IMPROVEMENT PLANS FOR
DISTRICT 2 MULTI-USE TRAIL
TAYLOR MORRISON
MILPITAS, CALIFORNIA

BENCHMARK

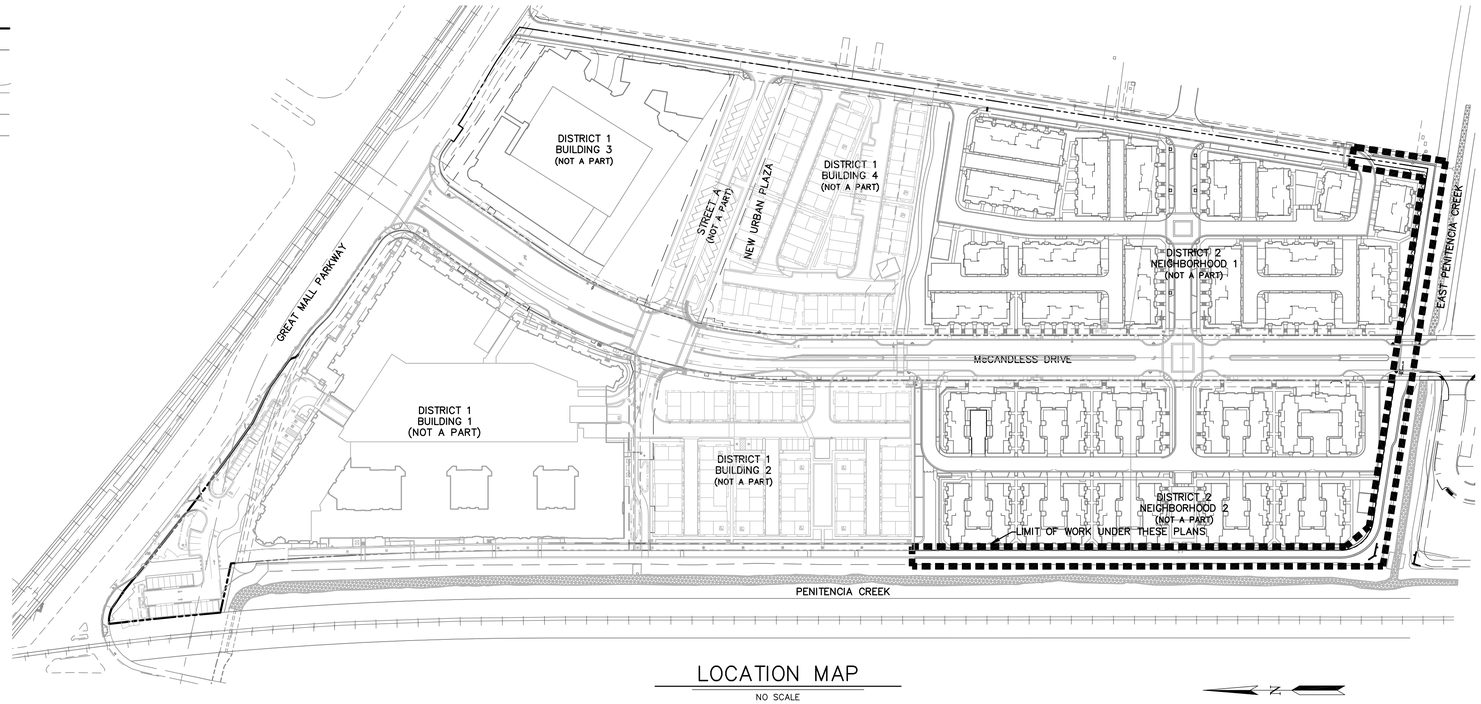
SOUTHERLY DISK IN MONUMENT WELL AT THE INTERSECTION OF ABEL STREET AND CORNING AVENUE, ELEVATION = 17.124' NGVD29 (19.864' NAVD88)

EXISTING UTILITY NOTE:

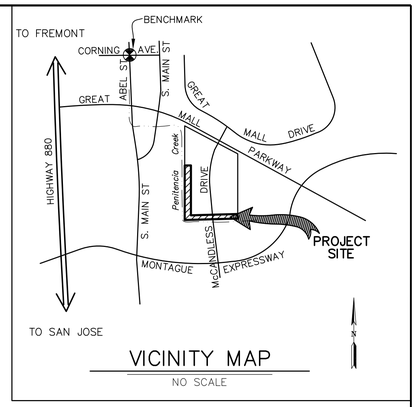
EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED UPON RECORD INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF PREPARATION OF THESE PLANS. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. THE CONTRACTOR SHALL NOTIFY UTILITY COMPANIES AT LEAST 2 WORKING DAYS IN ADVANCE OF CONSTRUCTION TO FIELD LOCATE UTILITIES. CALL UNDERGROUND SERVICE ALERT (U.S.A.), AT 1-800-227-2600. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND LOCATION

LEGEND

PROPOSED	DESCRIPTION	EXISTING
	TRACT BOUNDARY	
	LOT LINE	
	CONTOUR	
SD	PERFORATED STORM DRAIN	
	WATER	
	RECYCLED WATER	
	MANHOLE	OR
	CATCH BASIN/FIELD INLET	
	FIRE HYDRANT	
	WATER VALVE	
	AIR RELEASE VALVE	
	CONCRETE CURB/GUTTER/SIDEWALK	
2.5%	SLOPE AND DIRECTION	
	BUILDING LINE	
	ELECTROLIER	
	DIRECTION OF FLOW	
	RAILROAD TRACKS	
	CREEK	



LOCATION MAP
NO SCALE



VICINITY MAP
NO SCALE

CIVIL SHEET INDEX

SHEET NO	TITLE
1	TITLE SHEET
2	CITY GENERAL NOTES
3	MULTI-USE TRAIL PLAN
4	MULTI USE TRAIL SECTIONS
5	MULTI USE TRAIL SECTIONS
6	MULTI USE TRAIL SECTIONS
7	MULTI USE TRAIL SECTIONS
8	EROSION CONTROL
9	BEST MANAGEMENT PRACTICES

ABBREVIATIONS

AB	AGGREGATE BASE	NTS	NOT TO SCALE
AC	ASPHALT CONCRETE	O.C.	ON CENTER
ACP	ASBESTOS CEMENT PIPE	PAD	PAD ELEVATION
AD	AREA DRAIN	PAV	PAVEMENT
ARV	AIR RELIEF VALVE	PCC	PORTLAND CEMENT CONCRETE
BNDY	BOUNDARY	PL or ℄	PROPERTY LINE
BC	BEGIN CURVE	PRC	POINT OF REVERSE CURVATURE
B/C	BACK OF CURB	PRUE	PRIVATE UTILITY EASEMENT
BW	BACK OF WALK	PSI	PER SQUARE INCH
C&G	CURB & GUTTER	PSUE	PUBLIC SERVICE UTILITY EASEMENT
CL	CENTERLINE	PT	POINT
CLF	CHAIN LINK FENCE	PVC	POLYVINYL CHLORIDE PIPE
CO	CLEAN OUT	PVI	POINT OF VERTICAL INTERSECTION
DIA	DIAMETER	R	RIGHT or RADIUS
DWG	DRAWING	RCP	REINFORCED CONCRETE PIPE
DWY	DRIVEWAY	RW or R/W	RIGHT OF WAY
(E)	EAST	RET	RETURN
EC	END CURVE	S	SLOPE
ELECT	ELECTROLIER	(S)	SOUTH
ELEV	ELEVATION	(SE)	SOUTHEAST
EP	EDGE OF PAVEMENT	(SW)	SOUTHWEST
EVA	EMERGENCY VEHICLE ACCESS	SCVWD	SANTA CLARA VALLEY WATER DISTRICT
EX	EXISTING	SD	STORM DRAIN
FC	FACE OF CURB	SDAD	STORM DRAIN AREA DRAIN
FF	FINISH FLOOR	SDMH	STORM DRAIN MANHOLE
FFGF	FINISH FLOOR FRONT OF GARAGE	SAD	SEE ARCHITECTS DRAWINGS
FGI	FLAT GRATE INLET	SLD	SEE LANDSCAPE DRAWINGS
FH	FIRE HYDRANT	SPD	SEE PLUMBING DRAWINGS
FI	FIELD INLET	SSD	SEE STRUCTURAL DRAWINGS
FL	FLOW LINE	SS	SANITARY SEWER
GB	GRADE BREAK	SSLAT	SANITARY SEWER LATERAL
GR	GRATE	SSMH	SANITARY SEWER MANHOLE
HOA	HOMEOWNERS' ASSOCIATION	STA	STATION
HP	HIGH POINT	STD	STANDARD
IMP	IMPROVEMENTS	SWK	SIDEWALK
INV	INVERT	TC	TOP OF CURB
IRR	IRRIGATION	TDC	TOP OF DEPRESSED CURB
JT	JOINT TRENCH	TFC	TOP FLUSH CURB
L	LEFT	TSC	TOP OF CURB & SPILL GUTTER
LF	LINEAR FEET	TVC	TOP OF VERTICAL CURB
LP	LOW POINT	TYP	TYPICAL
MAX	MAXIMUM	VC	VERTICAL CURB
MIN	MINIMUM	W	WATER
(N)	NORTH	(W)	WEST
(NE)	NORTHEAST	WSER or WM	WATER SERVICE
NO.	NUMBER		

SCOPE OF WORK

1. DISTRICT 2 MULTI-USE TRAIL GRADING AND SURFACE IMPROVEMENTS.

CITY OF MILPITAS STANDARD DETAILS

DWG. NO.	CITY OF MILPITAS DESIGN STANDARD
464	FLAT GRATE STORM INLET

UNDERGROUND SERVICE ALERT
1 (800) 227-2600
CALL BEFORE YOU DIG

LOCATION OF UTILITIES

LOCATION OF UTILITIES SHOWN IS ONLY APPROXIMATE. DETERMINATION OF THE ACTUAL LOCATION IS THE RESPONSIBILITY OF THE CONTRACTOR.

U.S.A. 1-800-227-2600

SOILS ENGINEER: These plans have been reviewed and found to be in substantial conformance with the intent and purpose of the geotechnical exploration report dated _____, _____, prepared by _____.

Date

Firm: _____

Address: _____

Telephone: _____

CIVIL ENGINEER: I hereby declare that I am the engineer of work for this project, that I have exercised responsible charge over the design of the project as defined in section 6703 of the business and professions codes, and that the design is consistent with current standards. The design shown hereon is necessary and reasonable and does not restrict any historic drainage flows from adjacent properties nor increase drainage to adjacent properties. The design includes principles and techniques to reduce quantity and improve the quality of storm water runoff, as required by NPDES. I understand that the check of project drawings and specifications by the City of Milpitas is confined to a review only and does not relieve me, as engineer of work, of my responsibilities for project design.

SIGNATURE DATE FIRM

Address: _____

Telephone: _____

REGISTERED PROFESSIONAL ENGINEER
JORGE M. DURAN
C-59978
CIVIL
STATE OF CALIFORNIA

RJA
RUGGERI-JENSEN-AZAR
ENGINEERS ▪ PLANNERS ▪ SURVEYORS
8055 CAMINO ARROYO GILROY, CA 95020
PHONE: (408) 848-0300 FAX: (408) 848-0302

RECOMMENDED FOR APPROVAL:

Planning _____ Date _____

Fire _____ Date _____

Building _____ Date _____

Record Drawings

To be competed prior to acceptance of work by the City

Signature + Seal Date

P.E. No. ____ Exp. ____

Public Works Inspector: _____

No.	Revisions	City Engr.	Aprv.	Date

NOT FOR CONSTRUCTION
2nd SUBMITTAL
NOVEMBER 12, 2014

CITY OF MILPITAS
ENGINEERING DIVISION

Approved:

City Engineer Date

Any changes to this plan shall be approved by the City Engineer

Project No. 0720230-5000

Sheet 1 of 9

GENERAL NOTES

CITY OF MILPITAS STANDARD GENERAL NOTES

1. All work and materials shall comply with standard specifications, construction details, and standard drawings (listed on sheet 1) of the City of Milpitas available in the City Engineer's office. It is the responsibility of the contractor to obtain permits necessary to perform the improvements in these plans from the appropriate agencies and to comply with the agencies' requirements. All plans shall be prepared on City's Improvements Title Block. The contractor must comply with all applicable national, state and local laws.

2. Plans used for construction of public facilities purposes must be signed by the City Engineer or his representative. Any subsequent changes shall be approved by the City Engineer or his representative prior to their construction.

3. The official copy of these plans are on file in the office of the City Engineer in Milpitas.

4. This plan is subject to review and subsequent approval in the event the work has not commenced within six (6) months of the date of plan approval.

5. All utilities and improvements that become damaged during construction shall be completely restored to the satisfaction of the City Engineer.

6. A $2000 deposit shall be made to the City of Milpitas and a construction water meter shall be obtained for incidental water used during grading and roadway construction. Water meter(s) shall be installed for incidental water use during building(s) construction and pressure test of water line within the building(s).

7. The Contractor shall notify Underground Service Alert (U.S.A.) at (800) 227–2600 48 hours prior to any construction activities, and obtain a reference number.

8. Prior to any construction or installation of public facilities, the developer's engineer shall arrange a pre–construction conference between the contractors and the City Public Works Inspector. This shall take place a minimum of seven (7) days prior to the scheduled start of work. At the conference, the developer's engineer shall present the Public Works Inspector with a certified copy of a material list and specifications for installation. Prior to the installation, approval by the City Engineer is required of any non–standard materials. Any non–standard materials shall be demonstrated by the developer's engineer and contractor to equal or exceed City standards.

9. The contractor shall call City of Milpitas Public Works Facilities Inspection at (408) 586–2884 to schedule inspections, 48 hours prior to the start of construction.

10. Prior to any work, the contractor shall obtain a City Business license and a Public Works Construction or Encroachment Permit.

11. The Contractor is responsible for the preservation and/or perpetuation of all existing monuments and stakes within the Contractor's area of work. The Contractor shall not disturb or remove any monuments or stakes without the permission of the City Engineer, and he shall bear the expense of resetting any monuments or stakes which may be disturbed or removed with or without permission. The Contractor shall provide a minimum of 15 Working days notice to the City Engineer prior to disturbance or removal of existing monuments or stakes. The Contractor shall utilize the services of a California Licensed Land Surveyor to reset all disturbed or removed monuments and stakes or provide witness monuments, and file the required documentation with the County Surveyor pursuant to the Business and Professions Code Section 8771.

12. When it is found that field conditions are not as shown on the plans, the Consulting Engineer shall make revisions and/or adjustments to the satisfaction of the City Engineer prior to further construction.

13. Upon completion of improvements, the developer's engineer shall submit a letter to the City Engineer certifying that those privately maintained improvements (street, lighting, utilities, etc.) have been constructed per the improvement plans.

14. Developer shall coordinate with Pacific Gas and Electric Company for the design and installation of all gas and electric facilities.

15. Developer shall coordinate with AT&T for the design and installation of all Telephone facilities.

16. Construction shall not begin until 7 AM and shall end by 7 PM, weekdays and weekends. No work is allowed on official City holidays.

17. A National Pollution Discharge Elimination System Permit (NPDES construction permit) is required prior to commencement of construction activity related to this site and shall be obtained by the Owner and/or Owner's Contractor as appropriate. Any discharge (during construction) or groundwater into the downstream storm system must be uncontaminated. The Contractor shall make this determination prior to any discharge.

18. If archaeological materials are uncovered during grading, trenching or other excavation, earthwork within 100' of this area shall be stopped until a professional archaeologist who is certified by the Society of California Archaeologist (SCA) or the Society of Professional Archaeologist (SOPA) has had an opportunity to evaluate the significance of the find and suggest appropriate mitigation measures, if they are deemed necessary.

19. Record drawings original plans, including a copy of the AutoCAD files (digital format) shall be furnished to the City Engineer within sixty (60) days of the completion of construction and prior to initial acceptance of public improvements.

20. All grading shall comply with City of Milpitas Grading Ordinance, this plan, the Geotechnical Report "Multi–Use Trail – District 2," prepared by ENGEO, Incorporated dated August 23 2013. The recommendation letter "Decomposed Granite Trail Surface Recommendations" prepared by ENGEO, Incorporated dated October 31, 2014 and all subsequent addendums.

21. City approval of plans does not relieve the developer from his/her responsibility to correct errors and omissions discovered during construction. Upon request, any required plan revisions shall be promptly submitted to the City Engineer for approval.

22. A water valve shall be installed for each residential or commercial area after the meter and prior to entry of the building such that it is accessible to homeowner and City Meter Reader. Ownership/Maintenance by City of Milpitas. Plan Check and insepction by City of Milpitas and Santa Clara Valley Water District (SCVWD).

23. The following entities shall be responsible for inspection and maintenance/ownership of the listed facilities and completion certificate by design engineer(state ownership's name and inspection by P.W. inspection or Build. Div.):

24. Each parcel shall have separate solid waste enclosure and Allied Waste service. Unless, necessary agreements have been recorded to provide for joint use of enclosure and or Allied Waste services for more than one parcel.

GRADING NOTES

1. Permittee shall notify the City of Milpitas 2 working days before the start of grading. (408) 586–2884

2. The permittee must maintain the streets, sidewalks, and any other public rights–of–way in a clean, safe, and usable condition. Any spill of soil, rock or construction debris must be removed from publicly owned property during construction and upon completion of the project.

3. All grading shall comply with City of Milpitas Grading Ordinance, this plan, and the Geotechnical Report "Multi–Use Trail – District 2" prepared by ENGEO, Incorporated dated August 23, 1013. The recommendation letter "Decomposed Granite Trail Surface Recommendations," prepared by ENGEO, Incoporated dated October 31 2014 and all subsequent addendums. All grading work shall be done under the observation of the Geotechnical Engineer. The Geotechnical Engineer shall be notified 48 hours before the start of any grading. (408) 574–4900.

4. All deleterious materials, i.e., lumber, logs, brush, or any other organic materials or rubbish shall be removed from all areas to receive compacted fill.

5. Unsuitable materials, such as topsoil, weathered bedrock, etc., shall be removed as required by soils engineer (and engineering geologist, where employed) from all areas to receive compacted fill or drainage structure.

6. All fill areas shall be cleaned of all vegetation and debris, scarified to a minimum depth of 12 inches and inspected by the soils engineer prior to the placing of fill.

7. All existing creek bank and new cut slopes shall be investigated, both during and after grading by the soils engineering, to determine if any slope stability problem exists. Should excavation disclose any geological hazards, the soils engineer shall recommend necessary treatment to the City Engineer for approval.

8. All cut and fill slopes are 3:1 max (H:V) unless shown otherwise on this plan.

9. The existing topography shown on these plans is based on an aerial/ground survey prepared by Aerogeodetic Corporation dated May 2006 and supplemented with field surveys. The contours shown on this plan represent ground elevations as determined at the time of said surveys.

10. The Contractor shall be responsible to confirm ground elevation and overall topography of the site prior to the start of construction. Based on his field reconnaissance, these plans, and the geotechnical report, the Contractor shall estimate the earthwork quantities to his satisfaction prior to the start of construction, and shall dispose of excess material or provide for the acquisition of import material as required to complete the grading as shown on this plan. No additional compensation will be made for any export or import required, except as provided in the bid documents.

11. Should additional revisions to the grading plans be required to facilitate the Contractor's operation, Ruggeri–Jensen–Azar shall be compensated for such additional revisions.

12. During final grading for trail subgrade, the Contractor shall compact the subgrade to 90% R.C. at a moisture content of at least 3% above optimum per ASTM D 1557. Aggregate base shall be compacted to 95% R.C. per ASTM D 1557, and per the Geotechnical Engineer's recommendations.

13. Any abandoned underground pipes exposed during construction shall be removed or adequately plugged, or a combination of both in accordance with the requirements of the City of Milpitas Building Division, and Geotechnical recommendations.

14. All exposed or disturbed soil surfaces shall be watered as necessary, but not less than twice daily to control dust. Areas of digging and grading operations shall be consistently watered to control dust. Grading or other dust–producing activities shall be suspended during periods of high wind when dust is readily visible in the air. Stockpiles of soil, debris, sand, or other dust–producing materials shall be watered or covered. The construction area and the surrounding streets shall be swept (no water) as necessary, but not less than twice daily.

15. Earthwork quantities shown on this plan are approximate estimated quantities and are furnished for information only. The quantities have been calculated from existing ground elevations, based on the topography referenced above, to the grades shown on these plans. The actual amount of earth moved will vary depending on compaction, consolidation, stripping, and the Contractor's method of operation.

Earthwork Summary

Item	Estimated Quantity
Site Cut	950± CY
Site Fill	40± CY
Export	910±CY

- Compaction, consolidation and shrinkage factors for on–site materials are not incorporated in the above quantities. Actual quantities moved in the field for this project will vary depending on the actual soils encountered, the Contractor's method of operation, etc. Earthwork calculations are based on approximate existing ground to bottom of base section, scary section is excluded..

PROJECT NOTES

1. Developer: Taylor Morrison – Bay Area Division
5000 Executive Parkway, Ste. 175
San Ramon, CA 94583
(916) 932–0980
Contact: Jay Pawlek

City of Milpitas: Engineering Department
455 E. Calaveras Blvd.
Milpitas, California 95035
(408) 586–3329
Fax (408) 586–3293
Contact: Patrick Dobbins

Civil Engineer: Ruggeri–Jensen–Azar & Associates
8055 Camino Arroyo
Gilroy, California 95037
(408) 848–0300
Fax (408) 848–0302
Contact: Jorge Duran

Geotechnical Engineer: ENGEO Incorporated
6399 San Ignacio Ave., Suite 150
San Jose, CA 95119
(408) 574–4900
Fax (888) 279–2698
Contact: Andrew Firmin

2. The Contractor shall notify Ruggeri–Jensen–Azar & Associates two working days prior to the need for construction survey stakes. Cut sheets are to be supplied to the Public Works Department or Engineering Department 24 hours prior to construction relating to the cut sheets.

3. The Contractor shall be held responsible for any field changes made without written authorization from the City Engineer.

4. Benchmark:
The southern disk in monument well at the intersection of Abel Street and Corning Avenue, levation=17.124' NGVD29 (19.864' NAVD88)

5. The Contractor is responsible for matching existing streets, surrounding landscape, and other improvements with a smooth transition in paving, curbs, gutters, sidewalks, and grading. Abrupt or apparent changes in grades or cross slopes shall ne avoided.

8. The location, depth and existence of underground improvements are shown in their approximate positions based upon information available to the engineer. The contractor shall excavate inspection holes "pot holes" and determine the location and depth of all underground structures and utilities that are in the vicinity of and/or may be affected by the proposed improvement work prior to any construction work.

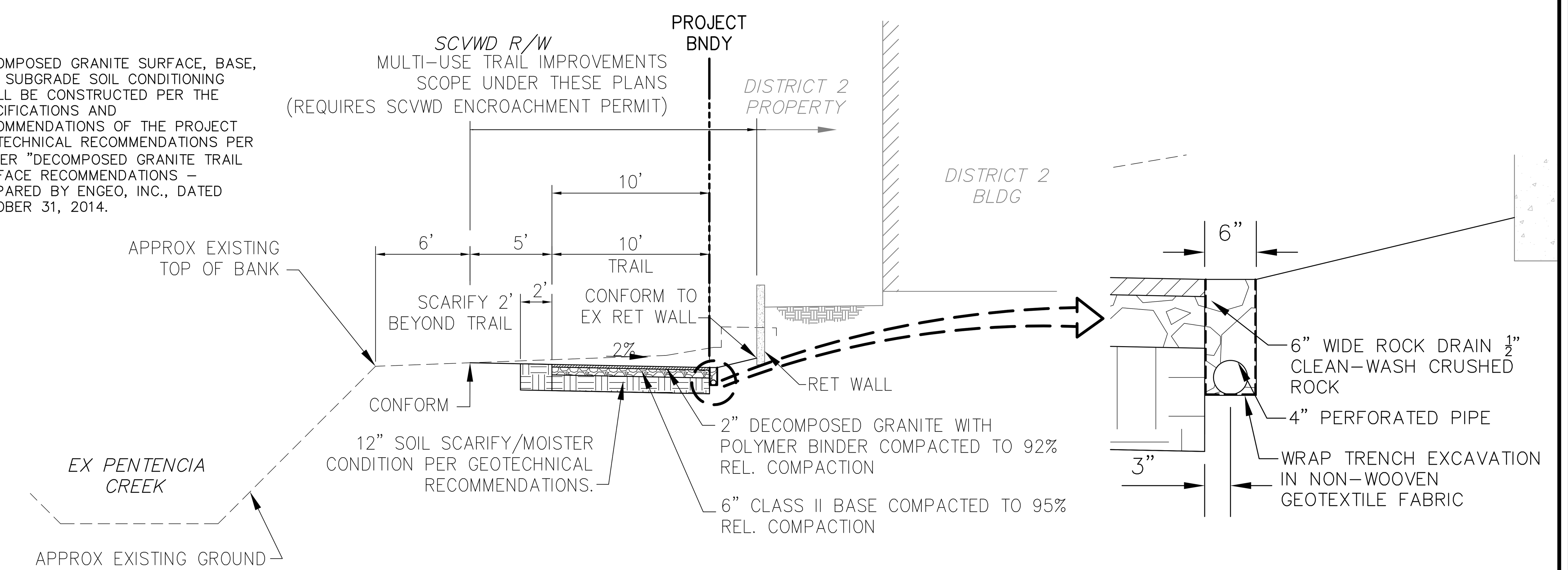
9. The contractor is responsible for performing locate services for those facilities installed by the contractor until such time as the work has been officially accepted by the City of Milpitas. The marking, labeling, and timing of such locates shall be in conformance with the requirements of Underground Service Alert.

DECOMPOSED GRANITE (DG) PAVEMENT NOTES

1. The DG is installed in a manner similar to that for hot mix asphalt mixtures using asphalt paving equipment and tools. Binder Emulsion: DG using the RPBE shall have a record of Marshall Stability test results where mixtures exceeded 10,000 pound stabilities when tested at 140°F (60°C) temperature, TSRST test results where finished mixtures demonstrated all of the low temperature performance criteria down to a temperature of –18.4°F (–28°C), and Resilient Modulus test results in accordance with ASTM D–4123 test methods demonstrating layer equivalency equal or better than conventional hot mix asphalt. See "Decomposed Granite Trail Surface Recommendations," prepared by ENGEO, Incorporated dated October 31, 2014 for DG recommendations.
2. The DG shall be NaturalPAVE® XL Resin Pavement™ Mixture as manufactured by Soil Stabilization Products Company, Inc., (SSPCo), Merced, CA (209) 383– 3296 or (800) 523–9992, no known acceptable equal.
3. The DG shall be cold–manufactured, cold–applied, display the natural coloration and texture of the aggregate material used in the mix formulation, and be suitable for vehicular and pedestrian traffic and with high strength such as that exhibited by hot mix asphaltic concrete mixtures. The DG shall have a documented record of having performed as well or better than asphalt pavement in both wet and dry Rotational Penetrometer test evaluation of Firmness and Stability for use as an accessible outdoor surface.
4. Tack Coat: Same as NaturalPAVE XL Resin Pavement Binder Emulsion for DG. Uniformly mix 1 part RPTC with 1 part water. Resin: Same as NaturalPAVE XL Resin Pavement Binder Emulsion for DG. Uniformly mix 1 part RPFS with 4 parts water.
5. DG shall not be applied when it is raining or when rain is expected. Weather forecasts should indicate no rain during application procedures and for at least 24 hours following application. The ambient temperature must be above 16 degrees C (60 degrees F) for application of DG unless otherwise approved in writing by the DG manufacturer. The same weather limitations apply to the application of fog seal.
6. The DG shall be placed using a self–propelled mechanized spreading and finishing machine equipped with a screed or strike off assembly. The DG shall be compacted with a self–propelled tandem smooth drum. It is the responsibility of the installer to review the suitability of all compaction equipment for project specific requirements and to operate the equipment so as not to damage the pavement mat during installation procedures.
7. For areas where the finished compacted depth of the RP is 3 inches or less, place DG in one lift. If tack coat is required, clean surface of first DG or hot mix asphalt placement lift of any debris or track on and apply tack coat no more than 10 minutes ahead of DG placement operations. Apply tack coat at rate of 0.05 gallon RPTC per square yard.
8. Perform initial compaction with self–propelled tandem smooth drum rollers of 1 to 2 tons capable of operation in both static and vibratory modes. Compaction shall be done similar to AC pavement placment.
9. Perform final compaction with self–propelled tandem smooth drum rollers. Make no less than 5 complete rolling passes, forwards and backwards on all areas of pavement installation, while moving continuously across and overlapping each previous pass. Do not over roll the pavement installation. Once final compaction effort has produced a pavement mat that is compressed, uniformly shaped and textured, free of roller marks and surface deformities, and meeting grade and smoothness specifications, no further compaction is required. The minimum number of compaction passes to achieve these goals is specified.
10. Apply fog seal to surface of completed RP surface course not earlier than 24 hours and not later than 48 hours following final compaction. The contractor shall verify the newly placed pavement is adequately cured to support the fog seal distribution equipment before commencing the fog seal application. Protect pavement surface against track on of dirt and mud until fog coat application has been completed.
11. Apply fog seal at rate of 0.02 to 0.04–gallon of RPFS per square yard. Protect pavement surface against track on of dirt and mud until fog coat application has been completed.
12. Apply fog seal using pressurized distribution equipment that is designed, equipped, maintained, and operated in such a manner that Fog Seal may be applied uniformly at variable widths.
13. Allow fog sealed surface to dry for at least 48 hours prior to allowing traffic on pavement. Wind, temperature, humidity, and pavement surface absorbency affect drying and curing rates.
14. Restrict access following fog seal application until pick–up on tires will not occur.
15. Finished Surface Smoothness of RP surface course: Maximum ¼ inch variation from a 10–foot long straight edge laid parallel to the road center lines, except at intersections, grade breaks and tie–in points to adjacent pavements and hard surfaced pedestrian walking paths.

NOTES:

1. DECOMPOSED GRANITE SURFACE, BASE, AND SUBGRADE SOIL CONDITIONING SHALL BE CONSTRUCTED PER THE SPECIFICATIONS AND RECOMMENDATIONS OF THE PROJECT GEOTECHNICAL RECOMMENDATIONS PER LETTER "DECOMPOSED GRANITE TRAIL SURFACE RECOMMENDATIONS – PREPARED BY ENGEO, INC., DATED OCTOBER 31, 2014.



TYPICAL SECTION STATION (10+49±–17+60±,18+59–19+09±)

NO SCALE

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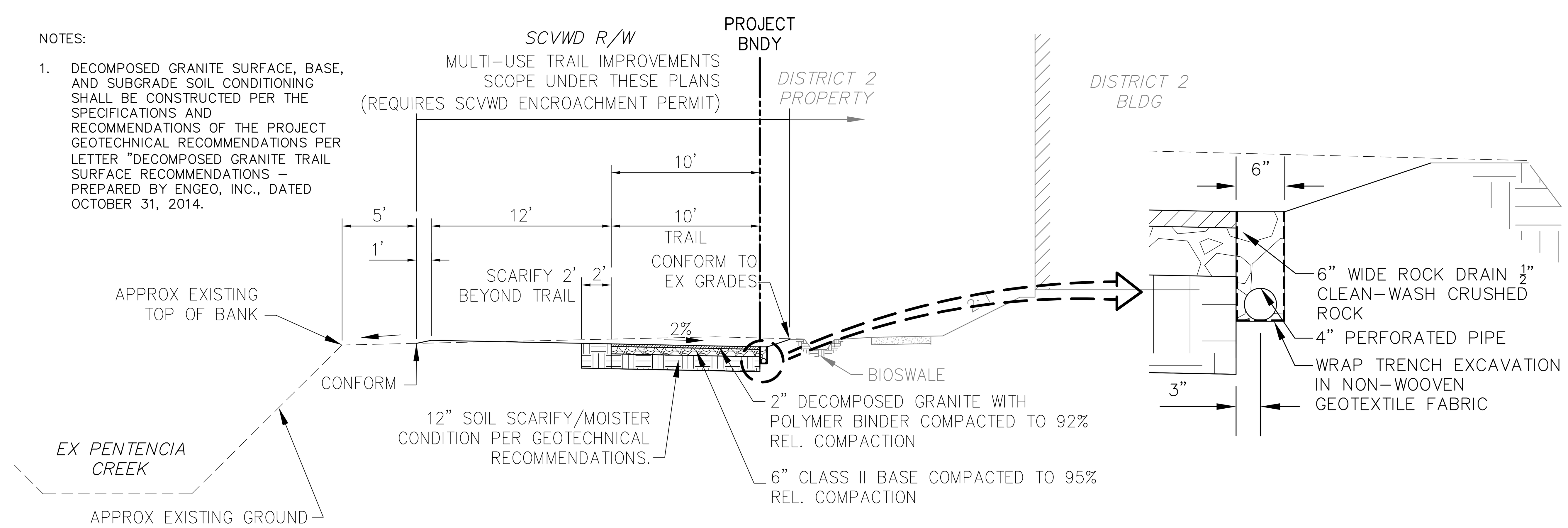


TYPICAL SECTION STA (17+60–18+59, 19+09–24+04)

NO SCALE

RUGGERI-JENSEN-AZAR
ENGINEERS • PLANNERS • SURVEYORS
8055 CAMINO ARROYO GILROY, CA 95020
PHONE: (408) 848–0300 FAX: (408) 848–0302

REGISTERED PROFESSIONAL ENGINEER
JORGE M. DURAN
C-59978
CIVIL
STATE OF CALIFORNIA

Record Drawings
To be completed prior to acceptance of work by the City

Signature & Seal ____ Date
P.E. No. ____ Exp. ____
Public Works Inspector: ____
Public Improvements initially Accepted by the City Council on: ____

REVISIONS

Num.	Date	By	Description	City Engr. Aprv.	Date

NOT FOR CONSTRUCTION
2nd SUBMITTAL
NOVEMBER 12, 2014

CITY OF MILPITAS
ENGINEERING DIVISION

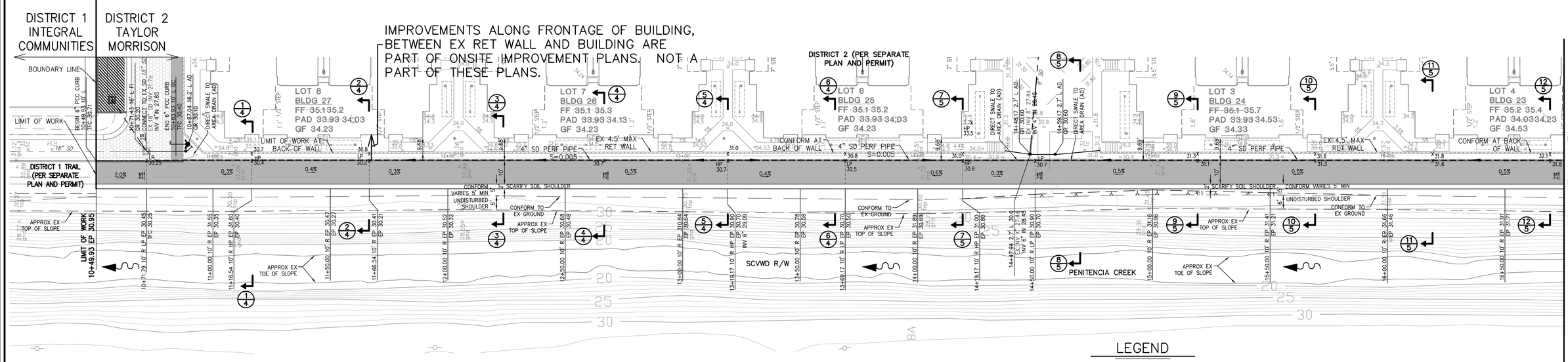
APPROVED:

CITY ENGINEER ____ DATE
ANY CHANGES TO PUBLIC IMPROVEMENTS SHALL BE APPROVED BY THE CITY ENGINEER
RECOMMENDED FOR APPROVAL:
FIRE DEPT. ____ DATE: ____
ENGINEERING ____ DATE: ____

DISTRICT 2 MULTI–USE TRAIL
IMPROVEMENTS AND GRADING PLANS
CITY GENERAL NOTES
MILPITAS, CALIFORNIA

FOR: TAYLOR MORRISON
NOVEMBER 12, 2014

JOB NO. 072030-5000
FILE NO.
SCALE: NONE
SHEET
2
OF 9 SHEETS



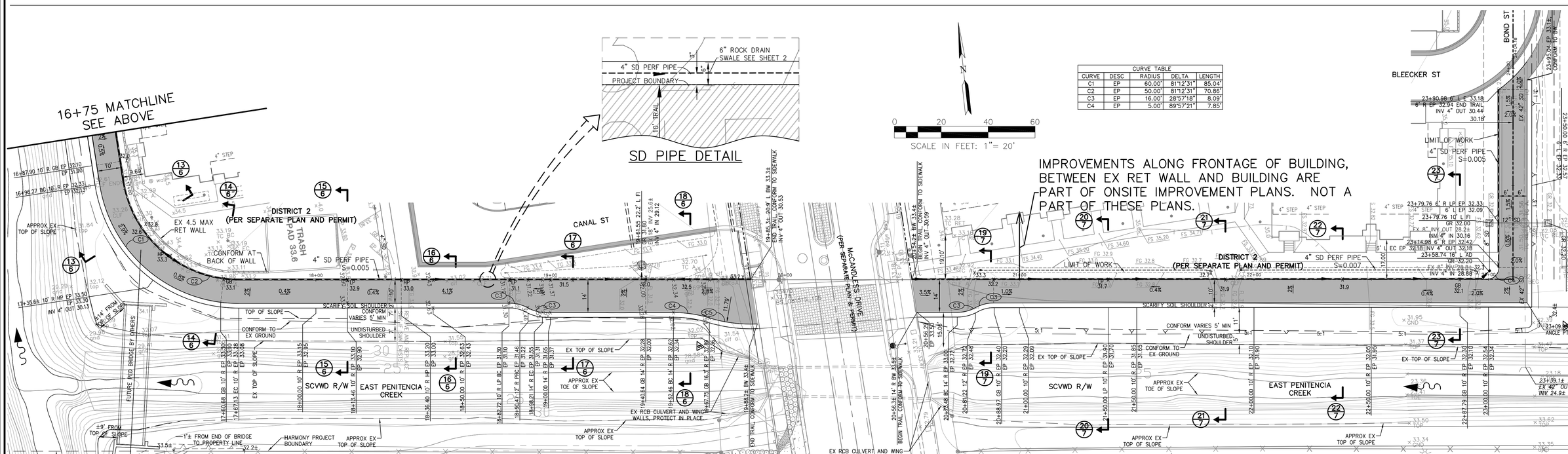
MULTI-USE TRAIL PLAN
SCALE: 1"=20'

LEGEND

DESCRIPTION

10' WIDE DECOMPOSED GRANITE WITH POLYMER BINDER. SEE GEOTECHNICAL REPORT FOR RECOMMENDATIONS.

SCALE IN FEET: 1"= 20'



CURVE TABLE				
CURVE	DESC	RADIUS	DELTA	LENGTH
C1	EP	60.00'	81°12'31"	85.04'
C2	EP	50.00'	81°12'31"	70.86'
C3	EP	16.00'	28°57'18"	8.09'
C4	EP	5.00'	89°57'21"	7.85'

MULTI-USE TRAIL PLAN
SCALE: 1"=20'

RJA
RUGGERI-JENSEN-AZAR
ENGINEERS • PLANNERS • SURVEYORS
8055 CAMINO ARROYO GILROY, CA 95020
PHONE: (408) 848-0300 FAX: (408) 848-0302

REGISTERED PROFESSIONAL ENGINEER JORGE M. DURAN C-59978 CIVIL STATE OF CALIFORNIA

Record Drawings
To be completed prior to acceptance of work by the City

Signature & Seal Date
P.E. No. Exp.
Public Works Inspector:
Public Improvements initially Accepted by the City Council on:

REVISIONS

Num.	Date	Description	City Engr. Aprv.	Date

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APPROVED:
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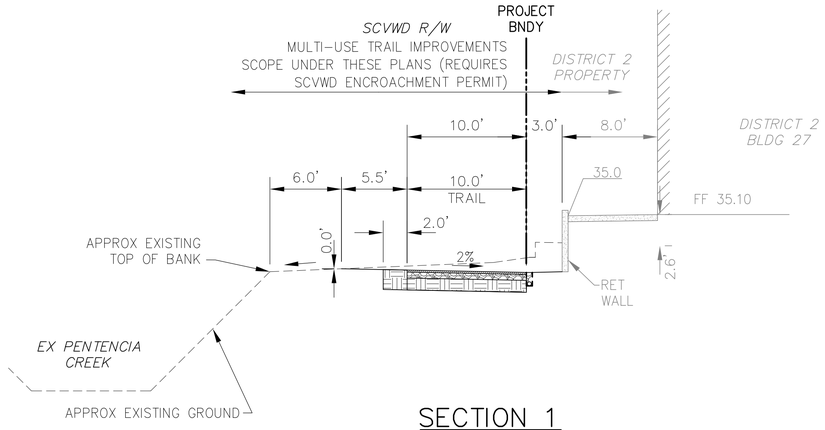
RECOMMENDED FOR APPROVAL:
FIRE DEPT. DATE:
ENGINEERING DATE:

DISTRICT 2 MULTI-USE TRAIL
IMPROVEMENTS AND GRADING PLANS
MULTI-USE TRAIL PLAN – 10+50 TO 16+75
MILPITAS, CALIFORNIA
FOR: TAYLOR MORRISON NOVEMBER 12, 2014

JOB NO. 072030-5000
FILE NO.
SCALE: 1"=20'
SHEET 3 OF 9 SHEETS



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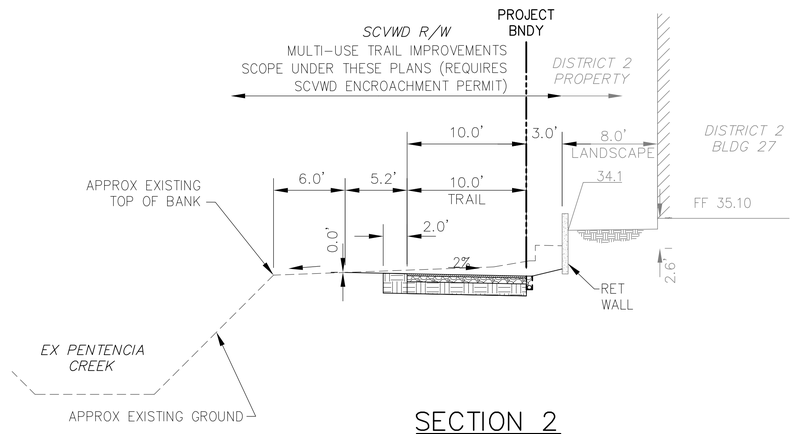

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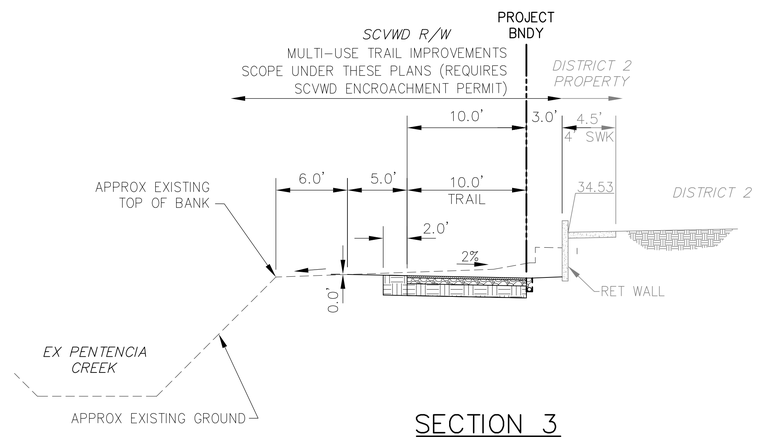

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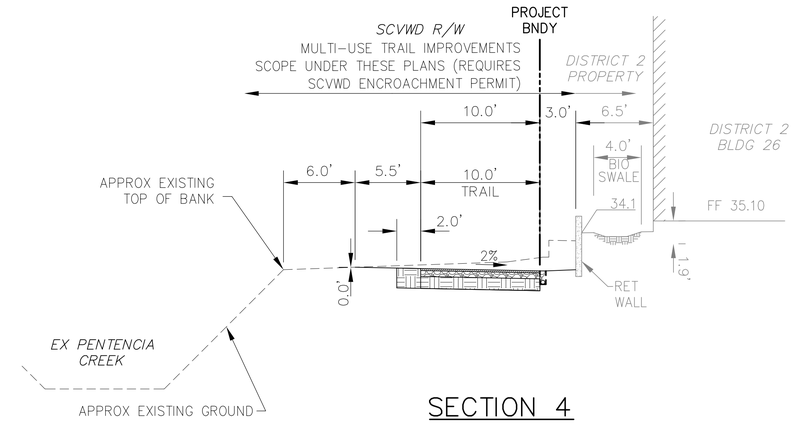

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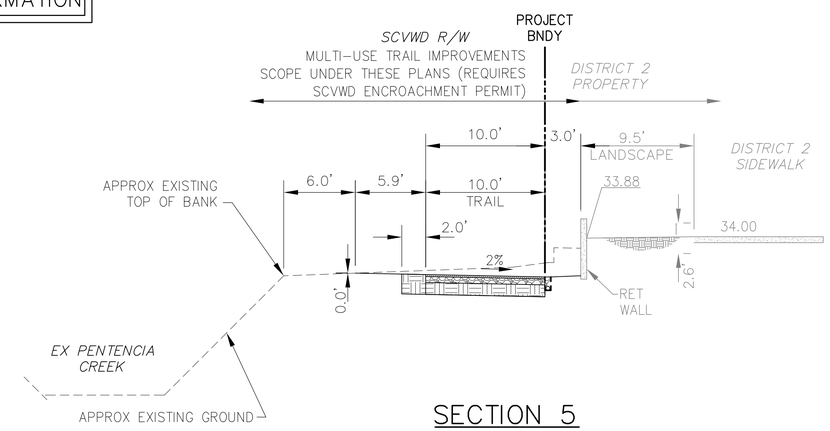
SEE DETAILS ON SHEET 2
FOR SECTION INFORMATION



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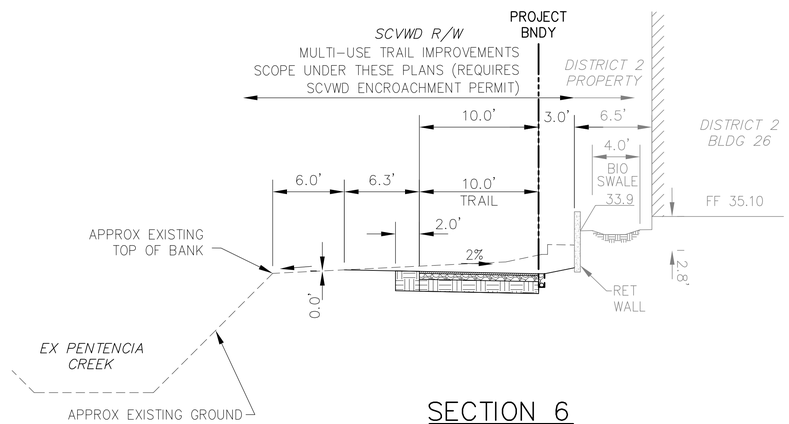

SECTION 6
NO SCALE

RUGGERI-JENSEN-AZAR
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PHONE: (408) 848-0300 FAX: (408) 848-0302

REGISTERED PROFESSIONAL ENGINEER
JORGE M. DURAN
C-59978
CIVIL
STATE OF CALIFORNIA

Record Drawings
To be completed prior to acceptance of work by the City

Signature & Seal Date
P.E. No. _____ Exp. _____

Public Works Inspector: _____

Public Improvements initially Accepted by the City Council on: _____

No.	Description	City Engr. Aprv.	Date

NOT FOR CONSTRUCTION
2nd SUBMITTAL
NOVEMBER 12, 2014

CITY OF MILPITAS
ENGINEERING DIVISION

APPROVED:

CITY ENGINEER DATE

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DISTRICT 2 MULTI-USE TRAIL

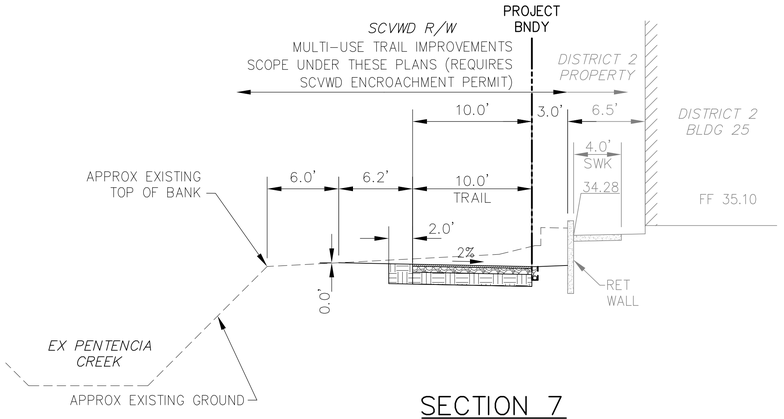
IMPROVEMENTS AND GRADING PLANS

MULTI USE TRAIL SECTIONS

MILPITAS, CALIFORNIA

FOR: TAYLOR MORRISON NOVEMBER 12, 2014

JOB NO. 072030-5000
FILE NO.
SCALE: NONE
SHEET 4 OF 9 SHEETS



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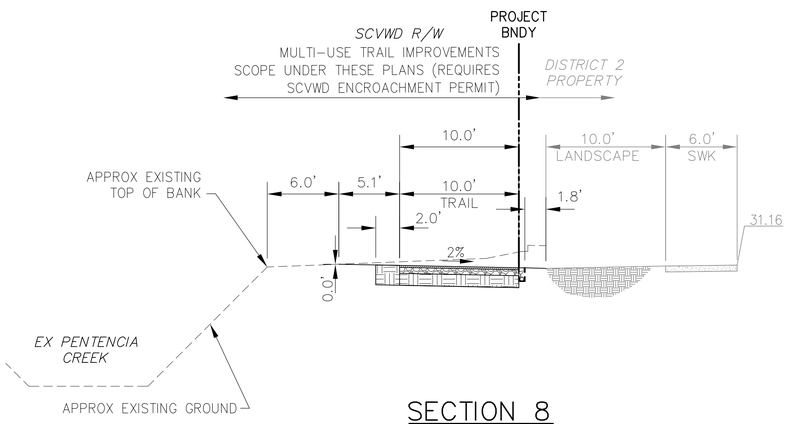

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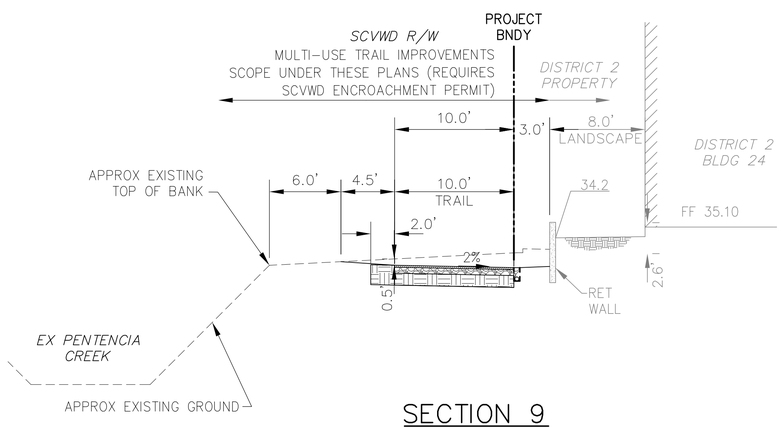
SEE DETAILS ON SHEET 2 FOR SECTION INFORMATION



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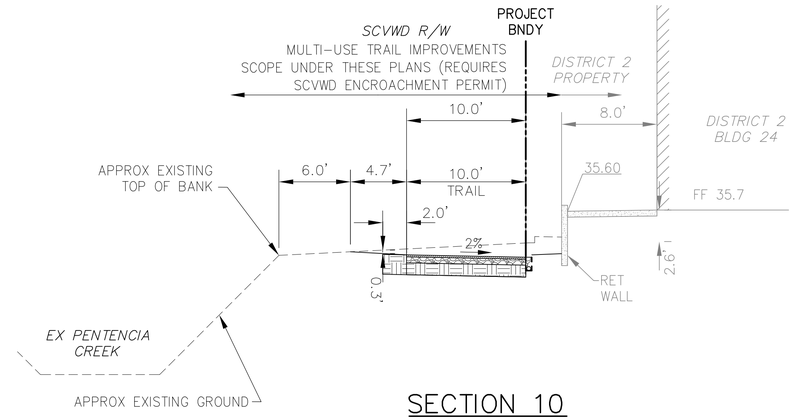

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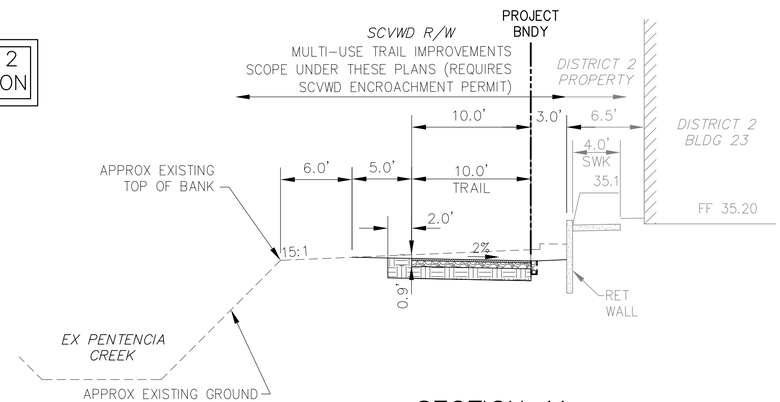

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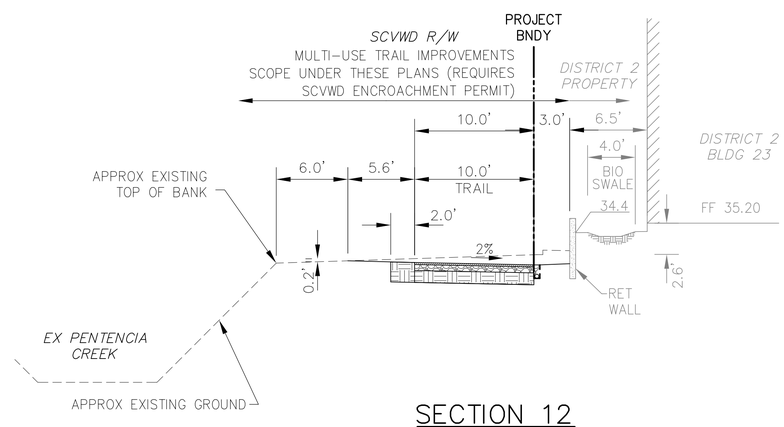

SECTION 12
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RJA
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CIVIL
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CITY OF MILPITAS
ENGINEERING DIVISION

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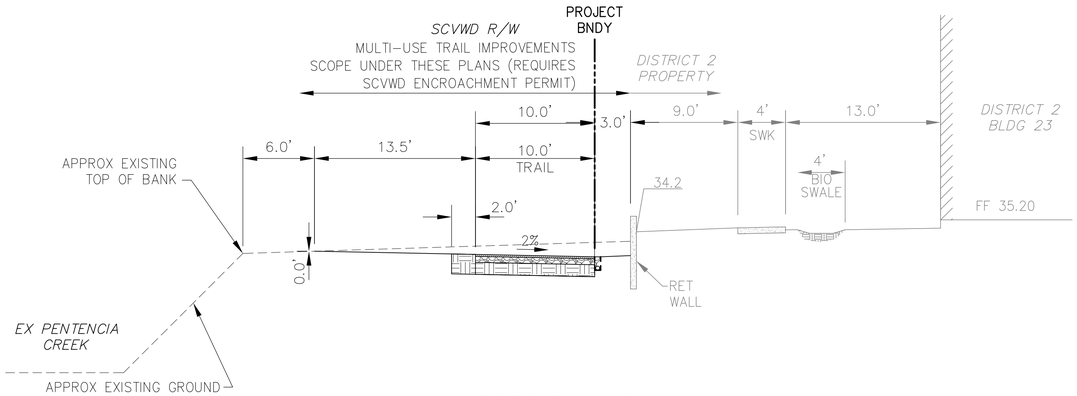
ENGINEERING _____ DATE: _____

DISTRICT 2 MULTI-USE TRAIL
IMPROVEMENTS AND GRADING PLANS
MULTI USE TRAIL SECTIONS
MILPITAS, CALIFORNIA

FOR: TAYLOR MORRISON NOVEMBER 12, 2014

JOB NO. 072030-5000
FILE NO.
SCALE: NONE
SHEET 5 OF 9 SHEETS



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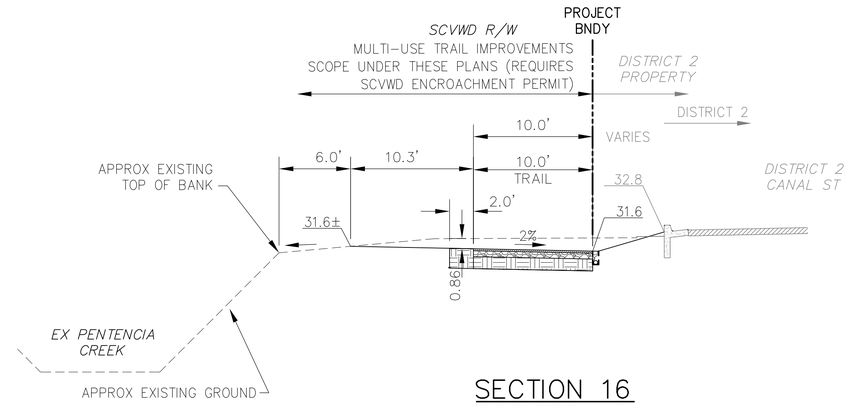

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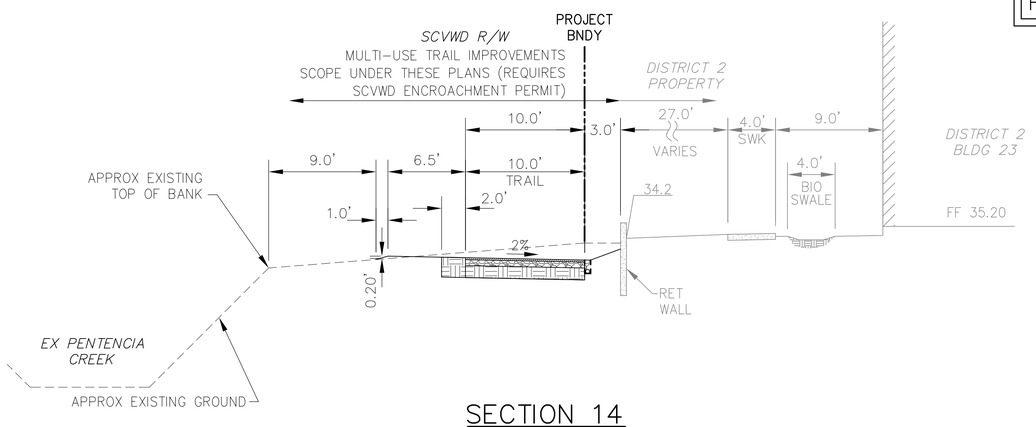
SEE DETAILS ON SHEET 2 FOR SECTION INFORMATION



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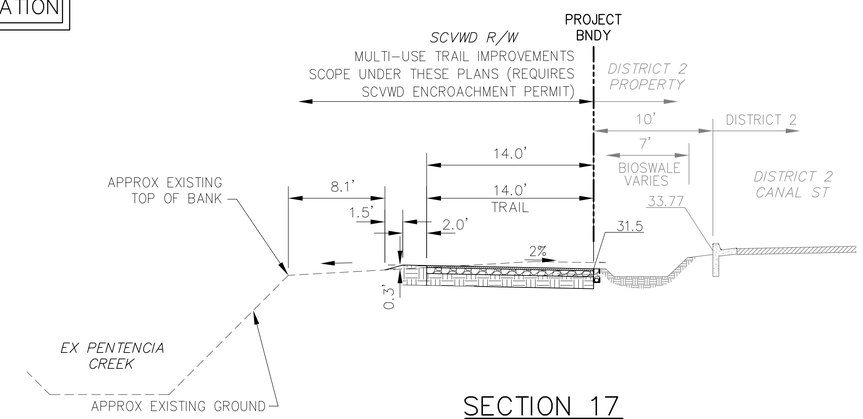

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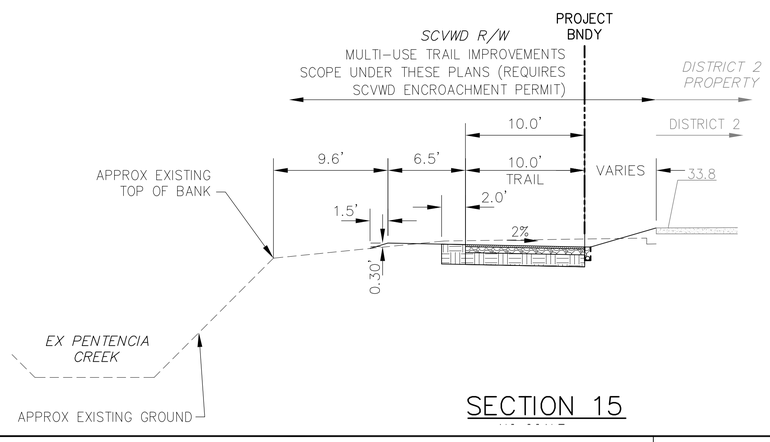

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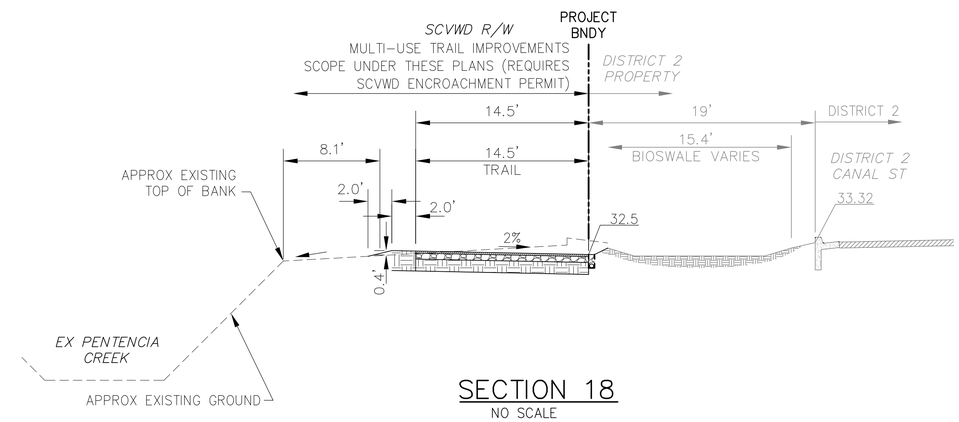

SECTION 18
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REGISTERED PROFESSIONAL ENGINEER JORGE M. DURAN C-59978 CIVIL STATE OF CALIFORNIA

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NOVEMBER 12, 2014

CITY OF MILPITAS
ENGINEERING DIVISION

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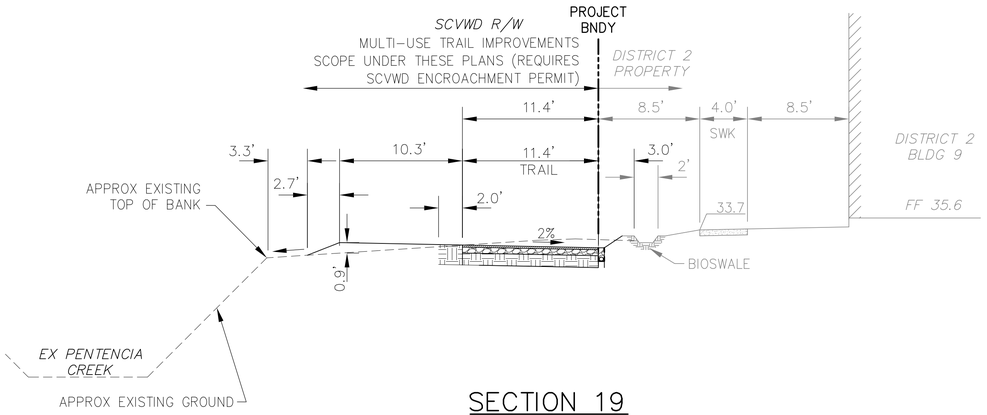
DISTRICT 2 MULTI-USE TRAIL
IMPROVEMENTS AND GRADING PLANS
MULTI USE TRAIL SECTIONS
MILPITAS, CALIFORNIA

FOR: TAYLOR MORRISON NOVEMBER 12, 2014

JOB NO. 072030-5000
FILE NO.
SCALE: NONE
SHEET 6 OF 9 SHEETS



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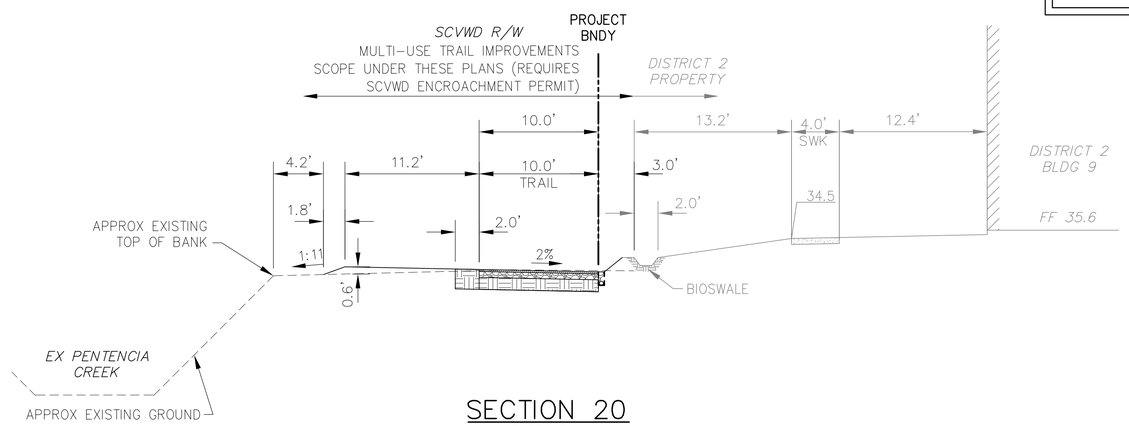

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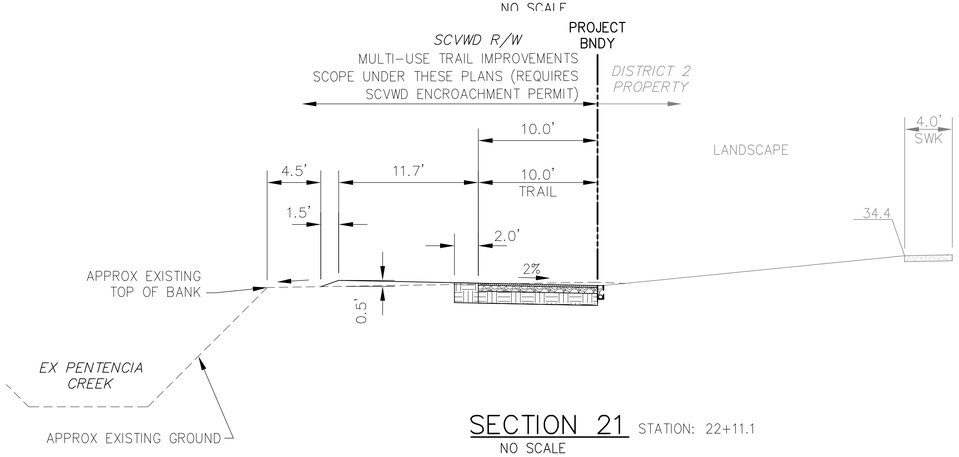

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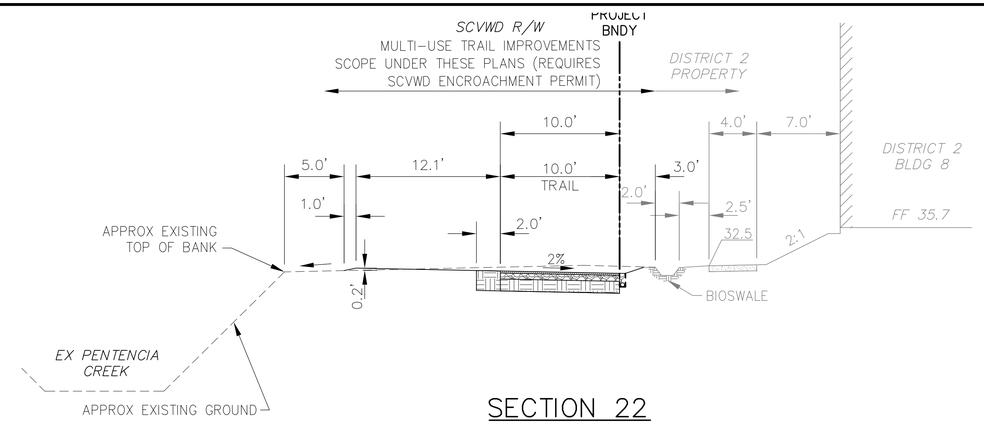

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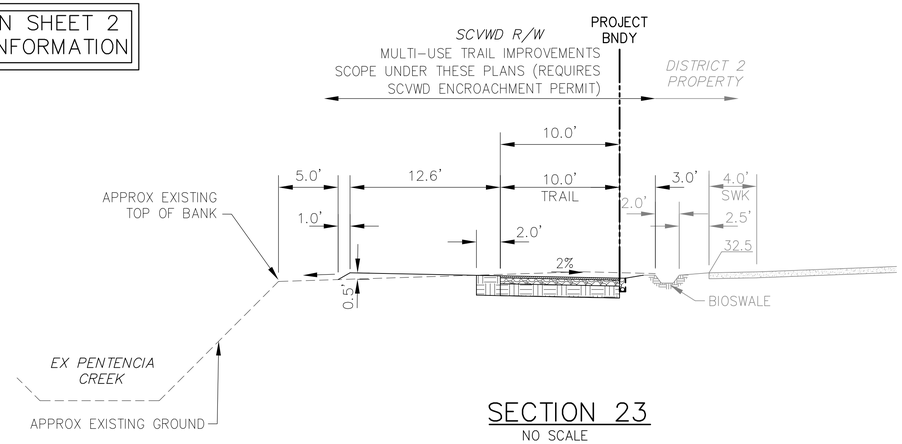
SEE DETAILS ON SHEET 2
FOR SECTION INFORMATION



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DISTRICT 2 MULTI-USE TRAIL
IMPROVEMENTS AND GRADING PLANS
MULTI USE TRAIL SECTIONS
MILPITAS, CALIFORNIA

FOR: TAYLOR MORRISON NOVEMBER 12, 2014

JOB NO. 072030-5000
FILE NO.
SCALE: NONE
SHEET 7 OF 9 SHEETS

SILT FENCE

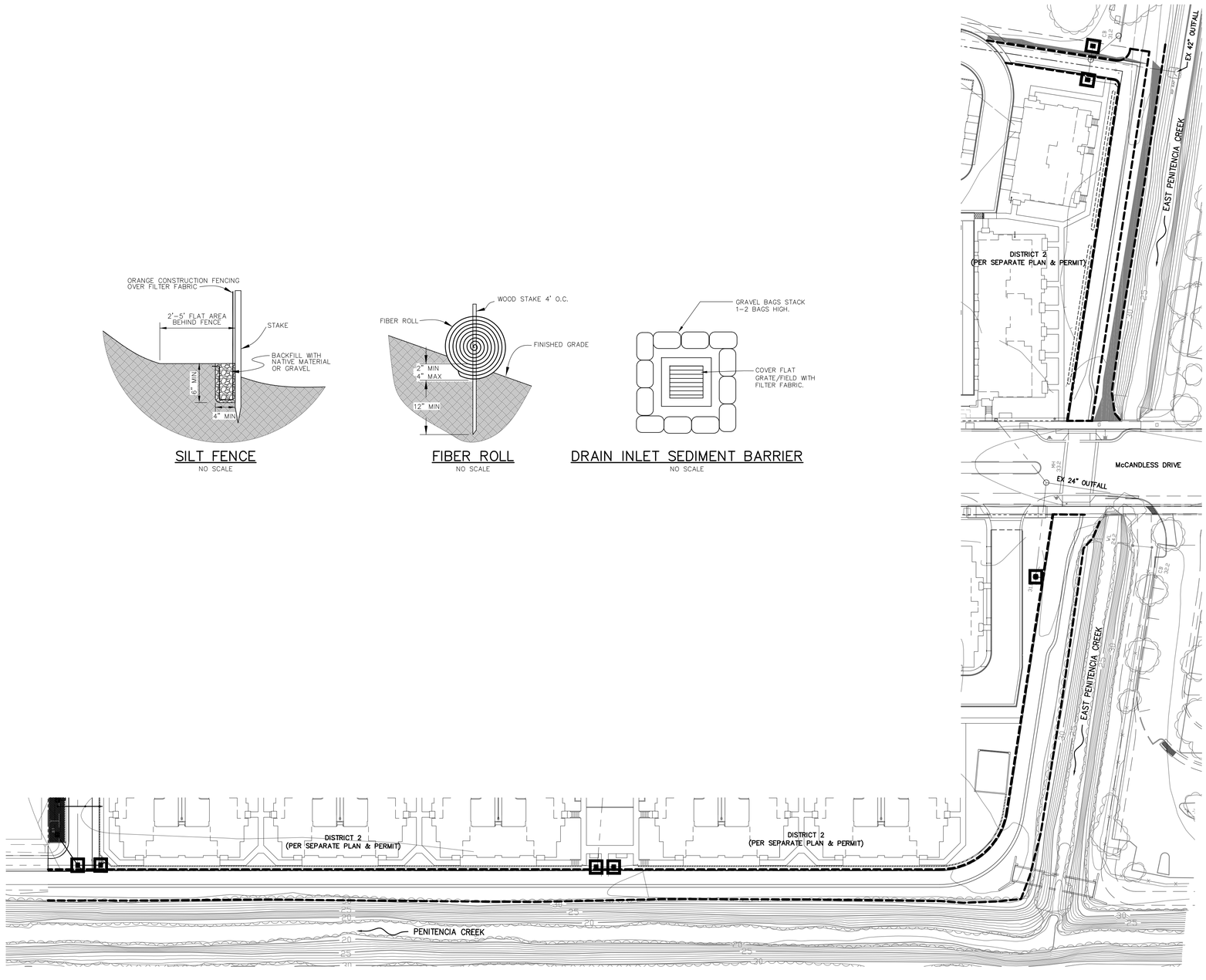
NO SCALE

FIBER ROLL

NO SCALE

DRAIN INLET SEDIMENT BARRIER

NO SCALE



LEGEND

- LINEAR SEDIMENT CONTROL– FIBER ROLL, SILT FENCE, OR SIMILAR
- DRAIN INLET SEDIMENT BARRIER
- SLOPE EROSION PROTECTION (HYDROSEED W/ EROSION BLANKET AND FIBER ROLLS OR EQUAL)

REFER TO DISTRICT 2 SWPPP FOR STABILIZED CONSTRUCTION ENTRANCE, CONCRETE WASHOUT, AND STAGING AREAS.

WATER POLLUTION CONTROL NOTES

1. General: Refer to the District 2 project SWPPP for more information regarding good site management "housekeeping", BMPs, and additional monitoring and reporting requirements. It is the responsibility of the Qualified SWPPP Practitioner (QSP) to ensure this Erosion Control Plan and the requirements of the SWPPP are properly implemented.
2. Revisions: This Erosion Control Plan may not cover all the situations that may arise during construction due to unanticipated field conditions. The QSP shall modify this plan as necessary to identify proper erosion and sediment controls for the current phase of work. Variations shall be properly reported, and amendments made to the SWPPP if necessary, according to the procedure outlined in the project SWPPP.
3. Drain Inlet Protection: Prior to beginning construction, install drain inlet sediment barriers per the detail on this plan on all drain inlets in the vicinity of construction operations.
4. Preserve Existing Property/Vegetative: Keep vehicles and equipment off exposed soil and preserve existing vegetation as much as possible.
5. Stockpile/Staging Management: All stockpiles and staging areas shown on this plan are conceptual. Actual stockpile and staging area locations will be dependent on the construction phase and work zone. The QSP shall identify actual staging areas on this plan. Cover all stockpiles with a plastic cover when not in use and prior to storm events. Store chemicals in watertight containers with appropriate secondary containments to prevent any spillage or leakage. Install and maintain sand bag barriers and/or fiber rolls around the base of all stockpiles at all times.
6. Sawcutting, Grinding, & Pavement Removal: The water used to cool the blade during sawcutting operations must be sucked up into a shop vacuum or other approved method and disposed of properly. The fluid cannot be discharged to the storm drain system per State and Federal regulations. Collect and remove all demolished pavement from the construction site and recycle when practical or dispose of in conformance with State regulations.
7. Pavement Operations: Do not allow loose sand or gravel to wash into storm drains. Drainage inlets and manholes should be covered with filter fabric during the application of seal/tack coats or slurry/fog seals. Pavement coating and sealing should not be applied during storm events.
8. Building Pads: Apply soil binder, erosion blanket, or plastic sheeting over exposed building pad areas prior to forecasted rain events.
9. Material Delivery: All haul and delivery trucks with loose material shall be covered or a minimum two feet of freeboard maintained.
10. Street Cleaning: All paved areas shall be kept free and clear of earth material and debris. Streets shall be cleaned with a sweep vacuum truck as needed.
11. Vehicle Maintenance, Cleaning & Fueling: Vehicle maintenance, cleaning, and fueling is not allowed at the construction site and shall take place at designated offsite locations.
12. Concrete Waste Management: Washout of concrete wastes shall take place at designated onsite locations and in accordance with CASQA Handbook BMP WM–8.
13. Port–a–Pottie: Port–a–Pottie locations should be designated as far away from public access and storm drain inlets as possible. Inspect sanitation facilities regularly for leaks and spills and clean or replace as necessary to prevent discharges of pollutants to the storm water drainage system or receiving water.
14. Construction Traffic: Traffic speeds shall be limited to 15 mph.
15. Disturbed Area Management: Apply soil binder on disturbed areas where no work will commence within 14 days. Install and establish final stabilization measures (vegetation, pavement, etc.) as soon as possible on disturbed areas where work is complete. Utility trenches in existing streets that are not completely repaired to the final condition shall be covered with temporary pavement, plates, or other equivalent method.
16. BMP Inspection and Maintenance: Construction site BMPs shall be inspected weekly and once a day during extended storm events to ensure proper implementation and functionality. BMPs shall be repaired or replaced immediately after a deficiency has been identified. Refer to the project SWPPP for more information regarding BMP maintenance.
17. Dust Control: Water all active construction areas, unpaved access roads, and staging areas at least twice a day or more often as needed to prevent dust from becoming airborne and leaving the site.

N

0 40 80 120

SCALE IN FEET: 1"= 40'

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CITY OF MILPITAS
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DISTRICT 2 MULTI–USE TRAIL

IMPROVEMENTS AND GRADING PLANS

EROSION CONTROL

MILPITAS, CALIFORNIA

FOR: TAYLOR MORRISON NOVEMBER 12, 2014

JOB NO. 072030–5000
FILE NO.
SCALE: 1"=50'
SHEET 8 OF 9 SHEETS

BLUEPRINT FOR A CLEAN BAY

Best Management Practices for the Construction Industry

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

Preventing Pollution: It's Up to Us

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

Santa Clara Valley Urban Runoff Pollution Prevention Program

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

Spill Response Agencies:

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

Small Business Hazardous Waste Disposal Program

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

Local Pollution Control Agencies

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

Santa Clara Valley Water District (408) 265-2600

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

Fresh Concrete and Mortar Application

Who should use this information?

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

Storm Drain Pollution from Fresh Concrete And Mortar Applications

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

Doing the Job Right
General Business Practices

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

During Construction

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

Heavy Equipment Operation

Who should use this information?

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

Stormwater Pollution from Heavy Equipment on Construction Sites

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

Doing the Job Right
Site Planning and Preventive Vehicle Maintenance

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

Spill Cleanup

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

General Construction and Site Supervision

Who should use this information?

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

Storm Drain Pollution from Construction Activities

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

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

Doing the Job Right
General Principles

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

Advance Planning To Prevent Pollution

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

Good Housekeeping Practices

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

Materials/Waste Handling

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

Permits

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

Earth-Moving and Dewatering Activities

Who should use this information?

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

Storm Drain Pollution from Earth-Moving Activities

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

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

Doing the Job Right
General Business Practices

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

Practices During Construction

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

Dewatering Operations
Check for Toxic Pollutants

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

Check for Sediment Levels

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

Detecting Contaminated Soil or Groundwater

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

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

If any of these are found follow the procedures below.

Landscaping,Gardening, And Pool Maintenance

Who should use this information?

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

Storm Drain Pollution from Landscaping and Swimming Pool Maintenance

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

Doing the Job Right
General Business Practices

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

Landscaping/Garden Maintenance

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

Pool/Fountain/Spa Maintenance
Draining pools or spas

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

Filter Cleaning

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

Roadwork and Paving

Who should use this information?

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

Storm Drain Pollution from Roadwork

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

Doing the Job Right
General Business Practices

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

During Construction

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

Asphalt/Concrete Removal

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

Painting and Application of Solvents and Adhesives

Who should use this information?

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

Storm Drain Pollution from Paints, Solvents, and Adhesives

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

Doing the Job Right
Handling Paint Products

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

Paint Removal

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

Painting Cleanup

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

Recycle/Reuse Leftover Paints Whenever Possible

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

Milpitas Municipal Code (MMC) 2008

XI-16-11 Accidental Discharge - Notification of Discharge

(a)
All persons shall notify the City by telephone immediately by dialing (911) upon accidentally discharging any material other than an acceptable discharge into a storm drain or watercourse to enable countermeasures to be taken by the City to minimize damage to storm drains and the receiving waters. In conference with Title I, Chapter 20, Section 1 of this code the City may abate any nuisance that obstructs the public right-of-way or poses an immediate danger to persons, property, or wild life. The City, at its sole option, may direct the person or persons responsible for the discharge to perform cleanup activities when it is deemed by the City that the person or persons have the capability to perform such activities.

(b)
This notification shall be followed, within ten(10) days of the date of occurrence, by a detailed written statement to the City Engineer describing the causes of the accidental discharge and the measures being taken to prevent future occurrences. Such notification will not relieve persons of liability for violations of this Chapter or for any fines imposed on the City on account thereof under Section 13350 of the California Water Code, or for violation of Section 5650 of the California Fish and Wildlife Code, or any other applicable provisions of State or Federal laws. (ord.239 (part), 8/17/93)
XI-16-14 Enforcement and Penalties

XI-16-14 Enforcement and Penalties

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

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

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

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

(e)
Suspension of Utility Service. The City may, without prior notice, suspend water service, sanitary sewer service, and/or storm drain discharge access to a person discharging to the storm drain system when such suspension is necessary to stop an actual or threatened discharge which (1) presents, or may present, imminent and substantial danger to the environment or to the health or welfare of persons, or (2) presents, or may present, imminent and substantial danger to the storm drain system.

(f)
For construction projects, when a combined total of three or more Stop Work Notices and Notices of Noncompliance for urban runoff violations have been issued, the City Manager or his or her designee may require the contractor to hire a qualified licensed Civil Engineer within three business days. The Civil Engineer shall observe Best Management Practices, provide guidance for improvement for the duration of the project, and certify compliance.

A Stop Work Notice shall be issued for failure to comply.

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

RJA
RUGGERI-JENSEN-AZAR
ENGINEERS ▪ PLANNERS ▪ SURVEYORS
8055 CAMINO ARROYO GILROY, CA 95020
PHONE: (408) 848-0300 FAX: (408) 848-0302

REGISTERED PROFESSIONAL ENGINEER JORGE M. DURAN C-59978 CIVIL STATE OF CALIFORNIA

Record Drawings
To be completed prior to acceptance of work by the City

Signature & Seal Date
P.E. No. _____ Exp. _____
Public Works Inspector: _____
Public Improvements initially Accepted by the City Council on: _____

No.	Date	By	REVISIONS	City Engr.	Aprv.	Date

NOT FOR CONSTRUCTION
2nd SUBMITTAL
NOVEMBER 12, 2014

CITY OF MILPITAS
ENGINEERING DIVISION
APPROVED:
CITY ENGINEER DATE
ANY CHANGES TO PUBLIC IMPROVEMENTS SHALL BE APPROVED BY THE CITY ENGINEER
RECOMMENDED FOR APPROVAL:
FIRE DEPT. _____ DATE: _____
ENGINEERING _____ DATE: _____

DISTRICT 2 MULTI-USE TRAIL

IMPROVEMENTS AND GRADING PLANS

BEST MANAGEMENT PRACTICES

MILPITAS, CALIFORNIA

FOR: TAYLOR MORRISON NOVEMBER 12, 2014

JOB NO. 072030-5000
FILE NO.
SCALE:
SHEET 9 OF 9 SHEETS