

**DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION**

**GENERAL PROVISIONS, NOTICE TO BIDDERS,
SPECIAL PROVISIONS, PROPOSAL AND CONTRACT
FOR**

2024 Geologic Hazard Abatement District (GHAD) Maintenance

Bid Opening Date – Wednesday October 23, 2024

2:00 p.m.

To be used in conjunction with the City Standard Specifications and Details dated July 2024, the State Standard Specifications and Plans dated 2018 and all updates at the time of bid, and the Labor Surcharge and Equipment Rental Rates in effect on the date the work is accomplished.

APPROVED



Adam Nelkie
City Engineer
No. 78830
Expires: 9/30/2025



EXHIBIT A

Vicinity Map

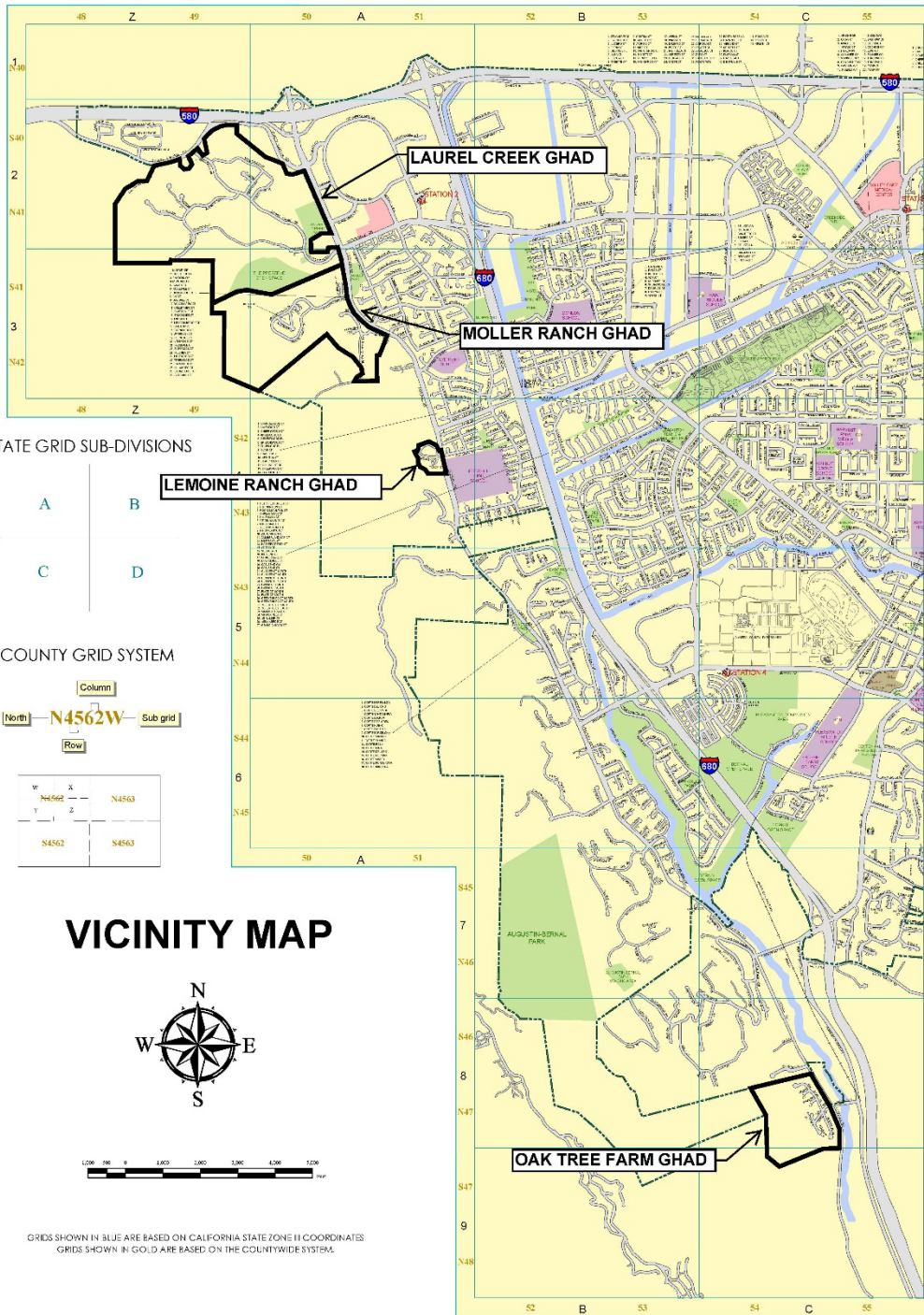
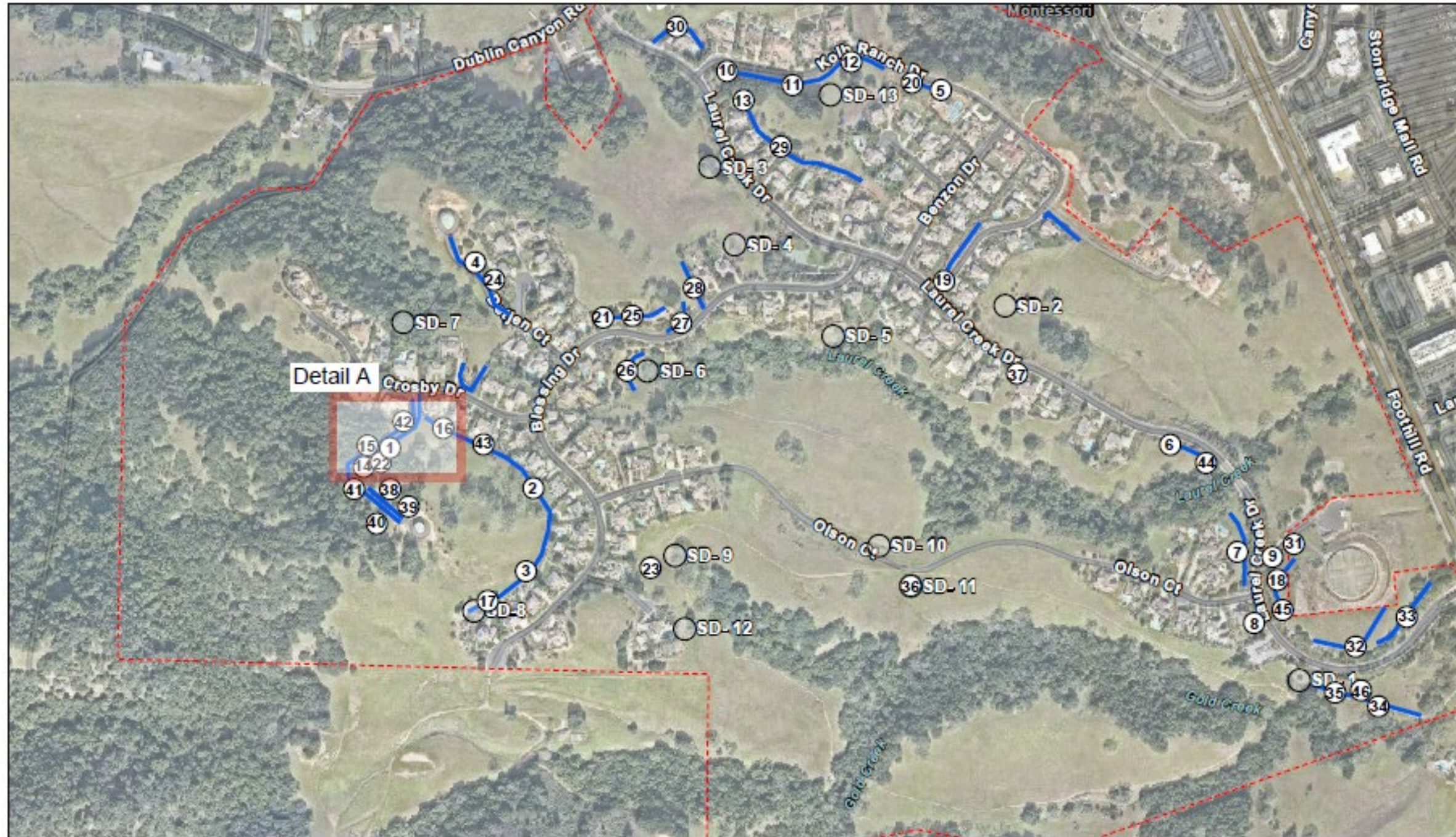


EXHIBIT B

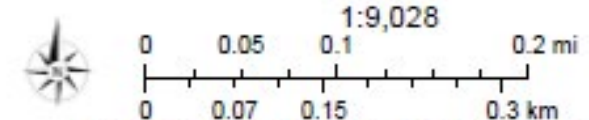
GHAD Maps

Laurel Creek GHAD



8/26/2024, 2:19:26 PM

- Subdrain Outlet
- Laurel Creek "LC" Site Condition Fall 2024
- Concrete Lined Drainage Ditches
- - - GHAD Boundary



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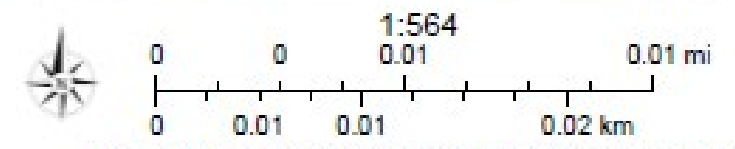
Laurel Creek GHAD Detail A



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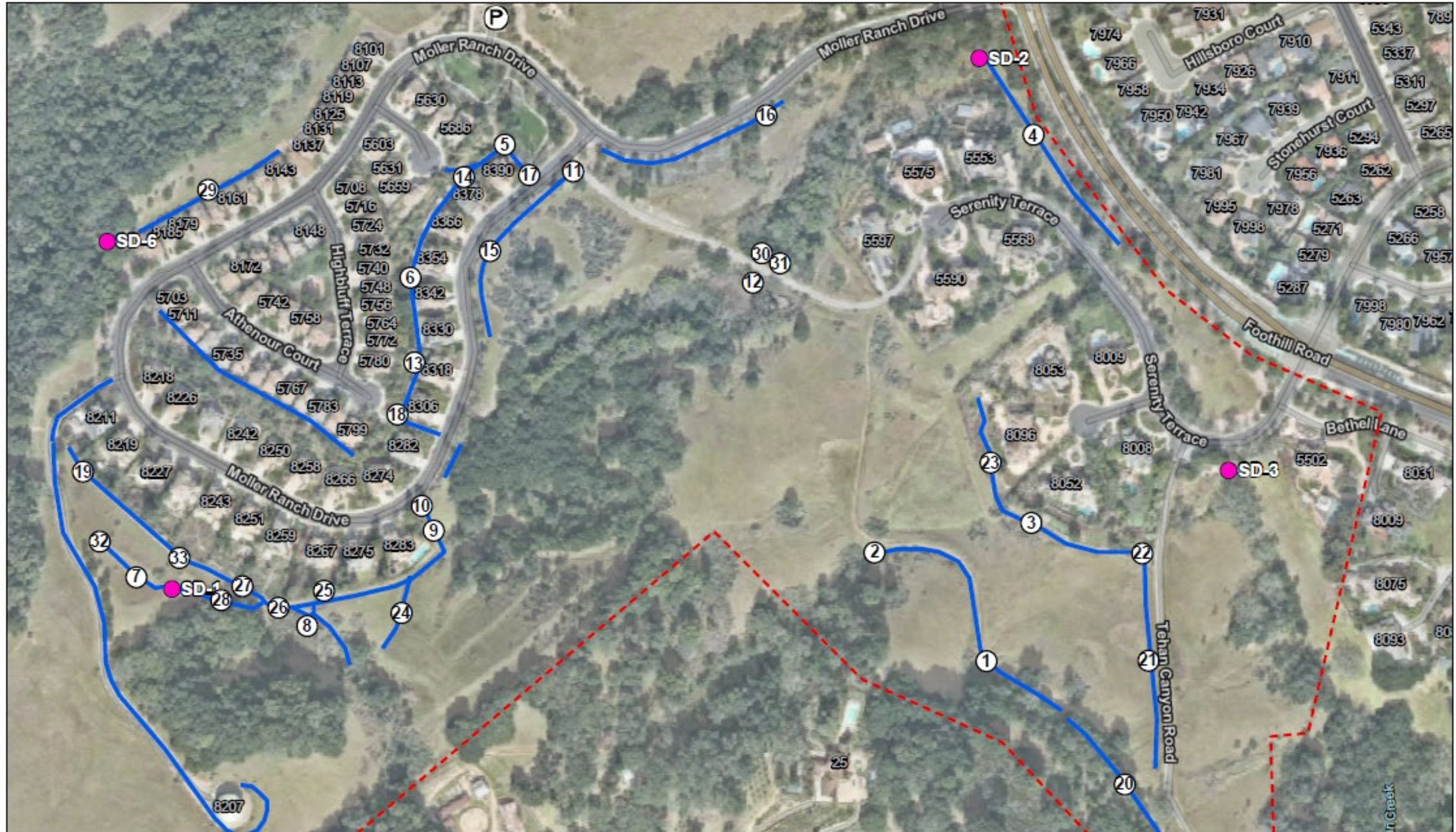
- Concrete Lined Drainage Ditches
- - - GHAD Boundary

○ Laurel Creek "LC" Site Condition Fall 2024



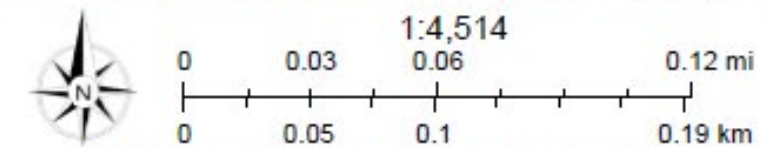
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Moller Ranch GHAD



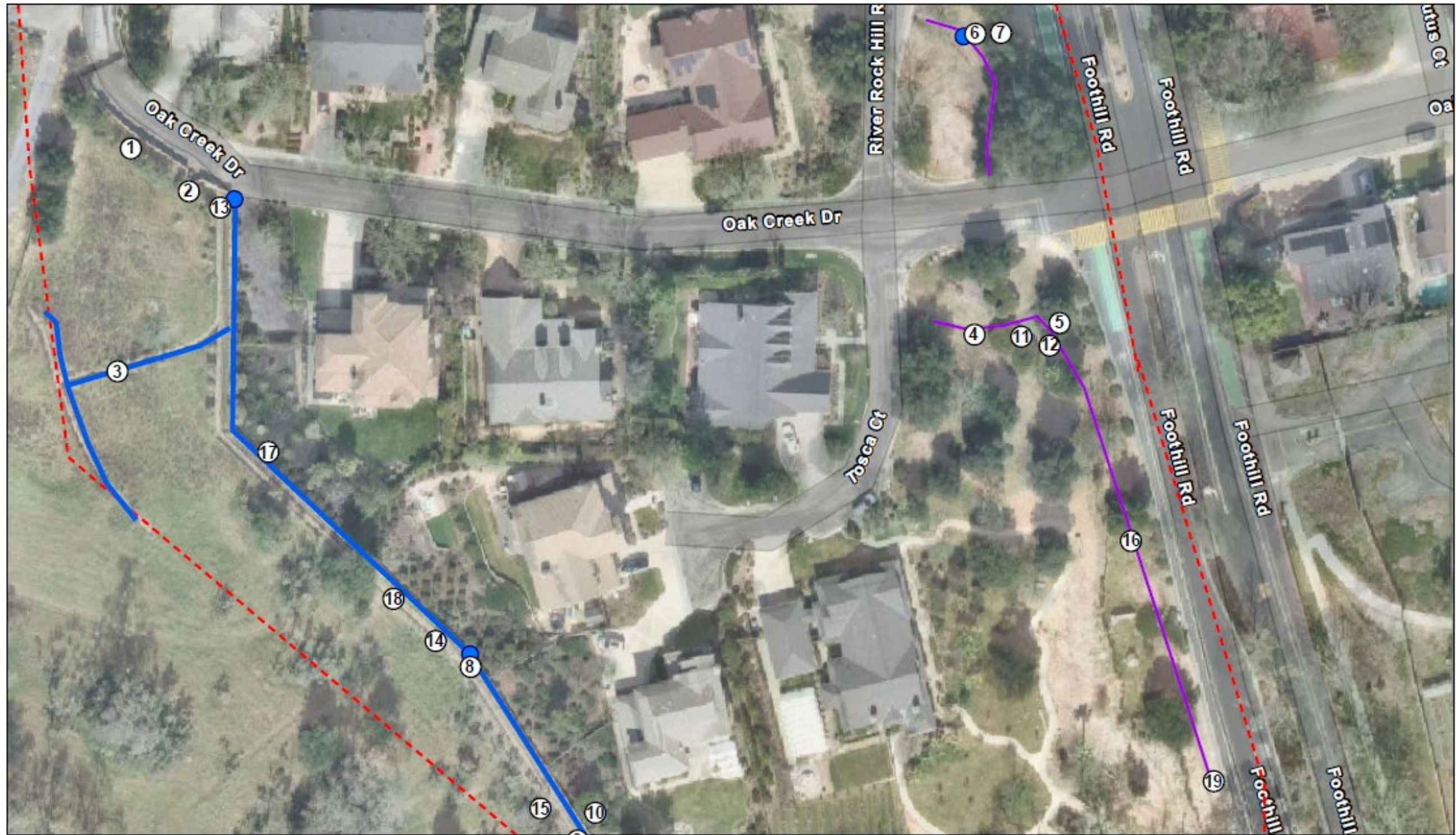
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- Subdrain Outlet
- Concrete Lined Drainage Ditches
- Moller Ranch "MR" Site Condition Fall 2024
- Subdrain Outlet
- GHAD Boundary



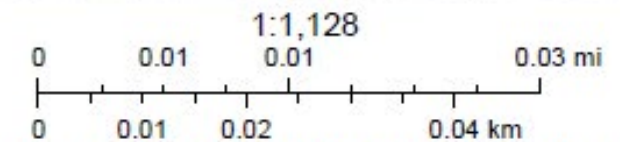
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Lemoine Ranch GHAD



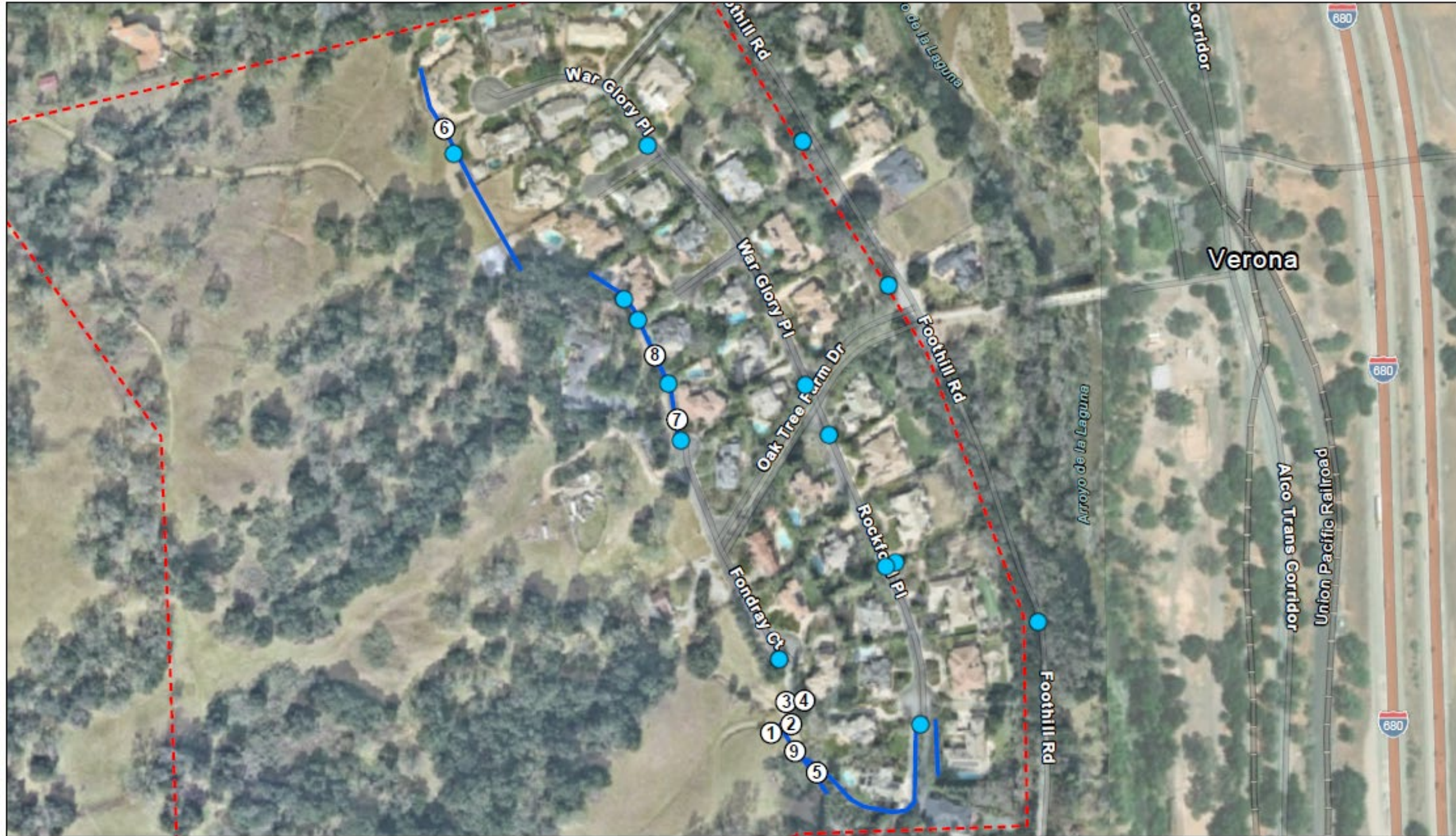
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- Subdrain Outlet
- Concrete Lined Drainage Ditches
- Earthen Lined Drainage Ditch
- GHAD Boundary
- Lemoine Ranch "LR" Site Condition Fall 2024



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Oak Tree Farm GHAD



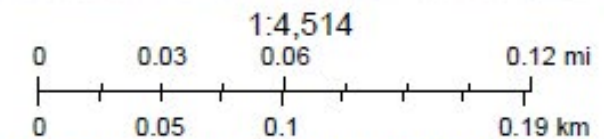
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V4 Oak Tree Aerial Imagery (Nearmap 0224)

- Red: Band_1
- Green: Band_2
- Blue: Band_3

- Storm Drain Inlet
- Concrete Lined Drainage Ditches
- GHAD Boundary

○ Oak Tree Farm "OTF" Site Condition Fall 2024



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Web AppBuilder for ArcGIS

EXHIBIT C

Work Tables

Laurel Creek GHAD (1 of 2)

Project ID #	Site Condition	Description of Work	Reference Sheet
LC-1	Leaves accumulating in concrete-lined drainage ditch.	Remove leaves from concrete-lined drainage ditch to allow proper flow.	Detail A
LC-2	Trimmed grasses accumulated in concrete-lined drainage ditch.	Remove grasses to allow proper drainage. Approx 150'	1st Page Site Plan
LC-3	Trimmed grasses accumulated in concrete-lined drainage ditch.	Remove grasses to allow proper drainage.	1st Page Site Plan
LC-4	Leaves, trimmed grasses accumulated in concrete-lined drainage ditch.	Remove debris, grasses & leaves to allow proper drainage. Approx 150'	1st Page Site Plan
LC-5	Erosion above concrete-lined drainage ditch.	Remove existing wattles and install new wattles.	1st Page Site Plan
LC-6	Leaves accumulated in concrete-lined drainage ditch.	Remove leaves to allow proper flow. Entire Concrete V-ditch approx. 250'	1st Page Site Plan
LC-7	Overgrown grasses & leaves accumulated in concrete-lined drainage ditch.	Trim back grasses and remove leaves to allow proper flow for entire concrete v-ditch. Approx 350'	1st Page Site Plan
LC-8	Pile of sand on accumulating on sidewalk from burrowing.	Remove accumulated soil and re-fill void next to sidewalk.	1st Page Site Plan
LC-9	Soil slumping into concrete drainage ditch and drain inlet.	Remove wattle and re-install wattle to keep soil from flowing into ditch and obstructing drainage.	1st Page Site Plan
LC-10	Slow drainage of catch basin during rain events.	Cleanout catch basin with vactor truck and place riprap around basin to promote drainage.	1st Page Site Plan
LC-11	Slow drainage of catch basin during rain events.	Cleanout catch basin with vactor truck and jet.	1st Page Site Plan
LC-12	Slow drainage of catch basin during rain events.	Cleanout catch basin with vactor truck and jet.	1st Page Site Plan
LC-13	Slow drainage of catch basin during rain events. Leaves, branches debris around catch basin.	Cleanout catch basin with vactor truck and jet. Re-grade area around catch basin.	1st Page Site Plan
LC-14	Leaves accumulating in concrete-lined drainage ditch.	Remove leaves from concrete-lined drainage ditch to allow proper flow. Remove soil from ditch to allow proper flow. Approx 50'	Detail A
LC-15	Expansion joint in pavement along concrete-lined drainage ditch.	Patch pavement to prevent water infiltration beneath drainage ditch. Approx 75'	Detail A
LC-16	Leaves accumulated in concrete-lined drainage ditch.	Remove leaves to allow proper drainage.	Detail A
LC-17	Leaves and soil accumulating in concrete-lined drainage ditch.	Remove leaves and soil from concrete-lined drainage ditch to allow proper flow. Approx 200'	1st Page Site Plan
LC-18	Overgrown vegetation on sides of V-ditch. Leaves and grass accumulated in concrete-lined drainage ditch.	Trim overgrown vegetation. Remove leaves and grass to allow proper flow. Approx 350'	1st Page Site Plan
LC-19	Leaves accumulated in concrete-lined drainage ditch.	Remove leaves to allow proper flow. Approx 100'	1st Page Site Plan
LC-20	Soil and leaves accumulated in concrete-lined drainage ditch.	Remove soil and leaves to allow proper flow.	1st Page Site Plan
LC-21	Leaves accumulated in concrete-lined drainage ditch.	Remove leaves to allow proper flow. Entire V-Ditch. Approx. 370' Limited access in this area. No equipment or vehicles.	1st Page Site Plan
LC-22	Cracking and distress on access road.	Seal cracks to prevent water infiltration below subgrade. Approx 50'	Detail A
LC-23	Drainage inlet in open space is clogged, standing water in DI.	Unclog inlet and restore proper flow. Limited access in this area. No equipment or vehicles.	1st Page Site Plan
LC-24	Leaves accumulated in concrete-lined drainage ditch.	Remove leaves to allow proper flow.	1st Page Site Plan
LC-25	Catch basin filled with Debris	Clean outside and inside of Catch Basin	1st Page Site Plan
LC-26	Leaves accumulated in drainage ditch.	Remove leaves to allow proper flow. For approx. 100'	1st Page Site Plan
LC-27	Leaves accumulated in drainage ditch.	Remove leaves to allow proper flow. For entire concrete v-ditch. Approx. 200'	1st Page Site Plan
LC-28	Grass clippings accumulated in concrete drainage ditch.	Remove debris, leaves & grass clippings to allow proper drainage. Entire Concrete V-Ditch approx. 225'	1st Page Site Plan
LC-29	Branches accumulated in concrete drainage ditch.	Remove debris, leaves, branches to allow proper drainage for majority of concrete v-ditch. Approx. 250'	1st Page Site Plan

Laurel Creek GHAD (2 of 2)

Project ID #	Site Condition	Description of Work	Reference Sheet
LC-30	Leaves accumulated in concrete drainage ditch.	Remove leaves to allow proper drainage. Clean entire concrete V-ditch will need to be cleaned out. Approx. 300'	1st Page Site Plan
LC-31	Erosion on slope depositing soil in concrete drainage ditch.	Remove soil from ditch to allow proper flow.	1st Page Site Plan
LC-32	Concrete drainage ditch overgrown with grasses and weeds, soil accumulated in v-ditch	Trim back grasses, remove soil, remove leaves, debris to allow property flow for approx. 400' Access to this location will be limited. No vehicles or equipment.	1st Page Site Plan
LC-33	Leaves accumulated in drainage ditch blocking DI.	Trim back grasses, remove soil, remove leaves, debris to allow property flow for approx. 350' Access to this location will be limited. No vehicles or equipment.	1st Page Site Plan
LC-34	Concrete drainage ditch overgrown with grasses and weeds.	Trim back grasses and vegetation, soil, leaves, debris to allow proper flow in V-ditch. Approx 500' Access to this location will be limited. No vehicles or equipment.	1st Page Site Plan
LC-35	Grasses and vegetation overgrown in concrete drainage ditch and access road.	Trim back grasses, pull weeds on access road. Approx 250'	1st Page Site Plan
LC-36	Erosion at outfall of SD-11, area overgrown with dense grasses and weeds.	Place rip rap apron at outfall to prevent further incising into open space. Trim grasses and weeds to allow proper access for monitoring. Access to this location will be limited. No vehicles or equipment. Olson Court road access but located approx. 100' from Olson Court.	1st Page Site Plan
LC-37	5926 Laurel Creek -New concrete V-ditch required with sidewalk walk curb through drain.	Approx 200'. Concrete V-ditch to trench curb drain. Clear and Grub (trees, bushes, etc...) excavation, grading, fill, subgrade prep, concrete v-ditch install, demo of existing sidewalk, installation of new sidewalk panel with curb through drainage. (see attached details). Existing 1-1/2" PVC irrigation lines may need to be lowered, sleeved, relocated or repaired.	1st Page Site Plan
LC-38	East Side - Debris, gravel, soils, leaves in Concrete V-Ditch	Clean V-Ditch for entire length. Approx. 250'	1st Page Site Plan
LC-39	East Side - Straw wattle damaged.	Remove existing and install new wattles at existing location. Approx 40'	1st Page Site Plan
LC-40	West Side - Debris, gravel, soils, leaves in Concrete V-Ditch	Clean V-Ditch. Approx. 100'	1st Page Site Plan
LC-41	West Side - Debris, gravel, soils, leaves in Concrete V-Ditch	Clean V-Ditch for Approx. 20'	1st Page Site Plan
LC-42	Expansion joint in pavement along concrete-lined drainage ditch.	West Side - Patch pavement to prevent water infiltration beneath drainage ditch. for approx. 250'	Detail A
LC-43	Debris & Trimmed grasses accumulated in concrete-lined drainage ditch.	Clean Debris & remove grasses accumulated for proper drainage. Approx 400' to DI	1st Page Site Plan
LC-44	Leaves accumulated in Catch Basin	Clean out Catch Basin	1st Page Site Plan
LC-45	Leaves accumulated in Catch Basin	Clean out Catch Basin	1st Page Site Plan
LC-46	Existing concrete V-ditch is damaged or missing	Install new concrete V-ditch for approx. 10'. Equipment and vehicle access to this area will be difficult.	1st Page Site Plan

Moller Ranch GHAD (1 of 1)

Project ID #	Site Condition	Description of Work	Notes
MR-1	Leaves accumulated in concrete-lined drainage ditch.	Remove leaves to allow proper flow. Approx 600'	
MR-2	Dirt swale at capacity.	Re-grade earthen swale to promote drainage.	
MR-3	Leaves, grass & debris accumulated in concrete drainage ditch for entire v-ditch.	Remove leaves, grass & debris to allow proper flow for entire concrete V-ditch. Approx 600'	
MR-4	Earthen swale completely overgrown and filled with soil.	Mow back vegetation and re-grade earthen swale to promote drainage. Approx 150' north side to SD-2	
MR-5	Leaves accumulated in concrete-lined drainage ditch.	Remove leaves to allow proper drainage.	
MR-6	Cracking in concrete-lined drainage ditch.	Seal cracks at the bottom of the concrete drainage ditch to prevent water infiltration. Approx 20' Longitudinally	
MR-7	Soil deposited in drainage ditch from animal burrowing.	Remove soil from ditch to allow proper flow. Approx 20'	
MR-8	Standing water in drainage ditch and vegetation growing through cracks.	Remove vegetation and seal cracks to promote positive flow and prevent water infiltration below ditch. Approx 400'	
MR-9	Ditch segment buried with soil and vegetation.	Expose ditch segment to allow proper flow. Limited access at this location. 5' High Retaining wall on Moller Ranch Drive.	
MR-10	Slow drainage during rain events.	Clear out catch basin with vector truck.	
MR-11	Slow drainage during rain events.	Clear out catch basin with vector truck, remove roots clogging drainage.	
MR-12	Outfall in pond overgrown and inlet clogged.	Expose outfall and clear inlet with vector and jetting.	
MR-13	Previous concrete patches are cracking on concrete v-ditch	Re-patch concrete v-ditch. Repair is approx. 20' longitudinally	
MR-14	Cracking at the bottom of concrete-lined drainage ditch.	Seal cracks at the bottom of the concrete drainage ditch to prevent water infiltration. Approx 40'	
MR-15	Debris, grass, leaves, branches accumulated in concrete drainage ditch.	Remove debris, grass, leaves, branches to prevent obstruction of drainage. Approx 550'	
MR-16	Leaves accumulated in concrete-lined drainage ditch.	Remove leaves to allow proper drainage.	
MR-17	Leaves accumulated in concrete-lined drainage ditch.	Remove leaves to allow proper drainage.	
MR-18	Cracking and offset in concrete-lined drainage ditch. Soil accumulated in concrete-lined drainage ditch.	Seal crack to prevent water infiltration beneath ditch, remove soil to allow proper flow. Approx 20 locations for 2' laterally	
MR-19	Debris accumulated at drain inlet.	Remove debris to allow proper drainage. Approx 10'	
MR-20	Grass, leaves and debris accumulated in concrete-lined drainage ditch.	Remove grass, leaves, debris to allow proper drainage. Approx 400'	
MR-21	Vegetation overgrown, trimmed grass leaves and debris accumulated in concrete-lined drainage ditch.	Trim back vegetation, remove trimmed grass, leaves and clear debris to allow proper flow. Entire V-ditch approx. 650'	
MR-22	Debris, branches inside DI/CB	Clean out Catch Basin.	
MR-23	Overgrown vegetation along concrete drainage ditch and vegetation growing through cracks in ditch.	Trim vegetation to allow proper monitoring access and seal cracks in concrete ditch.	
MR-24	Area overgrown with dense vegetation.	Trim vegetation and clear debris from concrete drainage ditch for entire concrete V-ditch. Approx 225'	
MR-25	Cracking in concrete drainage ditch allowing water to actively flow under ditch.	Seal cracks and voids in concrete ditch to prevent water infiltration below ditch. Approx 200'	
MR-26	Concrete drainage ditch blocked with vegetation growing through cracks, standing water in ditch.	Remove vegetation, trimmed grass (approx. 300') and seal cracks to allow flow through drainage ditch.	
MR-27	Standing water, drainage blocked by vegetation growing in ditch.	Remove vegetation, trimmed grass, debris from the drainage ditch and seal cracks. Approx 200'	
MR-28	Standing water, drainage ditch blocked with vegetation.	Trim back vegetation, overgrown, trimmed grass, leaves and clear debris to allow proper flow. Approx 50'	
MR-29	Vegetation overgrown, trimmed grass leaves and debris accumulated in concrete-lined drainage ditch.	Trim back vegetation, overgrown, trimmed grass, leaves and clear debris to allow proper flow. Entire V-ditch approx. 375'	
MR-30	Debris accumulated at drain inlet on north side of road.	Clean debris from CB to allow proper flow	
MR-31	Road on north side has debris, leaves, soil etc.. Along curb long.	Clean Debris along curb line to allow drainage. Approx 100'	
MR-32	Debris accumulated at drain inlet.	Clean CB.	
MR-33	Trimmed grass and debris accumulated in concrete-lined drainage ditch.	Remove trimmed grass and debris to allow proper drainage. Approx 100'	

Lemoine Ranch GHAD (1 of 1)

Project ID #	Site Condition	Description of Work	Notes
LR-1	Animal burrowing created a void behind wall.	Backfill voids and compact soil behind wall. At one location. Hole is approx. 6" by 6"	
LR-2	Excessive burrowing and erosion exposing footing of wall	Re-grade, backfill and compact voids behind wall. Approx 10' of backfill and re-grading	
LR-3	Minor soil buildup & standing water in concrete-lined drainage ditch.	Remove soil to allow proper flow.	
LR-4	Minor leaves accumulated in earthen swale.	Remove leaves to promote proper drainage. Regrade from curb opening 30' between rock line swale.	
LR-5	Earthen swale filled in with soil from erosion and burrowing activity.	Remove growing organics from swale, re-grade earthen swale and line with rock to restore drainage.	
LR-6	Catch basin blocked, draining slowly during rain events.	Clear out and jet catch basin to unclog the line. Regrade from curb opening to CB for proper flow. 12" or 18" wide flow lines	
LR-7	Existing grade does not drain to gutter pan.	Regrade about 1' cut @ high spot 20' SE from Gutter Pan	
LR-8	Cracking in concrete drainage ditch & CB patching	Sack V-ditch. North and south side & grout fill west side of CB	
LR-9	Catch basin not completely poured. Southside missing wall.	At South side of inlet, remove plywood & form & pour closure	
LR-10	Burrowing and erosion between footing and concrete v-ditch. Stucco has popped off approximate dimension 3'x4' of retaining wall	Add backfill between wall footing & v-ditch. Patch stucco on retaining wall	
LR-11	Earthen swale filled in with soil from erosion and burrowing activity.	Re-grade earthen swale and line with rock to restore drainage.	
LR-12	Area of subsidence adjacent to earthen ditch.	Backfilling settled area to avoid standing water accumulation.	
LR-13	Deep erosion gully and collapsing soil along wall. Debris around and inside drain inlet.	Place riprap around drain inlet to allow proper flow, consider backfilling erosion gully. Remove debris around and inside drain inlet	
LR-14	Drain inlet offset from concrete-lined drainage ditch. Debris inside CB	Continue to monitor area for distress to concrete. Concrete sack North and South Sides & Grout Fill West side of CB. Remove debris from CB.	
LR-15	Erosion gully forming along retaining wall.	Backfill gully and create positive drainage towards the concrete-lined drainage ditch. Approx 25'	
LR-16	Leaves and branches accumulated in earthen ditch.	Remove leaves and branches to allow proper drainage. Approx 200'	
LR-17	Overgrown vegetation along drainage ditch.	Trim vegetation to allow proper flow. Approx 450'	
LR-18	Debris, weeds, leaves accumulated in drainage ditch. For majority of V-ditch	Remove debris to allow proper drainage. Approx 450'	
LR-19	Sand bags installed around field inlet	Remove sandbags, install tensor geogrid slope stabilization (or approved equal) approx. 15'x6' and 12" to 18" cobblestones in place of sandbags around inlet/headwall	

Oak Tree Farm GHAD (1 of 1)

Project ID #	Site Condition	Description of Work	Notes
OTF-1	Erosion rill on slope and access road, jute fabric placed on slope for erosion control.	Re-grade, compact and reinforce erosional rill.	
OTF-2	Storm drain clogged.	Jet manhole to clear line. Need to jet from pipe inlet #2 to SDMH #3 to FI#2 and to Rockford place SWI#5 & SDMH #2. Approx 300' of 36" RCP from DI to SDMH on Rockford Place.	
OTF-3	Wrong SDMH Lid Installed	Change existing 24" SDMH Lid to traffic rated 24" slotted drain lid (Cast Iron).	
OTF-4	Current sandbags runoff directly from private access road above FI#2. Steep Hill	Install 6" AC Berm/Curb on east side of SDMH#3 and FI#2 for along access road for approx. 35'	
OTF-5	Overgrown vegetation.	Trim back vegetation to allow drainage within concrete V-Ditch approx. 200'	
OTF-6	Degraded wattle along drainage ditch. Debris in V-ditch	Remove degraded straw wattle to prevent debris from blocking ditch. Approx 10' Also clean debris in V-ditch to allow proper drainage approx. 5'	
OTF-7	Leaves and soil accumulated in drainage ditch.	Remove leaves to allow proper drainage. Entire V-ditch approx. 300'	
OTF-8	Access road erosion.	Access road needs to regrade and compact to drain to concrete V-ditch. Approx 5' width by 75' along east side closer to the ditch.	
OTF-9	Leaves accumulated in concrete drainage ditch.	Remove leaves to allow proper drainage. V-ditch approx. 200'	

EXHIBIT D

Representative Photographs

Laurel Creek GHAD Photographs of Representative Conditions

ID LC-9: Soil slumping into concrete drainage ditch and drain inlet.



ID LC-10: Slow drainage of catch basin during rain events.



Laurel Creek GHAD Photographs of Representative Conditions

ID LC-13: Slow drainage of catch basin during rain events. Leaves, branches debris around catch basin.



ID LC-14: Leaves accumulating in concrete-lined drainage ditch.



Laurel Creek GHAD Photographs of Representative Conditions

ID LC-15: Expansion joint in pavement along concrete-lined drainage ditch.



ID LC-18: Overgrown vegetation on sides of V-ditch. Leaves and grass accumulated in concrete-lined drainage ditch.



Laurel Creek GHAD Photographs of Representative Conditions

ID LC-22: Cracking and distress on access road.



ID LC-23: Drainage inlet in open space is clogged, standing water in DI.



Laurel Creek GHAD Photographs of Representative Conditions

ID LC-32: Concrete drainage ditch overgrown with grasses and weeds, soil accumulated in v-ditch



ID LC-35: Grasses and vegetation overgrown in concrete drainage ditch and access road.



Laurel Creek GHAD Photographs of Representative Conditions

ID LC-36: Erosion at outfall of SD-11, area overgrown with dense grasses and weeds.



ID LC-37: New Concrete V-Ditch Required



Laurel Creek GHAD Photographs of Representative Conditions

ID LC-39: Straw wattle damaged.



ID LC 40: Debris, gravel, soils, leaves in Concrete V-Ditch



Laurel Creek GHAD Photographs of Representative Conditions

ID LC 43: Debris & Trimmed grasses accumulated in concrete-lined drainage ditch.



Moller Ranch GHAD Photographs of Representative Conditions

ID MR-3: Leaves, grass & debris accumulated in concrete drainage ditch for entire v-ditch.



ID MR-4: Earthen swale completely overgrown and filled with soil.



Moller Ranch GHAD Photographs of Representative Conditions

ID MR-6: Cracking in concrete-lined drainage ditch.



ID MR-9: Ditch segment buried with soil and vegetation.



Moller Ranch GHAD Photographs of Representative Conditions

ID MR-12: Outfall in pond overgrown and inlet clogged.



ID MR-18: Cracking and offset in concrete-lined drainage ditch. Soil accumulated in concrete-lined drainage ditch.



Moller Ranch GHAD Photographs of Representative Conditions

ID MR-21: Vegetation overgrown, trimmed grass leaves and debris accumulated in concrete-lined drainage ditch.



ID MR-22: Debris, branches inside DI/CB.



Moller Ranch GHAD Photographs of Representative Conditions

ID MR-25: Cracking in concrete drainage ditch allowing water to actively flow under ditch.



ID MR-26: Concrete drainage ditch blocked with vegetation growing through cracks, standing water in ditch.



Moller Ranch GHAD Photographs of Representative Conditions

ID MR-30: Debris accumulated at drain inlet on north side of road.



MR 31: Road on north side has debris, leaves, soil etc.. Along curb long.



Lemoine Ranch GHAD Photographs of Representative Conditions

ID LR-1: Animal burrowing created a void behind wall.



ID LR-2: Excessive burrowing and erosion exposing footing of wall

Lemoine Ranch GHAD Photographs of Representative Conditions



ID LR-7: Existing grade does not drain to gutter pan.



ID LR-13: Deep erosion gully and collapsing soil along wall. Debris around and inside drain inlet.

Lemoine Ranch GHAD Photographs of Representative Conditions



ID LR-16: Leaves and branches accumulated in earthen ditch.



Lemoine Ranch GHAD Photographs of Representative Conditions

ID LR-17: Overgrown vegetation along drainage ditch.



ID LR-18: Debris, weeds, leaves accumulated in drainage ditch. For majority of V-ditch



Lemoine Ranch GHAD Photographs of Representative Conditions

ID LR-19: Sand bags installed around field inlet



Oak Tree Farm GHAD Photographs of Representative Conditions

ID OTF-1: Erosion rill on slope and access road, jute fabric placed on slope for erosion control.

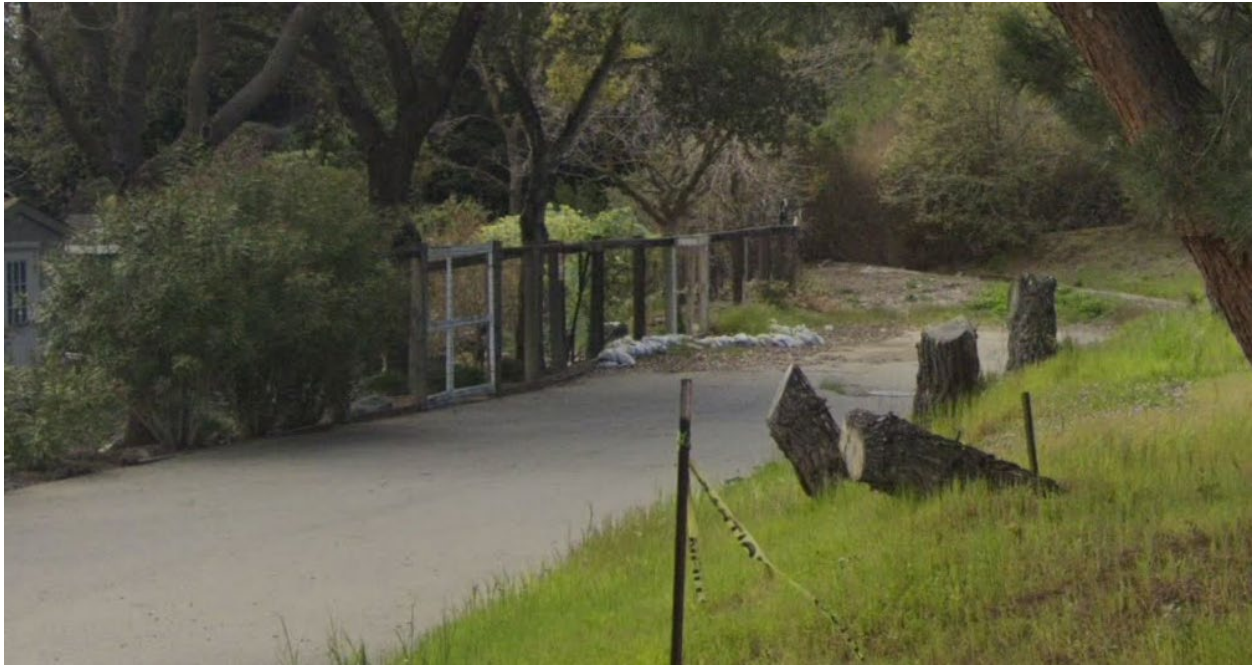


ID OTF-2: Storm drain clogged.



ID OTF-4: Current sandbags runoff directly from private access road above FI#2. Steep Hill

Oak Tree Farm GHAD Photographs of Representative Conditions



ID OTF-5: Overgrown vegetation.

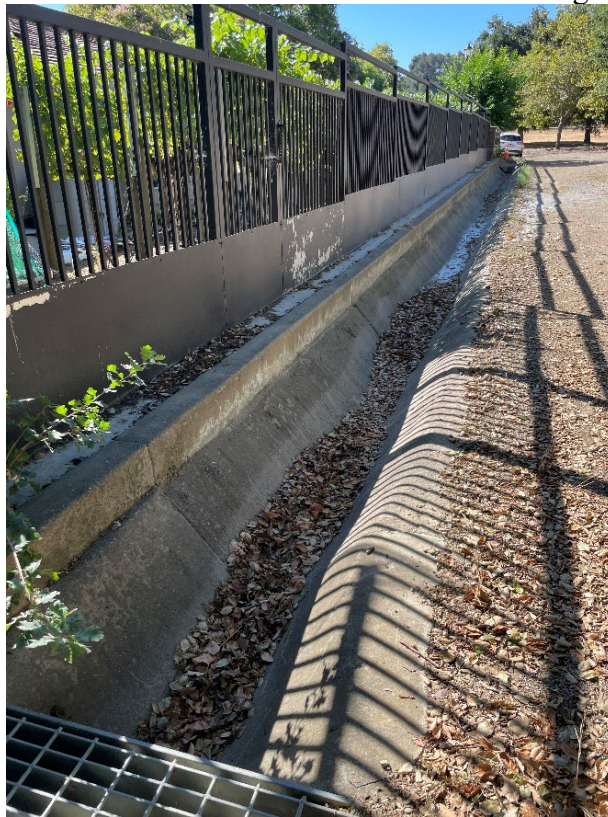


Oak Tree Farm GHAD Photographs of Representative Conditions

ID OTF-6: Degraded wattle along drainage ditch. Debris in V-ditch

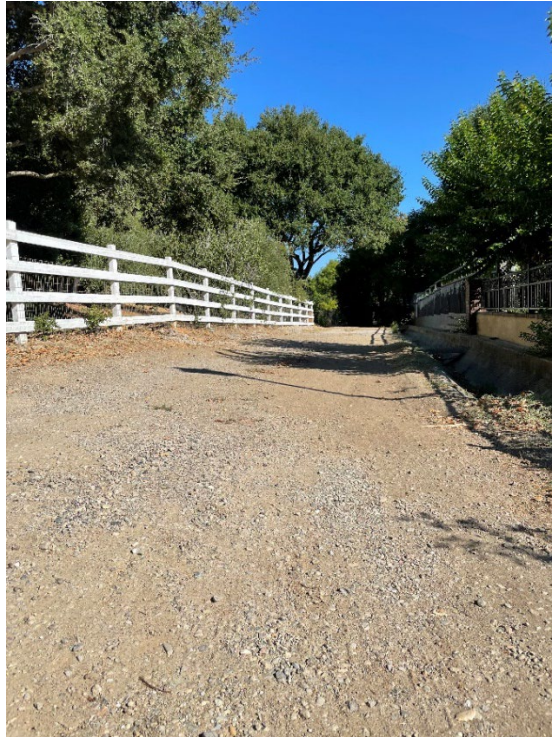


ID OTF-7: Leaves and soil accumulated in drainage ditch.



Oak Tree Farm GHAD Photographs of Representative Conditions

ID OTF-8: Access road erosion.

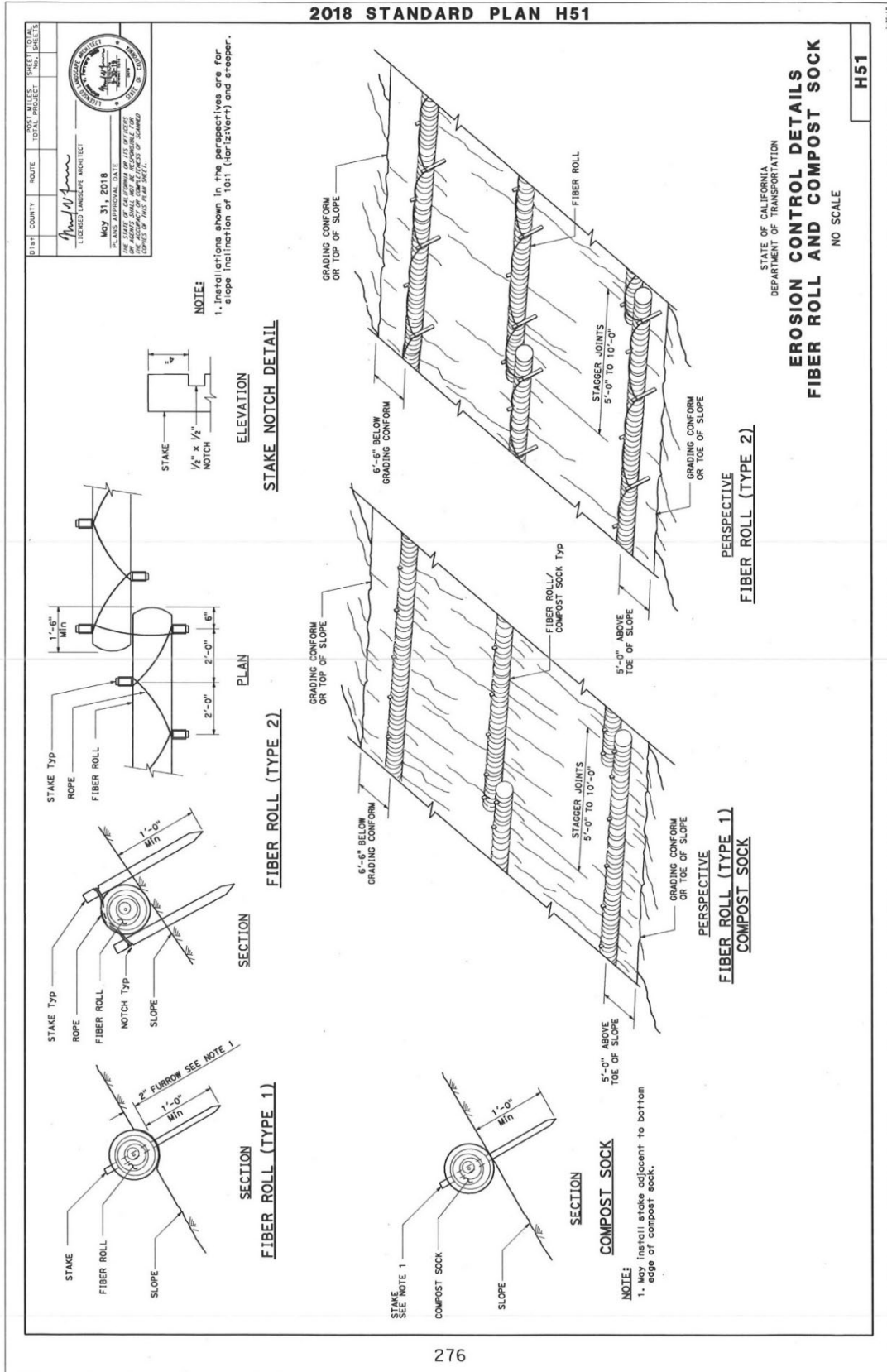


ID OTF-9: Leaves accumulated in concrete drainage ditch.



EXHIBIT E

Applicable Standard Plans



276

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL DETAILS

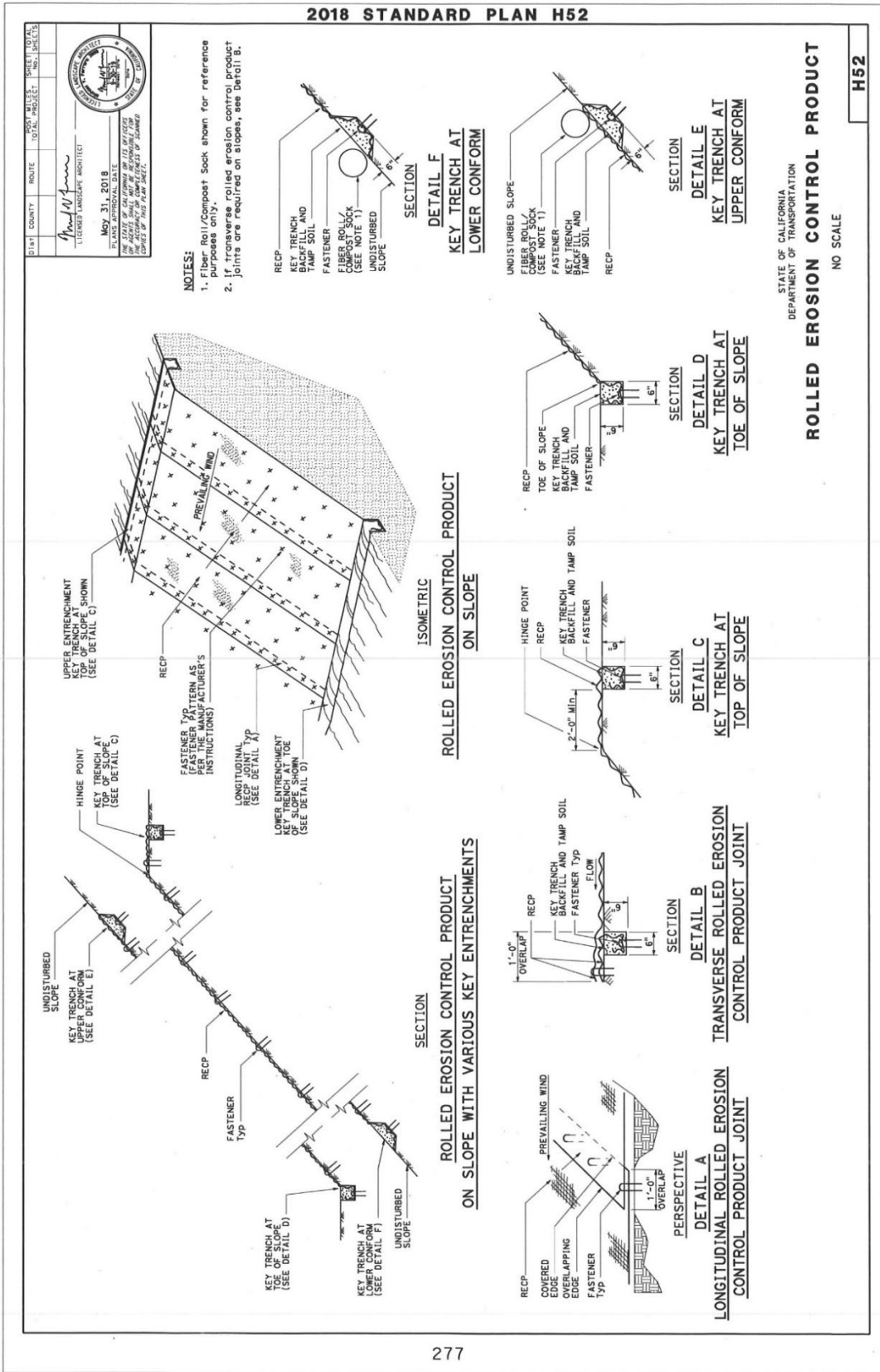
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NO SCALE

H51

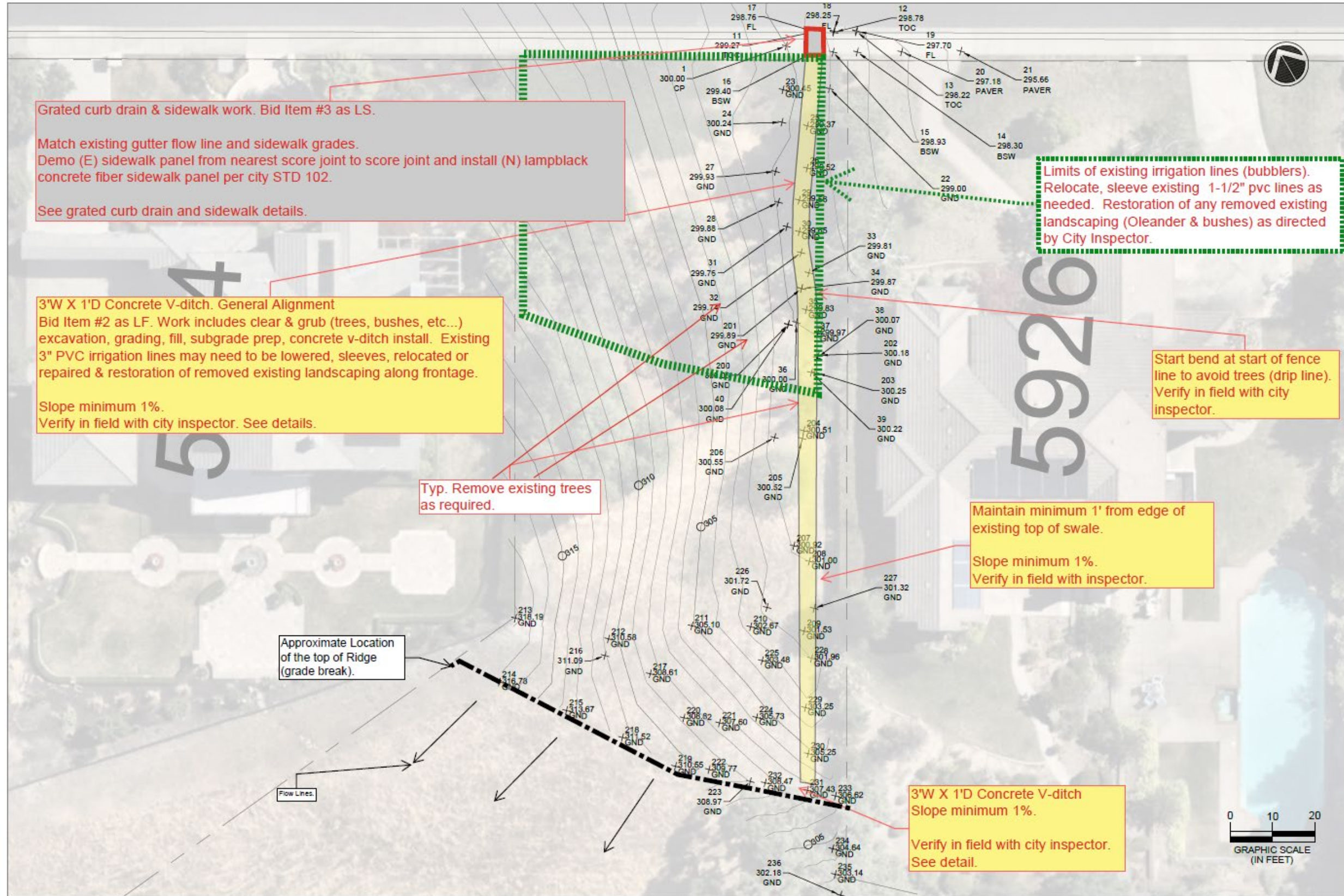
Return to Table of Contents

2018 Caltrans STD N52 Rolled Erosion Control Product



Return to Table of Contents

Laurel Creek Project ID# 37 Existing Site Survey and General Alignment of Concrete V-Ditch



Grated curb drain & sidewalk work. Bid Item #3 as LS.
 Match existing gutter flow line and sidewalk grades.
 Demo (E) sidewalk panel from nearest score joint to score joint and install (N) lampblack concrete fiber sidewalk panel per city STD 102.
 See grated curb drain and sidewalk details.

Limits of existing irrigation lines (bubblers).
 Relocate, sleeve existing 1-1/2" pvc lines as needed. Restoration of any removed existing landscaping (Oleander & bushes) as directed by City Inspector.

3'W X 1'D Concrete V-ditch. General Alignment
 Bid Item #2 as LF. Work includes clear & grub (trees, bushes, etc...) excavation, grading, fill, subgrade prep, concrete v-ditch install. Existing 3" PVC irrigation lines may need to be lowered, sleeves, relocated or repaired & restoration of removed existing landscaping along frontage.
 Slope minimum 1%.
 Verify in field with city inspector. See details.

Start bend at start of fence line to avoid trees (drip line).
 Verify in field with city inspector.

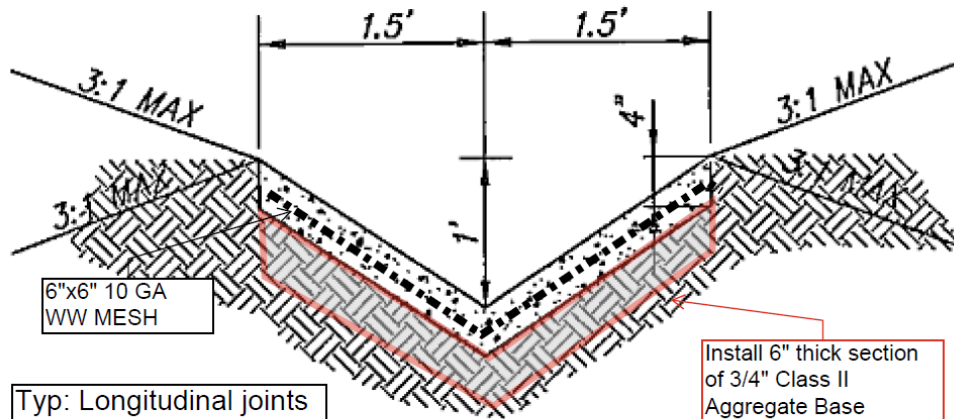
Typ. Remove existing trees as required.

Maintain minimum 1' from edge of existing top of swale.
 Slope minimum 1%.
 Verify in field with inspector.

Approximate Location of the top of Ridge (grade break).

3'W X 1'D Concrete V-ditch
 Slope minimum 1%.
 Verify in field with city inspector. See detail.

Laurel Creek Project ID# 37 Detail Sheets



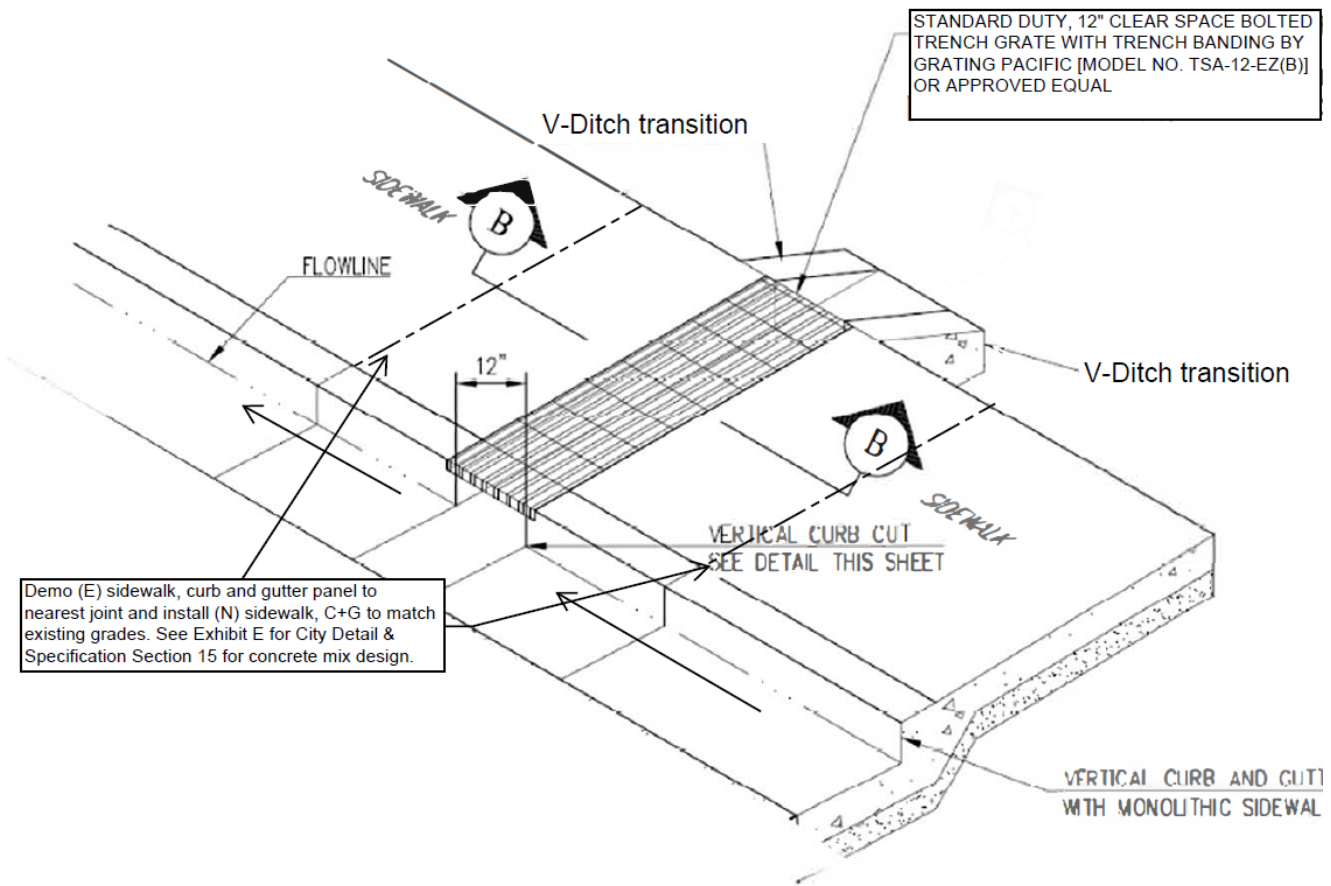
6"x6" 10 GA
WW MESH

Typ: Longitudinal joints
shall be maximum 10'

Install 6" thick section
of 3/4" Class II
Aggregate Base
compact to 95% ASTM
D1557.

**3' WIDE
CONCRETE V-DITCH**

NOT TO SCALE



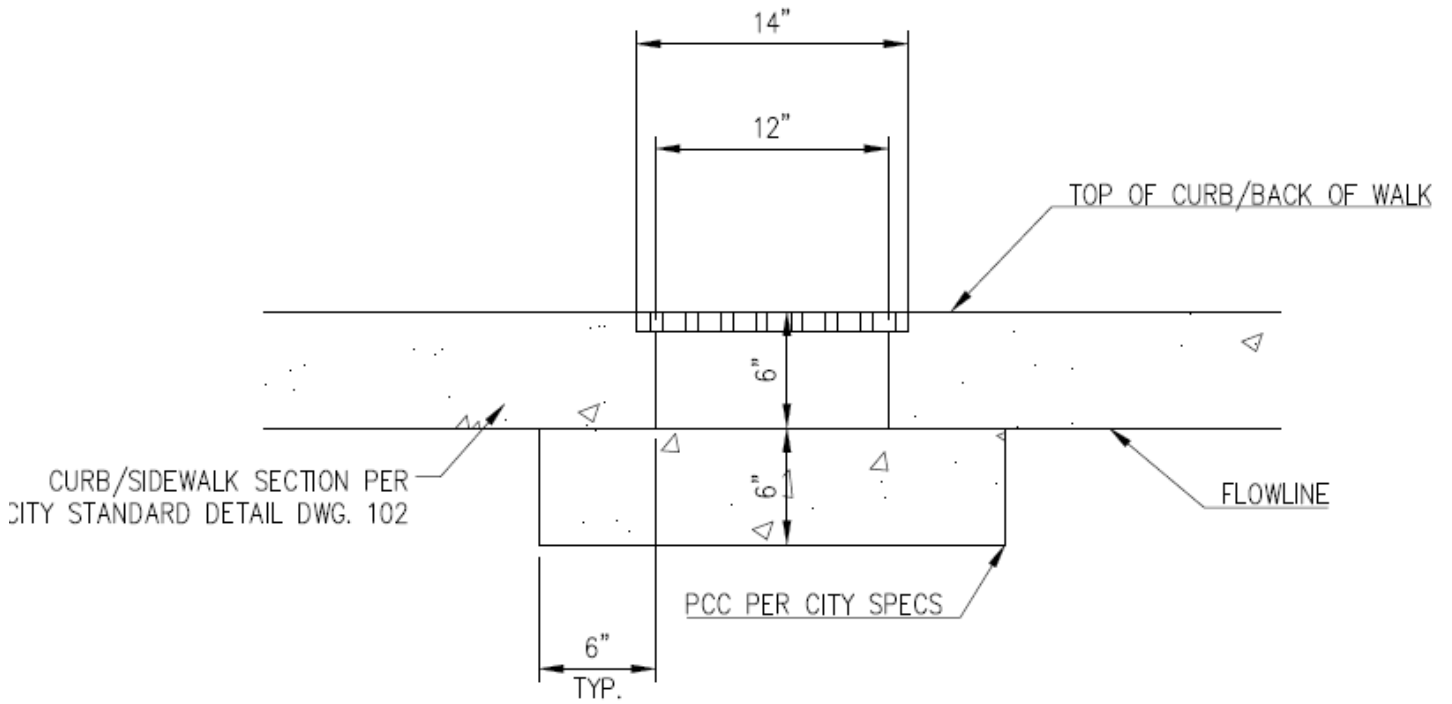
STANDARD DUTY, 12" CLEAR SPACE BOLTED
TRENCH GRATE WITH TRENCH BANDING BY
GRATING PACIFIC [MODEL NO. TSA-12-EZ(B)]
OR APPROVED EQUAL

Demo (E) sidewalk, curb and gutter panel to
nearest joint and install (N) sidewalk, C+G to
match existing grades. See Exhibit E for City Detail &
Specification Section 15 for concrete mix design.

VERTICAL CURB AND GUT
WITH MONOLITHIC SIDEWALK

GRATED CURB CUT DETAIL

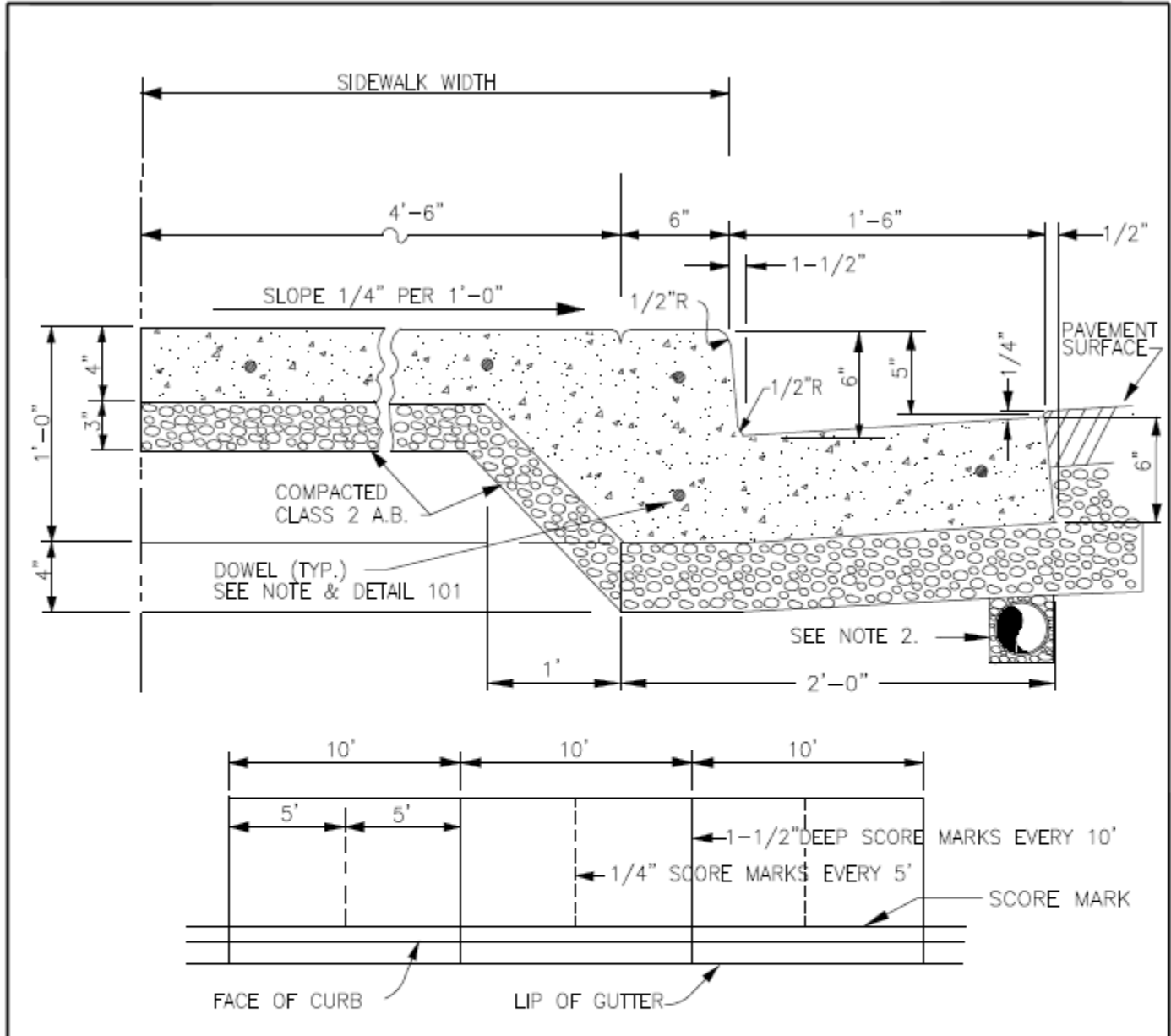
NOT TO SCALE



GRATED CURB CUT SECTION B-B

NOT TO SCALE

City of Pleasanton Standard Detail No. 102



TYPICAL SCORE MARKING DETAIL FOR 5' WIDE SIDEWALK OR LESS

NOTES:

1. SEE DETAIL 101 FOR GENERAL CURB, GUTTER & SIDEWALK NOTES.
2. INSTALL A SUBDRAIN IN ACCORDANCE WITH DETAIL 209 AS DETERMINED BY THE CITY ENGINEER.

DRAWN BY:	STAFF	
CHECKED BY:	AN	
SCALE:	N.T.S.	

CITY OF PLEASANTON
 STANDARD DETAILS
 TYPE "B" MONOLITHIC CURB,
 GUTTER AND SIDEWALK

DATE : 10/16 DWG NO. 102