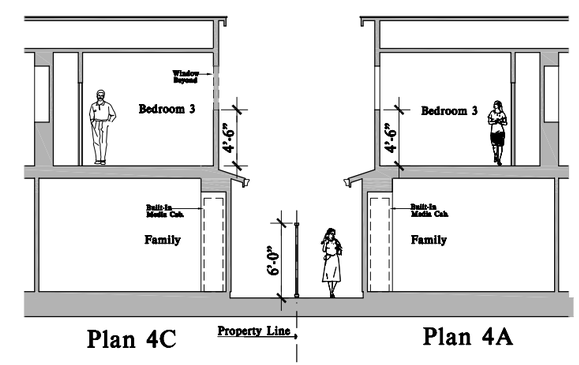




First Floor



Second Floor



PRIVACY STUDY 1

SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 3/16" = 1' DATE: FEBRUARY 25th, 2008

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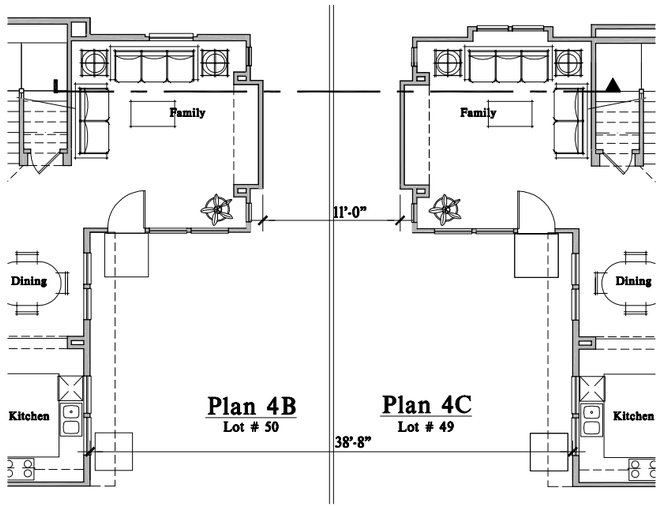
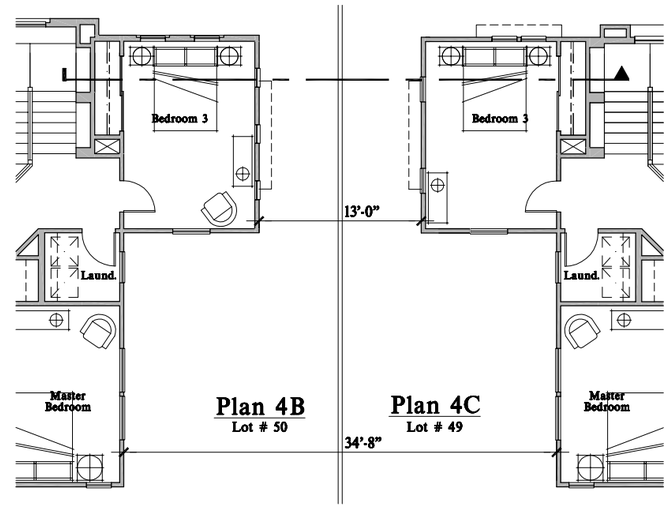
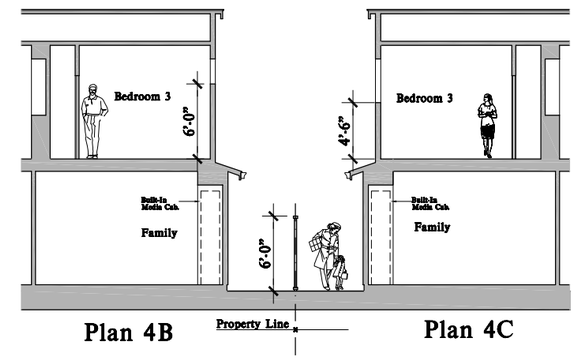
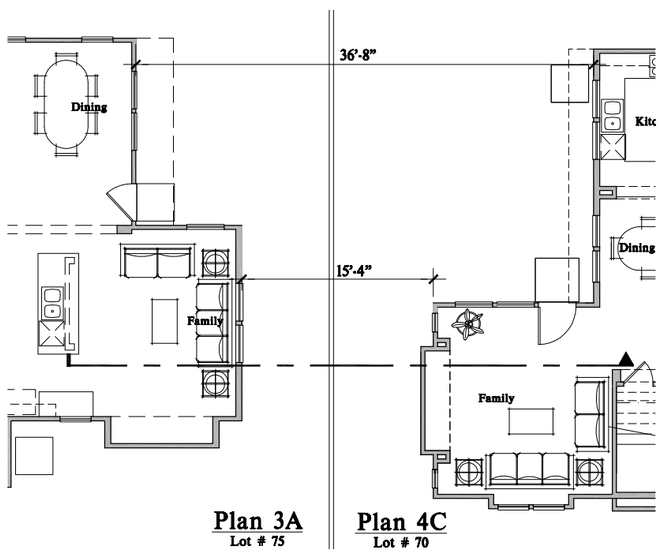


First Floor

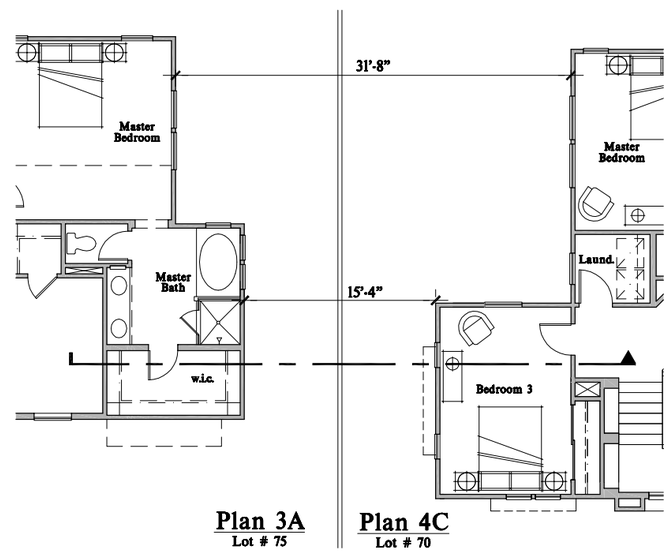


Second Floor

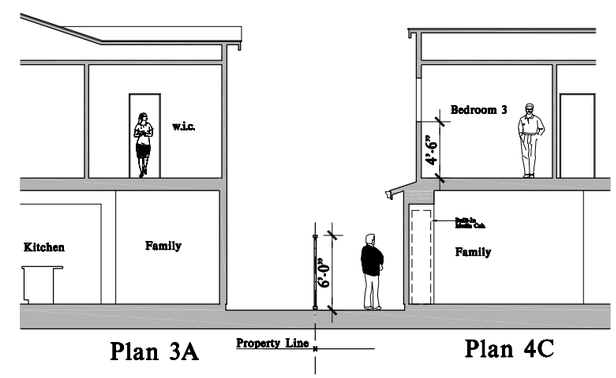




First Floor



Second Floor



THE MISSION PEAK COMPANY

PRIVACY STUDY 2

SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

0' 4' 12' 16'

SCALE: 3/16" = 1' DATE: FEBRUARY 25th, 2008

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SHEET NUMBER
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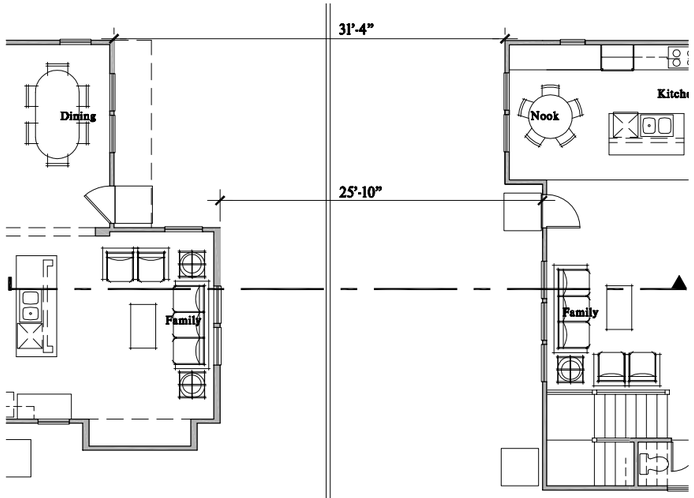
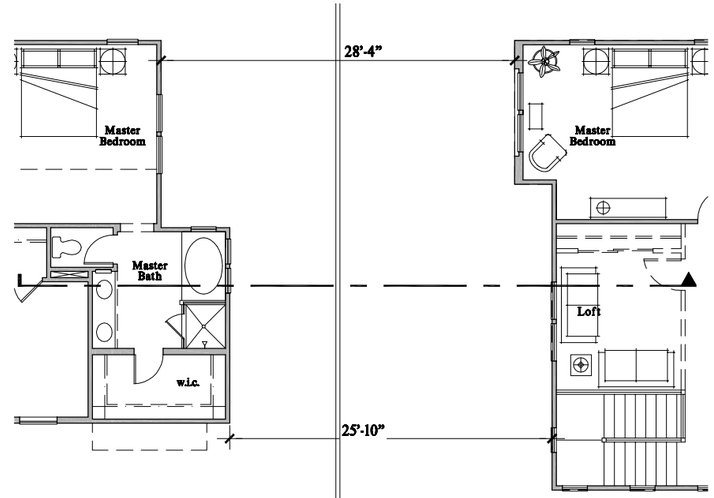


Plan 3A
Lot # 64

Plan 2A alt
Lot # 57

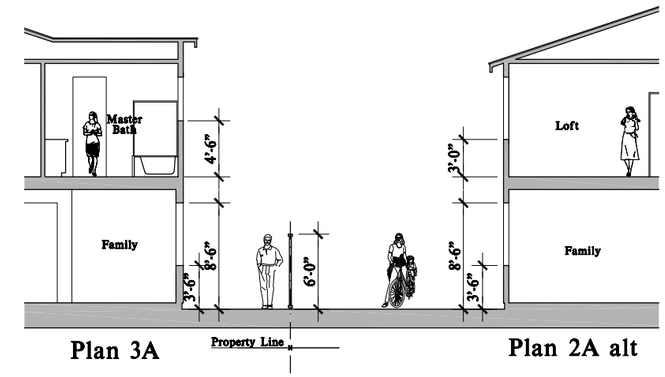
First Floor



Plan 3A
Lot # 64

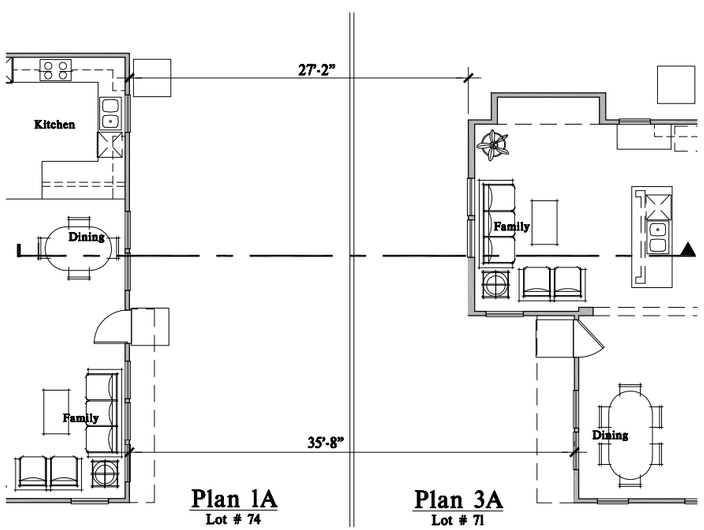
Plan 2A alt
Lot # 57

Second Floor



Plan 3A

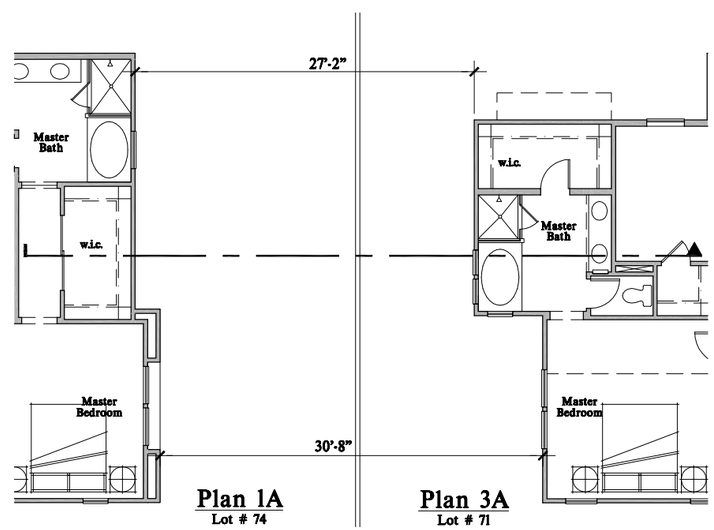
Plan 2A alt



Plan 1A
Lot # 74

Plan 3A
Lot # 71

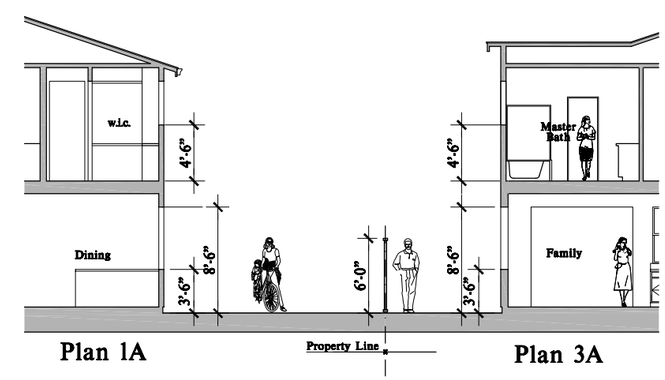
First Floor



Plan 1A
Lot # 74

Plan 3A
Lot # 71

Second Floor



Plan 1A

Plan 3A

PRIVACY STUDY 3

SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 3/16" = 1' DATE: FEBRUARY 25th, 2008

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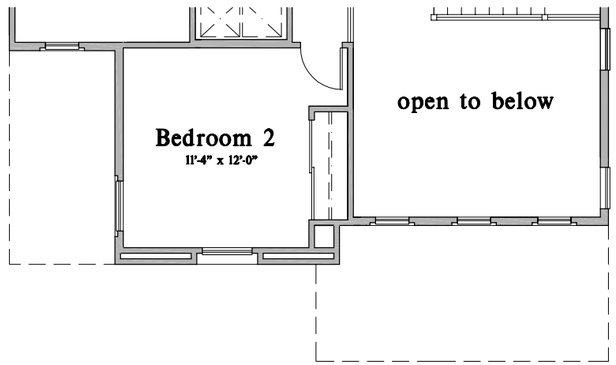
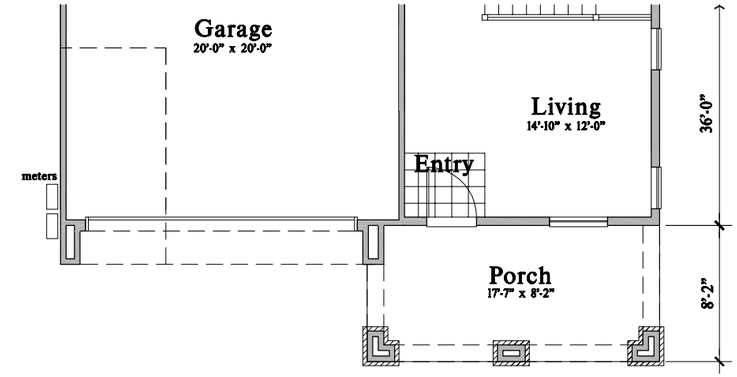
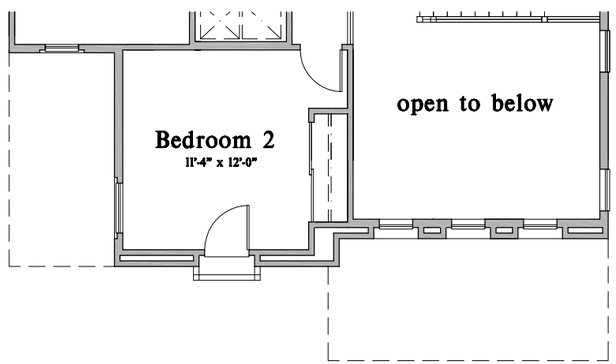


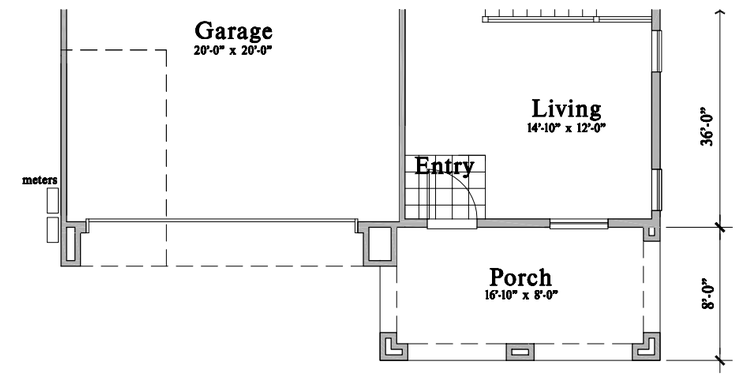
Second Floor
Plan 1B



First Floor
Plan 1B



Second Floor
Plan 1C



First Floor
Plan 1C

PLAN 1 "B" & "C" PARTIAL FLOOR PLANS

SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1'

DATE: February 25th, 2008

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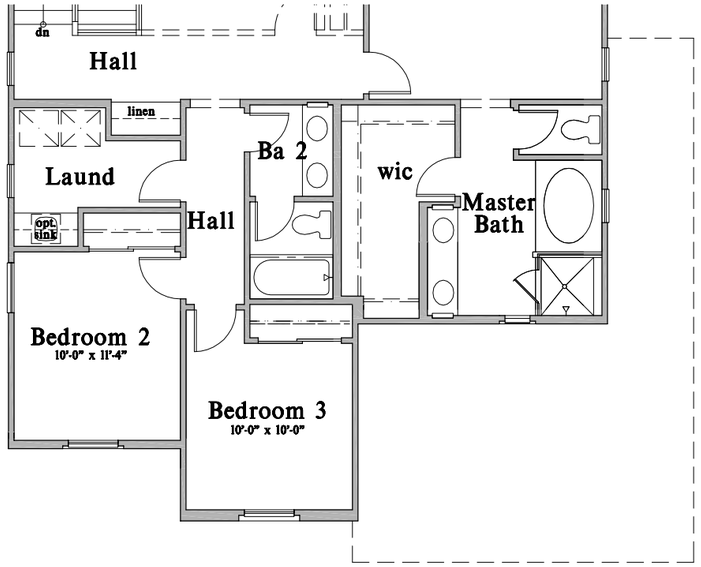
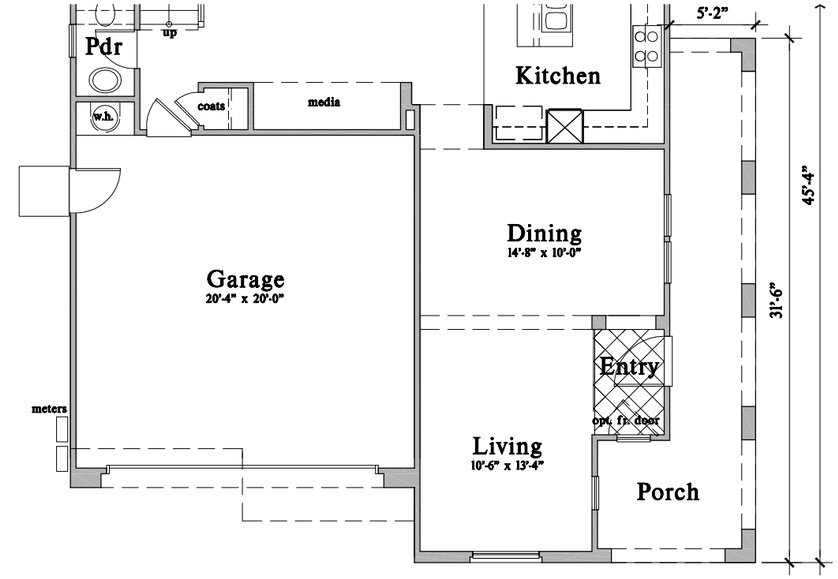
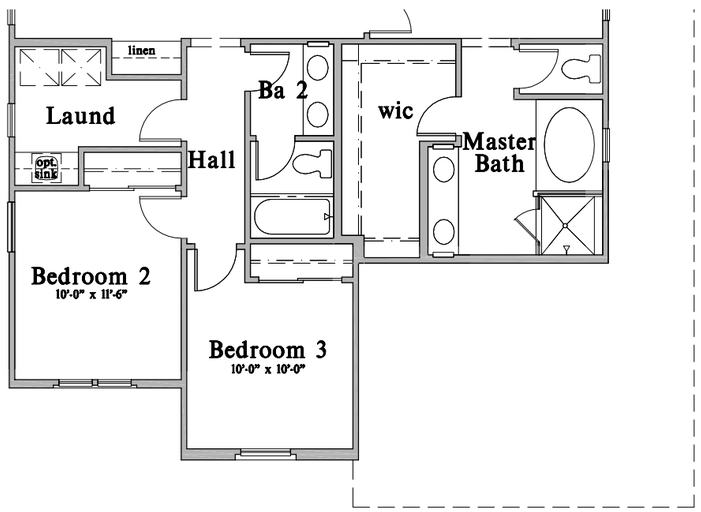


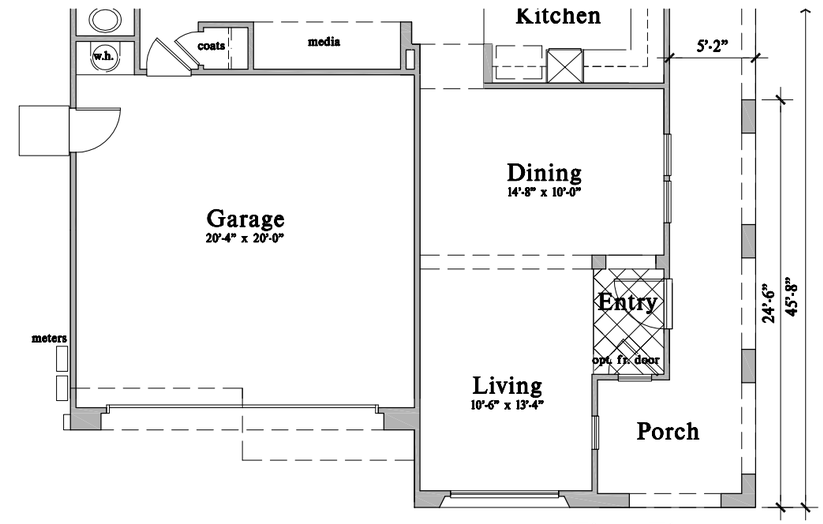
Second Floor
Plan 2B



First Floor
Plan 2B



Second Floor
Plan 2C



First Floor
Plan 2C

PLAN 2 "B" & "C" PARTIAL FLOOR PLANS

SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1'

DATE: February 25th, 2008

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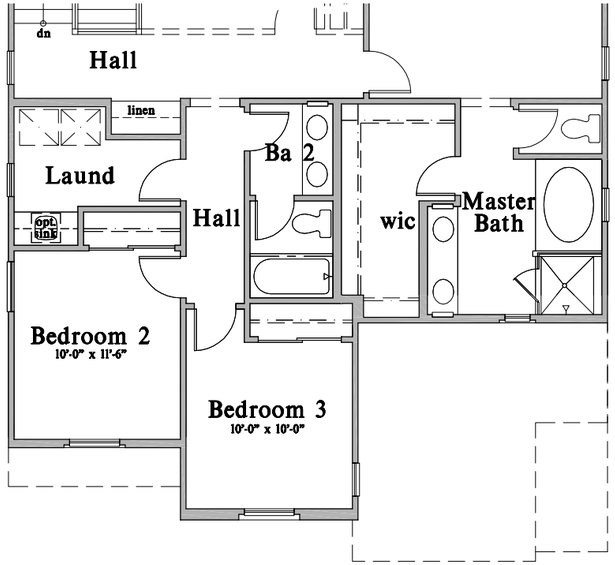
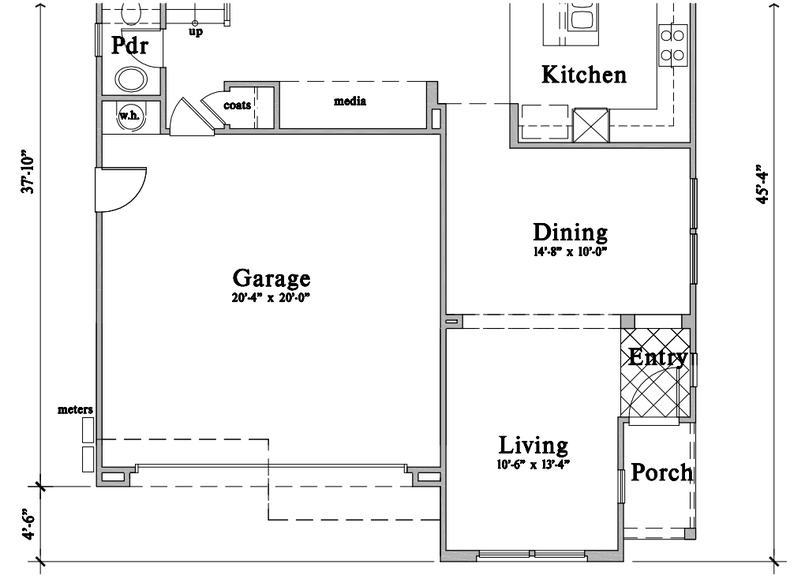
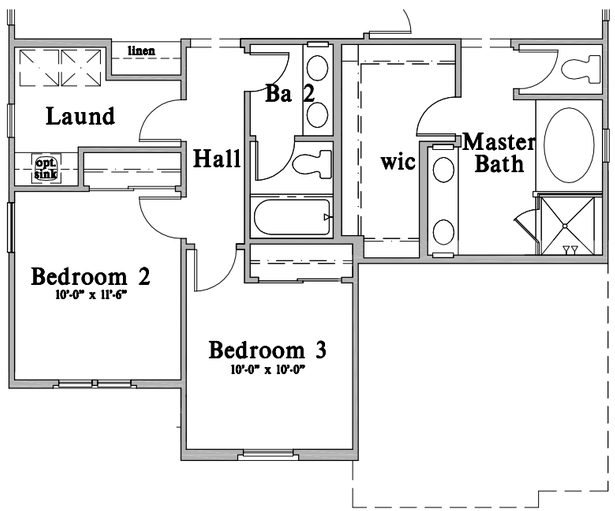


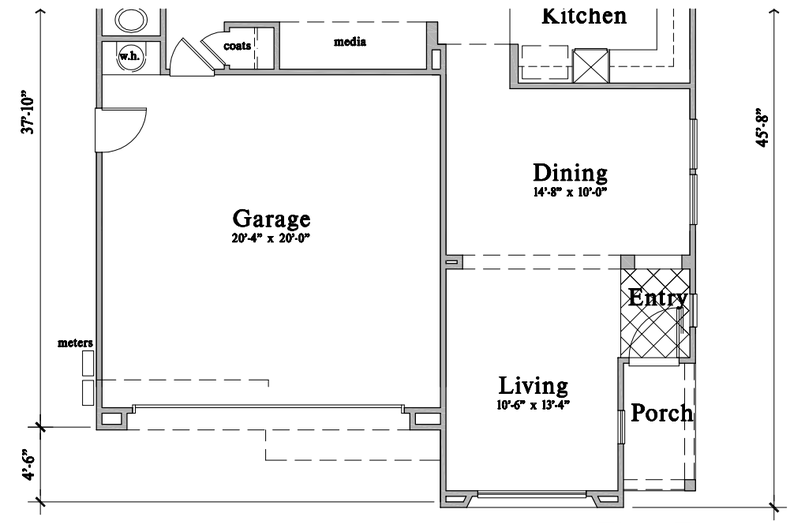
Second Floor
Plan 2alt B



First Floor
Plan 2alt B



Second Floor
Plan 2alt C



First Floor
Plan 2alt C

PLAN 2 ALT "B" & "C" PARTIAL FLOOR PLANS

SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1'

DATE: February 25th, 2008

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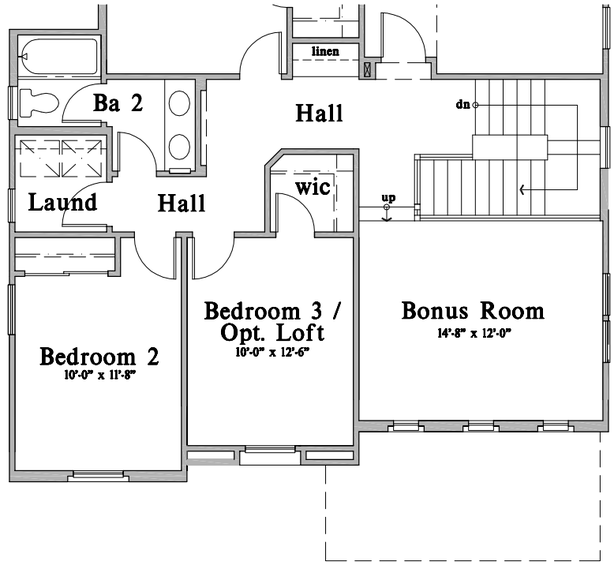
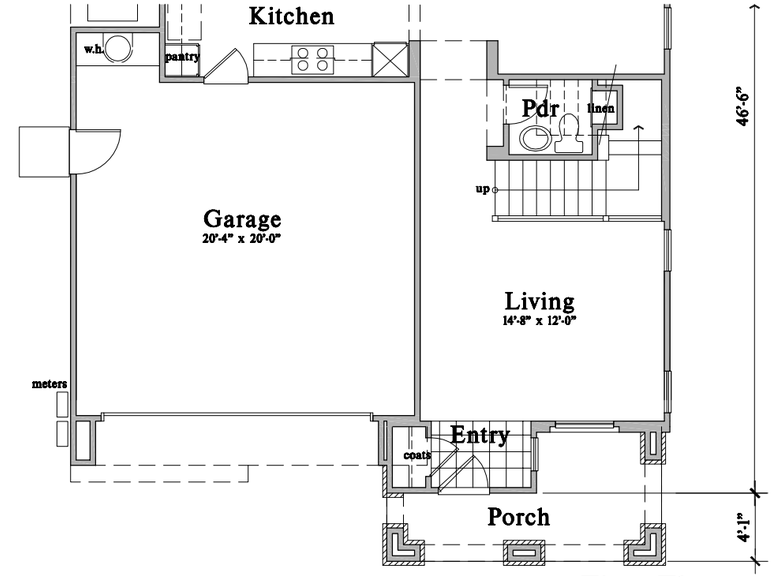
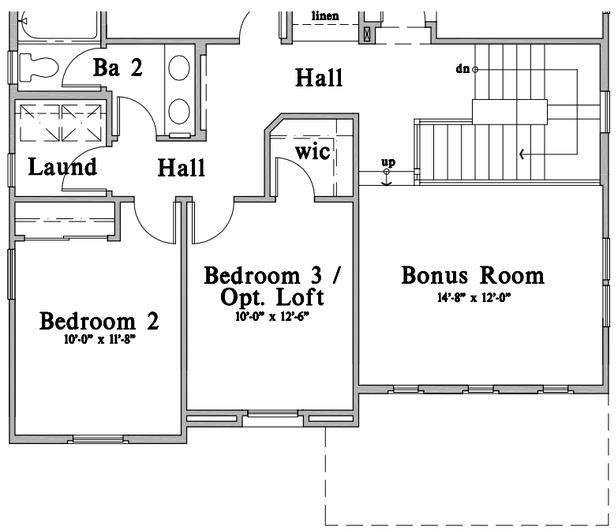


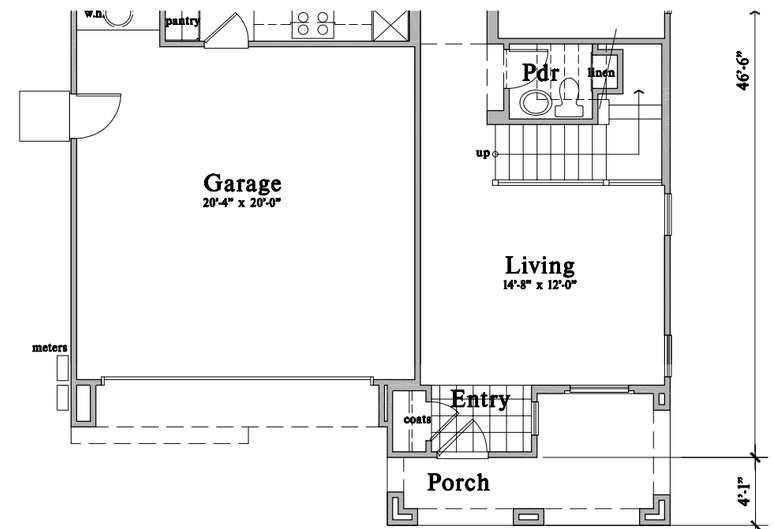
Second Floor
Plan 3B



First Floor
Plan 3B



Second Floor
Plan 3C



First Floor
Plan 3C

PLAN 3 "B" & "C" PARTIAL FLOOR PLANS

SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1'

DATE: February 25th, 2008

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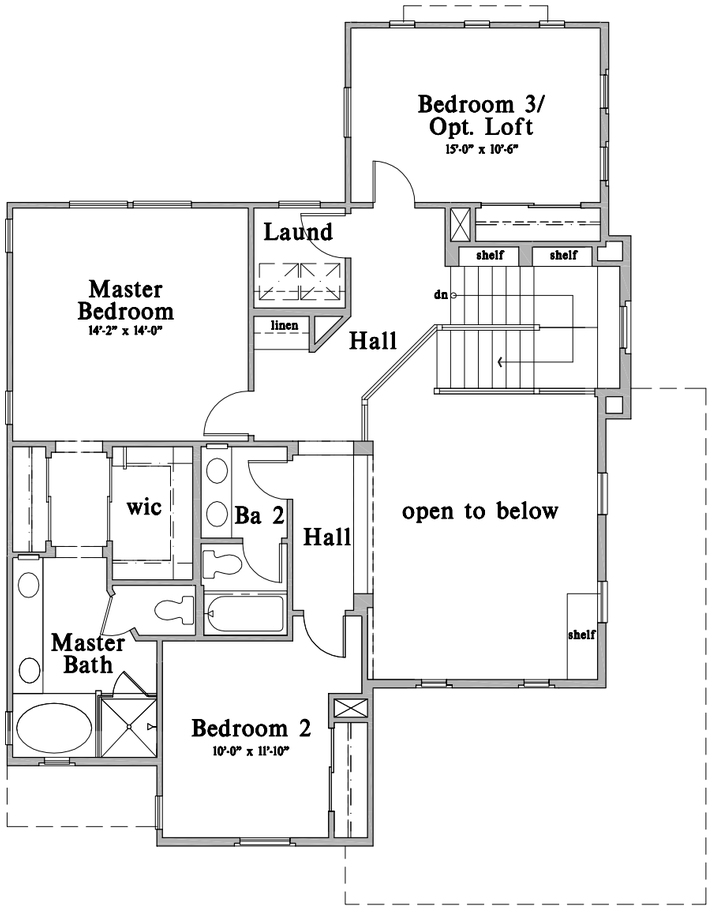
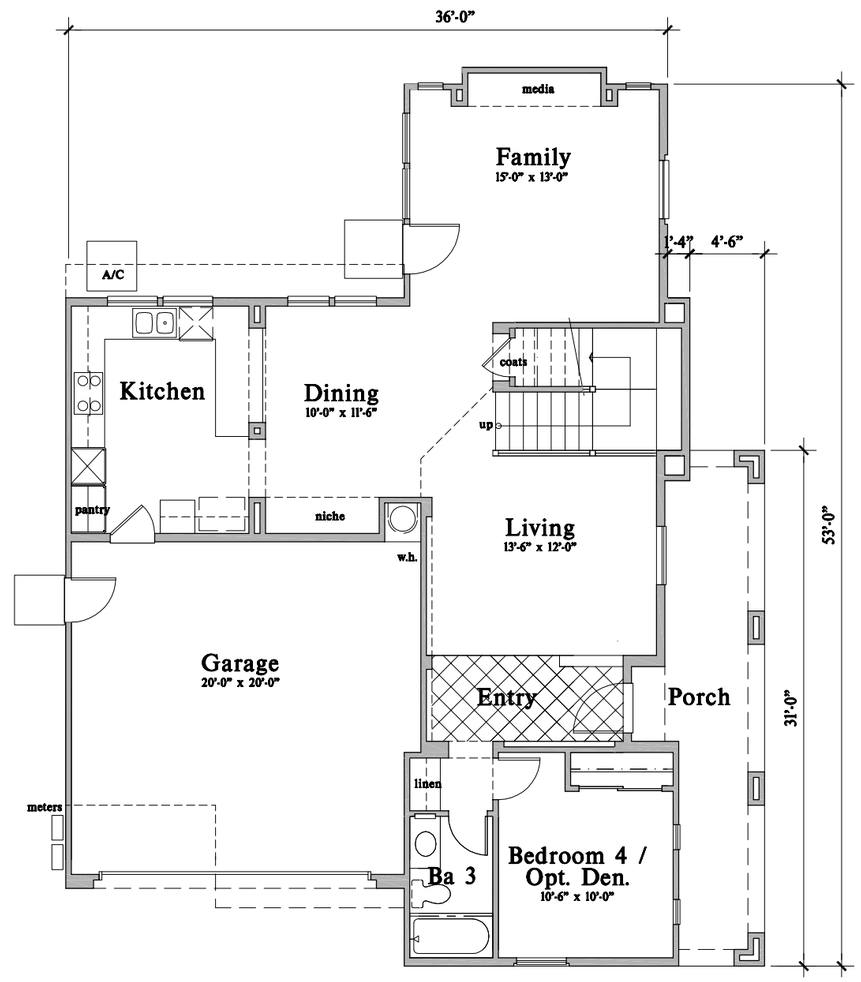
SHEET NUMBER
A-36



Second Floor
Plan 4B



First Floor
Plan 4B

PLAN 4 "B"
FLOOR PLANS

SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1'

DATE: February 25th, 2008

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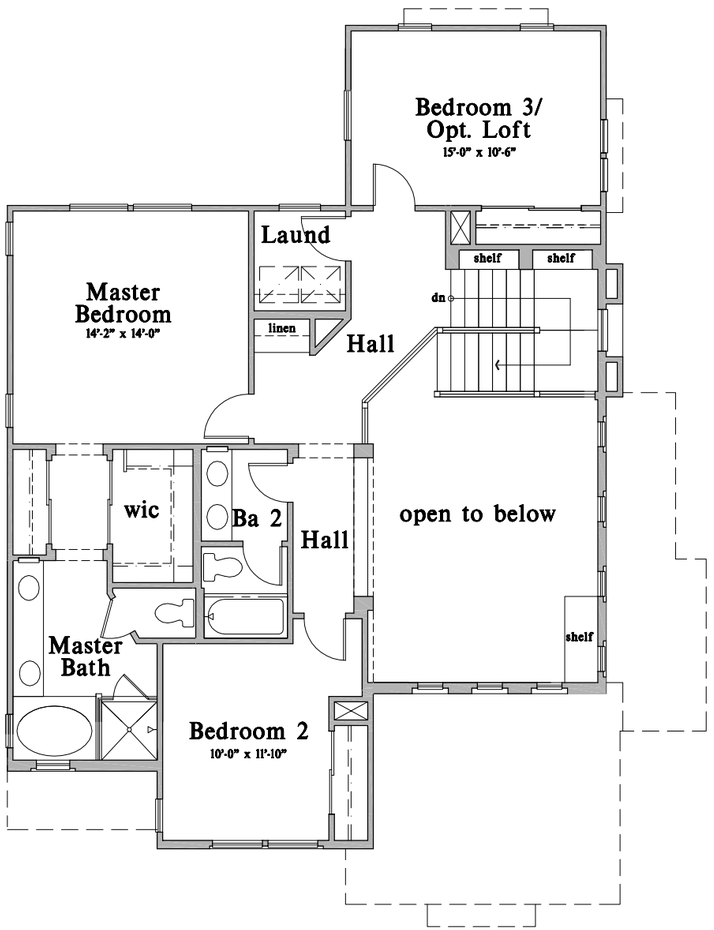
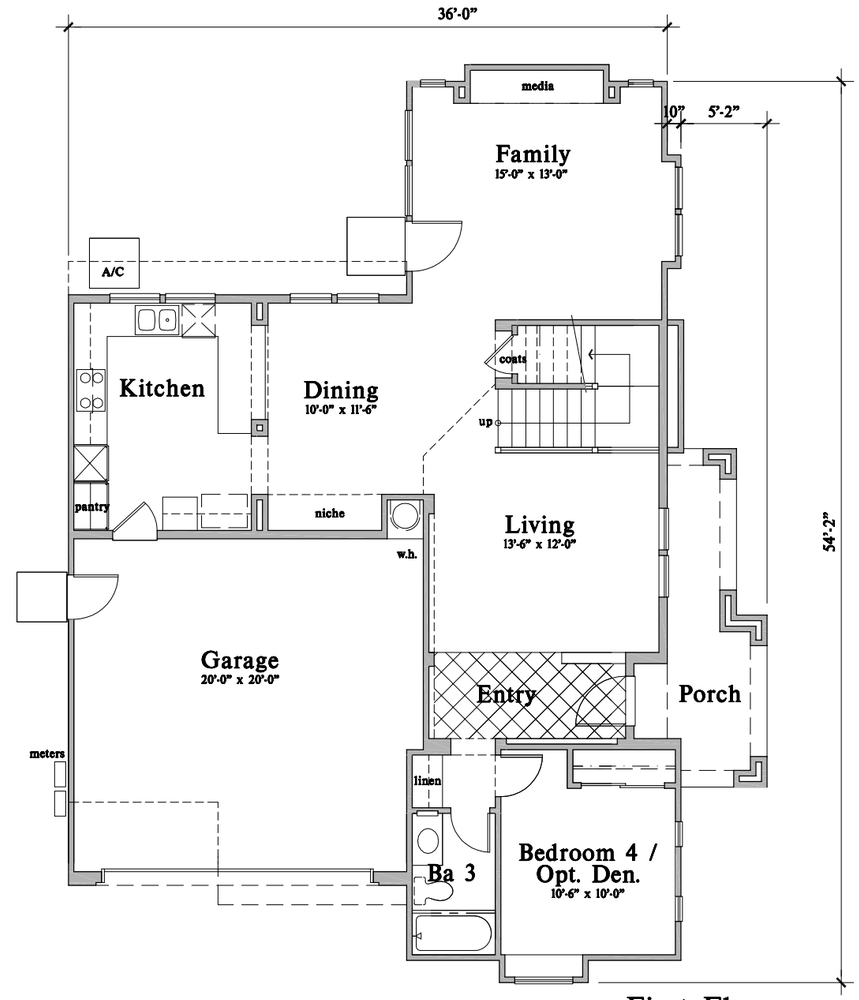


Second Floor
Plan 4C



First Floor
Plan 4C

PLAN 4 "C"
FLOOR PLANS
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

THE MISSION PEAK COMPANY

0' 4' 12' 16'

SCALE: 1/4" = 1'

DATE: February 25th, 2008

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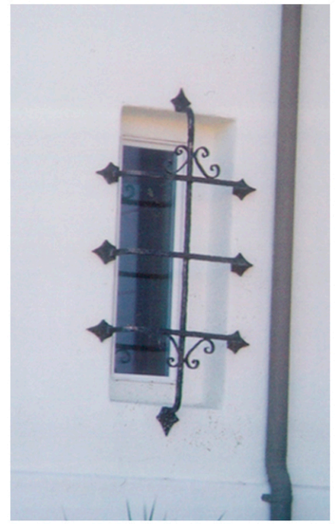
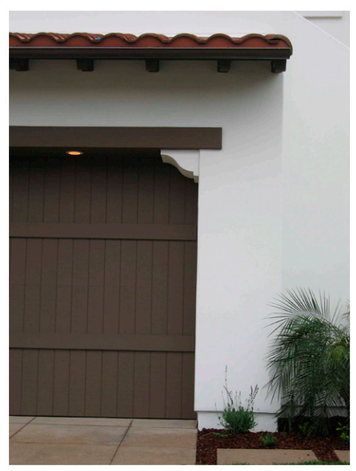
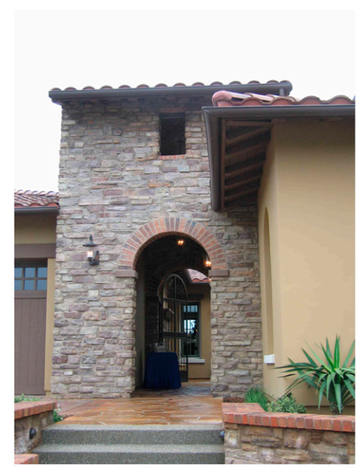
Craftsman Details (A)

Tuscan Details (B)







Spanish Details (C)

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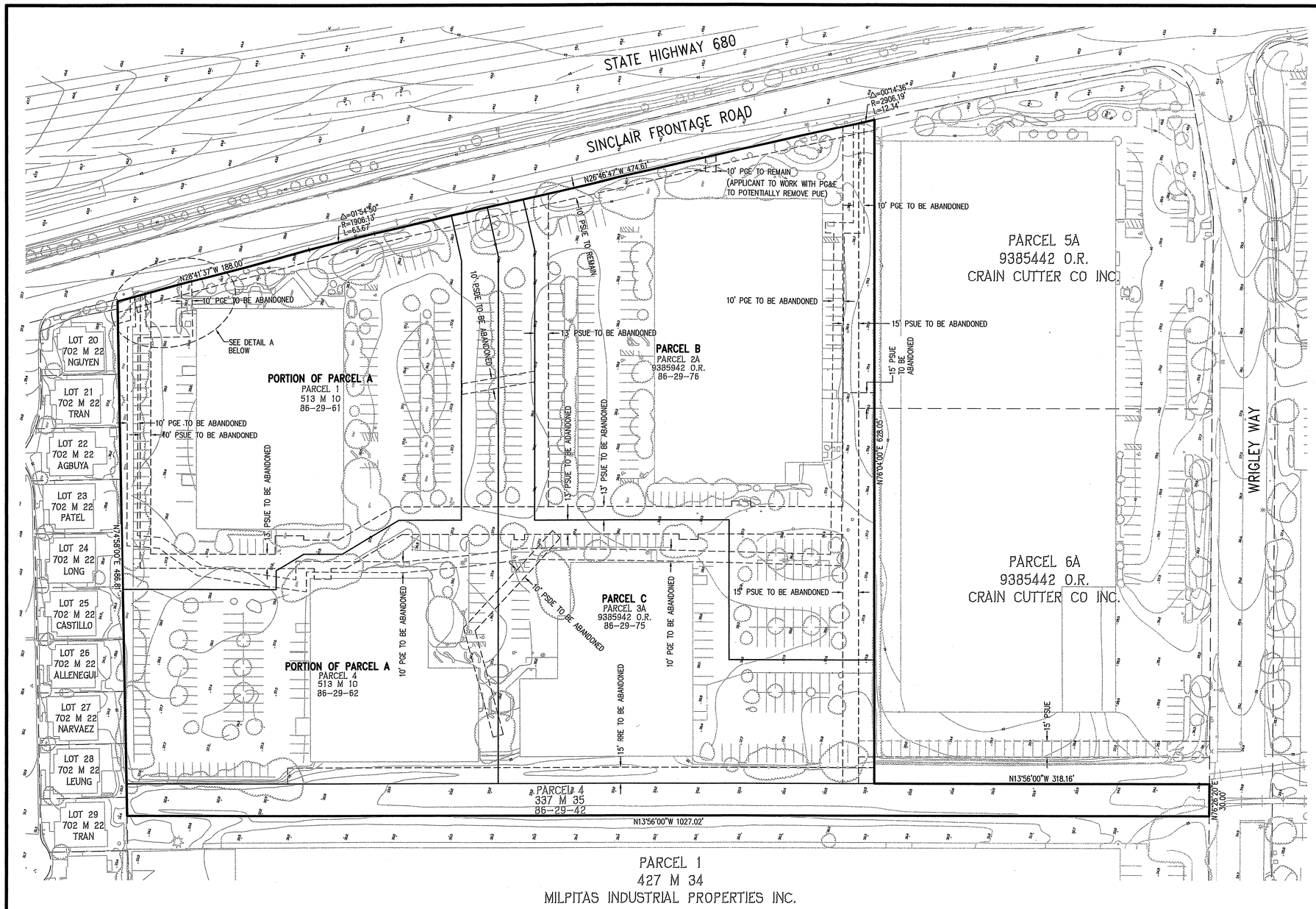


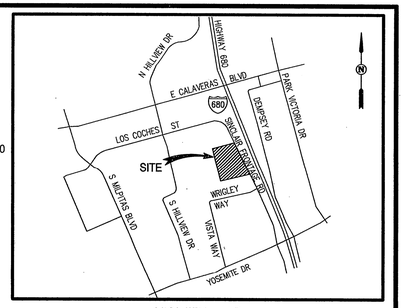
CONTACTS

1. OWNER/SUBDIVIDER: THE MISSION PEAK COMPANY
40480 ENCYCLOPEDIA CIRCLE
FREMONT, CA 94538-2446
(510) 354-0888
STEPHEN ALLEN

2. ENGINEER: CARLSON, BARBEE & GIBSON, INC.
6111 BOLLINGER CANYON ROAD, SUITE 150
SAN RAMON, CA 94583
(925) 866-0322
LEE ROSENBLATT, RCE 65469

3. SOILS ENGINEER: KC ENGINEERING COMPANY
865 COTTING LANE SUITE A
VACAVILLE, CA 95688
(707) 447-4025

4. TOPOGRAPHIC SOURCE: AERIAL TOPOGRAPHY COMPILED BY:
AEROMETRIC SURVEYS
915 CLAREMONT STREET
SAN MATEO, CA 94402



VICINITY MAP
(NTS)

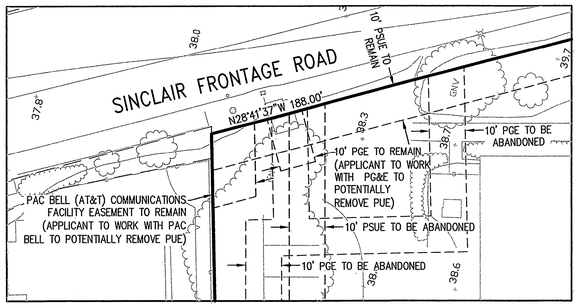
GENERAL NOTES

1. ASSESSORS PARCEL NO: 086-29-042
086-29-061
086-29-062
086-29-075
086-29-076
2. SITE ADDRESS: 350 SINCLAIR FRONTAGE ROAD
MILPITAS, CA 95035
3. SITE AREA: 9.65± ACRES
4. PROPOSED ZONING: R1-3
5. EXISTING USE: OFFICE SPACE
PROPOSED USE: SINGLE-FAMILY RESIDENTIAL
80 SINGLE FAMILY LOTS, 12 PARCELS
6. MINIMUM LOT SIZE: 45' X 70' (3,150 SF)
7. BENCHMARK: CITY OF MILPITAS BENCHMARK CAL-HIL: BRASS DISK IN MONUMENT WELL AT THE INTERSECTION OF EAST CALAVERAS BLVD AND HILLVIEW AVENUE.EL: 26.005 FEET
8. EXISTING STRUCTURES: ALL EXISTING BUILDINGS, PAVEMENT, AND TREES WITHIN BOUNDARY TO BE REMOVED.
9. EXISTING UTILITIES: ALL EXISTING UTILITIES WITHIN BOUNDARY TO BE REMOVED UNLESS OTHERWISE NOTED.
10. STREETS: ALL STREETS WITHIN THE SUBDIVISION WILL BE PRIVATE STREETS AND WILL BE PRIVATELY MAINTAINED. ALL STREETS WILL BE WITHIN PSUE'S (MINIMUM LONGITUDINAL SLOPE = 0.6%).
11. STREET TREES: STREET TREES SHALL BE PROVIDED AS REQUIRED BY THE CITY, INSTALLED PER CITY STD NO. 448 AND WILL BE PRIVATELY MAINTAINED BY THE HOMEOWNERS ASSOCIATION.
12. STREET LIGHTS: STREET LIGHTS ON PRIVATE STREETS WILL BE PRIVATELY MAINTAINED.
13. WALLS: ALL WALLS WILL BE PRIVATE FACILITIES AND PRIVATELY MAINTAINED.
14. PUBLIC UTILITIES: PROPOSED WATER FACILITIES WITHIN THE SUBDIVISION WILL BE CONSTRUCTED PER LOCAL STANDARDS AND DEDICATED TO THE CITY OF MILPITAS.
15. PRIVATE UTILITIES: PROPOSED STORM DRAIN AND SANITARY SEWER FACILITIES WITHIN THE SUBDIVISION WILL BE PRIVATELY MAINTAINED, EXCEPT AS NOTED.
16. STORM DRAIN: PROPOSED STORM DRAIN FACILITIES WILL BE PRIVATE FACILITIES AND WILL BE PRIVATELY MAINTAINED BY THE HOMEOWNERS ASSOCIATION.
17. WATER PROPOSED WATER FACILITIES WITHIN THE SUBDIVISION WILL BE CONSTRUCTED PER CITY OF MILPITAS STANDARDS AND DEDICATED TO THE CITY.
18. SANITARY SEWER PROPOSED SANITARY SEWER FACILITIES WILL BE PRIVATE FACILITIES AND WILL BE PRIVATELY MAINTAINED BY THE HOMEOWNERS ASSOCIATION.
19. LANDSCAPING ALL LANDSCAPING TO BE PRIVATELY OWNED AND MAINTAINED.
20. FLOOD ZONE: ZONE D
REFER TO:
FLOOD INSURANCE RATE MAP
PANEL 060344-0003 G (JUNE 22, 1998)
21. WELLS ONSITE: NONE
22. GAS & ELECTRIC: PG&E
23. TELEPHONE: AT&T
24. CABLE TV: COMCAST
25. DIMENSIONS: ALL DIMENSIONS ARE PRELIMINARY AND SUBJECT TO FINAL MAP.
26. FINAL MAP MULTIPLE MAPS MAY BE FILED FOR THIS SITE.
27. PHASING MULTIPLE CONSTRUCTION AND DRE PHASES WILL BE REQUIRED FOR THIS SITE.

LEGEND

EXISTING	PROPOSED	DESCRIPTION
		SUBDIVISION BOUNDARY
		PROPERTY LINE
		CURB, GUTTER AND SIDEWALK
		CENTERLINE
x 100.0	x 100.0	SPOT ELEVATIONS
PSUE		PUBLIC SERVICE UTILITY EASEMENT
PSDE*		PRIVATE STORM DRAIN EASEMENT
PUE*		PUBLIC UTILITY EASEMENT
PGE*		PG&E EASEMENT
RRE*		RAILROAD EASEMENT
1		LOT NUMBER
PARCEL B		TITLE REPORT PARCEL REFERENCE

*NOTE: ALL EXISTING EASEMENTS TO BE QUITCLAIMED OR ABANDONED UNLESS OTHERWISE SPECIFIED.



DETAIL A

SCALE: 1"=20'

SUBDIVISION TENTATIVE MAP

This Map has been reviewed by the City Engineer.

City Engineer **Date**

Recommended for Approval by the Milpitas Planning Commission, this _____ day of _____ 200____ , and Approved by the Milpitas City Council this_____ day of _____ 200 _____.

Planning and Neighborhood Services Director **Date**

SHEET INDEX

TM-01 TITLE SHEET-EXISTING PROPERTY
TM-02 SITE PLAN
TM-03 GRADING AND UTILITY PLAN
TM-04 FIRE TRUCK ACCESS AND STRIPING EXHIBIT
TM-05 CITY NOTES AND CONDITIONS

VESTING TENTATIVE MAP
EXISTING PROPERTY
SINCLAIR RENAISSANCE

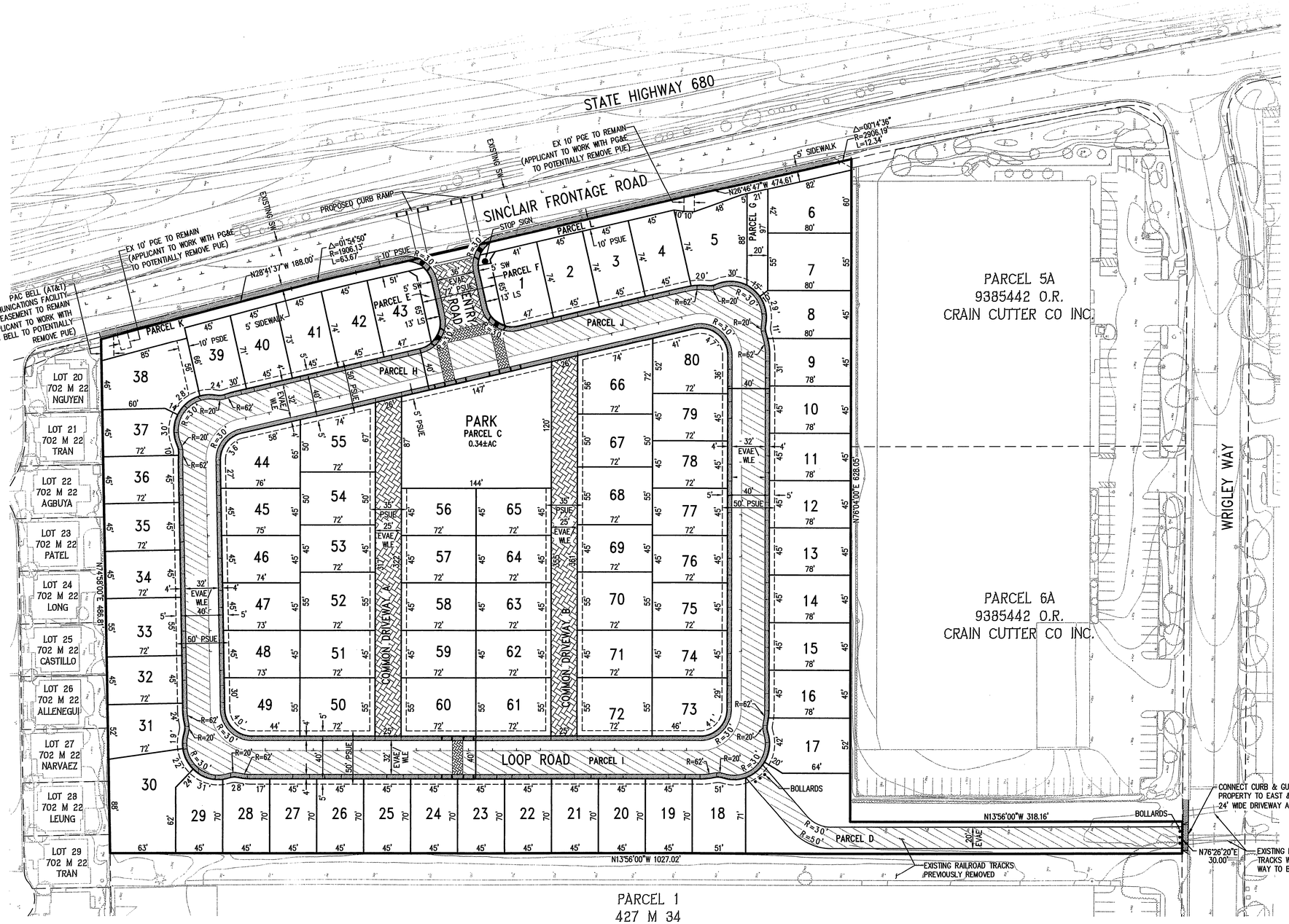
CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

0' 50' 150' 200'

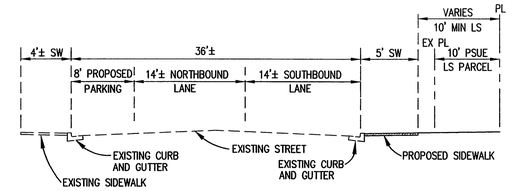
SCALE: 1" = 50' DATE: FEBRUARY 25, 2008

cbg Carlson, Barbee & Gibson, Inc.
CIVIL ENGINEERS • SURVEYORS • PLANNERS
6111 BOLLINGER CANYON ROAD, SUITE 150
SAN RAMON, CALIFORNIA 94583
TEL (925) 866-0322
FAX (925) 866-8575

SHEET NUMBER
TM-01
1 OF 5



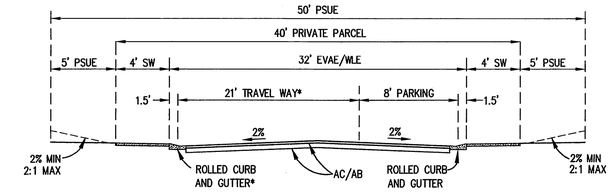
PARCEL 1
427 M 34
MILPITAS INDUSTRIAL PROPERTIES INC.



SINCLAIR FRONTAGE ROAD

NOT TO SCALE

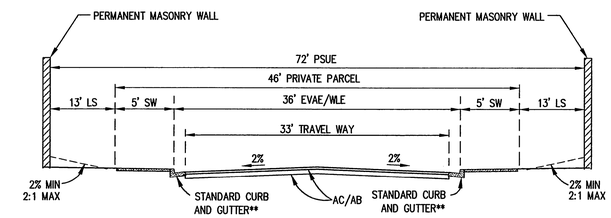
NOTES:
1. NO COMMERCIAL VEHICLE PARKING ON SINCLAIR FRONTAGE ROAD
2. PROPOSED LANE CONFIGURATION AND STRIPING PER TRAFFIC STUDY



TYPICAL 32' STREET SECTION (LOOP ROAD)

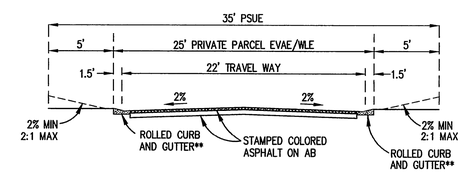
NOT TO SCALE

* 21' FIRE LANE SHOWN ON PLANS CURB TO BE PAINTED RED AND STENCILED "NO PARKING FIRE LANE"



TYPICAL 36' STREET SECTION (ENTRY ROAD)

NOT TO SCALE
NOTE: NO PARKING ON ENTRY ROAD
** CURB TO BE PAINTED RED AND STENCILED "NO PARKING FIRE LANE"



TYPICAL 25' COMMON DRIVEWAY SECTION

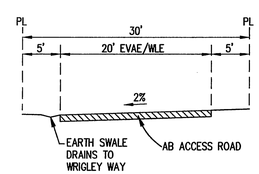
NOT TO SCALE
NOTE: NO PARKING ON COMMON DRIVEWAY
** CURB TO BE PAINTED RED AND STENCILED "NO PARKING FIRE LANE"

LEGEND

EXISTING	PROPOSED	DESCRIPTION
		SUBDIVISION BOUNDARY
		PROPERTY LINE
		CURB, GUTTER AND SIDEWALK
		CENTERLINE
x 100.0	x 100.0	SPOT ELEVATIONS
	PSDE	PRIVATE STORM DRAIN EASEMENT (HOA)
	PSUE	PUBLIC SERVICE UTILITY EASEMENT
	PGE	PG&E EASEMENT
	EVAE	EMERGENCY VEHICLE ACCESS EASEMENT
	WLE	WATER LINE EASEMENT
	1	LOT NUMBER
		FIRE LANE (COMMON DRIVEWAYS A & B ALSO TO HAVE EVA/FIRE ACCESS, SEE SHEET TM-04)
		STAMPED COLORED ASPHALT
		PROPOSED PARKING

GENERAL NOTES

1.	EXISTING ZONING:	INDUSTRIAL
2.	PROPOSED ZONING:	R1-3
3.	EXISTING LAND USE:	OFFICE SPACE MANUFACTURING AND WAREHOUSING (GENERAL PLAN)
4.	PROPOSED LAND USE:	PLANNED UNIT DEVELOPMENT SINGLE FAMILY RESIDENTIAL
5.	TOTAL SITE AREA:	9.65± AC
6.	TOTAL NUMBER OF LOTS:	80 LOTS; 12 PARCELS
7.	DENSITY:	8.3 UNITS/AC
8.	PARKING:	RESIDENT (GARAGE) 160 STALLS RESIDENT (DRIVEWAY) 160 STALLS GUEST 31 STALLS OFF-SITE (FRONTAGE) 21 STALLS TOTAL 372 STALLS
9.	TOTAL IMPERVIOUS SURFACE:	5.8± AC



EVA SECTION

NOT TO SCALE

VESTING TENTATIVE MAP
SITE PLAN
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

0' 50' 150' 200'

SCALE: 1" = 50' DATE: FEBRUARY 25, 2008

Carlson, Barbee & Gibson, Inc.
CIVIL ENGINEERS • SURVEYORS • PLANNERS
6111 BOLLINGER CANYON ROAD, SUITE 150
SAN RAMON, CALIFORNIA 94583
TEL (925) 866-0322
FAX (925) 866-8575

SHEET NUMBER
TM-02
2 OF 5

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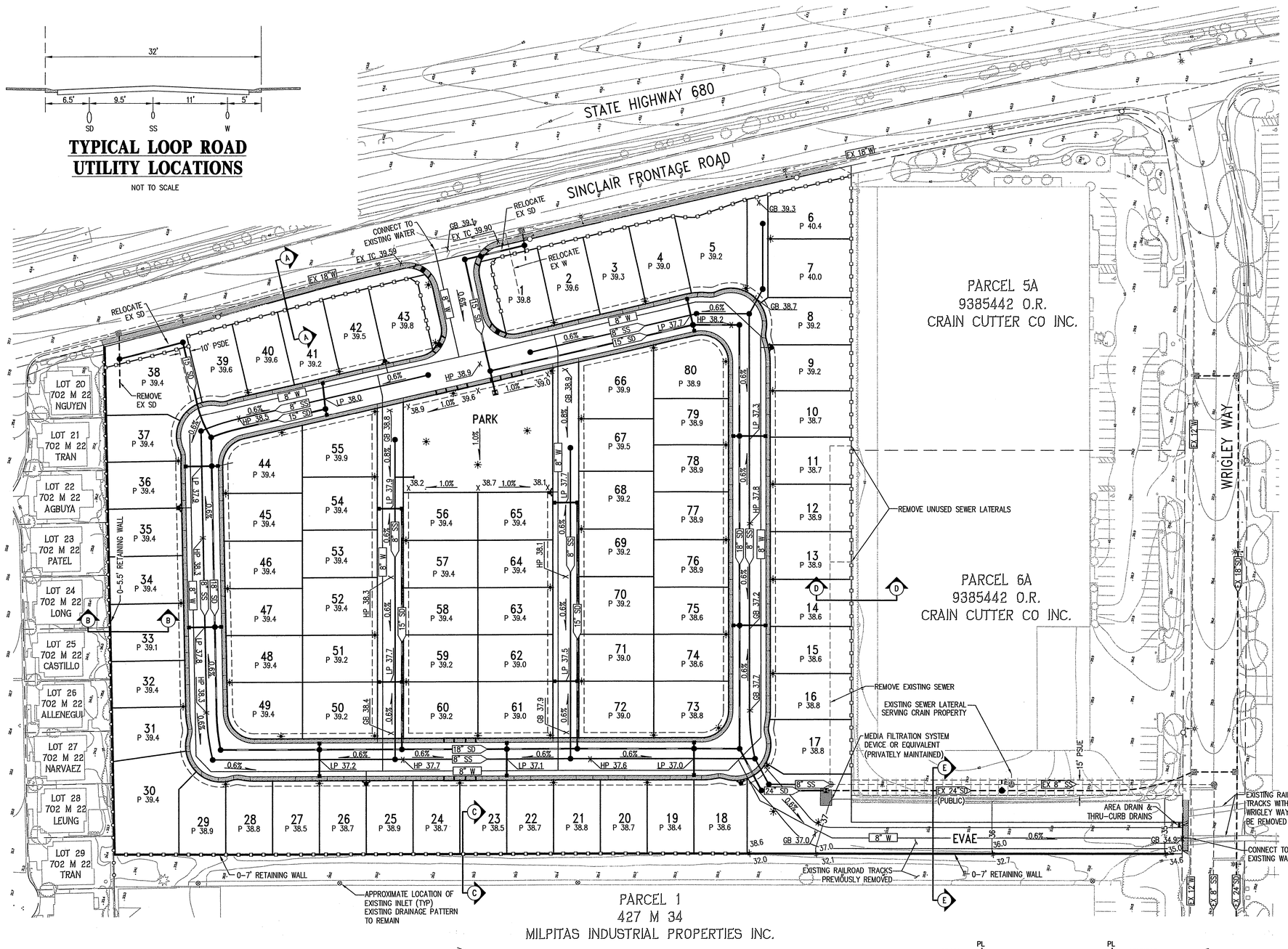
TYPICAL LOOP ROAD UTILITY LOCATIONS

NOT TO SCALE

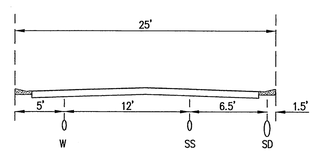


UTILITY NOTES

1. PUBLIC UTILITIES: PROPOSED WATER FACILITIES WITHIN THE SUBDIVISION WILL BE CONSTRUCTED PER LOCAL STANDARDS AND DEDICATED TO THE CITY OF MILPITAS
2. PRIVATE UTILITIES: PROPOSED STORM DRAIN AND SANITARY SEWER FACILITIES WITHIN THE SUBDIVISION WILL BE PRIVATELY MAINTAINED BY THE HOMEOWNER'S ASSOCIATION
3. STORM DRAIN: PRIVATE (HOA MAINTAINED)
   MIN SLOPE OF PROPOSED STORM DRAIN PIPE = 0.002
   MIN SIZE OF PROPOSED STORM DRAIN PIPE IS 12"
   STORM DRAIN FACILITIES MAY BE RCP OR HDPE N-12 PIPE
4. WATER: CITY OF MILPITAS
5. SEWER: PRIVATE (HOA MAINTAINED)
   MIN SLOPE OF PROPOSED SEWER PIPE = 0.0033
   MIN SIZE OF PROPOSED SEWER MAIN IS 8"
6. GAS & ELECTRIC: PG&E
7. TELEPHONE: AT&T
8. CABLE TV: COMCAST

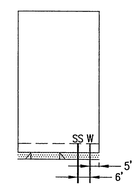
LEGEND

EXISTING	PROPOSED	DESCRIPTION
		PROPERTY LINE
		CURB, GUTTER AND SIDEWALK
		CENTERLINE
x 777.0	x TC 777.70	SPOT ELEVATIONS
EX SD	SD	STORM DRAIN LINE (PRIVATE)
EX SS	SS	SANITARY SEWER (PRIVATE)
EX W	W	WATER (PUBLIC)
		PERIMETER MASONRY WALL
		SANITARY SEWER MANHOLE
		STORM DRAIN MANHOLE
		CURB INLET
		FIELD INLET
		FIRE HYDRANT
		STREETLIGHT
	20	LOT NUMBER
	PSUE	PUBLIC SERVICE UTILITY EASEMENT
	PSDE	PRIVATE STORM DRAIN EASEMENT
	WLE	WATER LINE EASEMENT (SEE TM-02)



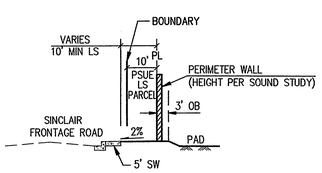
TYPICAL DRIVEWAY UTILITY LOCATION

NOT TO SCALE



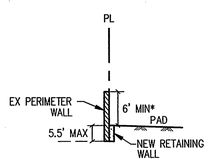
TYPICAL UTILITY CONNECTIONS

NOT TO SCALE



SECTION A-A

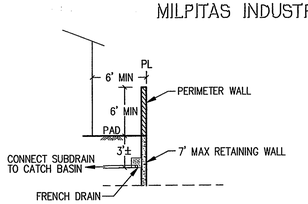
NOT TO SCALE



SECTION B-B

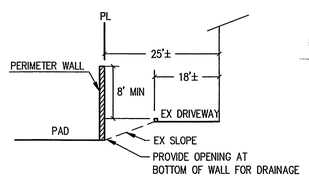
NOT TO SCALE

* ADDITIONAL COURSES MAY BE REQUIRED



SECTION C-C

NOT TO SCALE



SECTION D-D

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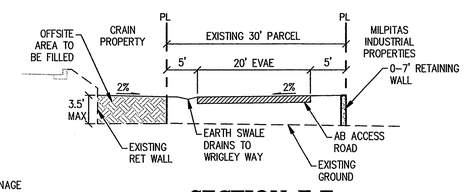

SECTION E-E

NOT TO SCALE

VESTING TENTATIVE MAP
GRADING AND UTILITY PLAN
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

0' 50' 150' 200'

SCALE: 1" = 50' DATE: FEBRUARY 25, 2008

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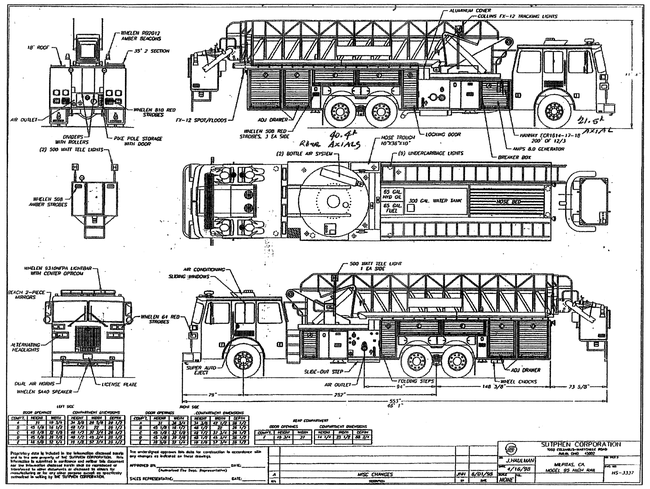
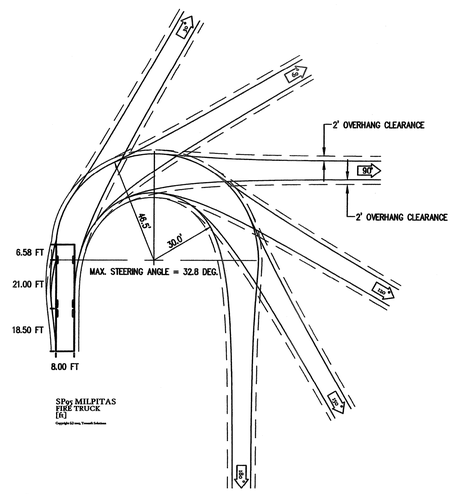
SHEET NUMBER
TM-03
3 OF 5



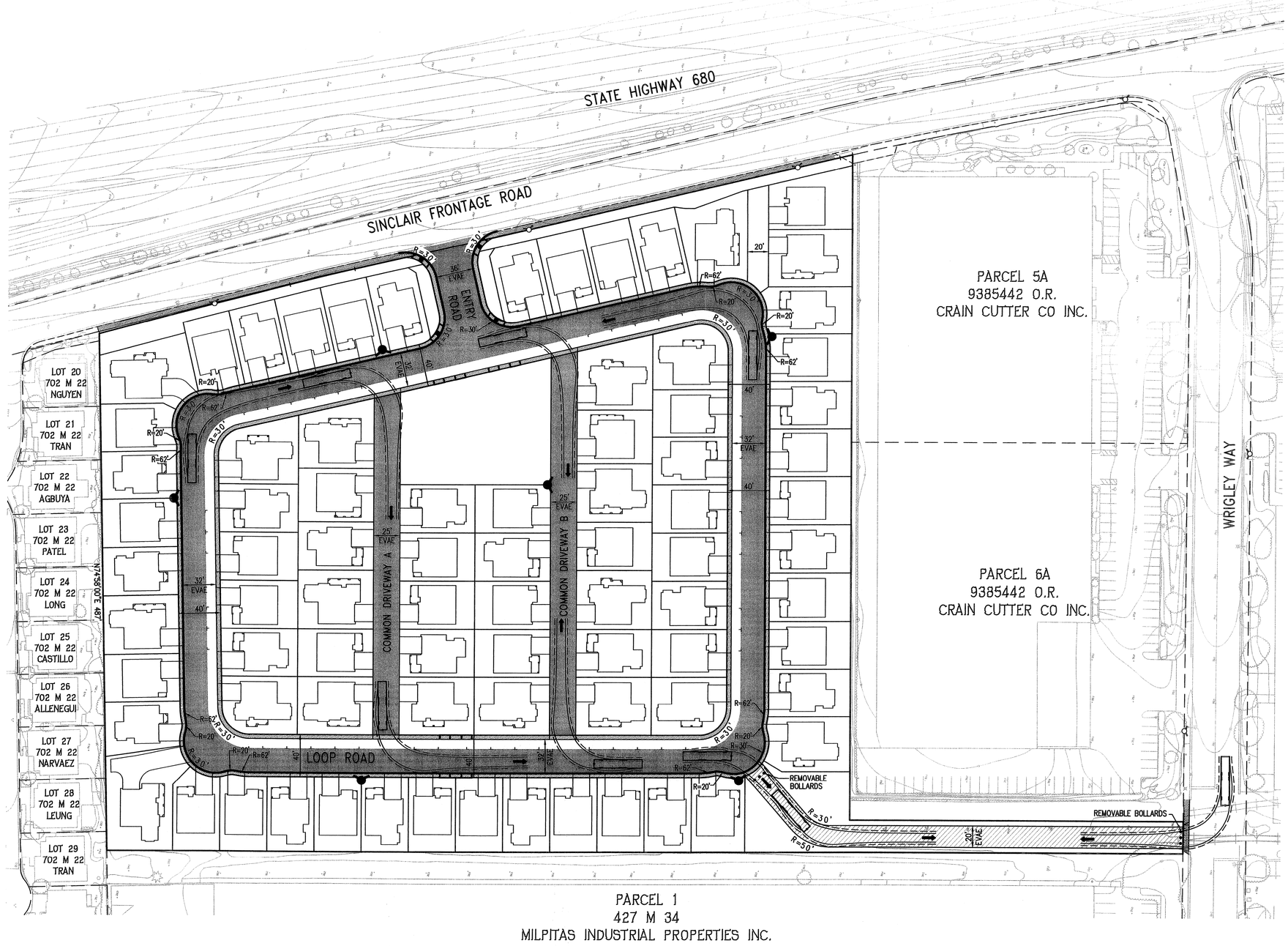
* FIRE TRUCK DETAILS PROVIDED BY THE CITY OF MILPITAS FIRE DEPARTMENT



SP95 MILPITAS FIRE TRUCK

NOT TO SCALE

NOTE: MOST RESTRICTIVE TURN SHOWN ON PLAN FOR EACH TURNING MOVEMENT



LEGEND

- FIRE APPARATUS ACCESS ROADS (PAVED)
- EMERGENCY VEHICLE ACCESS EASEMENT (EVAE) (AB)
- PROPOSED FIRE HYDRANT
- EXISTING FIRE HYDRANT
- CURB TO BE PAINTED RED AND STENCILED "NO PARKING FIRE LANE"

VESTING TENTATIVE MAP
FIRE TRUCK ACCESS AND STRIPING EXHIBIT
SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

0' 50' 150' 200'

SCALE: 1" = 50' DATE: FEBRUARY 25, 2008

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SHEET NUMBER
TM-04
4 OF 5

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PENDING CITY NOTES AND CONDITIONS

VESTING TENTATIVE MAP
CITY NOTES AND CONDITIONS

SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

0' 50' 150' 200'

SCALE: 1" = 50' DATE: FEBRUARY 25, 2008

cbg
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SHEET NUMBER
TM-05
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UNAPPROVED

PLANNING COMMISSION MINUTES

June 25, 2008

I.
PLEDGE OF ALLEGIANCE

Chair Williams called the meeting to order at 7:00 P.M. and led the Pledge of Allegiance.

II.
ROLL CALL/SEATING OF ALTERNATE

Present: Gunawan Ali-Santosa, Larry Ciardella, Alex Galang, Sudhir Mandal Gurdev Sandhu, Noella Tabladillo and Cliff Williams
Alternate Present: Aslam Ali
Absent: None
Staff: AhSing, Hom, Lindsay, Ogaz and Oliva

III.
PUBLIC FORUM

Chair Williams invited members of the audience to address the Commission on any topic not on the agenda, noting that no response is required from the staff or Commission, but that the Commission may choose to agendize the matter for a future meeting.

Rajeev Madnawat, representing the Community Advisory Commission, invited the public to participate in National Night Out on August 7, 2008.

IV.
ANNOUNCEMENTS

There were no announcements.

V.
CONFLICT OF INTEREST

City Attorney Mike Ogaz asked if any member of the Commission has any personal or financial conflict of interest related to any of the items on tonight's agenda.

There were no Commissioners who identified a conflict of interest.

VI.
APPROVAL OF AGENDA

Chair Williams called for approval of the agenda.

There were no changes to the agenda.

Motion to approve the agenda as submitted.

M/S: Mandal/Sandhu

AYES: 7

NOES: 0

VII.
CONSENT CALENDAR

Chair Williams asked whether staff, the Commission, or anyone in the audience wished to remove or add any items to the consent calendar.

There were no changes to the consent calendar, however, staff received two e-mails in opposition to Item No. 1 (Conditional Use Permit No. UP08-0020) and Item No. 2 (Site Approval Amendment No. SA2008-0017)**.**

Chair Williams opened the public hearing on Item Nos. 1 and 2.

Tony Trouch and Michael Chang, Milpitas Business Owners, requested that Item No. 1 be pulled from the consent calendar for discussion.

Motion to remove Item No. 1 from consent calendar.

M/S: Williams/Mandal

AYES: 7

NOES: 0

Motion to close the public hearing on Item No. 2

M/S: Tabladillo/Mandal

AYES: 7

NOES: 0

Motion to approve the consent calendar.

M/S: Tabladillo/Mandal

AYES: 7

NOES: 0

***2 SITE APPROVAL AMENDMENT NO. SA2008-0017:** A request to amend a special condition of approval, No. 23a, relating to construction timing. If approved, the request would allow project construction to occur everyday, Mondays through and Sundays between 6 a.m. and 7 p.m., until December 31, 2008. The project is located at 1666 South Main Street. *(Recommendation: Close the public hearing and adopt Resolution No. 08-026 approving the proposed amendment to special condition no. 23a)*

VIII.
PUBLIC HEARING

1. CONDITIONAL USE PERMIT NO. UP08-0020

Cindy Hom, Assistant Planner, presented a request to locate a 1,088 square foot self-serve yogurt shop within the Milpitas Square Shopping Center located at 510 Barber Lane. Ms. Hom recommended to close the public hearing and adopt Resolution No. 08-027 approving the project subject to the conditions of approval.

Chair Williams asked how is the parking during lunchtime. Ms. Hom said the last parking study was done in 2005 and based on that study, there were excess parking stalls.

Joe Oliva, Principal Transportation Planner, stated that during lunchtime hours, people park in the back portions of the Crowne Plaza and Barber Lane because there is not enough parking.

Chair Williams said he is concerned that there is not a current parking study.

Mr. Lindsay said staff's job is to see if an application is in conformance with the zoning ordinance and based on parking ratios currently in the code for restaurants, this use permit would meet the zoning ordinance requirements.

Commissioner Sandhu asked what the status of this retail space is. Ms. Hom said it used to be a clothing store.

Commissioner Ciardella asked if the shopping center has to comply with the parking requirements in the zoning ordinance. City Attorney Mike Ogaz said that the parking task force is looking to see if there is a need to increase parking levels for shopping centers. At this time, the Commission cannot require more than what the current code requires.

Vice Chair Mandal said that currently customers are parking on the street and asked if this is included in the parking calculations. Ms. Hom said that it is not included and only on-site parking is included in the calculations.

Commissioner Tabladillo asked if the City enforces employees parking in the main lot. Ms. Hom said employees are accounted for 10% of parking spaces and it is generally encouraged for employees to park in the back of the buildings and it is sometimes a condition of approval.

Chair Williams introduced the applicant.

John Ha, representing the applicant, said they are in compliance with the zoning ordinance and should not have any competition with the other businesses.

Vice Chair Mandal asked about the business. Mr. Ha said they will be serving frozen yogurt.

Commissioner Tabladillo asked if there is a requirement to have a 15 or 20 minute parking space in front of the shop. Ms. Hom said there is no timed parking at the shopping center.

Chair Williams asked if the Commission can require timed parking spaces and Mr. Lindsay said yes. He also suggested that the Parking Task Force look into requiring timed parking for other businesses throughout the shopping center.

City Attorney Mike Ogaz said that because the property owner is not present tonight, staff cannot condition the project to have timed parking.

Commissioner Tabladillo asked if the applicant will be providing Wi-Fi and Mr. Ha said no.

Commissioner Galang asked about the frequency of visitors and Mr. Ha said that they have a lot of business after 3 p.m. and at nighttime.

Chair Williams opened the public hearing.

Tony Trouch, Business Owner, said he is concerned about parking and trash and wants the Commission to deny the project.

Michael Chang, Business Owner, said he is concerned about the project and felt it is a conversion of use. He asked the Commission to deny the project.

Motion to close the public hearing.

M/S: Sandhu/Mandal

AYES: 7

NOES: 0

Commissioner Ciardella asked if customers are carpooling together during lunchtime and Mr. Oliva said yes.

Motion to adopt Resolution No. 08-027 approving Conditional Use Permit No. UP08-0020, Tutti Frutti Yogurt Shop subject to the attached findings and conditions of approval.

M/S: Sandhu/Ciardella

AYES: 7

NOES: 0

3. PARKING TASK FORCE TASK 3 TECHNICAL MEMORANDUM

Joe Oliva, Principal Transportation Planner, presented a summary of staff's public outreach efforts to interested stakeholders in the community regarding the state of parking in various land use districts throughout the City, including residential, industrial, commercial and quasi-public areas. Mr. Oliva recommended that the Commission close the Public Hearing and Note Receipt and File.

Chair Williams asked if staff looked at Menlo Park's parking ordinance. Mr. Oliva said that Menlo Park was not one of the cities that staff researched because they are very restrictive with their on-street parking.

Chair Williams asked about street sweeping days that would help to force vehicles to be removed and Mr. Oliva said that Public Works and Code Enforcement are trying to tackle the problem.

Commissioner Sandhu suggested that the task force look at no parking zones to see if staff could allow parking there at certain times. Mr. Oliva said that no parking zones in industrial parks are used to prevent big heavy trucks from parking there.

Commissioner Tabladillo said that KB home residents are complaining that there is not enough parking. Mr. Oliva said there is a parking problem out there and people are parking illegally. He advised the Home Owners Association (HOA) to form a parking committee.

Commissioner Tabladillo said she is concerned about the lack of parking at supermarkets and asked the task force to come up with alternatives. Mr. Oliva said that he understands her concerns and hopefully staff can come up with solutions.

Chair Williams asked if staff has conditioned housing projects to require that the HOA have parking guidelines and James Lindsay, Planning and Neighborhood Services Director said yes.

Commissioner Ciardella said Menlo Park has certain sections of town where they limit parking on certain streets.

Commissioner Galang suggested if the parking task force could look into fining large vehicles that park into compact spaces.

Chair Williams opened the public hearing.

There were no speakers from the audience.

Motion to close the public hearing.

M/S: Galang/Sandhu

AYES: 7

NOES: 0

Chair Williams noted that this was a note receipt and file.

4. GENERAL PLAN AMENDMENT NO. GM2006-2, ZONE CHANGE NO. ZC2007-8, "S" ZONE NO. SZ2007-10, PLANNED UNIT DEVELOPMENT NO. PD2007-1, VESTING MAJOR TENTATIVE MAP NO. MA2007-4, AND ENVIRONMENTAL IMPACT ASSESSMENT NO. EA2007-6

Cindy Hom, Assistant Planner, presented a request to change the land use designation of 9.65 acres from industrial to residential and develop an 80 lot subdivision at Sinclair Frontage Road, north of Wrigley Way. Ms. Hom recommended the Commission close the Public Hearing and adopt Resolution No. 08-020 and recommend approval to the City Council subject to the Conditions of Approval.

Chair Williams asked what is the speed limit and Ms. Hom said it is 45 mph and that the consensus is to reduce the traffic speed to 35 mph.

Chair Williams suggested that staff look at on street parking.

Chair Williams asked what is the wall height along Sinclair Frontage and Ms. Hom said 16 feet.

Commissioner Tabladillo asked if the existing sidewalk is comparable to the new sidewalk that would be installed and Ms. Hom said yes.

Commissioner Tabladillo asked if there will be landscaping near the entrance and Ms. Hom said yes.

Commissioner Ali-Santosa said he is concerned about fire truck access. Ms. Hom said the private street is developed in conformance with the fire departments turning radius standards.

Commissioner Ciardella asked about the parking requirements. Ms. Hom said for the R1 zoning district, the parking requirement is 2 off street parking spaces and they are providing in excess.

Chair Williams asked if a window privacy study was done and Ms. Hom said no.

Vice Chair Mandal said he concerned about the traffic flow. Ms. Hom said the width of the entry road is 36 feet travel way and is wide enough to accommodate traffic.

Commissioner Galang asked about hazardous mitigation measures. Ms. Hom said it is the applicant's responsibility to comply with the measures.

Chair Williams asked if the applicant was in communication with the nearby residents. Ms. Hom said there was a community meeting and the residents were concerned about the wall and the applicant has promised to maintain the current height.

Commissioner Tabladillo asked about the demolishing of the existing site and Ms. Hom deferred the question to the applicant.

Chair Williams introduced the applicant.

Steve Allen, Applicant, 6217 Lake View Circle, San Ramon, presented a request to change the land use designation of 9.65 acres from industrial to residential and develop an 80 lot subdivision at Sinclair Frontage Road, north of Wrigley Way.

Chair Williams asked who designed the project and Mr. Allen said KTGY architects.

Chair Williams asked what was the core drilling depth and Mr. Allen said it exceeded eighteen feet.

Chair Williams suggested a condition that would require the applicant to come up with mitigation measures to ensure privacy and the applicant agreed.

Commissioner Tabladillo asked if the bollards will allow the residents to walk through and Mr. Allen said yes.

Commissioner Tabladillo asked about pedestrian sidewalk safety and Mr. Allen explained the safety elements of the sidewalk.

Commissioner Tabladillo requested that staff include lighting along the emergency vehicle access corridor.

Vice Chair Mandal asked if the project is going to be the same height level as the project to the north and Mr. Allen said no, the project will be a higher level.

Vice Chair Mandal asked if the park area will be private or public and Mr. Allen said it will be private.

Commissioner Ciardella asked where the mailboxes would be located and Mr. Allen referred the Commission to the plans.

Commissioner Galang asked how much will the units cost and Mr. Allen said approximately mid 400's to 500's.

Commissioner Sandhu asked when will the project be completed and Mr. Allen said approximately four years.

Chair Williams opened the public hearing.

Howard Narvaez., 976 Cameron Circle, Milpitas, said he is concerned about traffic, construction noise, hazardous materials, tree planting, family noise, privacy issues and property values.

Lance Crain, Property Owner at 1155 Wrigley Way, requested the following special conditions: 1) the applicant build a 16 foot sound wall along the entire property line, 2) home purchasers sign a waiver regarding potential noise and 3) storm drainage for the project be improved.

Motion to close the public hearing.

M/S: Sandhu/Galang

AYES: 7

NOES: 0

Chair Williams asked Mr. Lindsay if staff can incorporate Mr. Crain's suggestions as conditions of approval. Mr. Lindsay said the applicant is proposing a higher wall but does not meet the 16 foot height requested by Mr. Crain.

Commissioner Sandhu said he is concerned about privacy issues and not meeting the development standards.

Vice Chair Mandal said he is also concerned about privacy and Mr. Crain's business.

Mr. Lindsay said staff considered Mr. Crain's request about the 16 foot wall height but felt it wasn't required to meet the noise standards.

Commissioner Ciardella asked if there is another 16 foot wall against residential homes and Mr. Lindsay said the Sinclair Horizons subdivision.

Commissioner Ciardella asked what the height of a roll up door is. Mr. Crain said the height of a roll up door is 16 feet.

Commissioner Tabladillo asked if all the homes are two stories and Mr. Lindsay said yes.

Commissioner Tabladillo said she was concerned about privacy.

Motion to Adopt Resolution No. 08-020 and recommend approval to the City Council subject to conditions of approval with the following added special conditions of approval.

1) To have appropriate lighting along the emergency vehicle access pathway.
2) To have the applicant, staff and HOA work on a privacy condition that is mutually agreeable specifically for units 30, 31 and 32.
3) To have the applicant provide a 16 foot wall height with structurally integrity along the whole length of the south wall.

M/S: Ali-Santosa/Galang

AYES: 6

NOES: 1 (Sandhu-due to not in agreement with the development standards)

IX. PRESENTATION

5. BROWN ACT REVIEW

Chair Williams requested that this item be continued to the next meeting and the Commission agreed.

X. ADJOURNMENT

The meeting was adjourned 10:20 p.m. to the next regular meeting of July 9, 2008.

Respectfully Submitted,

James Lindsay
Planning & Neighborhood
Services Director

Veronica Bejines
Recording Secretary

MISSION PEAK
HOMES

May 14, 2007

City of Milpitas
Planning Division
Attn: Kristine Lowe
455 E. Calaveras Blvd.
Milpitas, CA 95035

RE: Sinclair Renaissance

Dear Kristine,

The project is located at 245 Sinclair Frontage Road and is comprised of five (5) legal parcels four (4) currently comprise the Sinclair Business Park and one (1) is a 30 ft. wide by 1027 ft long parcel that has recently been purchased from Union Pacific Rail Road.

Mission Peak Homes has owned the Sinclair Business Park for over 15 years and has encountered a decrease in tenant's that has now left the site nearly vacant. Therefore, we are requesting the City of Milpitas to consider our proposal to have the property rezoned to residential to allow for the development of a 80 unit, single-family, detached small lot development.

The proposed development will be comprised of two different lot styles, one will be the typical street facing front loaded style of lot the other will be a type of cluster where individual lots will be served by a shared common driveway. The inclusion of the shared driveway lots allows us to minimize the number of garage doors that face the street, and to develop two floor plans with side entry's with enhanced elevations where the product faces both the shared driveways and the thru street.

The product will consist of four floor plans with three different styles of architectural elevations. We are proposing a fully landscaped park with amenities for the entire site community, enhanced paving at the project entry and fully landscaped front yards. The main entrance to the site will be off of Sinclair Frontage Road with an additional EVA connecting to Wrigley Way. There will a H.O.A. with maintenance responsibilities for all on-site Streets, Parks, front yard and common area landscaping.

Should you need further details or information regarding the project please contact me at 510-354-0885.

Sincerely,

Stephen M. Allen
Director of Operations
Mission Peak Homes

40480 Encyclopedia Circle, Fremont, California 94538, Telephone 510/354•0888, Facsimile 510/354•0889

CITY OF MILPITAS
455 EAST CALAVERAS BOULEVARD, MILPITAS, CALIFORNIA 95035-5479 • www.ci.milpitas.ca.gov

MITIGATED NEGATIVE DECLARATION
ENVIRONMENTAL IMPACT ASSESSMENT (EIA) NO. EA2007-6

A NOTICE, PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT OF 1970, AS AMENDED (PUBLIC RESOURCES CODE 21,000 ET SEQ.), THAT THE SINCLAIR RENAISSANCE RESIDENTIAL PROJECT, WHEN IMPLEMENTED WITH THE REQUIRED MITIGATIONS, WILL NOT HAVE A SIGNIFICANT IMPACT ON THE ENVIRONMENT.

Project Title: Sinclair Renaissance Residential Project

Project Description: An application has been filed with the City of Milpitas for the following request:

- General Plan Amendment to change the land use designation from "Manufacturing and Warehousing " to "Single Family Moderate Density,"
- Zone Change from "Heavy Industrial" to "Single Family Residential minimum 3,000 square foot" to ensure consistency between the modified General Plan land use designation and City zoning,
- Vesting Major Tentative Map to create all "for sale" housing units,
- Planned Unit Development to allow for diverse development standards for setbacks, and
- Site and Architectural Review for the new residential subdivision.

The project proposal entails demolition of an existing low-rise industrial business park that contains approximately 121,746 square feet of building floor space and existing site improvements. The applicant proposes to redevelop the site with 80 detached, two-story, single family residential homes, .42 acres of private open space that includes a .34 acre private park and .18 acres of passive play area, and installation of associated site improvements and landscaping.

Project Location: The proposed project area is a 9.65-acre site consisting of five parcels (APN 86-29-061, 062, 075, 076, and 042) located along the west side of Sinclair Frontage Road, south of the Los Coches Street in Milpitas, California.

Project Proponent: Stephen Allen, Mission Peak Homes, 40480 Encyclopedia Circle, Fremont, CA 94538.

The City of Milpitas has reviewed the Environmental Impact Assessment for the above project based on the information contained in the Environmental Information Form and the Initial Study and finds that the project will have no significant impact upon the environment with the implementation of the following mitigation measures, as recommended in the EIA.

Summary of Impacts and Mitigation Measures:

I. Air Quality

Impact AIR 1: Construction-related air emissions can be a potentially significant impact on sensitive receptors. Air quality impacts associated with construction activities are anticipated to consist of airborne dust particulate matter (PM_{10}) as earthwork commences. This stray dust has the potential for exposing sensitive receptors to substantial pollutants and odors, therefore it could be considered significant on a temporary and localized basis. However, the impact can be reduced to a less-than-significant level through adherence to Mitigation Measures. The Bay Area Quality Management District provides control measures that would be applied to this project, such as watering construction areas, covering trucks, and daily sweeping, for construction emissions of PM_{10} that, when implemented, would reduce the impact of air pollutant emissions from construction activities to a level considered less than significant

AQ MM1: The applicant shall adhere to the following BAAQMD Best Management Practices during all phases of constructions:

- Water all active construction areas at least twice daily or as often as need to control dust emissions.
- Cover all trucks hauling soil, sand, gravel and other loose material and/or ensure that all trucks hauling materials maintain at least two feet of freeboard.
- Sweep daily or as often as needed with water sweepers all paved access roads, parking areas, and staging areas at the construction site to control dust.
- Sweep public streets daily or as often as needed to keep streets free from visible soil material.
- Enclose, cover, water twice daily or apply non-toxic soil binders to exposed stockpiles.
- Replant vegetation in disturbed areas as quickly as possible.

II. Biological Resources

Impact BIO 1: The removal of existing mature trees on the site could disturb nesting habitat for raptors and have a potential significant impact. However, the impact can be reduced to less than significant with implementation of the following mitigation:

BIO MM1: The applicant shall conduct a preconstruction survey for nesting raptors between September and January by a qualified ornithologist or wildlife biologist to ensure that no raptor nest will be disturb during demolition and construction activities. The survey shall be conducted no more than 14 day prior to the initiation of demolition/construction activities during the early part of the breeding season (January to April) and no more than 30 days prior to the initiation of these activities during the later part of the breeding season (May to August).

During the survey, the ornithologist/biologist will inspect all trees for raptors nest. If an active raptor nest is found close enough to the demolition/construction area to be disturbed, the ornithologist/biologist (in consultation with the California Department of Fish and Game) will determine the extent of the construction free buffer zone to be established around the nest. The project will main the buffer zone, allowing no intrusion or impact to the tree(s) until after the young have fledge and are functioning independently of the nest.

Impact BIO 2: Per MMC X-2-7.01, trees that have thirty-seven inch circumference or greater is deemed "protected." Any removal of "protected" trees shall be replaced at a ratio of 1:3. Out of the 190 trees to be removed, 115 are deemed "protected" trees. The impact would be less than significant with mitigation because the applicant is proposing to replant 350 new trees.

BIO MM2: In accordance with MMC X-2-7.01, the applicant shall obtain a tree removal permit prior to the removal of any trees. For any tree that cannot be mitigated due to lack of available planting area or construction conflict, the applicant shall be required to pay a tree mitigation fee to the City of Milpitas. Reimbursement to the City for the value of the tree(s) to removed will be determine by an arborist certified by the International Society of Aboriculture utilizing the current edition for the "Guide for Plant Appraisal, Inter Society of Aboriculture." The funds will be deposited in the City's Tree Replacement Fund and will be used to plant trees within the City of Milpitas.

III. Cultural Resources

Impact CUL 1: Construction of the proposed project could result in impacts to unknown buried archaeological resources. Implementation of the below mitigation measure can help reduce the impact to less than significant.

CUL MM1: All ground disturbing activities shall be monitored by a qualified archaeologist to ensure that any discovery of significant archaeological materials and/or human remains is handled in accordance with approved guidelines.

VI. Geology and Soils

Impact GEO 1: The site contains potential liquefiable soils and subject to settlements during a seismic event. The impact can mitigated to be a less than significant impact by incorporating the design recommendations into the project plans and specifications.

GEO MM1: The applicant shall comply with the findings and recommendations contained in the Geotechnical Investigation Report, dated October 2006, prepared by KC Engineering Company. To ensure compliance with this mitigation, the applicant shall submit a letter from a licensed geotechnical engineer certifying that all of their recommendations have been incorporated into the construction

drawings prior to issuance of any grading or building permit. Additionally, prior to obtaining a final, a certificate of occupancy, or any occupancy for the buildings, the applicant shall submit a letter from a licensed geotechnical engineer certifying that all of their recommendations have been satisfied.

Impact GEO 2: Implementation of the proposed project would result in increase erosion and loss of topsoil until the project is constructed and new vegetation is established.

GEO MM2: The following measures are included in the project to reduce potential construction related erosion impacts:

- All excavation and grading work will be scheduled in the dry weather months or construction sites will be weatherized to withstand or avoid erosion.
- Stockpiles and excavated soils will be covered with secured tarps or plastic sheeting.
- Vegetation in disturbed areas will be replanted as quickly as possible.
- Project will also adhere to the Regional Water Quality Control Board's best management practices to reduce construction related and post construction runoff impacts.

V. Hazards and Hazardous Materials

Impact HAZ 1: Since the project site was once used for agriculture, it could have a potential significant impact if hazardous agricultural chemicals such as herbicides, pesticides, and the like were used when the property. However, the impact can be reduced to a level of less than significant with following mitigation:

HAZ MM1: The project sponsor shall sample the soil within the project site to determine the presence or absence of pesticides and herbicides. If soil sampling indicates the presence of any contaminant in hazardous concentrations, the California Regional Water Quality Control Board (RWQCB) and Department of Toxic Substance Control (DTSC) shall be contacted to determine the level of any necessary remediation efforts. If required, the project sponsor shall remediate these soils in compliance with applicable laws.

Impact HAZ 2: The project site will locate sensitive receptors within proximity to chemical and hazardous users. In event of an accidental release, sensitive receptors may be exposed to toxic chemicals or hazardous materials, which can be a potential significant impact. However, given existing local, state, and federal regulation, enforcement, engineering and process safeguards already in place, the impact can be considered less than significant with mitigation.

HAZ MM2: Existing local, state and federal regulations and enforcement are effective forms of hazard mitigation for toxic gas safety and preventing any possible offsite consequences from catastrophic release.

XI. Noise

Impact NOI 1: Anticipated noise level exposures will exceed acceptable noise levels thresholds specified in the Milpitas General Plan Noise Element. However the impact is less than significant with implementation of the following noise mitigation measures and by incorporating design standards that would minimize noise exposures to acceptable levels.

NOI MM1: The applicant shall incorporate and adhere to the recommendations and design standards set forth in the Traffic Noise Assessment dated December 15, 2006, prepared by Edward L. Pack Associates.

NOI MM2: Construction of 16-foot tall acoustically effective noise control barrier along the property line contiguous with Sinclair Frontage Road, a 12-foot acoustically-effective barrier at the south side of Lot 43 and north side of Lot 1, and a 16-foot that steps down to 8-feet tall along the southern property line according to the following schedule:

Lot #	**Required Height of Fence**
Lot 6	16 ft. stepped down to 11 ft.
Lot 7	11 ft.
Lot 8	10 ft.
Lot 9	9 ft.
Lot 10	9 ft.
Lot 11	8 ft.
Lot 12	8 ft.
Lot 13	8 ft.
Lot 14	8 ft.
Lot 15	8 ft.
Lot 16	8 ft.
Lot 17	8 ft.

NOI MM3: Maintain closed at all times all first floor windows and glass doors of living spaces within 420 ft. of the centerline of the I-680 and with direct or side orientation towards the freeway. Install windows and glass doors rated minimum Sound Transmission Class (STC) 28. A disclosure statement shall be provided to all future property owners affected stating that windows and glass doors must be maintain the STC rating 28 or higher that were installed at the time of construction to main acceptable DNL noise exposures for single-family residents of 45 dB NDL.

NOI MM4: Maintain closed at all times all second floor windows and glass doors of living spaces within 420 ft. of the centerline of I-680 and with a direct or side orientation towards the freeway. At the living spaces within 340 ft. of the centerline, install windows and glass doors rated minimum STC 33. A disclosure statement shall be provided to all future property owners stating that windows and glass doors must maintain the STC rating 33 or higher that were installed at the time of construction to main acceptable DNL noise exposures for single-family residents of 45 dB NDL**.**

NOI MM5: At living spaces between 340 ft. and 420 ft. of the centerline, install windows and glass doors rated minimum STC 27. A disclosure statement shall be provided for all future property owners affected stating that windows and glass doors must maintain the STC rating 27 or higher that were installed at the time of construction to main acceptable DNL noise exposures for single-family residents of 45 dB NDL.

NOI MM6: At the second floors of Lot 1 (east and north faces) and of Lot 43 (east and south facades) install windows and glass doors rated minimum STC 38. A disclosure statement shall be provided to all future property owners affected stating that windows and glass doors must maintain the STC rating 38 or higher that were installed at the time of construction to main acceptable DNL noise exposures for single-family residents of 45 dB NDL.

NOI MM7: Second floor windows for homes located on lots 6-17 shall install windows and glass doors rated minimum STC 28. A disclosure statement shall be provided to all future property owners affected stating that windows and glass doors must maintain the STC rating 28 or higher that were installed at the time of construction to main acceptable DNL noise exposures for single-family residents of 45 dB NDL.

NOI MM8: Provide mechanical ventilation for all residential living spaces that have closed window requirements.

NOI MM9: Prior to building permit issuance, applicant shall submit acoustical test report of all sound rated windows and doors. The report shall be review by a qualified acoustician to ensure that the chosen windows and doors will adequately reduce traffic noise to acceptable levels.

Impact NOI 2: The project site is bordered by existing residential land uses to the north. Noise generated by construction activities would have a significant temporary impact on nearby sensitive receptors. However, the Milpitas General Plan adopted *Noise Policy 6-I-13,* which restricts the hours of operation, technique, and equipment used in all public and private construction activities to minimize noise impact. With implementation of the following mitigation measure, the impact would be less than significant.

NOI MM10: Pursuant to the City of Milpitas Municipal Code, no person shall engage or permit others to engage in construction of any building or related road or walkway, pool or landscape improvement or in the construction operations related thereto, including delivery of construction materials, supplies, or improvements on or to a construction site except within the hours of 7:00 AM to 7:00 PM on weekdays and weekends.

NOI MM11: The contractor shall be required to use available noise suppression devices and properly maintain and muffle internal combustion engine-driven construction equipment.

NOI MM12: The contractor shall be required to use noise barriers or noise control blankets to shield stationary equipment from nearby noise-sensitive receptors.

NOI MM13: The contractor shall designate a disturbance coordinator and post the name and phone number of this person at easy reference points for the surrounding land uses. The disturbance coordinator would respond to all complaints about noise and take the necessary steps to reduce the problem.

XII. Public Services

Impact PUB 1: The project will add 309 new residents and will have an incremental impact on existing park system. However, the project is anticipated to have less than a significant impact to park and open resources with implementation of the following mitigation measure.

PUB MM1: The project applicant shall pay a park in-lie fee in the amount of $1,556,695 prior to certificate of occupancy.

XV. Transportation/Traffic

Impact TRA 10: The project is anticipates a potential cumulative impact with regard to the LOS on the Northbound Milpitas Boulevard road segment between Montague and Yosemite Drive and on the Eastbound Yosemite Drive road segment between Milpitas Boulevard and Sinclair Frontage Road. However, the impact is less than significant with mitigation.

TRA MM 10: To mitigate this cumulative impact, the project applicant shall pay a traffic impact fee for their fair share contribution towards the Calaveras Boulevard (SR 237) Overpass Widening Project, Montague Expressway Widening Project, and South Milpitas Boulevard Smart Corridor Project.

Copies of the E.I.F. and E.I.A. may be obtained at the Milpitas Planning Department, 455 E. Calaveras Boulevard, Milpitas, CA 95035.

By:_____
Project Planner

SINGLE FAMILY RESIDENTIAL DEVELOPMENT
ENVIRONMENTAL IMPACT ASSESSMENT (EA2007-6)
INITIAL STUDY

ENVIRONMENTAL CHECKLIST RESPONSES AND ANALYSIS

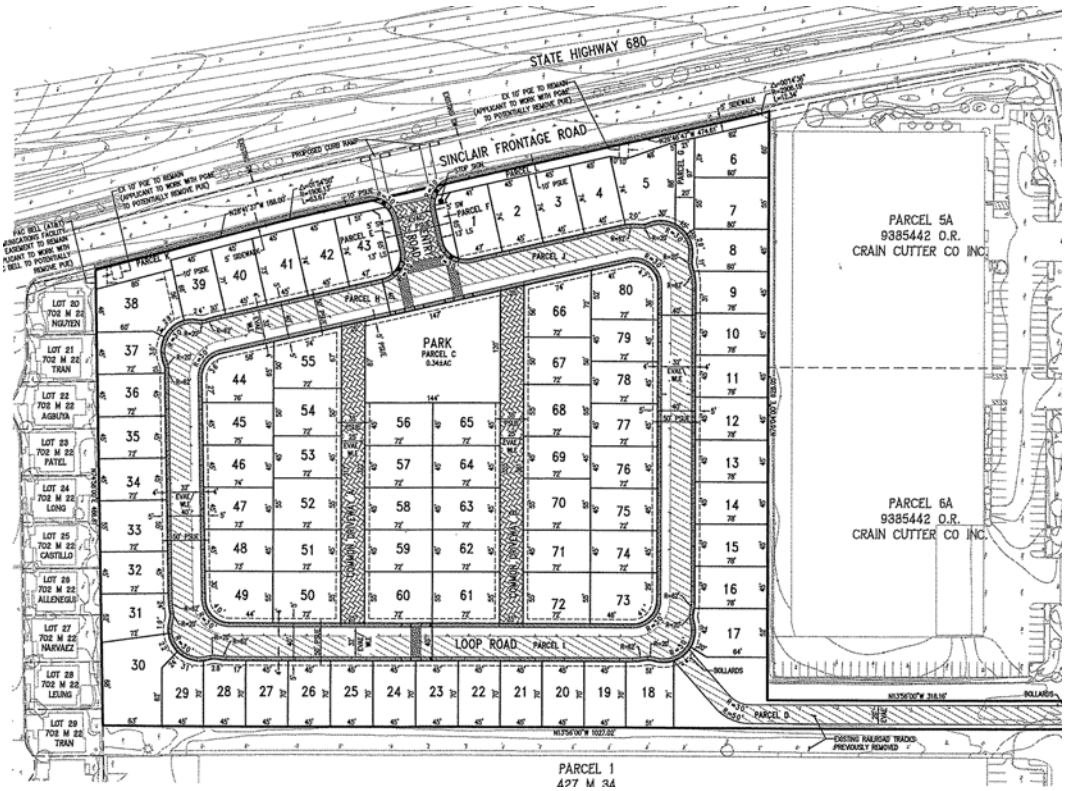
The following discussion includes explanations of answers to the previous checklist questions regarding potential environmental impacts. Each subsection is annotated with the number corresponding to the checklist form.

EXISTING SETTING:
The proposed project area is a 9.65-acre site consisting of five parcels (APN 86-29-061, 062, 075, 076, and 042) developed with four single-story, concrete tilt up industrial buildings, 190 trees, various site improvements, and an abandon railroad spur located along the western edge of the project site.

The subject property is located on the west side of Sinclair Frontage Road, approximately 450 feet south of the intersection with Los Coches Street in Milpitas, California. The project site is bounded by single-family residential homes to the north, manufacturing and warehousing buildings to the west and south, Sinclair Frontage Road and Interstate 680 to the east. The surrounding zoning includes Single Family Residential with minimum lot sizes at 3,000 square feet (R1-3) to the north and Heavy Industrial to the west and south. Figure 1 shows the location of the project area in context with nearby features, including freeways, major surface streets and other buildings. Figure 2 shows the proposed residential development.

Figure 1: Project Site Aerial (Existing Condition)

Figure 2: Proposed Site Development



PROJECT DESCRIPTION:

An application has been filed with the City of Milpitas for the following request:

- *General Plan Amendment to change the land use designation from "Manufacturing and Warehousing " to "Single Family Moderate Density,"*
- *Zone Change from "Heavy Industrial" to "Single Family Residential minimum 3,000 square foot" to ensure consistency between the modified General Plan land use designation and City zoning,*
- *Vesting Major Tentative Map to create all "for sale" housing units,*
- *Planned Unit Development to allow for diverse development standards for setbacks, and*
- *S-Zone permit for site and architectural approval of a new residential subdivision.*

The project proposal entails demolition of an existing low-rise industrial business park that contains approximately 121,746 square feet of building floor space and existing site improvements. The applicant proposes to redevelop the site with 80 detached, two-story, single family residential homes, .42 acres of private open space that includes a .34 acre private park and .18 acres of passive play area, and installation of associated site improvements and landscaping.

Attachment to: *Sinclair Renaissance Single Family Residential Development, General Plan Land Use Amendment No. GM2006-2, Zone Change No. ZC2007-8, "S" Zone No.*

SZ2007-10, Planned Unit Development No. PD2007-1, Vesting Major Tentative Map No. MA2007-4, and Environmental Impact Assessment No. EA2007-6.

Discussion of Checklist/Legend:
PS: Potentially Significant Impact
LS/M: Less Than Significant with Mitigation Incorporation
LS: Less Than Significant Impact
NI: No Impact

I. AESTHETICS

Environmental Impacts

a) Have a substantial adverse effect on a scenic vista? (LS)

The Milpitas General Plan identifies Interstate 680 as a "Scenic Connector." Due to the proximity of the Freeway, the proposed residential project is required to construct a new 16-foot tall concrete sound wall along its segment on Sinclair Frontage Road for sound attenuation. However, the impact is less than significant because it will be a continuation of an existing sound wall that will include tiered landscaping consisting of trees and shrubbery that will afford a pleasant streetscape along Sinclair Frontage and Interstate 680.

b) Damage scenic resources such as trees, rock outcroppings, or historic buildings within a state scenic highway? (NI)

The proposed project would change land use on the site from an industrial business park to a single-family residential development. Based on the review of the General Plan there are no designated scenic resources located on the project site. The proposed project is located on the Milpitas valley floor and will not impact any scenic resources, which are located along the foothills and hillside.

c) Degrade the existing visual character or quality of the site and it's surroundings? (LS)

Considering the project site is an urbanized area, the change in the visual character would be minimal. However, there are 190 existing trees that include 115 protected trees that are proposed for removal. Based on Milpitas Municipal Code (MMC) X-7.01-1, trees greater than 56-inches in circumference measure 4/12-feet above ground are deemed protected. The project proposes removal of all existing trees to allow for grading and construction of the site. The applicant is proposing to replant with 350 new 24-inch box trees that will enhance the visual character and quality of the site. The new plantings will adequately compensate for the loss of existing vegetation. The project would result in approximately 2.06 acres of more green space compared to existing conditions.

d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the areas?

The project will not create any new substantial light or glare considering the project entail redevelopment of an existing industrial park to low density residential homes.

II. AGRICULTURE RESOURCES

Environnemental Impacts

a) Convert prime farmland, unique farmland, or farmland of statewide importance as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non agricultural uses? (NI)

The project site is currently developed with industrial buildings within an urbanized area. The project will have no impact because it does not affect any prime farmland, unique farmland, or any farmland of statewide importance.

b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract? (NI)

The project site will not conflict with agricultural zoning or a Williamson Act Contract because the subject site is currently zoned Heavy Industrial (M2) and developed with four industrial buildings. The project proposes to rezone the project area to Single Family Residential, minimum 3,000 square foot lot (R1-3) to allow for low-density residential homes.

c) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use? (NI)

The project will not cause or result in any conversion of farmland considering the project site is currently developed with industrial buildings and the surrounded are is also urbanized with residential homes to the north, and other industrial buildings to the west and south.

III. AIR QUALITY

Environnemental Impacts

a-c) Conflict with the implementation of the applicable air quality plan, violate any air quality standard or contribute substantially to an existing or project air violation, or result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality stand? (LS)

The proposed project will result in an 80-unit single-family detached residential subdivision. The increase in the number of residential dwellings in the city may result in an incremental increase in traffic and a subsequent increase in local and regional pollutant levels. However, the impact would be less than significant because the proposed residential development would generate less than 100 net new peak-hour trips based on the Traffic Impact Analysis report. The Bay Area Air Quality Management District (BAAQMD) has adopted a threshold of 80lbs/day for the air pollutants that include: carbon monoxide (CO), nitrogen oxides (NOx), and reactive organic gas (ROG) as the threshold for projects that would substantial contribute to air quality violations. According the BAAQMD, projects that do not exceed 2,000 vehicle trips would not exceed this threshold.

d) Expose sensitive receptors to substantial pollutant concentrations? (LS/M)

> ***AIR 1:*** *Construction-related air emissions can be a potentially significant impact on sensitive receptors. Air quality impacts associated with construction activities are anticipated to consist of airborne dust particulate matter (PM_{10}) as earthwork commences. This stray dust has the potential for exposing sensitive receptors to substantial pollutants and odors, therefore it could be considered significant on a temporary and localized basis. However, the impact can be reduced to a less-than-significant level through adherence to Mitigation Measures. The Bay Area Quality Management District provides control measures that would be applied to this project, such as watering construction areas, covering trucks, and daily sweeping, for construction emissions of PM_{10} that, when implemented, would reduce the impact of air pollutant emissions from construction activities to a level considered less than significant*
>
> ***AIR MM1:*** *The applicant shall adhere to the following BAAQMD Best Management Practices during all phases of constructions:*
>
> - *Water all active construction areas at least twice daily or as often as need to control dust emissions.*
> - *Cover all trucks hauling soil, sand, gravel and other loose material and/or ensure that all trucks hauling materials maintain at least two feet of freeboard.*
> - *Sweep daily or as often as needed with water sweepers all paved access roads, parking areas, and staging areas at the construction site to control dust.*
> - *Sweep public streets daily or as often as needed to keep streets free from visible soil material.*
> - *Enclose, cover, water twice daily or apply non-toxic soil binders to exposed stockpiles.*
> - *Replant vegetation in disturbed areas as quickly as possible.*

e) Create objectionable odors affecting a substantial number of people? (NI)

The project will not result in any objectionable odors because it entails the development of single-family homes.

IV. BIOLOGICAL RESOURCES

Environmental Impacts

a) Have a substantial adverse affect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, polices, or regulations, or by the California Department of Fish & Game or U.S. Fish & Wildlife Service? (NI)

The project site is currently developed with structures, paving and landscaping. Based on existing conditions, there are no natural or sensitive habitats that would support endangered, sensitive or species of special concern. Therefore, no impact is anticipated for this topic.

b) Have substantial adverse affect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulation or by the California Department of Fish & Game or U.S. Fish & Wildlife Service? (NI)

The project area is within an urbanized area and is not located adjacent to any creek, riparian corridor, or other sensitive natural community. Therefore no impact is anticipated for this topic.

c) Have substantial adverse affect on any federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? (NI)

The project site is not located on or near any federally protected wetlands. The project proposal entails redevelopment of an existing industrial business park to low-density residential homes.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? (LS/M)

The project site has been developed with an industrial business park and contains no special-status plant or wildlife species or their habitats. The proposed project would not impact any wetlands, creeks or other corridors that would facilitate movement of fish or wildlife.

Currently the site contains 190 non-native mature trees that consist of nine tree species. Based on the tree survey, there are 115 trees that are deemed protected per Milpitas Municipal Code X-2-7.01. The project proposes removal of all 190 trees to allow for grading and construction of the residential homes and related site improvements.

BIO 1: *The removal of existing mature trees on the site could disturb nesting habitat for raptors and have a potential significant impact. However, the impact can be reduced to less than significant with implementation of the following mitigation:*

BIO MM1: *The applicant shall conduct a preconstruction survey for nesting raptors between September and January by a qualified ornithologist or wildlife biologist to ensure that no raptor nest will be disturb during demolition and construction activities. The survey shall be conducted no more than 14 day prior to the initiation of demolition/construction activities during the early part of the breeding season (January to April) and no more than 30 days prior to the initiation of these activities during the later part of the breeding season (May to August). During the survey, the ornithologist/biologist will inspect all trees for raptors nest. If an active raptor nest is found close enough to the demolition/construction area to be disturbed, the ornithologist/biologist (in consultation with the California Department of Fish and Game) will determine the extent of the construction free buffer zone to be established around the nest. The project will main the buffer zone, allowing no intrusion or impact to the tree(s) until after the young have fledge and are functioning independently of the nest.*

e) **Conflict with any local polices or ordinances protecting biological resources, such as a tree preservation policy or ordinance? (LS/M)**

As mentioned previously, the site contains 190 non-native trees, which include 115 "protected trees".

BIO 2*: Per MMC X-2-7.01, trees that have thirty-seven inch circumference or greater is deemed "protected." Any removal of "protected" trees shall be replaced at a ratio of 1:3. Out of the 190 trees to be removed, 115 are deemed "protected" trees. The impact would be less than significant with mitigation because the applicant is proposing to replant 350 new trees.*

BIO MM2*: In accordance with MMC X-2-7.01, the applicant shall obtain a tree removal permit prior to the removal of any trees. For any tree that cannot be mitigated due to lack of available planting area or construction conflict, the applicant shall be required to pay a tree mitigation fee to the City of Milpitas. Reimbursement to the City for the value of the tree(s) to removed will be determine by an arborist certified by the International Society of Aboriculture utilizing the current edition for the "Guide for Plant Appraisal, Inter Society of Aboriculture." The funds will be deposited in the City's Tree Replacement Fund and will be used to plant trees within the City of Milpitas.*

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional. Or state habitat conservation plan? (NI)

The proposed project will not conflict with any adopted Habitat Conversation Plan, Natural Community Conservation Plan, or other approved local regional or state habitat conservation plan. The project will have no impact with regards to topic.

V. CULTURAL RESOURCES:

Environmental Impacts

a-c) Cause a substantial adverse change in the significance of a historical, archaeological, or palentological resource? (NI)

The project will not have an impact that would result in a substantial adverse change in the significance of historic, archaeological, or palentological resources because the project site is an existing industrial development located within an urbanized area. The buildings were constructed approximately 25 years ago and are not considered historic. Additionally, the Milpitas General Plan does not identify any designated or listed historic or cultural resources on the site.

d) Disturb any human remain, including those interred outside of formal cemeteries checked by the tribal constitution? (LS/M)

The City of Milpitas was once inhabited by the Tamyen tribelet of Coastanoan (Ohlone) Indians, which maintained a few year-round village sites and visited temporary camps to hunt or gather food depending of the different season of the year. The two notable village sites include the Elmwood Correctional Facility and the Alviso Adobe. Although none of these sites are located on or adjacent to the project site, there is a potential for unknown subsurface artifacts and/or buried human remains given the early occupation of Coastanoan Indians.

Tribal consultation was requested with five tribal groups that were identified by the Native American Heritage Commission. One out of the five groups responded to the tribal consultation request. The Muwekma Ohlone Indian Tribe advised that the proposed project might have a potential significant impact on potential subsurface ancestral cultural resources and/or ancestral remains given its proximity to the two notable sites and the presence of nearby fresh water drainages (Arroyo de los Coches and Lower Penitencia Creeks) that would have been conducive for settlement and subsistence activities.

> ***CUL 1:*** *Construction of the proposed project could result in impacts to unknown buried archaeological resources. Implementation of the below mitigation measure can help reduce the impact to less than significant.*
>
> ***CUL MM1:*** *All ground disturbing activities shall be monitored by a qualified archaeologist to ensure that any discovery of significant archaeological materials and/or human remains is handled in accordance with approved guidelines.*

VI. GEOLOGY AND SOILS

Environnemental Impacts

a, c, d) Expose people and structures to known earthquake faults, seismic related ground shaking or failure, expansive soil, liquefaction, or landslide? (LS/M)

According to the Milpitas General Plan's Geotechnical Hazards Map and the Alquist-Priolo Map, the project site is not located within a geological hazardous area or within a special stone zone. Based on the Geotechnical Investigation, there are no known active or inactive faults crossing the site as mapped and/or recognized by the State of California. However, the entire Bay Area is considered to be a seismically–active region and therefore the project can anticipate earthquake related ground shaking during life of the project. The Geotechnical Investigation indicates the presence of near-surface, highly to very highly expansive clays and potentially liquefiable subsurface soils.

> ***GEO 1:*** *The site contains potential liquefiable soils and subject to settlements during a seismic event. The impact can mitigated to be a less than significant impact by incorporating the design recommendations into the project plans and specifications.*
>
> ***GEO MM1:*** *The applicant shall comply with the findings and recommendations contained in the Geotechnical Investigation Report, dated October 2006, prepared by KC Engineering Company. To ensure compliance with this mitigation, the applicant shall submit a letter from a licensed geotechnical engineer certifying that all of their recommendations have been incorporated into the construction drawings prior to issuance of any grading or building permit. Additionally, prior to obtaining a final, a certificate of occupancy, or any occupancy for the buildings, the applicant shall submit a letter from a licensed geotechnical engineer certifying that all of their recommendations have been satisfied.*

b) Result in substantial soil erosion or the loss of topsoil? (LS/M)

The project could anticipate potential soil erosion impacts during demolition and grading of the site. However the impact can be mitigated to a less than significant impact.

> ***GEO 2:*** *Implementation of the proposed project would result in increase erosion and loss of topsoil until the project is constructed and new vegetation is established.*
>
> ***GEO MM2:*** *The following measures are included in the project to reduce potential construction related erosion impacts:*

- *All excavation and grading work will be scheduled in the dry weather months or construction sites will be weatherized to withstand or avoid erosion.*

- *Stockpiles and excavated soils will be covered with secured tarps or plastic sheeting.*
- *Vegetation in disturbed areas will be replanted as quickly as possible.*
- *Project will also adhere to the Regional Water Quality Control Board's best management practices to reduce construction related and post construction runoff impacts.*

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waster water disposal systems where sewers are not available for the disposal of wastewater? (NI)

The project will not have an impact with regard to this topic because the project will be connected to the existing municipal sewer system.

VII. HAZARDS AND HAZARDOUS MATERIALS

Environmental Impacts

a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials? (NI)

There would be no impact with regard to the transport, use or disposal of hazardous materials, since the proposed project involves construction of a low-density residential development on the site. There would be no use, storage or transport of significant quantities of hazardous materials associated with the proposed residential development.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? (LS/M)

Mission Peak Homes commissioned Aqua Science Engineers to conduct Phase I Environmental Site Assessments of the project site and railroad service corridor. The Phase I Environmental Site Assessments determine that there are no recognized environmental hazards or evidence of chemical contamination on the site. However, previous use of the site included agriculture. It is undetermined if hazardous agriculture chemicals were used and therefore, could have a potential significant impact.

> ***HAZ 1****: Since the project site was once used for agriculture, it could have a potential significant impact if hazardous agricultural chemicals such as herbicides, pesticides, and the like were used when the property. However, the impact can be reduced to a level of less than significant with following mitigation:*
>
> ***HAZ MM1:*** *The project sponsor shall sample the soil within the project site to determine the presence or absence of pesticides and herbicides. If soil sampling indicates the presence of any contaminant in hazardous concentrations, the California Regional Water Quality Control Board (RWQCB) and Department of Toxic Substance Control (DTSC) shall be contacted to determine the level of any*

necessary remediation efforts. If required, the project sponsor shall remediate these soils in compliance with applicable laws.

A Risk Assessment was also prepared to evaluate the potential health and safety risks to individuals from exposure to hazardous materials, which may occur at the proposed site due to the proximity to industrial uses. Three facilities were identified with the study area that store hazardous chemicals that could potentially have offsite consequences to the project site if catastrophically released. The three facilities includes: McCabe Quality Foods located 1.2 miles from the project site, Sipex Corporation located approximate .25 miles from the project site, and Linear Technology-Fab 4 located .25 miles from the project site. Both Sipex Corporation and Linear Technology have toxic endpoints that encompass the project site.

HAZ 2: *The project site will locate sensitive receptors within proximity to chemical and hazardous users. In event of an accidental release, sensitive receptors may be exposed to toxic chemicals or hazardous materials, which can be a potential significant impact. However, given existing local, state, and federal regulation, enforcement, engineering and process safeguards already in place, the impact can be considered less than significant with mitigation.*

HAZ MM2: *Existing local, state and federal regulations and enforcement are effective forms of hazard mitigation for toxic gas safety and preventing any possible offsite consequences from catastrophic release.*

c) Emit hazardous materials or handle hazardous materials or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? (NI)

The project will have no impact in regards to this topic, since the construction and the use of the site as single family residential would not release hazardous material into the environment.

d) Is the site listed as a hazardous materials site? (NI)

No properties comprising the project area are listed on the any regulatory agency list for hazardous site as of August 2006. Therefore, the project anticipates no impact with regard to this topic.

e,f) Is the site located within an airport land use plan of a public airport or private airstrip? (NI)

The project site is not located near a public or private airport, airfield or airstrip and therefore there are no impacts anticipated for this project.

g) Interference with an emergency evacuation plan? (NI)

The proposed project would include the construction of a residential project on private land and will not impact or interfere with an emergency evacuation plan because no affected roadways would be blocked.

h) Expose people and structures to a significant risk of loss, injury or death involving wild land fires or where residences are intermixed with wild lands? (NI)

The project area is located in an urbanized area and there would be no impact with regard to potential hazards with regard to wild land fire.

VIII. HYDROLOGY AND WATER QUALITY

Environmental Impacts

a) Violate any water quality standards or waste discharge requirements? (NI)

The project will have a no impact with regard to violation of waste discharge requirements, since the amount of stormwater runoff would not be significantly increased over the existing conditions. The project site would be subject to surface water standards imposed by the City of Milpitas under the city's NPDES permit with the Regional Water Quality Board.

b) Substantially deplete groundwater recharge areas or lowering of water table? (NI)

No impacts are anticipated with regard to depletion of groundwater resources, since the project will add more pervious surface areas that would allow more groundwater recharge compared to what the existing industrial park allows currently with its large buildings and paved areas.

c) Substantially alter drainage patterns, including streambed courses such that substantial siltation or erosion would occur? (NI)

The project site is currently fully developed with buildings, parking lots and other paved areas. Redevelopment of the project site would not increase the amount of stormwater runoff or change existing drainage patterns. Therefore, the project will result in no impacts.

d) Substantially alter drainage patterns or result in flooding, either on or off the project site? (NI)

Refer to item "c," above.

e) Create stormwater runoff that would exceed the capacity of drainage systems or add substantial amounts of polluted runoff? (NI)

Refer to item "c," above.

f) Substantially degrade water quality? (LS)

Redevelopment of the project site will be subject to City surface water quality standards to reduce any water quality impacts to a less-than-significant level.

g) Place housing within a 100-year flood hazard area as mapped by a Flood Insurance Rate Map? (NI)

The City of Milpitas is a participant in the National Flood Insurance Program (NFIP). As a result, flooding hazards within the City are managed under the requirements of the National Flood Insurance Act of 1986 and the Flood Disaster Protection Act of 1973, as amended. Furthermore, the City's Floodplain Management Ordinance prohibits new development from redirecting flood flows or substantially increasing the flood depth of any area.

New development is required to be constructed at an elevation above the base flood under the existing requirements of the National Flood Insurance Program and the City's Floodplain Management Ordinance. The project has been designed to will comply with this requirement. Therefore, the proposed project will not expose people or structures to a significant risk of loss, injury, or death involving flooding and will have a less than significant flooding impact.

h) Place within a 100-year flood hazard boundary structures that impeded or redirect flood flow, including dam failures? (LS)

Refer to item "g," above.

i) Result in inundation by seiche, tsunami or mudflows? (NI)

Based on the Milpitas General Plan Flooding and Inundation Map, the project is not located within the Sandy Wool Dam Inundation area and therefore would not be a potential impact to the project. Also, the project area is located a sufficient distance from San Francisco Bay to minimize any impacts from seiche or tsunami action in the Bay. As such, no impact would be anticipated regarding this topic.

IX. LAND USE AND PLANNING

a, c) Would the project physically divide a community or conflict with any habitat conservation plan? (NI)

The proposed project area consists of contiguous parcels and entails a change to the land use designation to allow moderate density single-family residential housing to be constructed. As such the project will not result in a physically divided community and have no impact with regard to this topic.

The project site is not located with a habitat conservation plan area or natural community conservation plan area and therefore, the project will not have an impact.

b) Conflict with any land use plan or regulation? (LS)

The proposed project is inconsistent with the City General Plan land use designation currently on the project site. Although the project includes applications to amend the General Plan and rezone the site to ensure consistency between the proposed development and applicable land use regulatory policies, there are other potentially impacts that could include incompatibility with surrounding industrial uses and economic impacts resulting from loss of industrial zoned property and jobs opportunities.

The project would be locating residential homes near industrial uses. Industrial operations may conflict with the residents' quiet and peaceful enjoyment of their homes because of the business hours or type of operations. New industrial businesses may be impacted because they may be discouraged to locate near residential and/or existing businesses may be limited from any future expansions because of the proximity to residential. The project would also remove 9.65 acres of industrial land and would result in a loss of approximate 386 employees or more if there are multiple shifts. However, these impacts are less than significant because residents will be fully disclosed that they are purchasing a home at the edge of industrial zoning district. Businesses will have to comply with local, state, and federal regulations when it comes to storage and handing hazardous material to ensure public health and safety. Under the existing General Plan there is 1,755 acres of industrial zoned land. Based on the 2005 Industrial Land Survey, the City had an inventory of approximately 22.5 million square feet of industrial space. Therefore the loss of 9.65 acres and approximately 121,746 square feet would not be a substantial decrease. It would result in less than 1% decrease in the total industrial space inventory.

X. MINERAL RESOURCES

Environmental Impacts

a-b) Result in loss of a known mineral resource or availability of a locally important mineral resource recovery site? (NI)

According to the General Plan, the project site contains no known mineral resources and therefore, will have no impact in regards to this topic.

XI. NOISE

Environmental Impacts

a) Result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? (LS/M)

The General Plan specifies a threshold of 60 decibels (dB) DNL as a "normally acceptable" limit for exterior noise levels and up to 70 decibel (dB) DNL for

conditionally acceptable provided that a detailed analysis is conducted and noise insulation features are incorporated in the design of the project. The General Plan also specifies a level of 45 decibel (dB) DNL for acceptable interior noise levels.

Due to the project site proximity to Sinclair Frontage Road and Interstate 680, which are located to the east of the site, a Traffic Noise Assessment Study prepared by Edward L. Pack Associates Inc (2006) to assess exterior and interior noise levels. The study concluded that the primary noise source would be from the vehicle traffic on Interstate 680. Based on future traffic conditions, the project site will experience noise levels in excess of 18 dB DNL for exterior and interior noise levels. The exterior noise exposures would impact rear yards and building setbacks of homes that are located closest to Interstate 680 as well as the planned park area, which expects a 70 dB NDL noise exposure.

To the immediate south of the project is a manufacturing company. Based on a supplemental noise study prepared by Edward L. Pack Associates, current operations of the manufacturing company does not generate any significant levels of noise. Presently, there are roll up doors and man doors located on the north side of the building. The building also has loading docks, but they are located on the south side of the building and faces Wrigley Way. Based on a site visit, nearly all of the operations are conducted indoors. However, future operations may be noticeable at the project site if the noise sources are high in level and the roll up doors are not fully closed. The impact would affect Lots 6-17 located to the southern edge of the project site.

> ***NOI 1****: Anticipated noise level exposures will exceed acceptable noise levels thresholds specified in the Milpitas General Plan Noise Element. However the impact is less than significant with implementation of the following noise mitigation measures and by incorporating design standards that would minimize noise exposures to acceptable levels.*
>
> ***NOI MM1:*** *The applicant shall incorporate and adhere to the recommendations and design standards set forth in the Traffic Noise Assessment dated December 15, 2006, prepared by Edward L. Pack Associates.*
>
> ***NOI MM2:*** *Construction of 16-foot tall acoustically effective noise control barrier along the property line contiguous with Sinclair Frontage Road, a 12-foot acoustically-effective barrier at the south side of Lot 43 and north side of Lot 1, and a 16-foot that steps down to 8-feet tall along the southern property line according to the following schedule:*

Lot #	***Required Height of Fence***
Lot 6	*16 ft. stepped down to 11 ft.*
Lot 7	*11 ft.*
Lot 8	*10 ft.*
Lot 9	*9 ft.*
Lot 10	*9 ft.*
Lot 11	*8 ft.*
Lot 12	*8 ft.*
Lot 13	*8 ft.*
Lot 14	*8 ft.*
Lot 15	*8 ft.*
Lot 16	*8 ft.*
Lot 17	*8 ft.*

NOI MM3: *Maintain closed at all times all first floor windows and glass doors of living spaces within 420 ft. of the centerline of the I-680 and with direct or side orientation towards the freeway. Install windows and glass doors rated minimum Sound Transmission Class (STC) 28. A disclosure statement shall be provided to all future property owners affected stating that windows and glass doors must be maintain the STC rating 28 or higher that were installed at the time of construction to main acceptable DNL noise exposures for single-family residents of 45 dB NDL.*

NOI MM4: *Maintain closed at all times all second floor windows and glass doors of living spaces within 420 ft. of the centerline of I-680 and with a direct or side orientation towards the freeway. At the living spaces within 340 ft. of the centerline, install windows and glass doors rated minimum STC 33. A disclosure statement shall be provided to all future property owners stating that windows and glass doors must maintain the STC rating 33 or higher that were installed at the time of construction to main acceptable DNL noise exposures for single-family residents of 45 dB NDL.*

NOI MM5: *At living spaces between 340 ft. and 420 ft. of the centerline, install windows and glass doors rated minimum STC 27. A disclosure statement shall be provided for all future property owners affected stating that windows and glass doors must maintain the STC rating 27 or higher that were installed at the time of construction to main acceptable DNL noise exposures for single-family residents of 45 dB NDL.*

NOI MM*6: At the second floors of Lot 1 (east and north faces) and of Lot 43 (east and south facades) install windows and glass doors rated minimum STC 38. A disclosure statement shall be provided to all future property owners affected stating that windows and glass doors must maintain the STC rating 38 or higher that were installed at the time of construction to main acceptable DNL noise exposures for single-family residents of 45 dB NDL.*

***NOI MM7**: Second floor windows for homes located on lots 6-17 shall install windows and glass doors rated minimum STC 28. A disclosure statement shall be provided to all future property owners affected stating that windows and glass doors must maintain the STC rating 28 or higher that were installed at the time of construction to main acceptable DNL noise exposures for single-family residents of 45 dB NDL.*

***NOI MM8**: Provide mechanical ventilation for all residential living spaces that have closed window requirements.*

***NOI MM9:** Prior to building permit issuance, applicant shall submit acoustical test report of all sound rated windows and doors. The report shall be review by a qualified acoustician to ensure that the chosen windows and doors will adequately reduce traffic noise to acceptable levels.*

Construction of the proposed project would temporarily increase noise levels in the project area. Construction activities generate considerable amounts of noise, especially during the construction of project infrastructure when heavy equipment is used. Typical average construction generated noise levels are about 81 – 89 decibels measured at a distance of 50 feet from the center of the site during busy construction periods (e.g., earth moving equipment, impact tools, etc.) Construction generated noise levels drop off at a rate of about six decibels per doubling of distance between the source and receptor. Construction equipment would be located near adjacent residences, and the noise from construction would likely be an annoyance to these land uses. Due to the proximity of the sensitive receptors, this would be a significant temporary impact.

NOI 2: The project site is bordered by existing residential land uses to the north. Noise generated by construction activities would have a significant temporary impact on nearby sensitive receptors. However, the Milpitas General Plan adopted *Noise Policy 6-I-13,* which restricts the hours of operation, technique, and equipment used in all public and private construction activities to minimize noise impact. With implementation of the following mitigation measure, the impact would be less than significant.

NOI MM10: Pursuant to the City of Milpitas Municipal Code, no person shall engage or permit others to engage in construction of any building or related road or walkway, pool or landscape improvement or in the construction operations related thereto, including delivery of construction materials, supplies, or improvements on or to a construction site except within the hours of 7:00 AM to 7:00 PM on weekdays and weekends.

NOI MM11: The contractor shall be required to use available noise suppression devices and properly maintain and muffle internal combustion engine-driven construction equipment.

NOI M12: The contractor shall be required to use noise barriers or noise control blankets to shield stationary equipment from nearby noise-sensitive receptors.

NOI MM13: The contractor shall designate a disturbance coordinator and post the name and phone number of this person at easy reference points for the surrounding land uses. The disturbance coordinator would respond to all complaints about noise and take the necessary steps to reduce the problem.

b-d) Exposure of persons to or generation of excessive ground-borne vibration, ground-borne noise levels, and ambient noise levels?(LS)

The proposed project would include construction or operation elements that could result in ground-borne vibration levels. This would be for construction activities related to demolition, grading, and construction of the homes and site improvements. However, the impact would be less than significant because it would be short-term in nature and would involve normal construction techniques to minimize vibration and noise vibration impacts.

e) For a project located within an airport land use plan or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? (NI)

No impacts are anticipated because the project is not located within two miles of an airport, private airstrip, or near active railroad lines that would generate ground-borne vibrations or noise vibrations.

e) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the area to excessive noise levels? (NI)

See item "e" above.

XII. POPULATION AND HOUSING

Environmental Impacts

a) Induce substantial population growth in an area, either directly or indirectly? (LS)

The proposed project will require a General Plan Amendment and Zone Change to allow the conversion of industrial land to low density residential development. The project is proposing to add a total of 80 new residential units. Based on Census data regarding population density for single family residential, it is anticipated to house 309 persons. The increased population would be less than significant because of continued demand for new housing. The project offers single-family homes that would provide a variety and mix in the housing types and cost, which is consistent with General Plan Implementing policy 2.a-I-12.

b) Displace substantial numbers of existing housing or substantial numbers of people? (NI)

The project site is an existing industrial park and will not result in displacement of any homes or people. The project can anticipate no impact with regards to displaced housing.

XII. PUBLIC SERVICES

The following service providers serve the project site:

Fire Protection. Fire protection is provided by the City of Milpitas Fire Department, which provides structural fire suppression, rescue, hazardous materials control and public education services. There are four Fire stations located within the city at the various locations below:

***Fire Station # 1**: 777 South Main St.*
***Fire Station # 2:** 1263 Yosemite Dr.*
***Fire Station # 3:** 45 Midwick Dr.*
***Fire Station # 4**: 775 Barber Ln.*

Police Protection. The City of Milpitas Police Department provides police protection.

Schools. Educational facilities are provided by the Milpitas Unified School District that operates kindergarten through high school services within the community. Schools that would serve the project include Milpitas High School (grades 9-12), two middle schools (grades 7-8) and nine elementary schools (grades K-6).

Maintenance. Public Works maintenance is provided by the City of Milpitas Public Works Department.

Environmental Impacts

a) Would the project result in substantial adverse impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- **Fire? (NI)**
- **Police? (NI)**
- **Other public facilities? (NI)**
- **Schools? (LS/M)**
- **Parks? (LS/M)**

The proposed project would not require additional fire, police, parks, or other public facilities because the project site is located with the existing urban service area. The project does not exceed the level of service threshold to warrant additional staffing.

The Milpitas School District has determined that the proposed project would increase enrollment at Randall Elementary, Rancho Middle School, and Milpitas High School. Under state law, payment of adopted school impact fees at the time building permits can be used to reduce school impacts to a less-than-significant level.

The Milpitas General Plan Open Space and Environmental Conservation Element calls for the allocation of 5 acres for neighborhood and community parks per each 1,000 residents. The project will be generating 309 new residents and is required to provide 1.08 acres of parkland or an in-lieu equivalency. The project proposes a .43-acres of private open space that consist of a .34-acre private park and .18-acre passive play area that would serve future residents within the new residential community. Based on Milpitas Municipal Code X-I-9.08, the .43 acres of private open space can be used as credit towards the Parkland and/or Park In-Lieu requirements. The amount of remaining parkland subject to park mitigation is .65 acres of parkland dedication and/or a park in-lieu fee in the amount of $1,556,695.

> ***PUB 1:*** *The project will add 309 new residents and will have an incremental impact on existing park system. However, the project is anticipated to have less than a significant impact to park and open resources with implementation of the following mitigation measure.*
>
> ***PUB MM1:*** *The project applicant shall pay a park in-lie fee in the amount of $1,556,695 prior to certificate of occupancy.*

XIV. RECREATION

Environmental Impacts

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? (LS)

The project is anticipated to have less than a significant impact because it proposes a .34-acre private park that includes play equipment, lawn space, and picnic areas that future residents can use and therefore will not cause a substantial physical deterioration of existing park facilities. The applicant shall pay their "fair share" contribution in the amount of $1,556,695, which shall be collected to implement park and open space improvements.

b) Does the project include recreational facilities or require the construction or expansion of recreation facilities, which might have an adverse physical effect on the environment? (NI)

The project proposes construction of new Private Park that will be improved with playground equipment, lawn space, and picnic areas. No impact is anticipated considering the site is an existing developed site

XV. TRANSPORTAION/TRAFFIC

Environmental Impacts

a) Cause an increase in traffic, which in substantial in relation to the existing traffic load and capacity of the street systems (i.e., result in a substantial increase in either the number of vehicle trips, the volume of capacity ratio on roads, or congestion at intersections)? (LS/M)

To evaluate potential traffic impacts on the surrounding roadway system, a Transportation Impact Analysis was prepared by Fehr and Peers Traffic Transportation Consultants. The roadway system was evaluated under the Existing, Background, Project and Year 2030 conditions. The project was also reviewed for on-site circulation, vehicle access and bicycle and pedestrian circulation. The proposed project is estimated to generate approximately 187 net new daily trips, 38 net new AM peak-hour trips, and 51 new PM peak-hour trips. The project would generate less than 100 net new peak-hour trips on a typical weekday. Project conditions would maintain LOS D or better on studied intersections. As such, the project would have a less than significant impact.

b) Exceed, either individually or cumulatively a level of service standard established by the county congestion management agency for designated roads or highways? (LS/M)

Under the Year 2030 conditions, the project is expected to exacerbate unacceptable (LOS E or F) operations during the PM peak-hour for the following two segments:

- *Northbound Milpitas Boulevard between Montague and Yosemite Drive.*
- *Eastbound Yosemite Drive between Milpitas Boulevard and Sinclair Frontage Road.*

TRA 10: *The project is anticipates a potential cumulative impact with regard to the LOS on two roadway segments noted above. However, the impact is less than significant with mitigation.*

TRA MM 10: *To mitigate this cumulative impact, the project applicant shall pay a traffic impact fee for their fair share contribution towards the Calaveras Boulevard (SR 237) Overpass Widening Project, Montague Expressway Widening Project, and South Milpitas Boulevard Smart Corridor Project.*

c) Result in a change in air traffic patterns either an increase in traffic levels or a change in location that results in substantial safety risk? (NI)

The project will not result in any impacts to air traffic patterns because it is a residential development located within the valley floor.

b) Substantially increase hazards due to a design feature or incompatible uses? (LS)

Approval of the proposed project and would a include construction of a private loop road and internal pedestrian sidewalks. The City of Milpitas has adopted design standards intended to assure that access to and from a development area, and circulation within the area, will be safe and efficient. Since project facilities will be required to be constructed to these design standards, such impacts are anticipated to be less-than-significant.

c) Result in inadequate emergency access? (NI)

Proposed development includes two emergency vehicular access points. The main access is provided by Sinclair Frontage Road and the second point of access is a new designated Emergency Vehicle Access located at the southwest corner of the site that terminates at Wrigley Way. The proposed site development meets the Fire Department requirements and standards for emergency ingress and egress. No impacts are therefore anticipated.

d) Result in inadequate parking capacity? (NI)

No impacts to parking are anticipated since the project provides the required number of parking spaces per the City of Milpitas Parking Development Standards and regulations.

f) Conflict with adopted policies, plans or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)? (NI)

Sidewalks will connect to public sidewalks on Sinclair Frontage/Los Coches Street and allow for pedestrian connections to nearby commercial service land uses and transit facilities on along Calaveras Boulevard. No impact are anticipated with regard to this topic.

XVI. UTILITIES AND SERVICE SYSTEMS

The following service providers serve the project site:

- Electrical and natural gas power: Pacific Gas and Electric Company
- Communications: AT&T
- Water supply: Provided by the City of Milpitas with the wholesale providers being either the San Francisco Water Department or the Santa Clara Valley Water District.
- Recycled water: South Bay Water Recycling Program
- Sewage treatment: Provided by the City of Milpitas and treated at the San Jose /Santa Clara Water Pollution Plant in San Jose.
- Storm drainage: City of Milpitas
- Solid waste disposal: Disposal is at the Newby Islands Landfill, operated by BFI
- Cable Television: Comcast

Environmental Impacts

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? (NI)

The project involves construction of new low-density residential homes and would be limited to typical domestic sewage, which would not include unique contaminants or pollutants. No impacts are therefore anticipated since Regional Water Quality Control Board treatment requirements would not be exceeded if this project is constructed.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? (LS)

The project site is already connected to the City's water and sewer systems. The proposed change of use would represent a minimal increase in the amount of water use and wastewater discharge. This impact would therefore be less-than-significant.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? (LS)

The project area is developed site with existing improvements. The storm drain impacts would also be less-than-significant for this development project. Redevelopment of the project site will be subject to C.3 surface water quality standards mandated by the Regional Water Quality Control Board and implemented by the City of Milpitas.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? (LS)

Since the project proposed a residential development, it anticipated a less than significant increase in domestic distribution capacity. The project applicant shall design and install all necessary water lines (including fire flow) in accordance with the City's Water Master Plan and guidelines. In addition, the project applicant will pay its fair share cost of purchasing adequate public system water for the respective development, including costs for capacity and storage needs above master plan capacities as determined by the City Engineer.

e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? (LS)

The project is anticipated to a less than significant impact with regard to this topic. The project proposes to redevelop an existing industrial site to low density residential. While the sanitary sewer lines that serve the project site are of sufficient size to accommodate the project, the increase in wastewater flows will affect sewer conveyance capacity, the

main pump system capacity, and the Water Pollution Control Plant Capacity. The developer shall design and construct all sanitary sewers in accordance with the City's Sewer Master Plan and the City Engineering Standards and Guidelines. In addition, the developer will purchase adequate public system sewage capacity. Fees shall consist of treatment plant fees up to the levels established in the Master Plan, plus proportional replacement costs for a new main sewage pump station and regional plant capacity above the master plan capacities, as determined by the City. The acquisition of additional plant capacity will not require the expansion of the existing wastewater treatment facility or construction of a new facility. The proposed project will not cause the wastewater treatment plant to exceed its existing capacity.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? (LS)

The project would anticipate an incremental increase in residential waste. However, the existing landfill has capacity to handle this additional amount of waste produced from the proposed project. The City of Milpitas is currently operating a residential recycling program for single-family houses and apartments that complies with state-mandated waste reduction goals specified in the Public Resources Code Section 40500. This project will participate in the City's solid waste program and in the City's residential recycling program, which will reduce the total amount of garbage taken to the landfill. Coordination with the solid waste hauler is necessary to insure that sufficient space is allocated for the necessary facilities. With implementation of the City's residential recycling program and solid waste program, the proposed project will have a less than significant impact on solid waste facilities serving the City of Milpitas.

g) Comply with federal, state, and local statutes and regulations related to solid waste? (NI)

If approved the project shall adhere to federal, state and local statues and regulations and therefore will not have impact with regard to this topic.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of the fish or wildlife specie, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or pre-history? Does the project have impacts that are individually limited but cumulatively considerable? (LS/M)

b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? (LS/M)

c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly. (LS/M)

The proposed development would have potential impacts regarding traffic, air quality, biological resources, geotechnical hazards, hazardous materials, and noise impacts associated with proposed project. Mitigation measures have been included in the project to reduce identified project impacts on the natural and human environment to a less than significant level.

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May 28, 2008

VIA FACSIMILE AND MAIL (408) 586-3293

Cindy Hom
Project Planner
City of Milpitas
455 East Calaveras Boulevard
Milpitas, CA 95035

Re: Mitigated Negative Declaration/Environmental Impact Assessment (EIA) No. EA2007-6 - Sinclair Renaissance Residential Project

Dear Ms. Hom:

This office represents Crain Cutter Co., Inc. ("Crain"), in connection with its real property located at 1155 Wrigley Way in the City of Milpitas. Crain's heavy industrial property is directly adjacent to the proposed Sinclair Renaissance Planned Unit Development (the "Project"). On behalf of Crain, we have reviewed the most recent plans submitted for the Project, and the proposed Mitigated Negative Declaration/Environmental Impact Assessment ("MND"). For the reasons set forth below, we believe the MND presently fails to comply with the provisions of the California Environmental Quality Act ("CEQA"; Pub. Resources Code, §§ 21000 et seq.). If revisions to the Project that would fully and completely mitigate the significant environmental impacts of the Project to a less than significant level cannot be made, we respectfully request that the City prepare an adequate Environmental Impact Report ("EIR").

1. The MND's Proposed Noise Mitigation Does Not Fully And Completely Mitigate Noise Impacts

While the measures proposed to mitigate noise impacts are substantial and will go a long way towards mitigating the potentially significant noise impacts of the Project, we believe additional mitigation is necessary in order to fully and completely mitigate the impacts. Specifically, we believe that the developer of the project should be required through an adopted mitigation measure to properly disclose the potentially significant noise impacts to any potential purchaser of Lots 6-17 of the subdivision. Such a disclosure would be in addition to the disclosure required by NOI MM7, and is necessary to fully mitigate the potential impacts of truck noise and operational noise on Lots 6-17.

Additionally, in light of the potential impacts of truck noise and operational noise on Lots 6-17, and potential aesthetic impacts, Crain believes that the soundwall proposed in NOI MM2 must be 16 feet tall along the entire southern property line. Not only will a stepped down fence (as proposed in the MND) cause adverse aesthetic and visual impacts, it will fail to sufficiently mitigate potentially significant noise impacts.

2. The MND Fails To Identify, Discuss, and Mitigate A Significant Geology and Soils Impact.

A mitigated negative declaration may be adopted only if all potentially significant impacts will be avoided or reduced into insignificance. (Pub. Resources Code, § 21080(c)(2); 14 Cal. Code Regs, § 15070(b).) Thus, to avoid the mandatory requirement that an EIR be prepared, the MND must identify, discuss, and mitigate potentially significant environmental impacts. For the Project MND to be considered adequate, appropriate mitigation measures must be included in the MND. (*Ocean View Estates Homeowners Ass'n v. Montecito Water District* (2004) 116 Cal.App.4th 396.)

Our review of the proposed MND has identified an impact that was not identified, discussed, or mitigated in the proposed MND. Specifically, the MND fails to identify the potential failure of the soundwall and/or the fire access road on the Crain property as a potentially significant environmental impact. As you may be aware, the Crain property is located at a higher grade than the property on which the Project is proposed to be developed. Consequently, development of the Project may destabilize existing surfaces, cause erosion, or put residential and commercial structures at risk. Unless the proposed soundwall is required - through an adopted and enforceable mitigation measure - to be fully engineered as a retaining wall to stabilize the surfaces, prevent erosion, and protect the residential and commercial structures, this impact will not be fully mitigated as required by CEQA.

3. The MND Improperly Determines There Will Be No Hydrology or Drainage Impacts.

Despite the fact that the development of the Project will substantially alter the existing drainage pattern of the site, the MND provides no discussion of the proposed drainage system, and fails to include standard mitigation measures for drainage impacts. Based upon a review of the MND, the public is unable to determine whether drainage related environmental impacts will result from the Project. The MND must be revised to include a description of the proposed drainage pattern of the site (once developed), together with an analysis of the potential impacts of the proposed drainage plan.

* * *

On behalf of our client, we appreciate the opportunity to provide these comments regarding the MND and Project. We look forward to working with the City and the Project proponent to ensure all potentially significant impacts are identified and mitigated. Should you have any questions or wish to discuss our comments further, please do not hesitate to contact the undersigned.

Very truly yours,

MILLER STARR REGALIA

Kristina D. Lawson

KDL:kdl
cc: Lance Crain

MISSION PEAK HOMES

June 4, 2008

City of Milpitas
Planning Division
Attn: Cindy Hom
455 E. Calaveras Blvd.
Milpitas, CA 95035

RE: Sinclair Renaissance,

Dear Cindy,

In response to the letter from Miller Starr Regalia which identifies three (3) areas of concern they have with the Mitigated Negative Declaration / Environmental Impact Assessment EA2007-6. As stated in the letter, Miller Starr Regalia represents the Crain Cutter Company who owns property adjacent to our proposed project. I would like to make the following response.

I have met with Mr. Lance Crain on two separate occasions to provide Mr. Crain an opportunity to review our proposed development and to provide comments and concerns he may have our proposed residential development. In addition to those meetings I did meet with Mr. Crain and his attorney on a separate occasion to discuss the drainage issue at the rear of his property.

At our first meeting Mr. Crain requested that we repair the fire access drive isle along the northern edge of his property. At that time Mr., Crain stated that his father should have built a retaining wall along the edge of the drive isle but did not and as a result the asphalt drive isle has started cracking, quite severely. The longitudinal cracking of asphalt this severe is usually indicative of structural failure or subsurface settlement of some type. We declined his request to repair the drive isle, however we did make note of his problem and have incorporated a retaining wall along his northern boundary.

Our second meeting took place several months later and at that time I provide Mr. Crain with copies of our revised plan showing the proposed retaining condition along his northern boundary. At this meeting Mr. Crain expressed concerns regarding the type of retaining wall and its structural design, he was concern that the wall should be designed to accommodate the weight of a fire truck. I assured Mr. Crain that when we were designing the wall I would make sure that we used 40,000 lbs as the surcharge and would provide him copies of the completed design and structural calculations. Mr. Crain also expressed a concern about noise levels of his present operations and future noise levels if he was to change his manufacturing process. I agreed to have our acoustical engineer reevaluate his recommendations taking into consideration Mr, Crain's concerns. I also asked our consultant to provide additional recommendations if needed. Upon receipt of the results of the acoustical engineers letter I forwarded a copy to Mr. Crain along with a copy structural calculations for a similar style retaining g wall used on anther project. In the letter I proposed, to build the sound wall along our common boundary to a minimum of 8' above his drive isle and increase the STC ratings on the second floor windows of all homes adjacent to his property, please keep in mind this is not required. Additionally, I included a Memorandum Of Understanding between Crain Cutter and Mission Peak Homes that would allow MPH access to the Crain property to repair an existing drainage problem at the rear of his property. This MOU was prepared at the request of the City of Milpitas Engineering Department. I have not received a verbal or written acknowledgement from Mr. Crain regarding this request.

40480 Encyclopedia Circle, Fremont, California 94538, Telephone 510/354•0888, Facsimile 510/354•0889

Today, I made another visit to the site and noticed that the roll-up door at the northern portion of the Crain Cutter building is actually higher than I remembered, therefore, I would like to make the following modification to our proposed sound wall heights along Mr. Crain's northern boundary. I would like to increase the height of the sound wall to sixteen feet (16') above our pad grade at lots 6 thru 10 and then step down to eleven feet (11') above pad grade for the remainder of the wall along lots 11 thru 17. As it was always our intent to make the sound wall in this area as high as the exterior door openings along the adjacent building.

In general, Mission Peak Homes has made every effort to make reasonable changes to accommodate and respond to all of Mr. Crain's concerns. We were quite shocked that Mr. Crain has responded to our efforts, by enlisting his attorney to challenge the Mitigated Negative Declaration.

Sincerely

Stephen M. Allen

Tree Report
245 Sinclair Frontage Road
Milpitas CA

Prepared for:
Mission Peak Company
40480 Encyclopedia Drive
Fremont CA 94538

Prepared by:
HortScience, Inc.
4125 Mohr Ave., Suite F
Pleasanton CA 94566

December, 2006

RECEIVED

MAY 15 2007

CITY OF MILPITAS
PLANNING DIVISION

Tree Report
245 Sinclair Frontage Road
Milpitas CA

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Attachments

Tree Survey

Tree Survey Map

Introduction and Overview

The Mission Peak Co. is planning to build a residential housing development at 245 Sinclair Frontage Road, in Milpitas. The site is currently occupied by a group of single-story commercial buildings. HortScience, Inc. was asked to prepare a **Tree Report** for the site for review by City of Milpitas.

This report provides the following information:

1. A survey of trees growing within and adjacent to the project area.

2. An assessment of the impacts of constructing the proposed project on the trees.

Survey Methods

Trees were surveyed on November 15, 2006. The survey included all trees 4" and greater in diameter. The survey procedure consisted of the following steps:

1. Identifying the tree as to species;

2. Measuring the trunk diameter at a point 24" above grade;

3. Tagging each tree with an identifying number and recording its location on a map;

4. Evaluating the health and structural condition using a scale of 1 – 5:
   - ***5*** - A healthy, vigorous tree, reasonably free of signs and symptoms of disease, with good structure and form typical of the species.
   - ***4*** - Tree with slight decline in vigor, small amount of twig dieback, minor structural defects that could be corrected.
   - ***3*** - Tree with moderate vigor, moderate twig and small branch dieback, thinning of crown, poor leaf color, moderate structural defects that might be mitigated with regular care.
   - ***2*** - Tree in decline, epicormic growth, extensive dieback of medium to large branches, significant structural defects that cannot be abated.
   - ***1*** - Tree in severe decline, dieback of scaffold branches and/or trunk; most of foliage from epicormics; extensive structural defects that cannot be abated.

5. Rating the suitability for preservation as "good", "moderate" or "poor". Suitability for preservation considers the health, age and structural condition of the tree, and its potential to remain an asset to the site for years to come.

   Good: Trees with good health and structural stability that have the potential for longevity at the site.

   Moderate: Trees with somewhat declining health and/or structural defects than can be abated with treatment. The tree will require more intense management and monitoring, and may have shorter life span than those in 'good' category.

   Poor: Trees in poor health or with significant structural defects that cannot be mitigated. Tree is expected to continue to decline, regardless of treatment. The species or individual may have characteristics that are undesirable for landscapes, and generally are unsuited for use areas.

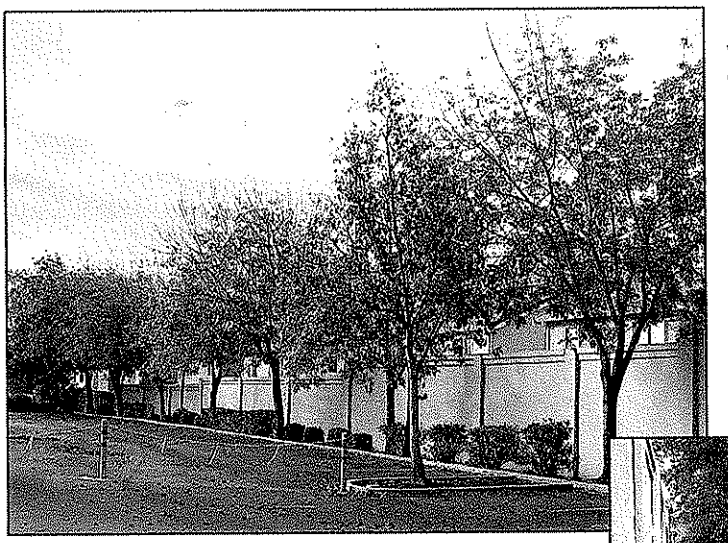
Description of Trees

One hundred ninety (190) trees were evaluated, representing nine (9) species (Table 1, following page). All of the trees were planted as part of the landscape treatment; none of the trees were native to the site. Descriptions of each tree are found in the ***Tree Survey***, and locations are plotted on the ***Tree Survey Map*** (see attachments).

Trees were growing in designated planting areas within parking lots and around buildings. In several instances, species with a mature tree size too large for the location had been planted in close proximity to design features.

Coast redwood was the most frequently occurring species, with 67 trees or 35% of the population. Coast redwoods were experiencing drought stress from a lack of summer irrigation, resulting in many trees with dry, thin foliage (38 of the 67 trees).

Sweet gum was the next most commonly occurring species with 66 trees (35%). Sweet gums had large surface roots and poor branch structure, typical of the species.



Evergreen ashes were also well represented at the site, with 23 trees, or 12% of the population. Twenty (20) of the evergreen ash trees were planted along the northern property line adjacent to a wall and drainage ditch (Photo 1). Close proximity to these features had required root and branch pruning, resulting in trees produced trees with poor form and structure and a lean to the south.

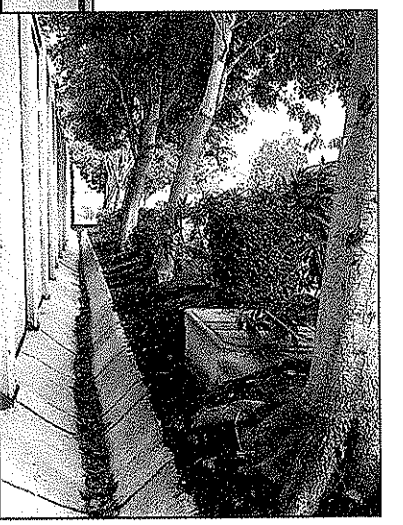


Photo 1: Evergreen ash trees #145-152 (along the wall) had been planted close to the wall and drainage ditch. Inset shows proximity to the drainage ditch and the lean to the south.

The City of Milpitas defines any tree with a circumference of 37" (diameter of 12") or greater on developed commercial or industrial property as "Protected" (Street Tree Ordinance X-2-7.01-1). One hundred and fifteen (115) trees met the criteria for "Protected" status, including 64 coast redwoods, 24 sweet gums and 17 evergreen ashes. "Protected" trees are identified in the ***Tree Survey*** (see attachments).

Table 1: Tree condition ratings and frequency of occurrence.
245 Sinclair Frontage Road, Milpitas CA

Common Name	Scientific Name	Condition Rating			No. of Trees
		Poor (0-2)	Fair (3)	Good (4-5)	
Western redbud	*Cercis ocidentalis*	-	-	1	1
Evergreen ash	*Fraxinus uhdei*	2	21	-	23
Crape myrtle	*Lagerstroemia indica*	-	-	11	11
Sweetgum	*Liquidamabar styraciflua*	1	27	38	66
Chinese pistache	*Pistacia chinensis*	-	2	6	8
Victorian box	*Pittosporum eugenoides*	-	-	1	1
Callery pear	*Pyrus calleryana*	-	6	2	8
Coast redwood	*Sequoia sempervirens*	13	24	30	67
Mexican fan palm	*Washingtonia robusta*	-	-	5	5
Total		**16**	**80**	**94**	**190**
		8%	42%	49%	100%

Suitability for Preservation

Before evaluating the impacts that will occur during development, it is important to consider the quality of the tree resource itself, and the potential for individual trees to function well over an extended length of time. Trees that are preserved on development sites must be carefully selected to make sure that they may survive development impacts, adapt to a new environment and perform well in the landscape.

Our goal is to identify trees that have the potential for long-term health, structural stability and longevity. For trees growing in open fields, away from areas where people and property are present, structural defects and/or poor health presents a low risk of damage or injury if they fail. However, we must be concerned about safety in use areas. Therefore, where development encroaches into existing plantings, we must consider their structural stability as well as their potential to grow and thrive in a new environment. Where development will not occur, the normal life cycles of decline, structural failure and death should be allowed to continue.

Evaluation of suitability for preservation considers several factors:

- **Tree health**
  Healthy, vigorous trees are better able to tolerate impacts such as root injury, demolition of existing structures, changes in soil grade and moisture, and soil compaction than are non-vigorous trees.

- **Structural integrity**
  Trees with significant amounts of wood decay and other structural defects that cannot be corrected are likely to fail. Such trees should not be preserved in areas where damage to people or property is likely.

- **Species response**
  There is a wide variation in the response of individual species to construction impacts and changes in the environment. In our experience, for example, Chinese pistache is moderately sensitive to root loss and injury, while coast redwood is tolerant of site disturbance.

- **Tree age and longevity**
  Old trees, while having significant emotional and aesthetic appeal, have limited physiological capacity to adjust to an altered environment. Young trees are better able to generate new tissue and respond to change.
- **Invasiveness**
  Trees with the potential to invade native habitats, reproduce rapidly, and grow in sub-optimal environments are considered invasive. Species with these qualities may alter the functional and aesthetic qualities of the habitats they invade. None of the species surveyed at the 245 Sinclair Frontage Rd. site are considered invasive.

Each tree was rated for suitability for preservation based upon its age, health, structural condition and ability to safely coexist within a development environment (Table 2, following page).

We consider trees with good suitability for preservation to be the best candidates for preservation. We do not recommend retention of trees with low suitability for preservation in areas where people or property will be present. Retention of trees with moderate suitability for preservation depends upon the intensity of proposed site changes.

Table 2: Tree Suitability for Preservation
245 Sinclair Frontage Road, Milpitas CA

Good	These are trees with good health and structural stability that have the potential for longevity at the site. Forty-seven (47) trees were of good suitability for preservation, including 17 evergreen ash trees, 11 coast redwoods, and 10 crape myrtles.
Moderate	Trees in this category have fair health and/or structural defects that may be abated with treatment. Trees in this category require more intense management and monitoring, and may have shorter life-spans than those in the "good" category. Ninety-nine (99) trees were of moderate suitability for preservation, including 42 sweet gums, 37 coast redwoods, and five (5) evergreen ashes.
Poor	Trees in this category are in poor health or have significant defects in structure that cannot be abated with treatment. These trees can be expected to decline regardless of management. The species or individual tree may possess either characteristics that are undesirable in landscape settings or be unsuited for use areas. Forty-four (44) trees were of poor suitability for preservation, including 19 coast redwoods, 18 evergreen ashes, and six (6) sweet gums.

Evaluation of Impacts and Recommendations for Action

Appropriate tree retention develops a practical match between the location and intensity of construction activities and the quality and health of trees. The ***Tree Survey*** was the reference point for tree condition and quality. Potential impacts from construction were evaluated using the Tentative Map, prepared by Carlson, Barbee and Gibson, Inc. (December, 2006).

The plan depicted the layout of the roads and buildings, as well as some utility information. Accurate trunk locations were not represented.

Potential impacts from construction were estimated for each tree. The proposed development would construct 80 residential units and a small park on the site, requiring demolition of the existing structures and grading of the entire site. The most significant impacts to the trees would occur as a result of grading the site for road and building construction.

Based on our evaluation of the plans, there is insufficient space for preservation of any trees. A grade change of approximately 2' within the proposed park precludes preservation of trees in this area.

Removal is recommended for all 190 trees, including the 115 "Protected" trees.

If you have any questions regarding my observations and recommendations, please contact me.

HortScience, Inc.

John Leffingwell
Certified Arborist WE-3966A
Registered Consulting Arborist #442

HORTSCIENCE TREE SURVEY

Mission Peak Company
Sinclaire Frontage Road
Milpitas
December 2006

TREE No.	SPECIES	SIZE DIAMETER (in inches)	Protected?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
1	Sweetgum	8	No	3	Moderate	Codominant at 10'; crown reduced.
2	Coast redwood	21	Yes	3	Moderate	Dry foliage.
3	Coast redwood	26	Yes	4	Moderate	Dry foliage; thin on west.
4	Coast redwood	27	Yes	4	Moderate	Dry foliage; crowded.
5	Coast redwood	26	Yes	4	Moderate	Crowded.
6	Coast redwood	28	Yes	4	Moderate	Crowded.
7	Coast redwood	28	Yes	4	Moderate	Crowded.
8	Chinese pistache	11	No	4	Good	Multiple attachments at 6'.
9	Chinese pistache	11	No	4	Moderate	Multiple attachments at 6'; crowded to N.
10	Coast redwood	27	Yes	4	Moderate	Dry foliage.
11	Coast redwood	23	Yes	4	Moderate	Dry foliage; crowded on N.
12	Coast redwood	20	Yes	3	Moderate	Corrected form at 3'.
13	Sweetgum	14	Yes	4	Moderate	Codominant at 5'; exposed surface roots.
14	Sweetgum	13	Yes	4	Moderate	Codominant at 6'.
15	Sweetgum	10	No	4	Moderate	Exposed surface roots; crown reduced.
16	Coast redwood	16	Yes	5	Good	Excellent health and structure.
17	Coast redwood	13	Yes	4	Good	Good form and structure.
18	Coast redwood	16	Yes	5	Good	Excellent health and structure.
19	Chinese pistache	6	No	4	Good	Small crown.
20	Chinese pistache	10	No	4	Moderate	Codominant at 6'; girdling root to S.
21	Coast redwood	23	Yes	5	Good	Excellent health and structure.
22	Coast redwood	20	Yes	5	Good	Excellent health and structure.
23	Coast redwood	16	Yes	4	Good	Good health; slight bow in trunk.
24	Chinese pistache	12	Yes	4	Good	Multiple attachments at 6'; full crown.
25	Chinese pistache	13	Yes	3	Moderate	Multiple attachments at 6'; crown reduced on building side.

HORTSCIENCE TREE SURVEY

Mission Peak Company
Sinclaire Frontage Road
Milpitas
December 2006

TREE No.	SPECIES	SIZE DIAMETER (in inches)	Protected?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
26	Sweetgum	11	No	3	Moderate	Multiple attachments at 7'.
27	Sweetgum	12	Yes	3	Moderate	Large root grows along building; crown reduced on E.
28	Sweetgum	10	No	4	Moderate	Multiple attachments at 8'.
29	Sweetgum	12	Yes	4	Moderate	Good form and structure; crown reduced.
30	Sweetgum	8	No	4	Moderate	Good form and structure; crown reduced.
31	Crape myrtle	6	No	5	Good	Good young tree.
32	Crape myrtle	7	No	5	Good	Good young tree.
33	Sweetgum	10	No	4	Moderate	Crown reduced; exposed surface roots.
34	Sweetgum	11	No	4	Moderate	Low lateral limb; stubs.
35	Sweetgum	11	No	4	Moderate	Codominant at 12'; crown reduced.
36	Sweetgum	9	No	4	Good	Multiple attachments at 6'; crown reduced.
37	Crape myrtle	6	No	5	Good	Good young tree.
38	Crape myrtle	5	No	4	Good	Corrected form at base.
39	Sweetgum	11	No	4	Good	Good form; trunk wound.
40	Sweetgum	8	No	4	Good	Good form; exposed surface roots.
41	Sweetgum	7	No	4	Good	Crooked central leader; crown reduced.
42	Sweetgum	9	No	3	Moderate	Weak codominant attachment at 6'; crown reduced.
43	Crape myrtle	5	No	5	Moderate	Good young tree.
44	Sweetgum	11	No	4	Moderate	Weak attachment at 8'; exposed surface roots; crown reduced.
45	Sweetgum	10	No	4	Good	Included bark at 8'; crown reduced.
46	Evergreen ash	20	Yes	3	Moderate	Multiple attachments at 8'; weak attachment.
47	Evergreen ash	14	Yes	3	Moderate	Heavy low lateral limbs.

HORTSCIENCE TREE SURVEY

Mission Peak Company
Sinclaire Frontage Road
Milpitas
December 2006

TREE No.	SPECIES	SIZE DIAMETER (in inches)	Protected?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
48	Evergreen ash	16	Yes	3	Poor	Codominant at 5'; included bark.
49	Western redbud	8	No	4	Good	Multiple attachments at 5'.
50	Sweetgum	9	No	4	Moderate	Good form; surface roots.
51	Sweetgum	18	Yes	4	Good	Excellent form; surface roots; full crown.
52	Victorian box	12	Yes	4	Moderate	Multiple attachments at 5'; crown close to building.
53	Sweetgum	11	No	4	Good	Multiple attachments at 7'.
54	Sweetgum	8	No	4	Good	Good form; thin crown.
55	Coast redwood	16	Yes	2	Poor	Very thin, dry crown.
56	Coast redwood	15	Yes	2	Poor	Very thin, dry crown.
57	Coast redwood	15	Yes	3	Poor	Very thin, dry crown.
58	Coast redwood	15	Yes	2	Poor	Very thin, dry crown.
59	Coast redwood	17	Yes	2	Poor	Very thin, dry crown.
60	Coast redwood	13	Yes	2	Poor	Very thin, dry crown.
61	Coast redwood	18	Yes	3	Moderate	Dry crown.
62	Coast redwood	16	Yes	3	Moderate	Dry crown.
63	Coast redwood	15	Yes	3	Moderate	Dry crown.
64	Coast redwood	14	Yes	3	Moderate	Thin, dry crown.
65	Coast redwood	14	Yes	3	Moderate	Thin, dry crown.
66	Coast redwood	17	Yes	3	Moderate	Dry crown.
67	Sweetgum	11	No	4	Moderate	Codominant at 7';crown reduced.
68	Sweetgum	12	Yes	4	Good	Codominant at 10'.
69	Sweetgum	13	Yes	4	Moderate	Codominant at 6'.
70	Sweetgum	13	Yes	3	Moderate	Codominant 6'; exposed surface roots.
71	Sweetgum	10	No	4	Good	Good form; leans to S.

HORTSCIENCE TREE SURVEY

Mission Peak Company
Sinclaire Frontage Road
Milpitas
December 2006

TREE No.	SPECIES	SIZE DIAMETER (in inches)	Protected?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
72	Sweetgum	10	No	3	Moderate	Crook at 8'.
73	Sweetgum	11	No	4	Moderate	Multiple attachments at 8'; crown reduced.
74	Coast redwood	15	Yes	3	Poor	Thin, dry crown.
75	Coast redwood	12	Yes	3	Poor	Thin, dry crown.
76	Coast redwood	13	Yes	3	Poor	Thin, dry crown.
77	Coast redwood	12	Yes	3	Moderate	Dry crown.
78	Coast redwood	13	Yes	3	Moderate	Dry crown.
79	Coast redwood	14	Yes	3	Moderate	Thin, dry crown.
80	Coast redwood	16	Yes	3	Moderate	Thin, dry crown.
81	Coast redwood	14	Yes	3	Moderate	Dry crown.
82	Coast redwood	15	Yes	3	Poor	Thin, dry crown.
83	Coast redwood	14	Yes	3	Poor	Thin, dry crown.
84	Coast redwood	18	Yes	4	Moderate	Dry foliage.
85	Sweetgum	8	No	4	Good	Multiple attachments at 7'.
86	Sweetgum	6	No	4	Good	Good young tree.
87	Sweetgum	8	No	4	Good	Good young tree.
88	Sweetgum	9	No	4	Moderate	Codominant at 8'.
89	Coast redwood	17	Yes	1	Poor	All but dead.
90	Coast redwood	14	Yes	1	Poor	All but dead.
91	Coast redwood	15	Yes	2	Poor	Very thin, dry crown.
92	Coast redwood	17	Yes	2	Poor	Very thin, dry crown.
93	Coast redwood	11	No	2	Poor	Very thin, dry crown.
94	Coast redwood	17	Yes	3	Moderate	Dry foliage.
95	Coast redwood	15	Yes	2	Poor	Thin, dry crown.
96	Coast redwood	13	Yes	2	Poor	Very thin, dry crown.
97	Coast redwood	16	Yes	2	Poor	Thin, dry crown.

HORTSCIENCE TREE SURVEY

Mission Peak Company
Sinclaire Frontage Road
Milpitas
December 2006

TREE No.	SPECIES	SIZE DIAMETER (in inches)	Protected?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
98	Sweetgum	11	No	4	Moderate	Good health.
99	Sweetgum	11	No	4	Moderate	Codominant at 8'.
100	Sweetgum	12	Yes	4	Moderate	Codominant at 8'.
101	Sweetgum	14	Yes	3	Moderate	Multiple attachments at 8'; weak attachments.
102	Sweetgum	15	Yes	3	Moderate	Narrow attachments at 6'; included bark.
103	Coast redwood	24	Yes	3	Moderate	Good form; thin.
104	Coast redwood	22	Yes	3	Moderate	Good form; thin.
105	Coast redwood	6	No	4	Moderate	Good young tree.
106	Coast redwood	22	Yes	4	Moderate	Good form; a bit thin; crowded.
107	Coast redwood	24	Yes	4	Moderate	Good form; a bit thin; crowded.
108	Coast redwood	24	Yes	4	Moderate	Good form; crowded.
109	Callery pear	5	No	4	Moderate	Multiple attachments at 5'.
110	Callery pear	5	No	4	Moderate	Low lateral limbs.
111	Callery pear	6	No	3	Moderate	Multiple attachments at 4'; narrow form.
112	Callery pear	6	No	3	Moderate	Multiple attachments at 4'; narrow form.
113	Callery pear	7	No	3	Moderate	Poor form; excessive sprouts.
114	Coast redwood	13	Yes	4	Good	Good health.
115	Callery pear	9	No	3	Moderate	Multiple attachments at 6'; full crown
116	Coast redwood	12	Yes	3	Moderate	Partial failure; corrected form.
117	Callery pear	6	No	3	Moderate	Narrow form.
118	Chinese pistache	9	No	4	Good	Good form; leans to W.
119	Chinese pistache	15	Yes	3	Moderate	Multiple attachments at 6'; leans to S.
120	Sweetgum	16	Yes	3	Moderate	Multiple attachments at 10'; low lateral S.
121	Sweetgum	14	Yes	3	Moderate	Codominant at 6'; large exposed surface roots.
122	Sweetgum	9	No	3	Moderate	Narrow form.
123	Sweetgum	13	Yes	3	Moderate	Codominant with included bark at 12'.

HORTSCIENCE TREE SURVEY

Mission Peak Company
Sinclaire Frontage Road
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December 2006

TREE No.	SPECIES	SIZE DIAMETER (in inches)	Protected?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
124	Sweetgum	11	No	3	Moderate	Crooked form.
125	Sweetgum	12	Yes	4	Good	Good form.
126	Sweetgum	11	No	3	Moderate	Crown reduced; exposed surface roots.
127	Coast redwood	26	Yes	4	Moderate	Good form.
128	Coast redwood	23	Yes	4	Moderate	Good form; crowded.
129	Coast redwood	28	Yes	4	Moderate	Good form; crowded.
130	Crape myrtle	5	No	4	Good	Good young tree.
131	Crape myrtle	6	No	4	Good	Good young tree.
132	Sweetgum	6	No	4	Good	Good young tree.
133	Sweetgum	13	Yes	3	Moderate	Multiple attachments at 7'.
134	Sweetgum	9	No	3	Poor	Circling roots.
135	Sweetgum	14	Yes	3	Moderate	Codominant at 6'; damage to surface roots.
136	Evergreen ash	23	Yes	3	Moderate	Narrow upright attachments at 8'; roots uplifting asphalt.
137	Evergreen ash	14	Yes	3	Poor	Narrow weak attachments at 10'; broken limb.
138	Evergreen ash	12	Yes	2	Poor	Poor form; leans to E.
139	Evergreen ash	11	No	3	Moderate	Narrow weak attachments at 6'; broken limb.
140	Evergreen ash	12	Yes	3	Poor	Narrow, codominant attachment at 7'.
141	Evergreen ash	17	Yes	3	Poor	Narrow, codominant attachment at 7'.
142	Evergreen ash	12	Yes	3	Poor	Narrow, codominant attachment at 7'; leans to S.
143	Evergreen ash	12	Yes	3	Poor	Narrow, codominant attachment at 8'; leans to S; roots cut on N.
144	Evergreen ash	12	Yes	3	Poor	Multiple attachments at 7'; narrow attachments.
145	Evergreen ash	12	Yes	3	Poor	Codominant at 7'; included bark.
146	Sweetgum	8	No	3	Poor	Basal wound; dead roots; crown ok.
147	Evergreen ash	11	No	3	Moderate	Weak attachments.

HORTSCIENCE TREE SURVEY

Mission Peak Company
Sinclaire Frontage Road
Milpitas
December 2006

TREE No.	SPECIES	SIZE DIAMETER (in inches)	Protected?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
148	Evergreen ash	12	Yes	3	Poor	Codominant at 8'; narrow attachment with included bark; trunk wound.
149	Evergreen ash	11	No	3	Poor	Codominant at 8'; narrow attachment.
150	Evergreen ash	10	No	3	Poor	Multiple attachments at 7'.
151	Evergreen ash	14	Yes	3	Poor	Multiple attachments at 7'; trunk wound.
152	Evergreen ash	17	Yes	3	Poor	Multiple attachments at 9'; v-ditch very close to trunk.
153	Mexican fan palm	18	Yes	5	Good	4' of brown trunk.
154	Mexican fan palm	24	Yes	5	Good	10' of brown trunk.
155	Mexican fan palm	18	Yes	5	Good	No tag; 6' of brown trunk.
156	Evergreen ash	7	No	2	Poor	Poor form.
157	Evergreen ash	9	No	3	Poor	Multiple attachments at 7'; included bark.
158	Evergreen ash	15	Yes	3	Poor	Codominant at 8'; included bark.
159	Evergreen ash	25	Yes	3	Poor	Multiple attachments at 8'; palm growing into canopy.
160	Mexican fan palm	18	Yes	4	Moderate	No tag; 5' of brown trunk; small sprouts at base; crown growing into #159.
161	Sweetgum	8	No	3	Moderate	Codominant at 6'; crown reduced.
162	Sweetgum	10	No	3	Moderate	Codominant at 8'; trunk wound; crown reduced.
163	Crape myrtle	7	No	5	Good	Excellent health and structure.
164	Crape myrtle	6	No	5	Good	Excellent health and structure; minor trunk wound.
165	Crape myrtle	6	No	5	Good	Excellent health and structure.
166	Sweetgum	11	No	3	Poor	Corrected form; exposed surface roots.
167	Crape myrtle	7	No	5	Good	Excellent health and structure.

HORTSCIENCE TREE SURVEY

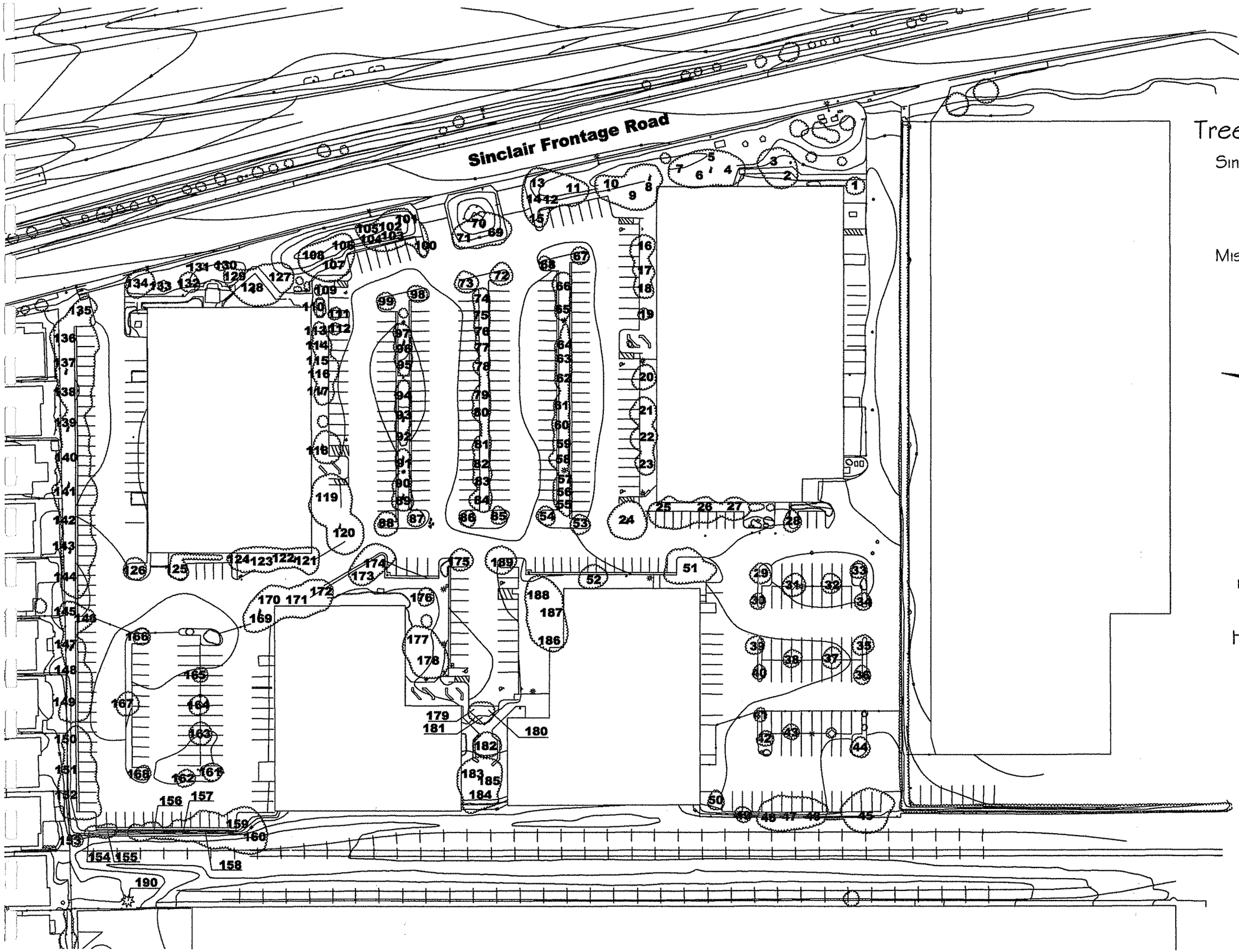
Mission Peak Company
Sinclaire Frontage Road
Milpitas
December 2006

TREE No.	SPECIES	SIZE DIAMETER (in inches)	Protected?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
168	Sweetgum	8	No	3	Moderate	Wide attachment at 7'; damage to exposed surface roots.
169	Sweetgum	14	Yes	2	Poor	Codominant at 9'; included bark; very weak attachment.
170	Sweetgum	16	Yes	3	Poor	Multiple attachments at 10'; weak attachments.
171	Sweetgum	15	Yes	3	Moderate	Upright narrow attachments at 9'; included bark.
172	Sweetgum	16	Yes	4	Moderate	Multiple attachments at 10'.
173	Sweetgum	12	Yes	4	Good	Good health.
174	Sweetgum	17	Yes	3	Poor	Codominant at 8'; included bark; failed limb left wound on S.
175	Sweetgum	11	No	4	Good	Good health.
176	Coast redwood	13	Yes	3	Moderate	Thin foliage.
177	Coast redwood	29	Yes	4	Moderate	Good form; crowded.
178	Coast redwood	27	Yes	4	Moderate	Good form; crowded.
179	Sweetgum	8	No	4	Moderate	Good health; crowded.
180	Sweetgum	7	No	3	Moderate	Multiple attachments at 5'; crowded; crown reduced.
181	Sweetgum	7	No	3	Moderate	Codominant at 6'; crowded.
182	Callery pear	12	Yes	3	Poor	Very narrow, codominant attachment at 7; topped at15'.
183	Coast redwood	30	Yes	4	Good	Good form; crown misshaped by building.
184	Coast redwood	11	No	4	Moderate	Crowded by larger trees.
185	Coast redwood	13	Yes	4	Moderate	Crowded; a bit thin.
186	Coast redwood	28	Yes	4	Good	Crowded by building.
187	Coast redwood	23	Yes	4	Good	Crowded; exposed surface roots.
188	Coast redwood	28	Yes	4	Good	Good form; exposed surface roots.

HORTSCIENCE TREE SURVEY

Mission Peak Company
Sinclaire Frontage Road
Milpitas
December 2006

TREE No.	SPECIES	SIZE DIAMETER (in inches)	Protected?	CONDITION 1=POOR 5=EXCELLENT	SUITABILITY FOR PRESERVATION	COMMENTS
189	Sweetgum	14	Yes	4	Moderate	Multiple attachments at 7'.
190	Mexican fan palm	18	Yes	5	Good	No tag; excellent form and structure; fronds to base.



Tree Survey Map

Sinclair Frontage Road
Milpitas, CA

Prepared for:
Mission Peak Company
Fremont, CA

November 2006

No Scale

Notes:
Base map provided by:
Aerometric Surveys
San Mateo, CA
Driplines and numbered tree locations are approximate.

HortScience, Inc.
Pleasanton, CA
925-484-0211

Transportation Impact Analysis

Sinclair Frontage Residential

TRANSPORTATION

&PLANNING

FEHR & PEERS
TRANSPORTATION CONSULTANTS

160 W. Santa Clara St., Ste. 675
San Jose, CA 95113

Project SJ06-886

April 2008

Final Report

Sinclair Frontage Residential Transportation Impact Analysis

Prepared for:

Mission Peak

Prepared by:

Fehr & Peers

April 2008

SJ06-886

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EXECUTIVE SUMMARY

This report presents the results of the transportation impact analysis (TIA) for the proposed 80 single-family dwelling unit residential project located at 245 Sinclair Frontage Road in the City of Milpitas, California. The proposed residential project replaces 120,558 square feet of existing light industrial office uses and the site is generally bounded by the Los Coches Street to the north, Wrigley Way to the south, Sinclair Frontage Road to the west, and Hillview Drive to the east.

The purpose of the analysis is to identify potential transportation impacts of the proposed project on the surrounding roadway system, and recommend appropriate improvements to mitigate impacts considered significant in comparison to thresholds determined by City of Milpitas Guidelines. The roadway system was evaluated under Existing, Background, Project, and Year 2030 Conditions. A review of on-site circulation, vehicle access, and bicycle and pedestrian circulation was conducted.

PROJECT TRAFFIC ESTIMATES

The amount of traffic generated by the proposed project was estimated by applying trip generation rates for single-family residential land uses identified in *San Diego Traffic Generators* (San Diego Association of Governments, April 2002) to the size of the project. The existing industrial trips, measured from driveway counts, were credited against the proposed residential uses.

The proposed project is estimated to generate approximately 167 net new daily trips, 36 net new AM peak-hour trips, and 49 net new PM peak-hour trips. The proposed project will generate less than 100 net new peak-hour trips on a typical weekday; therefore, a Congestion Management Program (CMP) analysis will not be required by the Santa Clara Valley Transportation Authority (VTA).

INTERSECTION IMPACTS AND MITIGATION

The proposed project is estimated to have a less-than-significant impact to the study intersections under Project Conditions. Therefore, mitigation measures are not required to the off-site intersections.

ROADWAY SEGMENT IMPACTS AND MITIGATION

The City of Milpitas utilizes peak-hour roadway segment volumes to evaluate long-term impacts (Year 2030 Conditions). During the AM peak hour, the project is estimated to have a less-than-significant impact on the study roadway segments. During the PM peak hour, the proposed project is expected to exacerbate unacceptable (LOS E or F) operations on the following two segments:

- Northbound Milpitas Boulevard between Montague Expressway and Yosemite Drive
- Eastbound Yosemite Drive between Milpitas Boulevard and Sinclair Frontage Road

To mitigate anticipated cumulative impacts of new development traffic on future deficient roadway segments, the City of Milpitas requires projects to pay their “fair share” of the traffic improvement costs. The project applicant will be required to make a “fair share” contribution towards the Calaveras Boulevard (SR 237) Overpass Widening Project, Montague Expressway Widening Project, and South Milpitas Boulevard Smart Corridor Project.

BICYCLE, PEDESTRIAN, AND TRANSIT FACILITIES

The project would have a less-than-significant impact on the bicycle and transit facilities, since the project is not expected to conflict with existing or planned bicycle and transit facilities. The existing sidewalk, which terminates north of the site, should be extended south along the west side of Sinclair Frontage Road to provide a continuous sidewalk.

SITE ACCESS AND ON-SITE CIRCULATION

All on-site access and circulation elements as shown in the site plan are compliant with City standards. The proposed 4-foot sidewalks along the project frontage should be widened to 5 feet to accommodate wheelchair passing.

The cross-section for Sinclair Frontage Road in front of the project site is proposed to remain the same as under existing conditions with on-street parking provided on the east side of the street next to the freeway. Commercial vehicle parking would continue to be prohibited in these spaces. The proposed 36-foot cross-section includes an 8-foot marked parking lane and two 14-foot travel lanes, and no separate turn lanes are required to provide adequate site access. However, we recommend that the on-street parking is relocated to the west side of the street adjacent to the uses generating parking demand. This would allow residents and guests and other visitors to access their vehicles without crossing a street with a posted speed limit of 40 mph. The supply would be reduced due to an extended painted red curb to provide adequate sight distance for vehicles exiting the site driveway, but the on-street spaces supplement the on-site supply, and reduced potential for pedestrian-vehicle conflict is a clear benefit of moving parking to the west side of the street.

If residents are required to park their cars in their own garages or driveways the project's parking supply exceeds the City's requirement.

1. INTRODUCTION

This report presents the results of the transportation impact analysis (TIA) for the proposed 80 single-family dwelling unit residential project located at 245 Sinclair Frontage Road in the City of Milpitas, California. The project would replace 120,558 square feet of light industrial office use. The project site is generally bounded by Los Coches Street to the north, Wrigley Way to the south, Sinclair Frontage Road to the west, and South Hillview Drive to the east.

The analysis was conducted to identify potential transportation impacts of the proposed development on the surrounding roadway system and to recommend improvements to mitigate any significant impacts. Figure 1 presents the project location, surrounding roadway system, and study intersections. The preliminary site plan is shown on Figure 2.

Project impacts were estimated following the City of Milpitas guidelines. The proposed project will generate less than 100 net new peak-hour trips on a typical weekday; therefore, a Congestion Management Program (CMP) analysis will not be required by the Santa Clara Valley Transportation Authority (VTA).

The analysis evaluated the operations of the following key intersections selected with consultation of City of Milpitas staff:

1. Milpitas Boulevard / Los Coches Street
2. Hillview Drive / E. Calaveras Boulevard
3. Hillview Drive / Los Coches Street
4. Sinclair Frontage Road / Yosemite Drive

The operations of the key intersections were evaluated during the weekday morning (AM) and afternoon (PM) peak hours for the following three scenarios:

Scenario 1: *Existing Conditions* – Existing volumes obtained from counts.

Scenario 2: *Background Conditions* – Existing volumes plus traffic from approved but not yet constructed developments in the area.

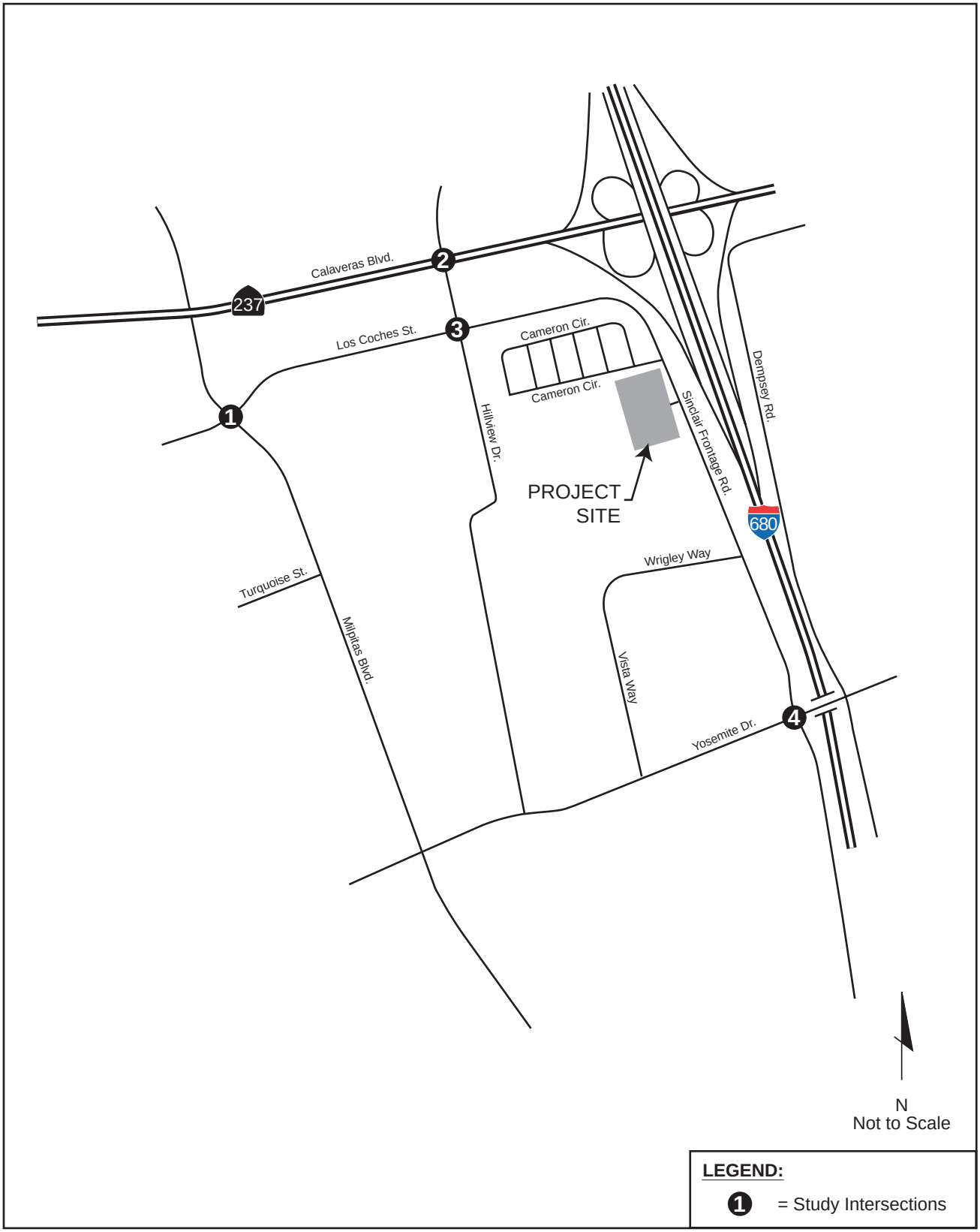
Scenario 3: *Project Conditions* – Background volumes plus the net new traffic generated by the proposed project.

Cumulative traffic operations were evaluated using a peak-hour roadway segment analysis per City of Milpitas Guidelines. Year 2030 Cumulative Conditions were evaluated using volumes from the City's travel demand model and the project trip assignment. Cumulative traffic operations were evaluated on the following ten roadway segments:

1. Calaveras Boulevard (SR 237), between Abel Avenue and Milpitas Boulevard
2. Calaveras Boulevard (SR 237), between Milpitas Boulevard and Hillview Drive
3. Calaveras Boulevard (SR 237), between Hillview Drive and I-680
4. Montague Expressway, between Great Mall Parkway and Milpitas Boulevard
5. Montague Expressway, between Milpitas Boulevard and I-680
6. Milpitas Boulevard, between Calaveras Boulevard (SR 237) and Yosemite Drive

7. Milpitas Boulevard, between Yosemite Drive and Montague Expressway
8. Sinclair Frontage Road, between Los Coches Street and Yosemite Drive
9. Los Coches Street, between Milpitas Boulevard and Hillview Drive
10. Yosemite Drive, between Milpitas Boulevard and Sinclair Frontage Road

The remainder of this report is divided into four chapters. The existing transportation system serving the property and the current operating conditions of the key intersections are described in Chapter 2. Chapter 3 discusses intersection operations with traffic from approved but not yet constructed developments under Background Conditions. Chapter 4 describes Project Conditions, including the method used to estimate the amount of traffic added to the surrounding roadways by the proposed project and its impacts on the transportation system. This chapter also includes a discussion of site access and on-site circulation. Cumulative Conditions are described in Chapter 5.



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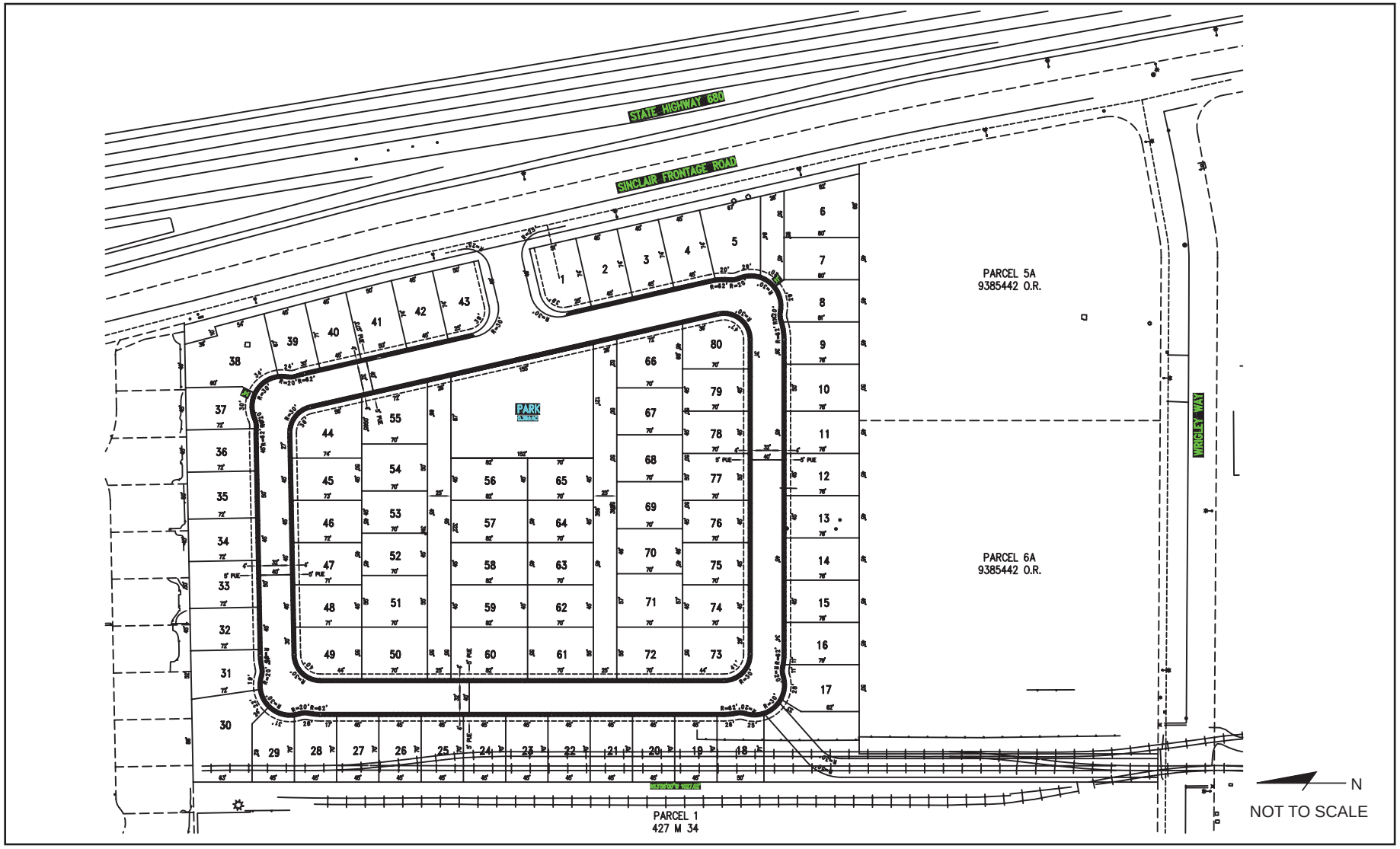
January 2007
SJ06-886

Sinclair Frontage Residential TIA

PROJECT LOCATION AND STUDY INTERSECTIONS

FIGURE 1



Sinclair Frontage Residential TIA

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SITE PLAN

January 2007
SJ06-886

FIGURE 2

2. EXISTING CONDITIONS

This chapter describes the existing conditions of the roadway facilities, pedestrian and bicycle facilities, transit service, traffic volumes, and intersection operations. This chapter also includes a discussion of the method used to calculate intersection levels of service and the corresponding results.

EXISTING ROADWAY NETWORK

Regional access to the project site is provided by Interstate 880 (I-880), Interstate 680 (I-680), and State Route 237 (SR 237)/Calaveras Boulevard. Local access to the site is provided by Sinclair Frontage Road, Los Coches Street, Hillview Drive, and Milpitas Boulevard. This section describes the existing roadway network, which is illustrated on Figure 1.

I-880 is a north-south freeway west of the project site extending south to the City of San Jose and north to the City of Oakland. Near the project site, the freeway includes eight lanes north of SR 237/Calaveras Boulevard and six lanes to the south. The I-880/SR 237 interchange includes direct ramp connections for High Occupancy Vehicle (HOV) lanes between the west and north legs of the interchange. Regional access to the project site is provided via the SR 237/Calveras Boulevard interchange. The peak direction of travel during commute hours is northbound during the AM peak hour and southbound during the PM peak hour.

I-680 is a north-south freeway immediately east of the project site extending south to the City of San Jose and north to Solano County. Near the project site, the freeway includes six mixed-flow lanes plus a southbound HOV lane north of Calaveras Boulevard (SR 237) and eight mixed-flow lanes to the south. Access to the site is provided via an interchange at Calaveras Boulevard. The commute direction is southbound during the AM peak hour northbound during the PM peak hour.

SR 237 is an east-west roadway that connects I-880 and I-680 and includes two distinct facilities: a six-lane freeway extending from I-880 west to US 101, and a four- to eight-lane arterial roadway between I-880 and I-680 with an elevated section over the Union Pacific Railroad tracks. The arterial section is locally designated as *Calaveras Boulevard*, which is six lanes wide except on the bridge over the Union Pacific railroad tracks and Main Street, where it is four lanes wide. Calaveras Boulevard serves as a major commute route with heavy directional travel during the peak hours (westbound in the morning and eastbound in the afternoon).

Sinclair Frontage Road is a north-south, two-lane local street extending from Los Coches Street to Ames Avenue. The posted speed limit is 40 miles per hour (mph).

Los Coches Street is an east-west, two-lane local road that extends from Topaz Street in the west and connects to Sinclair Frontage Road to the east. The posted speed limit on Los Coches Street is 35 mph.

Hillview Drive is a north-south roadway extending from Yosemite Drive north into the City of Fremont. South of Los Coches Street, Hillview Drive is a two-lane local road, and north of Los Coches Street Hillview Drive is a four-lane collector street. Near of the project site, the posted speed limit on Hillview Drive is 35 mph.

Milpitas Boulevard is a north-south, four-lane arterial extending from the Milpitas-Fremont City limit line (also the Santa Clara-Alameda County limit line) south to Montague Expressway. Milpitas Boulevard is designated Warm Springs Boulevard north of the City/County limit. Near of the project site, the posted speed limit is 40 mph.

EXISTING PEDESTRIAN AND BICYCLE FACILITIES

Pedestrian Facilities

Pedestrian facilities comprise sidewalks, crosswalks, and off-street paths. Figure 3 presents existing pedestrian facilities near the project site with sidewalks at the following locations:

- *Hillview Drive*, east side between Los Coches Street and Yosemite Drive and both sides north of Los Coches Street;
- *Los Coches Street,* both sides between Hillview Drive and Sinclair Frontage Road and north side between Milpitas Boulevard and Hillview Drive;
- *Sinclair Frontage Road*, west side from Los Coches Street to Cameron Circle;
- *Milpitas Boulevard*, both sides north of Los Coches Street and west side south of Los Coches Street;
- *Calaveras Boulevard,* both sides east of I-680.

Bicycle Facilities

The location of bicycle facilities near the project site was obtained during field visits to the study area and referenced by the VTA's *Santa Clara Valley Bikeways Map* (October 2005). Bicycle facilities include multi-use, off-street paths, bike lanes, and bike routes. Multi-use paths are paved pathways for use by bicycles and other users that are separated from roadways. Bike lanes are lanes on roadways designated for use by bicycles with special lane markings, pavement legends, and signage. Bike routes are designated for bicycle travel with signs only but do not include a separate travel lane.

Bicycle lanes are provided on Yosemite Drive between Sinclair Frontage Road and Milpitas Boulevard and on Milpitas Boulevard, north of Yosemite Drive. Milpitas Boulevard between Yosemite Drive and Montague Expressway and Calaveras are designated bicycle routes. Figure 3 illustrates the location of these bicycle facilities near the project site.

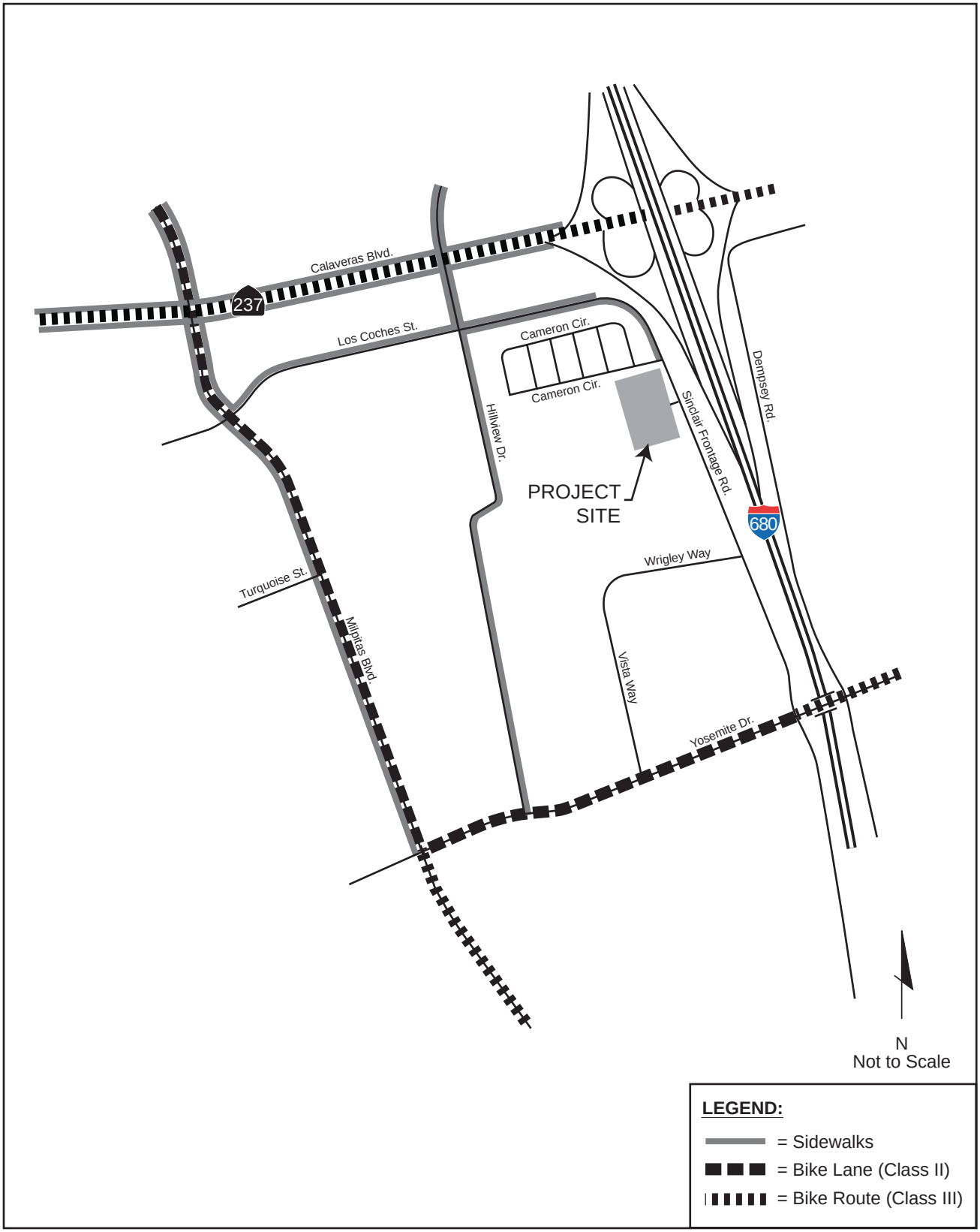
Other local roadways, such as Hillview Avenue, Sinclair Frontage Road, and Los Coches Street generally have wide lanes and carry relatively low traffic volumes, which allow for bicycles to comfortably share the road with vehicles. Multi-use paths do not exist near the project site.

EXISTING TRANSIT SERVICE

The Santa Clara Valley Transportation Authority (VTA) operates bus and light rail service in Santa Clara County. Figure 4 shows the existing bus routes in the study area.

The Great Mall/Main Transit Center is located on the north side of Great Mall Parkway at Main Street, approximately two miles south-west of the project site. This multimodal transit hub consists of an elevated light rail station above Great Mall Parkway and a bus transfer facility and park-and-ride lot located on the northeast corner of the Great Mall Parkway/Main Street intersection.

VTA bus route 47 and 77 serve bus stop locations near the project site on Milpitas Boulevard and Calaveras Boulevard. Table 1 summarizes the destinations, hours and days of operation, and service frequencies for the bus routes.



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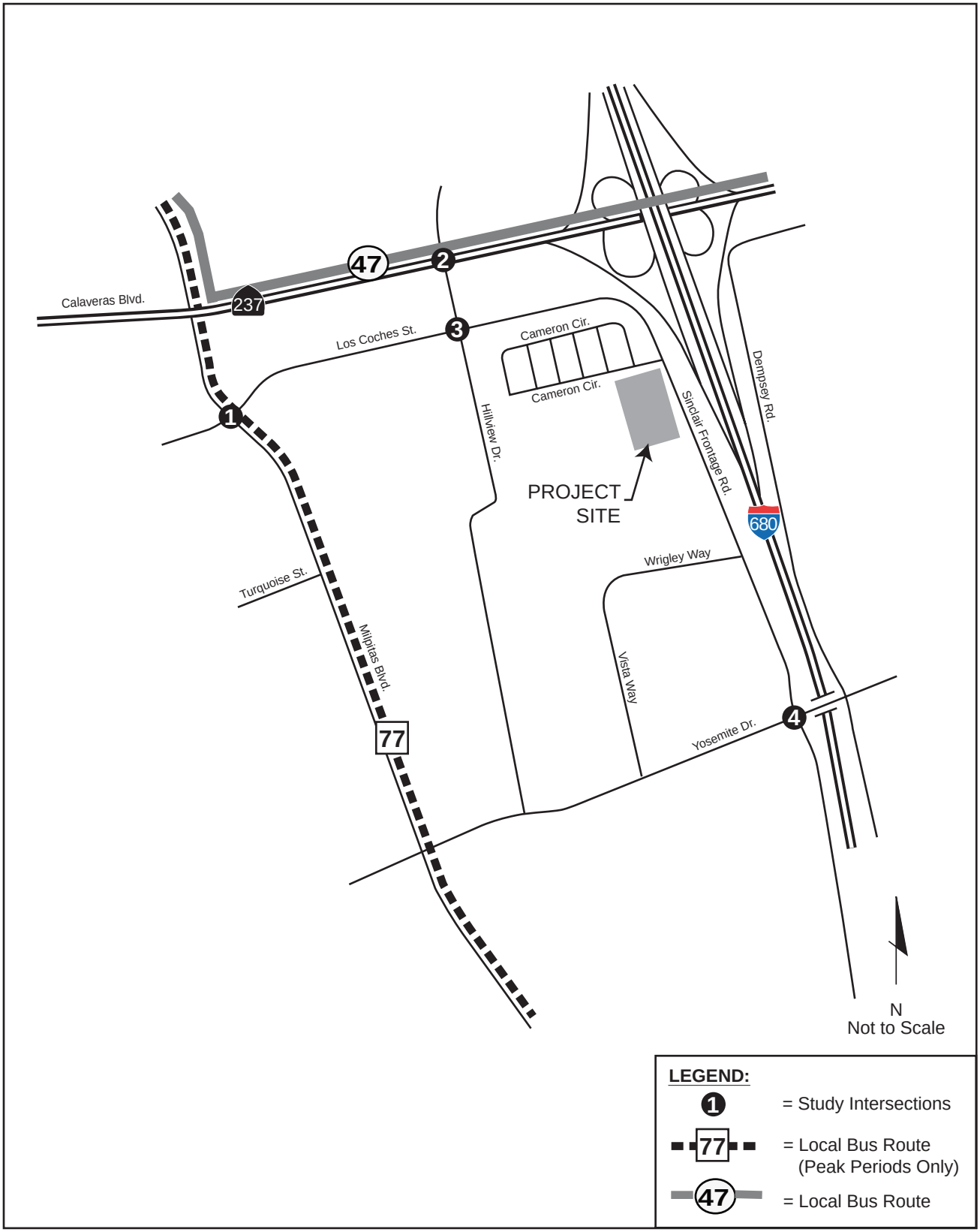
EXISTING PEDESTRIAN AND BICYCLE FACILITIES

FIGURE 3



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EXISTING TRANSIT SERVICE

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FIGURE 4

TABLE 1
EXISTING TRANSIT SERVICE

Route	From	To	Weekdays			Weekends	
			Operating Hours	Peak	Midday	Operating Hours	Midday
47	Great Mall/Main	Washington/Escuela	5:40a – 10:00p	20-30	30	7:00a – 8:00p	30
77*	Eastridge	Milpitas/Calaveras	5:20a – 9:50p	15-30	30	6:40a – 9:05p	30

Note:
* Route 77 operates between Great Mall/Main and Milpitas/Calaveras weekday peak periods only.

EXISTING VOLUMES AND LANE CONFIGURATIONS

The operations of the key intersections were evaluated during the weekday AM and PM peak hours. Intersection operations were evaluated for the highest one-hour volume counted between 7:00 and 9:00 AM and between 4:00 and 6:00 PM. The City of Milpitas provided intersection counts at Calaveras Boulevard/Hillview Drive and new traffic counts were conducted at the remaining locations to supplement this information. The new traffic counts are included in Appendix A.

Figure 5 presents the existing AM and PM peak-hour turning movement volumes at the study intersections. Figure 6 presents the existing intersection lane configurations and traffic control devices.

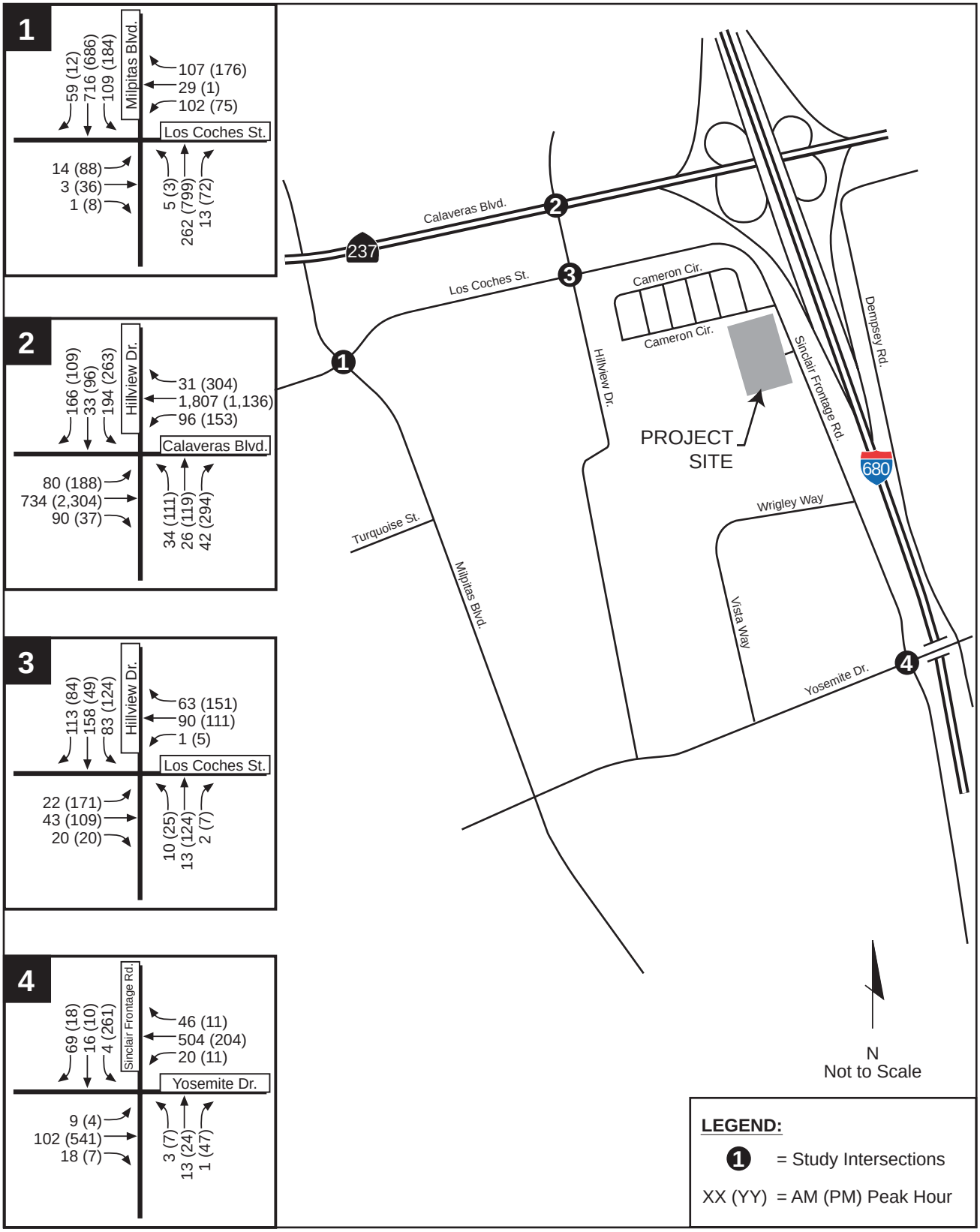
LEVEL OF SERVICE METHODS

The operations of roadway facilities are described with the term level of service (LOS). LOS is a qualitative description of traffic flow based on such factors as speed, travel time, delay, and freedom to maneuver. Six levels are defined from LOS A, with the best operating conditions, to LOS F, with the worst operating conditions. LOS E represents “at-capacity” operations. Operations are designated as LOS F when volumes exceed capacity, resulting in stop-and-go conditions.

Signalized Intersections

The level of service method approved by the City of Milpitas and the VTA analyzes a signalized intersection’s operation based on average control vehicular delay, as calculated using the method described in Chapter 16 of the *2000 Highway Capacity Manual* (*HCM*) by the Transportation Research Board, with adjusted saturation flow rates to reflect conditions in Santa Clara County. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The average control delay for signalized intersections is calculated using TRAFFIX analysis software and is correlated to a LOS designation as shown in Table 2.

The City of Milpitas has established a minimum acceptable operating level of LOS D for signalized intersections excluded from the Congestion Management Program (CMP).



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EXISTING INTERSECTION PEAK-HOUR TRAFFIC VOLUMES

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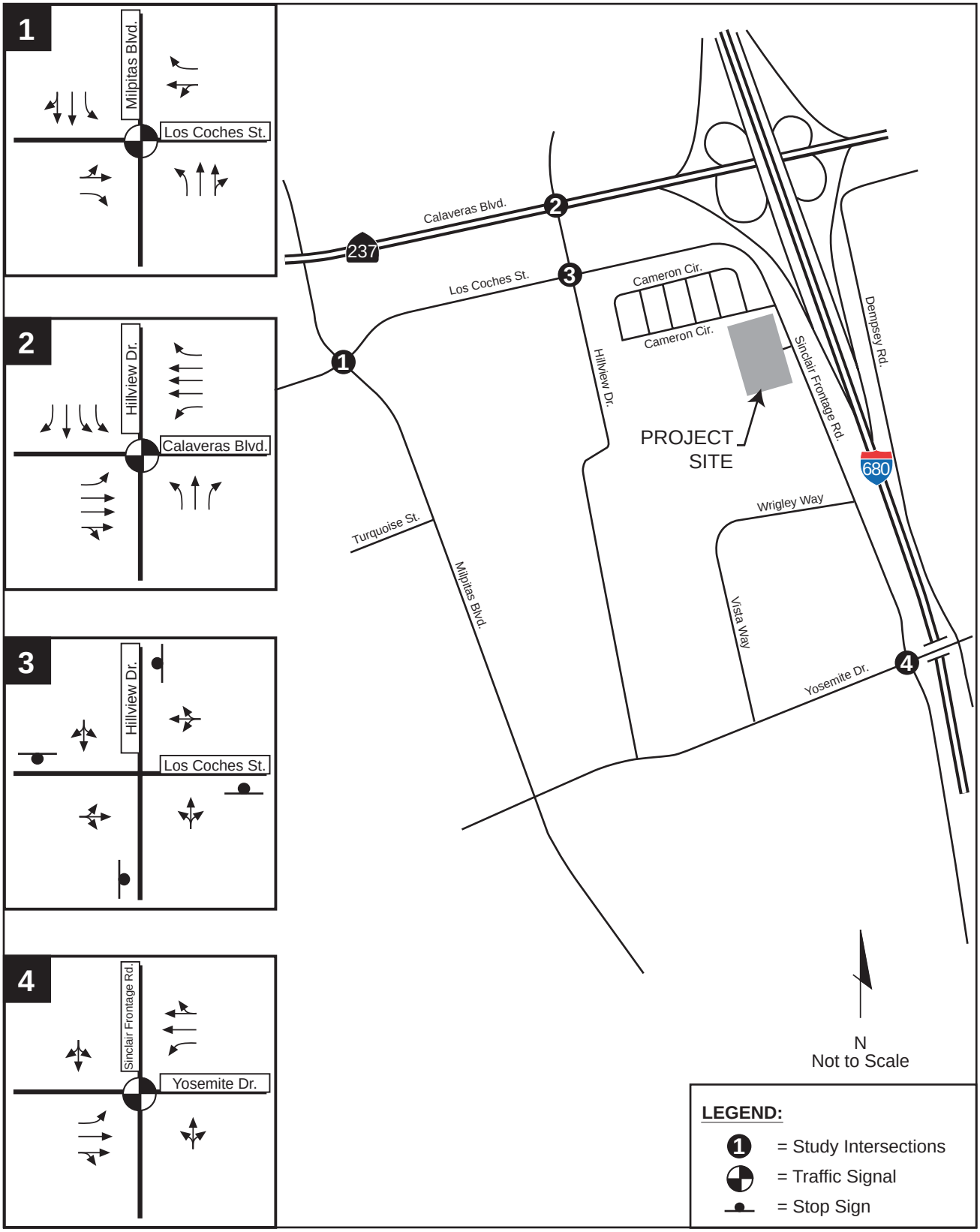
FIGURE 5



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EXISTING INTERSECTION LANE CONFIGURATIONS

FIGURE 6

TABLE 2
SIGNALIZED INTERSECTION LEVEL OF SERVICE DEFINITIONS
USING AVERAGE CONTROL VEHICULAR DELAY

Level of Service	Description	Average Control Delay Per Vehicle (Seconds)
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	≤ 10.0
B+ B B-	Operations with low delay occurring with good progression and/or short cycle lengths.	10.1 to 12.0 12.1 to 18.0 18.1 to 20.0
C+ C C-	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.1 to 23.0 23.1 to 32.0 32.1 to 35.0
D+ D D-	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, and high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 39.0 39.1 to 51.0 51.1 to 55.0
E+ E E-	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.	55.1 to 60.0 60.1 to 75.0 75.1 to 80.0
F	Operations with delays unacceptable to most drivers occurring due to over-saturation, poor progression, or very long cycle lengths.	> 80.0

Source: *Traffic Level of Service Analysis Guidelines*, VTA Congestion Management Program, June 2003; *Highway Capacity Manual*, Transportation Research Board, 2000.

Unsignalized Intersections

Operations of the project driveway were evaluated using the method contained in Chapter 17 of the 2000 *Highway Capacity Manual*. The LOS rating is based on the weighted average control delay expressed in seconds per vehicle (See Table 3). At two-way or side street-controlled intersections, LOS is calculated for each controlled movement, not for the intersection as a whole. For approaches composed of a single lane, the delay is computed as the average of all movements in that lane. For all-way stop controlled locations, LOS is computed for the intersection as a whole.

LOS D is the minimum acceptable operating level of service for unsignalized intersections as established by the City of Milpitas. Additionally, the peak-hour signal warrants from the *Manual on Uniform Traffic Control Devices* (MUTCD, 2003) are used to analyze operations at unsignalized intersections.

TABLE 3
UNSIGNALIZED INTERSECTION LEVEL OF SERVICE DEFINITIONS

Level of Service	Description of Operations	Average Control Delay (sec / veh)
A	No delay for stop-controlled approaches.	0 – 10
B	Operations with minor delays.	> 10 – 15
C	Operations with moderate delays.	> 15 – 25
D	Operations with some delays.	>25 – 35
E	Operations with high delays, and long queues.	> 35 – 50
F	Operation with extreme congestion, with very high delays and long queues unacceptable to most drivers.	> 50

Source: Highway Capacity Manual, Transportation Research Board, 2000.

EXISTING INTERSECTION LEVELS OF SERVICE

Existing intersection lane configurations, signal timings, and peak-hour turning movement volumes were used as inputs for the levels of service calculations. The results of the LOS analysis for Existing Conditions are presented in Table 4. Appendix B contains the corresponding calculation sheets.

TABLE 4
EXISTING INTERSECTION LEVELS OF SERVICE

Intersection	Control Type	Peak Hour[1]	Count Date	Delay[2]	LOS[3]
1. Milpitas Boulevard / Los Coches Street	Signal	AM PM	11/06 11/06	12.8 16.6	B B
2. Hillview Drive / E. Calaveras Boulevard	Signal	AM PM	10/05 10/05	24.0 34.3	C C-
3. Hillview Drive / Los Coches Street	All-Way Stop	AM PM	11/06 11/06	9.7 12.0	A B
4. Sinclair Frontage Road / Yosemite Drive	Signal	AM PM	11/06 11/06	10.6 16.0	B+ B

Notes:
1 AM = morning peak hour, PM = evening peak hour.
2 Whole intersection weighted average control delay expressed in seconds per vehicle for signalized and all-way stop intersections using method described in the 2000 *Highway Capacity Manual*, with adjusted saturation flow rates to reflect Santa Clara County Conditions.
3 LOS = level of service. LOS calculations conducted using the TRAFFIX level of service analysis software package.

Measured against the City of Milpitas level of service standards, each signalized intersection operates at an acceptable LOS D or better under Existing Conditions. The all-way stop intersection of Hillview Drive and Los Coches Street operates acceptably (LOS D or better) and does not meet peak-hour signal warrants.

FIELD OBSERVATIONS

Field observations of the key study intersections near the project site were conducted in November 2006 to verify the calculated operations. The observations indicate that the study intersections are operating at or near the calculated levels of service.

During the AM peak period, large queues of more than fifteen vehicles were observed on the westbound through and left-turn movements on E. Calaveras Boulevard at Hillview Drive. The queues in the through movement were generally able to clear during the green phase, while the left-turn queues, which frequently queued out of pocket, were regularly observed to not clear the intersection before the phase turned red. At the Los Coches Street/Hillview Drive intersection, southbound traffic was observed to arrive in platoons from the upstream intersection at E. Calaveras Boulevard/Hillview Drive. This results in periodic queues of five to eight vehicles in the southbound direction at the Los Coches Street/Hillview Drive intersection; though the queues were observed to clear quickly.

During the PM peak period, eastbound vehicles at the intersection of E. Calaveras Boulevard and Hillview Drive were observed queuing by more than twenty vehicles, queuing through the next intersection downstream at Town Center Drive. The queues were especially heavy in the third through lane from the center due to vehicles trying to access the I-680 southbound ramps.

Operations at the intersections of Sinclair Frontage Road/Yosemite Drive and Milpitas Boulevard/Los Coches were observed to be light during both peak periods. No significant queues were observed.

3. BACKGROUND CONDITIONS

This chapter discusses the operations of the key intersections with existing traffic volumes plus traffic generated from surrounding projects that have been approved but not yet constructed or occupied. Background Conditions serve as the basis for identifying project impacts.

BACKGROUND TRAFFIC ESTIMATES

Traffic volumes for Background Conditions were estimated by adding traffic generated by approved but not yet constructed or occupied developments to existing traffic volumes. City staff provided a list of approved projects and available traffic projections. Traffic projections were prepared for the developments where traffic estimates were not available. Background Conditions includes traffic associated with Phase 1 of the North San Jose development. A list of approved projects included under Background Conditions is attached as Appendix C. Figure 7 illustrates the traffic volumes at the key intersections under Background Conditions.

BACKGROUND ROADWAY IMPROVEMENTS

No roadway or intersection improvements were identified at the study intersections.

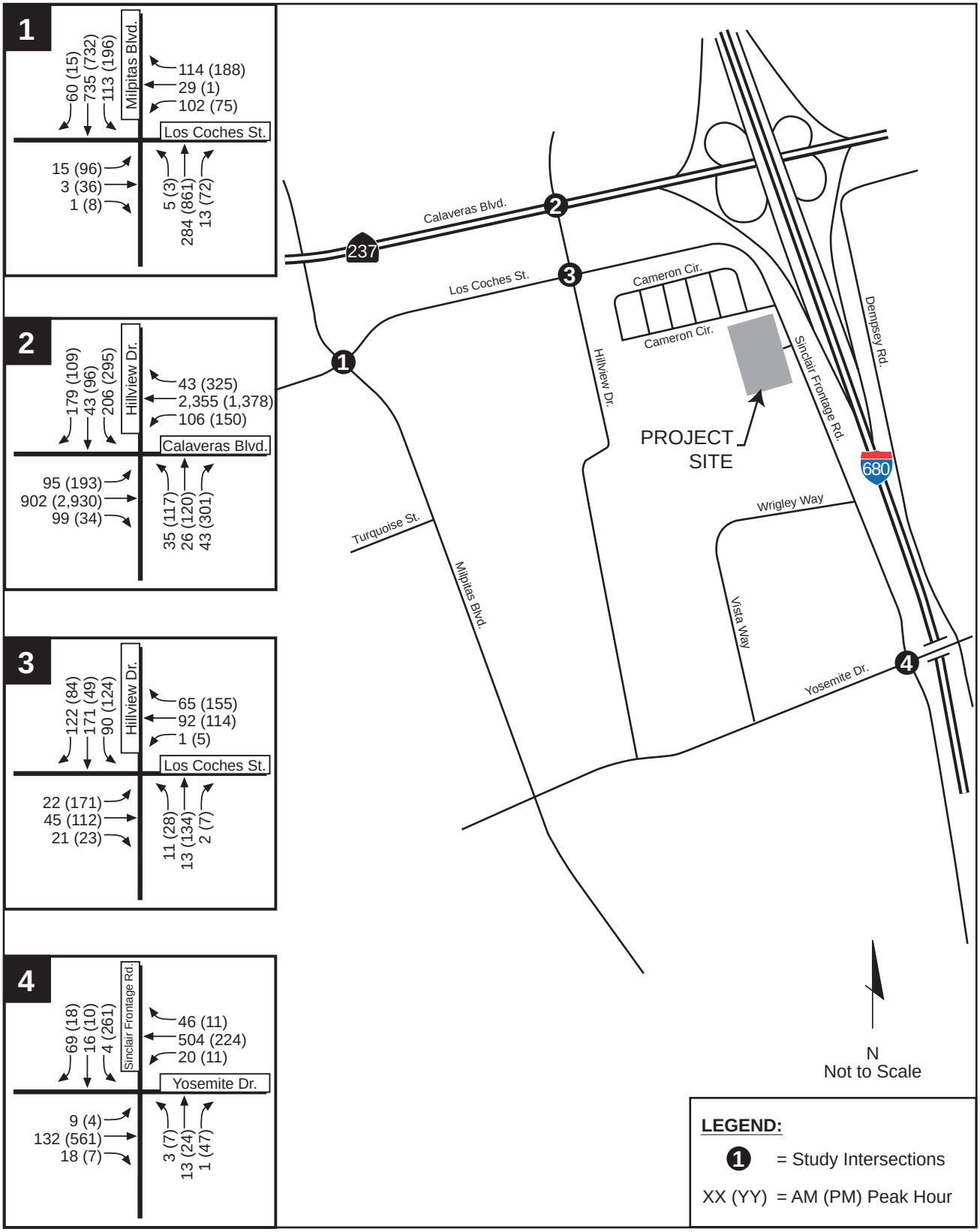
BACKGROUND INTERSECTION LEVELS OF SERVICE

Level of service calculations were conducted for the key intersections to evaluate their operations under Background Conditions with approved project traffic. The results of the LOS analysis are presented in Table 5. The signalized intersections are projected to continue to operate at an acceptable level of service, LOS D or better, under Background Conditions. The all-way stop-controlled intersection of Hillview Drive and Los Coches Street operates at acceptable levels (LOS D or better) and does not meet the peak-hour signal warrant. Appendix B contains the corresponding calculation sheets.

TABLE 5
BACKGROUND INTERSECTION LEVELS OF SERVICE

Intersection	Peak Hour[1]	Delay[2]	LOS[3]
1. Milpitas Boulevard / Los Coches Street	AM	12.8	B
	PM	16.9	B
2. Hillview Drive / E. Calaveras Boulevard	AM	23.9	C
	PM	36.3	D+
3. Hillview Drive / Los Coches Street	AM	10.1	B
	PM	12.3	B
4. Sinclair Frontage Road / Yosemite Drive	AM	10.6	B+
	PM	16.0	B

Notes:
1 AM = morning peak hour, PM = evening peak hour.
2 Whole intersection weighted average control delay expressed in seconds per vehicle for signalized and all-way stop intersections using method described in the 2000 *Highway Capacity Manual*, with adjusted saturation flow rates to reflect Santa Clara County Conditions.
3 LOS = level of service. LOS calculations conducted using the TRAFFIX level of service analysis software package.



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BACKGROUND INTERSECTION PEAK-HOUR TRAFFIC VOLUMES

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FIGURE 7

4. PROJECT CONDITIONS

The impacts of the proposed project on the surrounding roadway system are discussed in this chapter. First, the method used to estimate the amount of traffic generated by the project is described. Then, the results of the level of service calculations for Project Conditions are presented. Project Conditions are defined as Background Conditions plus traffic generated by the proposed project. A comparison of intersection operations under Background and Project Conditions are presented and the impacts of the project on the study intersections are discussed. Site access and on-site circulation are addressed in this chapter.

PROJECT TRAFFIC ESTIMATES

The amount of traffic added to the roadway system by the proposed development is estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. The first step estimates the amount of added traffic to the roadway network. The second step estimates the directions of travel to and from the project site. The trips are assigned to specific street segments and intersection turning movements during the third step. The results of the process for the proposed project are described in the following sections.

Trip Generation

The amount of traffic added to the surrounding roadway system by the proposed project was estimated by applying the appropriate trip generation rates to the proposed development. Per City of Milpitas guidelines, trip generation rates for single-family residential land uses from *San Diego Traffic Generators* (San Diego Association of Governments, April 2002) were used to estimate project trip generation.

The trips generated by the existing industrial office uses were credited against the trips generated by the proposed residential uses. Turning movement counts and 72-hour hose counts were conducted at the site driveways to measure the daily and peak-hour traffic volumes generated by the existing industrial office space. The existing site generates 633 daily trips, 28 AM peak-hour trips (22 inbound and 6 outbound) and 31 PM peak-hour trips (5 inbound and 26 outbound). The results of the driveway counts are presented in an October 18, 2006 memorandum contained in Appendix D.

The project trip generation estimates are presented in Table 6. The proposed project is estimated to generate 167 net new daily trips, 36 net new AM peak-hour trips (-3 inbound and 39 outbound) and 49 net new PM peak-hour trips (51 inbound and -2 outbound).

TABLE 6
PROJECT TRIP GENERATION ESTIMATES

Land Use	Size (sq. ft. or dwelling units)	Daily	AM			PM		
			In	Out	Total	In	Out	Total
Proposed Use (A)								
Single-Family Residential	80 d.u.	800	19	45	64	56	24	80
Existing Uses (B)								
Industrial Park	120,558 s.f.	633	22	6	28	5	26	31
Net Total (A-B)		**167**	**-3**	**39**	**36**	**51**	**-2**	**49**

Source: *San Diego Traffic Generators*, SANDAG, April 2002.

Trip Distribution

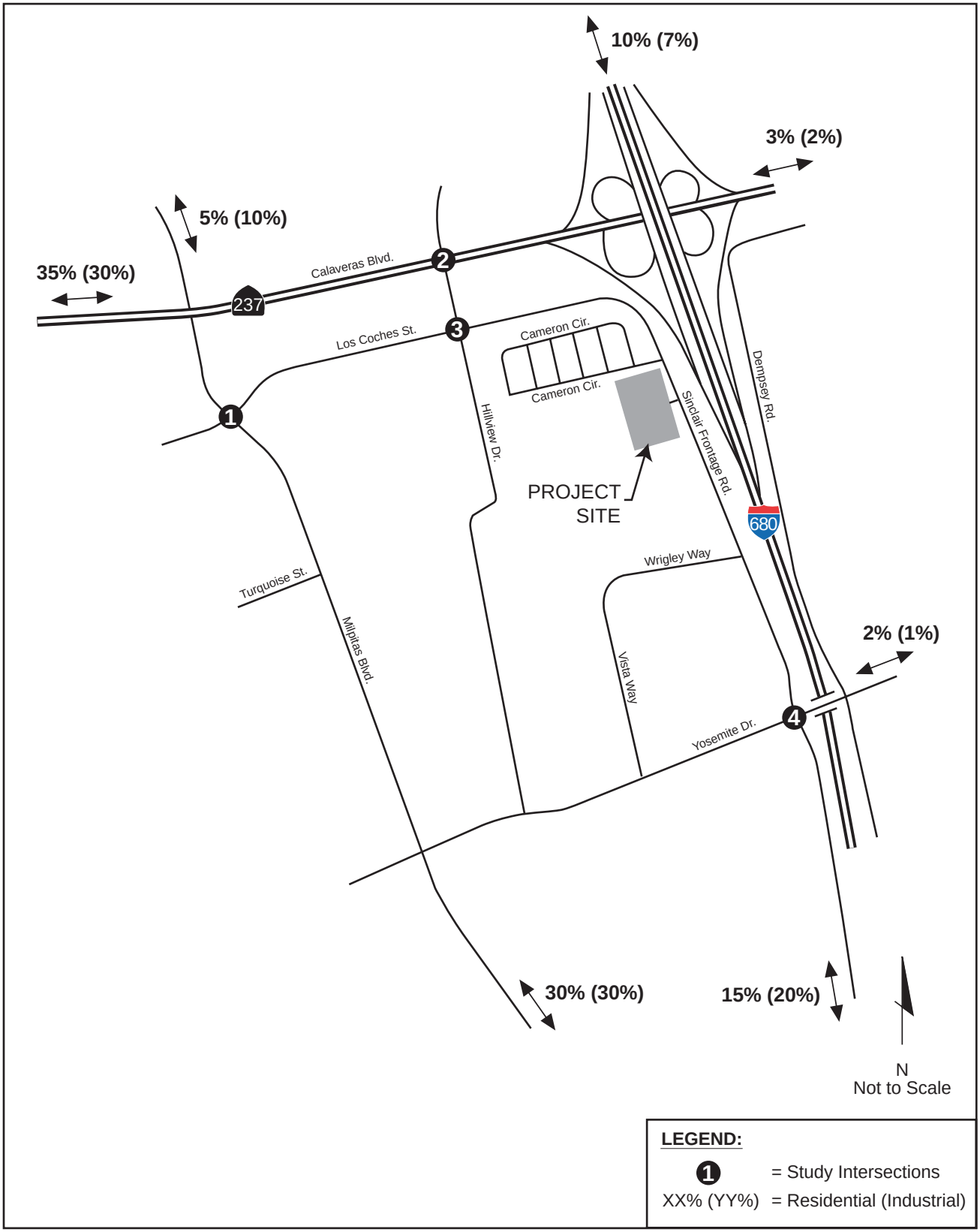
The directions of approach and departure for the proposed project were estimated using VTA's travel demand forecasting model, existing travel patterns, and the relative locations of complementary land uses. The major directions of approach and departure form the trip distribution pattern for the projects residential and the existing industrial/commercial components are illustrated on Figure 8.

Trip Assignment

The trips generated by the existing uses and the project were assigned to the roadway system based on the directions of approach and departure discussed above. Figure 9 shows the AM and PM peak-hour project trips assigned to each turning movement at the study intersections. Project trips were added to background traffic volumes to establish intersection volumes for Project Conditions, as shown in Figure 10.

PROJECT INTERSECTION LEVELS OF SERVICE

The results of the intersection level of service calculations for Project Conditions are presented in Table 7. Appendix B contains the corresponding calculation sheets. The results for Background Conditions are included for comparison purposes, along with the projected increases in critical delay and critical volume-to-capacity (V/C) ratios. Critical delay represents the delay associated with the critical movements of the intersection, or the movements that require the most "green time" and have the greatest effect on overall intersection operations. The changes in critical delay and critical V/C ratio between Background and Project Conditions are used to identify significant impacts. All study intersections are projected to continue to operate at acceptable levels of service with the addition of project traffic.



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PROJECT TRIP DISTRIBUTION

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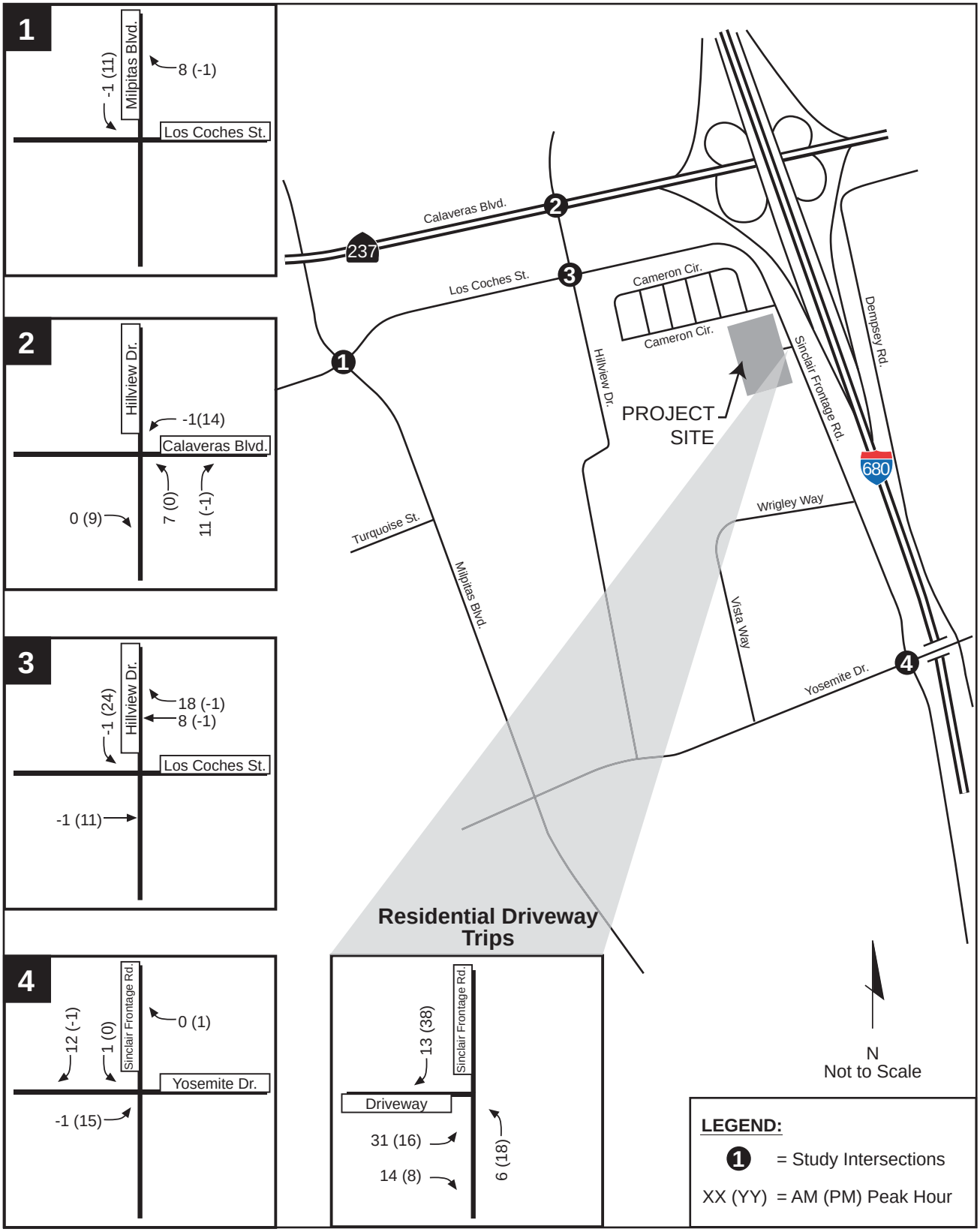
FIGURE 8



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NET NEW PROJECT TRIPS
PEAK-HOUR TRAFFIC VOLUMES

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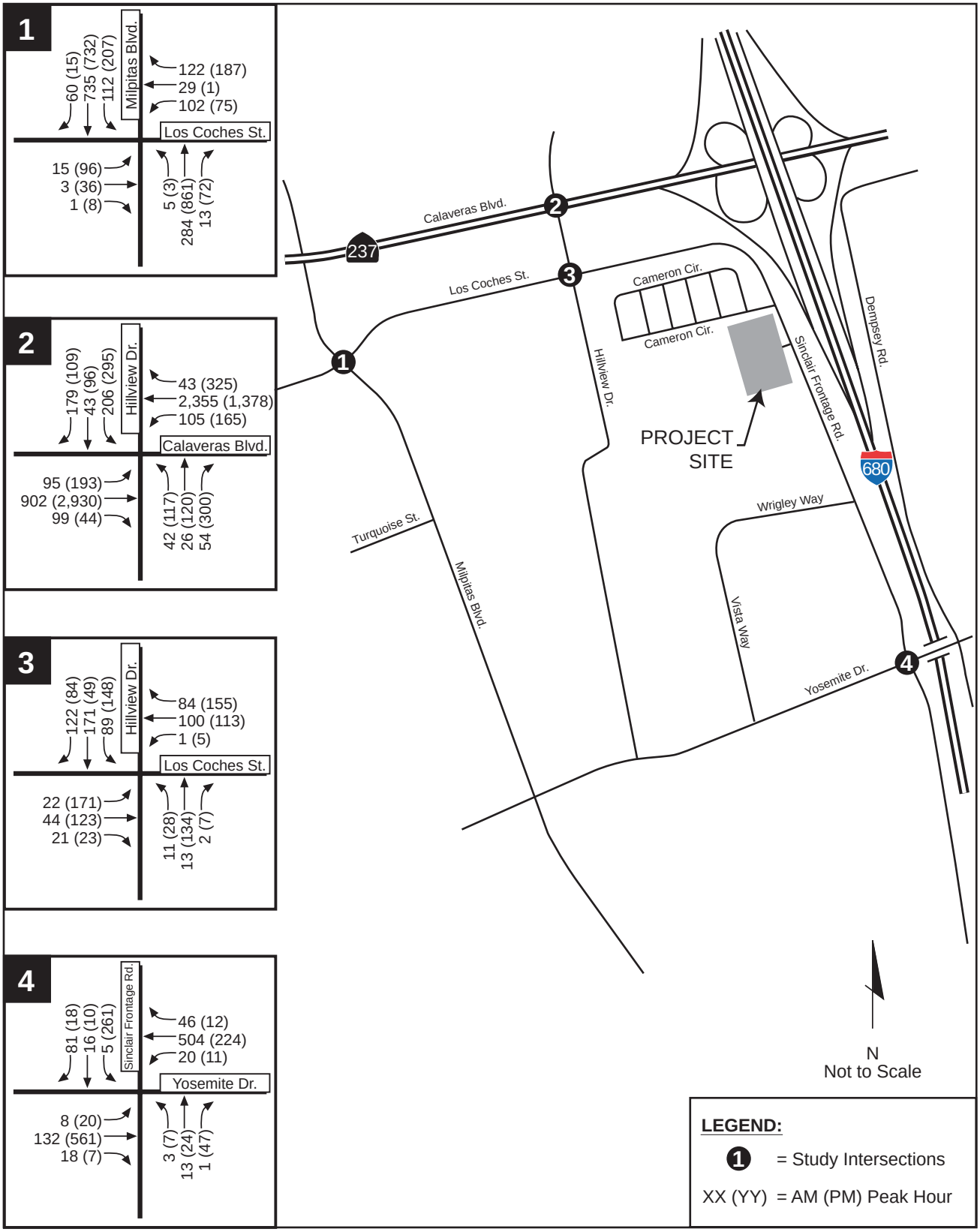
FIGURE 9



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PROJECT INTERSECTION PEAK-HOUR TRAFFIC VOLUMES

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FIGURE 10

TABLE 7
PROJECT INTERSECTION LEVELS OF SERVICE

Intersection	Peak Hour[1]	Background		Project			
		Delay[2]	LOS[3]	Delay[2]	LOS[3]	Δ in Crit. V/C[4]	Δ in Crit. Delay[5]
1. S Milpitas Boulevard / Los Coches Street	AM	12.8	B	12.9	B	+0.000	+0.0
	PM	16.9	B	17.0	B	+0.007	+0.3
2. Hillview Drive / E. Calaveras Boulevard	AM	23.9	C	24.0	C	+0.004	+0.1
	PM	36.3	D+	36.5	D+	+0.001	+0.1
3. Hillview Drive / Los Coches Street	AM	10.1	B	10.3	B	+0.006	+0.1
	PM	12.3	B	12.9	B	+0.027	+0.6
4. Sinclair Frontage Road / Yosemite Drive	AM	10.6	B+	11.2	B+	+0.008	+0.6
	PM	16.0	B	16.1	B	-0.001	+0.0

Notes:
1 AM = morning peak hour, PM = evening peak hour.
2 Whole intersection weighted average control delay expressed in seconds per vehicle for signalized and all-way stop intersections using method described in the 2000 *Highway Capacity Manual*, with adjusted saturation flow rates to reflect Santa Clara County Conditions.
3 LOS = level of service. LOS calculations conducted using the TRAFFIX level of service analysis software package.
4 Change in the critical volume-to-capacity ratio (V/C) between Background and Project Conditions.
5 Change in critical movement delay between Background and Project Conditions.
Bold text denotes intersections with significant impacts.

INTERSECTION IMPACT CRITERIA

The impacts of the project were evaluated by comparing the results of the level of service calculations under Project Conditions to the results under Background Conditions.

Signalized Intersections

Significant impacts at signalized City of Milpitas intersections are defined to occur when the addition of project traffic causes:

1. Intersection operations to degrade from an acceptable level (LOS D or better) under Background Conditions to an unacceptable level (LOS E or F) under Project Conditions; or
2. Exacerbation of unacceptable operations (LOS E or F) by increasing the critical delay by more than 4 seconds and increasing the volume-to-capacity (V/C) ratio by 0.01 or more; or
3. An increase in the V/C ratio of 0.01 or more at an intersection with unacceptable operations (LOS E or F) when the change in critical delay is negative (i.e., decreases). This can occur if the critical movements change.

Unsignalized Intersections

Significant impacts at unsignalized Milpitas City intersection are defined to occur when the addition of project traffic causes:

1. Intersection to deteriorate from LOS D or better under background conditions to LOS E or F under project conditions, and the peak hour volume signal warrant criteria are met or exceeded; or

2. Project traffic is added to an intersection that already meets or exceeds peak hour warrant criteria under Background Conditions, and operates unacceptably.

INTERSECTION IMPACTS AND MITIGATION MEASURES

Based on the project impact criteria listed above, the proposed project would not have a significant impact at the study intersections. Therefore no intersection mitigation measures are required. Signal warrant analysis sheets for the Hillview Drive / Los Coches Street intersection are attached as Appendix E.

PEDESTRIAN, BICYCLE AND TRANSIT FACILITIES

The project causes a significant impact to pedestrian, bicycle, and transit facilities and services if:

1. An element of the proposed project conflicts with existing or planned pedestrian, bicycle, and transit services, or
2. The proposed project creates hazardous conditions for pedestrians or bicyclists that currently do not exist.

The project is not expected to conflict with planned pedestrian, bicycle, and transit services. The project will create pedestrian demand in areas with inadequate pedestrian facilities. The project applicant should provide a continuous sidewalk along the project frontage and connect it to the existing sidewalk that currently terminates immediately north of the site. This enhancement would improve pedestrian access from the project site to the transit stop and shopping destinations near Hillview Drive.

SITE ACCESS, ON-SITE CIRCULATION AND PARKING

Vehicular Site Access

The proposed site plan for the project is shown on Figure 2. Access to the project site is proposed via one 40-foot wide driveway on Sinclair Frontage Road. The throat-depth for the driveway is approximately 75 feet, which provides storage for three outbound vehicles. Based on the projected volumes at the driveway, a maximum outbound queue of one to two car vehicles is expected during the AM peak hour (no queues are expected in the PM peak hour). Given the project traffic and traffic volumes on Sinclair Frontage Road, the current driveway length of 75 feet is sufficient. The curb-return radius at the driveway is 25 feet, which meets City guidelines for emergency vehicle access.

An emergency vehicle access only driveway is proposed at the south-west corner of the site. This driveway connects to Wrigley Way south of the project site and is approximately 20 feet wide with a minimum radius of 30 feet. Although these dimensions meet the City's code for emergency vehicle access, it is recommended that Fire Department officials review the final site plan to ensure that adequate emergency access is provided.

The project sponsor and city staff have developed a cross-section solution that better defines the existing parking and travel lanes along the project frontage. The proposed 36-foot cross-section includes an 8-foot marked parking lane and two 14-foot travel lanes. This proposed cross-section maintains the parking lane on the east side of the road and includes posted prohibition of commercial vehicle parking. The existing centerline stripe will not change. A sidewalk is provided on the east side of the street (adjacent to the freeway fence) to provide a separate walking area away from vehicle traffic. However, this layout forces any residents and guests parked on Sinclair Frontage Road to cross the street (posted for 40 mph) to access their vehicles.

We recommend that on-street parking be provided on the west side of Sinclair Frontage Road to improve pedestrian accessibility to the on-street parking. This configuration would allow pedestrians direct access to their vehicles without having to cross this relatively high-speed street. Furthermore, striping for this parking lane will provide more separation between pedestrians on the sidewalk and southbound vehicles even if vehicles are not parked on the street. Sufficient transition distance is provided on either side of the project site - north to the start of the horizontal curve (650 feet) and south to Wrigley (550 feet) - to transition between the existing cross-section and the configuration with parking on the west side of the street.

Due to the 40 mph posted limit, approximately 60 percent of the project frontage curb face would have to be painted red to provide adequate stopping sight distance. A reduced speed limit would require less red curb and increase the on-street parking supply, but may not be supported by speed surveys. City staff should evaluate the future function of Sinclair Frontage Road by weighing the benefits of driveway sight distance, network capacity needs, on-street parking supply, and pedestrian access to on-street parking.

As shown on Figures 9 and 10, the project northbound left-turn volumes will be low (6 AM peak hour and 18 PM peak hour) and the two-way peak hour traffic volumes will remain low on Sinclair Frontage Road (169 AM peak hour and 345 PM peak hour). Thus, a shared northbound left-through lane on Sinclair Frontage Road at the project driveway would accommodate the project and through traffic needs.

On-Site Circulation

A main circular loop roadway and two interior aisles provide access to the residential units. The circular loop roadway is 32 feet wide and includes proposed parallel on-street parking along the inner side.

The proposed site plan includes 4-foot sidewalks on both sides of the internal roadway. The sidewalks should be widened to 5 feet to accommodate wheelchair passing.

Parking

The project proposes a supply of two garage spaces per residential unit plus 36 on-street parking spaces for a total supply of 196 spaces. If residents are required to park their cars in their own garages or driveways, the project's parking supply exceeds the City's requirement of 189 spaces. A summary of the parking evaluation is presented in Table 8.

TABLE 8
PARKING SUPPLY EVALUATION

Descriptions	Required by City Code (Stalls)	Proposed Supply (Stalls)	Surplus/Deficit
Resident - Two/Three Bedroom (80 Units @ 2.0 spaces/unit)	160		
Guest Parking (15% of Resident Parking)	24		
Subtotal Required Total Parking	184		
Total Resident Parking	**160**	**160**	**0**
Total Guest Parking	**24**	**36**	**+12**
Total Parking	**184**	**200**	**+12**

5. YEAR 2030 CONDITIONS

This chapter discusses the analysis of the Year 2030 scenarios (Year 2030 General Plan and Year 2030 Plus Project), which was conducted using projected roadway link volumes per City of Milpitas guidelines. Peak-hour roadway segment volumes are used for this long-term analysis since estimating intersection turning movement volumes in 2030 is considered speculative.

YEAR 2030 TRAFFIC VOLUMES

Year 2030 General Plan Volumes

Year 2030 AM and PM peak-hour roadway segment traffic volumes were obtained from the Valley Transportation Authority's regional travel demand model. This regional model is used by the VTA to produce traffic projections for use in transportation and air quality planning and includes buildout of the City of Milpitas according to its General Plan. The Year 2030 General Plan volumes assume that the site is occupied by light industrial uses.

Year 2030 General Plan Plus Project Volumes

The net difference in new trips between the proposed project and the current site uses was added to the Year 2030 General Plan volumes to establish Year 2030 General Plan Plus Project volumes. Tables 9 and 10 present the roadway segment volumes for the two Year 2030 General Plan scenarios during the AM and PM peak-hours.

YEAR 2030 ROADWAY SEGMENT IMPACTS

Significant impacts to a roadway segment occur if:

- The addition of traffic from the proposed project degrades operations under 2030 General Plan Buildout Conditions from an acceptable level (LOS D or better) to an unacceptable level (LOS E or LOS F); or
- The proposed project adds trips that are more than one percent of the segment's capacity when the segment is operating at LOS E or F under General Plan Buildout Conditions. Capacity is analyzed in terms of volume-to-capacity (V/C).

YEAR 2030 ROADWAY SEGMENT LEVELS OF SERVICE

As shown in Tables 9 and 10, the segments that are operating at acceptable levels of service (LOS D or better) identified under Year 2030 General Plan Conditions will remain at acceptable levels with the addition of project traffic. For those segments operating at unacceptable levels during the AM peak hour, the project trips are less than one percent of the segment's capacity.

During the PM peak hour, the project is expected to exacerbate unacceptable operations by adding trips greater than one percent of capacity on the following two roadway segments:

- Northbound Milpitas Boulevard between Montague Expressway and Yosemite Drive
- Eastbound Yosemite Drive between Milpitas Boulevard and Sinclair Frontage Road

YEAR 2030 ROADWAY IMPACTS AND MITIGATION MEASURES

The City of Milpitas requires projects to pay their "fair share" of the improvement costs to mitigate the anticipated cumulative impacts of traffic from new developments on future deficient intersections.

The project is not located within any specific area that requires payment of traffic impact fees. However, the project applicant will be required to make a "fair share" contribution towards the Calaveras Boulevard (SR 237) Overpass Widening Project, Montague Expressway Widening Project, and South Milpitas Boulevard Smart Corridor Project because the project is adding trips to these corridors.

TABLE 9
YEAR 2030 AM PEAK-HOUR FORECASTS: GENERAL PLAN VERSUS GENERAL PLAN AMENDMENT

Segment From	Segment To	Dir[1]	2004 Vol[2]	2030 General Plan			2030 General Plan + Project			Percent Change	Impact?
				Vol[3]	V/C[4]	LOS[5]	Vol[3]	V/C	LOS[5]		
Calaveras Boulevard (SR 237)											
Abel Ave	Milpitas Blvd	EB	1,370	1,440	0.48	A	1,440	0.48	A	0.00%	No
Milpitas Blvd	Hillview Dr	EB	980	1,580	0.53	A	1,580	0.53	A	0.00%	No
Hillview Dr	I-680	EB	1,100	1,310	0.44	A	1,321	0.44	A	0.37%	No
I-680	Hillview Dr	WB	3,060	3,250	1.08	F	3,249	1.08	F	-0.03%	No
Hillview Dr	Milpitas Blvd	WB	2,460	2,720	1.09	F	2,727	1.09	F	0.28%	No
Milpitas Blvd	Abel St	WB	2,480	3,030	1.52	F	3,044	1.52	F	0.70%	No
Montague Expressway											
Great Mall Pkwy	Milpitas Blvd	EB	752	1,750	0.40	A	1,750	0.40	A	0.00%	No
Milpitas Blvd	I-680	EB	424	1,800	0.41	A	1,800	0.41	A	0.00%	No
I-680	Milpitas Blvd	WB	2,816	5,200	1.18	F	5,200	1.18	F	0.00%	No
Milpitas Blvd	Great Mall Pkwy	WB	2,400	5,300	1.20	F	5,300	1.20	F	0.00%	No
Milpitas Boulevard											
Calaveras Blvd	Yosemite Dr	SB	830	1,370	0.98	E	1,369	0.98	E	-0.07%	No
Yosemite Dr	Montague Expwy	SB	132	1,610	1.15	F	1,622	1.16	F	0.86%	No
Montague Expwy	Yosemite Dr	NB	871	1,680	1.20	F	1,679	1.20	F	-0.07%	No
Yosemite Dr	Calaveras Blvd	NB	540	1,480	1.06	F	1,488	1.06	F	0.57%	No
Sinclair Frontage Road											
Los Coches St	Yosemite Dr	SB	N/A	190	0.14	A	203	0.15	A	0.93%	No
Los Coches St	Yosemite Dr	NB	N/A	430	0.31	A	457	0.33	A	1.93%	No
Los Coches Street											
Milpitas Blvd	Hillview Dr	EB	N/A	80	0.06	A	79	0.06	A	-0.07%	No
Hillview Dr	Milpitas Blvd	WB	N/A	100	0.07	A	108	0.08	A	0.57%	No
Yosemite Drive											
S. Milpitas Blvd	Sinclair Frontage Rd	EB	N/A	200	0.14	A	199	0.14	A	-0.07%	No
Sinclair Frontage	Milpitas Blvd	WB	N/A	1470	1.05	F	1,482	1.06	F	0.86%	No

Notes:
[1] Dir = Direction, NB = Northbound, SB = Southbound, EB = Eastbound, WB = Westbound
[2] 2004 Vol = Year 2004 Volume
[3] Vol = Model Volume
[4] V/C = Volume to capacity ratio
[5] LOS = Level of Service

TABLE 10
YEAR 2030 PM PEAK-HOUR FORECASTS: GENERAL PLAN VERSUS GENERAL PLAN AMENDMENT

Segment From	Segment To	Dir[1]	2004 Vol[2]	2030 General Plan			2030 General Plan + Project			Percent Change	Impact?
				Vol[3]	V/C[4]	LOS[5]	Vol[3]	V/C	LOS[5]		
Calaveras Boulevard (SR 237)											
Abel Ave	Milpitas Blvd	EB	2,290	3,100	1.03	F	3,118	1.04	F	0.60%	No
Milpitas Blvd	Hillview Dr	EB	2,550	3,410	1.14	F	3,420	1.14	F	0.33%	No
Hillview Dr	I-680	EB	2,900	3,710	1.24	F	3,709	1.24	F	-0.03%	No
I-680	Hillview Dr	WB	1,780	2,010	0.67	B	2,025	0.68	B	0.50%	No
Hillview Dr	Milpitas Blvd	WB	1,490	2,160	0.86	D	2,160	0.86	D	0.00%	No
Milpitas Blvd	Abel St	WB	1,510	1,630	0.54	A	1,631	0.54	A	0.03%	No
Montague Expressway											
Great Mall Pkwy	Milpitas Blvd	EB	2,620	4,490	1.02	F	4,490	1.02	F	0.00%	No
Milpitas Blvd	I-680	EB	3,200	5,130	1.17	F	5,130	1.17	F	0.00%	No
I-680	Milpitas Blvd	WB	1,242	2,450	0.56	A	2,450	0.56	A	0.00%	No
Milpitas Blvd	Great Mall Pkwy	WB	1,639	2,500	0.57	A	2,500	0.57	A	0.00%	No
Milpitas Boulevard											
Calaveras Blvd	Yosemite Dr	SB	490	1,720	1.23	F	1,731	1.24	F	0.79%	No
Yosemite Dr	Montague Expwy	SB	980	1,930	1.38	F	1,930	1.38	F	0.00%	No
Montague Expwy	Yosemite Dr	NB	560	1,330	0.95	E	1,346	0.96	E	**1.14%**	**Yes**
Yosemite Dr	Calaveras Blvd	NB	990	1,780	1.27	F	1,779	1.27	F	-0.07%	No
Sinclair Frontage Road											
Los Coches St	Yosemite Dr	SB	N/A	550	0.39	A	585	0.42	A	2.50%	No
Los Coches St	Yosemite Dr	NB	N/A	220	0.16	A	237	0.17	A	1.21%	No
Los Coches Street											
Milpitas Blvd	Hillview Dr	EB	N/A	150	0.11	A	161	0.12	A	0.79%	No
Hillview Dr	Milpitas Blvd	WB	N/A	100	0.07	A	99	0.07	A	-0.07%	No
Yosemite Drive											
S. Milpitas Blvd	Sinclair Frontage Rd	EB	N/A	1760	1.26	F	1,776	1.27	F	**1.14%**	**Yes**
Sinclair Frontage	Milpitas Blvd	WB	N/A	640	0.46	A	640	0.46	A	0.00%	No

Notes:
[1] Dir = Direction, NB = Northbound, SB = Southbound, EB = Eastbound, WB = Westbound
[2] 2004 Vol = Year 2004 Volume
[3] Vol = Model Volume
[4] V/C = Volume to capacity ratio
[5] LOS = Level of Service
Bold type indicates significant impact

APPENDIX A:
EXISTING TRAFFIC COUNTS

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

Peak hours – AM (7:00 to 9:00) and PM (4:00 to 6:00)
(Date; Peak Hours; Source)

1. Milpitas Boulevard / Los Coches Street (11/01/06; AM/PM; TDS)
2. Hillview Drive / E. Calaveras Boulevard (10/2005; AM/PM; City of Milpitas - see Milpitas Transit Area Specific Plan)
3. Hillview Drive / Los Coches Street (11/01/06; AM/PM; TDS)
4. Sinclair Frontage Road / Yosemite Drive (11/01/06; AM/PM; TDS)

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	MILPITAS BLVD Southbound					LOS COCHES ST Westbound					MILPITAS BLVD Northbound					LOS COCHES ST Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:00 AM	3	72	5	0	80	20	3	12	0	35	9	35	0	0	44	0	0	2	0	2	161
07:15 AM	16	100	17	0	133	16	3	14	0	33	3	58	1	0	62	1	0	2	0	3	231
07:30 AM	12	121	17	0	150	18	5	19	0	42	0	51	0	0	51	0	0	2	0	2	245
07:45 AM	16	184	27	0	227	30	10	28	0	68	2	54	0	0	56	0	2	4	0	6	357
Total	47	477	66	0	590	84	21	73	0	178	14	198	1	0	213	1	2	10	0	13	994
08:00 AM	8	175	23	0	206	21	9	34	0	64	3	75	1	0	79	0	1	0	0	1	350
08:15 AM	6	194	35	0	235	22	3	23	0	48	4	55	1	0	60	0	0	8	0	8	351
08:30 AM	29	163	24	0	216	34	7	17	0	58	4	78	3	0	85	1	0	2	0	3	362
08:45 AM	17	168	21	0	206	33	4	18	0	55	6	58	0	0	64	0	2	2	0	4	329
Total	60	700	103	0	863	110	23	92	0	225	17	266	5	0	288	1	3	12	0	16	1392
Grand Total	107	1177	169	0	1453	194	44	165	0	403	31	464	6	0	501	2	5	22	0	29	2386
Apprch %	7.4	81	11.6	0		48.1	10.9	40.9	0		6.2	92.6	1.2	0		6.9	17.2	75.9	0		
Total %	4.5	49.3	7.1	0	60.9	8.1	1.8	6.9	0	16.9	1.3	19.4	0.3	0	21	0.1	0.2	0.9	0	1.2	

	MILPITAS BLVD Southbound					LOS COCHES ST Westbound					MILPITAS BLVD Northbound					LOS COCHES ST Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	16	184	27	0	227	30	**10**	28	0	**68**	2	54	0	0	56	0	**2**	4	0	6	357
08:00 AM	8	175	23	0	206	21	9	**34**	0	64	3	75	1	0	79	0	1	0	0	1	350
08:15 AM	6	**194**	**35**	0	**235**	22	3	23	0	48	**4**	55	1	0	60	0	0	**8**	0	**8**	351
08:30 AM	**29**	163	24	0	216	**34**	7	17	0	58	4	**78**	**3**	0	**85**	**1**	0	2	0	3	**362**
Total Volume	59	716	109	0	884	107	29	102	0	238	13	262	5	0	280	1	3	14	0	18	1420
% App. Total	6.7	81	12.3	0		45	12.2	42.9	0		4.6	93.6	1.8	0		5.6	16.7	77.8	0		
PHF	.509	.923	.779	.000	.940	.787	.725	.750	.000	.875	.813	.840	.417	.000	.824	.250	.375	.438	.000	.563	.981

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	MILPITAS BLVD Southbound					LOS COCHES ST Westbound					MILPITAS BLVD Northbound					LOS COCHES ST Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	11	125	42	0	178	24	0	7	0	31	18	127	0	0	145	0	2	4	0	6	360
04:15 PM	7	115	25	0	147	33	4	12	0	49	19	120	1	0	140	0	4	7	0	11	347
04:30 PM	4	144	32	0	180	60	1	16	0	77	20	185	0	0	205	0	5	8	0	13	475
04:45 PM	5	145	31	0	181	32	4	14	0	50	23	151	0	0	174	2	10	10	0	22	427
Total	27	529	130	0	686	149	9	49	0	207	80	583	1	0	664	2	21	29	0	52	1609
05:00 PM	0	153	34	0	187	43	0	22	0	65	18	200	0	0	218	1	11	20	0	32	502
05:15 PM	3	161	37	0	201	55	0	17	0	72	11	230	1	0	242	4	10	20	0	34	549
05:30 PM	5	190	43	0	238	39	1	13	0	53	19	165	1	0	185	1	4	15	0	20	496
05:45 PM	4	182	70	0	256	39	0	23	0	62	24	204	1	0	229	2	11	33	0	46	593
Total	12	686	184	0	882	176	1	75	0	252	72	799	3	0	874	8	36	88	0	132	2140
Grand Total	39	1215	314	0	1568	325	10	124	0	459	152	1382	4	0	1538	10	57	117	0	184	3749
Apprch %	2.5	77.5	20	0		70.8	2.2	27	0		9.9	89.9	0.3	0		5.4	31	63.6	0		
Total %	1	32.4	8.4	0	41.8	8.7	0.3	3.3	0	12.2	4.1	36.9	0.1	0	41	0.3	1.5	3.1	0	4.9	

	MILPITAS BLVD Southbound					LOS COCHES ST Westbound					MILPITAS BLVD Northbound					LOS COCHES ST Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	153	34	0	187	43	0	22	0	65	18	200	0	0	218	1	**11**	20	0	32	502
05:15 PM	3	161	37	0	201	**55**	0	17	0	**72**	11	**230**	**1**	0	**242**	**4**	10	20	0	34	549
05:30 PM	**5**	**190**	43	0	238	39	**1**	13	0	53	19	165	1	0	185	1	4	15	0	20	496
05:45 PM	4	182	**70**	0	**256**	39	0	**23**	0	62	**24**	204	1	0	229	2	11	**33**	0	**46**	**593**
Total Volume	12	686	184	0	882	176	1	75	0	252	72	799	3	0	874	8	36	88	0	132	2140
% App. Total	1.4	77.8	20.9	0		69.8	0.4	29.8	0		8.2	91.4	0.3	0		6.1	27.3	66.7	0		
PHF	.600	.903	.657	.000	.861	.800	.250	.815	.000	.875	.750	.868	.750	.000	.903	.500	.818	.667	.000	.717	.902

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	HILLVIEW DR Southbound					LOS COCHES ST Westbound					HILLVIEW DR Northbound					LOS COCHES ST Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:00 AM	22	12	9	0	43	7	12	0	0	19	2	7	4	0	13	2	4	2	0	8	83
07:15 AM	32	15	11	0	58	10	16	0	0	26	0	6	0	0	6	3	3	1	0	7	97
07:30 AM	23	26	14	0	63	17	25	0	0	42	0	5	1	0	6	7	6	4	0	17	128
07:45 AM	46	31	18	0	95	8	32	0	0	40	0	8	1	0	9	4	8	2	0	14	158
Total	123	84	52	0	259	42	85	0	0	127	2	26	6	0	34	16	21	9	0	46	466
08:00 AM	36	44	17	0	97	9	16	0	0	25	0	4	1	0	5	6	12	9	0	27	154
08:15 AM	22	27	15	0	64	20	24	1	0	45	0	0	0	0	0	6	12	2	0	20	129
08:30 AM	26	48	16	0	90	22	28	0	0	50	1	4	7	0	12	5	14	3	0	22	174
08:45 AM	29	39	35	0	103	12	22	0	0	34	1	5	2	0	8	3	5	8	0	16	161
Total	113	158	83	0	354	63	90	1	0	154	2	13	10	0	25	20	43	22	0	85	618
Grand Total	236	242	135	0	613	105	175	1	0	281	4	39	16	0	59	36	64	31	0	131	1084
Apprch %	38.5	39.5	22	0		37.4	62.3	0.4	0		6.8	66.1	27.1	0		27.5	48.9	23.7	0		
Total %	21.8	22.3	12.5	0	56.5	9.7	16.1	0.1	0	25.9	0.4	3.6	1.5	0	5.4	3.3	5.9	2.9	0	12.1	

	HILLVIEW DR Southbound					LOS COCHES ST Westbound					HILLVIEW DR Northbound					LOS COCHES ST Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	**36**	44	17	0	97	9	16	0	0	25	0	4	1	0	5	**6**	12	**9**	0	**27**	154
08:15 AM	22	27	15	0	64	20	24	**1**	0	45	0	0	0	0	0	6	12	2	0	20	129
08:30 AM	26	**48**	16	0	90	**22**	**28**	0	0	**50**	**1**	4	**7**	0	**12**	5	**14**	3	0	22	**174**
08:45 AM	29	39	**35**	0	**103**	12	22	0	0	34	1	**5**	2	0	8	3	5	8	0	16	161
Total Volume	113	158	83	0	354	63	90	1	0	154	2	13	10	0	25	20	43	22	0	85	618
% App. Total	31.9	44.6	23.4	0		40.9	58.4	0.6	0		8	52	40	0		23.5	50.6	25.9	0		
PHF	.785	.823	.593	.000	.859	.716	.804	.250	.000	.770	.500	.650	.357	.000	.521	.833	.768	.611	.000	.787	.888

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	HILLVIEW DR Southbound					LOS COCHES ST Westbound					HILLVIEW DR Northbound					LOS COCHES ST Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	11	7	22	0	40	39	26	2	0	67	1	37	9	0	47	3	31	34	0	68	222
04:15 PM	17	10	29	0	56	28	19	1	0	48	1	24	3	0	28	4	25	27	0	56	188
04:30 PM	16	9	28	0	53	42	32	0	0	74	0	28	12	0	40	5	26	34	0	65	232
04:45 PM	22	9	27	0	58	32	28	0	0	60	1	23	2	0	26	1	28	33	0	62	206
Total	66	35	106	0	207	141	105	3	0	249	3	112	26	0	141	13	110	128	0	251	848
05:00 PM	23	8	34	0	65	53	32	3	0	88	2	39	8	0	49	0	26	48	0	74	276
05:15 PM	17	14	31	0	62	35	33	0	0	68	2	25	7	0	34	4	23	34	0	61	225
05:30 PM	21	11	29	0	61	40	25	2	0	67	2	27	3	0	32	5	22	39	0	66	226
05:45 PM	23	16	30	0	69	23	21	0	0	44	1	33	7	0	41	11	38	50	0	99	253
Total	84	49	124	0	257	151	111	5	0	267	7	124	25	0	156	20	109	171	0	300	980
Grand Total	150	84	230	0	464	292	216	8	0	516	10	236	51	0	297	33	219	299	0	551	1828
Apprch %	32.3	18.1	49.6	0		56.6	41.9	1.6	0		3.4	79.5	17.2	0		6	39.7	54.3	0		
Total %	8.2	4.6	12.6	0	25.4	16	11.8	0.4	0	28.2	0.5	12.9	2.8	0	16.2	1.8	12	16.4	0	30.1	

	HILLVIEW DR Southbound					LOS COCHES ST Westbound					HILLVIEW DR Northbound					LOS COCHES ST Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	**23**	8	**34**	0	65	**53**	32	**3**	0	**88**	**2**	**39**	**8**	0	**49**	0	26	48	0	74	**276**
05:15 PM	17	14	31	0	62	35	**33**	0	0	68	2	25	7	0	34	4	23	34	0	61	225
05:30 PM	21	11	29	0	61	40	25	2	0	67	2	27	3	0	32	5	22	39	0	66	226
05:45 PM	23	**16**	30	0	**69**	23	21	0	0	44	1	33	7	0	41	**11**	**38**	**50**	0	**99**	253
Total Volume	84	49	124	0	257	151	111	5	0	267	7	124	25	0	156	20	109	171	0	300	980
% App. Total	32.7	19.1	48.2	0		56.6	41.6	1.9	0		4.5	79.5	16	0		6.7	36.3	57	0		
PHF	.913	.766	.912	.000	.931	.712	.841	.417	.000	.759	.875	.795	.781	.000	.796	.455	.717	.855	.000	.758	.888

Traffic Data Service

Campbell, CA

(408) 377-2988
tdsbay@cs.com

File Name : 3AMFINAL
Site Code : 00000003
Start Date : 11/1/2006
Page No : 1

Groups Printed- Vehicles

	SINCLAIRE RD Southbound					YOSEMITE DR Westbound					SINCLAIRE RD Northbound					YOSEMITE DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:00 AM	19	3	3	0	25	8	65	5	0	78	2	8	0	0	10	1	17	2	0	20	133
07:15 AM	21	2	2	0	25	6	82	6	0	94	0	1	0	0	1	1	15	3	0	19	139
07:30 AM	14	6	0	0	20	11	156	5	0	172	0	3	1	0	4	2	29	0	0	31	227
07:45 AM	18	0	1	0	19	10	123	3	0	136	1	8	0	0	9	4	26	4	0	34	198
Total	72	11	6	0	89	35	426	19	0	480	3	20	1	0	24	8	87	9	0	104	697
08:00 AM	16	8	1	0	25	19	143	6	0	168	0	1	2	0	3	11	32	2	0	45	241
08:15 AM	18	8	5	0	31	21	131	8	0	160	2	0	0	0	2	12	41	3	0	56	249
08:30 AM	26	12	4	0	42	23	142	1	0	166	4	2	0	0	6	8	19	5	0	32	246
08:45 AM	25	7	0	0	32	24	133	3	0	160	0	1	0	0	1	3	32	1	0	36	229
Total	85	35	10	0	130	87	549	18	0	654	6	4	2	0	12	34	124	11	0	169	965
Grand Total	157	46	16	0	219	122	975	37	0	1134	9	24	3	0	36	42	211	20	0	273	1662
Apprch %	71.7	21	7.3	0		10.8	86	3.3	0		25	66.7	8.3	0		15.4	77.3	7.3	0		
Total %	9.4	2.8	1	0	13.2	7.3	58.7	2.2	0	68.2	0.5	1.4	0.2	0	2.2	2.5	12.7	1.2	0	16.4	

	SINCLAIRE RD Southbound					YOSEMITE DR Westbound					SINCLAIRE RD Northbound					YOSEMITE DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	**21**	2	**2**	0	**25**	6	82	**6**	0	94	0	1	0	0	1	1	15	3	0	19	139
07:30 AM	14	6	0	0	20	11	**156**	5	0	**172**	0	3	1	0	4	2	29	0	0	31	227
07:45 AM	18	0	1	0	19	10	123	3	0	136	**1**	**8**	0	0	**9**	4	26	**4**	0	34	198
08:00 AM	16	**8**	1	0	25	**19**	143	6	0	168	0	1	**2**	0	3	**11**	**32**	2	0	**45**	**241**
Total Volume	69	16	4	0	89	46	504	20	0	570	1	13	3	0	17	18	102	9	0	129	805
% App. Total	77.5	18	4.5	0		8.1	88.4	3.5	0		5.9	76.5	17.6	0		14	79.1	7	0		
PHF	.821	.500	.500	.000	.890	.605	.808	.833	.000	.828	.250	.406	.375	.000	.472	.409	.797	.563	.000	.717	.835

Traffic Data Service

Campbell, CA
(408) 377-2988
tdsbay@cs.com

File Name : 3PMFINAL
Site Code : 00000003
Start Date : 11/1/2006
Page No : 1

Groups Printed- Vehicles

	SINCLAIRE RD Southbound					YOSEMITE DR Westbound					SINCLAIRE RD Northbound					YOSEMITE DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	1	1	21	0	23	17	37	2	0	56	12	7	4	0	23	4	82	0	0	86	188
04:15 PM	1	5	42	0	48	12	27	1	0	40	16	8	2	0	26	1	79	1	0	81	195
04:30 PM	1	1	66	0	68	5	25	0	0	30	11	3	3	0	17	0	104	2	0	106	221
04:45 PM	3	4	43	0	50	11	42	1	0	54	11	8	1	0	20	2	79	4	0	85	209
Total	6	11	172	0	189	45	131	4	0	180	50	26	10	0	86	7	344	7	0	358	813
05:00 PM	6	7	84	0	97	2	41	2	0	45	24	15	3	0	42	3	131	3	0	137	321
05:15 PM	7	1	58	0	66	5	51	4	0	60	9	2	0	0	11	1	134	1	0	136	273
05:30 PM	3	0	71	0	74	1	54	1	0	56	9	3	4	0	16	1	137	0	0	138	284
05:45 PM	2	2	48	0	52	3	58	4	0	65	5	4	0	0	9	2	139	0	0	141	267
Total	18	10	261	0	289	11	204	11	0	226	47	24	7	0	78	7	541	4	0	552	1145
Grand Total	24	21	433	0	478	56	335	15	0	406	97	50	17	0	164	14	885	11	0	910	1958
Apprch %	5	4.4	90.6	0		13.8	82.5	3.7	0		59.1	30.5	10.4	0		1.5	97.3	1.2	0		
Total %	1.2	1.1	22.1	0	24.4	2.9	17.1	0.8	0	20.7	5	2.6	0.9	0	8.4	0.7	45.2	0.6	0	46.5	

	SINCLAIRE RD Southbound					YOSEMITE DR Westbound					SINCLAIRE RD Northbound					YOSEMITE DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	6	**7**	**84**	0	**97**	2	41	2	0	45	**24**	**15**	3	0	**42**	**3**	131	**3**	0	137	**321**
05:15 PM	**7**	1	58	0	66	**5**	51	**4**	0	60	9	2	0	0	11	1	134	1	0	136	273
05:30 PM	3	0	71	0	74	1	54	1	0	56	9	3	**4**	0	16	1	137	0	0	138	284
05:45 PM	2	2	48	0	52	3	**58**	4	0	**65**	5	4	0	0	9	2	**139**	0	0	**141**	267
Total Volume	18	10	261	0	289	11	204	11	0	226	47	24	7	0	78	7	541	4	0	552	1145
% App. Total	6.2	3.5	90.3	0		4.9	90.3	4.9	0		60.3	30.8	9	0		1.3	98	0.7	0		
PHF	.643	.357	.777	.000	.745	.550	.879	.688	.000	.869	.490	.400	.438	.000	.464	.583	.973	.333	.000	.979	.892

APPENDIX B:
INTERSECTION LEVEL OF SERVICE CALCULATIONS

Sinclair Frontage Residential TIA
SJ06-886

Summary Scenario Comparison Report (With Average Critical Delay)
Future Volume Alternative

Intersection		Existing AM				Background AM				Project AM						???			
		LOS	Avg Del (sec)	Crit V/C	Avg Crit Del (sec)	LOS	Avg Del (sec)	Crit V/C	Avg Crit Del (sec)	LOS	Avg Del (sec)	Crit V/C	Crit V/C Change	Avg Crit Del (sec)	Avg Crit Del Change	LOS	Avg Del (sec)	Crit V/C	Avg Crit Del (sec)
#1	Milpitas Boulevard / Los Coches Street	B	12.8	0.335	10.8	B	12.8	0.342	10.8	B	12.9	0.342	+ 0.000	10.8	+ 0.0	?	xx.x	x.xxx	xx.x
#2	E. Calaveras Blvd / Hillview Dr	C	24.0	0.485	21.9	C	23.9	0.605	22.3	C	24.0	0.609	+ 0.004	22.4	+ 0.1	?	xx.x	x.xxx	xx.x
#3	Los Coches St / Hillview Dr	A	9.7	0.440	9.7	B	10.1	0.479	10.1	B	10.3	0.485	+ 0.006	10.3	+ 0.1	?	xx.x	x.xxx	xx.x
#4	Sinclair Frontage Road / Yosemite Drive	B+	10.6	0.241	9.9	B+	10.6	0.241	9.9	B+	11.2	0.249	+ 0.008	10.6	+ 0.6	?	xx.x	x.xxx	xx.x

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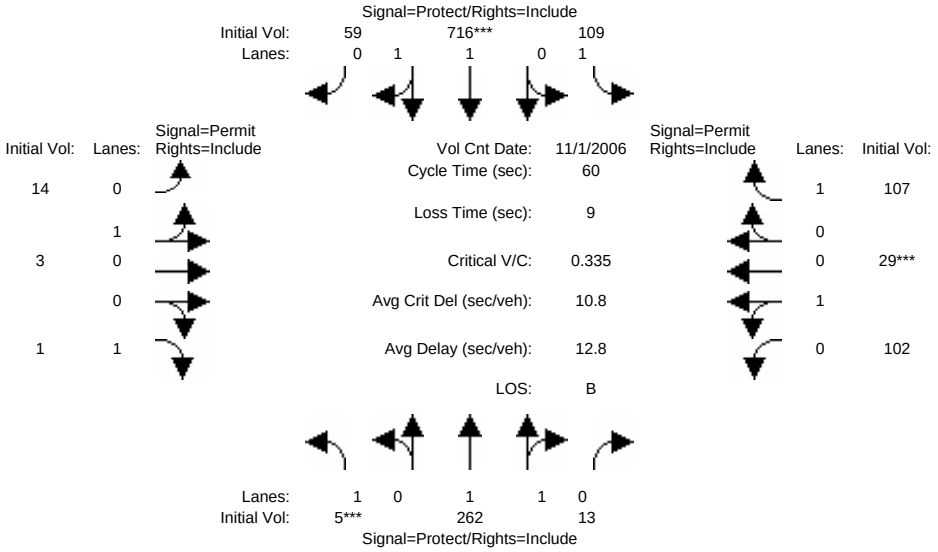
Sinclair Frontage Residential TIA
SJ06-886

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #1: Milpitas Boulevard / Los Coches Street



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 1 Nov 2006 << 7:45-8:45 am												
Base Vol:	5	262	13	109	716	59	14	3	1	102	29	107
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	262	13	109	716	59	14	3	1	102	29	107
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	262	13	109	716	59	14	3	1	102	29	107
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	262	13	109	716	59	14	3	1	102	29	107
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	262	13	109	716	59	14	3	1	102	29	107
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	5	262	13	109	716	59	14	3	1	102	29	107
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.95	0.92	0.98	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	1.90	0.10	1.00	1.84	0.16	0.82	0.18	1.00	0.78	0.22	1.00
Final Sat.:	1750	3525	175	1750	3418	282	1482	318	1750	1402	398	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.07	0.07	0.06	0.21	0.21	0.01	0.01	0.00	0.07	0.07	0.06
Crit Moves:	****				****						****	
Green Time:	7.0	23.3	23.3	16.3	32.7	32.7	11.3	11.3	11.3	11.3	11.3	11.3
Volume/Cap:	0.02	0.19	0.19	0.23	0.38	0.38	0.05	0.05	0.00	0.38	0.38	0.32
Delay/Veh:	23.7	12.4	12.4	18.1	8.4	8.4	20.2	20.2	19.8	24.5	24.5	23.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	23.7	12.4	12.4	18.1	8.4	8.4	20.2	20.2	19.8	24.5	24.5	23.6
LOS by Move:	C	B	B	B-	A	A	C+	C+	B-	C	C	
HCM2k95thQ:	0	4	4	4	9	9	1	1	0	6	6	5

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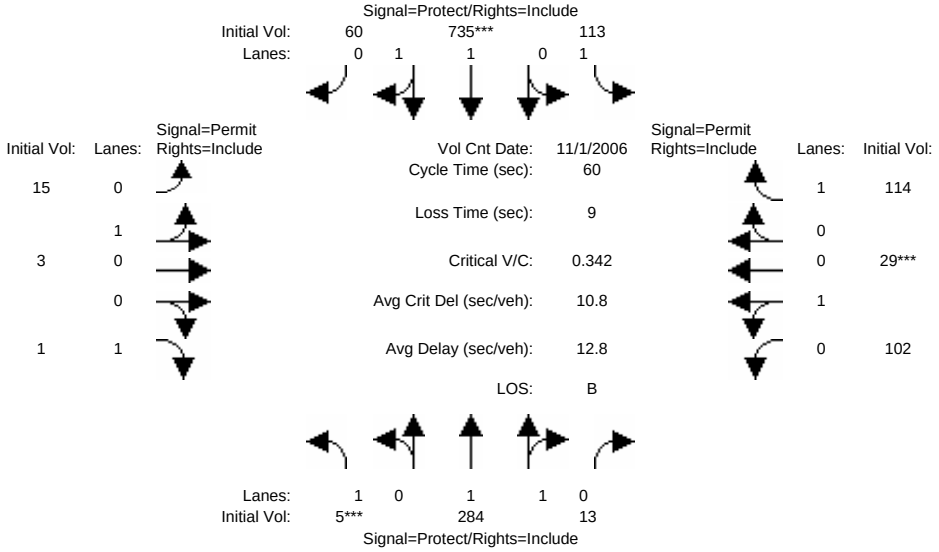
Sinclair Frontage Residential TIA
SJ06-886

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #1: Milpitas Boulevard / Los Coches Street



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 1 Nov 2006 << 7:45-8:45 am												
Base Vol:	5	262	13	109	716	59	14	3	1	102	29	107
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	262	13	109	716	59	14	3	1	102	29	107
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	22	0	4	19	1	1	0	0	0	0	7
Initial Fut:	5	284	13	113	735	60	15	3	1	102	29	114
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	284	13	113	735	60	15	3	1	102	29	114
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	284	13	113	735	60	15	3	1	102	29	114
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	5	284	13	113	735	60	15	3	1	102	29	114
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.95	0.92	0.98	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	1.91	0.09	1.00	1.84	0.16	0.83	0.17	1.00	0.78	0.22	1.00
Final Sat.:	1750	3538	162	1750	3421	279	1500	300	1750	1402	398	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.08	0.08	0.06	0.21	0.21	0.01	0.01	0.00	0.07	0.07	0.07
Crit Moves:	****				****						****	
Green Time:	7.0	23.5	23.5	16.4	32.9	32.9	11.1	11.1	11.1	11.1	11.1	11.1
Volume/Cap:	0.02	0.21	0.21	0.24	0.39	0.39	0.05	0.05	0.00	0.39	0.39	0.35
Delay/Veh:	23.7	12.4	12.4	18.1	8.4	8.4	20.4	20.4	19.9	24.9	24.9	24.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	23.7	12.4	12.4	18.1	8.4	8.4	20.4	20.4	19.9	24.9	24.9	24.3
LOS by Move:	C	B	B	B-	A	A	C+	C+	B-	C	C	
HCM2k95thQ:	0	4	4	4	9	9	1	1	0	6	6	5

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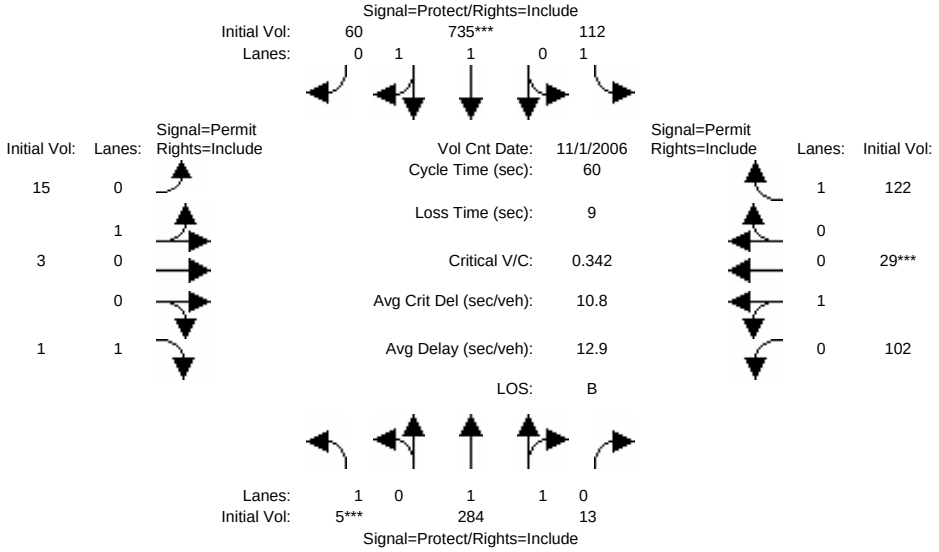
Sinclair Frontage Residential TIA
SJ06-886

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project AM

Intersection #1: Milpitas Boulevard / Los Coches Street



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 1 Nov 2006 << 7:45-8:45 am												
Base Vol:	5	262	13	109	716	59	14	3	1	102	29	107
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	262	13	109	716	59	14	3	1	102	29	107
Added Vol:	0	0	0	-1	0	0	0	0	0	0	0	8
ATI:	0	22	0	4	19	1	1	0	0	0	0	7
Initial Fut:	5	284	13	112	735	60	15	3	1	102	29	122
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	284	13	112	735	60	15	3	1	102	29	122
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	284	13	112	735	60	15	3	1	102	29	122
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	5	284	13	112	735	60	15	3	1	102	29	122
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.95	0.92	0.98	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	1.91	0.09	1.00	1.84	0.16	0.83	0.17	1.00	0.78	0.22	1.00
Final Sat.:	1750	3538	162	1750	3421	279	1500	300	1750	1402	398	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.08	0.08	0.06	0.21	0.21	0.01	0.01	0.00	0.07	0.07	0.07
Crit Moves:	****				****						****	
Green Time:	7.0	23.5	23.5	16.4	32.9	32.9	11.1	11.1	11.1	11.1	11.1	11.1
Volume/Cap:	0.02	0.21	0.21	0.23	0.39	0.39	0.05	0.05	0.00	0.39	0.39	0.38
Delay/Veh:	23.7	12.4	12.4	18.1	8.4	8.4	20.4	20.4	19.9	24.9	24.9	24.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	23.7	12.4	12.4	18.1	8.4	8.4	20.4	20.4	19.9	24.9	24.9	24.7
LOS by Move:	C	B	B	B-	A	A	C+	C+	B-	C	C	
HCM2k95thQ:	0	4	4	4	9	9	1	1	0	6	6	6

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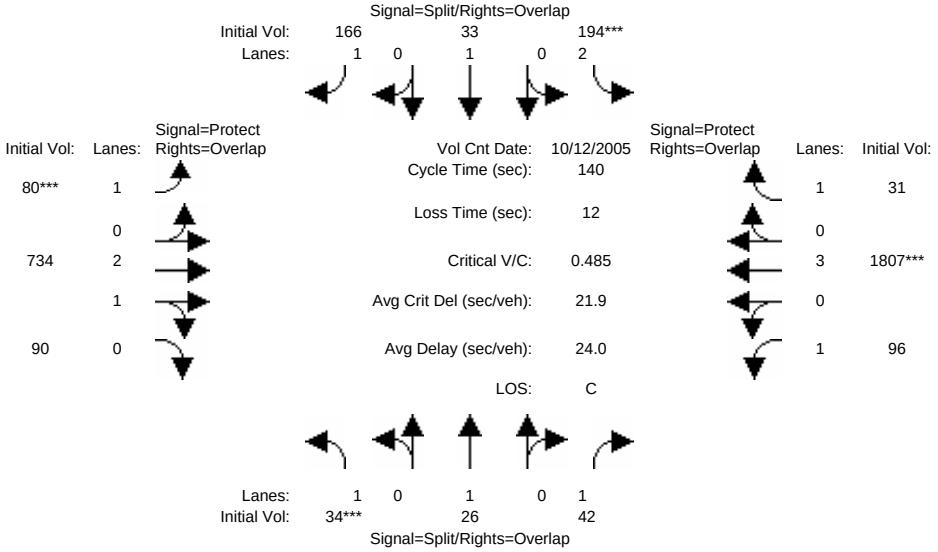
Sinclair Frontage Residential TIA
SJ06-886

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #2: E. Calaveras Blvd / Hillview Dr



Street Name:	Hillview Dr						E. Calaveras Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Volume Module: >> Count Date: 12 Oct 2005 <<												
Base Vol:	34	26	42	194	33	166	80	734	90	96	1807	31
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	34	26	42	194	33	166	80	734	90	96	1807	31
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	34	26	42	194	33	166	80	734	90	96	1807	31
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	34	26	42	194	33	166	80	734	90	96	1807	31
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	26	42	194	33	166	80	734	90	96	1807	31
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	34	26	42	194	33	166	80	734	90	96	1807	31
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	0.99	0.95	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	1.00	2.66	0.34	1.00	3.00	1.00
Final Sat.:	1750	1900	1750	3150	1900	1750	1750	4988	612	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.01	0.02	0.06	0.02	0.09	0.05	0.15	0.15	0.05	0.32	0.02
Crit Moves:	****			****			****				****	
Green Time:	10.0	10.0	37.4	17.1	17.1	29.8	12.7	73.5	83.5	27.4	88.2	105.3
Volume/Cap:	0.27	0.19	0.09	0.50	0.14	0.45	0.50	0.28	0.25	0.28	0.50	0.02
Delay/Veh:	66.8	64.3	38.9	62.1	56.2	51.7	71.6	18.8	13.6	50.0	14.6	4.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	66.8	64.3	38.9	62.1	56.2	51.7	71.6	18.8	13.6	50.0	14.6	4.4
LOS by Move:	E	E	D+	E	E+	D-	E	B-	B	D	B	
HCM2k95thQ:	4	3	3	10	3	13	8	12	11	8	23	1

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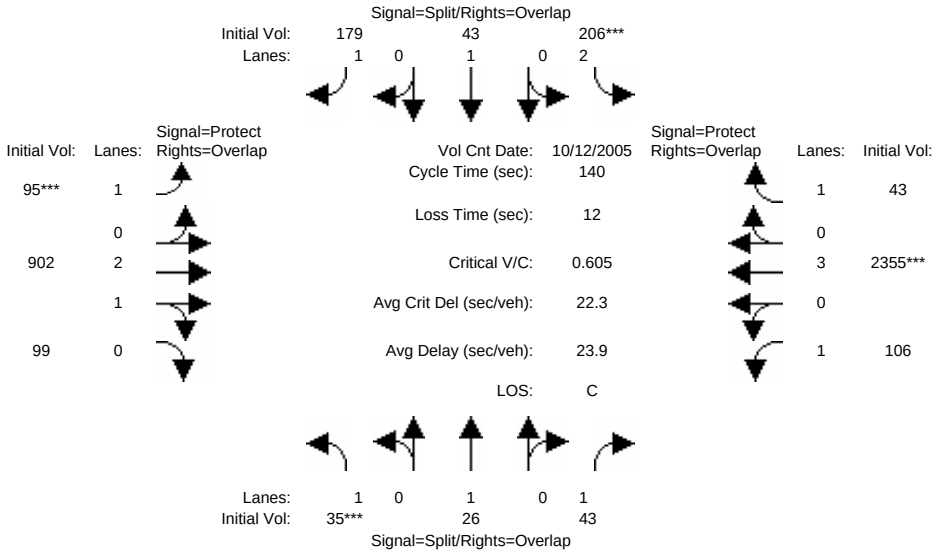
Sinclair Frontage Residential TIA
SJ06-886

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #2: E. Calaveras Blvd / Hillview Dr



Street Name:	Hillview Dr						E. Calaveras Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Volume Module: >> Count Date: 12 Oct 2005 <<												
Base Vol:	34	26	42	194	33	166	80	734	90	96	1807	31
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	34	26	42	194	33	166	80	734	90	96	1807	31
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	1	0	1	12	10	13	15	168	9	10	548	12
Initial Fut:	35	26	43	206	43	179	95	902	99	106	2355	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	35	26	43	206	43	179	95	902	99	106	2355	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	26	43	206	43	179	95	902	99	106	2355	43
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	35	26	43	206	43	179	95	902	99	106	2355	43
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	0.99	0.95	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	1.00	2.69	0.31	1.00	3.00	1.00
Final Sat.:	1750	1900	1750	3150	1900	1750	1750	5045	554	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.01	0.02	0.07	0.02	0.10	0.05	0.18	0.18	0.06	0.41	0.02
Crit Moves:	****			****			****				****	
Green Time:	10.0	10.0	36.2	14.5	14.5	26.5	12.0	77.3	87.3	26.2	91.5	106.0
Volume/Cap:	0.28	0.19	0.10	0.63	0.22	0.54	0.63	0.32	0.29	0.32	0.63	0.03
Delay/Veh:	67.1	64.3	39.9	69.2	60.1	57.4	80.4	17.4	12.3	51.8	15.1	4.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	67.1	64.3	39.9	69.2	60.1	57.4	80.4	17.4	12.3	51.8	15.1	4.3
LOS by Move:	E	E	D	E	E	E+	F	B	B	D-	B	A
HCM2k95thQ:	4	3	3	12	4	14	10	14	12	9	32	1

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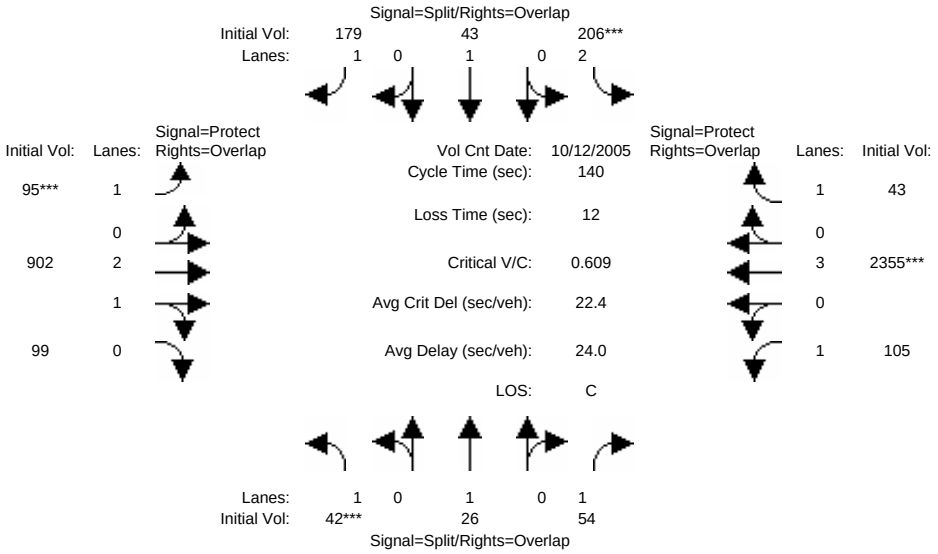
Sinclair Frontage Residential TIA
SJ06-886

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project AM

Intersection #2: E. Calaveras Blvd / Hillview Dr



Street Name:	Hillview Dr						E. Calaveras Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Volume Module: >> Count Date: 12 Oct 2005 <<												
Base Vol:	34	26	42	194	33	166	80	734	90	96	1807	31
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	34	26	42	194	33	166	80	734	90	96	1807	31
Added Vol:	7	0	11	0	0	0	0	0	0	-1	0	0
ATI:	1	0	1	12	10	13	15	168	9	10	548	12
Initial Fut:	42	26	54	206	43	179	95	902	99	105	2355	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	42	26	54	206	43	179	95	902	99	105	2355	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	26	54	206	43	179	95	902	99	105	2355	43
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	42	26	54	206	43	179	95	902	99	105	2355	43
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	0.99	0.95	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	1.00	2.69	0.31	1.00	3.00	1.00
Final Sat.:	1750	1900	1750	3150	1900	1750	1750	5045	554	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.01	0.03	0.07	0.02	0.10	0.05	0.18	0.18	0.06	0.41	0.02
Crit Moves:	****			****			****				****	
Green Time:	10.0	10.0	36.0	14.5	14.5	26.5	12.0	77.5	87.5	26.0	91.5	106.0
Volume/Cap:	0.34	0.19	0.12	0.63	0.22	0.54	0.63	0.32	0.29	0.32	0.63	0.03
Delay/Veh:	69.0	64.3	40.4	69.2	60.1	57.4	80.4	17.3	12.2	52.0	15.1	4.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	69.0	64.3	40.4	69.2	60.1	57.4	80.4	17.3	12.2	52.0	15.1	4.3
LOS by Move:	E	E	D	E	E	E+	F	B	B	D-	B	A
HCM2k95thQ:	5	3	4	12	4	14	10	14	12	9	32	1

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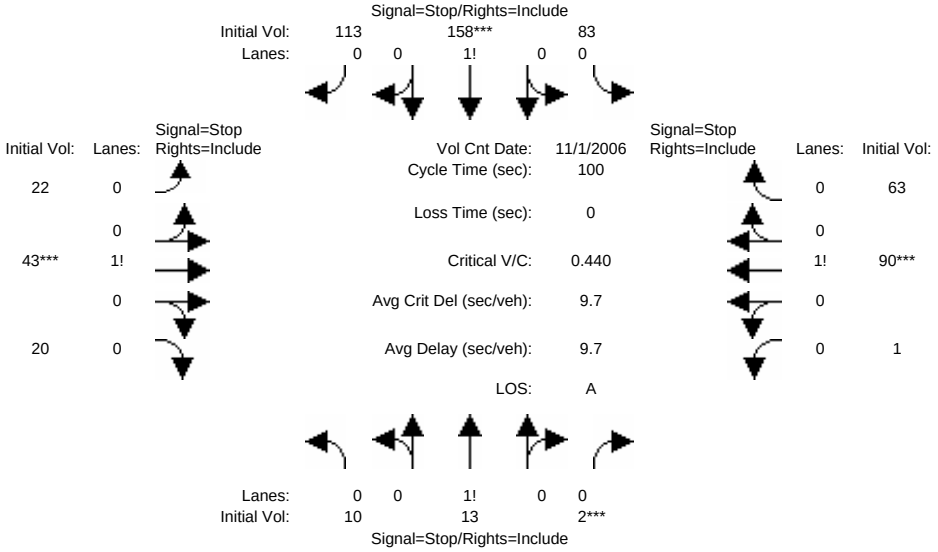
Sinclair Frontage Residential TIA
SJ06-886

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Existing AM

Intersection #3: Los Coches St / Hillview Dr



Street Name:	Hillview Dr						Los Coches St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 1 Nov 2006 << 8:00-9:00 am												
Base Vol:	10	13	2	83	158	113	22	43	20	1	90	63
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	13	2	83	158	113	22	43	20	1	90	63
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	13	2	83	158	113	22	43	20	1	90	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	13	2	83	158	113	22	43	20	1	90	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	13	2	83	158	113	22	43	20	1	90	63
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	10	13	2	83	158	113	22	43	20	1	90	63
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.40	0.52	0.08	0.23	0.45	0.32	0.26	0.51	0.23	0.01	0.58	0.41
Final Sat.:	276	359	55	189	359	257	179	350	163	5	427	299
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.44	0.44	0.44	0.12	0.12	0.12	0.21	0.21	0.21
Crit Moves:			****		****			****			****	
Delay/Veh:	8.0	8.0	8.0	10.5	10.5	10.5	8.5	8.5	8.5	8.7	8.7	8.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.0	8.0	8.0	10.5	10.5	10.5	8.5	8.5	8.5	8.7	8.7	8.7
LOS by Move:	A	A	A	B	B	B	A	A	A	A	A	A
ApproachDel:		8.0			10.5			8.5			8.7	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		8.0			10.5			8.5			8.7	
LOS by Appr:		A			B			A			A	
AllWayAvgQ:	0.0	0.0	0.0	0.7	0.7	0.7	0.1	0.1	0.1	0.2	0.2	0.2

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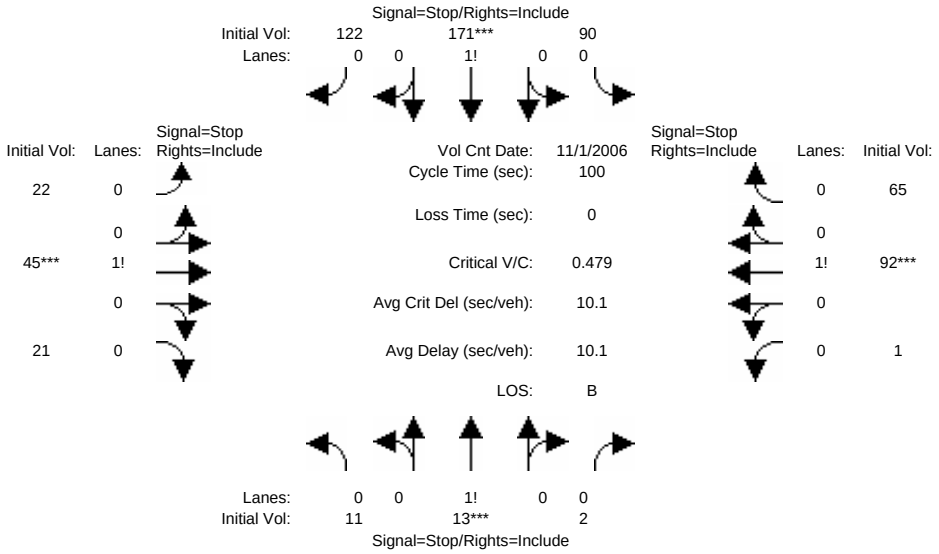
Sinclair Frontage Residential TIA
SJ06-886

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Background AM

Intersection #3: Los Coches St / Hillview Dr



Street Name:	Hillview Dr						Los Coches St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 1 Nov 2006 << 8:00-9:00 am												
Base Vol:	10	13	2	83	158	113	22	43	20	1	90	63
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	13	2	83	158	113	22	43	20	1	90	63
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	1	0	0	7	13	9	0	2	1	0	2	2
Initial Fut:	11	13	2	90	171	122	22	45	21	1	92	65
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	13	2	90	171	122	22	45	21	1	92	65
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	13	2	90	171	122	22	45	21	1	92	65
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	11	13	2	90	171	122	22	45	21	1	92	65
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.42	0.50	0.08	0.23	0.45	0.32	0.25	0.51	0.24	0.01	0.58	0.41
Final Sat.:	287	339	52	188	357	255	169	346	162	5	418	295
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.48	0.48	0.48	0.13	0.13	0.13	0.22	0.22	0.22
Crit Moves:		****			****			****			****	
Delay/Veh:	8.1	8.1	8.1	11.1	11.1	11.1	8.6	8.6	8.6	8.9	8.9	8.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.1	8.1	8.1	11.1	11.1	11.1	8.6	8.6	8.6	8.9	8.9	8.9
LOS by Move:	A	A	A	B	B	B	A	A	A	A	A	A
ApproachDel:		8.1			11.1			8.6			8.9	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		8.1			11.1			8.6			8.9	
LOS by Appr:		A			B			A			A	
AllWayAvgQ:	0.0	0.0	0.0	0.8	0.8	0.8	0.1	0.1	0.1	0.2	0.2	0.2

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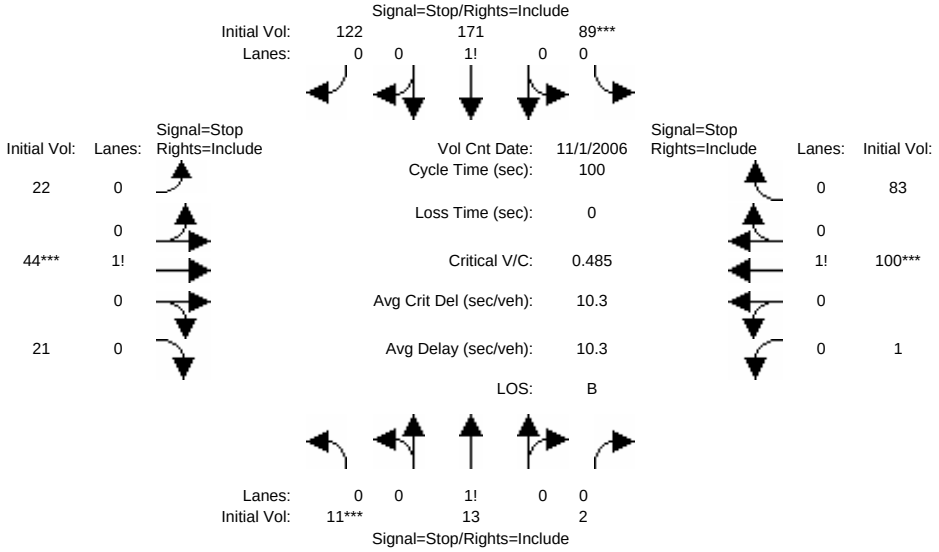
Sinclair Frontage Residential TIA
SJ06-886

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Project AM

Intersection #3: Los Coches St / Hillview Dr



Street Name:	Hillview Dr						Los Coches St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 1 Nov 2006 << 8:00-9:00 am												
Base Vol:	10	13	2	83	158	113	22	43	20	1	90	63
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	13	2	83	158	113	22	43	20	1	90	63
Added Vol:	0	0	0	-1	0	0	0	-1	0	0	8	18
ATI:	1	0	0	7	13	9	0	2	1	0	2	2
Initial Fut:	11	13	2	89	171	122	22	44	21	1	100	83
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	13	2	89	171	122	22	44	21	1	100	83
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	13	2	89	171	122	22	44	21	1	100	83
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	11	13	2	89	171	122	22	44	21	1	100	83
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.42	0.50	0.08	0.23	0.45	0.32	0.25	0.51	0.24	0.01	0.54	0.45
Final Sat.:	282	333	51	183	352	251	170	339	162	4	392	326
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.49	0.49	0.49	0.13	0.13	0.13	0.25	0.25	0.25
Crit Moves:	****			****				****			****	
Delay/Veh:	8.2	8.2	8.2	11.3	11.3	11.3	8.6	8.6	8.6	9.1	9.1	9.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.2	8.2	8.2	11.3	11.3	11.3	8.6	8.6	8.6	9.1	9.1	9.1
LOS by Move:	A	A	A	B	B	B	A	A	A	A	A	A
ApproachDel:		8.2			11.3			8.6			9.1	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		8.2			11.3			8.6			9.1	
LOS by Appr:		A			B			A			A	
AllWayAvgQ:	0.0	0.0	0.0	0.8	0.8	0.8	0.1	0.1	0.1	0.3	0.3	0.3

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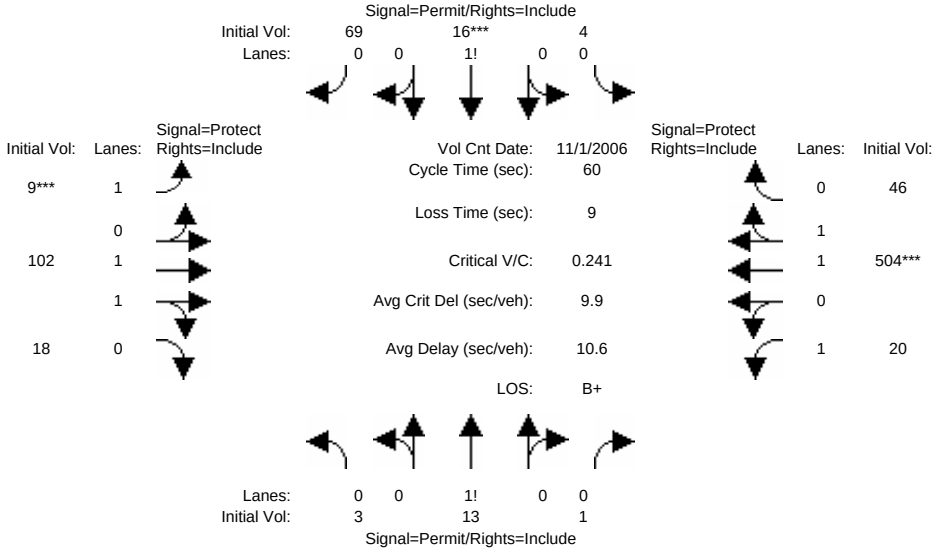
Sinclair Frontage Residential TIA
SJ06-886

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #4: Sinclair Frontage Road / Yosemite Drive



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Volume Module: >> Count Date: 1 Nov 2006 << 7:15-8:15 am												
Base Vol:	3	13	1	4	16	69	9	102	18	20	504	46
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	13	1	4	16	69	9	102	18	20	504	46
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	13	1	4	16	69	9	102	18	20	504	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	13	1	4	16	69	9	102	18	20	504	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	13	1	4	16	69	9	102	18	20	504	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	3	13	1	4	16	69	9	102	18	20	504	46
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	0.18	0.76	0.06	0.04	0.18	0.78	1.00	1.69	0.31	1.00	1.83	0.17
Final Sat.:	309	1338	103	79	315	1357	1750	3145	555	1750	3390	309
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.05	0.05	0.05	0.01	0.03	0.03	0.01	0.15	0.15
Crit Moves:					****		****				****	
Green Time:	11.2	11.2	11.2	11.2	11.2	11.2	7.0	23.4	23.4	16.4	32.8	32.8
Volume/Cap:	0.05	0.05	0.05	0.27	0.27	0.27	0.04	0.08	0.08	0.04	0.27	0.27
Delay/Veh:	20.3	20.3	20.3	22.9	22.9	22.9	23.9	11.6	11.6	16.2	7.6	7.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.3	20.3	20.3	22.9	22.9	22.9	23.9	11.6	11.6	16.2	7.6	7.6
LOS by Move:	C+	C+	C+	C+	C+	C+	C	B+	B+	B	A	
HCM2k95thQ:	1	1	1	4	4	4	0	2	2	1	6	6

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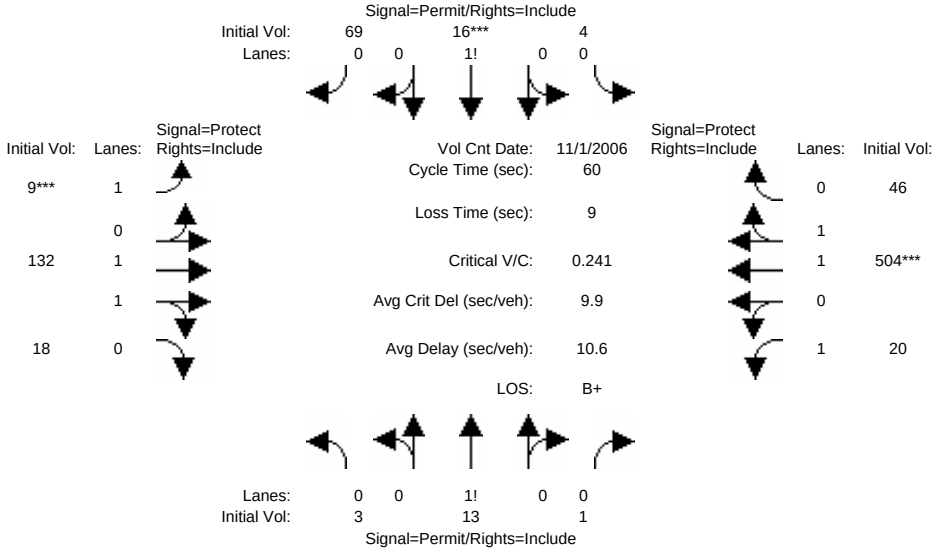
Sinclair Frontage Residential TIA
SJ06-886

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #4: Sinclair Frontage Road / Yosemite Drive



Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Min. Green:	10		10		10		10		10		10		7		10		10		7		10		10	
Volume Module: >> Count Date: 1 Nov 2006 << 7:15-8:15 am																								
Base Vol:	3		13		1		4		16		69		9		102		18		20		504		46	
Growth Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00
Initial Bse:	3		13		1		4		16		69		9		102		18		20		504		46	
Added Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
ATI:	0		0		0		0		0		0		0		30		0		0		0		0	
Initial Fut:	3		13		1		4		16		69		9		132		18		20		504		46	
User Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00
PHF Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00
PHF Volume:	3		13		1		4		16		69		9		132		18		20		504		46	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	3		13		1		4		16		69		9		132		18		20		504		46	
PCE Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00
MLF Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00
Final Vol.:	3		13		1		4		16		69		9		132		18		20		504		46	
Saturation Flow Module:																								
Sat/Lane:	1900	1900		1900		1900	1900	1900		1900		1900	1900	1900		1900		1900	1900	1900		1900		1900
Adjustment:	0.92	0.92		0.92		0.92	0.92	0.92		0.92		0.92	0.92	0.98		0.95		0.92	0.98	0.95		0.92		0.95
Lanes:	0.18	0.76		0.06		0.04	0.18	0.78		1.00		1.75	0.25		1.00	1.83		0.17						
Final Sat.:	309	1338		103		79	315	1357		1750		3256	444		1750	3390		309						
Capacity Analysis Module:																								
Vol/Sat:	0.01	0.01		0.01		0.05	0.05	0.05		0.05		0.01	0.04		0.04	0.01	0.15		0.15					
Crit Moves:								****				****					****							
Green Time:	11.2	11.2		11.2		11.2	11.2	11.2		11.2		7.0	23.4		23.4	16.4	32.8		32.8					
Volume/Cap:	0.05	0.05		0.05		0.27	0.27	0.27		0.27		0.04	0.10		0.10	0.04	0.27		0.27					
Delay/Veh:	20.3	20.3		20.3		22.9	22.9	22.9		22.9		23.9	11.8		11.8	16.2	7.6		7.6					
User DelAdj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00		1.00					
AdjDel/Veh:	20.3	20.3		20.3		22.9	22.9	22.9		22.9		23.9	11.8		11.8	16.2	7.6		7.6					
LOS by Move:	C+		C+		C+		C+		C+		C+		C		B+		B+		B		A			
HCM2k95thQ:	1		1		1		4		4		4		0		2		2		1		6		6	

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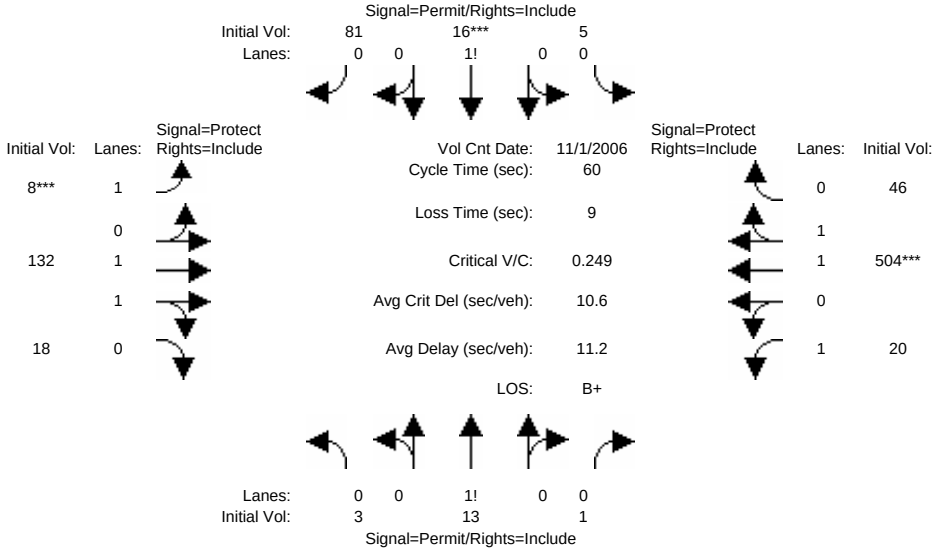
Sinclair Frontage Residential TIA
SJ06-886

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project AM

Intersection #4: Sinclair Frontage Road / Yosemite Drive



Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Min. Green:	10		10		10		10		10		10		7		10		10		7		10		10	
Volume Module: >> Count Date: 1 Nov 2006 << 7:15-8:15 am																								
Base Vol:	3		13		1		4		16		69		9		102		18		20		504		46	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	3		13		1		4		16		69		9		102		18		20		504		46	
Added Vol:	0		0		0		1		0		12		-1		0		0		0		0		0	
ATI:	0		0		0		0		0		0		0		30		0		0		0		0	
Initial Fut:	3		13		1		5		16		81		8		132		18		20		504		46	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Volume:	3		13		1		5		16		81		8		132		18		20		504		46	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	3		13		1		5		16		81		8		132		18		20		504		46	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Final Vol.:	3		13		1		5		16		81		8		132		18		20		504		46	
Saturation Flow Module:																								
Sat/Lane:	1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900	
Adjustment:	0.92		0.92		0.92		0.92		0.92		0.92		0.92		0.98		0.95		0.92		0.98		0.95	
Lanes:	0.18		0.76		0.06		0.05		0.16		0.79		1.00		1.75		0.25		1.00		1.83		0.17	
Final Sat.:	309		1338		103		86		275		1390		1750		3256		444		1750		3390		309	
Capacity Analysis Module:																								
Vol/Sat:	0.01		0.01		0.01		0.06		0.06		0.06		0.00		0.04		0.04		0.01		0.15		0.15	
Crit Moves:									****				****								****			
Green Time:	12.4		12.4		12.4		12.4		12.4		12.4		7.0		22.7		22.7		15.9		31.6		31.6	
Volume/Cap:	0.05		0.05		0.05		0.28		0.28		0.28		0.04		0.11		0.11		0.04		0.28		0.28	
Delay/Veh:	19.3		19.3		19.3		22.0		22.0		22.0		23.9		12.2		12.2		16.6		8.3		8.3	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	19.3		19.3		19.3		22.0		22.0		22.0		23.9		12.2		12.2		16.6		8.3		8.3	
LOS by Move:	B-		B-		B-		C+		C+		C+		C		B		B		B		A			
HCM2k95thQ:	1		1		1		4		4		4		0		2		2		1		6		6	

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Sinclair Frontage Residential TIA
SJ06-886

Summary Scenario Comparison Report (With Average Critical Delay)
Future Volume Alternative

Intersection		Existing PM				Background PM				Project PM						???			
		LOS	Avg Del (sec)	Crit V/C	Avg Crit Del (sec)	LOS	Avg Del (sec)	Crit V/C	Avg Crit Del (sec)	LOS	Avg Del (sec)	Crit V/C	Crit V/C Change	Avg Crit Del (sec)	Avg Crit Del Change	LOS	Avg Del (sec)	Crit V/C	Avg Crit Del (sec)
#1	Milpitas Boulevard / Los Coches Street	B	16.6	0.519	17.0	B	16.9	0.555	17.6	B	17.0	0.562	+ 0.007	17.8	+ 0.3	?	xx.x	x.xxx	xx.x
#2	E. Calaveras Blvd / Hillview Dr	C-	34.3	0.732	34.3	D+	36.3	0.869	38.3	D+	36.5	0.871	+ 0.001	38.4	+ 0.1	?	xx.x	x.xxx	xx.x
#3	Los Coches St / Hillview Dr	B	12.0	0.486	12.0	B	12.3	0.501	12.3	B	12.9	0.528	+ 0.027	12.9	+ 0.6	?	xx.x	x.xxx	xx.x
#4	Sinclair Frontage Road / Yosemite Drive	B	16.0	0.376	16.0	B	16.0	0.382	16.0	B	16.1	0.382	- 0.001	16.0	- 0.0	?	xx.x	x.xxx	xx.x

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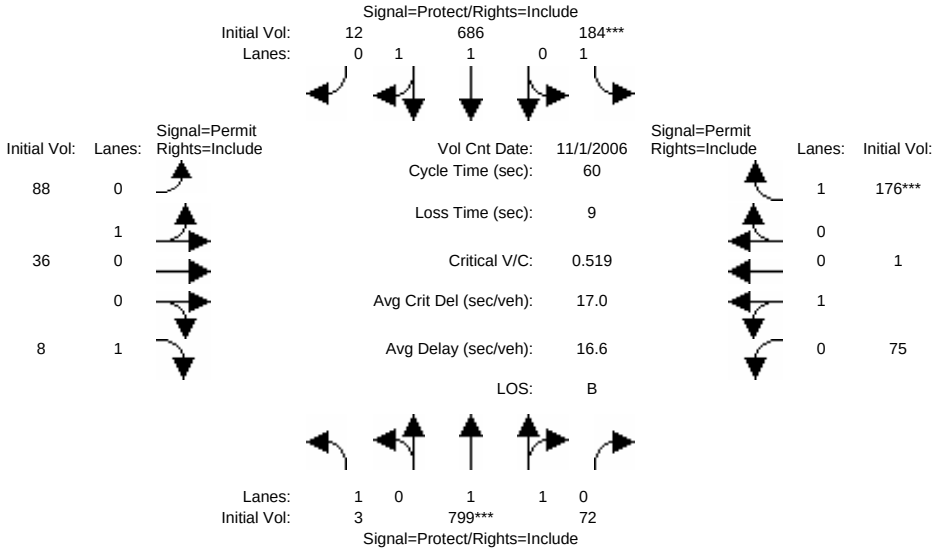
Sinclair Frontage Residential TIA
SJ06-886

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #1: Milpitas Boulevard / Los Coches Street



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 1 Nov 2006 << 5:00-6:00 pm												
Base Vol:	3	799	72	184	686	12	88	36	8	75	1	176
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	799	72	184	686	12	88	36	8	75	1	176
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	799	72	184	686	12	88	36	8	75	1	176
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	799	72	184	686	12	88	36	8	75	1	176
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	799	72	184	686	12	88	36	8	75	1	176
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	3	799	72	184	686	12	88	36	8	75	1	176
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.97	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	1.83	0.17	1.00	1.96	0.04	0.71	0.29	1.00	0.99	0.01	1.00
Final Sat.:	1750	3394	306	1750	3636	64	1277	523	1750	1776	24	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.24	0.11	0.19	0.19	0.07	0.07	0.00	0.04	0.04	0.10
Crit Moves:		****		****								****
Green Time:	15.0	27.2	27.2	12.2	24.3	24.3	11.6	11.6	11.6	11.6	11.6	11.6
Volume/Cap:	0.01	0.52	0.52	0.52	0.47	0.47	0.36	0.36	0.02	0.22	0.22	0.52
Delay/Veh:	16.9	12.9	12.9	26.7	14.1	14.1	23.8	23.8	19.7	21.8	21.8	27.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.9	12.9	12.9	26.7	14.1	14.1	23.8	23.8	19.7	21.8	21.8	27.3
LOS by Move:	B	B	B	C	B	B	C	C	B-	C+	C+	
HCM2k95thQ:	0	12	12	8	10	10	5	5	0	3	3	8

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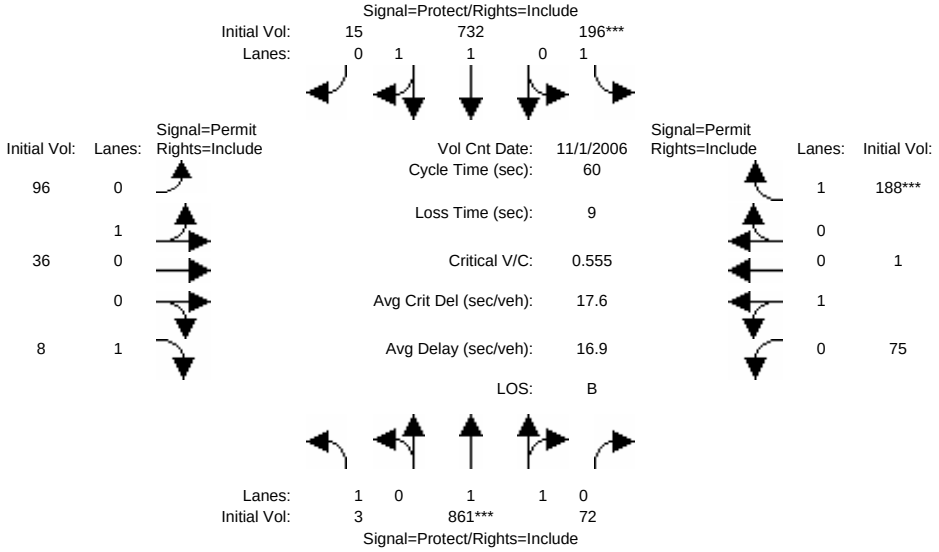
Sinclair Frontage Residential TIA
SJ06-886

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #1: Milpitas Boulevard / Los Coches Street



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 1 Nov 2006 << 5:00-6:00 pm												
Base Vol:	3	799	72	184	686	12	88	36	8	75	1	176
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	799	72	184	686	12	88	36	8	75	1	176
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	62	0	12	46	3	8	0	0	0	0	12
Initial Fut:	3	861	72	196	732	15	96	36	8	75	1	188
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	861	72	196	732	15	96	36	8	75	1	188
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	861	72	196	732	15	96	36	8	75	1	188
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	3	861	72	196	732	15	96	36	8	75	1	188
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.97	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	1.84	0.16	1.00	1.96	0.04	0.73	0.27	1.00	0.99	0.01	1.00
Final Sat.:	1750	3414	286	1750	3626	74	1309	491	1750	1776	24	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.25	0.11	0.20	0.20	0.07	0.07	0.00	0.04	0.04	0.11
Crit Moves:		****		****								****
Green Time:	14.4	27.3	27.3	12.1	25.0	25.0	11.6	11.6	11.6	11.6	11.6	11.6
Volume/Cap:	0.01	0.55	0.55	0.55	0.49	0.49	0.38	0.38	0.02	0.22	0.22	0.55
Delay/Veh:	17.4	13.3	13.3	27.7	13.9	13.9	24.2	24.2	19.7	21.8	21.8	28.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.4	13.3	13.3	27.7	13.9	13.9	24.2	24.2	19.7	21.8	21.8	28.3
LOS by Move:	B	B	B	C	B	B	C	C	B-	C+	C+	
HCM2k95thQ:	0	13	13	9	11	11	6	6	0	3	3	9

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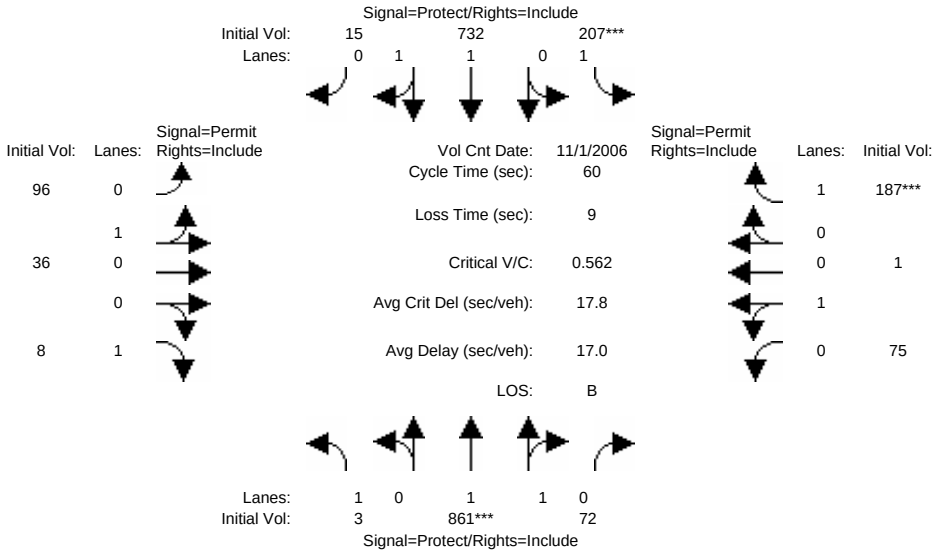
Sinclair Frontage Residential TIA
SJ06-886

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project PM

Intersection #1: Milpitas Boulevard / Los Coches Street



Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Min. Green:	7		10		10		7		10		10		10		10		10		10		10		10	
Volume Module: >> Count Date: 1 Nov 2006 << 5:00-6:00 pm																								
Base Vol:	3		799		72		184		686		12		88		36		8		75		1		176	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	3		799		72		184		686		12		88		36		8		75		1		176	
Added Vol:	0		0		0		11		0		0		0		0		0		0		0		-1	
ATI:	0		62		0		12		46		3		8		0		0		0		0		12	
Initial Fut:	3		861		72		207		732		15		96		36		8		75		1		187	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Volume:	3		861		72		207		732		15		96		36		8		75		1		187	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	3		861		72		207		732		15		96		36		8		75		1		187	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Final Vol.:	3		861		72		207		732		15		96		36		8		75		1		187	
Saturation Flow Module:																								
Sat/Lane:	1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900	
Adjustment:	0.92		0.98		0.95		0.92		0.97		0.95		0.95		0.95		0.92		0.95		0.95		0.92	
Lanes:	1.00		1.84		0.16		1.00		1.96		0.04		0.73		0.27		1.00		0.99		0.01		1.00	
Final Sat.:	1750		3414		286		1750		3626		74		1309		491		1750		1776		24		1750	
Capacity Analysis Module:																								
Vol/Sat:	0.00		0.25		0.25		0.12		0.20		0.20		0.07		0.07		0.00		0.04		0.04		0.11	
Crit Moves:			****				****																****	
Green Time:	14.5		26.9		26.9		12.6		25.1		25.1		11.4		11.4		11.4		11.4		11.4		11.4	
Volume/Cap:	0.01		0.56		0.56		0.56		0.48		0.48		0.39		0.39		0.02		0.22		0.22		0.56	
Delay/Veh:	17.3		13.6		13.6		27.3		13.8		13.8		24.5		24.5		19.9		22.0		22.0		28.7	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	17.3		13.6		13.6		27.3		13.8		13.8		24.5		24.5		19.9		22.0		22.0		28.7	
LOS by Move:	B		B		B		C		B		B		C		C		B-		C+		C+			
HCM2k95thQ:	0		13		13		9		11		11		6		6		0		3		3		9	

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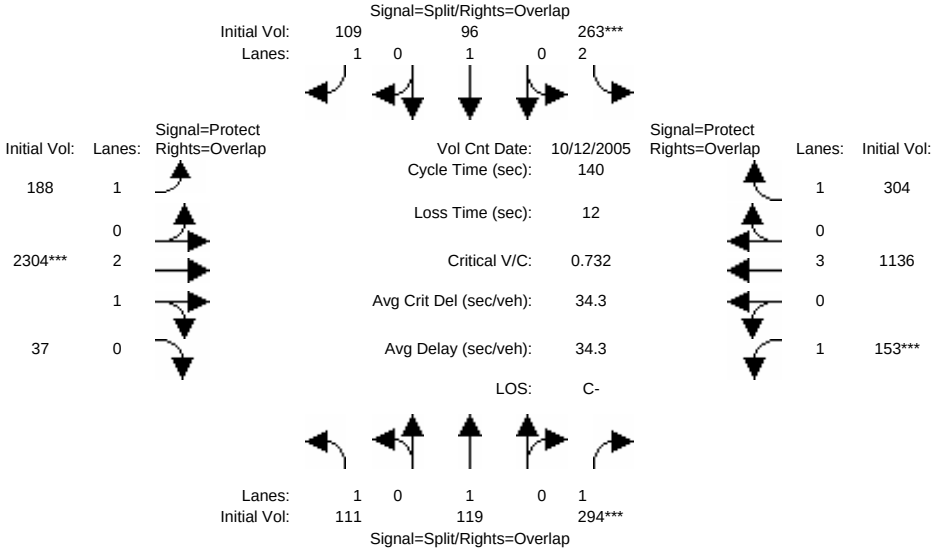
Sinclair Frontage Residential TIA
SJ06-886

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #2: E. Calaveras Blvd / Hillview Dr



Street Name:	Hillview Dr						E. Calaveras Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Volume Module: >> Count Date: 12 Oct 2005 <<												
Base Vol:	111	119	294	263	96	109	188	2304	37	153	1136	304
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	111	119	294	263	96	109	188	2304	37	153	1136	304
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	111	119	294	263	96	109	188	2304	37	153	1136	304
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	111	119	294	263	96	109	188	2304	37	153	1136	304
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	111	119	294	263	96	109	188	2304	37	153	1136	304
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	111	119	294	263	96	109	188	2304	37	153	1136	304
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	0.98	0.95	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	1.00	2.95	0.05	1.00	3.00	1.00
Final Sat.:	1750	1900	1750	3150	1900	1750	1750	5511	89	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.17	0.08	0.05	0.06	0.11	0.42	0.42	0.09	0.20	0.17
Crit Moves:			****	****				****		****		
Green Time:	15.4	15.4	32.1	16.0	16.0	49.8	33.8	79.9	95.3	16.7	62.8	78.8
Volume/Cap:	0.58	0.57	0.73	0.73	0.44	0.18	0.44	0.73	0.61	0.73	0.44	0.31
Delay/Veh:	71.2	69.9	61.2	72.4	64.3	31.6	48.4	23.7	13.0	79.7	27.2	17.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	71.2	69.9	61.2	72.4	64.3	31.6	48.4	23.7	13.0	79.7	27.2	17.0
LOS by Move:	E	E	E	E	E	C	D	C	B	E-	C	B
HCM2k95thQ:	11	11	23	15	9	7	14	41	30	15	19	13

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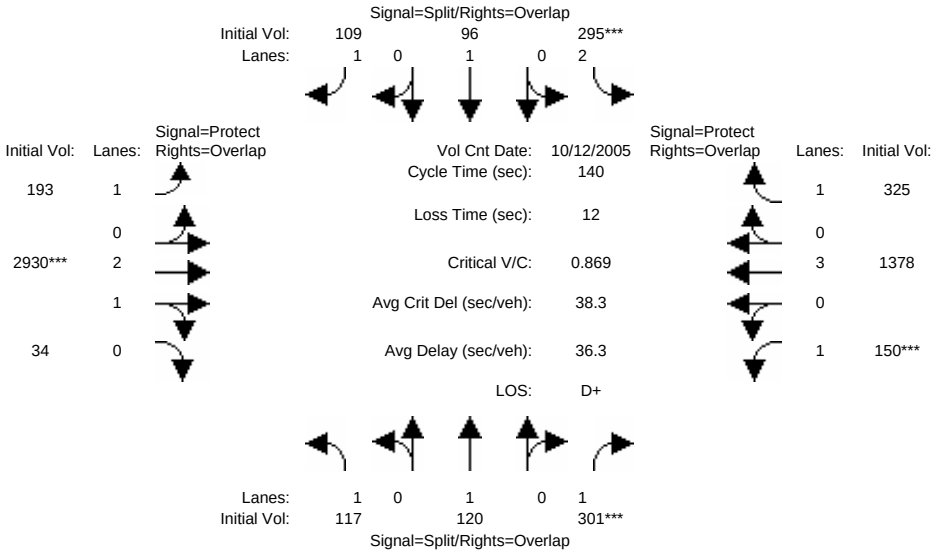
Sinclair Frontage Residential TIA
SJ06-886

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #2: E. Calaveras Blvd / Hillview Dr



Street Name:	Hillview Dr						E. Calaveras Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Volume Module: >> Count Date: 12 Oct 2005 <<												
Base Vol:	111	119	294	263	96	109	188	2304	37	153	1136	304
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	111	119	294	263	96	109	188	2304	37	153	1136	304
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	6	1	7	32	0	0	5	626	-3	-3	242	21
Initial Fut:	117	120	301	295	96	109	193	2930	34	150	1378	325
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	117	120	301	295	96	109	193	2930	34	150	1378	325
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	117	120	301	295	96	109	193	2930	34	150	1378	325
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	117	120	301	295	96	109	193	2930	34	150	1378	325
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	0.98	0.95	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	1.00	2.96	0.04	1.00	3.00	1.00
Final Sat.:	1750	1900	1750	3150	1900	1750	1750	5536	64	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.06	0.17	0.09	0.05	0.06	0.11	0.53	0.53	0.09	0.24	0.19
Crit Moves:			****	****				****		****		
Green Time:	13.9	13.9	27.7	15.1	15.1	46.1	31.0	85.2	99.1	13.8	68.0	83.1
Volume/Cap:	0.67	0.64	0.87	0.87	0.47	0.19	0.50	0.87	0.75	0.87	0.50	0.31
Delay/Veh:	79.8	75.9	78.9	86.3	66.2	34.3	52.2	26.1	14.0	103.2	25.1	15.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	79.8	75.9	78.9	86.3	66.2	34.3	52.2	26.1	14.0	103.2	25.1	15.0
LOS by Move:	E-	E-	E-	F	E	C-	D-	C	B	F	C	
HCM2k95thQ:	12	11	27	18	9	7	15	60	43	17	22	13

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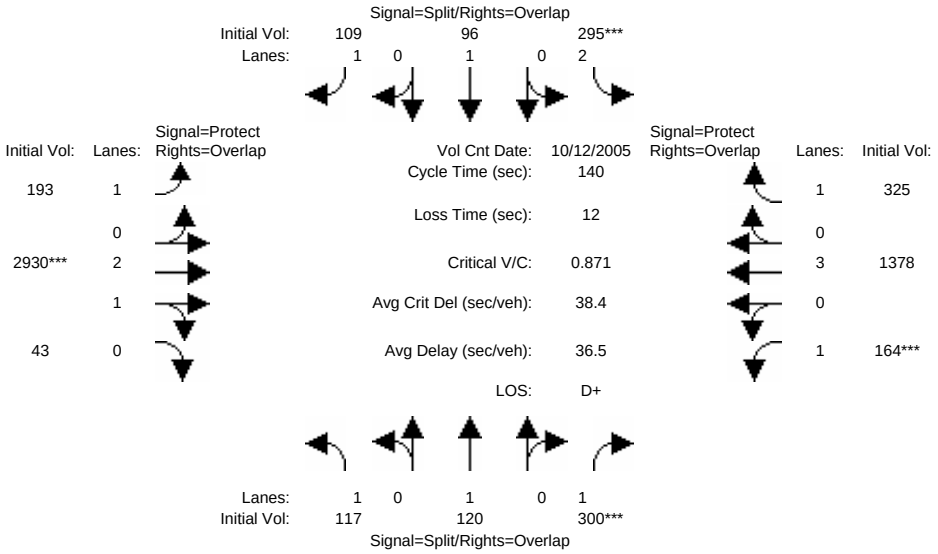
Sinclair Frontage Residential TIA
SJ06-886

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project PM

Intersection #2: E. Calaveras Blvd / Hillview Dr



Street Name:	Hillview Dr						E. Calaveras Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Volume Module: >> Count Date: 12 Oct 2005 <<												
Base Vol:	111	119	294	263	96	109	188	2304	37	153	1136	304
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	111	119	294	263	96	109	188	2304	37	153	1136	304
Added Vol:	0	0	-1	0	0	0	0	0	9	14	0	0
ATI:	6	1	7	32	0	0	5	626	-3	-3	242	21
Initial Fut:	117	120	300	295	96	109	193	2930	43	164	1378	325
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	117	120	300	295	96	109	193	2930	43	164	1378	325
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	117	120	300	295	96	109	193	2930	43	164	1378	325
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	117	120	300	295	96	109	193	2930	43	164	1378	325
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	0.98	0.95	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	2.00	1.00	1.00	1.00	2.96	0.04	1.00	3.00	1.00
Final Sat.:	1750	1900	1750	3150	1900	1750	1750	5519	81	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.06	0.17	0.09	0.05	0.06	0.11	0.53	0.53	0.09	0.24	0.19
Crit Moves:			****	****				****		****		
Green Time:	12.5	12.5	27.6	15.1	15.1	46.5	31.5	85.4	97.9	15.1	69.0	84.0
Volume/Cap:	0.75	0.71	0.87	0.87	0.47	0.19	0.49	0.87	0.76	0.87	0.49	0.31
Delay/Veh:	89.8	84.0	79.2	86.5	66.3	34.0	51.6	26.1	14.9	100.1	24.4	14.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	89.8	84.0	79.2	86.5	66.3	34.0	51.6	26.1	14.9	100.1	24.4	14.5
LOS by Move:	F	F	E-	F	E	C-	D-	C	B	F	C	
HCM2k95thQ:	13	12	27	18	9	7	14	61	45	18	22	13

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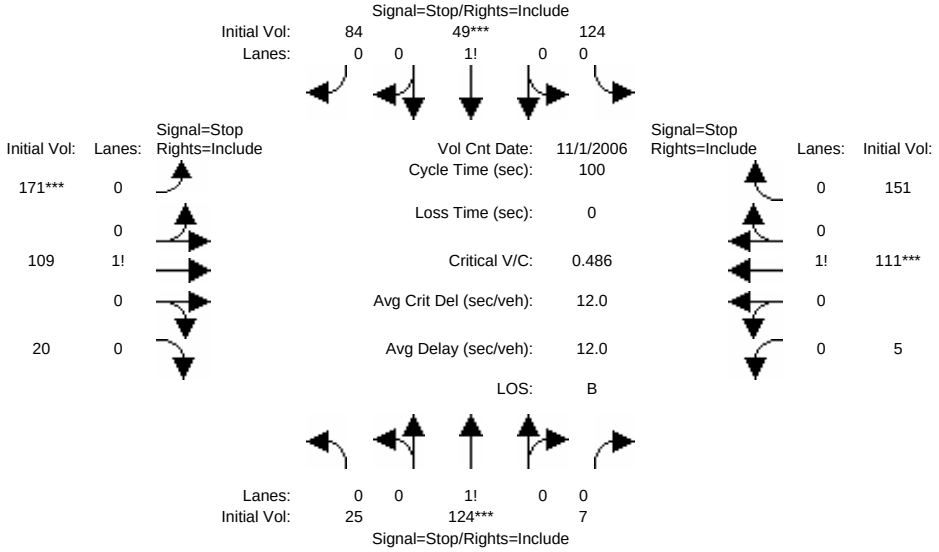
Sinclair Frontage Residential TIA
SJ06-886

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Existing PM

Intersection #3: Los Coches St / Hillview Dr



Street Name:	Hillview Dr						Los Coches St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 1 Nov 2006 << 5:00-6:00 pm												
Base Vol:	25	124	7	124	49	84	171	109	20	5	111	151
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	25	124	7	124	49	84	171	109	20	5	111	151
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	124	7	124	49	84	171	109	20	5	111	151
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	25	124	7	124	49	84	171	109	20	5	111	151
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	124	7	124	49	84	171	109	20	5	111	151
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	25	124	7	124	49	84	171	109	20	5	111	151
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.16	0.80	0.04	0.48	0.19	0.33	0.57	0.36	0.07	0.02	0.42	0.56
Final Sat.:	89	444	25	291	115	197	352	224	41	12	270	367
Capacity Analysis Module:												
Vol/Sat:	0.28	0.28	0.28	0.43	0.43	0.43	0.49	0.49	0.49	0.41	0.41	0.41
Crit Moves:		****			****		****				****	
Delay/Veh:	10.7	10.7	10.7	12.1	12.1	12.1	13.1	13.1	13.1	11.4	11.4	11.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.7	10.7	10.7	12.1	12.1	12.1	13.1	13.1	13.1	11.4	11.4	11.4
LOS by Move:	B	B	B	B	B	B	B	B	B	B	B	B
ApproachDel:		10.7			12.1			13.1			11.4	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		10.7			12.1			13.1			11.4	
LOS by Appr:		B			B			B			B	
AllWayAvgQ:	0.3	0.3	0.3	0.6	0.6	0.6	0.8	0.8	0.8	0.6	0.6	0.6

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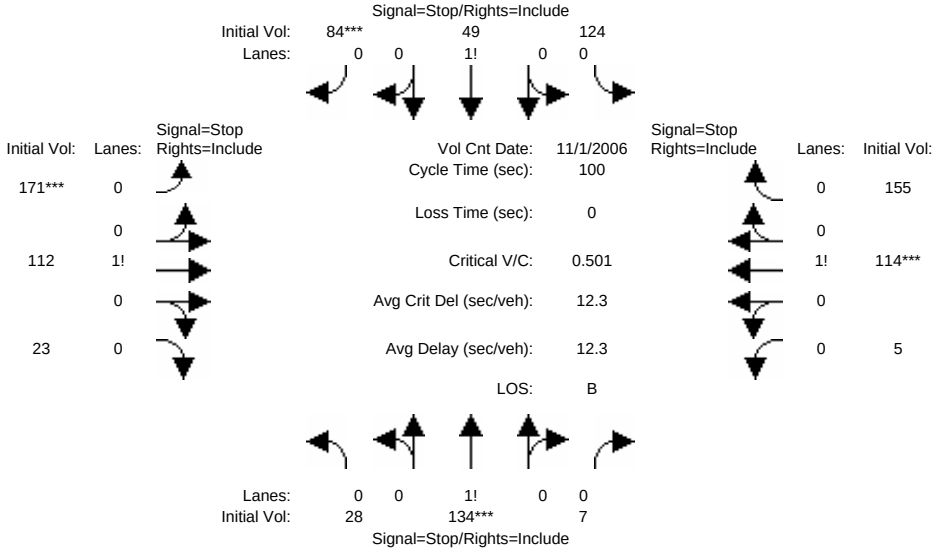
Sinclair Frontage Residential TIA
SJ06-886

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Background PM

Intersection #3: Los Coches St / Hillview Dr



Street Name:	Hillview Dr						Los Coches St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 1 Nov 2006 << 5:00-6:00 pm												
Base Vol:	25	124	7	124	49	84	171	109	20	5	111	151
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	25	124	7	124	49	84	171	109	20	5	111	151
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	3	10	0	0	0	0	0	3	3	0	3	4
Initial Fut:	28	134	7	124	49	84	171	112	23	5	114	155
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	28	134	7	124	49	84	171	112	23	5	114	155
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	28	134	7	124	49	84	171	112	23	5	114	155
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	28	134	7	124	49	84	171	112	23	5	114	155
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.17	0.79	0.04	0.48	0.19	0.33	0.56	0.37	0.07	0.02	0.42	0.56
Final Sat.:	92	438	23	286	113	194	341	223	46	12	266	362
Capacity Analysis Module:												
Vol/Sat:	0.31	0.31	0.31	0.43	0.43	0.43	0.50	0.50	0.50	0.43	0.43	0.43
Crit Moves:		****				****	****				****	
Delay/Veh:	11.1	11.1	11.1	12.3	12.3	12.3	13.5	13.5	13.5	11.7	11.7	11.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.1	11.1	11.1	12.3	12.3	12.3	13.5	13.5	13.5	11.7	11.7	11.7
LOS by Move:	B	B	B	B	B	B	B	B	B	B	B	B
ApproachDel:		11.1			12.3			13.5			11.7	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		11.1			12.3			13.5			11.7	
LOS by Appr:		B			B			B			B	
AllWayAvgQ:	0.3	0.3	0.3	0.6	0.6	0.6	0.8	0.8	0.8	0.6	0.6	0.6

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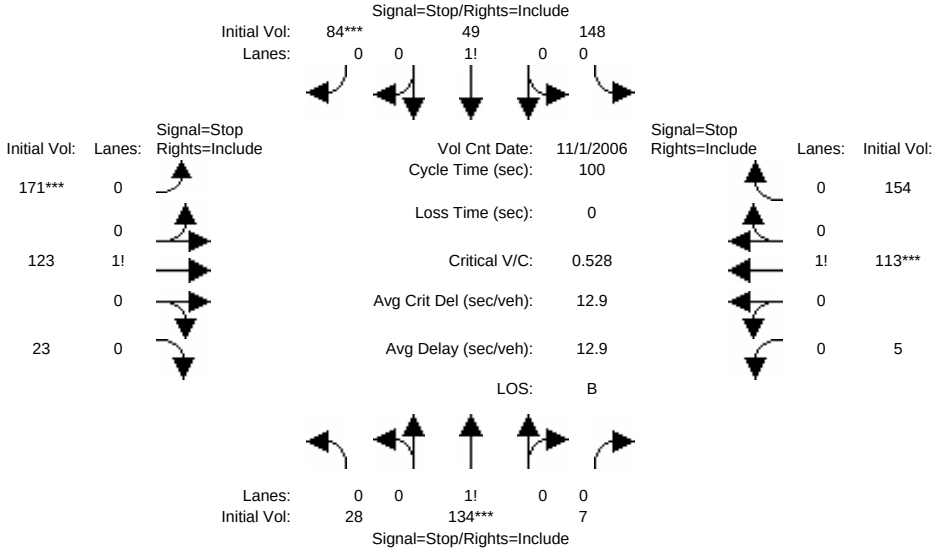
Sinclair Frontage Residential TIA
SJ06-886

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Project PM

Intersection #3: Los Coches St / Hillview Dr



Street Name:	Hillview Dr						Los Coches St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 1 Nov 2006 << 5:00-6:00 pm												
Base Vol:	25	124	7	124	49	84	171	109	20	5	111	151
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	25	124	7	124	49	84	171	109	20	5	111	151
Added Vol:	0	0	0	24	0	0	0	11	0	0	-1	-1
ATI:	3	10	0	0	0	0	0	3	3	0	3	4
Initial Fut:	28	134	7	148	49	84	171	123	23	5	113	154
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	28	134	7	148	49	84	171	123	23	5	113	154
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	28	134	7	148	49	84	171	123	23	5	113	154
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	28	134	7	148	49	84	171	123	23	5	113	154
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.17	0.79	0.04	0.53	0.17	0.30	0.54	0.39	0.07	0.02	0.41	0.57
Final Sat.:	89	428	22	309	102	176	324	233	44	11	258	352
Capacity Analysis Module:												
Vol/Sat:	0.31	0.31	0.31	0.48	0.48	0.48	0.53	0.53	0.53	0.44	0.44	0.44
Crit Moves:		****				****	****				****	
Delay/Veh:	11.3	11.3	11.3	13.2	13.2	13.2	14.2	14.2	14.2	12.0	12.0	12.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.3	11.3	11.3	13.2	13.2	13.2	14.2	14.2	14.2	12.0	12.0	12.0
LOS by Move:	B	B	B	B	B	B	B	B	B	B	B	B
ApproachDel:		11.3			13.2			14.2			12.0	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		11.3			13.2			14.2			12.0	
LOS by Appr:		B			B			B			B	
AllWayAvgQ:	0.3	0.3	0.3	0.7	0.7	0.7	0.9	0.9	0.9	0.6	0.6	0.6

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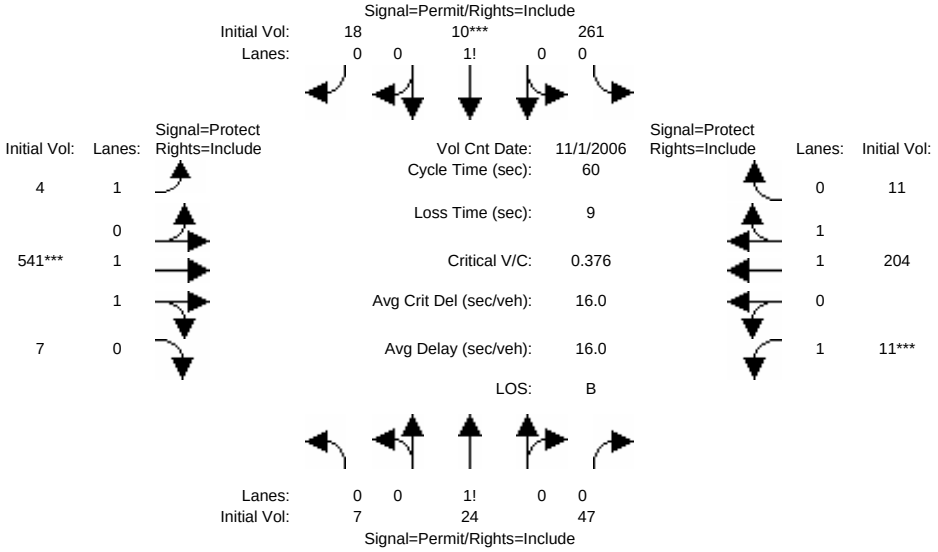
Sinclair Frontage Residential TIA
SJ06-886

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #4: Sinclair Frontage Road / Yosemite Drive



Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Min. Green:	10		10		10		10		10		10		7		10		10		7		10		10	
Volume Module: >> Count Date: 1 Nov 2006 << 5:00-6:00 am																								
Base Vol:	7		24		47		261		10		18		4		541		7		11		204		11	
Growth Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00
Initial Bse:	7		24		47		261		10		18		4		541		7		11		204		11	
Added Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
ATI:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	7		24		47		261		10		18		4		541		7		11		204		11	
User Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00
PHF Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00
PHF Volume:	7		24		47		261		10		18		4		541		7		11		204		11	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	7		24		47		261		10		18		4		541		7		11		204		11	
PCE Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00
MLF Adj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00
Final Vol.:	7		24		47		261		10		18		4		541		7		11		204		11	
Saturation Flow Module:																								
Sat/Lane:	1900	1900		1900		1900	1900	1900		1900		1900	1900	1900		1900		1900	1900	1900		1900		1900
Adjustment:	0.92	0.92		0.92		0.92	0.92	0.92		0.92		0.92	0.92	0.97		0.95		0.92	0.92	0.98		0.95		0.95
Lanes:	0.09	0.31		0.60		0.91	0.03	0.06		1.00		1.97	0.03	1.00		1.89		0.11						
Final Sat.:	157	538		1054		1580	61	109		1750		3653	47	1750		3511		189						
Capacity Analysis Module:																								
Vol/Sat:	0.04	0.04		0.04		0.17	0.17	0.17		0.17		0.17	0.00	0.15		0.15		0.15	0.01	0.06		0.06		0.06
Crit Moves:								****						****						****				
Green Time:	23.2	23.2		23.2		23.2	23.2	23.2		23.2		23.2	11.4	20.8		20.8		20.8	7.0	16.4		16.4		16.4
Volume/Cap:	0.12	0.12		0.12		0.43	0.43	0.43		0.43		0.43	0.01	0.43		0.43		0.43	0.05	0.21		0.21		0.21
Delay/Veh:	12.2	12.2		12.2		15.5	15.5	15.5		15.5		15.5	19.8	16.1		16.1		16.1	24.1	17.3		17.3		17.3
User DelAdj:	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00		1.00
AdjDel/Veh:	12.2	12.2		12.2		15.5	15.5	15.5		15.5		15.5	19.8	16.1		16.1		16.1	24.1	17.3		17.3		17.3
LOS by Move:	B		B		B		B		B		B		B-		B		B		C		B		B	
HCM2k95thQ:	3		3		3		9		9		9		0		9		9		1		4		4	

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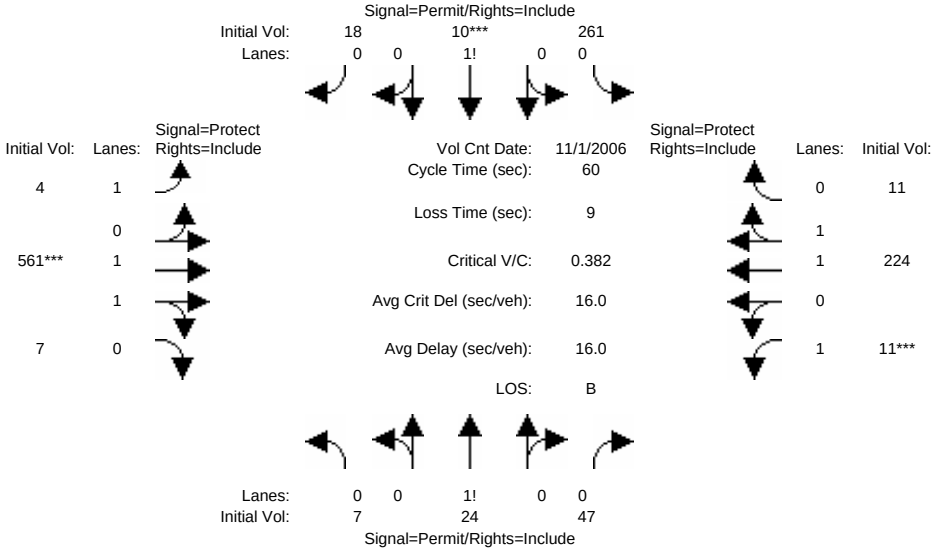
Sinclair Frontage Residential TIA
SJ06-886

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #4: Sinclair Frontage Road / Yosemite Drive



Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Min. Green:	10		10		10		10		10		10		7		10		10		7		10		10	
Volume Module: >> Count Date: 1 Nov 2006 << 5:00-6:00 am																								
Base Vol:	7		24		47		261		10		18		4		541		7		11		204		11	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	7		24		47		261		10		18		4		541		7		11		204		11	
Added Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
ATI:	0		0		0		0		0		0		0		20		0		0		20		0	
Initial Fut:	7		24		47		261		10		18		4		561		7		11		224		11	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Volume:	7		24		47		261		10		18		4		561		7		11		224		11	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	7		24		47		261		10		18		4		561		7		11		224		11	
PCE Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
MLF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Final Vol.:	7		24		47		261		10		18		4		561		7		11		224		11	
Saturation Flow Module:																								
Sat/Lane:	1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900	
Adjustment:	0.92		0.92		0.92		0.92		0.92		0.92		0.92		0.97		0.95		0.92		0.97		0.95	
Lanes:	0.09		0.31		0.60		0.91		0.03		0.06		1.00		1.97		0.03		1.00		1.90		0.10	
Final Sat.:	157		538		1054		1580		61		109		1750		3654		46		1750		3527		173	
Capacity Analysis Module:																								
Vol/Sat:	0.04		0.04		0.04		0.17		0.17		0.17		0.00		0.15		0.15		0.01		0.06		0.06	
Crit Moves:									****						****				****					
Green Time:	22.8		22.8		22.8		22.8		22.8		22.8		11.6		21.2		21.2		7.0		16.6		16.6	
Volume/Cap:	0.12		0.12		0.12		0.43		0.43		0.43		0.01		0.43		0.43		0.05		0.23		0.23	
Delay/Veh:	12.4		12.4		12.4		15.9		15.9		15.9		19.6		15.9		15.9		24.1		17.3		17.3	
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
AdjDel/Veh:	12.4		12.4		12.4		15.9		15.9		15.9		19.6		15.9		15.9		24.1		17.3		17.3	
LOS by Move:	B		B		B		B		B		B		B-		B		B		C		B		B	
HCM2k95thQ:	3		3		3		9		9		9		0		9		9		1		4		4	

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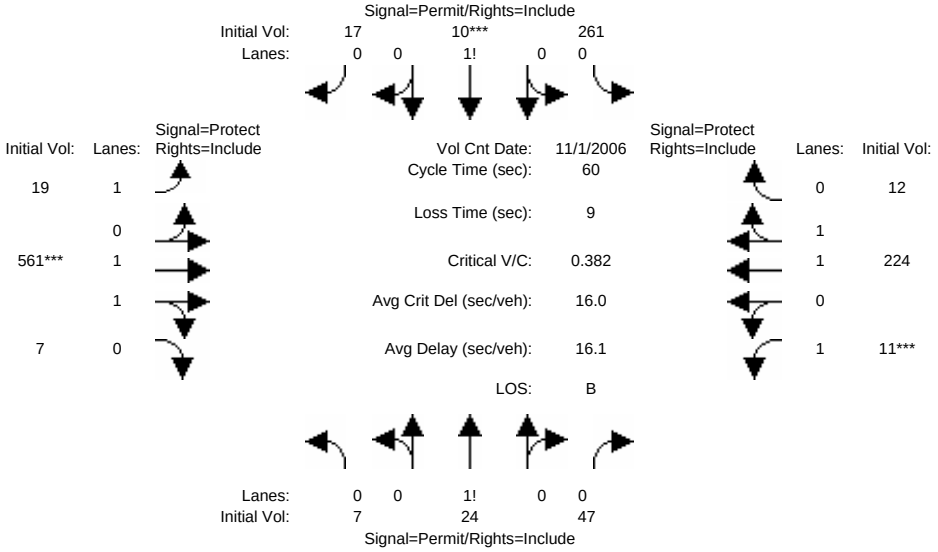
Sinclair Frontage Residential TIA
SJ06-886

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project PM

Intersection #4: Sinclair Frontage Road / Yosemite Drive



Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Min. Green:	10	10	10		10	10	10		7	10	10		7	10	10	
Volume Module: >> Count Date: 1 Nov 2006 << 5:00-6:00 am																
Base Vol:	7	24	47		261	10	18		4	541	7		11	204	11	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	7	24	47		261	10	18		4	541	7		11	204	11	
Added Vol:	0	0	0		0	0	-1		15	0	0		0	0	1	
ATI:	0	0	0		0	0	0		0	20	0		0	20	0	
Initial Fut:	7	24	47		261	10	17		19	561	7		11	224	12	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	7	24	47		261	10	17		19	561	7		11	224	12	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	7	24	47		261	10	17		19	561	7		11	224	12	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol.:	7	24	47		261	10	17		19	561	7		11	224	12	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.97	0.95		0.92	0.98	0.95	
Lanes:	0.09	0.31	0.60		0.91	0.03	0.06		1.00	1.97	0.03		1.00	1.90	0.10	
Final Sat.:	157	538	1054		1586	61	103		1750	3654	46		1750	3512	188	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.04	0.04		0.16	0.16	0.16		0.01	0.15	0.15		0.01	0.06	0.06	
Crit Moves:						****				****			****			
Green Time:	22.8	22.8	22.8		22.8	22.8	22.8		11.6	21.2	21.2		7.0	16.6	16.6	
Volume/Cap:	0.12	0.12	0.12		0.43	0.43	0.43		0.06	0.43	0.43		0.05	0.23	0.23	
Delay/Veh:	12.5	12.5	12.5		15.9	15.9	15.9		20.0	15.8	15.8		24.1	17.3	17.3	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	12.5	12.5	12.5		15.9	15.9	15.9		20.0	15.8	15.8		24.1	17.3	17.3	
LOS by Move:	B	B	B		B	B	B		C+	B	B		C	B	B	
HCM2k95thQ:	3	3	3		9	9	9		1	9	9		1	4	4	

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APPENDIX C:
APPROVED TRIP INVENTORY

City of Milpitas ATI

List of Approved Projects
Cisco Systems Site 4 -San Jose
Tasman/McCarthy Business Center
Irvine Company R&D - Phase 1
Irvine Company R&D -Phase 2
Great Mall GLA Recapture
Cisco Systems Site 5 - Milpitas
Veritas Software
Milpitas Town Center Redevelopment
Parc Place Residential
Kennady Drive Residential
Hillview Center Mixrd Use Development
Hillview Center Mixrd Use Development
Jones Chemical R&D Development
760 East Capitol Retail
Apton Plaza Mixed Use Development
Apton Plaza Mixed Use Development
Elmwood Residential Project
Cisco Systems Site 4 -San Jose
North Main Strret - Library
North Main Street - Senior Housing
North Main Street - County Medical Center
North Main Street - Specialty Retail
Fairfied Residential
RGC Residential Project

Intersection: **Hillview/Calaveras** **# 1**
Peak Hour: AM

Volumes	Northbound LT	Northbound TH	Northbound RT	Southbound LT	Southbound TH	Southbound RT	Eastbound LT	Eastbound TH	Eastbound RT	Westbound LT	Westbound TH	Westbound RT
Background w/ NSJ Buildout												
3COM	0	0	0	0	0	0	0	0	0	0	0	0
NSJ	0	11	0	-1	11	0	0	0	0	0	0	0
Cisco Alviso	0	0	0	0	0	0	0	0	0	0	0	0
Total 3COM, NSJ, Cisco	0	11	0	-1	11	0	0	0	0	0	0	0
Milpitas ATI	0	11	0	2	8	4	1	0	0	0	0	7
Total Background	***0***	***22***	***0***	***1***	***19***	***4***	***1***	***0***	***0***	***0***	***0***	***7***

Intersection: **Hillview/Calaveras** **# 1**
Peak Hour: PM

Volumes	Northbound LT	Northbound TH	Northbound RT	Southbound LT	Southbound TH	Southbound RT	Eastbound LT	Eastbound TH	Eastbound RT	Westbound LT	Westbound TH	Westbound RT
Background w/ NSJ Buildout												
3COM	0	0	0	0	0	0	0	0	0	0	0	0
NSJ	0	49	0	2	8	0	0	0	0	0	0	0
Cisco Alviso	0	0	0	0	0	0	0	0	0	0	0	0
Total 3COM, NSJ, Cisco	0	49	0	2	8	0	0	0	0	0	0	0
Milpitas ATI	0	13	0	1	38	12	8	0	0	0	0	12
Total Background	***0***	***62***	***0***	***3***	***46***	***12***	***8***	***0***	***0***	***0***	***0***	***12***

Intersection: **Hillview/Calaveras** **# 2**
Peak Hour: AM

Volumes	Northbound LT	Northbound TH	Northbound RT	Southbound LT	Southbound TH	Southbound RT	Eastbound LT	Eastbound TH	Eastbound RT	Westbound LT	Westbound TH	Westbound RT
Background w/ NSJ Buildout												
3COM	0	0	0	0	0	0	0	27	0	0	107	0
NSJ	0	0	0	0	0	0	0	4	0	0	15	0
Cisco Alviso	0	0	0	0	0	0	0	30	0	0	119	0
Total 3COM, NSJ, Cisco	0	0	0	0	0	0	0	61	0	0	241	0
Milpitas ATI	1	0	1	12	10	13	15	107	9	10	307	12
Total Background	***1***	***0***	***1***	***12***	***10***	***13***	***15***	***168***	***9***	***10***	***548***	***12***

Intersection: **Hillview/Calaveras** **# 2**
Peak Hour: PM

Volumes	Northbound LT	Northbound TH	Northbound RT	Southbound LT	Southbound TH	Southbound RT	Eastbound LT	Eastbound TH	Eastbound RT	Westbound LT	Westbound TH	Westbound RT
Background w/ NSJ Buildout												
3COM	0	0	0	0	0	0	0	105	0	0	12	0
NSJ	0	0	0	0	0	0	0	22	0	0	61	0
Cisco Alviso	0	0	0	0	0	0	0	117	0	0	13	0
Total 3COM, NSJ, Cisco	0	0	0	0	0	0	0	244	0	0	86	0
Milpitas ATI	6	1	7	32	0	0	5	382	-3	-3	156	21
Total Background	***6***	***1***	***7***	***32***	***0***	***0***	***5***	***626***	***-3***	***-3***	***242***	***21***

Intersection: **Hillview/Calaveras** **# 3**
Peak Hour: AM

Volumes	Northbound LT	Northbound TH	Northbound RT	Southbound LT	Southbound TH	Southbound RT	Eastbound LT	Eastbound TH	Eastbound RT	Westbound LT	Westbound TH	Westbound RT
Background w/ NSJ Buildout												
3COM	0	0	0	0	0	0	0	0	0	0	0	0
NSJ	0	0	0	0	0	0	0	0	0	0	0	0
Cisco Alviso	0	0	0	0	0	0	0	0	0	0	0	0
Total 3COM, NSJ, Cisco	0	0	0	0	0	0	0	0	0	0	0	0
Milpitas ATI	1	0	0	7	13	9	0	2	1	0	2	2
Total Background	***1***	***0***	***0***	***7***	***13***	***9***	***0***	***2***	***1***	***0***	***2***	***2***

Intersection: **Hillview/Calaveras** **# 3**
Peak Hour: PM

Volumes	Northbound LT	Northbound TH	Northbound RT	Southbound LT	Southbound TH	Southbound RT	Eastbound LT	Eastbound TH	Eastbound RT	Westbound LT	Westbound TH	Westbound RT
Background w/ NSJ Buildout												
3COM	0	0	0	0	0	0	0	0	0	0	0	0
NSJ	0	0	0	0	0	0	0	0	0	0	0	0
Cisco Alviso	0	0	0	0	0	0	0	0	0	0	0	0
Total 3COM, NSJ, Cisco	0	0	0	0	0	0	0	0	0	0	0	0
Milpitas ATI	3	10	0	0	0	0	0	3	3	0	3	4
Total Background	***3***	***10***	***0***	***0***	***0***	***0***	***0***	***3***	***3***	***0***	***3***	***4***

Intersection: **Milpitas/Yosemite** **#4**
Peak Hour: AM

Volumes	Northbound LT	Northbound TH	Northbound RT	Southbound LT	Southbound TH	Southbound RT	Eastbound LT	Eastbound TH	Eastbound RT	Westbound LT	Westbound TH	Westbound RT
Background w/ NSJ Buildout												
3COM	0	0	0	0	0	0	0	0	0	0	0	0
NSJ	0	0	0	0	0	0	0	30	0	0	0	0
Cisco Alviso	0	0	0	0	0	0	0	0	0	0	0	0
Total 3COM, NSJ, Cisco	0	0	0	0	0	0	0	30	0	0	0	0
Milpitas ATI	0	0	0	0	0	0	0	0	0	0	0	0
Total Background	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***30***	***0***	***0***	***0***	***0***

Intersection: **Milpitas/Yosemite** **#4**
Peak Hour: PM

Volumes	Northbound LT	Northbound TH	Northbound RT	Southbound LT	Southbound TH	Southbound RT	Eastbound LT	Eastbound TH	Eastbound RT	Westbound LT	Westbound TH	Westbound RT
Background w/ NSJ Buildout												
3COM	0	0	0	0	0	0	0	0	0	0	0	0
NSJ	0	0	0	0	0	0	0	20	0	0	20	0
Cisco Alviso	0	0	0	0	0	0	0	0	0	0	0	0
Total 3COM, NSJ, Cisco	0	0	0	0	0	0	0	20	0	0	20	0
Milpitas ATI	0	0	0	0	0	0	0	0	0	0	0	0
Total Background	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***20***	***0***	***0***	***20***	***0***

APPENDIX D:
EXISTING USES TRIP GENERATION MEMORANDUM

FEHR & PEERS
TRANSPORTATION CONSULTANTS

MEMORANDUM

Date: October 18, 2006

To: Mr. Steven Allen, Mission Peak Company

From: Daniel Rubins and Ryan Walbert

Subject: ***Trip Generation Estimate for the Sinclair Residential Project in Milpitas, California***

SJ06-886

This memorandum presents the results of a trip generation analysis conducted for the proposed 82 single-family home project located at 245 Sinclair Frontage Road in Milpitas, California. The proposed residential development would replace 120,558 s.f. of existing industrial office space.

Existing Trip Generation (Industrial Office)

Turning movement counts and 72-hour hose counts were conducted at the site driveways to measure the amount of daily and peak-hour traffic generated by the existing industrial office space.

Peak-hour turning movement counts were conducted for one day during the morning (7:00 to 9:00 am) and evening (4:00 to 6:00 pm) peak periods on Wednesday October 4, 2006. As shown in Table 1, the existing site generates 28 AM peak-hour trips (22 inbound and 6 outbound) and 31 PM peak-hour trips (5 inbound and 26 outbound).

Seventy-two (72) hour hose counts were conducted between Tuesday October 3rd and Thursday October 5th to measure the daily traffic and to verify the results of the AM and PM peak-hour turning movement counts. The results of the hose counts indicate that the site generates an average of 631 daily trips. The hose counts are consistent with the peak-hour turning movement counts.

Project Trip Generation (Residential)

The amount of traffic generated by the proposed residential development was estimated by applying trip generation rates published in the *San Diego Traffic Generators*, (San Diego Association of Governments (SANDAG), April 2002). The amount of traffic generated by the existing industrial office uses (using the turning movement counts) is subtracted from the proposed residential project to obtain the net-added traffic. As shown in Table 2, the proposed project would generate approximately 190 net added daily trips, 40 net-added AM peak-hour trips, and 50 net-added PM peak-hour trips.

Conclusions

The proposed 82-unit residential project is estimated to generate 190 net added daily trips, 40 net-added AM peak-hour trips, and 50 net-added PM peak-hour trips over the existing 120,558 s.f. industrial office site. The City of Milpitas will make the final determination on whether additional analysis (i.e. impacts to off-site intersections) is required.

FEHR & PEERS
TRANSPORTATION CONSULTANTS

TABLE 1
EXISTING DAILY AND PEAK HOUR OF GENERATOR

Item	Daily Trips	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Turning Movement Counts[1]							
Peak Hour	N/A	22	6	28	5	26	31
72-Hour Tube Counts[2]							
Day 1 (A)	580	15	9	24	7	21	28
Day 2 (B)	688	20	6	26	6	18	24
Day 3 (C)	624	15	13	28	24	36	60
Average Tube Count of Generator ((A+B+C)/3)	**631**	**17**	**9**	**26**	**12**	**25**	**37**

Notes:
1 Existing driveway turning movement counts conducted on October 4, 2006,
2 Existing 72-hour driveway tube counts conducted between October 3rd and October 5th, 2006.

TABLE 2
PROJECT TRIP GENERATION RATES AND ESTIMATES

Item	Daily		AM Peak Hour				PM Peak Hour			
	Rate	Trips	Rate	In	Out	Total	Rate	In	Out	Total
Proposed Residential[1]										
Single Family Homes (A) (82-dwelling units)	10.0	820	0.80	20	46	66	1.00	57	25	82
Existing Industrial Office[2]										
Industrial Office Space (B)		631		22	6	28		5	26	31
Net New Project Trips (A - B)		**189**		**-2**	**40**	**38**		**52**	**-1**	**51**

Notes:
1 Residential trip generation rates from the San Diego Association of Governments' (SANDAG) *San Diego Traffic Generators*, April 2002.
2 The daily trips were obtained from the 72-hour hose counts and the peak-hour trips were obtained from the turning movement counts.

APPENDIX E:
SIGNAL WARRANTS

Warrant 3A: Peak Hour Delay

The peak hour delay warrant is intended for application where traffic conditions are such that for one hour of the day minor street traffic suffers undue delay in entering or crossing the major street. The peak hour delay warrant is satisfied when the conditions given below exist for one hour (any four consecutive 15-minute periods) of an average weekday.

The peak hour delay warrant is met when:

1. The total delay experienced by the traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle-hours for a two-lane approach, and

2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes, and

3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four (or more) approaches or 650 vph for intersections with three approaches.

Analysis

Minor Street Lanes	1
Total Approaches	4

	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Serviced for the Intersection (vph)
Project AM	0.0	185	680
Limiting Value	4	100	800
Met/ Not Met	Not Met	Met	Not Met

Warrant	Not Met

Warrant 3B: Peak Hour Volume

The peak hour volume warrant is satisfied when the plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour of the higher volume minor street approach (one direction only) for one hour (any four consecutive 15-minute periods) of an average day falls above the curve in Figure 4-5 for the existing combination of approach lanes.

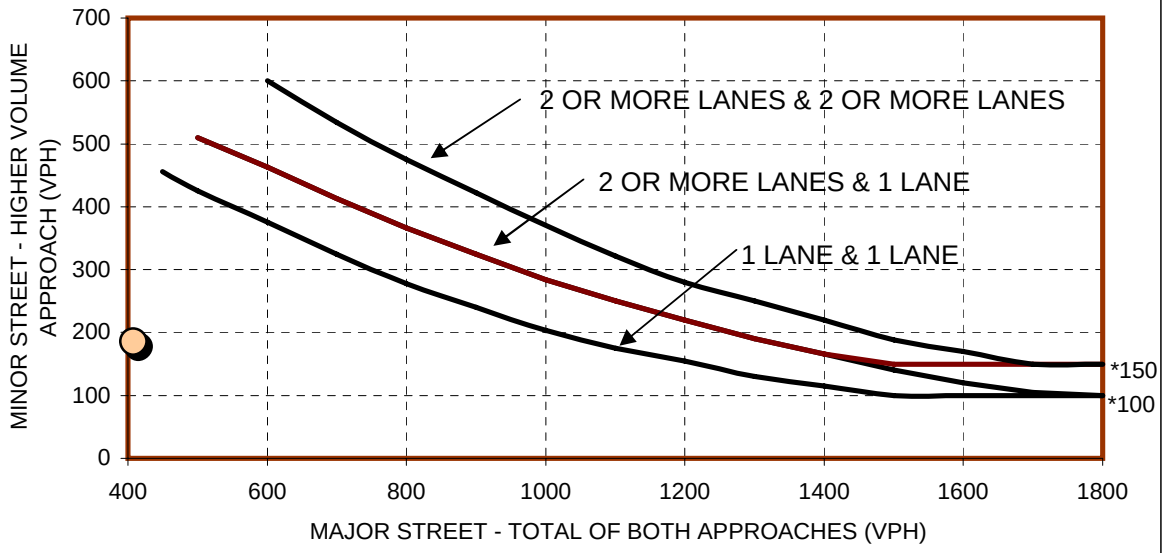
Analysis

	No of lanes
Major Street	1
Minor Street	1

Peak Hour

Time	Vehicles Per Hour	
	Major Street (Sum of both approaches)	Minor street (High volume approach)
8:00 AM	408	185

FIGURE 4C-3. PEAK HOUR VOLUME WARRANT



*Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume for minor street approach with one or lane.

Peak Hour

Warrant	Not Met

Warrant 3A: Peak Hour Delay

The peak hour delay warrant is intended for application where traffic conditions are such that for one hour of the day minor street traffic suffers undue delay in entering or crossing the major street. The peak hour delay warrant is satisfied when the conditions given below exist for one hour (any four consecutive 15-minute periods) of an average weekday.

The peak hour delay warrant is met when:

1. The total delay experienced by the traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle-hours for a two-lane approach, and

2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes, and

3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four (or more) approaches or 650 vph for intersections with three approaches.

Analysis

Minor Street Lanes	1
Total Approaches	4

	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Serviced for the Intersection (vph)
Project PM	0.0	317	1,040
Limiting Value	4	100	800
Met/ Not Met	Not Met	Met	Met

Warrant	Not Met

Warrant 3B: Peak Hour Volume

The peak hour volume warrant is satisfied when the plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour of the higher volume minor street approach (one direction only) for one hour (any four consecutive 15-minute periods) of an average day falls above the curve in Figure 4-5 for the existing combination of approach lanes.

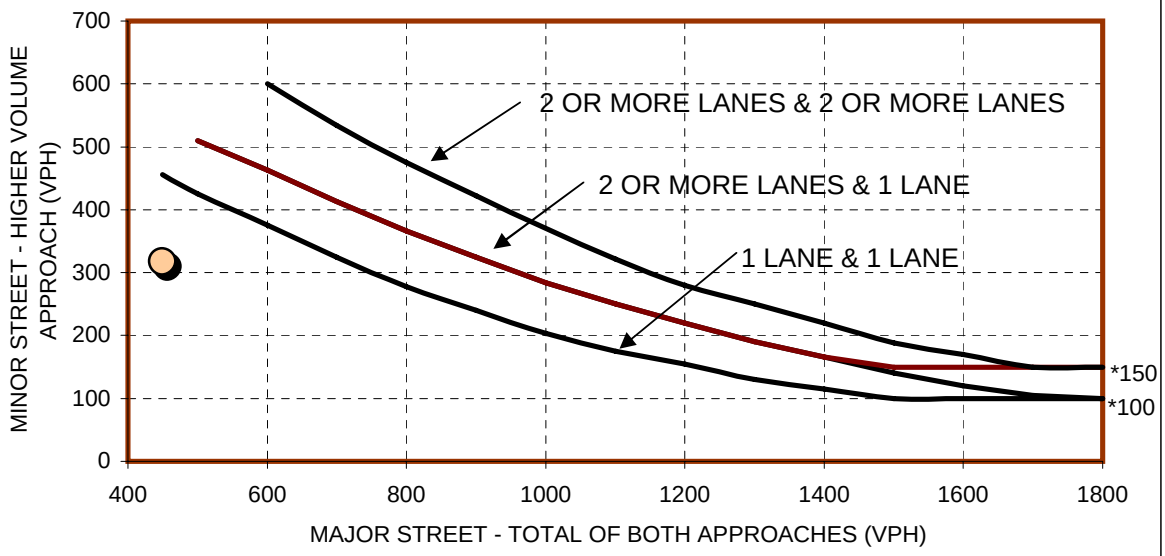
Analysis

	No of lanes
Major Street	1
Minor Street	1

Peak Hour

Time	Vehicles Per Hour	
	Major Street (Sum of both approaches)	Minor street (High volume approach)
5:00 PM	450	317

FIGURE 4C-3. PEAK HOUR VOLUME WARRANT



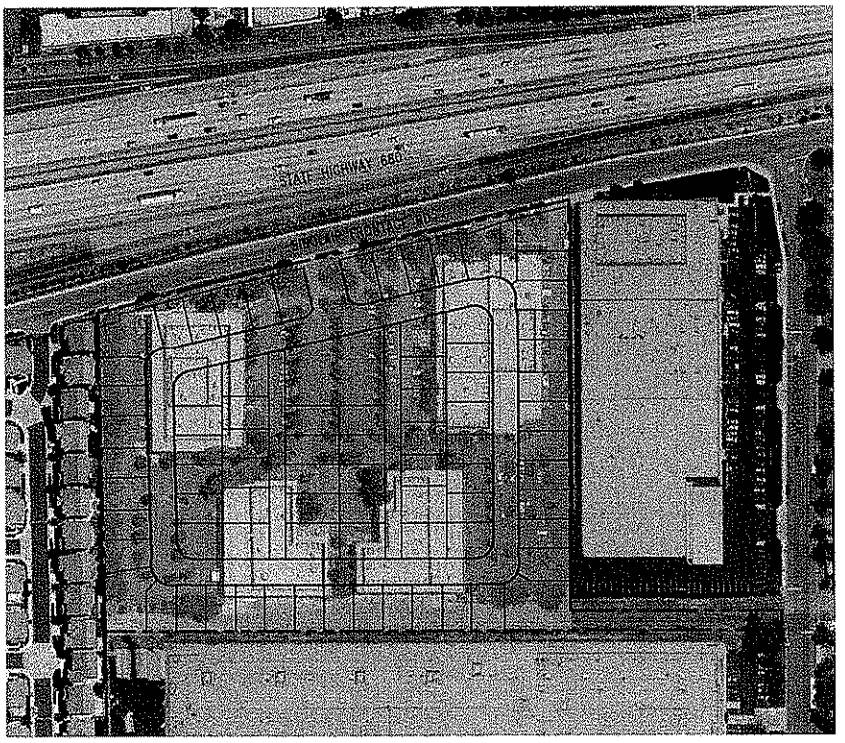
*Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume for minor street approach with one or lane.

Peak Hour

Warrant	Not Met

STORMWATER CONTROL REPORT

SINCLAIR RENAISSANCE
THE MISSION PEAK COMPANY



For
Stormwater C.3 Guideline Compliance Submittal
With
Tentative Map

RECEIVED
NOV 26 2007
CITY OF MILPITAS
PLANNING DIVISION

November 2007

Prepared By:

Carlson, Barbee & Gibson, Inc.
CIVIL ENGINEERS • SURVEYORS • PLANNERS

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Structural BMP Details
Bubble-up Area Drain Schematic

I. PROJECT SETTING

C.3 STORMWATER CONTROL PLAN
FOR
THE MISSION PEAK COMPANY
SINCLAIR RENAISSANCE

November 2007

Project Description

This Stormwater Control Plan for Sinclair Renaissance improvements is submitted to the Department of Public Works of the City of Milpitas (City) as a recommendation on the use of permanent Best Management Practices (BMPs) on the site. Probable design storm flows and permanent BMP selection are presented in this report. BMP technical requirements are presented in the Storm water C.3 Guidebook adopted by the City of Milpitas on October 6, 2005.

The project site for The Mission Peak Company – Sinclair Renaissance Project is located at the Northwest corner of the intersection of Sinclair Frontage Road and Wrigley Way in the City of Milpitas, as shown in Figure 1. The improvements to the site will include 80 single family units comprised of a single product type of 3,150 (45'x70') square foot lots. The 9.65 acre site also includes additional on-site parking, landscaping areas and a private park. Figure 2 is an aerial photo showing the project site.

The site is currently a business park and parking lot and approximately 81% (7.84 ac) of the site area is impervious surfaces.

Upon construction of the proposed improvements, approximately 5.78 acres (60%) of the site will be covered by impervious surface and about 3.87 acres (40%) will be covered by landscaped or pervious surfaces. The watershed also includes 1.08 acres of off-site Sinclair Frontage Road, which is not included in the area to be treated. Landscape areas include lawn, shrubs, trees and swales. Walkways and patios included in any landscape areas for the purpose of determining drainage sub-areas are accounted in the runoff calculations for BMP treatment by weighting the corresponding runoff coefficients.

On-site Conditions

Currently stormwater runoff from the site flows in an onsite storm drain system to an existing field inlet at the Southwest corner of the site. This then is conveyed south to Wrigley Way, and then west where it outfalls to Berryessa Creek. The existing drainage area and corresponding treatment flow are shown in Figure 3 and the existing storm drain facilities are identified in Figure 4.

For the purpose of this Stormwater Control Plan, the site has only a single drainage area.

- Drainage area A, with approximately 10.73 acres (9.65 acres on-site), will discharge into the existing storm drain inlet located at the southwest corner of the site.

This drainage area is further divided by surface type. Pervious and impervious surface areas are shown in Figures 3 and 5, and the corresponding land type areas are presented in Tables 1 and 2.

Proposed on-site storm drainage system improvements for the site will tie into the existing storm drain system as shown in Figure 6.

Additional On-site Conditions:

- Soil Type: From the on-site geotechnical investigation, the subsurface soils conditions indicate the site is generally underlain by 1 to 5 feet of very stiff to hard sandy clay fill with varying gravel content. The native subsurface soil conditions are generally 1 to 7 feet of highly expansive, stiff black clay.

- Groundwater Depth: From the on-site geotechnical investigation, approximate groundwater depth ranged between 11 to 16 feet deep. Groundwater levels are anticipated to fluctuate depending on seasonal variations.

Opportunities and Constraints for Stormwater Control

Opportunities: All landscaped areas within the proposed site including park area, public street frontage landscaping, private street frontage landscaping, and EVA parcel landscaping provide an opportunity for infiltration.

Constraints: Site constraints include limited landscape areas, grading constraints, walkways, patios, property line boundaries and existing fronting roadways.

Hydromodification Management Requirements

The project site is within the area defined as greater than 65% imperviousness and greater than 90% build-out as shown on the Areas of Applicability Map (Attachment B, Appendix P) of the Milpitas Stormwater C.3 Guidebook. Projects in this area are exempt from the Hydromodification Management Plan requirements. However, the site's impervious surface areas will be reduced by 21%, reducing peak off-site flows.

II. MEASURES TO LIMIT IMPERVIOUSNESS

Measures to Cluster Development and Protect Natural Resources

The following measures were used to make the development more compact:

- The site is developed to maximum density
- The site includes a 0.34 acre park

Measures to Limit Directly Connected Impervious Areas

Approximately 3.87 acres (40%) of the proposed project will be covered by landscaped or pervious surfaces which include lawn, shrubs and trees. These landscaped areas will provide infiltration and disconnect impervious areas on the site.

Selection of Paving Materials

Conventional concrete and conventional asphalt are selected for use throughout this site. Permeable pavements, although feasible, are somewhat impractical for this site because the pavements overlie expansive clay soils with slow permeability.

III. SELECTION AND PRELIMINARY DESIGN OF STORMWATER TREATMENT BMPS

Hydrology

Runoff coefficients for existing and proposed on-site conditions are based on values given in the City of Milpitas Land Development Engineering Manual and are presented in Tables 1 and 2.

A rainfall intensity value of *0.2 inches per hour* is used for treatment flows based on the City of Milpitas Stormwater C.3 Guidebook. The weighted runoff coefficient was based on the percentage imperviousness in the tributary drainage area. Based on the existing on-site conditions, runoff during a treatment flow event would be 1.60 cfs. Treatment flow for the proposed on-site improvements will be 1.23 cfs. A net decrease of 0.37 cfs can be expected in the rate of runoff due to a treatment flow event for the proposed on-site improvements. The Rational Method is used to calculate minimum treatment flow runoff and is presented in Tables 1 and 2 for the existing and proposed on-site conditions.

In addition, Table 3 identifies the 10-year peak runoff rates for the drainage area within the proposed site. The weighted runoff coefficients and City rainfall intensity charts were used to calculate the drainage area's peak runoff rate.

Recommended Permanent BMPs

Permanent Best Management Practices (BMPs) are required for the site. The recommended BMP alternatives for the project site are shown in Figure 7. These BMPs would provide a level of treatment that would meet the C.3 requirements for the runoff generated by the project improvements:

1. Bubble up area drain system on all lots will disconnect roof drainage and treat the flow as it passes through vegetated lawn area.

2. Installation of a structural stormwater treatment unit at the point of connection at the southwest corner of the project site (See Figures for typical structural BMP details).

Structural BMP sizing was calculated using the *flow-based* methodology described in the City of Milpitas Stormwater C.3 Guidebook.

For Roof Areas from Drainage Area 'A':
Proposed Drainage Area 'A' includes 2.80 acres of roofs. Roof areas will drain to a standard area drain system which will bubble up in the front yard. The flow will pass through the lawn area which will serve as a vegetated buffer area to treat the flow and slow down the runoff rate (see figure for schematic design). Roof areas vary among plan type; however, the largest plan has a roof area of approximately 1,750 sf. This corresponds to a treatment area of lawn of 70 sf, which will be exceeded by the minimum area of lawn in front of each individual home.

For Roads, Driveways and Landscaping Areas from Drainage Area 'A':
The structural BMP will be sized to treat the 6.85 acres of proposed drainage area 'A' which are not treated through the other permanent BMPs.

- The minimum required flow to be treated is 0.68 cfs (as shown in Table 2)
- The proposed Stormwater Treatment Unit will be sized with the correct number and size of cartridges/filters to treat this treatment flow

It is recommended that the structural BMP be installed at the downstream collection point of the drainage area in order to provide the most effective method of preventing pollutants from entering the public storm drain system and meet the City C.3 stormwater requirements.

Maintenance procedures for the recommended BMPs are outlined in Section VI, BMP Maintenance Requirements.

IV. SOURCE CONTROL MEASURES

Stormwater Control Measures

Pollution sources for the site include grease, oil, litter, pesticides and waste. Table 4 identifies potential pollutant source areas and the associated source control BMP.

V. PERMITTING AND CODE COMPLIANCE ISSUES

Permitting and Code Compliance Issues

There are no known conflicts between the proposed Stormwater Control Plan and the City of Milpitas ordinances and policies. Any conflicts that are found will be resolved through the design review process or during subsequent permitting.

VI. BMP MAINTENANCE REQUIREMENTS

Recommended BMP Maintenance

Proper operation and maintenance of stormwater management facilities will be the responsibility of the property owner through the Sinclair Renaissance Homeowners' Association in perpetuity. The property owner will be subject to an annual fee (set by the City's standard fee schedule) to offset the cost of inspecting the site or verifying that the stormwater management facilities are being maintained.

The applicant will prepare and submit, for the City's review, and acceptable Stormwater Control Operation and Maintenance Plan prior to the completion of construction and will execute a Stormwater Management Facilities Operation and Maintenance Agreement before sale, transfer, or permanent occupancy of the site. The applicant accepts the responsibility for maintenance of stormwater management facilities until such responsibility is transferred to the Sinclair Renaissance Homeowners' Association.

Treatment BMPs require minimum maintenance similar to that for any landscape areas. BMPs must be regularly maintained to insure that they continue to be effective and do not cause flooding or other harmful nuisances. The maintenance requirements are:

- Limit the use of fertilizers and/or pesticides. Mosquito larvicides should be applied only when absolutely necessary.
- After all major storm events, inspect storm drain inlets, drain pipes, check dams, swales and channels for obstructions and remove if necessary.
- A BMP maintenance plan agreement shall be prepared and entered in an agreement with the City of Milpitas with the building permit process.
- Structural BMP units (MFS Devices) shall be annually inspected and maintained. Any collected debris shall be removed from the unit through methods specified by the manufacturer.

VII. SUMMARY FORMS

Carlson, Barbee & Gibson, Inc.
CIVIL ENGINEERS • SURVEYORS • PLANNERS

Date: 10/26/2007
Job No.: 1432-00

Construction Plan C.3 Checklist
SINCLAIR RENAISSANCE

Stormwater Control Plan Page #	BMP Description	See Plan Sheet #s
Figure 7	Structural BMP / Media Filtration System	

City of Milpitas **C.3 Data Form**

Submit with Stormwater Control Plan

When Should This Form Be Completed?

Complete this form if any of the following applies:

- Project was "deemed complete" between Oct. 15, 2003 – Oct. 5, 2005 and has added or replaced an impervious surface area of 1 acre (43,500 square feet) or more.
- Project was "deemed complete" after Oct. 6, 2005 and has added or replaced an impervious surface area of 10,000 square feet or more and falls within the Group 2A categories (see below).

Note: For public roadways, include new impervious surface areas, but not replaced impervious surface areas.

What is an Impervious Surface?

Any surface on or above ground that prevents the infiltration or passage of water into the soil. Impervious surfaces include, but are not limited to, non-absorbent rooftops, paved or covered patios, driveways, parking lots, paved walkways, compacted soil or rock, and streets. It includes streets, roads, highways, and freeways that are under the City of Milpitas' jurisdiction and any newly constructed paved surface used primarily for the transportation of automobiles, trucks, motorcycles, and other motorized vehicles. Excluded from this category are public sidewalks, bicycle lanes, trails, bridge accessories, guardrails, and landscape features.

How To Determine the Date "Deemed Complete"

Private projects are "deemed complete" when the list of requirements needed for planning application submittals (provided by the Planning Division) is complete and ready to be processed. This list includes the Stormwater Control Plan. **Public projects** are "deemed complete" when City Council approves ***design*** funding.

What are the Group 2A Categories?

- Gas stations;
- Auto wrecking yards;
- Loading dock areas and surface parking lots containing more than 10,000 square feet or more of impervious surface area;
- Vehicle or equipment maintenance areas (including washing and repair), outdoor handling or storage of waste or hazardous materials, outdoor manufacturing area(s), outdoor food handling or processing, outdoor animal care, outdoor horticultural activities, and various other industrial and commercial uses where potential pollutant loading cannot be satisfactorily mitigated through other post-construction source control and site design practices.

For More Information

Contact the Planning Division at 408-586-3279.

Date: 10/26/07 APN # 0 8 6 - 2 9 - 0 4 2

Project Name: SINCLAIR RENAISSANCE 0 6 1

Project Description: PLANNED UNIT DEVELOPMENT, 80 SINGLE FAMILY RESIDENTIAL UNITS 0 6 2

Project Location (Address): 350 SINCLAIR FRONTAGE ROAD, MILPITAS, CA 0 7 5

Applicant Info (Name, Address, Phone #): STEPHEN ALLEN, THE MISSION PEAK COMPANY 0 7 6
40480 ENCYCLOPEDIA CIRCLE, FREMONT, CA 94538 (510) 354-0888

Contractor / Designer Info (Name, Company, Address, Phone #): CARLSON, BARBEE & GIBSON, INC.
6111 BOLLINGER CANYON ROAD, SUITE 150 LEE ROSENBLATT (925) 866-0322
SAN RAMON, CA 94583

1. ☐ **Public** ☒ **Private**
2. ☐ **New** ☒ **Redevelopment**
3. **Project Type** (select one):
   - ☐ Commercial/Industrial
   - ☐ Mixed Use
   - ☒ Residential
   - ☐ Restaurant / Retail
   - ☐ Shopping Center
   - ☐ Streets / Roads / Highways
4. **Impervious Surface Area (SF = Square Feet):**
   - a. Entire Site Size 420,354 SF
   - b. **EXISTING** Impervious Surface Area 341,464 SF
   - c. **EXISTING** Impervious Surface Area **to be Removed** 341,464 SF

d. **NEW** Impervious Surface Area **to be Added or Replaced**	251,777	SF
e. **TOTAL** Impervious Surface Area (b-c+d)	251,777	SF

50% Rule (only applies to existing developments NOT subject to stormwater treatment measures):

f. Percent Impervious Surface Area in Final Design (e/a x 100%)	60	%

For Significant Redevelopments (check appropriate box):
- ☐ If 50% or more, the entire project must be included in the treatment measure design.
- ☐ If less than 50%, only that affected portion must be included in the treatment measure design.

g. **Total Land Disturbance** During Construction — 420,354 SF
Includes clearing, grading, and excavating.

5. **Pesticide Reduction Measures Used (Check all that apply):**

- ☒ None - Doesn't Apply
- ☐ Education
- ☐ Conditions of Approval
- ☐ Physical and Mechanical Horticultural Measures
- ☐ Environmental Measures
- ☐ Biological Measures
- ☐ Chemical Measures
- ☐ Other _____

6. **Stormwater Control Measures Used (Check the appropriate boxes that apply to the project):**

SITE DESIGN

- ☐ Minimize land disturbance
- ☒ Minimize impervious surfaces
- ☒ Minimum-impact street design
- ☐ Minimum-impact driveway or parking lot design
- ☒ Cluster structures/pavement
- ☒ Disconnect downspouts
- ☐ Alternative driveway design
- ☐ Microdetention in landscape
- ☐ Preserve open space: _____ sq. ft.
- ☐ Protect riparian and wetland areas, riparian buffers (setback from top of bank: _____ ft.)
- ☐ Minimize change in runoff hydrograph
- ☒ Other: REDUCE RUNOFF RATE

STORMWATER TREATMENT

- ☐ Bioretention
- ☐ Drain Insert
- ☐ Exfiltration Trench
- ☐ Extended Detention Basin
- ☐ Hydrodynamic Separators
- ☐ Infiltration Basin
- ☐ Infiltration Trench
- ☒ Media Filter
- ☐ Multiple Systems
- ☐ Planter Boxes
- ☐ Porous Pavement
- ☐ Retention/Irrigation
- ☐ Roof Gardens
- ☐ Underground Detention Systems
- ☒ Vegetated Buffer Strip
- ☐ Vegetated Swale
- ☐ Vortex Separator*
- ☐ Water Quality Inlet
- ☐ Wet Pond
- ☐ Wet Vault
- ☐ Wetland
- ☐ Other: _____

SOURCE CONTROLS

- ☐ Alternative building materials
- ☐ Wash area/racks, drain to sanitary sewer
- ☐ Covered dumpster area, drain to sanitary sewer
- ☐ Swimming pool/fountain drain to sanitary sewer
- ☒ Beneficial landscaping (minimizes irrigation, runoff, pesticides and fertilizers; promotes treatment)
- ☐ Outdoor material storage protection
- ☐ Covers, drains for loading docks, maintenance bays, fueling areas
- ☒ Maintenance (street sweeping, catch basin cleaning)
- ☐ Permeable pavement
- ☒ Storm Drain Signage
- ☐ Green or Blue Roofs
- ☐ Other: _____

FOR CITY STAFF ONLY

PRIVATE PROJECTS	*PUBLIC PROJECTS*
Planning:	***Design & Construction Engineering / Special Projects:***
Date Received: _____	Date Received: _____
By (Name): _____	By (Name): _____
Permit #: _____	Permit #: _____
Project #, if aplicable: _____	Project #, if aplicable: _____
Master Permit #, if applicable: _____	Master Permit #, if applicable: _____
Date Entered into Database: _____	Date Entered into Database: _____
By (Name): _____	By (Name): _____

VIII. CERTIFICATION

Carlson, Barbee & Gibson, Inc.
CIVIL ENGINEERS • SURVEYORS • PLANNERS

November 1, 2007
Job No.: 1432-00

Mr. Babak Kaderi
CITY OF MILPITAS
Engineering Department
455 E. Calaveras Blvd.
Milpitas, CA 95035

Subject: Stormwater Control Plan Certification
Sinclair Renaissance
APN: 086-29-042/086-029-061/086-029-62/086-029-075/086-029-076
Milpitas, California

Dear Babak,

The selection, sizing, and preliminary design of treatment BMP's and other control measures in this plan meet the requirements of Regional Water Quality Control Board Order 01.119, as amended.

Very truly yours,

Lee Rosenblatt

Lee J. Rosenblatt, P.E.
Project Manager

P:\1400 - 1499\1432-00\Stormwater Control Plan\Stormwater Cert.doc

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TABLES

Carlson, Barbee & Gibson, Inc.
CIVIL ENGINEERS • SURVEYORS • PLANNERS

Date: 10/26/2007
Job No.: 1432-00

TABLE 1. EXISTING ON-SITE FLOWS
SINCLAIR RENAISSANCE

Drainage Area ID	Land Type	Area (acres)	C	Flow (cfs)
A - Pervious Areas	Landscaping	1.81	0.1	0.04
A - Impervious Areas	Pavement, Roof	7.84	1.0	1.57
A - Impervious Areas-Offsite	Sinclair Frontage Road	1.08	1.0	N.I.C.
TOTAL		10.73	0.85	1.60

Rainfall Intensity (in/hr) = 0.2
Impervious Runoff Coefficient = 1
Pervious Runoff Coefficient = 0.1

Note: Total Runoff Coefficient based on weighted average of total on-site project drainage area.

Carlson, Barbee & Gibson, Inc.
CIVIL ENGINEERS • SURVEYORS • PLANNERS

Date: 10/26/2007
Job No.: 1432-00

TABLE 2. PROPOSED FLOWS

(MINIMUM TREATED FLOWS PER CITY OF MILPITAS STORMWATER C.3 GUIDEBOOK)

SINCLAIR RENAISSANCE

Drainage Area ID	Land Type	Area (acres)	C	Flow (cfs)
A - Impervious Areas	Roof	2.80	1.0	0.56
A - Impervious Areas	Road/Driveway	2.98	1.0	0.60
A - Pervious Areas	Landscaping	3.87	0.1	0.08
A - Impervious Areas-Offsite	Sinclair Frontage Road	1.08	1.0	N.I.C.
TOTAL		10.73	0.68	1.23

Rainfall Intensity (in/hr) = 0.2
Impervious Runoff Coefficient = 1
Pervioius Runoff Coefficient = 0.1

Notes:
1. Total Runoff Coefficient based on weighted average of total on-site project drainage area.
2. Media filter sizing does not include roof areas which are treated by the vegetated lawn areas on each lot

Date: 10/26/2007
Job No.: 1432-00

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TABLE 3. PEAK RUNOFF CALCULATION WORKSHEET
(PROPOSED ON-SITE DRAINAGE AREAS)
SINCLAIR RENAISSANCE

Drainage Area ID	Land Type Description	Area (Acres)			Percentage Imprevious (%)	Weighted Runoff Coeff. 'C'	Time of Concentration Tc (min)	Rainfall Intensity 10-Year (in/hr)	Peak Runoff 10-Year (cfs)	Permanent BMP Measure
		Impervious	Pervious	Total						
Drainage Area 'A'	All On-site and offsite	6.86	3.87	10.73	64%	0.68	12	1.77	12.83	Structural BMP (Stormwater Treatment Unit) (on-site only)

Structural BMP Notes:

1. *The Stormwater Treatment Unit will have the appropriate capacity to meet the minimum required treat flow (See Table 2).*
2. *The Stormwater Treatment Unit will be installed at downstream point of the Drainage Area prior to discharging into the public storm drain system (See Figure 7).*

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Date: 10/26/2007
Job No.: 1432-00

TABLE 4. POTENTIAL SOURCES OF RUNOFF POLLUTANTS
SINCLAIR RENAISSANCE

Potential Source	Permanent Source Control BMPs	Operational BMPs
On-site Drain Inlets	Onsite inlets will be imprinted with "NO DUMPING - FLOW TO CREEK." Structural BMP (Media filter)	Inlet Markings will be inspected annually and replaced or renewed as needed.
Litter Waste	Provide trash bins.	
Landscape / Outdoor Pesticide Use	Landscaping will be designed to minimize required irrigation and runoff, to promote surface infiltration, and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution. Where possible, pest-resistant plants will be selected, especially for locations adjacent to hardscape. Plants will be selected appropriate to site soils, slopes slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, use of recycled water and plant interactions.	All site landscaping is to be maintained by a professional landscaping contractor. Contract to state that landscaping is to be maintained using Integrated Pest Management (IPM) principles, with minimal or no use of pesticides.

FIGURES

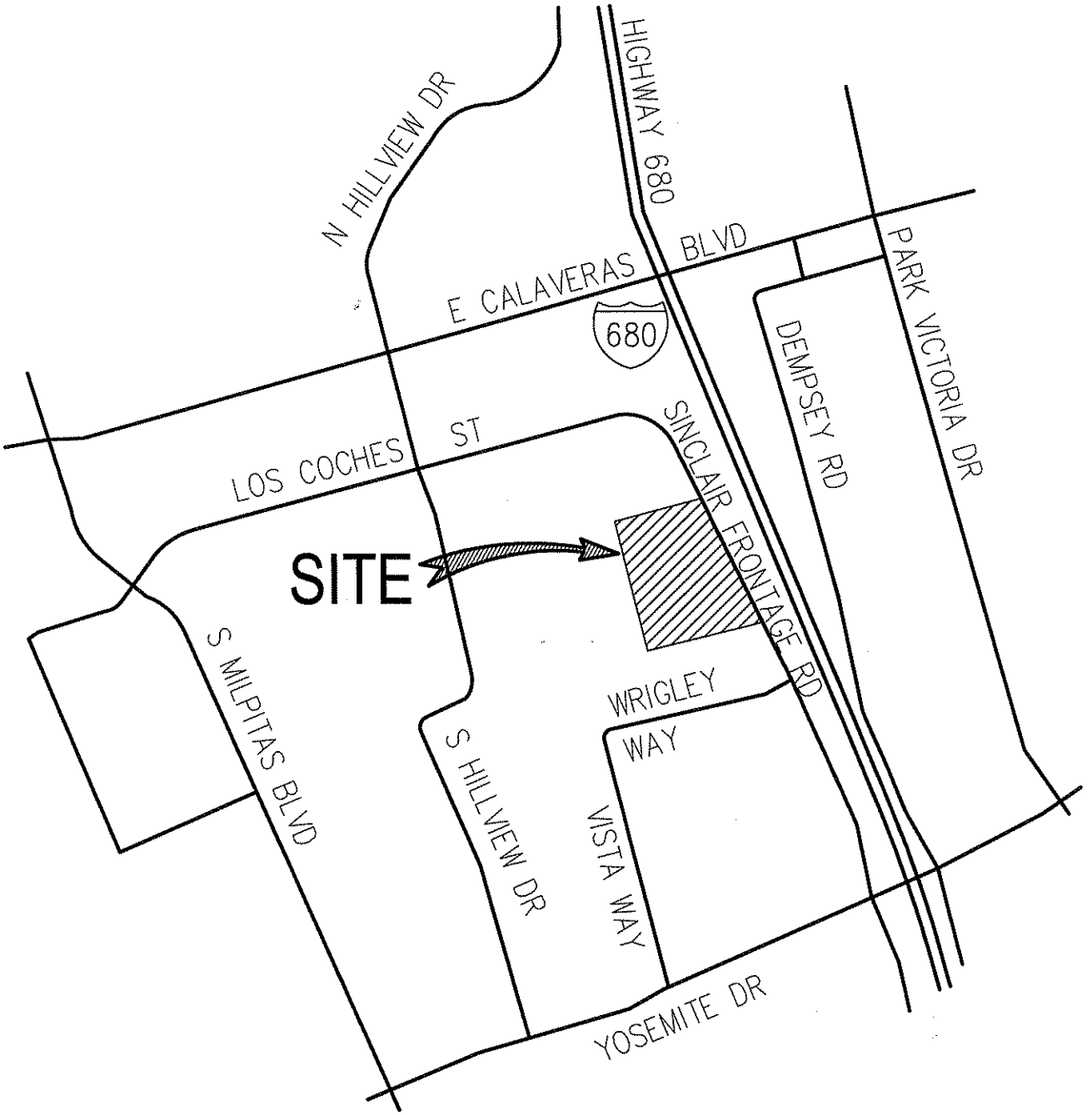

FIGURE 1

VICINITY MAP

SINCLAIR RENAISSANCE

SANTA CLARA COUNTY, CALIFORNIA

DATE: NOVEMBER 2006

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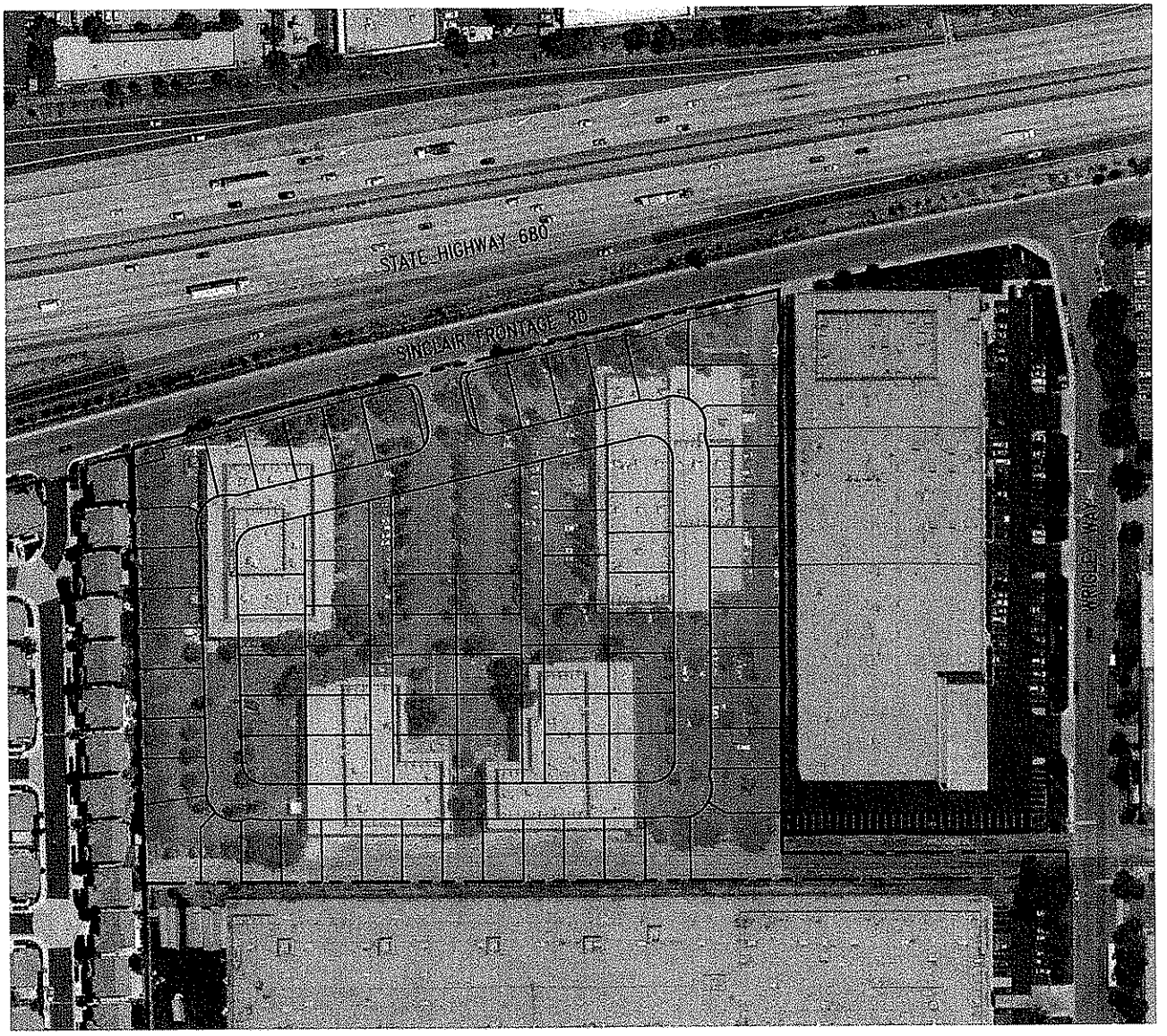

FIGURE 2

AERIAL PHOTO EXHIBIT

SINCLAIR RENAISSANCE

SANTA CLARA COUNTY, CALIFORNIA

DATE: NOVEMBER 2006

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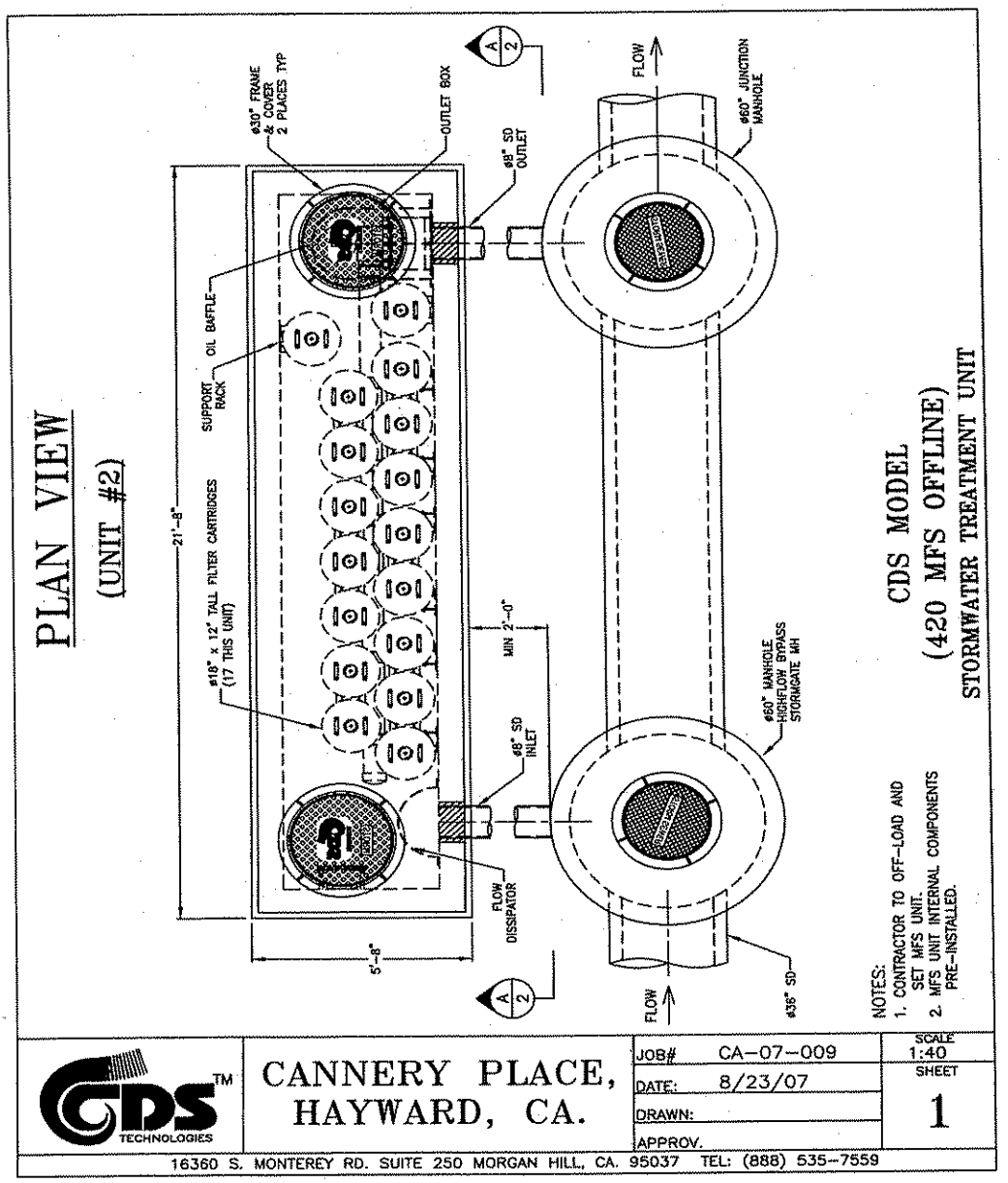
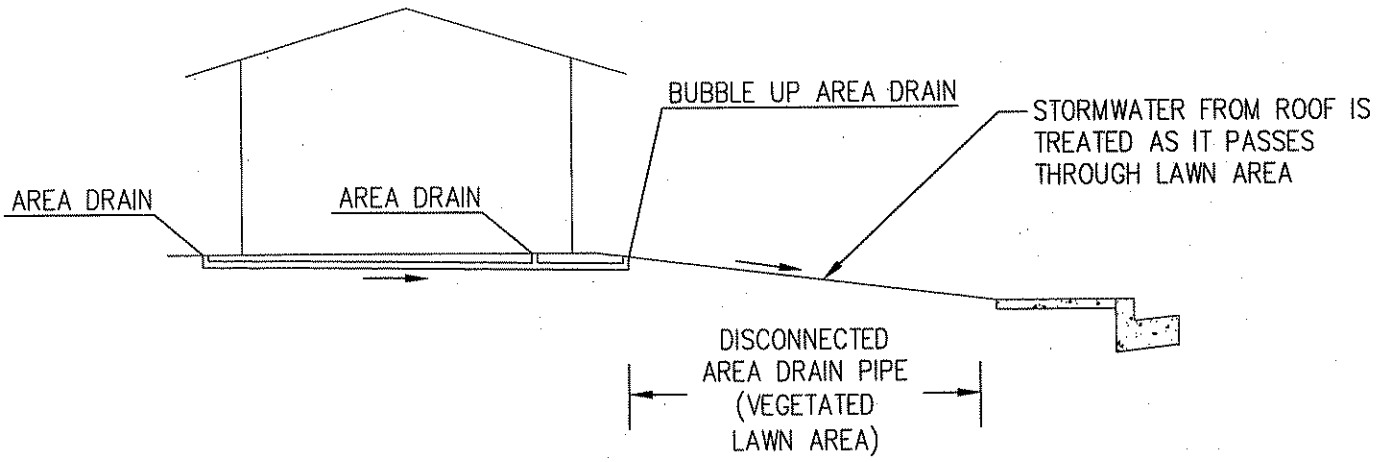


RECOMMENDED PERMANENT STRUCTURAL BMP
MEDIA FILTRATION SYSTEM



BUBBLE-UP AREA DRAIN DETAIL

NTS

BUBBLE-UP AREA DRAIN BMP

SINCLAIR RENAISSANCE

CITY OF MILPITAS SANTA CLARA COUNTY CALIFORNIA

OCTOBER 26, 2007

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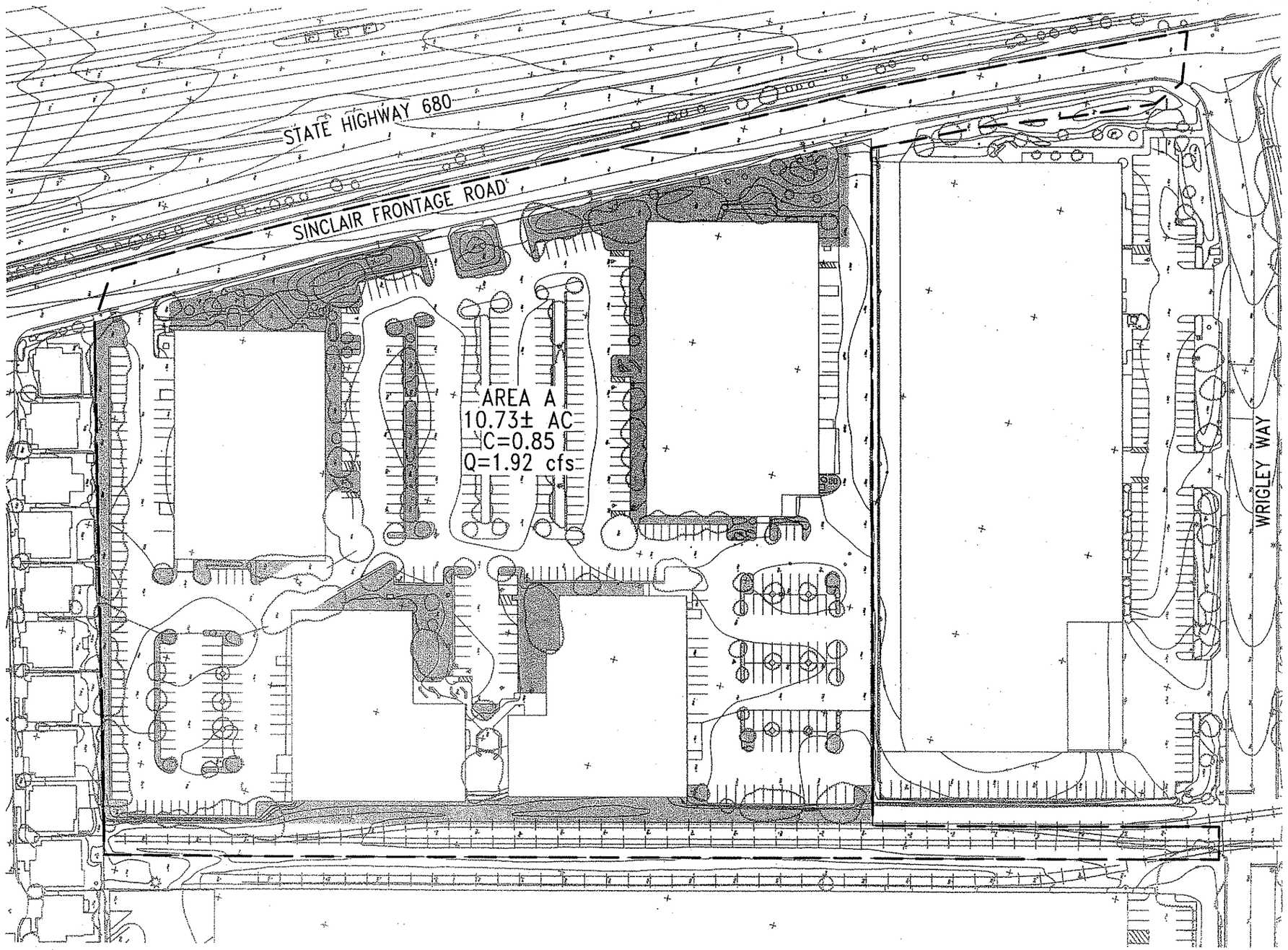
G:\1432\ACAD\EXHIBITS\SWCP\POP UP AREA DRAIN.DWG



LEGEND:

- DRAINAGE AREA BOUNDARY
- IMPERVIOUS AREAS
- PERVIOUS AREAS

FIGURE 3

EXISTING
ON-SITE DRAINAGE CONDITIONS

SINCLAIR RENAISSANCE

SANTA CLARA COUNTY, CALIFORNIA

DRAINAGE AREA	PERVIOUS AREA (AC±)	IMPERVIOUS AREA * (AC±)	TOTAL AREA * (AC±)
A	1.81	8.92	10.73

*DRAINAGE AREA INCLUDES 1.08 AC OF SINCLAIR FRONTAGE ROAD

SCALE: 1"= 100'
NOVEMBER 2006

0' 100' 300' 400'

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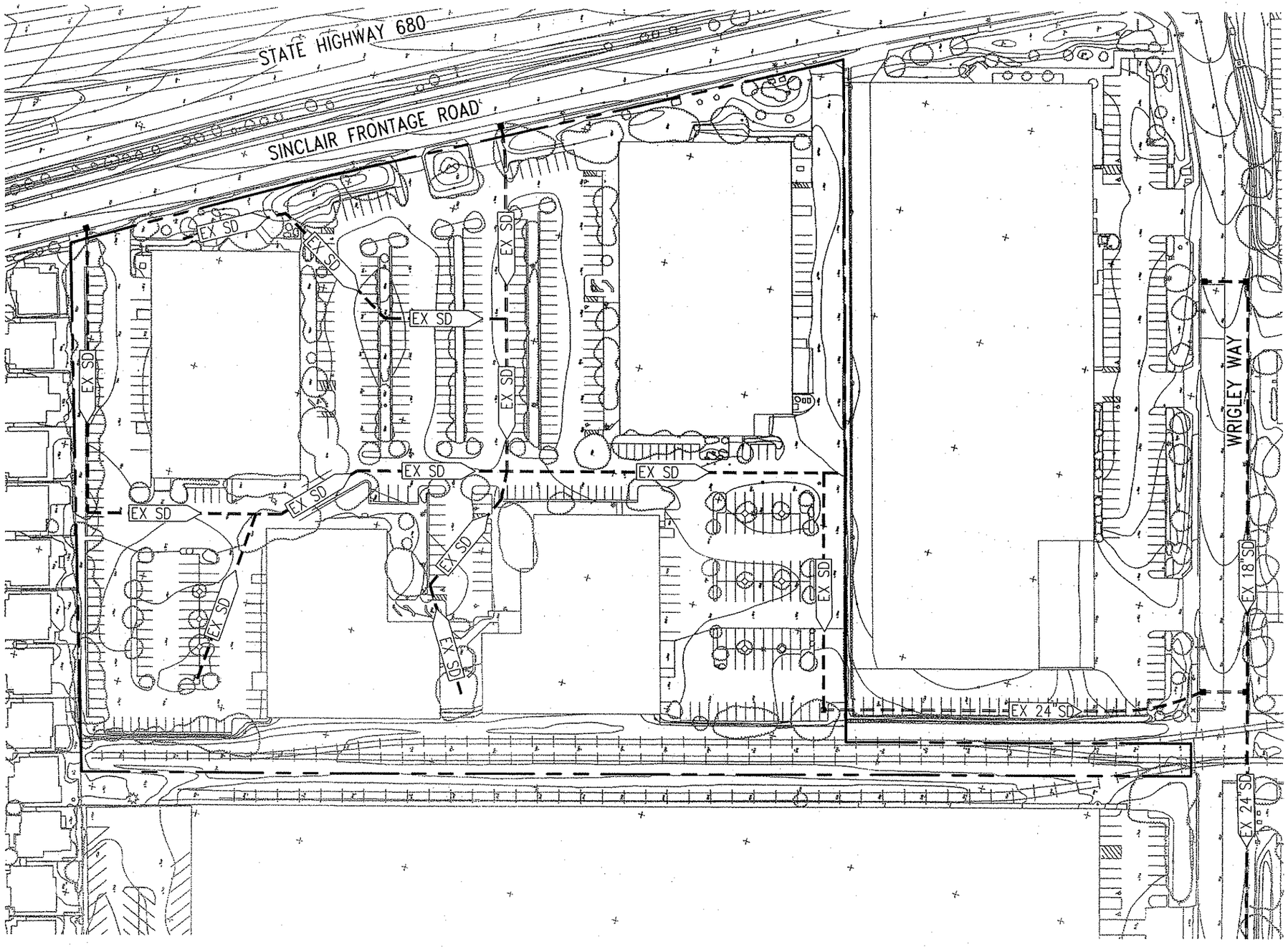
SHEET NUMBER
1
OF 1 SHEETS

G:\1432\ACAD\EXHIBITS\SWCP\EX-DRAINAGE-FIG-3.DWG



LEGEND:

EXISTING	DESCRIPTION
EX SD	STORM DRAIN PIPE
	STORM DRAIN MANHOLE
	CURB INLET

FIGURE 4

EXISTING STORM DRAIN FACILITIES
SINCLAIR RENAISSANCE
SANTA CLARA COUNTY, CALIFORNIA

SCALE: 1"=100'
NOVEMBER 2006

0' 100' 300' 400'

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OF 1 SHEETS

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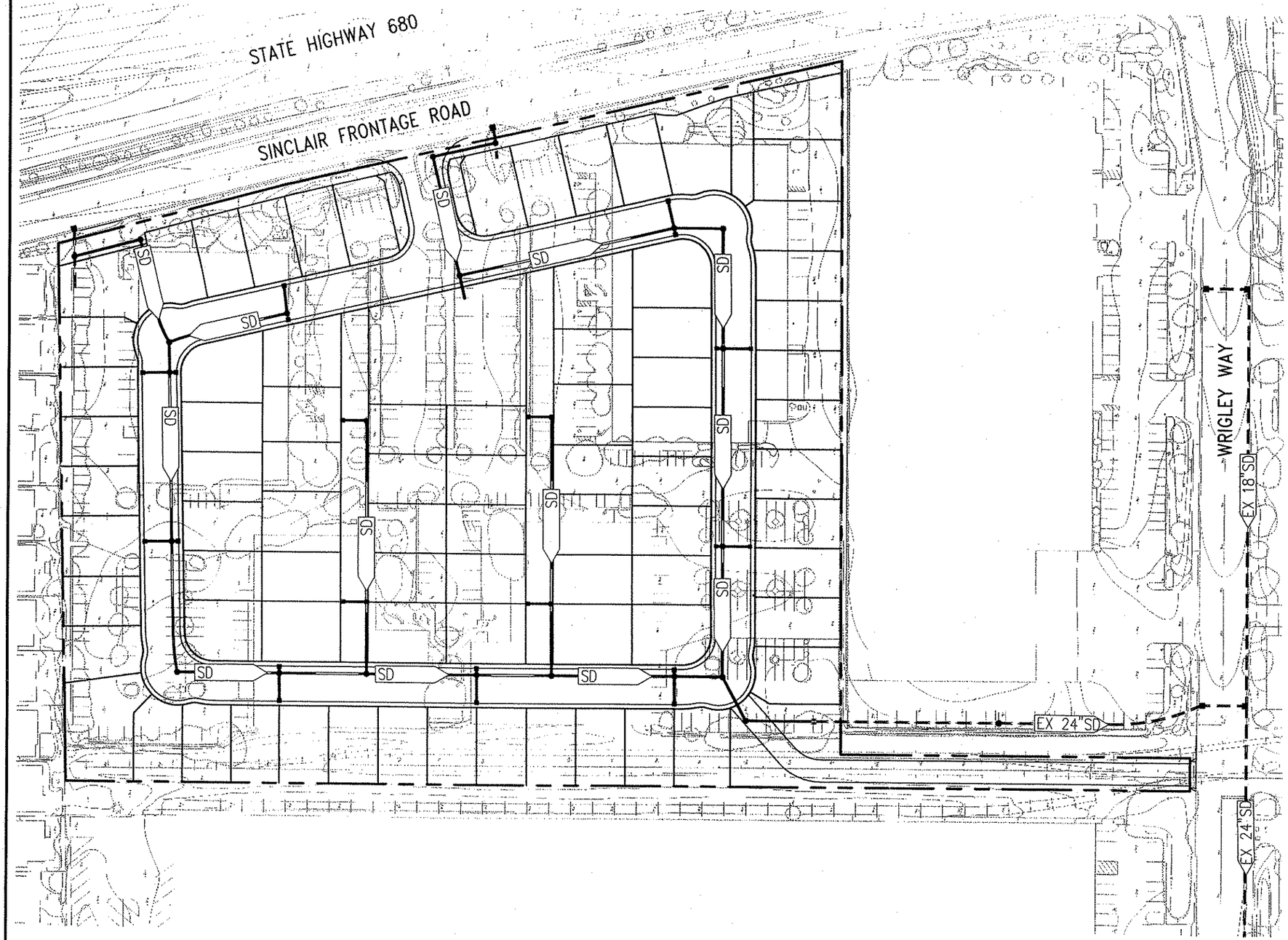

LEGEND:

- EX SD — EXISTING STORM DRAIN PIPE
- SD — STORM DRAIN PIPE
- STORM DRAIN MANHOLE
- FIELD INLET
- CURB INLET

FIGURE 6

PROPOSED
STORM DRAIN FACILITIES

SINCLAIR RENAISSANCE

SANTA CLARA COUNTY, CALIFORNIA

SCALE: 1"=100'
OCTOBER 2007

0' 100' 300' 400'

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SHEET NUMBER
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OF 1 SHEETS

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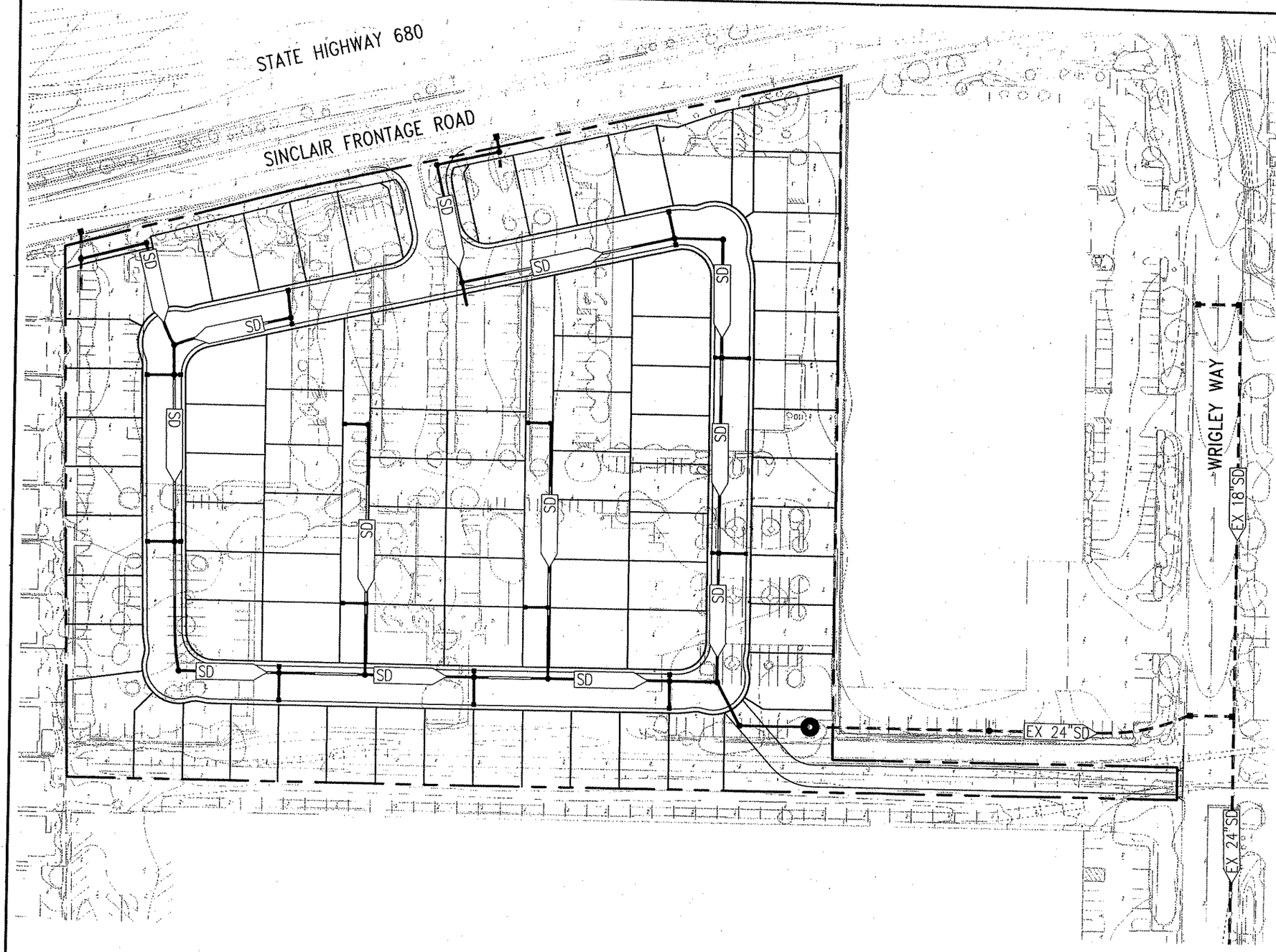
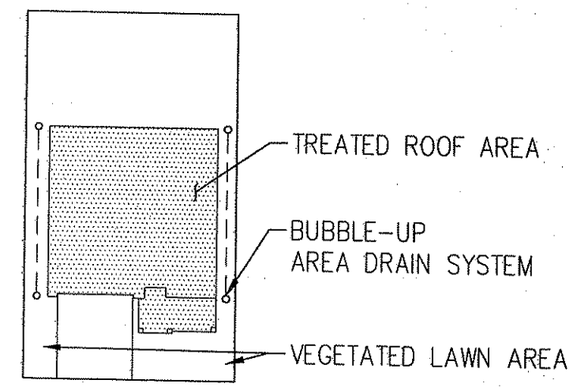


LEGEND:

- EX SD — EXISTING STORM DRAIN PIPE
- SD — STORM DRAIN PIPE
- STORM DRAIN MANHOLE
- FIELD INLET
- CURB INLET
- STRUCTURAL BMP (MEDIA FILTRATION SYSTEM)



TYPICAL LOT BMP DETAIL
NTS

FIGURE 7
PROPOSED
BMP LOCATIONS

SINCLAIR RENAISSANCE

SANTA CLARA COUNTY, CALIFORNIA

SCALE: 1"=100'
NOVEMBER 2007

0' 100' 300' 400'

cbg
Carlson, Barbee & Gibson, Inc.
CIVIL ENGINEERS • SURVEYORS • PLANNERS
6111 Bollinger Canyon Road, Suite 150 • San Ramon, CA 94583
925-866-0322 • fax 925-866-8575
www.cbandg.com

SHEET NUMBER
1
OF 1 SHEETS

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EDWARD L. PACK ASSOCIATES, INC.

1975 HAMILTON AVENUE
SUITE 26
SAN JOSE, CA 95125

Acoustical Consultants

TEL: 408-371-1195
FAX: 408-371-1196
www.packassociates.com

December 15, 2006
Project No. 38-044

Mr. Steve Allen
Mission Peak Company
40480 Encyclopedia Circle
Fremont, CA 94538

Subject: Traffic Noise Assessment Study for the Planned "Sinclair Renaissance" Single-Family Development, Sinclair Frontage Road, Milpitas

Dear Mr. Allen:

This report presents the results of a traffic noise assessment study for the planned "Sinclair Renaissance" single-family development along Sinclair Frontage Road and Interstate 680 in Fremont, Site Plan, Ref. (a). The noise exposures at the site were evaluated against the standards of the City of Milpitas Noise Element, Ref. (b). The analysis of the on-site sound level measurements indicates that the existing noise environment at the site is due primarily to vehicular traffic sources on I-680. The results of the study reveal that exterior and interior noise exposure excesses will occur and mitigation measures will be required.

Sections I and II of this report contain a summary of our findings and recommendations, respectively. Subsequent sections contain the site, traffic and project descriptions, analyses and evaluations. Attached hereto are Appendices A, B, and C, which include the list of references, descriptions of the applicable standards, definitions of the terminology, descriptions of the acoustical instrumentation used for the field survey, ventilation requirements, general building shell controls, and the on-site noise measurement data and calculation tables.

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MAY 15 2007

CITY OF MILPITAS
PLANNING DIVISION

I. Summary of Findings

The noise assessment results presented in the findings were evaluated against the standards of the City of Milpitas Noise Element, which utilizes the Day-Night Level (DNL) descriptor. The Noise Element standards specify a "Normally Acceptable" n exterior limit of 60 decibels (dB) DNL for single-family residential land uses. The Noise Element also indicates that exterior noise exposures up to 70 dB DNL are "Conditionally Acceptable", i.e., the land use is acceptable provided that a detailed analysis is conducted and noise insulation features are included into the design of the project. The noise standards for residential uses are typically applied to single-family rear yards, side yards and parks. A limit of 45 dB DNL is specified for interior living spaces.

A. Exterior Noise Exposures

The noise exposures shown below are without the application of mitigation measures, and represent the noise environment under existing site conditions.

Table I, below, provides the traffic noise exposure contours at the site (assuming a vacant site) under existing and future traffic conditions. The contours are shown in relation to the centerline of I-680. A noise contour map is presented on Figure 1.

TABLE I

Traffic Noise Exposure Contours

Existing Traffic	Dist. to CL	Future Traffic	Dist. to CL
80 dB DNL	100'	80 dB DNL	140'
75 dB DNL	230'	75 dB DNL	300'
70 dB DNL	500'	70 dB DNL	675'
65 dB DNL	1,000'	65 dB DNL	1,400'
60 dB DNL	2,300'	60 dB DNL	3,000'

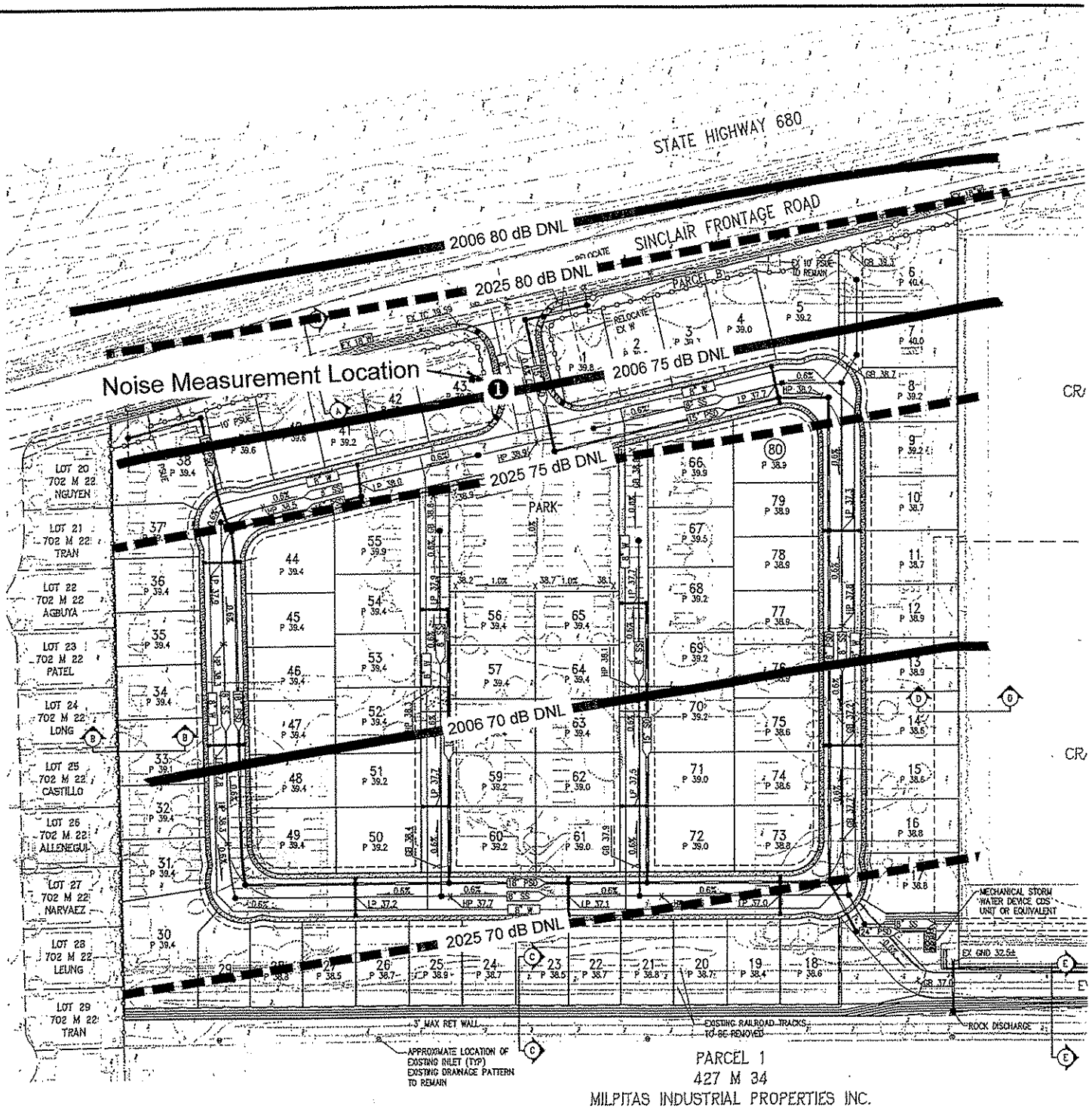
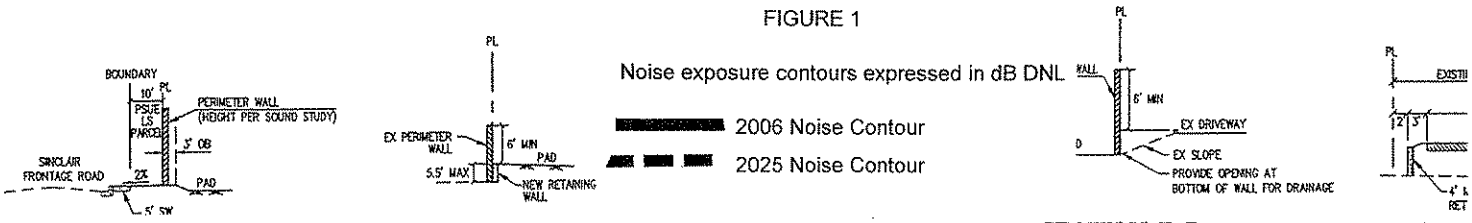


FIGURE 1

Noise exposure contours expressed in dB DNL

2006 Noise Contour

2025 Noise Contour



SECTION B-B
NOT TO SCALE

SECTION C-C
NOT TO SCALE

SECTION D-D
NOT TO SCALE

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December 18, 2006 www.packassociates.com

- The existing exterior noise exposures in the most impacted planned rear yards and building setbacks of the homes closest to I-680 (Lots 1-6, 38-43) at 190 ft. from the centerline is 76 dB DNL. Under future traffic conditions the noise exposure is expected to increase to 78 dB DNL. Thus, the noise exposures will be up to 18 dB in excess of the City of Milpitas Noise Element standards.

- The existing noise exposure at the planned park (310 ft. from the centerline of I-680) is 68 dB DNL. Under future traffic conditions, the noise exposure is expected to increase to 70 dB DNL. These noise exposures included the shielding provided by the planned homes of the project.

B. <u>Interior Noise Exposures</u>

- The interior noise exposure in the most impacted living spaces of homes closest to I-680 will be 61 and 63 dB DNL under existing and future traffic conditions, respectively. Thus, the noise interior exposures will be up to 18 dB in excess of the City of Milpitas Noise Element standards.

As shown above, noise exposure excesses occur and mitigation measures will be required. The recommended measures are described in Section II, below.

II. <u>Recommendations</u>

The following table provides various noise control barrier heights and the results noise exposures in the most impacted rear yards under future traffic conditions.

60 dB DNL	30 ft.
65 dB DNL	16 ft.
70 dB DNL	8 ft.

As the noise control barrier on the adjacent single-family development to the north is 16 ft. high, we recommended the following noise controls:

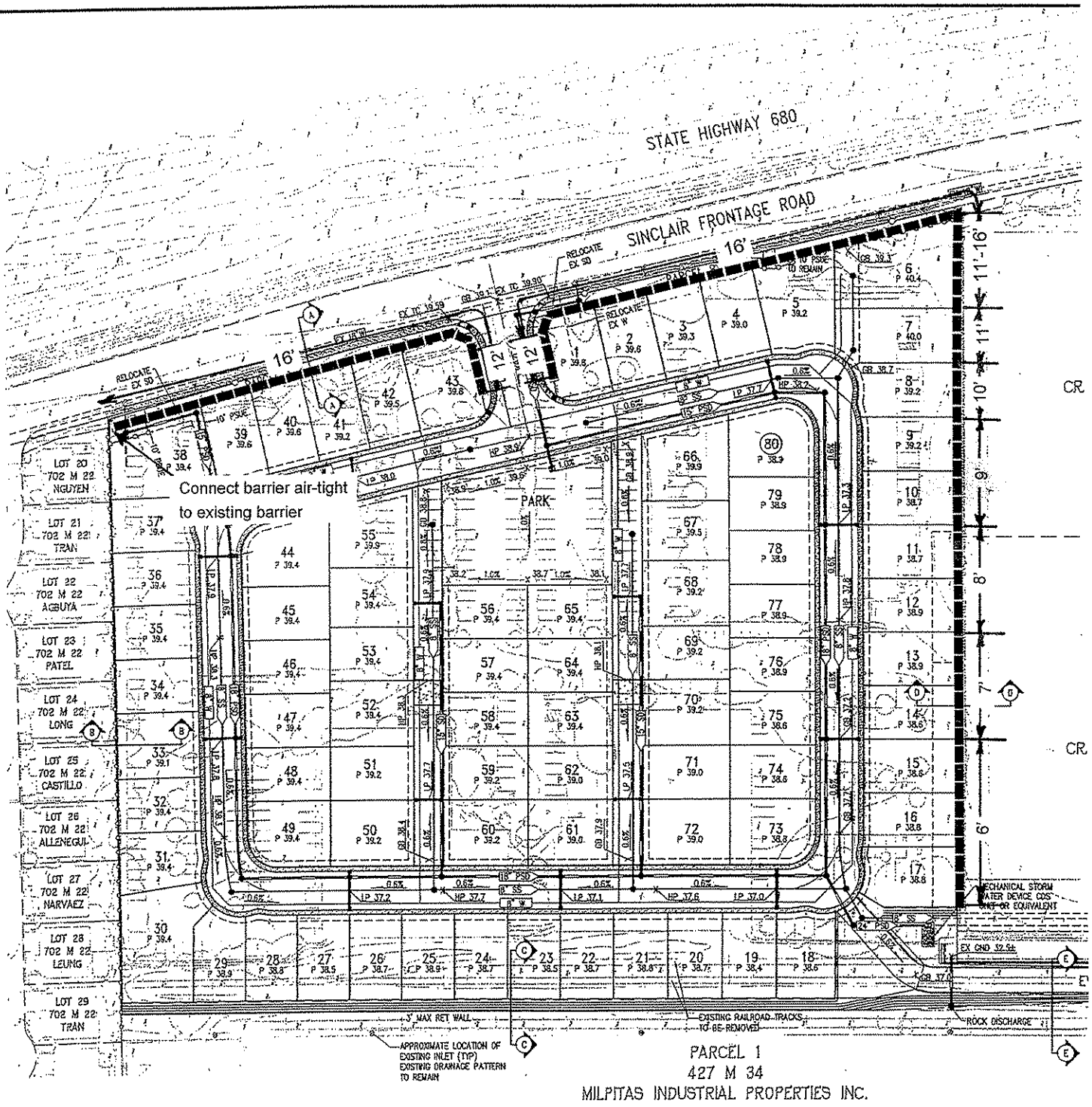
- Construct a 16 ft. high acoustically-effective noise control barrier along the property line contiguous with Sinclair Frontage Road. Connect the barrier air-tight to the existing barrier to the north. To control flanking noise at the south end of the site, construct noise control barriers behind the homes along the south property line (Lots 6-17) according to the following schedule:

Lot 6	16 ft. stepped down to 11 ft.
Lot 7	11 ft.
Lot 8	10 ft.
Lot 9	9 ft.
Lot 10	9 ft.
Lot 11	8 ft.
Lot 12	8 ft.
Lot 13	7 ft.
Lot 14	7 ft.
Lot 15	6 ft.
Lot 16	6 ft.
Lot 17	6 ft.

- At the south side of Lot 43 and at the north side of Lot 1, construct 12 ft. acoustically-effective barriers.

Please see Figure 2 for the locations and heights of the recommended noise control barriers.

The implementation of the above recommended measures will reduce I-680 traffic noise to no more than 65 dB DNL under future traffic conditions in the rear yards of the homes that back directly to I-680, with the exception of Lots 1 and 43, where the noise exposures will be up to 68 dB DNL. The noise exposure is these two lots will be controlled primarily by the side yard barriers at the project entry.



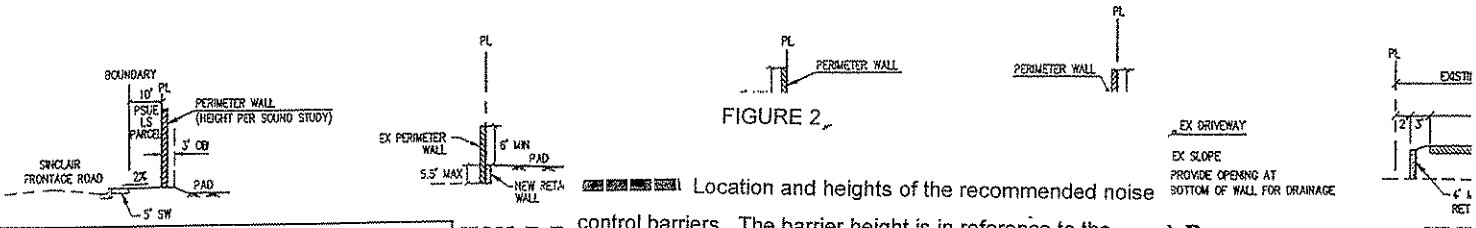


FIGURE 2

Location and heights of the recommended noise control barriers. The barrier height is in reference to the nearest **building pad** elevation.

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The noise exposure in the park will be reduced to 64 and 66 dB DNL under existing and future traffic conditions, respectively.

To achieve an acoustically-effective barrier it must be constructed air-tight, i.e., without cracks, gaps or other openings, and must provide for long term durability. The barriers can be constructed of masonry, wood, concrete, stucco, metal or a combination thereof, and must have minimum surface weights of 4.0 lbs. per sq. ft. for barriers 10 ft. high and higher and 2.5 lbs. per sq. ft. for barriers less than 10 ft. high. If wood fencing is used, homogeneous sheet materials are preferable to conventional wood fencing as the latter has a tendency to warp and form openings with age. However, high quality air-tight tongue-and-groove, board and batten or shiplap construction can be used provided that the construction is air-tight and the minimum surface weight is met. All connections with posts or pilasters must be sealed air-tight. No openings are permitted between the upper barrier components and the ground.

B. Interior Noise Controls

To achieve interior noise exposures for compliance with the 45 dB DNL standards of the City of Milpitas Noise Element sound control windows will be required. In addition, general construction measures affecting the building shell are also recommended, as described in Appendix B. The window sound ratings specified in this section assume the construction of the noise control barriers recommended above.

- Maintain closed at all times all **first floor** windows and glass doors of living spaces within 420 ft. of the centerline of I-680 and with a direct or side orientation toward the freeway. Install windows and glass doors rated minimum Sound Transmission Class (STC) 28.

- Maintain closed at all times all **second floor** windows and glass doors of living spaces within 420 ft. of the centerline of I-680 and with a direct or side orientation toward the freeway. At living spaces within 340 ft. of the centerline, install windows and glass doors rated minimum STC 33. At living spaces between 340 ft. and 420 ft. of the centerline, install windows and glass doors rated minimum STC 28.

- At the second floors of Lot 1 (east and north facades) and of Lot 43 (east and south facades) install windows and glass door rated minimum STC 38.

Provide some type of mechanical ventilation for all residential living spaces that have a closed window requirement and no other method of natural ventilation. Ventilation methods shall not compromise the acoustical integrity of the building shell.

All remaining windows of the project, including bathroom windows, may be fitted with any type of glass and may be kept open as desired, with the exception of bathroom windows that are in integral part of a noise impacted living space and not separated by a closeable door.

All windows must be of good quality and provide tight seals to prevent sound infiltration. To achieve an acoustically-effective window construction, the operable window panels must form an air-tight seal when in the closed position. In addition, the window and door frames must be caulked to the wall opening around their entire perimeter with a non-hardening caulking compound or acoustical sealant.

When windows are maintained closed for noise control, they are to be operable, as the requirement does not imply a "fixed" condition. Also, under the closed window requirement some type of mechanical ventilation should be provided to assure a habitable environment, as specified by the Uniform Building Code (UBC) and described in Appendix B. Please be aware that many dual-pane window assemblies have inherent noise reduction problems in the traffic and railroad noise frequency spectra due to resonance that occurs within the air space between the window lites, and the noise reduction capabilities vary from manufacturer to manufacturer. Therefore, the acoustical test report of all sound rated windows and doors should be reviewed by a qualified acoustician to ensure that the chosen windows and doors will adequately reduce traffic noise to acceptable levels.

The implementation of the above recommended measures will reduce excess noise exposures to achieve compliance with the 45 dB DNL interior standards of the City of Milpitas Noise Element.

III. Site, Traffic and Project Descriptions

The proposed development site is located along the west side of I-680, south of Calaveras Boulevard in Milpitas. The site is presently R&D/office uses that is relatively flat and approximately 4-5 below the grade of I-680. Surrounding land uses include The Crain Company warehouse adjacent to the south, vacant commercial/industrial uses adjacent to the west, the Sinclair Horizons single-family development is adjacent to the north and commercial uses are across Sinclair Frontage Road and I-680 to the east.

The primary source of noise at the site is traffic on I-680, which carries an existing Average Daily Traffic (ADT) volume of 161,000 vehicles, as reported by CalTrans, Ref. (c). Sinclair Frontage Road carries a minor amount of traffic in relation to I-680 and is insignificant.

The planned project includes the construction of 80 single-family homes and a park. Ingress and egress to the site will be way of a project street off of Sinclair Frontage Road.

IV. Analysis of the Noise Levels

A. Existing Noise Levels

To determine the existing noise environment at the site, continuous recordings of the sound levels were made a location 230 ft. from the centerline of the I-680. The measurement location is shown on Figure 1. This location was chosen for security of the sound measuring instruments. The measurements were made on July 17-18, 2006 for a continuous period of 24. The noise level data were recorded and processed using a Larson-Davis Model 812 Precision Integrating Sound Level Meter, which yields, by direct read-out, a series of descriptors of the sound levels versus time, as described in Appendix B. The measured descriptors include the L_1, L_{10}, L_{50}, and L_{90}, i.e., those levels exceeded for 1%, 10%, 50%, and 90% of the time. Also measured were the maximum and minimum levels and the continuous equivalent-energy levels (L_{eq}), which are used to calculate the DNL. The results of the sound measurements are shown in Appendix C.

The results of the field survey revealed that the L_{eq}'s at the measurement location, 230 ft. from the centerline of I-680, ranged from 67.5 to 73.3 dBA during the daytime and from 63.4 to 73.1 dBA at night.

Traffic noise diminishes at a rate of 3-6 dB per doubling of the distance from the source (centerline of the road) to the receiver. Thus, locations on the site at greater distances from I-680 will have lower noise levels. Additional noise shielding will be provided by interposed buildings of the project.

Vehicular traffic noise contain wide spectra of frequency components (from 100 to 10,000 Hertz), which are associated with engine, tire, drive train, exhaust and other sources. The frequency components are centered primarily in the 250 and 500 Hz octave bands and were used in determining the noise control measures recommended for this project.

B. Future Noise Levels

Future traffic volume data for I-680 were not available from CalTrans. Thus, reference was made to the 1995 traffic volumes, Ref. (d), and the 2005 traffic volumes determine the average annual growth rate for that 10 year period. The 1995 volume was 130,000 ADT. The 2005 volume was 161,000 ADT. The average growth rate was calculated to be 2.16% per year. Applying this same rate to the future 20 year horizon, the 2025 traffic volume is estimated to be 246,940 ADT. This increase in traffic volume from 2005 to 2025 yields a 2 dB increase in the traffic noise levels.

V. Evaluation of the Noise Exposures

A. Exterior Noise Exposures

To evaluate the on-site noise exposures against the City of Milpitas Noise Element standards, the DNL for the survey location was calculated by decibel averaging of the L_{eq}'s as they apply to the daily time periods of the DNL index. The DNL is a 24-hour noise descriptor that uses the measured L_{eq} values to calculate a 24-hour time-weighted average noise exposure. The formula used to calculate the DNL is described in Appendix B. The results of the calculations are shown in the data tables in Appendix C. Adjustments were made to the measured noise levels to account for the differences in setback locations from the measurement location using methods established by the Highway Research Board, Ref. (e).

The results of the calculations indicate that the exterior noise exposure at the measurement location 1, 230 ft. from the centerline of I-680, is 75 dB DNL.

The noise exposures in the most impacted rear yards and planned building setbacks from I-680 (175-185 ft. from the centerline) is 76 dB DNL under existing traffic conditions. Under future traffic conditions, the noise exposure is expected to increase to 78 dB DNL. Thus, the noise exposures will be up to 18 dB in excess of the 60 dB DNL standard of the City of Milpitas Noise Element.

The noise exposures at the planned park, which will be centered approximately 330 ft. from the centerline of I-680, but partially shielded by interposed residential structures, will be 68 and 70 dB DNL under existing and future traffic conditions, respectively.

B. Interior Noise Exposures

To evaluate the interior noise exposures in project living spaces against the standards of the City of Milpitas Noise Element, a 15 dB reduction was applied to the exterior noise exposure to represent the attenuation provided by the building shell under *annual-average* conditions. The *annual-average* condition assumes that windows have single-strength (3/32") glass and are kept open up to 50 % of the time for ventilation.

The interior noise exposures in living spaces closest to I-680, the noise exposures were calculated to be 61 dB DNL under existing traffic conditions. Under future traffic conditions, the noise exposures will increase to 63 dB DNL. Thus, the noise exposures will be up to 18 dB in excess of the City of Milpitas Noise Element standards.

As shown by the above evaluations, exterior and interior noise exposures excesses will occur and mitigation measures will be required. The recommended mitigation measures are described in Section II of this report.

This report presents the results of a noise assessment study for the planned "Sinclair Renaissance" single-family development along I-680 in Milpitas. The study findings and recommendations for present conditions are based on field measurements and other data and are correct to the best of our knowledge. Future noise level predictions were based upon information provided by CalTrans and estimates made by Edward L. Pack Associates, Inc. Significant changes in future traffic volumes, or changes in speed limits, motor vehicle technology, noise regulations, or other changes beyond our control may produce long-range noise results different from our estimates.

If you need any additional information or would like an elaboration on this report, please call me.

Sincerely,

EDWARD L. PACK ASSOC., INC.

Jeffrey K. Pack
President

Attachments: Appendices A, B, and C

APPENDIX A

References

(a) Site Plan, Sinclair Renaissance, by Carlson, Barbee & Gibson, Inc., November 2006

(b) Noise Element of the General Plan, City of Milpitas, March 19, 2002

(c) State of California Department of Transportation, Division of Traffic Operations, http://www.dot.ca.gov/hq/traffops/saferesr/trafdata/2005all/r101i.htm

(d) 1995 Traffic Volumes on California State Highways, State of California Department of Transportation, Division of Traffic Operations, May 1996

(e) Highway Research Board, "Highway Noise - A Design Guide for Highway Engineers", Report 117, 1971

APPENDIX B

Noise Standards, Terminology, Instrumentation Ventilation Requirements, and Building Shell Controls

1. Noise Standards

A. City of Milpitas Noise Element Standards

The noise standards of the City of Milpitas Noise Element of the General Plan, updated March 19, 2002, employ the Day-Night Level (DNL) noise descriptor, which is a 24-hour average noise descriptor that penalizes noise created between 10:00 p.m. and 7:00 a.m. by 10 decibels. The "Normally Acceptable" noise exposure for single-family land-use is 60 dB DNL. For multi-family land-use, the "Normally Acceptable" limit is 65 dB DNL. Schools, libraries, churches, nursing homes, hospitals, playgrounds, parks, auditoriums, amphitheaters, office buildings, and other commercial or professional business uses are acceptable up to 70 dB DNL. Sports arenas, industrial, manufacturing, golf courses, riding stables, water recreation and cemeteries are acceptable up to 75 dB DNL.

Interior noise exposures in all residences are limited to 45 dB DNL.

2. Terminology

A. Statistical Noise Levels

Due to the fluctuating character of urban traffic noise, statistical procedures are needed to provide an adequate description of the environment. A series of statistical descriptors have been developed which represent the noise levels exceeded a given percentage of the time. These descriptors are obtained by direct readout of the Community Noise Analyzer. Some of the statistical levels used to describe community noise are defined as follows:

L_1 - A noise level exceeded for 1% of the time.

L_{10} - A noise level exceeded for 10% of the time, considered to be an "intrusive" level.

L_{50} - The noise level exceeded 50% of the time representing an "average" sound level.

L_{90} - The noise level exceeded 90 % of the time, designated as a "background" noise level.

L_{eq} - The continuous equivalent-energy level is that level of a steady-state noise having the same sound energy as a given time-varying noise. The L_{eq} represents the decibel level of the time-averaged value of sound energy or sound pressure squared and is used to calculate the DNL and CNEL.

B. Day-Night Level (DNL)

Noise levels utilized in the standards are described in terms of the Day-Night Level (DNL). The DNL rating is determined by the cumulative noise exposures occurring over a 24-hour day in terms of A-Weighted sound energy. The 24-hour day is divided into two subperiods for the DNL index, i.e., the daytime period from 7:00 a.m. to 10:00 p.m., and the nighttime period from 10:00 p.m. to 7:00 a.m. A 10 dB weighting factor is applied (added) to the noise levels occurring during the nighttime period to account for the greater sensitivity of people to noise during these hours. The DNL is calculated from the measured L_{eq} in accordance with the following mathematical formula:

$$DNL = [(L_d+10\log_{10}15) \,\&\, (L_n+10+10\log_{10}9)] - 10\log_{10}24$$

Where:

L_d = L_{eq} for the daytime (7:00 a.m. to 10:00 p.m.)

L_n = L_{eq} for the nighttime (10:00 p.m. to 7:00 a.m.)

24 - indicates the 24-hour period

& - denotes decibel addition.

C. A-Weighted Sound Level

The decibel measure of the sound level utilizing the "A" weighted network of a sound level meter is referred to as "dBA". The "A" weighting is the accepted standard weighting system used when noise is measured and recorded for the purpose of determining total noise levels and conducting statistical analyses of the environment so that the output correlates well with the response of the human ear.

3. Instrumentation

The on-site field measurement data were acquired by the use of one or more of the precision acoustical instruments shown below. The acoustical instrumentation provides a direct readout of the L exceedance statistical levels including the equivalent-energy level (L_{eq}). Input to the meters was provided by a microphone extended to a height of 5 ft. above the ground. The meter conforms to ANSI S1.4 for Type 1 instruments. The "A" weighting network and the "Fast" response setting of the meter were used in conformance with the applicable ISO and IEC standards. All instrumentation was acoustically calibrated before and after field tests to assure accuracy.

Bruel & Kjaer 2231 Precision Integrating Sound Level Meter
Larson Davis LDL 812 Precision Integrating Sound Level Meter
Larson Davis 2900 Real Time Analyzer

4. Ventilation Requirements

Ventilation requirements to be applied when windows are maintained closed for noise control are specified in the Uniform Building Code (UBC), 1997 edition, Section 12.03.3 as follows:

> "In lieu of required exterior openings for natural ventilation, a mechanical ventilating system may be provided. Such system shall be capable of providing two air changes per hour in guest rooms, dormitories, habitable rooms, and in public corridors with a minimum of 15 cubic feet per minute (7L/s) of outside air per occupant during such time as the building is occupied."

Based on our previous experience, a "summer switch" on the furnace fan is normally considered acceptable as a ventilation system by FHA and other agencies. Air-conditioning is also an acceptable system.

5. Building Shell Controls

The following additional precautionary measures are required to assure the greatest potential for exterior-to-interior noise attenuation by the recommended mitigation measures. These measures apply at those units where closed windows are required:

- Unshielded entry doors having a direct or side orientation toward the primary noise source must be 1-5/8" or 1-3/4" thick, insulated metal or solid-core wood construction with effective weather seals around the full perimeter. Mail slots should not be used in these doors or in the wall of a living space, as a significant noise leakage can occur through them.

- If any penetrations in the building shell are required for vents, piping, conduit, etc., sound leakage around these penetrations can be controlled by sealing all cracks and clearance spaces with a non-hardening caulking compound.

- Fireplaces should be provided with tight-fitting dampers.

APPENDIX C

On-Site Measurement Data and Calculation Tables

DNL CALCULATIONS

CLIENT: THE MISSION PEAK CO.
FILE: 38-044
PROJECT: SINCLAIR RENAISSANCE
DATE: 7/17-18/2006
SOURCE: INTERSTATE 680

LOCATION 1 I-680
Dist. to Source 230 ft.

TIME	Leq	10^Leq/10		
7:00a.m.	73.3	21379620.9		
8:00 a.m.	72.9	19498446.0		
9:00a.m.	72.0	15848931.9		
10:00a.m.	70.7	11748975.5		
11:00 a.m.	70.4	10964782.0		
12:00noon	70.5	11220184.5		
1:00p.m.	70.0	10000000.0		
2:00 p.m.	70.2	10471285.5		
3:00 p.m.	70.5	11220184.5		
4:00 p.m.	70.6	11481536.2		
5:00 p.m.	70.8	12022644.3		
6:00 p.m.	70.6	11481536.2		
7:00 p.m.	70.0	10000000.0		
8:00 p.m.	69.2	8317637.7		
9:00 p.m.	68.1	6456542.3	SUM=	182112307.7
10:00 p.m.	67.5	5623413.3	Ld=	70.8
11:00 p.m.	66.8	4786300.9		
12:00mdnt	64.6	2884031.5		
1:00 a.m.	63.4	2187761.6		
2:00 a.m.	63.6	2290867.7		
3:00 a.m.	63.8	2398832.9		
4:00 a.m.	66.5	4466835.9		
5:00 a.m.	70.6	11481536.2		
6:00 a.m.	73.1	20417379.4	SUM=	56536959.5
			Ln=	68.0
	Daytime Level=	82.6		
	Nighttime Level=	87.5		
	DNL=	**75**		
	24-Hour Leq=	70.0		

GEOTECHNICAL INVESTIGATION
on
PROPOSED RESIDENTIAL DEVELOPMENT
A.P.N.'s 086-29-061, -062, -075 and -076
Sinclair Frontage Road
Milpitas, California
for
THE MISSION PEAK COMPANY

By

KC ENGINEERING COMPANY

Project No. VV2330

13 October 2006

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CITY OF MILPITAS
PLANNING DIVISION

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KC ENGINEERING COMPANY
A SUBSIDIARY OF MATERIALS TESTING, INC.

Project No. VV2330
13 October 2006

Mr. Steve Allen
The Mission Peak Company
40480 Encyclopedia Circle
Fremont, CA 94538

Subject: Proposed Residential Development
A.P.N.'s 086-29-061, -062, -075 and -076
Sinclair Frontage Road
Milpitas, California
GEOTECHNICAL INVESTIGATION

Dear Mr. Allen:

In accordance with your authorization, **KC ENGINEERING COMPANY** has investigated the geotechnical conditions of the surface and subsurface soils at the site of the proposed residential development to be constructed in Milpitas, California.

The accompanying report presents our conclusions and recommendations based on our investigation. Our findings indicate that the proposed residential development and associated improvements are feasible for construction, from a geotechnical standpoint, on the subject site provided the recommendations of this report are carefully followed and are incorporated into the project plans and specifications.

Should you have any questions relating to the contents of this report or should you require additional information, please contact our office at your convenience.

Respectfully Submitted,
KC ENGINEERING COMPANY

Reviewed By;

David V. Cymanski, G.E.
Principal Engineer

Jerry S. Pascoe, G.E.
Senior Engineer

REGISTERED PROFESSIONAL ENGINEER
JERRY S. PASCOE
GE 2613
EXP. 6-30-08
GEOTECHNICAL
STATE OF CALIFORNIA

Copies: 6 to Client

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- Vicinity Map, Figure 1
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APPENDIX C
- Corrosion Potential
- Corrosion Test Results

GEOTECHNICAL INVESTIGATION

Purpose and Scope

The purpose of the geotechnical investigation for the proposed residential development to be constructed on Sinclair Frontage Road in Milpitas, California was to determine the surface and subsurface soil conditions at the subject sites. Based on the results of the investigation, geotechnical criteria were established for grading of the site, the design of foundations for the proposed residences, and the construction of other related facilities on the property.

In accordance with our proposal dated 15 August 2006, our investigation services included the following tasks:

a. A review of available geotechnical literature concerning the site and vicinity;
b. Site reconnaissance by a Geotechnical Engineer to map the surface conditions;
c. Drilling of six exploratory borings and the sampling of the subsurface soils;
d. Laboratory testing of the samples obtained to determine their engineering characteristics;
e. Analysis of the data and formulation of conclusions and recommendations; and
f. Preparation of this written report.

Site Location and Description

The subject property is located on the west side of Sinclair Frontage Road, approximately 450 feet south of its intersection with Los Coches Street as shown on Figure 1, "Vicinity Map" in Appendix A. The site is bounded on the north by a residential subdivision, on the east by Sinclair Frontage Road, on the south by a commercial development and on the west by a railroad spur and another commercial development. Interstate 680 is located immediately adjacent to Sinclair Frontage Road on the east. The irregular-shaped site consists of four parcels of land totaling approximately 9 acres. The site is occupied by an office/commercial complex with four, one-story concrete tilt-up buildings (see Figure No. 2). Two of the buildings have below grade loading docks. The remaining portions of the site consist of asphalt concrete paved parking lots with integrated landscape planters and associated underground utilities. Railroad spurs also cross the western side of the property. The site is relatively flat with localized elevation differentials established for drainage purposes. The western side of the property is approximately 6 feet higher than the railroad spurs and is contained by retaining walls, both landscape walls and structural walls integral with two of the buildings.

The above description is based on a reconnaissance of the site by the Geotechnical Engineer, on a Topographic Base Map prepared by Carlson, Barbee & Gibson, Inc. dated July 2006 and on the USGS Topographic Map of the Milpitas Quadrangle as obtained from the 3D TopoQuads program by DeLorme. The Topographic Base Map is the basis for our Site Plan included as Figure No. 2 "Site Plan" in Appendix A.

Proposed Development

We understand that the existing commercial/office development will be demolished including the existing railroad spurs. Based on a review of a Conceptual Site Plan by KTGY Group dated 21 February 2006, the proposed development will consist of constructing approximately 79 single-family residential lots. A new one- or two-story, wood-framed detached residential structure will be constructed on each lot. Structural loading is anticipated to be relatively light to moderate, typical of residential home construction. The homes will be accessed via a main loop road and interior shared roads. An emergency vehicle access (EVA) road may be constructed on the southwest corner of the development extending to Wrigley Way. Grading is anticipated to consist of cuts and fills of approximately 6 vertical feet or less. Associated improvements will consist of underground utilities and retaining walls around portions of the development.

Field Investigation

Our field investigation was performed on 6 September 2006 and included a reconnaissance of the site and the drilling of six exploratory test borings at the approximate locations shown on Figure No. 2, "Site Plan" included in Appendix A.

The borings were drilled to a maximum depth of 50 feet below the existing ground surface. The drilling was performed with a truck-mounted Mobile B24 rig using power-driven, 4-inch diameter continuous flight solid augers. Visual classifications were made from the auger cuttings and the samples in the field. As the drilling proceeded, relatively undisturbed tube samples were obtained by driving a 3-inch O.D., split-tube sampler, containing thin brass liners, into the boring bottom. Disturbed samples were obtained by driving a 2-inch O.D., split-barrel sampler into the boring bottom in accordance with ASTM D1586. The sampler was driven into the in-situ soils under the impact of a 140 pound hammer having a free fall of 30 inches. The number of blows required to advance the sampler 12 inches into the soil were adjusted to the standard penetration resistance (N-Value). When the sampler was withdrawn from the boring bottom, the brass liners containing the relatively undisturbed samples were removed, examined for identification purposes, labeled and sealed to preserve the natural or in-situ moisture content. The samples were then transported to our laboratory for testing. Classifications made in the field were verified in the laboratory after further

examination and testing. The stratification of the soils, descriptions, location of undisturbed soil samples and standard penetration resistance are shown on the respective "Logs of Test Borings" contained within Appendixes A and B.

Laboratory Investigation

The laboratory testing program was directed towards providing sufficient information for the determination of the engineering characteristics of the site soils so that the recommendations outlined in this report could be formulated. The laboratory test results are presented in Appendix B.

Moisture content and dry density tests (ASTM D2937) were performed on representative relatively undisturbed soil samples in order to determine the consistency of the soil and the moisture variation throughout the explored soil profile.

In order to assist in the identification and classification of the subsurface soils and to evaluate liquefaction potential, sieve analysis tests (ASTM D422 and C136) and Atterberg Limits tests (ASTM D4318) were performed on selected soil samples. The Atterberg Limits test results were used to estimate the expansion potential of the near surface soils.

The strength parameters of the foundation soils were determined from direct shear (ASTM D3018) and unconfined compression (ASTM D2166) tests performed on selected relatively undisturbed soil samples. Standard field penetration resistance (N-Values) also assisted in the determination of strength and bearing capacity. The standard penetration resistance values are recorded on the respective "Logs of Test Borings".

Corrosivity testing was performed on a bulk sample of the near surface soils. The purpose of our testing was to evaluate the corrosion potential of the subsurface site soils to concrete and buried metal pipes. A description of the testing performed and the results are presented in Appendix C.

Subsurface Conditions

Based on our field exploration and laboratory investigation, the subsurface soil profile was found to be relatively uniform across the site. The surface of the site at all boring locations is covered with a pavement section of 2 to 3.5 inches of asphalt concrete over 6 to 15.5 inches of aggregate base. Fill, ranging in thickness from 1 to 5 feet, lies beneath the pavement in portions of the site with the thickest fill being along the western property line. The fill generally consists of brown, very stiff to hard sandy clay with a variable gravel content. The native soils beneath the site were found to consist of 1 to 7 feet of very highly expansive, very stiff black clay overlying vari-colored

brown, stiff to hard, moderately to highly expansive clay and sandy clay with variable caliches contents to the maximum depths explored. It is noted that one boring, Boring 4, encountered a layer of brown to pinkish brown, medium dense clayey sand between 12 and 21 feet below the pavement surface.

Groundwater was encountered at depths ranging from 11 to 16 feet below the pavement surface. Based on the fills which exist on the site, the groundwater is approximately 10 to 11 feet below the native ground surface. The groundwater conditions will fluctuate with variations in seasonal rainfall, irrigation on the site and vicinity and differences in subsurface stratigraphy.

A more thorough description and stratification of the soils encountered along with the results of the laboratory tests are presented on the "Logs of Test Borings" in Appendix A. The approximate location of the borings are shown on Figure No. 2, "Site Plan," in Appendix A.

Site Geology & Seismicity

According to the Open File Report 94-231[1], the site is underlain by Holocene-aged Floodbasin Deposits and lies on the boundary of Pleistocene-aged Alluvial Fan Deposits. Floodbasin deposits are rich clay to very fine silty clay deposits which can be organic. Alluvial Fan deposits are brown, tan or reddish brown, dense, gravelly and clayey sand or clayey gravel that fines upward to a sandy clay. The soils encountered during our investigation were found to correlate with those mapped. In particular, the surficial very highly expansive clay soils we encountered on the site are likely Floodbasin deposits which overlie the older Alluvial sandy clay deposits.

The site is not located within an Alquist-Priolo Earthquake Fault Zone[2]. There are no known active or inactive faults crossing the site as mapped and/or recognized by the State of California. However, the entire Bay Area is considered to be a seismically-active region. Earthquake related ground shaking should be expected during the design life of structures constructed on the site. The California Geological Survey (formerly the CDMG) has defined an active fault as one that has had surface displacement in the last 11,000 years, or has experienced earthquakes in recorded history. Based on our review of the Fault Activity Map of California[3] and the USGS Fault Database[4], the

[1] Helley, E.J., Graymer, R.W., Phelps, G.A., Showalter, P.K., and Wentworth, C.M., 1994, *Quaternary Geology of Santa Clara Valley, Santa Clara, Alameda, and San Mateo Counties, California: A Digital Database*, United States Geological Survey, Open-File Report 94-231, May 1994

[2] Hart, E.W. and Bryant, W.A., 1997, *Fault-Rupture Hazard Zones in California, Alquist-Priolo Earthquake Fault Zoning Act with Index to Earthquake Fault Zones Maps*, California Department of Conservation, Division of Mines and Geology, Special Publication 42, Revised 1997, Supplements 1 and 2 added 1999.

[3] Jennings, Charles W., 1994, *Fault Activity Map of California and Adjacent Areas*, California Division of Mines and Geology Geologic Map Data Series, Map No. 6.

nearest active faults are the Hayward and Calaveras Faults located 1.1 miles and 4.7 miles northeast of the site, respectively. Various other faults in the area, such as the Monte Vista-Shannon and San Andreas Faults, may produce seismic shaking at the site. Based on the Interactive Probabilistic Seismic Hazard Map on the CGS website, the peak ground acceleration that has a 10% probability of exceedance in 50 years is 0.71g. Using hazard deaggregation as performed on the US Geological Survey website, the major contributing faults for the site are the Hayward and Calaveras Faults with 57% and 36% contributions, respectively. All other faults contribute less than 1% to the hazard. Structures at the site should be designed to withstand the anticipated ground accelerations. Based on our review of published maps and the probabilistic ground motion parameters from the CGS website, the following 2001 California Building Code earthquake design criteria should be used by the Structural Engineer:

Soil Profile Type:	S_D
Seismic Zone:	4
Seismic Zone Factor:	0.40
Seismic Source Type:	B
Seismic Coefficients:	$C_a = 0.44N_a$; $C_v = 0.64N_v$
Near Source Factors:	N_a=1.3; N_v=1.6

Liquefaction Potential Evaluation

Soil liquefaction is a phenomenon in which loose and saturated cohesionless soils are subject to a temporary, but essentially total loss of shear strength, because of pore pressure build-up under the reversing cyclic shear stresses associated with earthquakes. Soils typically found most susceptible to liquefaction are saturated and loose, fine to medium grained sand having a uniform particle range and less than 5% fines passing the No. 200 sieve. According to Special Publication 117, the assessment of hazards associated with potential liquefaction of soil deposits at a site must consider translational site instability (i.e. lateral spreading, etc.) and more localized hazards such as bearing failure and settlement. The acceptable factor of safety against liquefaction is recommended in SP117 to be 1.3 or greater.

The data used for evaluating liquefaction potential of the subsurface soils consisted of the in-situ Standard Penetration Resistance values $(N_1)_{60}$ values, the unit weights, gradations, in-situ moisture contents, the groundwater level, and the location of the site to the nearest active fault and the predicted ground surface acceleration. The soil materials encountered below the site are predominately cohesive in nature (i.e. fine-grained) with a stiff to hard consistency and are not

[4] U.S. Geological Survey and California Geological Survey, 2006, Quaternary Fault and Fold Database for the United States, accessed October 8, 2006, from USGS web site: http//earthquake.usgs.gov/regional/qfaults/.

considered susceptible to liquefaction hazards. However, a layer of clayey sand was encountered in Boring 4 at a depth of 12 feet. It is noted that none of the other borings encountered this or similar granular soil layers. The layer in Boring 4 is 9 feet thick and was found to be medium dense. The upper portion of the layer, estimated at 3 feet thick, has 36.6% fines while the lower portion of the layer has 22.1% fines. The upper portion of the sand layer is generally considered non-liquefiable due to the high fines content (>35%) and the $(N_1)_{60}$ value. However, the lower portion of the layer may be liquefiable. Therefore we evaluated this sand layer for its potential to liquefy using the NCEER methods[5]. A seismic acceleration of 0.71g was used in our analysis as noted above.

Based on the data obtained and in view of the above noted criteria, a factor of safety (FOS) of 0.54 was calculated for the sand layer. According to SP117, a FOS equal to or greater than 1.3 is considered appropriate. Therefore, it is our opinion that the layer encountered in this boring should be considered liquefiable and subject to settlements during a seismic event. With respect to liquefaction induced settlement, we have evaluated a 6 feet thick layer that may liquefy. Utilizing the volumetric strain relationship developed by Tokimatsu and Seed[6], a total settlement of up to 1.4 inches was determined for this layer thickness. Differential settlement can be assumed to be one-half of the total or 0.7 inches. According to Ishihara[7], the potential for surface manifestation (i.e. sand boils, ground fissures, etc...) is low due to the thickness of the non-liquefiable clay soils overlying the potentially liquefiable soils. Since the site is relatively flat, there are no open face slopes adjacent to the site, and the discontinuous nature of the sand layer, the potential for lateral spreading at the site is considered very low.

[5] Youd, T. Leslie and Idriss, Izzat M., 1997, *Proceedings of the NCEER Workshop on Evaluation of Liquefaction Resistance of Soils*, Technical Report NCEER-97-0022 dated December 31, 1997.
[6] Tokimatsu, K. and Seed, H.B., 1987, *Evaluation of Settlements in Sands Due to Earthquake Shaking*, Journal of the Geotechnical Engineering Division, ASCE, Volume 113, No. 8, August 1987.
[7] Ishihara, K., 1985, *Stability of Natural Deposits During Earthquakes,* Proceedings of the Eleventh International Conference on Soil Mechanics and Foundation Engineering, San Francisco, CA, Volume 1, p. 321-376, August.

DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

General

From a geotechnical point of view, the proposed residential development is feasible for construction on the subject site provided the recommendations presented in this report are incorporated into the project plans and specifications.

The grading and foundation plans and structural calculations for the development must be reviewed by the Soil Engineer prior to contract bidding or submittal to governmental agencies to ensure that the geotechnical recommendations contained herein are properly incorporated and utilized in design.

KC ENGINEERING CO., should be notified at least two working days prior to site clearing, grading, and/or foundation operations on the property. This will give the Soil Engineer ample time to discuss the problems that may be encountered in the field and coordinate the work with the contractor.

Field observation and testing during the grading and/or foundation operations must be provided by representatives of ***KC ENGINEERING CO.***, to enable them to form an opinion regarding the adequacy of the site preparation, the acceptability of fill materials, and the extent to which the earthwork construction and the degree of compaction comply with the specification requirements. Any work related to the grading and/or foundation operations performed without the full knowledge and under the direct observation of the Soil Engineer will render the recommendations of this report invalid.

Geotechnical Considerations

The primary geotechnical concerns for the site are the presence of near-surface highly to very highly expansive clays and the potentially liquefiable subsurface soils. The near surface soil is prone to significant heave and shrink movements with changes in moisture content and, consequently, must be carefully considered in the design of grading, foundations, drainage, and landscaping. The recommendations provided in the following sections will minimize the effects of expansive soil movement.

As discussed in the liquefaction section above, a potentially liquefiable granular soil layer was encountered in Boring 4 on the site. This layer is discontinuous and was not encountered in the remaining borings on the site. This layer was evaluated for the potential to liquefy under seismic

loading. The lower portion, estimated at 6 feet thick, of the clayey sand in Boring 4 may liquefy under seismic loading. The estimated total settlement due to potential liquefaction of this layer may be up to 1.4 inches with 0.7 inches of differential settlement. Due to the discontinuous nature of this loose sand layer across the site, and the thickness of non-liquefiable soils above the loose sand layer, it is our opinion that the potential for significant liquefaction induced hazards at the site is low.

Based on the highly to very highly expansive soils present at the site, and the potentially liquefiable sand layer encountered beneath the site, it is our opinion that the proposed residences should be supported on post-tensioned slab foundation systems. Specific design and construction recommendations are provided in the Foundation Section.

Groundwater was encountered beneath the site at depths ranging from 11 to 16 feet below the pavement surface at the time of drilling. The groundwater is not expected to impact the design, construction or future performance of the subject residences. However, it is noted that, depending on the time of year the construction is performed, groundwater may be encountered during deeper underground utility construction.

Demolition

Prior to any grading on the site, demolition of the existing structures at the site should be completed. Demolition should include the complete removal of all surface and subsurface structures. Where any of the following are encountered: concrete, septic tanks, gas and oil tanks, storm drain systems, foundations, asphalt, debris and trash, these should also be removed, with the exception of items specified by the owner for salvage or recycling. In addition, all underground structures must be located on the grading plans so that proper removal may be carried out. It is vital that ***KC ENGINEERING CO.***, intermittently observe the demolition operations and be notified in ample time to ensure that subsurface structures are not covered.

Excavations made by the removal of any structure should be left open by the demolition contractor for backfill in accordance with the requirements for engineered fill. The removal of any underground structures should be done under the observation of the Soil Engineer to assure adequacy of the removal and that subsoils are left in proper condition for placement of engineered fills. Any soil exposed by the demolition operations, which are deemed soft or unsuitable by the Soil Engineer, shall be excavated as uncompacted fill soil and be removed as required by the Soil Engineer during grading. The demolition operation should be approved by the Soil Engineer prior to commencing grading operations. Any resulting excavations should be properly backfilled with engineered fill under the observation of the Soil Engineer. Should the location of any localized excavation be found to underlie

any structure, backfill should be compacted to a minimum relative compaction of 95% or the excavation widened to extend 5 feet beyond the footprint of the structure and backfilled to the specifications for engineered fill as recommended in the "grading" section herein.

Grading

Grading activities during the rainy season will be hampered by excessive moisture. Grading activities may be performed during the rainy season, however, achieving proper compaction may be difficult due to excessive moisture resulting in delays and/or the required use of chemical stabilization, such as lime treatment, to grade the site. Grading performed during the dry months will minimize the occurrence of the above problems.

Since most of the site is covered with pavement and buildings, minimal stripping of organic-laden topsoil is anticipated. The initial clearing operations should include the removal of trees, bushes and lawn in the areas to be graded and should include the rootball and associated root systems. Depressions resulting from removal of trees and bushes should be cleaned of loose soils and roots greater than 1 inch in diameter, and properly backfilled in accordance with the recommendations of this report. These materials should be removed from the site.

Where any loose or soft soils are encountered, they must be excavated to undisturbed competent ground. Excavated soil materials may be used as engineered fill with the approval of the Soil Engineer provided they do not contain debris or excessive organics.

Following demolition and site clearing, the top 12 inches of the existing ground should be scarified and compacted to a minimum degree of relative compaction of 90% at a minimum of 3% above optimum moisture content as determined by ASTM D1557 Laboratory Test Procedure. After stripping and recompacting the native subgrade, the site may be brought to the desired finished grades by placing engineered fill in lifts of 8 inches in uncompacted thickness and compacting to a relative compaction of 90% in accordance with the aforementioned test procedure.

In order to reduce the shrink-swell potential in the building pad areas, it is recommended to follow these special compaction requirements. The upper 2 feet of fill lots and cut/fill transition lots, and the upper 1 foot of cut lots should be moisture conditioned to at least 5% above optimum moisture content and compacted to a minimum of 87% and a maximum of 92% relative compaction.

Where a cut/fill transition occurs within a building pad, it is recommended that the cut portion of the pad be over-excavated a minimum of 1 foot, the bottom scarified 12 inches, and the area replaced and compacted as engineered fill as noted above.

All fill material should be approved by the Soil Engineer. The material should be a soil or soil-rock mixture which is free from excessive organic matter or other deleterious substances. The fill material should not contain rocks or lumps over 6 inches in greatest dimension and not more than 15% larger than 2-½ inches. All soils encountered during our investigation would be suitable for use as engineered fill when placed and compacted as recommended. Crushed concrete, asphalt concrete and aggregate base sections which have been thoroughly pulverized may be used as general fill.

Prior to compaction, each layer should be spread evenly and should be thoroughly blade mixed during the spreading to obtain uniformity of material in each layer. The fill should be brought to a water content that will permit proper compaction by either (a) aerating the material if it is too wet, or (b) spraying the material with water if it is too dry. Compaction should be performed by footed rollers or other types of approved compaction equipment and methods. Compaction equipment should be of such design that they will be able to compact the fill to the specified density. Rolling of each layer should be continuous over its entire area and the equipment should make sufficient trips to ensure that the required density has been obtained. No ponding or jetting is permitted.

The standard test used to define maximum densities and optimum moisture content of all compaction work shall be the Laboratory Test procedure ASTM D1557 and field tests shall be expressed as a relative compaction in terms of the maximum dry density and optimum moisture content obtained in the laboratory by the foregoing standard procedure. Field density and moisture tests shall be made in each compacted layer by the Soil Engineer in accordance with Laboratory Test Procedure ASTM D2922 and D3017, respectively. When footed rollers are used for compaction, the density and moisture tests shall be taken in the compacted material below the surface disturbed by the roller. When these tests indicate that the compaction requirements on any layer of fill, or portion thereof, have not been met, the particular layer, or portion thereof, shall be reworked until the compaction requirements have been met.

Surface Drainage

A very important factor affecting the performance of the structures is the proper design, implementation, and maintenance of surface drainage. Ponded water will cause swelling and/or loss of soil strength and may also seep under structures or pavement areas. Should surface water

be allowed to seep under the structures, differential foundation movement resulting in structural damage and/or standing water under the slab will occur. This may cause dampness to the floor which may result in mildew, staining, and/or warping of floor coverings. The site drainage should be designed by the Project Civil Engineer. To minimize the potential for the above problems, the following surface drainage measures are recommended and must be maintained by the property owner in perpetuity.

a) Liberal building pad slopes and surface drainage must be provided by the project Civil Engineer to remove all storm water from the pad and to prevent storm and/or irrigation water from ponding adjacent to or seeping beneath the structures and/or pavement areas. Where concrete is not provided adjacent to the structure, the finished grades should be compacted and sloped at a minimum 2% gradient away from the exterior foundation and be directed to swales or area drains. All hardscapes must also slope away from the structures.

b) Enclosed or trapped planter areas adjacent to the structure foundation should be avoided if possible. Where enclosed planter areas are constructed, these areas must be provided with adequate measures to drain surface water (irrigation and rainfall) away from the foundation. Positive surface gradients and/or controlled drainage area inlets should be provided. Care should be taken to adequately slope surface grades away from the structure foundation and into area inlets. Drainage area inlets should be piped to a suitable discharge facility.

c) The construction of continuous roof gutters is recommended. The downspouts should be connected to a closed pipe system to carry storm water away from the structures. This will reduce the possibility of soil saturation adjacent to the foundation. Downspout water may be allowed to discharge directly onto hardscape surfaces provided positive drainage is maintained.

d) Site drainage should be designed by the project Civil Engineer. Civil engineering, hydraulic engineering, and surveying expertise is necessary to design proper surface drainage to assure that the flow of water is directed away from the foundations.

e) Over-irrigation of plants is a common source of water migrating beneath a structure. Consequently, the amount of irrigation should not be any more than the amount necessary to support growth of the plants. Foliage requiring little irrigation (drip system) is recommended for the areas immediately adjacent to the structure.

f) Landscape mounds or concrete flatwork should not be constructed to block or obstruct the surface drainage paths. The Landscape Architect or other landscaper should be made aware of these landscaping recommendations and should implement them as designed. The surface drainage facilities should be constructed by the contractor as designed by the Civil Engineer.

Foundations

Based on the results of the field and laboratory testing program, the site's near surface soils are considered highly to very highly expansive. In addition, we encountered a potentially liquefiable sand layer beneath the site. Therefore, the proposed single-family residences should be supported on a rigid post-tensioned slab foundation system.

Post-tensioned slabs should be a minimum 10 inches in thickness and designed using the following criteria which is based on the design method of the 2001 California Building Code, Chapter 18, Division III, Sections 1816 and 1817, Design of Post-Tensioned Slabs on Ground:

Edge Moisture Variation Distance:

e_m (Edge Lift)	=	4.0 feet
e_m (Center Lift)	=	5.0 feet

Differential Movement:

y_m (Edge Lift)	=	0.75 inches
y_m (Center Lift)	=	1.5 inches

In addition, the following recommendations should be incorporated into the design and construction for the above structural mat foundation systems:

a) An allowable bearing capacity of 1,000 p.s.f. should be utilized and may be increased by one-third to resist short-term wind and seismic loading.

b) To resist lateral loading, a coefficient of friction of 0.30 may be used.

c) All areas to receive slabs should be wetted to seal any dessication cracks prior to placing the underslab components. The building pad subgrade should be thoroughly wetted to a moisture content of at least 5% above optimum within the upper 12 inches. This work should be performed under the observation of the Soil Engineer and approved prior to placement of underslab components.

d) The reinforcement and/or cables shall be placed in the center of the slab unless otherwise designated by the Structural Engineer.

e) The slab should be underlain by a minimum of 2 inches of compacted granular base material, except for the perimeter 12 inches which should be thickened to rest on grade. The granular material as recommended in ACI 302.1R may be an unwashed size No. 10 material per ASTM D 448. This material should meet a gradation of 100% passing 3/8", 85 to 100% passing No. 4, 10 to 30% passing No. 100, and 0 to 5% passing No. 200. Alternative granular materials may be used as approved by the Soils Engineer.

f) A Class A 10-mil minimum vapor retarder membrane that meets ASTM E 1745 (such as Stego-Wrap by Stego Industries LLC or equivalent) should be placed between the granular base material and the slab to minimize moisture condensation under the floor covering and upward vapor transmission. It is noted that polyethylene films (visqueen) do not meet these specifications. The vapor retarder must be adequately lapped and taped/sealed at penetrations and seams in accordance with ASTM E1643 and must not be punctured with form stakes. The vapor retarder must be placed continuously across the slab area.

g) As an alternative, the granular base material described above may be placed between the vapor retarder and the slab to aid in concrete curing and to protect the vapor retarder. This should only be done where the granular material will remain dry to slightly damp and not be exposed to rain water or other water sources prior to pour of concrete (refer to ACI 302.1R). Placement of concrete directly on a vapor retarder can result in the delay of the initial set of concrete. The concrete contractor should be notified to allow for proper finishing and curing of the concrete.

h) Water vapor migrating to the surface of the concrete can adversely affect floor covering adhesives. Provisions should be provided in the concrete mix design to minimize moisture emissions. This should include the selection of a water-cement ratio which inhibits water permeation (0.50 max) and/or the addition of suitable admixtures to limit water transmission.

i) Garage slabs and front porch slabs should be designed as part of the mat foundation system as recommended above.

j) The foundation plans, specifications, and calculations should be provided to us for review prior to construction to ensure conformance with the above recommendations.

Slab-on-Grade Construction

It is expected that the concrete slabs-on-grade including public sidewalks, driveways and other landscape flatwork may experience some cracking due to the expansive nature of the soil on the site. To reduce the potential cracking of concrete, the following are recommended:

a) All areas to receive slabs should be wetted to seal any dessication cracks prior to placing of concrete. This work should be done under the observation of the Soil Engineer.

b) Driveway slabs should be underlain by a minimum of 4 inches of angular ¾ inch gravel material placed between the finished subgrade and the slabs to serve as a capillary break between the subsoil and the slab.

c) Slabs should be a minimum of 5 inches thick and be reinforced with a minimum of No. 4 bars spaced 18 inches center to center, each way. The reinforcement shall be placed in the center of the slab unless otherwise designated by the design engineer.

d) All exterior flatwork slabs should be poured structurally independent of the foundations. A 30-pound felt strip, expansive joint material, or other positive separator should be provided around the edge of all floating slabs to prevent bond to the structure foundation.

Retaining Walls or Soundwalls

Any retaining walls that are to be constructed should be designed to resist lateral pressures exerted from a media having an equivalent fluid weight as follows plus any anticipated surcharge loads:

Gradient of Back Slope	Equivalent Fluid Weight (p.c.f.)			Coefficient Of Friction
	Unrestrained Condition (Active)	Restrained Condition (At Rest)	Passive Resistance	
Horizontal	50	70	300	0.30
2:1	70	90	300	0.30

The above criteria are based on fully drained conditions. In order to achieve fully-drained conditions, a drainage filter blanket should be placed behind the wall. The blanket should be a minimum of 12 inches thick and should extend the full height of the wall to within 12 inches of the surface. If the excavated area behind the wall exceeds 12 inches, the entire excavated space behind the 12-inch blanket should consist of compacted engineered fill or blanket material. The drainage blanket material should consist of Class II permeable material that meets CalTrans Specification, Section 68. A 4-inch perforated drain pipe should be installed in the bottom of the drainage blanket and should be underlain by at least 4 inches of filter type material. A 12-inch cap of clayey soil material should be placed over the drainage blanket. Piping with adequate gradient shall be provided to discharge water that collects behind the walls to an adequately controlled discharge system away from the structure foundation.

Retaining walls may either be founded on a spread footing or a pier foundation. Sound walls should be supported on piers. Spread footings should have a minimum depth of 24 inches below the lowest adjacent pad grade (i.e. trenching depth). Design bearing pressures for footings should not exceed 2,000 p.s.f. due to dead plus sustained live loads and may be increased by 1/3 due to all loads which include wind or seismic. To accommodate lateral building loads, the passive resistance of the foundation soil can be utilized. The passive soil pressures can be assumed to act against the front face of the footing below a depth of 1 foot below the ground surface. It is recommended that a passive pressure equivalent to that of a fluid weighing 300 p.c.f. be used. In addition, an allowable friction coefficient of 0.30 can be assumed at the base of the spread footings.

Piers should have a minimum diameter of 12 inches and should extend a minimum depth of 6 feet into engineered fill or native soil. The final depth will be determined in the field by the Soil Engineer during pier drilling operations and supplemental recommendations will be provided as necessary. The piers should be designed on the basis of skin friction acting between the soil and that portion of the pier that extends below a depth of 2 feet below finished grade. An allowable skin friction value of 500 p.s.f. can be used for combined dead and live loads. This value can be increased by one-third for total loads which include wind or seismic forces. The piers should be reinforced as determined by the design engineer. To resist lateral loads, the passive resistance of the soil can be used. The soil passive pressures can be assumed to act against the lateral projected area of the pier described by the vertical dimension of twice the pier diameter. It is recommended that a passive pressure equivalent of that of a fluid weighing 300 p.c.f. be used below 2 feet.

Pavement Areas

Preparation of Subgrade: After underground utilities have been placed in the areas to receive pavement and removal of excess material has been completed, the upper 8 inches of the subgrade soil

shall be scarified, moisture conditioned and compacted to a minimum relative compaction of 92% at a moisture content at least 3% above optimum in accordance with the grading recommendations specified in this report. The subgrade elevation is defined as the elevation achieved at the original subgrade undercut. All subgrade preparation following underground construction shall include treatment of the undercut subgrade elevation. Prior to placement of aggregate baserock, it is recommended that the subgrade be proof rolled and observed for deflection by the Soils Engineer. Should deflection and/or pumping conditions be encountered, supplemental stabilization recommendations will be provided.

Aggregate Base: The aggregate base material should meet the CalTrans Standard Specifications Section 26-1.02A. It is our understanding that the existing pavement materials and concrete from the existing buildings may be crushed onsite and stockpiled. If it is desired to use these materials to meet the above specifications, testing and approval will be required. All aggregate base material should be compacted to a minimum relative compaction of 95% at a moisture content above optimum based on the ASTM Test Procedure D1557-91. The construction of the pavement in the streets should conform to the requirements set forth by the latest Standard Specifications of the Department of Transportation of the State of California and/or City of Milpitas, Department of Public Works.

Asphalt Concrete: A bulk sample of the near surface soils was obtained for R-Value testing (California Standard Specification Procedure Test Method 301) which resulted in an R-Value of less than 5. Based on the lowest design R-Value of 5, and a range of traffic indices, the recommended pavement sections were calculated in accordance with Topic 608 of the California Department of Transportation Highway Design Manual. The appropriate traffic index (TI) and any minimum pavement sections should be determined by others in conformance with the City of Milpitas Specifications.

Design Traffic Index	Asphalt Concrete[1] (inches)	Aggregate Base[2] (inches)
5.0	3.0	10.0
6.0	3.0	14.0

Notes: 1) Includes Caltrans safety factor
2) CalTrans Class 2, minimum R-Value = 78
3) All layers in compacted thickness to Cal-Trans Specifications

Underground Utility and Excavations

Utility trenches extending to the building foundation must be backfilled with native or approved import material and compacted to relative compaction of 90% in accordance with Laboratory Test Procedure ASTM D1557. Backfilling and compaction of these trenches must meet the requirements set forth by the City of Milpitas, Department of Public Works.

Applicable safety standards require that trenches in excess of 5 feet must be properly shored or that the walls of the trench slope back to provide safety for installation of lines. If trench wall sloping is performed, the inclination should vary with the soil type and applicable OSHA Safety Standards. The soils at the site are considered to be Type B. However, where groundwater is encountered, use Type C.

With respect to state-of-the-art construction or local requirements, utility lines are generally bedded with granular materials. These materials can convey surface or subsurface water beneath the structures. It is, therefore, recommended that all utility trenches which possess the potential to transport water be sealed with a compacted impervious cohesive soil material or lean concrete where the trench enters/exits the building perimeter. This impervious seal should extend a minimum of 2 feet away from the building perimeter.

LIMITATIONS AND UNIFORMITY OF CONDITIONS

1. It should be noted that it is the responsibility of the owner or his representative to notify ***KC ENGINEERING CO.***, in writing, a minimum of two working days before any clearing, grading, or foundation excavation operations can commence at the site.

2. The recommendations of this report are based upon the assumption that the soil conditions do not deviate from those disclosed in the borings and from a reconnaissance of the site. Should any variations or undesirable conditions be encountered during the development of the site, ***KC ENGINEERING CO.***, will provide supplemental recommendations as dictated by the field conditions.

3. This report is issued with the understanding that it is the responsibility of the owner, or his representative, to ensure that the information and recommendations contained herein are brought to the attention of the Architect and Engineer for the project and incorporated into the plans and that the necessary steps are taken to see that the Contractor and Subcontractors carry out such recommendations in the field.

4. At the present date, the findings of this report are valid for the property investigated. With the passage of time, significant changes in the conditions of a property can occur due to natural processes or works of man on this or adjacent properties. In addition, legislation or the broadening of knowledge may result in changes in applicable standards. Changes outside of our control may render this report invalid, wholly or partially. Therefore, this report should not be considered valid after a period of two (2) years without our review, nor should it be used, or is it applicable, for any properties other than those investigated.

5. Not withstanding, all the foregoing applicable codes must be adhered to at all times.

APPENDIX A

Vicinity Map

Site Plan

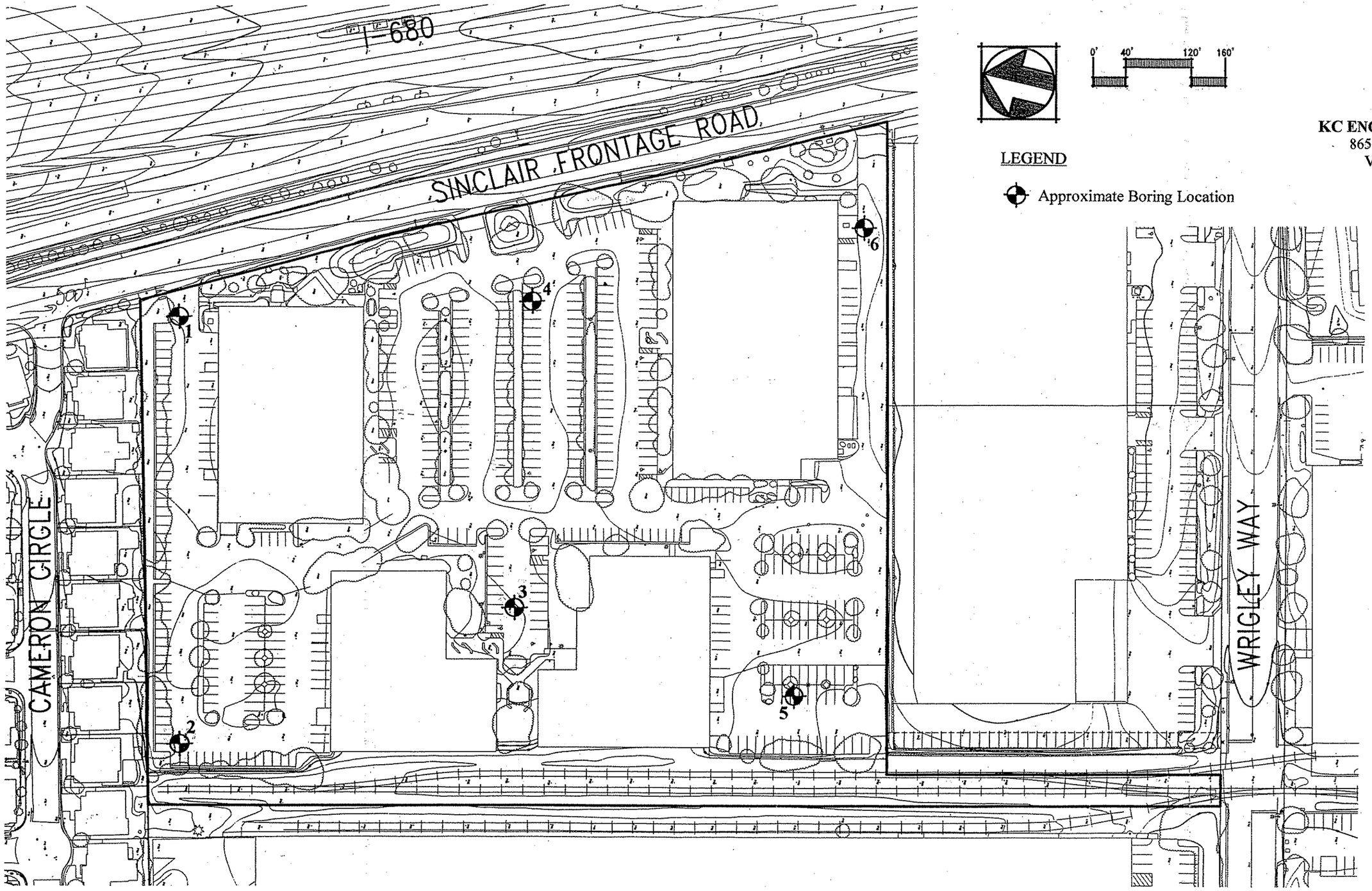
Logs of Test Borings

Boring Log Legend

3-D TopoQuads Copyright © 1999 DeLorme Yarmouth, ME 04096 Source Data: USGS 600 ft Scale: 1 : 20,800 Detail: 13-0 Datum: WGS84

KC ENGINEERING COMPANY
865 Cotting Lane, Suite A
Vacaville, CA 95688
(707) 447-4025

Project No. VV2330
Proposed Residential Subdivision
Sinclair Frontage Road
Milpitas, California
FIGURE NO. 1 - VICINITY MAP



KC ENGINEERING COMPANY
865 Cotting Lane, Suite A
Vacaville, CA 95688
(707) 447-4025

Project No. VV2330
Proposed Residential Subdivision
Sinclair Frontage Road
Milpitas, California
FIGURE NO. 2 – SITE PLAN

LOG OF TEST BORING
BORING NO.: 1

PROJECT: Proposed Residential Subdivision
CLIENT: The Mission Peak Company
LOCATION: Sincliar Frontage Road, Milpitas
DRILLER: Ram Geotechnical Drilling, Inc.
DRILL RIG: Mobile B24
DEPTH TO WATER: INITIAL ▽ : 11.5 ft.

PROJECT NO.: VV2330
DATE: 6 September 2006
ELEVATION: N/A
LOGGED BY: JSP
BORING DIAMETER: 4 in.
FINAL ▼ : 10 ft. AFTER: 1/2hrs.

DEPTH	SAMPLE NO.	SAMPLER	GRAPHIC LOG	GEOTECHNICAL DESCRIPTION AND CLASSIFICATION	SOIL CLASSIFICATION	CONVERTED SPT BLOW COUNT (BLOWS/FT.)	DRY DENSITY (PCF)	MOISTURE CONTENT (PERCENT)	ADDITIONAL TESTS AND REMARKS (LL, PI, UCC, ø&c, Gradation)
0				3.5" AC o/ 15.5" AB					
	1-1a			Black CLAY with caliche mottling; moist, very stiff	CH				
	1-1b					19	98.0	24.9	UCC=3,123 psf
5									
				Mottled Pinkish Brown and Grey CLAY with fine sand and caliche; moist, very stiff	CL				
	1-2					21	109.3	19.8	LL=37% PI=24
10				▼ ▽					
				-----As above, sandy clay, wet					
	1-3					28	117.4	16.8	
15									
				-----Grades w/o grey mottling					
	1-4					27	113.8	19.1	
20				Boring terminated at 19.5 feet					
25									

This information pertains only to this boring and is not necessarily indicitive of the whole site.

KC ENGINEERING CO.

Figure 3

LOG OF TEST BORING
BORING NO.: 2

PROJECT: Proposed Residential Subdivision
CLIENT: The Mission Peak Company
LOCATION: Sincliar Frontage Road, Milpitas
DRILLER: Ram Geotechnical Drilling, Inc.
DRILL RIG: Mobile B24
DEPTH TO WATER: INITIAL ▽ : 16 ft.

PROJECT NO.: VV2330
DATE: 6 September 2006
ELEVATION: N/A
LOGGED BY: JSP
BORING DIAMETER: 4 in.
FINAL ▼ : AFTER: hrs.

DEPTH	SAMPLE NO.	SAMPLER	GRAPHIC LOG	GEOTECHNICAL DESCRIPTION AND CLASSIFICATION	SOIL CLASSIFICATION	CONVERTED SPT BLOW COUNT (BLOWS/FT.)	DRY DENSITY (PCF)	MOISTURE CONTENT (PERCENT)	ADDITIONAL TESTS AND REMARKS (LL, PI, UCC, ø&c, Gradation)
0				3" AC o/ 12" AB					
				Brown sandy CLAY with gravel; dry, very stiff (FILL)	CL				
	2-1			----As above, more gravelly, damp, hard		38	117.3	10.9	
5				Black CLAY with caliche mottling; moist, very stiff (NATIVE)	CH				
	2-2					24	101.9	24.4	
10				Brown sandy CLAY with caliche mottling; moist, very stiff	CL				
	2-3					17	104.5	22.4	UCC=2,674 psf
15				▽					
				----As above, pinkish brown, wet					
	2-4					22	112.4	17.4	
20				----As above, stiff					
	2-5					15	105.1	22.3	%Sand=39.4 %<200=59.6
25									

This information pertains only to this boring and is not necessarily indicitive of the whole site.

KC ENGINEERING CO.

Figure 4

LOG OF TEST BORING
BORING NO.: 2

PROJECT: Proposed Residential Subdivision
CLIENT: The Mission Peak Company
LOCATION: Sincliar Frontage Road, Milpitas
DRILLER: Ram Geotechnical Drilling, Inc.
DRILL RIG: Mobile B24
DEPTH TO WATER: INITIAL ▽ : 16 ft.

PROJECT NO.: VV2330
DATE: 6 September 2006
ELEVATION: N/A
LOGGED BY: JSP
BORING DIAMETER: 4 in.
FINAL ▼ : AFTER: hrs.

DEPTH	SAMPLE NO.	SAMPLER	GRAPHIC LOG	GEOTECHNICAL DESCRIPTION AND CLASSIFICATION	SOIL CLASSIFICATION	CONVERTED SPT BLOW COUNT (BLOWS/FT.)	DRY DENSITY (PCF)	MOISTURE CONTENT (PERCENT)	ADDITIONAL TESTS AND REMARKS (LL, PI, UCC, ø&c, Gradation)
				----As above, very stiff					
	2-6					21	108.2	20.2	
30									
	2-7			----3" clayey fine sand lens		19	-	-	
35									
				Brown and Grey sandy CLAY; wet, hard	CL				
40	2-8					42	-	-	
45									
	2-9					35	-	-	
50				Boring terminated at 50 ft.					

This information pertains only to this boring and is not necessarily indicitive of the whole site.

KC ENGINEERING CO.

Figure 4

LOG OF TEST BORING
BORING NO.: 3

PROJECT: Proposed Residential Subdivision
CLIENT: The Mission Peak Company
LOCATION: Sincliar Frontage Road, Milpitas
DRILLER: Ram Geotechnical Drilling, Inc.
DRILL RIG: Mobile B24
DEPTH TO WATER: INITIAL ▽ : 11 ft.

PROJECT NO.: VV2330
DATE: 6 September 2006
ELEVATION: N/A
LOGGED BY: JSP
BORING DIAMETER: 4 in.
FINAL ▼ : AFTER: hrs.

DEPTH	SAMPLE NO.	SAMPLER	GRAPHIC LOG	GEOTECHNICAL DESCRIPTION AND CLASSIFICATION	SOIL CLASSIFICATION	CONVERTED SPT BLOW COUNT (BLOWS/FT.)	DRY DENSITY (PCF)	MOISTURE CONTENT (PERCENT)	ADDITIONAL TESTS AND REMARKS (LL, PI, UCC, ø&c, Gradation)
0				2" AC o/ 9" AB					
				Black CLAY with caliche mottling; moist, very stiff	CH				
	3-1a								
	3-1b					20	93.1	27.9	LL=66% PI=44 %Clay=66.9 %Sand=10.2 %Silt=22.9
5									
	3-2			Pinkish Brown sandy CLAY with caliche; moist to wet, very stiff	CL	24	100.0	24.3	
10				▽					
	3-3					20	111.5	19.6	
15									
20	3-4					24	-	-	
				Boring terminated at 20 ft.					
25									

This information pertains only to this boring and is not necessarily indicitive of the whole site.

KC ENGINEERING CO.

Figure 5

LOG OF TEST BORING
BORING NO.: 4

PROJECT: Proposed Residential Subdivision
CLIENT: The Mission Peak Company
LOCATION: Sincliar Frontage Road, Milpitas
DRILLER: Ram Geotechnical Drilling, Inc.
DRILL RIG: Mobile B24
DEPTH TO WATER: INITIAL ▽ : 11 ft.

PROJECT NO.: VV2330
DATE: 6 September 2006
ELEVATION: N/A
LOGGED BY: JSP
BORING DIAMETER: 4 in.
FINAL ▼ : AFTER: hrs.

DEPTH	SAMPLE NO.	SAMPLER	GRAPHIC LOG	GEOTECHNICAL DESCRIPTION AND CLASSIFICATION	SOIL CLASSIFICATION	CONVERTED SPT BLOW COUNT (BLOWS/FT.)	DRY DENSITY (PCF)	MOISTURE CONTENT (PERCENT)	ADDITIONAL TESTS AND REMARKS (LL, PI, UCC, ø&c, Gradation)
0				2" AC o/ 10" AB					
				Brown sandy CLAY with gravel; dry, very stiff (FILL)	CL				
				Black CLAY with caliche mottling; moist, very stiff (NATIVE)	CH				
				Pinkish Brown and Grey CLAY with fine sand and caliche; moist to wet, very stiff	CL				
	4-1					17	97.4	23.7	
5									
	4-2					25	109.1	20.8	
10				▽					
				Brown clayey SAND with gravel; fine to coarse grained; wet, medium dense	SC				
	4-3					15	-	-	%Gravel=15.0 %Sand=48.4 %<200=36.6
				----Pinkish Brown					
15									
	4-4					18	-	-	%Gravel=20.0 %Sand=57.9 %<200=22.1
20									
				Pinkish Brown sandy CLAY w/ caliche; wet, hard	CL				
	4-5					36	-	-	
25				Boring terminated at 25 ft.					

This information pertains only to this boring and is not necessarily indicitive of the whole site.

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Figure 6

LOG OF TEST BORING
BORING NO.: 5

PROJECT: Proposed Residential Subdivision
CLIENT: The Mission Peak Company
LOCATION: Sincliar Frontage Road, Milpitas
DRILLER: Ram Geotechnical Drilling, Inc.
DRILL RIG: Mobile B24
DEPTH TO WATER: INITIAL ▽ : 14 ft.

PROJECT NO.: VV2330
DATE: 6 September 2006
ELEVATION: N/A
LOGGED BY: JSP
BORING DIAMETER: 4 in.
FINAL ▼ : AFTER: hrs.

DEPTH	SAMPLE NO.	SAMPLER	GRAPHIC LOG	GEOTECHNICAL DESCRIPTION AND CLASSIFICATION	SOIL CLASSIFICATION	CONVERTED SPT BLOW COUNT (BLOWS/FT.)	DRY DENSITY (PCF)	MOISTURE CONTENT (PERCENT)	ADDITIONAL TESTS AND REMARKS (LL, PI, UCC, ø&c, Gradation)
0				2.5" AC o/ 6" AB					
				Brown sandy CLAY with gravel; dry, very stiff (FILL)	CL				
				Black CLAY with caliche; moist, very stiff (NATIVE)	CH				
	5-1					22	81.8	31.5	
5									
				Brown sandy CLAY with caliche; moist, very stiff	CL				
	5-2					21	92.1	29.4	
10									
				----Grades pinkish brown, wet, hard					
	5-3			▽		41	114.6	17.2	
15									
				----Grades stiff					
	5-4					14	-	-	%Gravel=4.0 %Sand=23.9 %<200=72.1
20				Boring terminated at 20 ft.					
25									

This information pertains only to this boring and is not necessarily indicitive of the whole site.

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Figure 7

LOG OF TEST BORING
BORING NO.: 6

PROJECT: Proposed Residential Subdivision
CLIENT: The Mission Peak Company
LOCATION: Sincliar Frontage Road, Milpitas
DRILLER: Ram Geotechnical Drilling, Inc.
DRILL RIG: Mobile B24
DEPTH TO WATER: INITIAL ▽ : 15 ft.

PROJECT NO.: VV2330
DATE: 6 September 2006
ELEVATION: N/A
LOGGED BY: JSP
BORING DIAMETER: 4 in.
FINAL ▼ : AFTER: hrs.

DEPTH	SAMPLE NO.	SAMPLER	GRAPHIC LOG	GEOTECHNICAL DESCRIPTION AND CLASSIFICATION	SOIL CLASSIFICATION	CONVERTED SPT BLOW COUNT (BLOWS/FT.)	DRY DENSITY (PCF)	MOISTURE CONTENT (PERCENT)	ADDITIONAL TESTS AND REMARKS (LL, PI, UCC, ø&c, Gradation)
0				3.5" AC o/ 14" AB					
				Black CLAY with caliche mottling; moist, very stiff	CH				
	6-1					18	91.7	25.6	ϕ=37°
5									
				Pinkish Brown sandy CLAY with caliche; moist, very stiff	CL				
	6-2					26	99.6	25.7	
10									
	6-3					25	107.4	20.1	
15				▽					
				----As above, wet					
	6-4					27	-	-	
				Boring terminated at 18.5 ft.					
20									
25									

This information pertains only to this boring and is not necessarily indicitive of the whole site.

KC ENGINEERING CO.

Figure 8

UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS			SYMBOLS	TYPICAL NAMES
COARSE GRAINED SOILS More than half of material is larger than No. 200 Sieve	GRAVELS More than half of coarse fraction is larger than No. 4 sieve	Clean gravels (<5% fines)	GW	Well graded gravels, gravel-sand mixtures, little or no fines (Cu>4 & 1<Cc<3)
			GP	Poorly graded gravels, gravel-sand mixtures, little or no fines
		Gravel with fines (>12% fines)	GM	Silty gravels, poorly graded gravel-sand-silt mixtures (PI<4 & below "A" line)
			GC	Clayey gravels, poorly graded gravel-sand-clay mixtures (PI>7 & above "A" line)
	SANDS More than half of coarse fraction is smaller than No. 4 sieve	Clean sands (<5% fines)	SW	Well graded sands, gravelly sands, little or no fines (Cu>6 & 1<Cc<3)
			SP	Poorly graded sands, gravelly sands, little or no fines
		Sands with fines (>12% fines)	SM	Silty sands, poorly graded sand-silt mixtures (PI<5 & below "A" line)
			SC	Clayey sands, poorly graded sand-clay mixtures (PI>7 & below "A" line)
FINE GRAINED SOILS More than half of material is smaller than No. 200 Sieve	SILTS AND CLAYS Liquid Limit is less than 50%		ML	Inorganic silts and very fine sands, silty or clayey fine sands, clayey silts with slight plasticity
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
			OL	Organic silts and clays of low plasticity
	SILTS AND CLAYS Liquid Limit is more than 50%		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
			CH	Inorganic clays of high plasticity, fat clays
			OH	Organic silts and clays of medium to high plasticity
HIGHLY ORGANIC SOILS			Pt	Peat and other highly organic soils

KC ENGINEERING COMPANY
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SAMPLER AND LAB TESTING LEGEND

- Auger
- Bulk Sample, taken from auger cuttings
- California Sampler
- Bulk/Grab Sample
- Pitcher
- Standard Penetration Test
- Shelby Tube
- No Recovery

LL=Liquid Limit (%)
PI=Plasticity Index
Φ=Friction Angle
C=Cohesion
UCC=Unconfined Compression
R value=Resistance Value
Consol=Consolidation Test

SOIL GRAIN SIZE

U.S. STANDARD SIEVE OPENINGS

	#200	#40	#10	#4	¾"	3"	12"
CLAY	SILT	SAND			GRAVEL	COBBLES	BOULDERS
		FINE	MEDIUM	COARSE	FINE / COARSE		
0.002	0.075	0.425	2.00	4.75	19.0	75	300

SOIL GRAIN SIZE IN MILLIMETERS

RELATIVE DENSITY (Coarse-grained soils)

SANDS & GRAVELS	BLOWS/FOOT[1]
Very Loose	0 – 4
Loose	4 – 10
Medium Dense	10 – 30
Dense	30 – 50
Very Dense	> 50

CONSISTENCY (Fine-grained soils)

SILTS & CLAYS	STRENGTH[2]	BLOWS/FOOT[1]
Very Soft	< 500	0 – 2
Soft	500 – 1,000	2 – 4
Firm	1,000 – 2,000	4 – 8
Stiff	2,000 – 4,000	8 – 15
Very Stiff	4,000 – 8,000	15 – 30
Hard	> 8,000	>30

1 – Number of blows of 140 pound hammer falling 30 inches to drive a 2-inch O.D. split spoon sampler (ASTM D1586)
2 – Unconfined compressive strength in lb/ft^2 as determined by lab testing or approximated by the standard penetration test (ASTM D1586) or pocket penetrometer.

WEATHERING (Bedrock)

Fresh	No visible sign of decomposition or discoloration; rings under hammer impact
Slightly weathered	Slight discoloration inwards from open fractures; little or no effect on normal cementation; otherwise similar to Fresh
Moderately weathered	Discoloration throughout; weaker minerals decomposed; strength somewhat less than fresh rock but cores can not be broken by hand or scraped with knife; texture preserved; cementation little to not affected; fractures may contain filling
Highly weathered	Most minerals somewhat decomposed; specimens can be broken by hand with effort or shaved with knife; texture becoming indistinct but fabric preserved; faint fractures
Completely weathered	Minerals decomposed to soil but fabric and structure preserved; specimens can be easily crumbled or penetrated

STRENGTH (Bedrock)

Plastic	Very low strength
Friable	Crumbles easily by rubbing with fingers
Weak	An unfractured specimen will crumble under light hammer blows
Moderately strong	Specimen will withstand a few heavy hammer blows before breaking
Strong	Specimen will withstand a few heavy ringing blows and will yield with difficulty only dust and small flying fragments
Very strong	Specimen will resist heavy ringing hammer blows and will yield with difficulty only dust and small flying fragments

BEDDING (Bedrock)	SPACING (inches)
Very thickly bedded	> 48
Thickly bedded	24 to 48
Thin bedded	2.5 to 24
Very thin bedded	5/8 to 2.5
Laminated	1/8 to 5/8
Thinly laminated	<1/8

FRACTURING (Bedrock)	SPACING (inches)
Very little fractured	> 48
Occasionally fractured	12 to 48
Moderately fractured	6 to 12
Closely fractured	1 to 6
Intensely fractrured	5/8 to 1
Crushed	<5/8

APPENDIX B

Laboratory Test Results

Materials Testing, Inc.

8798 Airport Road
Redding, California 96002
(530) 222-1116, fax 222-1611

865 Cotting Lane, Suite A
Vacaville, California 95688
(707) 447-4025, fax 447-4143

CLIENT: The Mission Peak Company
40480 Encyclopedia Circle
Fremont, CA 94538

CLIENT NO: VV2330-001
REPORT NO: 0300-005
DATE: 10/04/06

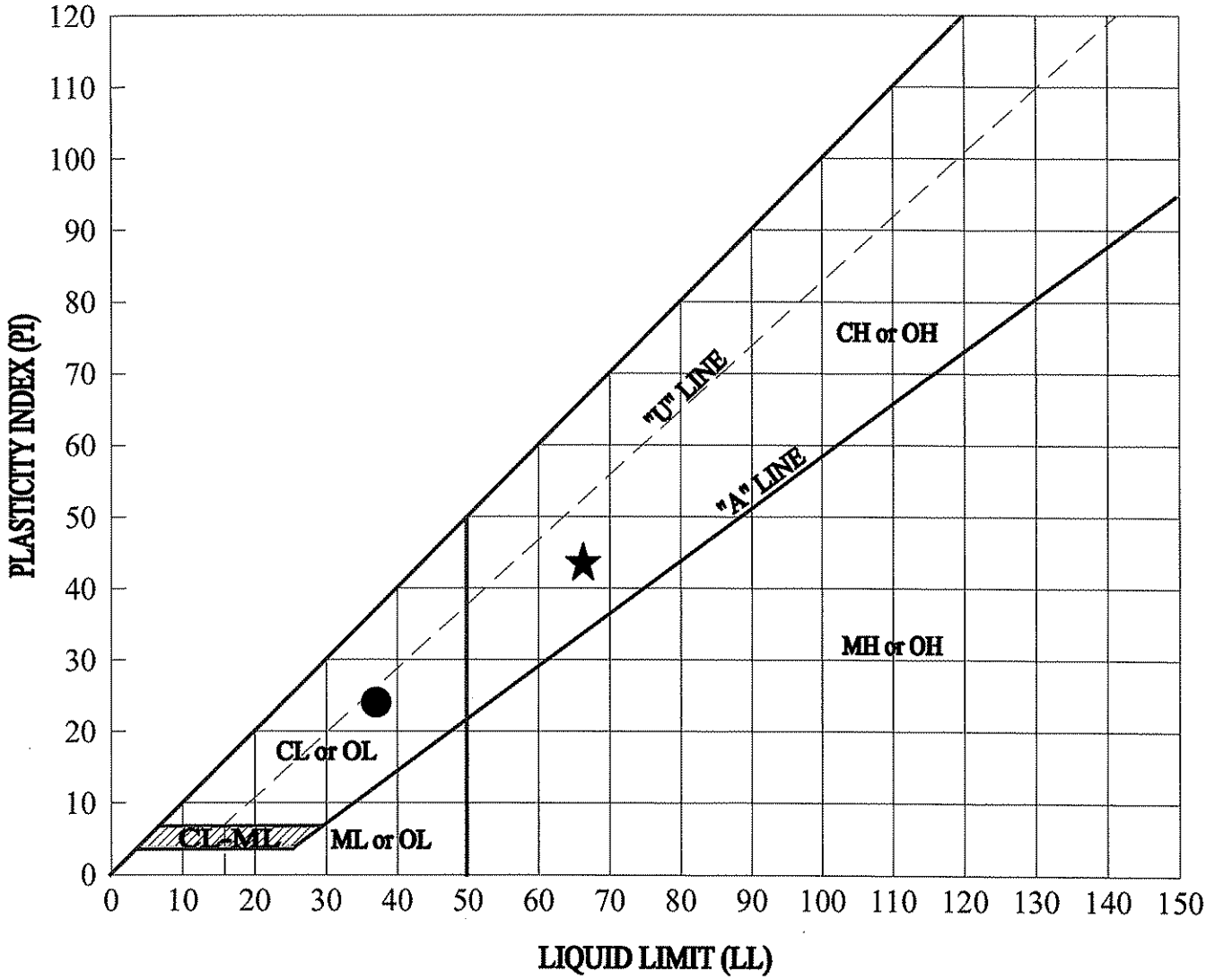
SUBJECT: Sinclair Frontage Road
Milpitas, California

SUBMITTED BY: KC Engineering

DENSITY OF IN PLACE SOIL BY THE DRIVE TUBE METHOD (ASTM D2937)
LIQUID LIMIT, PLASTIC LIMIT & PLASTICITY INDEX OF SOILS (ASTM D4318)
DATA SHEET

Sample #	Description	Dry Density pcf.	Moisture Content %	Liquid Limit %	Plastic Limit %	Plastic Index %
1-1b @ 3.0'	Dark Brown Fat Clay (Visual)	98.0	24.9	---	---	---
1-2 @ 8.0'	Light Brown Sandy Clay with Gravel (Visual)	109.3	19.8	37	13	24
1-3 @ 13.0'	Light Brown Sandy Clay with Gravel (Visual)	117.4	16.8	---	---	---
1-4 @ 19.0'	Light Brown Sandy Clay with Gravel (Visual)	113.8	19.1	---	---	---
2-1 @ 4.0'	Brown Sandy Clay with Gravel (Visual)	117.3	10.9	---	---	---
2-2 @ 9.0'	Dark Brown Fat Clay (Visual)	101.9	24.4	---	---	---
2-3 @ 14.0'	Light Brown Sandy Clay (Visual)	104.5	22.4	---	---	---
2-4 @ 19.0'	Light Brown Sandy Clay with Gravel (Visual)	112.4	17.4	---	---	---
2-5 @ 24.0'	Light Brown Sandy Clay (Visual)	105.1	22.3	---	---	---
2-6 @ 29.0'	Light Brown Sandy Clay (Visual)	108.2	20.2	---	---	---
3-1a @ 2.0'	Dark Brown Fat Clay (Visual)	---	---	66	22	44

Sample #	Description	Dry Density pcf.	Moisture Content %	Liquid Limit %	Plastic Limit %	Plastic Index %
3-1b @ 3.0'	Dark Brown Fat Clay (Visual)	93.1	27.9	---	---	---
3-2 @ 8.0'	Brown Silty Clay (Visual)	100.0	24.3	---	---	---
3-3 @ 13.0'	Gray Sandy Clay (Visual)	111.5	19.6	---	---	---
4-1 @ 4.0'	Brown Silty Clay (Visual)	97.4	23.7	---	---	---
4-2 @ 9.0'	Gray Silty Clay with Gravel (Visual)	109.1	20.8	---	---	---
5-1 @ 4.0'	Black Fat Clay (Visual)	81.8	31.5	---	---	---
5-2 @ 9.0'	Brown Silty Clay (Visual)	92.1	29.4	---	---	---
5-3 @ 14.0'	Brown Sandy Clay (Visual)	114.6	17.2	---	---	---
6-1 @ 3.0'	Dark Brown Fat Clay (Visual)	91.7	25.6	---	---	---
6-2 @ 8.0'	Brown Silty Clay (Visual)	99.6	25.7	---	---	---
6-3 @ 13.0'	Gray Silty Clay (Visual)	107.4	20.1	---	---	---



KEY SYMBOL	SAMPLE NUMBER	Depth	NATURAL MOISTURE CONTENT, %	PLASTIC LIMIT, PL, %	LIQUID LIMIT, LL, %	PLASTICITY INDEX, PI, %	LIQUIDITY INDEX	UNIFIED SOIL CLASSIFICATION SYMBOL
●	1-2	8 ft.	19.8	13	37	24	0.28	CL
★	3-1a	2 ft.	27.9	22	66	44	0.13	CH

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Project No. VV2330
Proposed Residential Subdivision
Sinclair Frontage Rd
Milpitas, California
PLASTICITY CHART AND DATA

PARTICLE SIZE DISTRIBUTION TEST REPORT

% + 3"	% GRAVEL	% SAND	% SILT	% CLAY
0.0	1.0	39.4	59.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8 in.	100.0		
#4	99.0		
#8	92.0		
#16	89.0		
#30	84.0		
#50	80.0		
#100	71.0		
#200	59.6		

* (no specification provided)

Soil Description

Light Brown Sandy Clay (Visual)

Atterberg Limits

PL= --- LL= --- PI= ---

Coefficients

D_{85}= 0.692 D_{60}= 0.0768 D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= CL AASHTO= ---

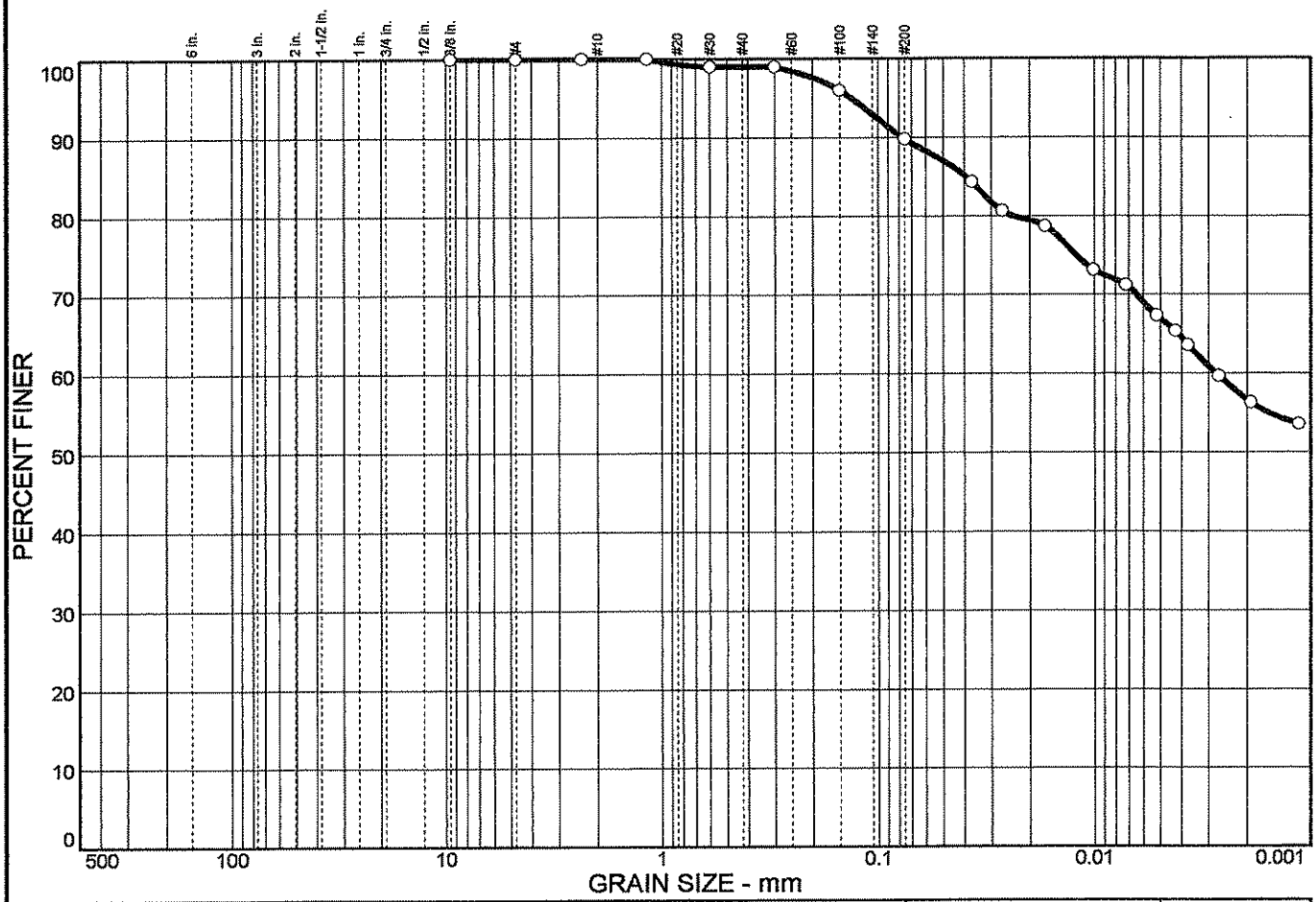
Remarks

Sample No.: 2-5 **Source of Sample:** Sinclair Frontage Road **Date:** 10/04/06
Location: **Elev./Depth:** 24'

Materials Testing, Inc.

Client: The Mission Peak Company
Project: Sinclair Frontage Road
Milpitas, CA
Project No: VV2330-001 **Report Number:** 0400-001

PARTICLE SIZE DISTRIBUTION TEST REPORT



% + 3"	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	10.2	22.9	66.9

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8 in.	100.0		
#4	100.0		
#8	100.0		
#16	100.0		
#30	99.0		
#50	99.0		
#100	96.0		
#200	89.8		

* (no specification provided)

Soil Description

Dark Brown Fat Clay

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.0394 D_{60}= 0.0028 D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= CH AASHTO=

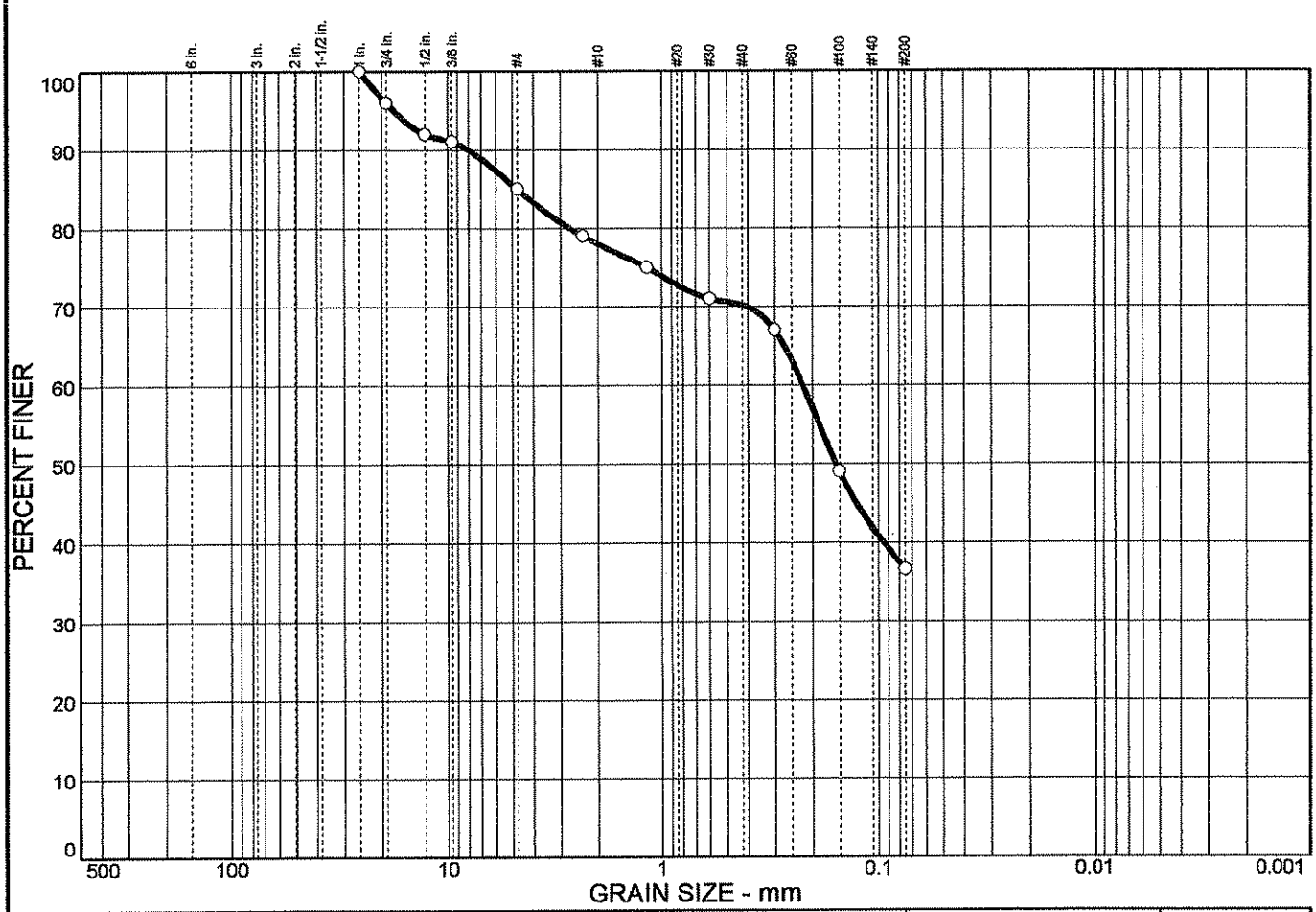
Remarks

Sample No.: 3-1b **Source of Sample:** 3-1b@3' **Date:** 9-25-06
Location: **Elev./Depth:** 3'

Materials Testing, Inc.

Client: Mission Peak Company
Project: Sinclair Frontage Road
Milpitas, CA.
Project No: VV2330 **Report Number:**

PARTICLE SIZE DISTRIBUTION TEST REPORT



% + 3"	% GRAVEL	% SAND	% SILT	% CLAY
0.0	15.0	48.4	36.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1 in.	100.0		
3/4 in.	96.0		
1/2 in.	92.0		
3/8 in.	91.0		
#4	85.0		
#8	79.0		
#16	75.0		
#30	71.0		
#50	67.0		
#100	49.0		
#200	36.6		

* (no specification provided)

Soil Description

Light Brown Clayey Sand with Gravel (Visual)

Atterberg Limits

PL= --- LL= --- PI= ---

Coefficients

D_{85}= 4.75 D_{60}= 0.222 D_{50}= 0.156
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= SC AASHTO= ---

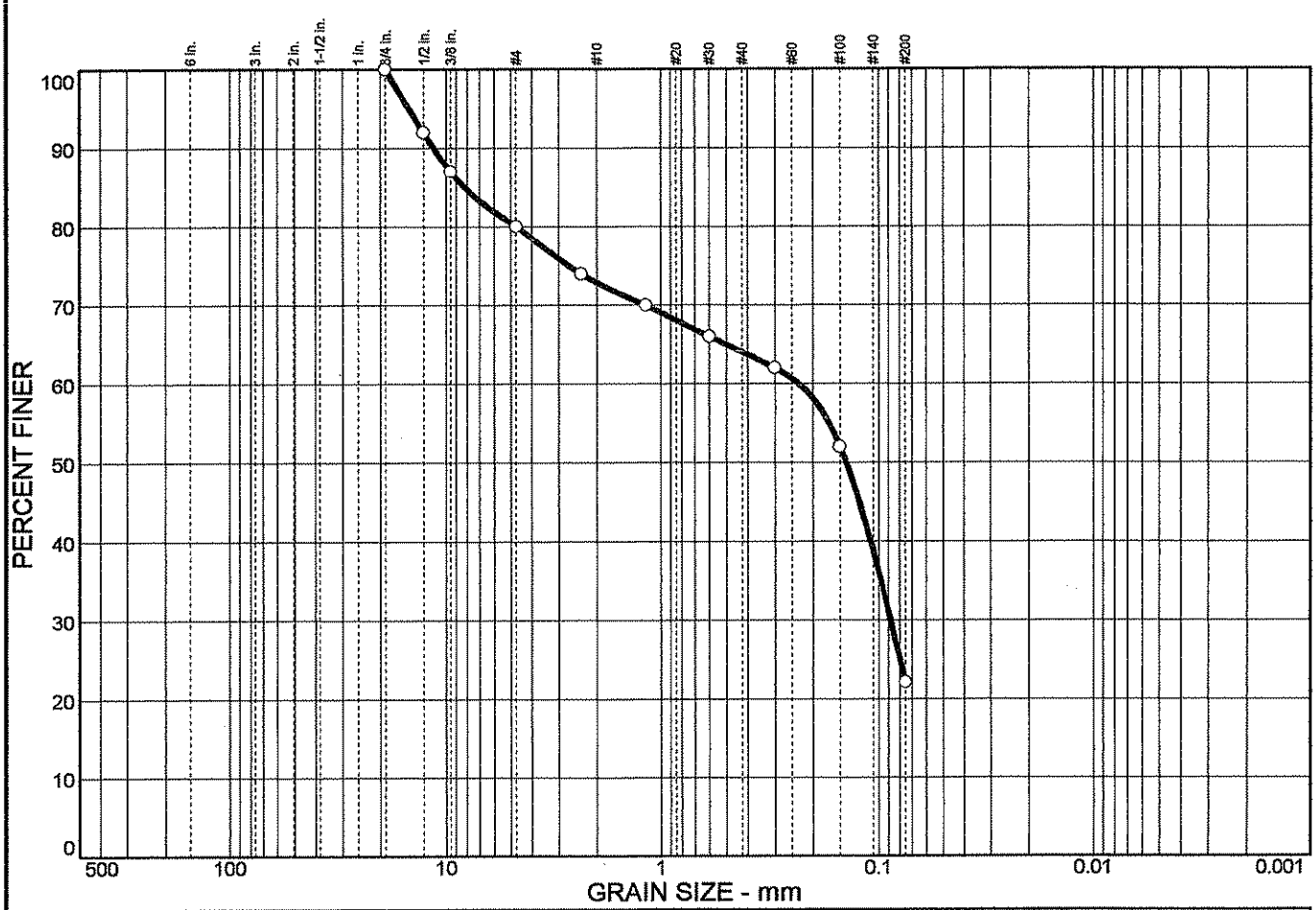
Remarks

Sample No.: 4-3 **Source of Sample:** Sinclair Frontage Road **Date:** 10/04/06
Location: **Elev./Depth:** 13'

Materials Testing, Inc.

Client: The Mission Peak Company
Project: Sinclair Frontage Road
Milpitas, CA
Project No: VV2330-001 **Report Number:** 0400-002

PARTICLE SIZE DISTRIBUTION TEST REPORT



% + 3"	% GRAVEL	% SAND	% SILT	% CLAY
0.0	20.0	57.9	22.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4 in.	100.0		
1/2 in.	92.0		
3/8 in.	87.0		
#4	80.0		
#8	74.0		
#16	70.0		
#30	66.0		
#50	62.0		
#100	52.0		
#200	22.1		

* (no specification provided)

Soil Description

Light Brown Clayey Sand with Gravel (Visual)

Atterberg Limits

PL= --- LL= --- PI= ---

Coefficients

D_{85}= 8.20 D_{60}= 0.233 D_{50}= 0.141
D_{30}= 0.0879 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= SC AASHTO= ---

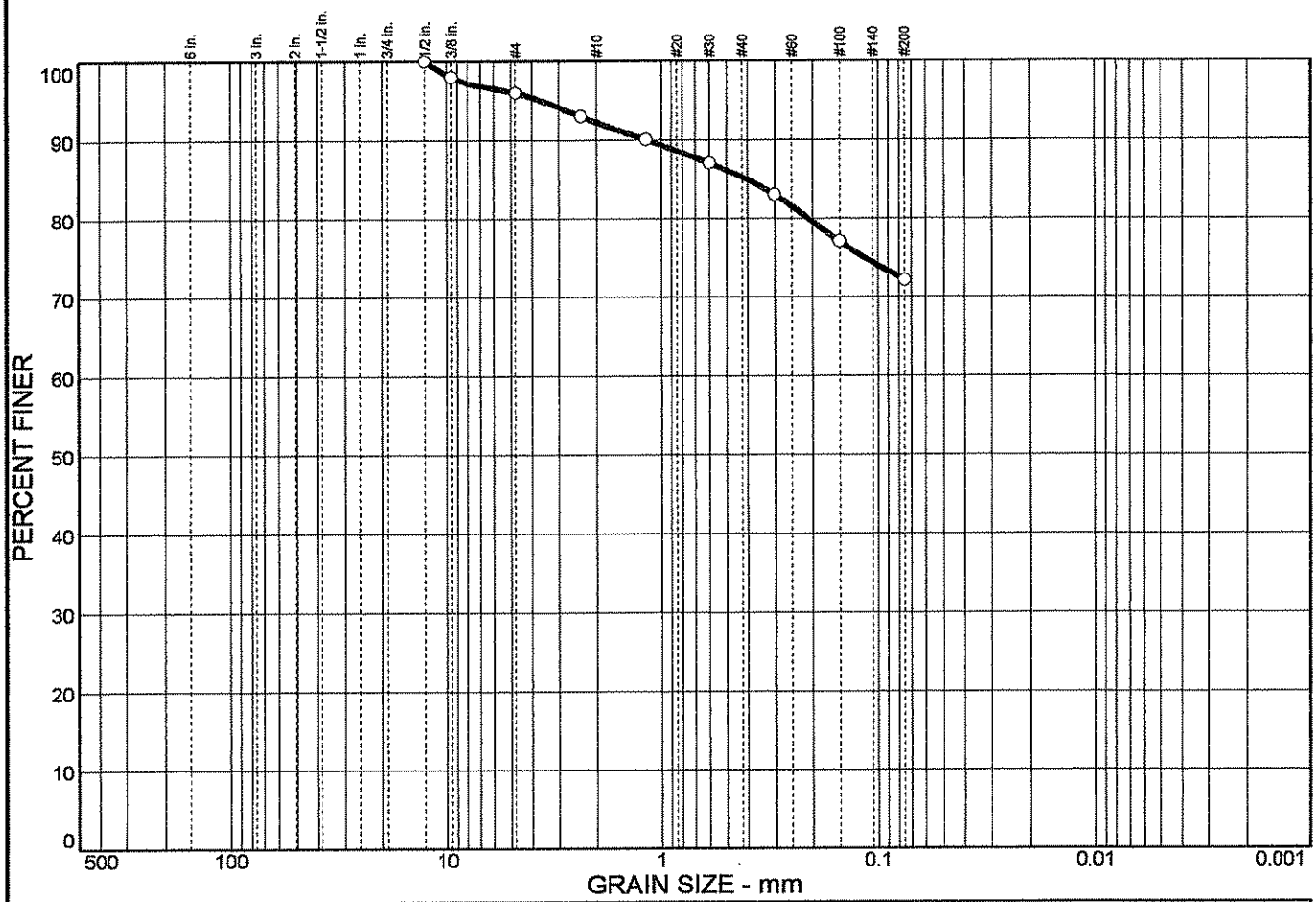
Remarks

Sample No.: 4-4 **Source of Sample:** Sinclair Frontage Road **Date:** 10/04/06
Location: **Elev./Depth:** 18.5'

Materials Testing, Inc.

Client: The Mission Peak Company
Project: Sinclair Frontage Road
Milpitas, CA
Project No: VV2330-001 **Report Number:** 0400-003

PARTICLE SIZE DISTRIBUTION TEST REPORT



% + 3"	% GRAVEL	% SAND	% SILT	% CLAY
0.0	4.0	23.9	72.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1/2 in.	100.0		
3/8 in.	98.0		
#4	96.0		
#8	93.0		
#16	90.0		
#30	87.0		
#50	83.0		
#100	77.0		
#200	72.1		

* (no specification provided)

Soil Description

Gray Sandy Clay with Gravel (Visual)

Atterberg Limits

PL= --- LL= --- PI= ---

Coefficients

D_{85}= 0.406 D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= CL AASHTO= ---

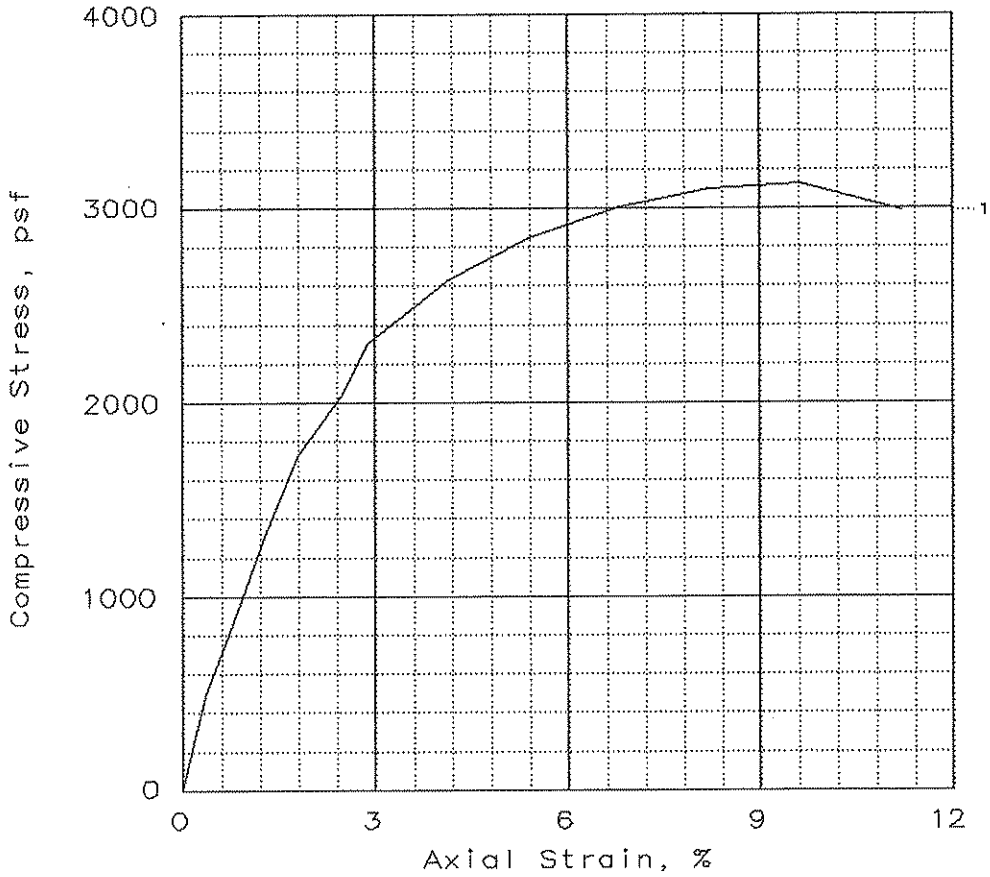
Remarks

Sample No.: 5-4 **Source of Sample:** Sinclair Frontage Road **Date:** 10/04/06
Location: **Elev./Depth:** 18.5'

Materials Testing, Inc.

Client: The Mission Peak Company
Project: Sinclair Frontage Road
Milpitas, CA
Project No: VV2330-001 **Report Number:** 0400-004

UNCONFINED COMPRESSION TEST



SAMPLE NO.:	1			
Unconfined strength, psf	3123			
Undrained shear strength, psf	1561			
Failure strain, %	9.6			
Strain rate, %/min				
Water content, % (cuttings after test)	24.9			
Wet density, pcf	122.4			
Dry density, pcf	98.0			
Saturation, %	101.6			
Void ratio	0.6242			
Specimen diameter, in	2.410			
Specimen height, in	4.720			
Height/diameter ratio	1.96			

Description: Dark Brown Fat Clay

			GS= 2.55	Type: Tube

Project No.: VV2330
Date: 9-25-06
Remarks:
Type of Failure

Shear

Report No.: ____

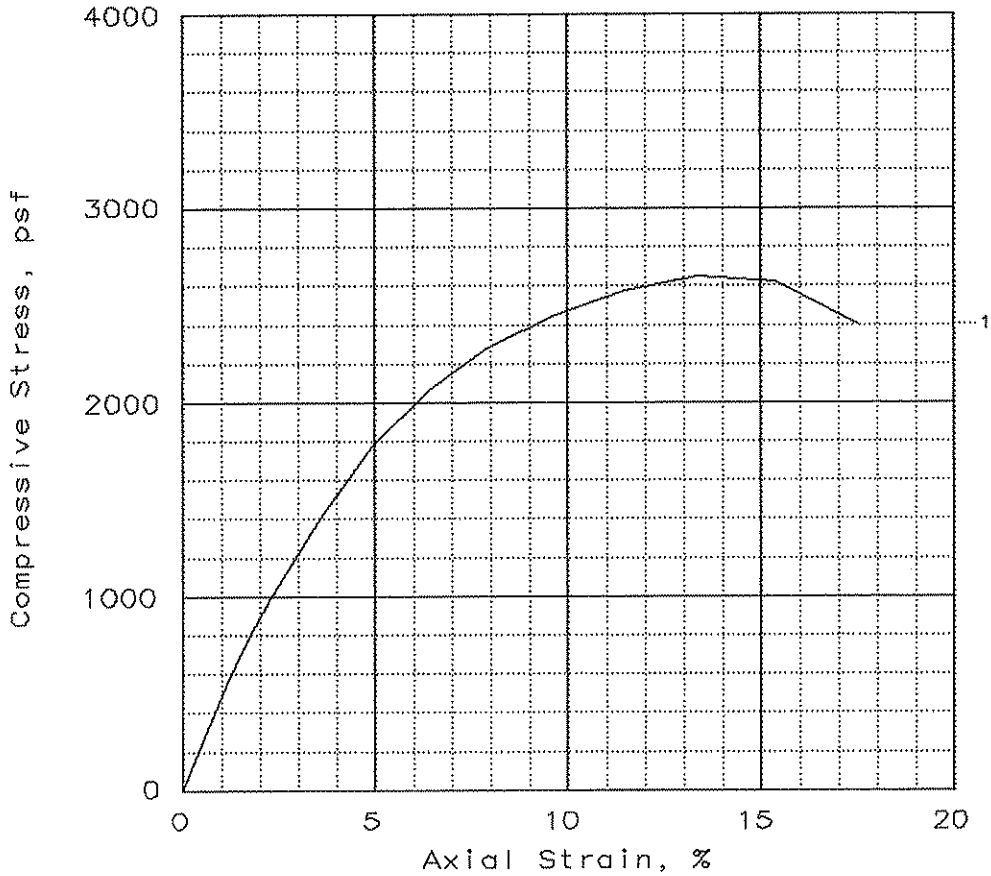
Client: Mission Peak Company

Project: Sinclair Frontage Road
Milpitas, CA.
Location: 1-1b@3'

UNCONFINED COMPRESSION TEST

MATERIALS TESTING, INC.

UNCONFINED COMPRESSION TEST



SAMPLE NO.:	1			
Unconfined strength, psf	2647			
Undrained shear strength, psf	1324			
Failure strain, %	13.4			
Strain rate, %/min				
Water content, % (cuttings after test)	22.4			
Wet density, pcf	127.9			
Dry density, pcf	104.5			
Saturation, %	103.4			
Void ratio	0.5689			
Specimen diameter, in	2.410			
Specimen height, in	4.850			
Height/diameter ratio	2.01			

Description: Light Brown Sandy Clay

GS= 2.627 | Type: Tube

Project No.: VV2330
Date: 9-25-06
Remarks:
Type of Failure

Shear

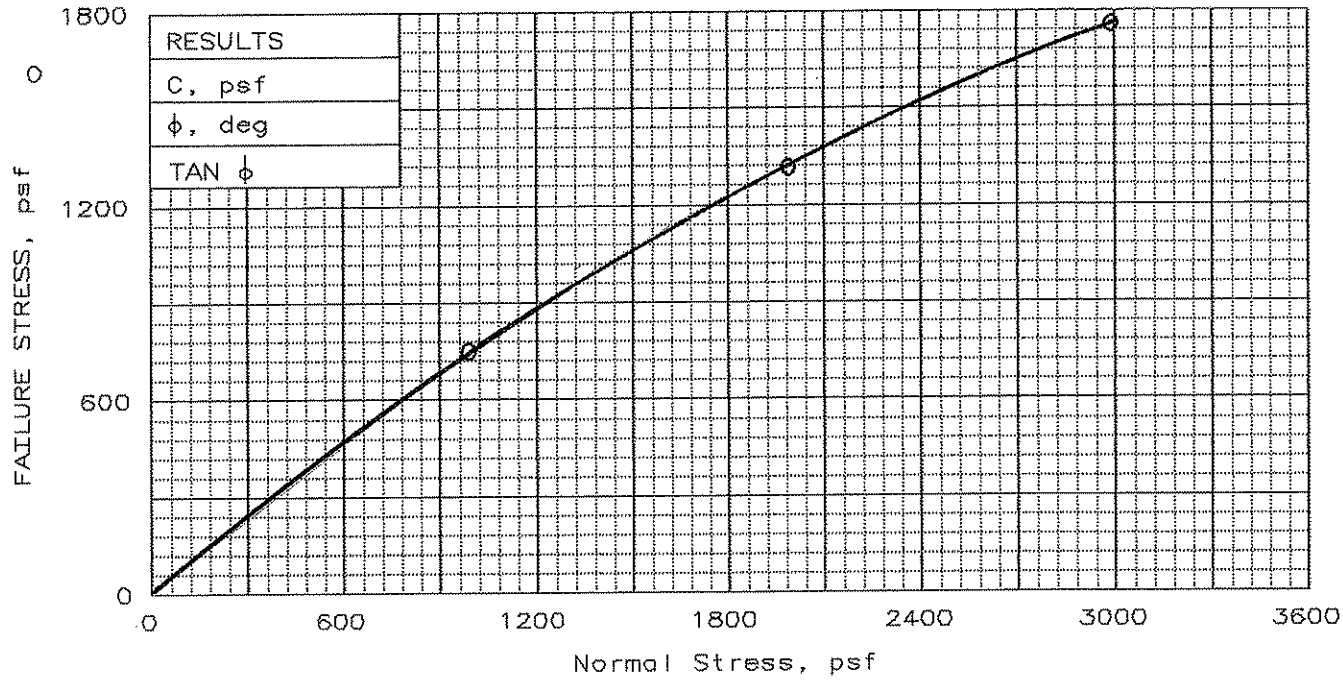
Report No.: ____

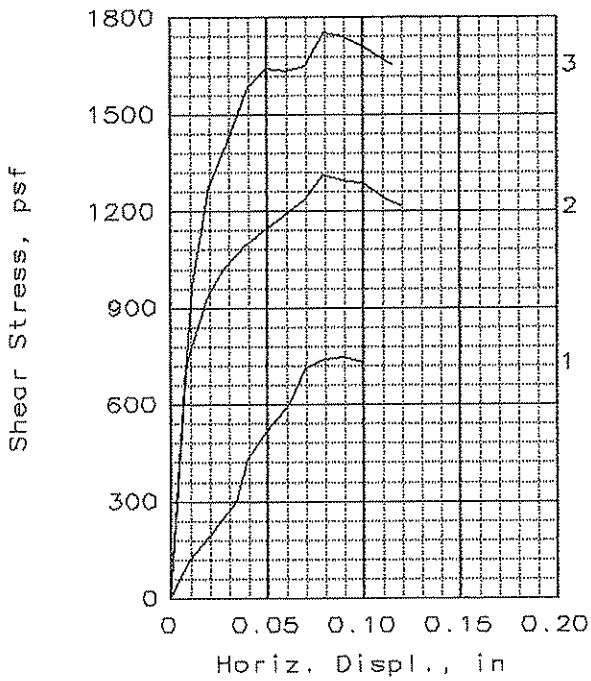
Client: Mission Peak Company

Project: Sinclair Frontage Road
Milpitas, CA.
Location: 2-3@14'

UNCONFINED COMPRESSION TEST

MATERIALS TESTING, INC.





SAMPLE NO.:		1	2	3
INITIAL	WATER CONTENT, %	25.6	25.6	25.6
	DRY DENSITY, pcf	90.8	92.6	91.4
	SATURATION, %	84.2	88.1	85.4
	VOID RATIO	0.792	0.757	0.780
	DIAMETER, in	2.410	2.410	2.410
	HEIGHT, in	1.000	1.000	1.000
AT TEST	WATER CONTENT, %	33.1	32.3	29.3
	DRY DENSITY, pcf	93.4	97.2	97.3
	SATURATION, %	116.3	124.8	113.6
	VOID RATIO	0.742	0.674	0.673
	DIAMETER, in	2.410	2.410	2.410
	HEIGHT, in	0.973	0.953	0.940
NORMAL STRESS, psf		1000	2000	3000
FAILURE STRESS, psf		748	1313	1755
DISPLACEMENT, in		0.09	0.08	0.08
ULTIMATE STRESS, psf				
DISPLACEMENT, in				
Strain rate, %/min				

SAMPLE TYPE: Tube
DESCRIPTION: Dark Brown Fat Clay

SPECIFIC GRAVITY= 2.606
REMARKS:

Report No.: _____

CLIENT: Mission Peak Company

PROJECT: Sinclair Frontage Road
Milpitas, CA.
SAMPLE LOCATION: 6-1@3'

PROJ. NO.: VV2330 DATE: 9-25-06

DIRECT SHEAR TEST REPORT

MATERIALS TESTING, INC.

Materials Testing, Inc.

8798 Airport Road
Redding, California 96002
(530) 222-1116, fax 222-1611

865 Cotting Lane, Suite A
Vacaville, California 95688
(707) 447-4025, fax 447-4143

CLIENT: Mission Peak Company
40480 Encyclopedia Circle
Fremont, CA 94538

Client No: VV2330-001
Report No: 0300-006
Date: 10/04/06

SUBJECT: Sinclair Frontage Road
Milpitas, California

Submitted by: KC Engineering

"R" VALUE TEST RESULTS (CTM-301)

Sample: Bulk A @ 0-2'
Description: Dark Brown Clay
Location: ---

SIEVE ANALYSIS

Sieve Size	2"	1-1/2"	1"	3/4"	1/2"	3/8"	#4
As Received (% Pass)							---
As Used (% Pass)							---

RESISTANCE VALUE

Specimen Number	Dry Unit Weight, PCF	Moisture (%)	Exudation Pressure (PSI)	Expansion Pressure Dial Reading & PSF		R-Value
1	85.7	33.6	---	---	---	---
2	---	---	---	---	---	---
3	---	---	---	---	---	---

R-Value @ 300 PSI Exudation Pressure = Less than 5*
R-Value @ Expansion = ---

Note: *Material extruded under mold before 800 p.s.i. attained.

APPENDIX C

Corrosion Potential to Buried Structures

CORROSION POTENTIAL

Corrosivity testing was performed on a bulk sample of the near surface soils. The purpose of our sampling was to evaluate the corrosion potential of the subsurface site soils to concrete and buried metal pipes. The sample was sealed and transported to Sunland Analytical Laboratories for testing. The soil sample was tested for the presence and concentration of water-soluble sulfates and chlorides in accordance with California Test Methods 417 and 422, respectively. The pH and minimum resistivity were determined in accordance with California Test Method 643.

The Caltrans Corrosion Guidelines[8] defines a corrosive site as one where the soil and/or water has a sulfate concentration of 2000 ppm or more, a chloride concentration of 500 ppm or more, a pH of 5.5 or less and a minimum resistivity less than 1000 ohm-cm. Based on this criteria, the soils at the site are considered to be corrosive to concrete and buried metal. According to ASTM A 674, polyethylene encasement of below grade ductile iron pipe is required.

The sulfate test results indicate "negligible" sulfate exposure to concrete per Table 19-A-4 of the 1997 Uniform Building Code (2001 CBC). Therefore, ordinary Type I/II cement is indicated to be suitable for use on the project.

KC Engineering Company is not a corrosion engineering firm. Therefore, to further define the soil corrosion potential and interpret the test results, or to design cathodic protection or grounding systems, a corrosion engineer should be consulted.

[8] California Department of Transportation Corrosion Technology Branch, Materials Engineering and Testing Services, *Corrosion Guidelines*, Version 1.0, September 2003.

Sunland Analytical
11353 Pyrites Way, Suite 4
Rancho Cordova, CA 95670
(916) 852-8557

Date Reported 09/20/2006
Date Submitted 09/15/2006

To: Jerry Pascoe
K.C. Engineering
865 Cotting Lane Suite A
Vacaville, Ca 95758

From: Gene Oliphant, Ph.D. \ Randy Horney RW
General Manager \ Lab Manager

The reported analysis was requested for the following location:
Location : VV2330\MILPITAS Site ID : BULK A (0-2').
Thank you for your business.

* For future reference to this analysis please use SUN # 48861-97332.

EVALUATION FOR SOIL CORROSION

Soil pH	7.16		
Minimum Resistivity	0.80	ohm-cm (x1000)	
Chloride	22.0 ppm	00.00220	%
Sulfate	0.4 ppm	00.00004	%

METHODS
pH and Min.Resistivity CA DOT Test #643
Sulfate CA DOT Test #417, Chloride CA DOT Test #422