

ST MARY'S ROAD STABILIZATION PROJECT

GENERAL NOTES

1. STANDARD SPECIFICATIONS

ALL MATERIALS AND CONSTRUCTION METHODS SHALL COMPLY WITH THE REQUIREMENTS OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) STANDARD SPECIFICATIONS, 2015 EDITION, UNLESS OTHERWISE NOTED ON THESE PLANS.

2. PERMITS

CITY WILL ACQUIRE INITIAL PERMITS FOR DEPARTMENT OF FISH AND WILDLIFE (DFW), UNITED STATES ARMY CORPS OF ENGINEERS (USACOE), REGIONAL WATER QUALITY CONTROL BOARDS (RWQCB). CONTRACTOR TO PAY FEES AND SCHEDULE PRECONSTRUCTION MEETINGS WITH ALL APPLICABLE AGENCIES.

3. TRAFFIC CONTROL AND PUBLIC SAFETY

THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FENCING, FLAGGING, AND OTHER DEVICES NECESSARY FOR TRAFFIC CONTROL AND PUBLIC SAFETY.

4. EXISTING FACILITIES

EXISTING SITE IMPROVEMENTS TO REMAIN MAY INTERFERE WITH THE WORK. THESE FACILITIES SHALL BE PROTECTED OR REMOVED AND REPLACED WITH LIKE KIND AND QUALITY AT THE CONTRACTOR'S EXPENSE.

5. SITE INFORMATION

THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL ABOVE GROUND AND UNDERGROUND FACILITIES WHICH MAY BE AFFECTED BY HIS OPERATIONS. THE CONTRACTOR SHALL CONTACT OWNERS OF THESE FACILITIES AND SHALL PROTECT FACILITIES AND MAINTAIN SERVICE DURING CONSTRUCTION. THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (USA) AT (800) 642-2444 AT LEAST TWO WORKING DAYS PRIOR TO CONSTRUCTION.

DIMENSIONS AND LIMITS OF WORK SHOWN ON THE PLANS ARE APPROXIMATE AND ARE SUBJECT TO CHANGE BASED ON CONDITIONS ENCOUNTERED. CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND SITE CONDITIONS PRIOR TO THE START OF CONSTRUCTION. DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND THOSE SHOWN ON THE PLANS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.

6. INSPECTIONS AND TESTING

THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER AT LEAST TWO WORKING DAYS PRIOR TO ALL REQUIRED INSPECTIONS AND TESTING. INSPECTIONS AND TESTING SHALL BE COMPLETED BY CAL ENGINEERING & GEOLOGY (925)935-9771.

BETWEEN WALLABI CT AND DRIFTWOOD DR LAFAYETTE, CALIFORNIA FEMA 4301-DR-CA, CALOES ID 013-39122 LAFAYETTE PROJECT NO. 360-861-2017.1 JULY 2017

DESCRIPTION OF WORK

THE WORK SHALL CONSIST IN GENERAL OF PROVIDING ALL MATERIAL, LABOR, AND EQUIPMENT NECESSARY TO COMPLETE THE ROAD STABILIZATION PROJECT. WORK SHALL INCLUDE, BUT NOT BE LIMITED TO: MOBILIZATION, WATER POLLUTION CONTROL, DEVELOP SITE ACCESS, CLEARING & GRUBBING, EXCAVATION, SURFACE AND SUBSURFACE DRAINAGE SYSTEMS, TEMPORARY SHORING PILES, WOOD LAGGING, RETAINING WALL, DRAINAGE INLET, RSP PLACEMENT, SOIL INFILLING, AND PLANTING.

CONTRACTOR LICENSE

THE CONTRACTOR SHALL POSSESS A VALID CLASS A LICENSE AT THE TIME THE CONTRACT IS AWARDED.

INDEX OF SHEETS

1. TITLE SHEET
2. SITE PLAN
3. TYPICAL SECTION
4. CREEK DIVERSION PLAN
5. STAGING PLAN
6. PLANTING PLAN

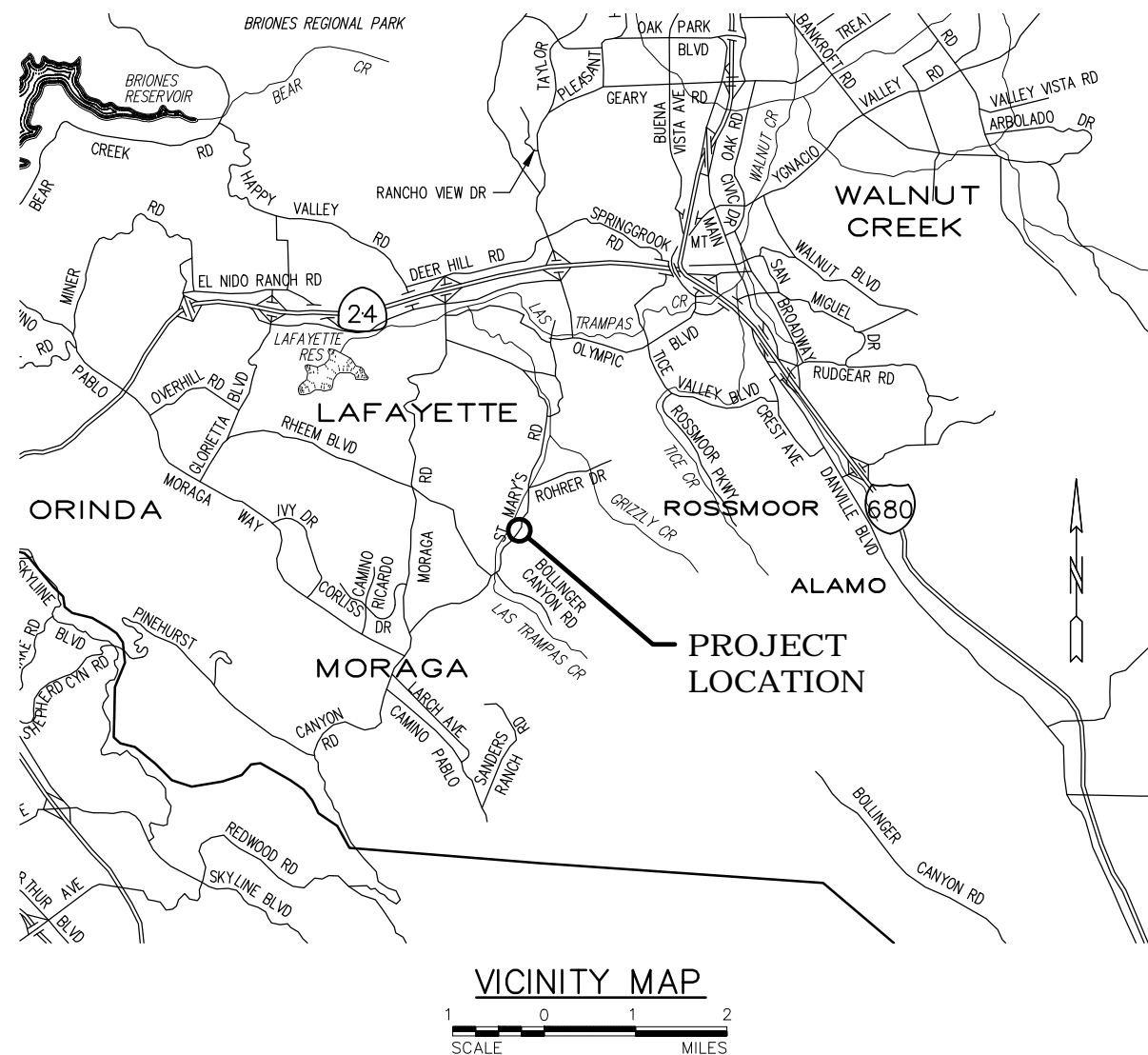
STANDARD PLANS


THE FOLLOWING STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) STANDARD PLANS, 2010 EDITION, APPLY:

- A10A ACRONYMS AND ABBREVIATIONS (SHEET 1 OF 2)
- A10B ACRONYMS AND ABBREVIATIONS (SHEET 2 OF 2)
- A10C SYMBOLS (SHEET 1 OF 2)
- A10D SYMBOLS (SHEET 2 OF 2)
- T51 TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY SILT FENCE)
- T56 TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY FIBER ROLLS)
- A77L1 MIDWEST GUARDRAIL SYSTEM STANDARD RAILING SECTION (WOOD POST WITH WOOD BLOCK)
- A77N3 MIDWEST GUARDRAIL SYSTEM TYPICAL LINE POST (EMBEDMENT AND HINGE POINT OFFSET DETAILS)

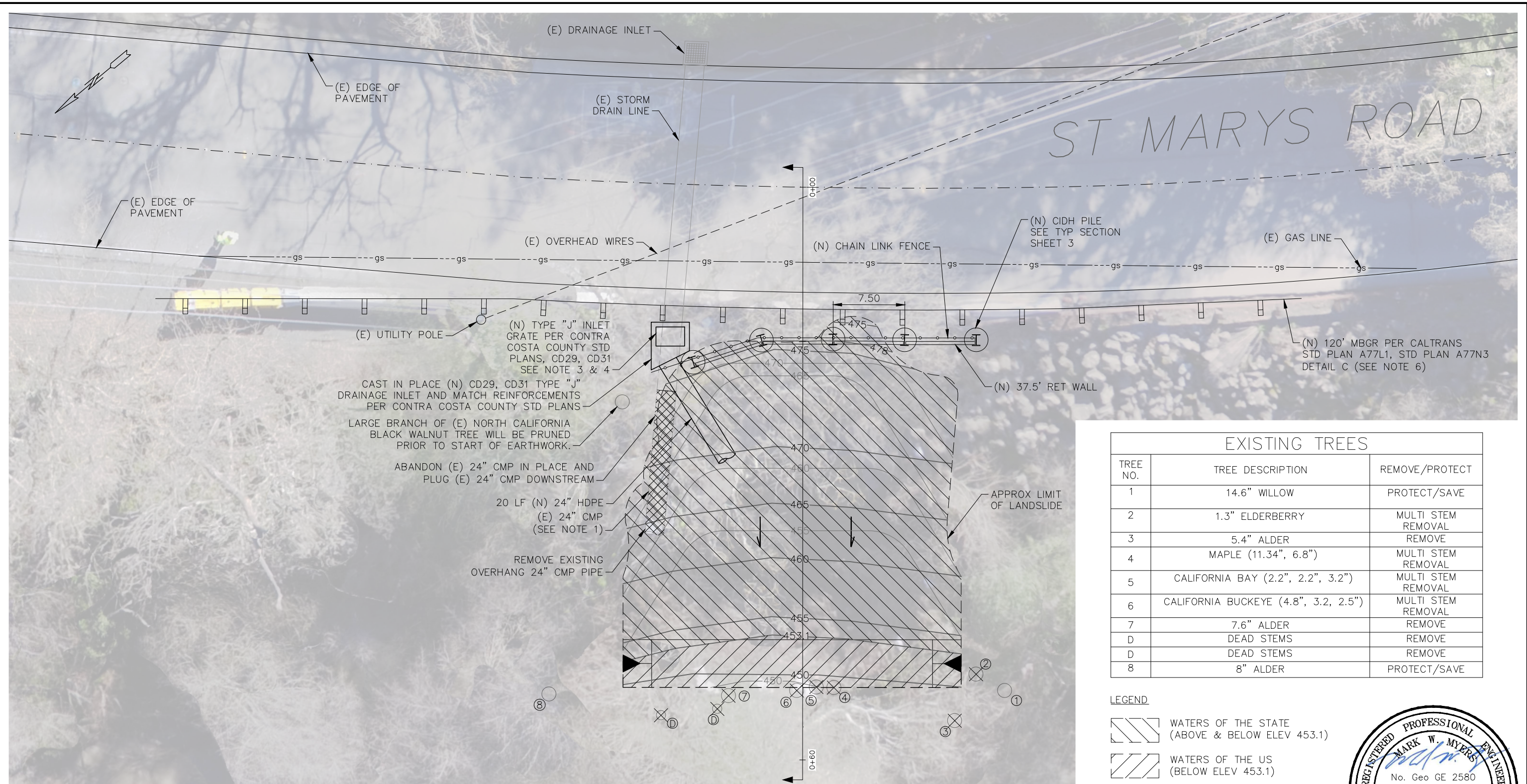
THE FOLLOWING CONTRA COSTA COUNTY STANDARD PLANS 2008 EDITION, APPLY:

- CD29 TYPE "J" INLET
- CD31 TYPE II MANHOLE BASE



 CAL ENGINEERING & GEOLOGY		1870 Olympic Blvd. Suite 100 Walnut Creek, CA 94596 Phone: (925) 935-9771	ST. MARY'S ROAD STABILIZATION PROJECT ST. MARY'S ROAD (BETWEEN WALLABI CT AND DRIFTWOOD DR) LAFAYETTE, CALIFORNIA TITLE SHEET		
DESIGNED M. MYERS	DRAWN T. UZEGBU	CHECKED M. MYERS	PROJECT NO. 170160	DATE JULY 2017	SHEET NO. OF 1 OF 6

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EXISTING TREES		
TREE NO.	TREE DESCRIPTION	REMOVE/PROTECT
1	14.6" WILLOW	PROTECT/SAVE
2	1.3" ELDERBERRY	MULTI STEM REMOVAL
3	5.4" ALDER	REMOVAL
4	MAPLE (11.34", 6.8")	MULTI STEM REMOVAL
5	CALIFORNIA BAY (2.2", 2.2", 3.2")	MULTI STEM REMOVAL
6	CALIFORNIA BUCKEYE (4.8", 3.2, 2.5")	MULTI STEM REMOVAL
7	7.6" ALDER	REMOVAL
D	DEAD STEMS	REMOVAL
D	DEAD STEMS	REMOVAL
8	8" ALDER	PROTECT/SAVE

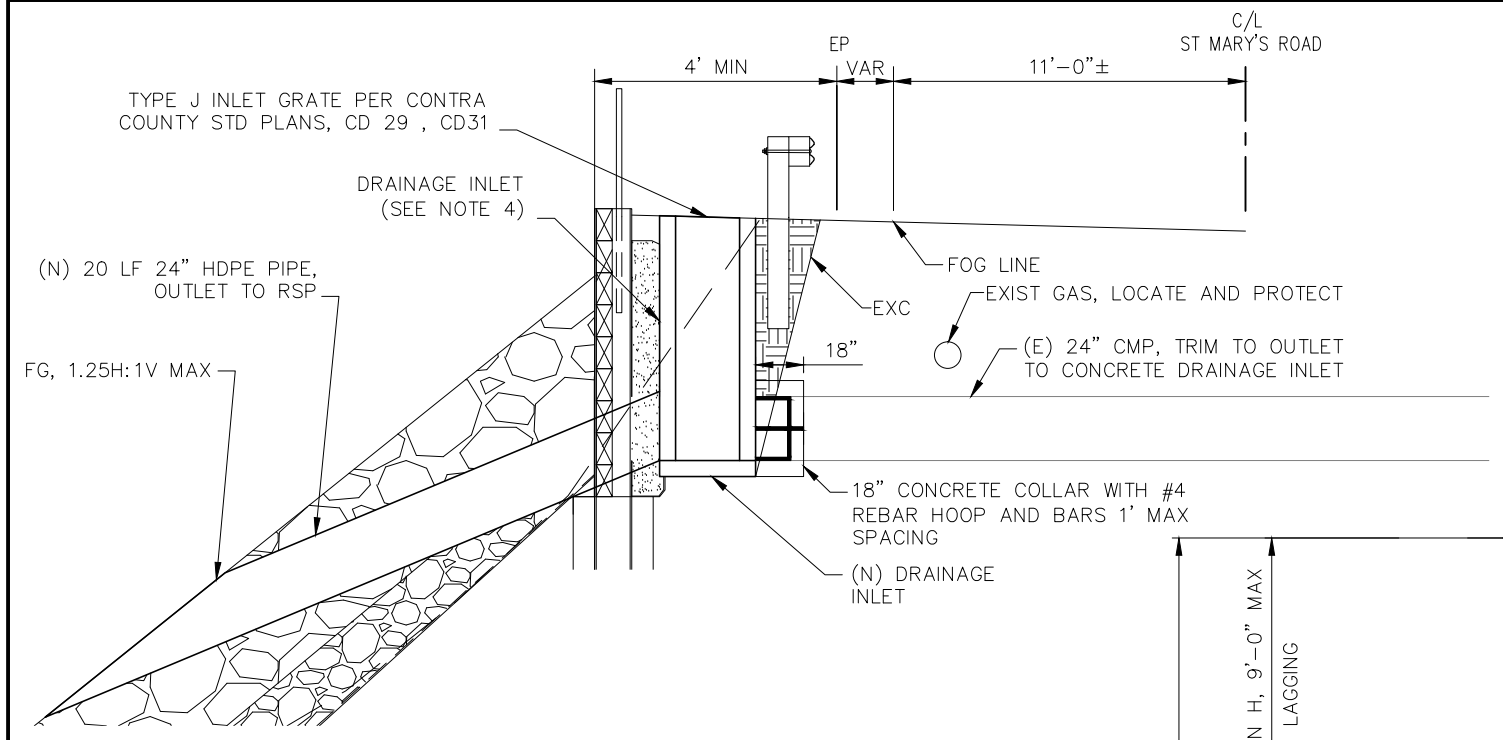
LEGEND
 WATERS OF THE STATE (ABOVE & BELOW ELEV 453.1)
 WATERS OF THE US (BELOW ELEV 453.1)



- NOTES**
- CONTRACTOR SHALL CUT PORTION OF (E) 24" CORRUGATED METAL PIPE (CMP) AND ABANDON PORTION NOT IN CONFLICT WITH REPAIR. EXISTING 24" CMP WILL DISCHARGE TO NEW DRAINAGE INLET. CONTRACTOR SHALL PLUG UPSTREAM END OF CMP AND ABANDONED IN PLACE.
 - CONTRACTOR SHALL INSTALL NEW 24" HDPE PIPE AND DRAINAGE INLET.
 - CONTRACTOR SHALL CONFORM TO EXISTING GRADE AT GRATE ELEVATION FOR NEW DRAINAGE INLET.
 - FLOW LINE ELEVATION SHALL CONFORM TO EXISTING FLOW LINE AT NEW DRAINAGE INLET
 - UTILITIES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL VERIFY UTILITIES AND NOTIFY USA.
 - CONTRACTOR SHALL REMOVE 25 FEET OF EXISTING METAL BEAM GUARDRAIL PRIOR TO CONSTRUCTION OF NEW SEGMENT.

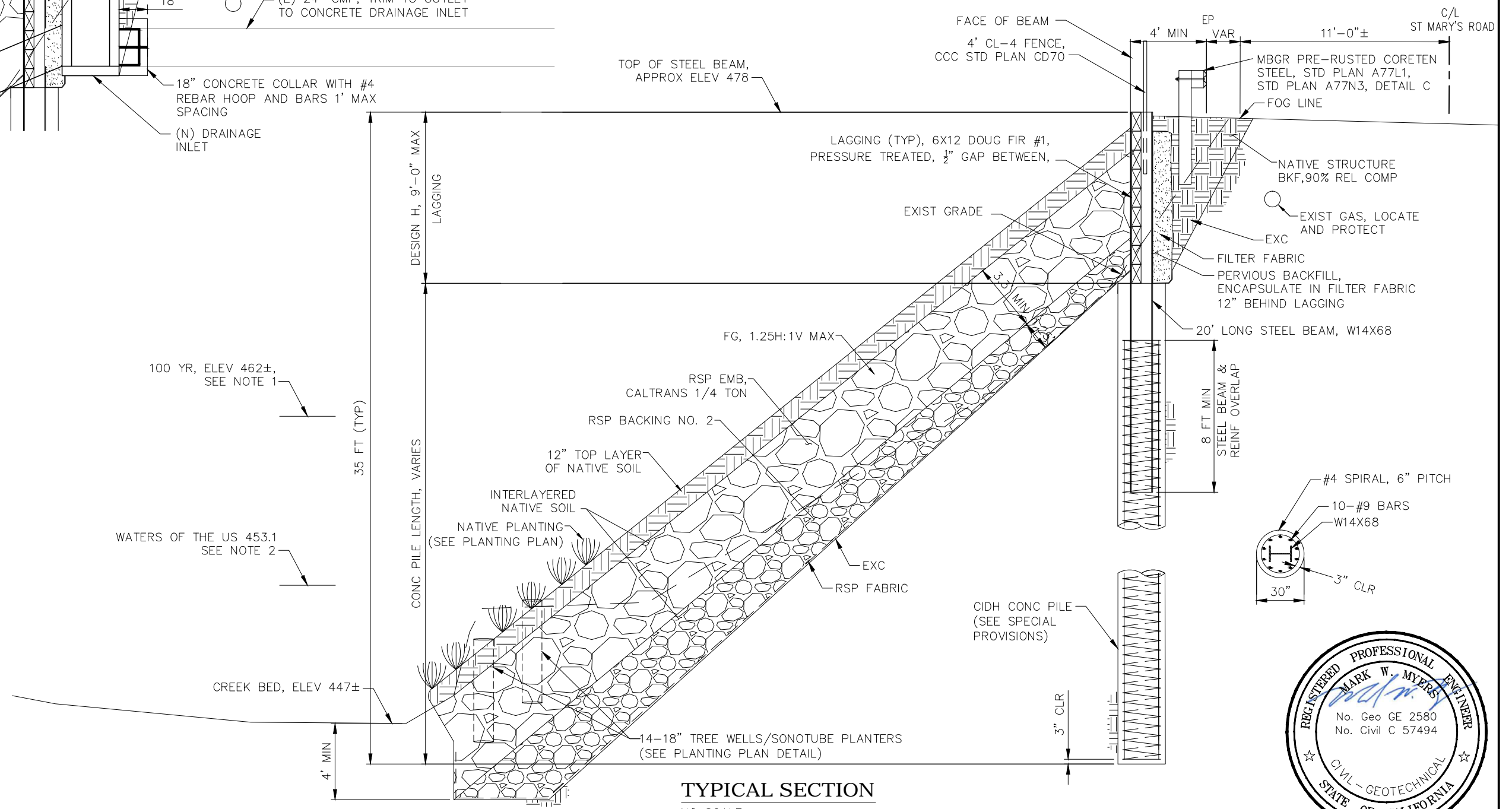
<p>CE&G CAL ENGINEERING & GEOLOGY</p>	1870 Olympic Blvd. Suite 100 Walnut Creek, CA 94596 Phone: (925) 935-9771	ST. MARY'S ROAD STABILIZATION PROJECT ST. MARY'S ROAD (BETWEEN WALLABI CT AND DRIFTWOOD DR) LAFAYETTE, CALIFORNIA SITE PLAN			
		DESIGNED M. MYERS	DRAWN T. UZEGBU	CHECKED M. MYERS	PROJECT NO. 170160





STORM DRAIN OUTLET
NO SCALE

- NOTES**
- GOOGLE EARTH OVERLAY OF FEMA MAP SHOWS THE 100 YR STORM ELEVATION TO BE APPROXIMATELY 462.
 - WATERS OF THE US
 - CONTRACTOR SHALL MATCH EXIST PAVEMENT SECTION.
 - CAST IN PLACE, INLET SHALL BE TYPE "J" DRAINAGE INLET PER CONTRA COSTA COUNTY STD PLANS CD29 AND CD31 WITH MODIFIED DIMENSION TO MATCH SITE CONSTRAINTS. APPROXIMATE INLET DEPTH IS 5.5 FT.



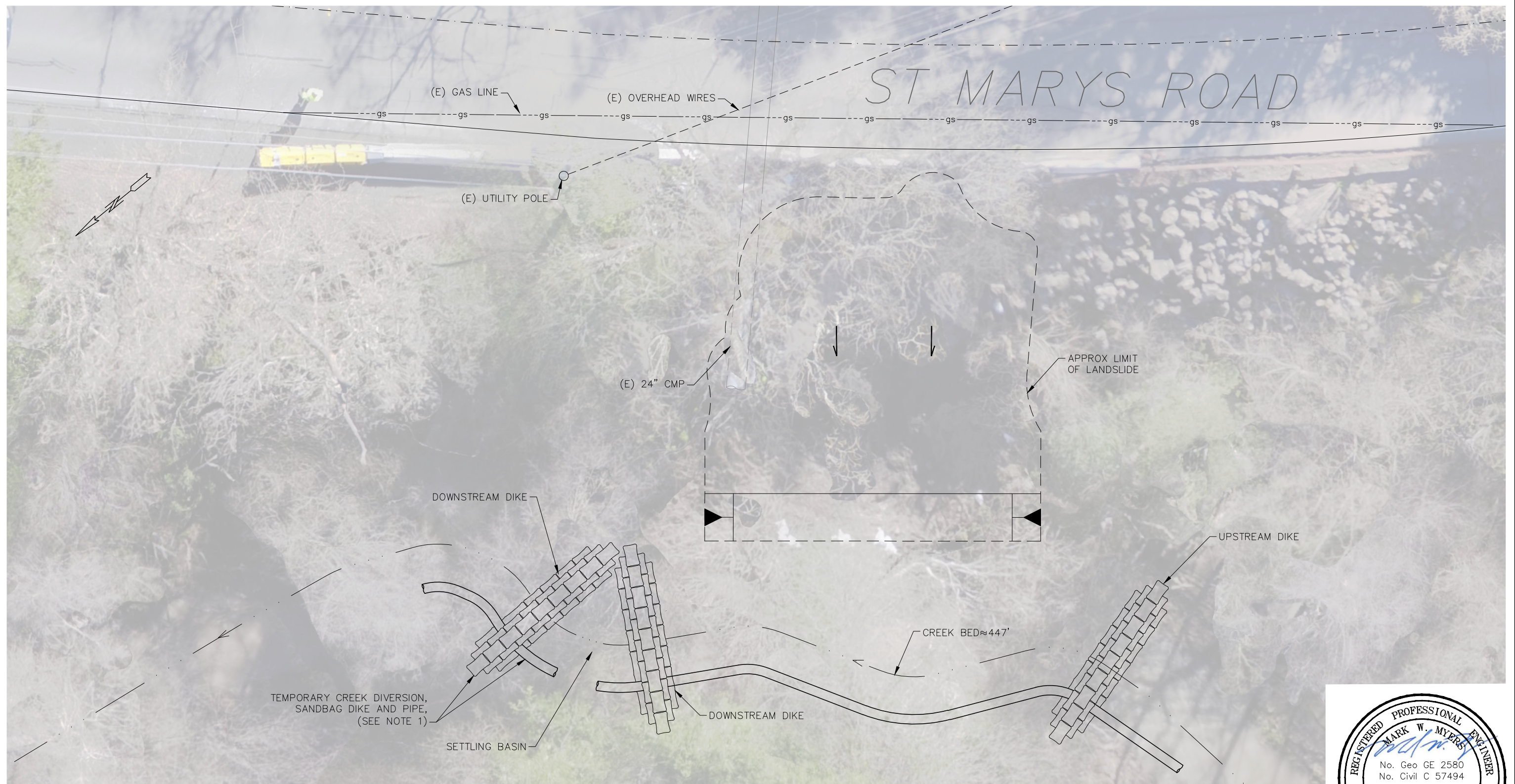
TYPICAL SECTION
NO SCALE



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<p>CE&G CAL ENGINEERING & GEOLOGY</p>		<p>1870 Olympic Blvd. Suite 100 Walnut Creek, CA 94596 Phone: (925) 935-9771</p>	<p>ST. MARY'S ROAD STABILIZATION PROJECT ST. MARY'S ROAD (BETWEEN WALLABI CT AND DRIFTWOOD DR) LAFAYETTE, CALIFORNIA</p> <p>TYPICAL SECTION</p>		
DESIGNED M. MYERS	DRAWN T. UZEGBU	CHECKED M. MYERS	PROJECT NO. 170160	DATE JULY 2017	SHEET NO. OF 3 OF 6


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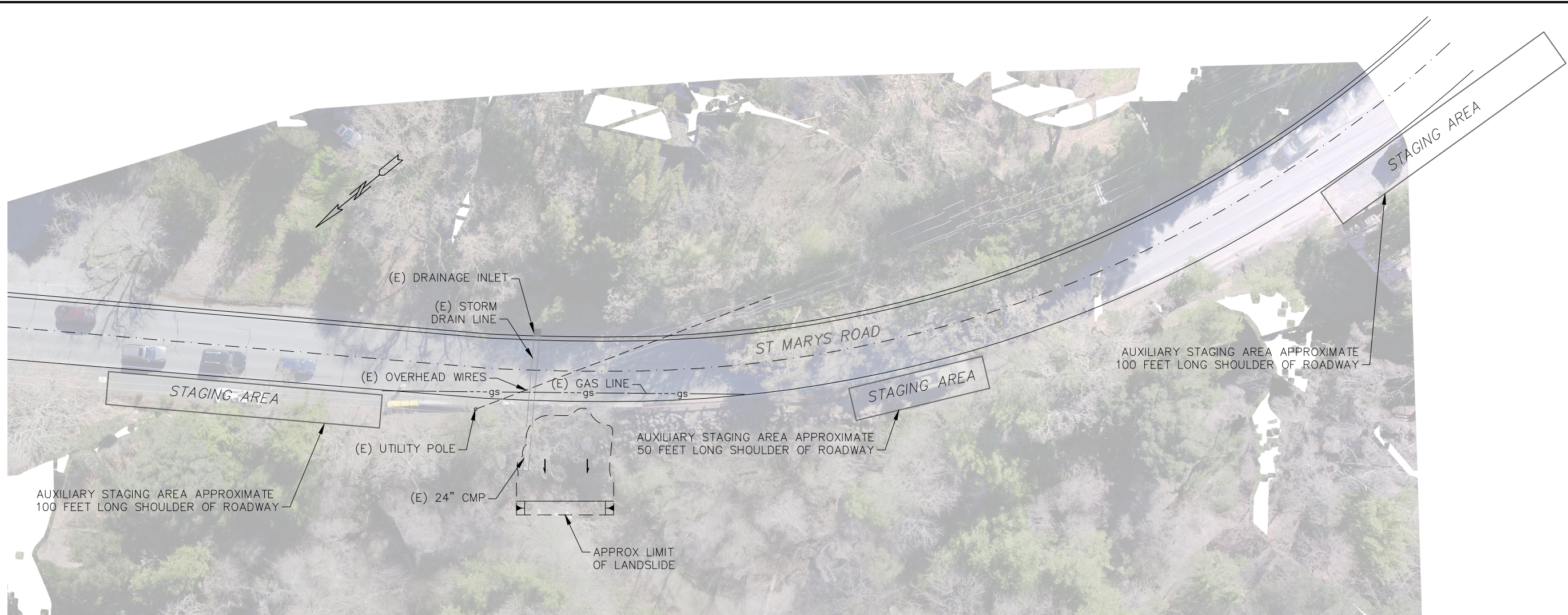
NOTES

1. PRIOR TO BEGINNING ANY WORK WITHIN THE CREEK CHANNEL, THE CONTRACTOR SHALL CONSTRUCT A TEMPORARY DIVERSION OF FLOWING CREEK WATER THROUGH THE CONSTRUCTION SITE. THE CONTRACTOR SHALL PROVIDE FOR THE CONTINUAL FLOW OF WATER IN THE CHANNEL AT ALL TIMES WITHOUT DISTURBANCE. THE DIVERSION METHOD SHALL INCORPORATE SAND BAGS AND PLASTIC SHEETING TO ACT AS UPSTREAM AND DOWNSTREAM COFFERDAMS. WATER SHALL BE ALLOWED TO FLOW BY GRAVITY THROUGH TEMPORARY PIPING. THE CONTRACTOR SHALL SUBMIT A TEMPORARY CREEK DIVERSION PLAN TO THE ENGINEER FOR APPROVAL. THE PLAN SHALL INCLUDE JUSTIFICATION OF ALL COFFERDAMS AND PIPE SIZING.
2. CONTRACTOR SHALL ALSO HAVE AN ADEQUATE SUMP PUMP(S) ON-SITE DURING CREEK DIVERSION TO TRANSPORT ANY SURGES OF WATER THAT MAY RELEASE INTO THE CREEK. THE SUMP PUMP(S) SHALL HAVE A FILTER SCREEN AT THE INLET AND DISCHARGE TO A SETTLING BASIN.



 CAL ENGINEERING & GEOLOGY		1870 Olympic Blvd. Suite 100 Walnut Creek, CA 94596 Phone: (925) 935-9771		ST. MARY'S ROAD STABILIZATION PROJECT ST. MARY'S ROAD (BETWEEN WALLABI CT AND DRIFTWOOD DR) LAFAYETTE, CALIFORNIA	
		CREEK DIVERSION PLAN		PROJECT NO. 170160	DATE JULY 2017
DESIGNED M. MYERS	DRAWN T. UZEGBU	CHECKED M. MYERS			

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AUXILIARY STAGING AREA APPROXIMATE 100 FEET LONG SHOULDER OF ROADWAY

(E) OVERHEAD WIRES

(E) UTILITY POLE

(E) 24" CMP

APPROX LIMIT OF LANDSLIDE

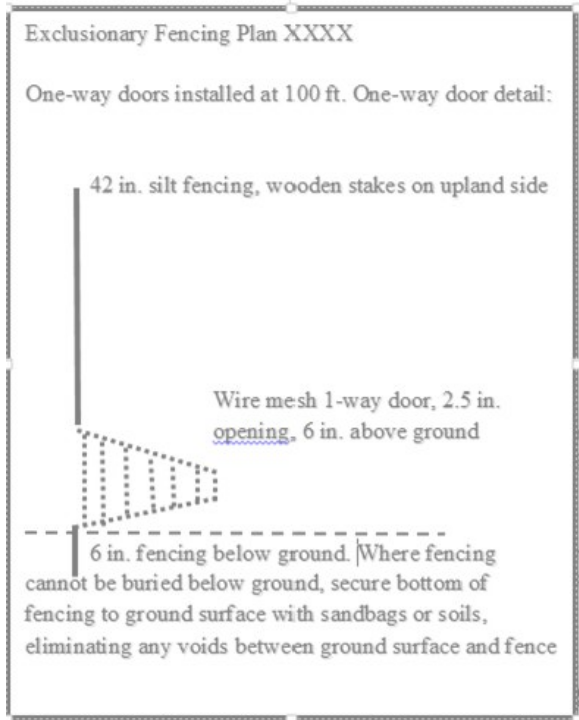
ST MARYS ROAD

STAGING AREA

AUXILIARY STAGING AREA APPROXIMATE 100 FEET LONG SHOULDER OF ROADWAY

STAGING AREA

AUXILIARY STAGING AREA APPROXIMATE 50 FEET LONG SHOULDER OF ROADWAY



WILDLIFE EXCLUSIONARY FENCING DETAIL
NO SCALE



NOTES

1. WILDLIFE EXCLUSIONARY FENCE SHALL BE PLACED AROUND STAGING AREAS UTILIZED BY THE CONTRACTOR.



		1870 Olympic Blvd. Suite 100 Walnut Creek, CA 94596 Phone: (925) 935-9771		ST. MARY'S ROAD STABILIZATION PROJECT ST. MARY'S ROAD (BETWEEN WALLABI CT AND DRIFTWOOD DR) LAFAYETTE, CALIFORNIA	
CE&G CAL ENGINEERING & GEOLOGY				STAGING PLAN	
DESIGNED M. MYERS	DRAWN T. UZEGBU	CHECKED M. MYERS	PROJECT NO. 170160	DATE JULY 2017	SHEET NO. OF 5 OF 6

FIGURE 2. PLANTING & SEEDING PLAN

Mosaic Associates

July 2017

Table 1: Plant Palette

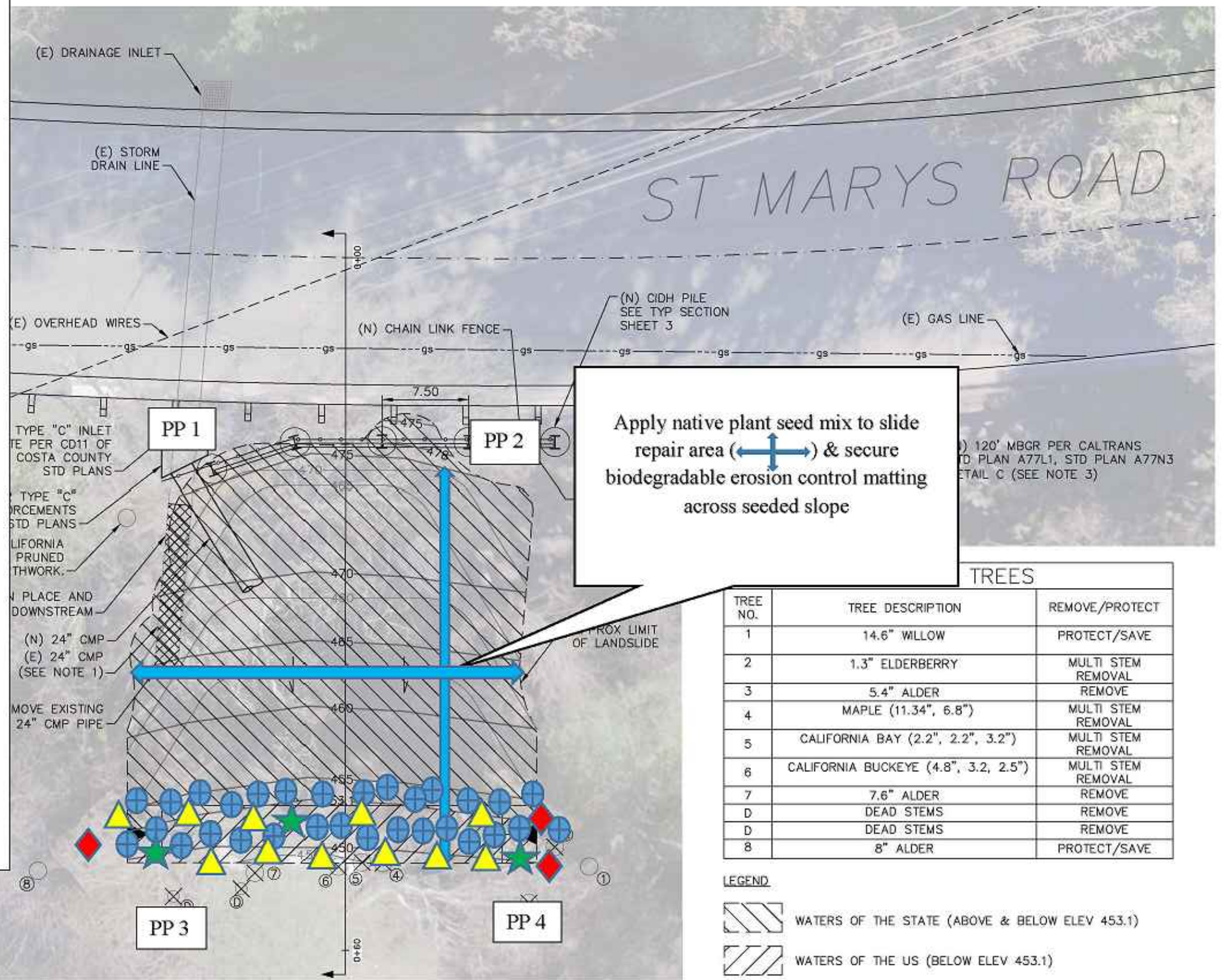
Species Name	Symbol	Type	Spacing	No. plants
<i>Rubus ursinus</i> California blackberry	Blue circle	1 gal or D-40	3' O.C	30
<i>Alnus rhombifolia</i> white alder	Green star	5 gal	10' O.C., sonotubes	3
<i>Salix lasiolepis</i> , <i>S. laevigata</i> , <i>S. exigua</i> arroyo, red or sandbar willow	Yellow triangle	pole cuttings	5' O.C., sonotubes	11
<i>Salix lasiolepis</i> , <i>S. laevigata</i> , <i>S. exigua</i> arroyo, red or sandbar willow	Red diamond	pole cuttings	5' O.C.,	3

Table 2: Native Plant Seed Mix 0.04 ac (1,920 SF)

Species	Rate lbs/acre
<i>Achillea millefolium</i> , yarrow	0.75
<i>Artemisia douglasiana</i> , mugwort	2
<i>Baccharis pilularis</i> , coyote bush	0.5
<i>Bromus carinatus</i> , CA brome	4
<i>Eschscholzia californica</i> , CA poppy	2
<i>Elymus glaucus</i> , blue wild rye	8
<i>Lupinus bicolor</i> , annual lupine	4
<i>Nassella pulchra</i> , purple needle-grass	2
<i>Scrophularia californica</i> , beeplant	2
<i>Sisyrinchium bellum</i> , CA blue-eyed grass	2
<i>Trifolium obtusiflorum</i> , creek clover	6
<i>Vulpia microstachys</i> , three-weeks fescue	6
Total	38.75

Photo point locations

PP



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LEGEND

WATERS OF THE STATE (ABOVE & BELOW ELEV 453.1)

WATERS OF THE US (BELOW ELEV 453.1)

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	Mosaic Associates 1690 San Pablo Avenue Suite D Pinole, CA 94564 Phone: (510) 964-0394	ST. MARY'S ROAD STABILIZATION PROJECT ST. MARY'S ROAD (BETWEEN WALLABI CT AND DRIFTWOOD DR) LAFAYETTE, CALIFORNIA	
	PLANTING PLAN		
DESIGNED J. BENDIX	DRAWN J. BENDIX	PROJECT NO. 170160	DATE JULY 2017
		SHEET NO. OF 6 6	