

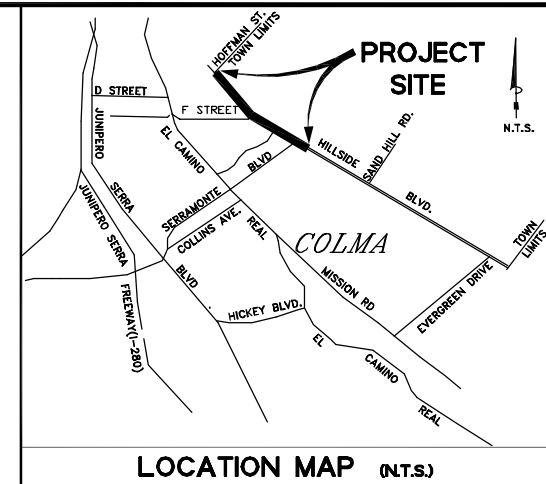


HILLSIDE BOULEVARD IMPROVEMENTS PROJECT, PHASE I

C.I.P. NO. 901

FROM HOFFMAN STREET TO 390 FEET SOUTH OF SERRAMONTE BOULEVARD

TOWN OF COLMA, SAN MATEO COUNTY, CALIFORNIA



AERIAL TOPOGRAPHIC SURVEY
 HJW GEOSPATIAL, INC.
 2001 BROADWAY, THIRD FLOOR,
 OAKLAND, CA 94612
 PH. (510)834-2001
 FLIGHT DATE: MARCH 4, 2010

FLIGHT CONTROL SURVEY
 JOHN T SEACE LAND SURVEYING
 218 OCEAN ST.
 SANTA CRUZ, CA. 94060-5118
 PH. (831)421-0704, FAX (831)466-0517
 EMAIL: jseace@aol.com

LANDSCAPE ARCHITECTS
 DILLINGHAM ASSOCIATES, LANDSCAPE ARCHITECTS
 2927 NEWBURY STREET,
 BERKELEY, CA. 94703
 PH. (510)548-4700, FAX (510)548-0265
 http://www.dillinghamlandarch.com

CALL TWO WORKING DAYS
BEFORE YOU DIG
 IN CALIFORNIA,
 NEVADA AND HAWAII
 1-800-227-2600
 UNDERGROUND SERVICE ALERT

CONTRACTOR SHALL HAVE A VALID CLASS "A"
 CONTRACTOR'S LICENSE.

TOWN OF COLMA

CYRUS KIANPOUR,
 CITY ENGINEER

DATE:
 R.C.E. 44799, EXPIRES 3/31/14

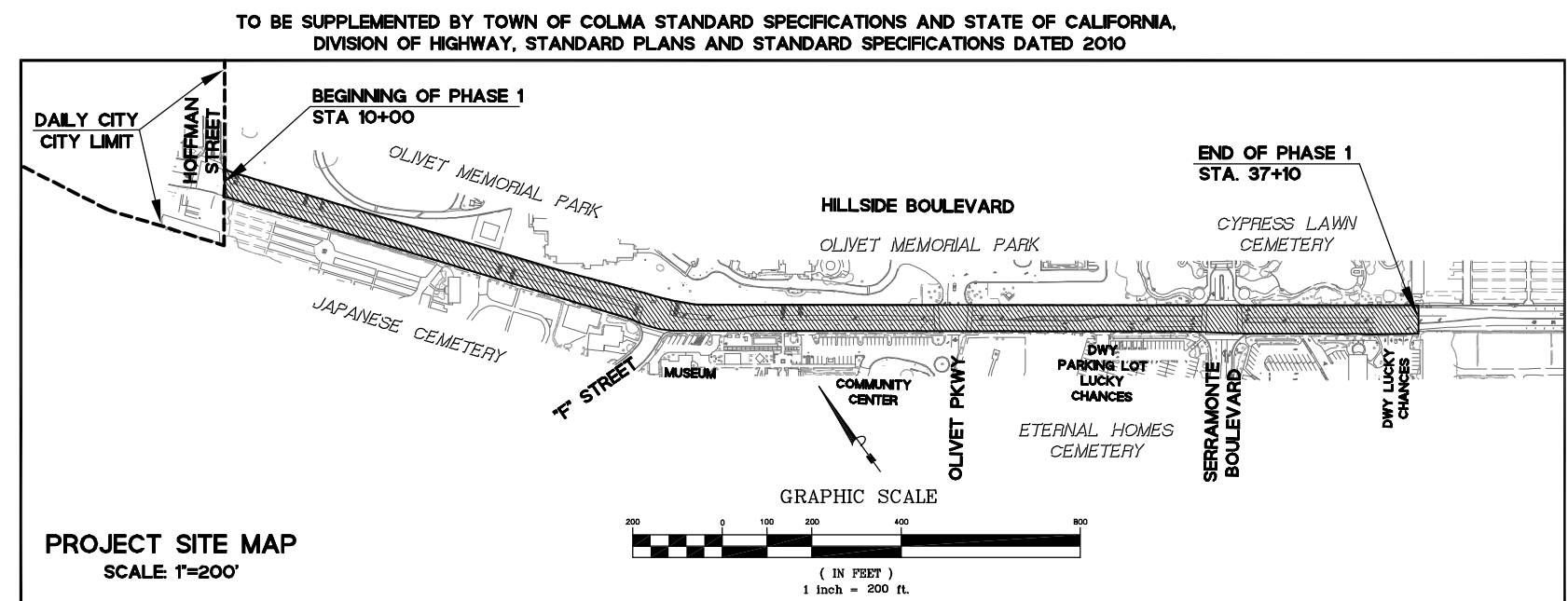
TOWN OF COLMA

ANNE - SOPHIE TRUONG
 DATE:
 R.C.E. 68110, EXPIRES 06/30/15

PREPARED UNDER MY SUPERVISION

LEGEND

EXISTING	NEW	DESCRIPTION
x140.25	140.25	SPOT ELEVATION
140		CONTOUR ELEVATIONS
---		CITY LIMIT
---		PROPERTY LINE, RIGHT OF WAY (R.O.W.)
---		STANDARD STREET MONUMENT
---	---	CURB AND GUTTER
SD	---	STORM DRAIN LINE
SS	---	SANITARY SEWER LINE
W	---	WATER LINE
G	---	GAS LINE
T	---	TELEPHONE LINE
TV	---	CABLE LINE
E	---	ELECTRICAL LINE
JT	---	JOINT TRENCH LINE
HV	---	HIGH VOLTAGE LINE
OH	---	OVERHEAD LINE
⊙	⊙	STORM DRAIN MANHOLE
⊙	⊙	STORM DRAIN INLET
⊙	⊙	SANITARY SEWER MANHOLE
⊙	⊙	WATER METER
⊙	⊙	WATER VALVE
⊙	⊙	FIRE HYDRANT
⊙	⊙	TELEPHONE VAULT
⊙	⊙	PULL BOX
⊙	⊙	UTILITY VAULT/BOX
⊙	⊙	JOINT POLE
⊙	⊙	GUY WIRE
⊙	⊙	PEDESTRIAN LIGHT
⊙	⊙	STREET LIGHT BOX
⊙	⊙	STREET SIGN POST
⊙	⊙	STREET NAME SIGN
⊙	⊙	POTHOLE EX. UTILITY
⊙	⊙	DETAIL NUMBER
⊙	⊙	PLAN SHEET NUMBER
⊙	⊙	RECTANGULAR RAPID FLASHING BEACON



SHEET NUMBERS AND TITLES

- TITLE SHEET
- KEY MAP, MONUMENT LOCATIONS, AND BASIS OF BEARINGS
- GENERAL NOTES
- CONSTRUCTION AND COORDINATION NOTES
- TYPICAL CROSS-SECTIONS
- TYPICAL CROSS-SECTIONS SHOWING EXISTING UTILITIES
- EXISTING CONDITIONS/DEMOLITION, STA.10+00 TO STA.21+00
- EXISTING CONDITIONS/DEMOLITION, STA.21+00 TO STA.31+50
- EXISTING CONDITIONS/DEMOLITION, STA.31+50 TO STA.36+70
- PAVING PLAN, STA.10+00 TO STA.21+00
- PAVING PLAN, STA.21+00 TO STA.31+50
- PAVING PLAN, STA.31+50 TO STA.36+70
- IMPROVEMENTS PLAN AND PROFILE, STA.10+00 TO STA.15+00
- IMPROVEMENTS PLAN AND PROFILE, STA.15+00 TO STA.21+00
- IMPROVEMENTS PLAN AND PROFILE, STA.21+00 TO STA.26+00
- IMPROVEMENTS PLAN AND PROFILE, STA.26+00 TO STA.31+50
- IMPROVEMENTS PLAN AND PROFILE, STA.31+50 TO STA.36+70
- SIGNING AND STRIPING PLAN, STA.10+00 TO STA.21+00
- SIGNING AND STRIPING PLAN, STA.21+00 TO STA.31+50
- SIGNING AND STRIPING PLAN, STA.31+50 TO STA.36+70
- EROSION/STORMWATER POLLUTION CONTROL PLAN, STA.10+00 TO STA.21+00
- EROSION/STORMWATER POLLUTION CONTROL PLAN, STA.21+00 TO STA.31+50
- EROSION/STORMWATER POLLUTION CONTROL PLAN, STA.31+50 TO STA.36+70,
- DETAILS AND NOTES
- POLLUTION PREVENTION PLAN
- DETAILS
- DETAILS
- DETAILS
- DETAILS
- DETAILS
- DETAILS
- DETAILS
- CURB RAMPS & INTERSECTION DETAILS
- CURB RAMPS & INTERSECTION DETAILS

SHEET NUMBERS AND TITLES (CONTINUATION)

- RAIN GARDEN TYPICAL LAYOUT & DETAILS
- RAIN GARDEN TYPICAL LAYOUT & DETAILS
- TREE BULB-OUT LAYOUT & MISCELLANEOUS DETAILS
- TRAFFIC SIGNAL MODIFICATION PLAN, OLIVET PWY./HILLSIDE BLVD.
- TRAFFIC SIGNAL MODIFICATION PLAN, OLIVET PWY./HILLSIDE BLVD.
- TRAFFIC SIGNAL MODIFICATION PLAN, SERRAMONTE BLVD./HILLSIDE BLVD.
- TRAFFIC SIGNAL MODIFICATION PLAN, SERRAMONTE BLVD./HILLSIDE BLVD.
- PLANTING PLAN, STA.10+00 TO STA.21+00
- PLANTING PLAN, STA.21+00 TO STA.31+50
- PLANTING PLAN, STA.31+50 TO STA.36+70
- PLANTING DETAILS
- IRRIGATION PLAN, STA.10+00 TO STA.21+00
- IRRIGATION PLAN, STA.21+00 TO STA.31+50
- IRRIGATION PLAN, STA.31+50 TO STA.36+70
- IRRIGATION LEGEND AND NOTES
- IRRIGATION DETAILS
- IRRIGATION DETAILS

ABBREVIATIONS

ABBREVIATIONS (CONTINUATION)

ANG	ANGLE	PAVT.	PAVEMENT
AVE.	AVENUE	PCC	PORTLAND CEMENT CONCRETE
BC	BEGIN CURVE	PI	POINT OF INTERSECTION
BOC	BACK OF CURB	PRC	POINT OF REVERSE CURVATURE
BS	BOTTOM OF SLOPE	PT	POINT
BVC	BEGIN VERTICAL CURVE	R	RADIUS
BW	BACK OF WALK	RC	RELATIVE COMPACTION
C&G	CURB AND GUTTER	RCP	REINFORCED CONCRETE PIPE
CD	CONTROLLED DENSITY FILL	RRFB	RECTANGULAR RAPID FLASHING BEACON
CL	CENTERLINE OR CLASS	ROW	RIGHT OF WAY
DWY	DRIVEWAY	RT.	RIGHT
FOC	FRONT OF CURB	S	SLOPE
FTB	FLUID THERMAL BACKFILL	SD	STORM DRAIN
EC	END CURVE	SDCB	STORM DRAIN CATCH BASIN
EVC	END VERTICAL CURVE	SDDI	STORM DRAIN DROP INLET
EX./I.E.	EXISTING	SDMH	STORM DRAIN MANHOLE
ESMT	EASEMENT	SDV	STORM DRAIN VAULT
FC, FOC	FACE OF CURB	SL	STREET LIGHT
FG	FINISH GRADE ELEVATION	SNS	STREET NAME SIGN
FH	FIRE HYDRANT	SSMH	SANITARY SEWER MANHOLE
FL	FLOW LINE	ST.	STREET
FND. MON.	FOUND MONUMENT	STD	STANDARD
FT	FOOT	SW	SIDEWALK
GB	GRADE BREAK	TC	TOP OF CURB ELEVATION
HDPE	HIGH DENSITY POLYETHYLENE	TG	TOP OF GRATE ELEVATION AT THE FLOWLINE WHERE GRATE IS LOCATED
INV./I.E.	INVERT ELEVATION		IN AN INCLINE GUTTER
L	LENGTH	TSI	TRAFFIC SIGNAL INTERCONNECT
LF	LINEAR FEET	TW	TOP OF RETAINING WALL ELEVATION
LG	LIP OF GUTTER	TYP.	TYPICAL
LT.	LEFT	W/	WITH
MAX	MAXIMUM	WV	WATER VALVE
N.I.C.	NOT-IN-CONTRACT		
NO	NUMBER		
NTS	NOT TO SCALE		
O.C.	ON CENTER		

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NO.	REVISIONS	DATE
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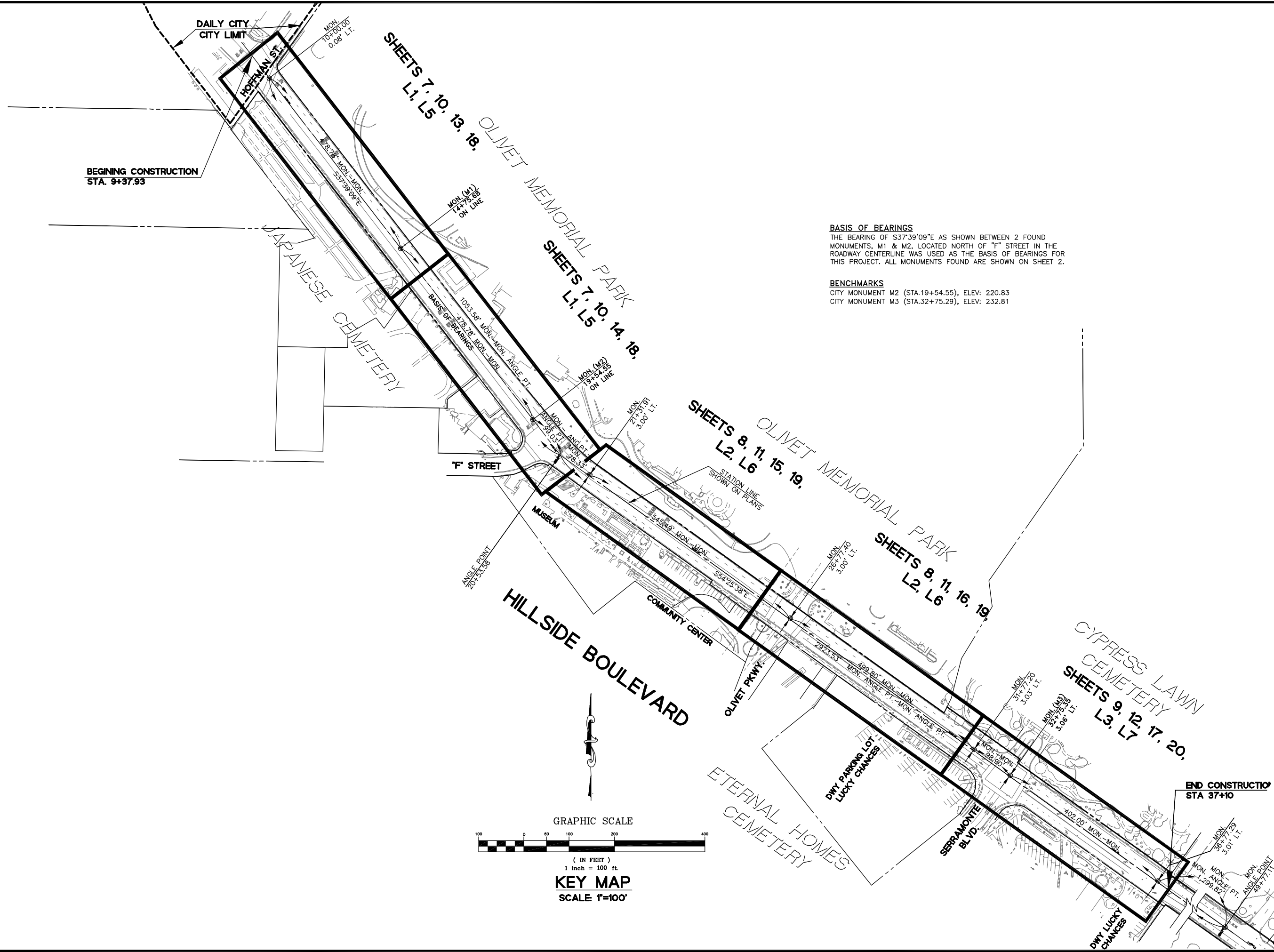
TITLE SHEET
 HILLSIDE BOULEVARD IMPROVEMENTS PROJECT,
 PHASE I
 TOWN OF COLMA
 CALIFORNIA

SHEET 1
 OF
 48

DATE: 07/17/14
 JOB#: 10.350

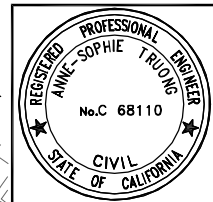
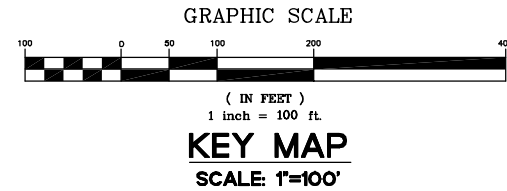
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BASIS OF BEARINGS
 THE BEARING OF $S37^{\circ}39'09''E$ AS SHOWN BETWEEN 2 FOUND MONUMENTS, M1 & M2, LOCATED NORTH OF "F" STREET IN THE ROADWAY CENTERLINE WAS USED AS THE BASIS OF BEARINGS FOR THIS PROJECT. ALL MONUMENTS FOUND ARE SHOWN ON SHEET 2.

BENCHMARKS
 CITY MONUMENT M2 (STA.19+54.55), ELEV: 220.83
 CITY MONUMENT M3 (STA.32+75.29), ELEV: 232.81



DESIGNED BY: ST	NO.	DATE
DRAWN BY: JOC/SH	NO.	DATE
APPROVED BY:	NO.	DATE
PREPARED BY: CSG Consultants Inc. 1700 South Amphlett Boulevard, 3rd Floor San Mateo, CA 94402 Phone (650)522-2500 Fax (650)522-2599	NO.	DATE
PREPARED FOR: TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA. 94014	NO.	DATE
TITLE: KEY MAP, MONUMENT LOCATIONS, AND BASIS OF BEARINGS HILLSIDE BOULEVARD IMPROVEMENTS PROJECT, PHASE I	NO.	DATE
TOWN OF COLMA CALIFORNIA	NO.	DATE
SHEET 2 of 48	NO.	DATE
CONSTRUCTION SET 07/17/14	NO.	DATE
JOB#: 10.350	NO.	DATE

I. GENERAL

- 1. CONSTRUCTION MATERIALS AND METHODS SHALL COMPLY WITH THESE PROJECT PLANS, THE PROJECT SPECIFICATIONS, AND THE TOWN OF COLMA STANDARD SPECIFICATIONS AND DETAILS, AND CALTRANS STANDARDS PLANS AND SPECIFICATIONS, IN THAT ORDER, UNLESS OTHERWISE INDICATED.
2. THE TERM "SPECIFICATIONS", WHERE USED IN THESE DRAWINGS, SHALL REFER TO THE PROJECT SPECIFICATIONS "CONTRACT SPECIFICATIONS AND SPECIAL PROVISIONS FOR THE HILLSIDE BLVD. IMPROVEMENT PROJECT, PHASE 1", DATED MARCH 2014.
3. WHERE USED IN THESE DRAWINGS, THE TERMS "TOWN" AND "CITY" SHALL REFER TO THE TOWN OF COLMA.
4. THIS PROJECT IS LOCATED WITHIN THE JURISDICTION OF THE TOWN OF COLMA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS AND LICENCES TO PERFORM THE WORK WITHIN THE TOWN PRIOR TO THE START OF WORK. THE TOWN OF COLMA WILL WAIVE FEES FOR ALL PERMITS REQUIRED FROM THE TOWN.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE REGULATIONS AND REQUIREMENTS OF THE TOWN ORDINANCES.
6. SHOULD IT APPEAR THAT THE WORK TO BE DONE OR ANY MATTER RELATIVE THERETO IS NOT SUFFICIENTLY DETAILED OR SPECIFIED IN THE CONSTRUCTION DOCUMENTS, THE CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS DIRECTOR AND OBTAIN CLARIFICATION BEFORE PROCEEDING WITH THE WORK IN QUESTION. SHOULD EXISTING CONDITIONS SHOWN ON THESE PLANS DIFFER FROM ACTUAL CONDITIONS IN THE FIELD, CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS DIRECTOR BEFORE PROCEEDING WITH THE WORK. CONTRACTOR WILL BE RESPONSIBLE FOR ADDITIONAL WORK RESULTING FROM LACK OF COORDINATION REGARDING PLAN/FIELD DISCREPANCIES WITH THE TOWN.
7. ALL REVISIONS TO THESE PLANS MUST BE REVIEWED AND APPROVED IN WRITING BY THE ENGINEER OF RECORD AND THE PUBLIC WORKS DIRECTOR PRIOR TO CONSTRUCTION OF AFFECTED ITEMS.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR ARRANGING REQUIRED INSPECTIONS BY THE PUBLIC WORKS DIRECTOR OR HIS/HER AUTHORIZED REPRESENTATIVE(S). NO DELAY OF WORK CLAIM WILL BE ALLOWED DUE TO THE CONTRACTOR'S FAILURE TO ARRANGE FOR TOWN INSPECTION IN ADVANCE. CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS DIRECTOR AT (650) 757-8888 A MINIMUM OF TWO (2) WORKING DAYS IN ADVANCE OF REQUIRED INSPECTIONS.
9. CONTRACTOR SHALL POST 24-HOUR EMERGENCY TELEPHONE NUMBERS FOR PUBLIC WORKS, POLICE DEPARTMENT AND FIRE DEPARTMENT AND EMERGENCY MEDICAL SERVICE ON SITE PRIOR TO START OF CONSTRUCTION.
10. CONTRACTOR SHALL PROVIDE A 72 HOUR NOTICE TO ADJOINING PROPERTY OWNERS AND TENANTS PRIOR TO COMMENCING CONSTRUCTION WORK. NOTIFICATION SHALL BE BY LETTER AND SHALL BE APPROVED BY THE PUBLIC WORKS DIRECTOR.
11. CONTRACTOR SHALL POST "NO-PARKING" SIGNS ON EACH PAVEMENT REHABILITATION STREET AND/OR WORK AREA 48 HOURS PRIOR TO COMMENCING WORK. IF THE INTENDED WORK DOES NOT COMMENCE WITHIN 24 HOURS OF THE SCHEDULED DATE, ALL "NO PARKING" SIGNS SHALL BE REMOVED FROM THE SITE UPON CONCURRENCE FROM THE PUBLIC WORKS DIRECTOR.
12. CONTRACTOR SHALL HAVE A CONSTRUCTION SUPERINTENDENT ON-SITE AND MUST HAVE READILY AVAILABLE TELEPHONE NUMBERS FOR EMERGENCY ASSISTANCE.
13. THE CONTRACTOR SHALL OBTAIN APPROVAL FOR THE HAUL ROUTE FROM THE TOWN'S ENGINEERING DEPARTMENT. APPROVED HAUL ROUTES SHALL BE STRICTLY ADHERED TO BY THE CONTRACTOR AND ALL SUBCONTRACTORS.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR THE CARE AND PROTECTION OF THE FOLLOWING, INCLUDING, BUT NOT LIMITED TO: ADJOINING PREMISES, TREES, LANDSCAPING, FENCES, UTILITIES, SIDEWALKS AND STREETS FROM DAMAGE BY HIS OPERATIONS. CONTRACTOR SHALL REPAIR, REPLACE OR CLEAN ANY PART OF THE ABOVE MENTIONED TO THE SATISFACTION OF THE PUBLIC WORKS DIRECTOR, AT NO ADDITIONAL COST TO THE TOWN OR THE ADJACENT PROPERTY OWNERS. FURTHERMORE, THE CONTRACTOR SHALL REPLACE OR REPAIR, AT HIS/HER OWN EXPENSE, ALL DAMAGED, REMOVED OR OTHERWISE DISTURBED EXISTING UTILITIES, UNDERGROUND OR SURFACE IMPROVEMENTS OR FEATURES OF WHATEVER NATURE, TO THEIR ORIGINAL CONDITION, WHETHER SHOWN ON THE PLANS OR NOT.
15. ALL CONSTRUCTION STAKING SHALL BE DONE BY A CIVIL ENGINEER AUTHORIZED TO PRACTICE LAND SURVEYING OR A LAND SURVEYOR REGISTERED IN THE STATE OF CALIFORNIA, HIRED BY THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY THE TOWN'S CONSTRUCTION INSPECTOR TWENTY-FOUR (24) HOURS IN ADVANCE OF COMMENCEMENT OF STAKING AND WHEN THE WORK WILL BE COMPLETED. THE CONTRACTOR SHALL ALLOW THE TOWN ADEQUATE TIME TO REVIEW AND APPROVE THE PROJECT STAKING PRIOR TO BEGINNING CONSTRUCTION. THIS TIME SHALL BE DETERMINED AND MUTUALLY AGREED UPON WITH THE CONTRACTOR AND TOWN AT THE PRE-CONSTRUCTION MEETING. THE TOWN RESERVES THE RIGHT TO MAKE REASONABLE ADJUSTMENTS TO THE STAKING WORK AS THE TOWN DEEMS NECESSARY AND WITHOUT REGARDS FOR ANY RELATED DELAYS TO CONSTRUCTION. THE CONTRACTOR SHALL WORK WITH THE TOWN IN ENSURING ANY MODIFICATIONS TO THE STAKING REQUIRED BY THE TOWN ARE IN PLACE PRIOR TO CONSTRUCTION.
16. THE CONTRACTOR IS RESPONSIBLE FOR MATCHING EXISTING PAVEMENT, ADJACENT LANDSCAPE AND OTHER IMPROVEMENTS WITH A SMOOTH TRANSITION IN PAVING, CURBS, GUTTERS, SIDEWALKS, ETC., TO AVOID ANY ABRUPT OR APPARENT CHANGES IN GRADES OR CROSS SLOPES, LOW SPOTS OR HAZARDOUS CONDITIONS.

II. WORK HOURS

- 1. NO WORK MAY COMMENCE OR BE CARRIED OUT EXCEPT BETWEEN THE HOURS OF 7 AM AND 5 PM, MONDAY THROUGH FRIDAY, EXCEPTING LEGAL HOLIDAYS OBSERVED BY THE TOWN OF COLMA. NO EQUIPMENT OR MOTOR VEHICLES MAY BE STARTED OR OPERATED EXCEPT DURING WORKING HOURS. PLACEMENT OF MATERIALS SHALL CEASE AT LEAST ONE-HALF HOUR PRIOR TO THE END OF WORKING HOURS TO ALLOW SUFFICIENT TIME FOR CLEAN-UP.
2. FOR ALL WORK OUTSIDE OF NORMAL WORK HOURS SPECIFIED ABOVE, CONTRACTOR SHALL OBTAIN IN WRITING PRIOR APPROVAL BY THE PUBLIC WORKS DIRECTOR. CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING ANY ADDITIONAL FEES REQUIRED BY THE TOWN FOR PERFORMING WORK BEYOND THE NORMAL WORKING HOURS.
3. CONTRACTOR SHALL CONFORM TO ALL REQUIREMENTS OF THE TOWN NOISE ORDINANCE WHEN WORKING WITHIN THE TOWN.

III. TRAFFIC CONTROL

- 1. THE CONTRACTOR SHALL SUBMIT FOR REVIEW BY THE PUBLIC WORKS DIRECTOR A TEMPORARY, PHASED, TRAFFIC CONTROL PLAN PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE LATEST "CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" PUBLISHED BY CALTRANS AND PROJECT SPECIFICATIONS IMMEDIATELY UPON APPROVAL OF INSURANCE FORMS AND CERTIFICATES. TRAFFIC CONTROL PLAN SHALL BE APPROPRIATE TO EACH PHASE OF WORK.
2. TRAFFIC CONTROL DEVICES SHALL INCLUDE A MINIMUM OF 2 "EXPECT DELAYS" PORTABLE CHANGEABLE MESSAGE SIGNS, TO BE PLACED AT A LOCATION APPROVED BY THE DIRECTOR OF PUBLIC WORKS AT LEAST 7 DAYS BEFORE THE START OF CONSTRUCTION.
3. SEE PROJECT SPECIFICATIONS FOR ADDITIONAL TRAFFIC CONTROL REQUIREMENTS.

IV. CONSTRUCTION STAGING

- 1. CONTRACTOR SHALL SUBMIT FOR REVIEW AND APPROVAL BY THE PUBLIC WORKS DIRECTOR A COMPLETE CONSTRUCTION STAGING PLAN IMMEDIATELY UPON APPROVAL OF INSURANCE FORMS AND CERTIFICATES. CONSTRUCTION STAGING AREA SHALL BE LOCATED WITHIN THE COMMUNITY CENTER PARKING LOT, IN AN AREA APPROVED BY THE DIRECTOR OF PUBLIC WORKS.
2. NO EQUIPMENT SHALL BE STORED WITHIN TOWN RIGHTS-OF-WAY. UNLESS APPROVED IN WRITING BY THE PUBLIC WORK DIRECTOR.
3. CONSTRUCTION STAGING AREA SHALL BE ADEQUATELY SECURED BY USE OF TEMPORARY FENCING WITH LOCKING GATE(S) AND SCREENED FROM THE PUBLIC RIGHT-OF-WAY TO THE SATISFACTION OF THE PUBLIC WORKS DIRECTOR. SCREENING SHALL CONSIST OF MATERIALS APPROVED BY THE PUBLIC WORKS DIRECTOR AND SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION.

V. STORMWATER POLLUTION, EROSION CONTROL, AND CLEANUP

- 1. CONTRACTOR SHALL COMPLY WITH ALL RULES, REGULATIONS AND PROCEDURES OF THE MUNICIPAL REGIONAL STORMWATER POLLUTION PERMIT (MRP), ALSO KNOWN AS THE NPDES PERMIT, MORE SPECIFICALLY, CONTRACTOR SHALL COMPLY WITH THE SAN MATEO COUNTYWIDE STORMWATER POLLUTION PREVENTION PROGRAM'S BEST MANAGEMENT PRACTICES (BMPs) FOR CONSTRUCTION ACTIVITIES, THE EROSION/STORMWATER POLLUTION CONTROL PLANS ATTACHED HERETO AS SHEETS NO. 21, 22, & 23, AND THE "POLLUTION PREVENTION - IT'S PART OF THE PLAN" CONSTRUCTION BMP PLAN SHEET, ATTACHED HERETO AS SHEET NO. 24.
2. CONTRACTOR SHALL SUBMIT FOR TOWN REVIEW A STORMWATER POLLUTION PREVENTION PLAN, PREPARED IN ACCORDANCE WITH CALTRANS STANDARDS INCLUDING ALL MEASURES TO BE IMPLEMENTED THROUGHOUT THE PROJECT LIMITS AND AT CONTRACTOR'S STAGING LOCATION.
3. ALL WORK TO BE PERFORMED DURING THE DRY WEATHER MONTHS OF BETWEEN APRIL 30TH & OCTOBER 1ST. WORK TO CONTINUE AFTER OCTOBER 1ST WITH WRITTEN PERMISSION AND ADDITIONAL PROTECTIVE MEASURES ONLY.
4. APPLY CONCRETE, ASPHALT, AND SEAL COAT DURING DRY WEATHER TO PREVENT CONTAMINANTS FROM CONTACTING STORM WATER RUNOFF.
5. COVER STORM DRAIN INLETS AND MANHOLES WHEN PAVING OR APPLYING SEAL COAT, SLURRY SEAL, FOG SEAL, ETC.
6. MAINTAIN ALL VEHICLES AND HEAVY EQUIPMENT. INSPECT FREQUENTLY FOR AND REPAIR LEAKS.
7. CLEAN UP LIQUID SPILLS ON PAVED OR IMPERMEABLE SURFACES USING "DRY" CLEANUP METHODS (E.G., ABSORBENT MATERIALS LIKE CAT LITTER, SAND OR RAGS).
8. FILTER FABRIC OR OTHER MATERIAL FOR SEDIMENT TRAPPING SHALL BE INSTALLED AND MAINTAINED AT STREET GUTTERS AND DRAINS TO KEEP CONSTRUCTION DEBRIS OUT OF THE STORM DRAIN SYSTEM.
9. NO MATERIAL, RESIDUE WASTE OR DEBRIS GENERATED BY CONSTRUCTION ACTIVITIES WILL BE ALLOWED TO BE WASHED INTO ANY DRAINAGE INLETS.
10. AT THE END OF EVERY DAY, ALL MATERIALS TRAPPED BY THE INLET PROTECTION BMP (FILTER FABRIC) AND EXCESS MATERIALS SUCH AS PAVEMENT PIECES OR DEBRIS WILL BE COLLECTED USING DRY SWEEP METHODS AND REMOVED FROM THE PROJECT SITE. NO MATERIALS WILL BE ALLOWED TO BE WASHED INTO THE STORM DRAIN SYSTEM.
11. DURING CONSTRUCTION, STREETS SHALL BE CLEANED AS OFTEN AS REQUIRED TO REMOVE ANY ACCUMULATION OF MUD AND DEBRIS RESULTING FROM THIS CONSTRUCTION.
12. BERM AROUND STORAGE AREAS TO PREVENT CONTACT WITH STORMWATER RUNOFF.
13. STORE STOCKPILED MATERIALS AND WASTES OVER PLASTIC SHEETING OR A TARP, AND UNDER A TEMPORARY ROOF OR SECURED PLASTIC SHEETING OR TARP.
14. ALWAYS PARK PAVING MACHINES OVER DRIP PANS OR ABSORBENT MATERIALS, AS THEY TEND TO DRIP CONTINUOUSLY.

VI. DUST CONTROL

- 1. THE CONTRACTOR SHALL PROVIDE DUST CONTROL FOR THE ENTIRE PROJECT SITE AT ALL TIMES IN CONFORMANCE WITH BAY AREA AIR QUALITY MANAGEMENT DISTRICT BASIC AND ENHANCED DUST CONTROL MEASURES. THE SITE SHALL BE SPRINKLED AS NECESSARY TO PREVENT DUST NUISANCE. IN THE EVENT THE CONTRACTOR NEGLECTS TO USE ADEQUATE MEASURES TO CONTROL DUST, THE TOWN RESERVES THE RIGHT TO TAKE WHATEVER MEASURES ARE NECESSARY TO CONTROL DUST AND BACK CHARGE THE CONTRACTOR.

VII. EXISTING CONDITIONS, UTILITIES AND MONUMENTS

- 1. CONTRACTOR SHALL CONTACT USA [UNDERGROUND SERVICES ALERT 1-(800)-227-2600,] AND AFFECTED UTILITY COMPANIES, A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO THE START OF WORK TO NOTIFY THEM OF CONSTRUCTION, AND TO REQUEST THAT UTILITIES BE MARKED. CONTRACTOR SHALL NOT BEGIN EXCAVATION WORK UNTIL ALL UTILITIES HAVE BEEN MARKED OR THE PRESCRIBED "NO RESPONSE FOLLOW-UP" PROCEDURES HAVE BEEN FOLLOWED.
2. LOCATION OF UNDERGROUND UTILITIES SHOWN ON THESE PLANS WAS COMPILED FROM SURVEYED SURFACE UTILITIES AND UTILITY COMPANIES' FACILITY SCHEMATICS AND IS APPROXIMATE. THE UTILITY INFORMATION SHOWN HEREON IS NOT MEANT TO BE A FULL CATALOG OF EXISTING CONDITIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING RECORD INFORMATION AND CONDUCTING FIELD INVESTIGATION TO VERIFY THE LOCATION AND ELEVATIONS OF EXISTING UTILITIES - WHETHER SHOWN ON THESE PLANS OR NOT. CONTRACTOR SHALL NOTIFY THE TOWN IMMEDIATELY UPON DISCOVERY OF DISCREPANCIES.
3. CONTRACTOR SHALL VERIFY UTILITY LOCATION AND ELEVATION AT PROPOSED UTILITY CROSSINGS AND CONNECTION POINTS BY POTHOLES AT THE LOCATIONS SHOWN ON THESE PLANS. REPORT DISCREPANCIES TO THE PUBLIC WORKS DIRECTOR FOR DESIGN REVISIONS.
4. CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING ABOVE OR NEAR PG&E 230KV TRANSMISSION LINE (JEFFERSON-MARTIN). LOCATION AS SHOWN ON PLAN WAS APPROXIMATED FROM SCHEMATIC AND VISIBLE TRENCH LINES, AND SHALL IN NO WAY BE ACCEPTED AS TRUE LOCATION. TRUE LOCATION SHALL BE MARKED IN THE FIELD BY REPRESENTATIVES OF PG&E. CONTRACTOR SHALL NOTIFY THE TOWN IMMEDIATELY UPON DISCOVERY OF DISCREPANCIES BETWEEN MARKED LOCATION AND THE LOCATION SHOWN ON THESE PLANS.
5. CONTRACTOR SHALL ARRANGE WITH UTILITY COMPANIES FOR RAISING OF THEIR FACILITIES TO FINISH GRADES.
6. CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT-IN-PLACE EXISTING MONUMENTS AND FOR RAISING THE LIDS OF MONUMENT WELLS TO GRADE. DESTROYED/DAMAGED MONUMENTS SHALL BE RE-ESTABLISHED AT CONTRACTOR'S SOLE EXPENSE.

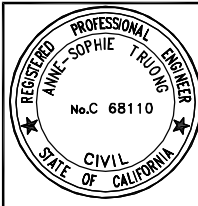
VIII. UNAUTHORIZED CHANGES AND USES

- 1. THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND REQUIRE WRITTEN APPROVAL OF THE TOWN ENGINEER AND THE PREPARER OF THESE PLANS.

IX. STATEMENT OF RESPONSIBILITY

- 1. CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD BOTH DESIGN PROFESSIONALS AND THE TOWN OF COLMA HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF EITHER THE DESIGN PROFESSIONAL OR THE TOWN OF COLMA.

DATE, REVISIONS, NO., DESIGNED: ST, DRAWN: JOC/GH, APPROVED: [Signature], PREPARED BY: CSG Consultants Inc., 1700 South Amphlett Boulevard, 3rd Floor, San Mateo, CA 94402, Phone (650)522-2500 Fax (650)522-2599, PREPARED FOR: TOWN OF COLMA, 1198 EL CAMINO REAL, COLMA, CA. 94014, GENERAL NOTES, HILLSIDE BOULEVARD IMPROVEMENTS PROJECT, PHASE I, CALIFORNIA, TOWN OF COLMA, TITLE: SHEET 3 OF 48, DATE: 07/17/14, JOB#: 10.350



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I. EARTHWORK AND GRADING

1. TOPSOIL, ROOTS, VEGETABLE MATTER, TRASH, DEBRIS AND ANY OTHER DELETERIOUS MATERIAL SHALL NOT BE CONSIDERED ACCEPTABLE FILL MATERIAL.
2. UNLESS OTHERWISE SHOWN ON PLANS AND/OR DETAILS, PLACE TOPSOIL TO A MINIMUM DEPTH OF FOUR (4") INCHES. FINISHED GRADE SHALL INCLUDE PLACEMENT OF TOPSOIL AND SHALL CONFORM TO THE DESIGN GRADES SHOWN ON THE DRAWINGS. ANY AREA TO RECEIVE FILL SHALL BE SCARIFIED AT LEAST SIX (6") INCHES AND COMPACTED TO THE SPECIFIED RELATIVE COMPACTION.
3. ANY ADDITIONAL FILL MATERIAL REQUIRED TO ATTAIN THE DESIGN GRADES SHOWN ON THESE PLANS SHALL BE PER PROJECT SPECIFICATIONS. ALL FILL MATERIAL SHALL BE FIELD TESTED FOR COMPLIANCE WITH THE PROJECT SPECIFICATIONS INCLUDING TOXICITY TESTING.
4. COMPACTION BY FLOODING, PONDING OR JETTING WILL NOT BE PERMITTED.
5. PROTECT-IN-PLACE OR RESTORE EXISTING IRRIGATION SYSTEMS. RESET IRRIGATOR HEADS WHERE REQUIRED TO MATCH FINAL GRADES. SPRINKLERS SHOULD NOT BE DISABLED FOR LONGER THAN SUCH PERIOD AS WAS AGREED UPON WITH PROPERTY OWNER, AND NEVER WITHOUT PRIOR APPROVAL FROM DIRECTOR OF PUBLIC WORKS AND PROPERTY OWNER.

II. DEMOLITION NOTES

1. SEE TRAFFIC SIGNAL MODIFICATION PLANS FOR ADDITIONAL DEMOLITION WORK INCLUDING REMOVAL OF EXISTING SIGNAL POLE FOUNDATIONS AND DETECTOR LOOPS.
2. EXISTING "SPECIAL" SIGNS AS SHOWN ON THE LIGHTING/SIGNING AND STRIPING PLANS SHALL BE SALVAGED AND MAINTAINED IN AN ACCEPTABLE CONDITION FOR RE-INSTALLATION BY THE CONTRACTOR.
3. DEMOLITION INCLUDES REMOVAL OF RAISED PAVEMENT MARKERS AND GRINDING OF THERMOPLASTIC PAVEMENT LEGENDS WHERE SHOWN.
4. PROTECT EXISTING IRRIGATION SYSTEMS WITHIN PROJECT LIMITS.
5. PROTECT EXISTING MONUMENTS DURING CONSTRUCTION.
6. PROTECT-IN-PLACE ALL MANHOLE COVERS AND LIDS OF UNDERGROUND VAULTS, WATER VALVES, ETC. UNLESS OTHERWISE NOTED ON PLANS.
7. TO THE BEST OF THE TOWN'S KNOWLEDGE, THE DEPTH OF EXISTING ASPHALT CONCRETE IS AS SHOWN ON THESE SECTIONS, HOWEVER, THE TOWN CANNOT WARRANT THAT THE DEPTH IS COMPLETELY UNIFORM THROUGHOUT. GRINDING EXISTING SECTION "FULL-DEPTH" SHALL MEAN REMOVE ALL EXISTING ASPHALT CONCRETE DOWN TO BASE MATERIAL, AND MAY BE MORE THAN WHAT IS SHOWN ON THESE PLANS.

III. LIGHTING NOTES

1. LIGHTING SYMBOLS DENOTE APPROXIMATE LOCATION OF POLE AND NO. 3 1/2 PULL BOX (NOT SHOWN).
2. LIGHTING STANDARD SHALL BE IN PLACE AND TRULY PLUMBED BEFORE PLACING DRY PACK.
3. LUMINAIRES SHALL BE WIRED TO A "MULTIPLE CIRCUIT".
4. LIGHTING CONDUIT INSTALLATION SHALL CONFORM TO THE REQUIREMENTS FOR "TRENCHING IN PAVEMENT METHOD" IN SECTION 86-2.05C OF THE STATE STANDARD SPECIFICATIONS.
5. CONFIRM EXACT LIGHT LOCATIONS IN THE FIELD WITH THE ENGINEER PRIOR TO EXCAVATION FOR THE FOUNDATION.
6. CONFIRM CONDUIT LOCATIONS IN FIELD WITH ENGINEER PRIOR TO TRENCHING.
7. SEE TRAFFIC SIGNAL MODIFICATION PLANS FOR ADDITIONAL LIGHTING REMOVALS AND INSTALLATIONS.
8. PROVIDE NO. 3 1/2 PULL BOX SPACED AS NOTED OR 250 FEET MAX.

COORDINATION NOTES:

PG&E COORDINATION

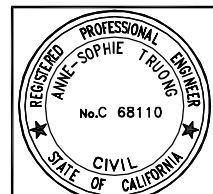
1. CONTRACTOR SHALL CONTACT BORIS GANKIN, PG&E UNDERGROUND TRANSMISSION MAINTENANCE SUPERVISOR (415-330-2286), AT LEAST 72 HOURS PRIOR TO WORKING NEAR THE 230KV TRANSMISSION LINE (LABELED HV ON PLANS). IF DIGGING WITHIN 5 FEET OF THE DUCT BANK (OR WHEN INSTALLING IRRIGATION SLEEVES OVER THE TRENCH), PG&E WILL ARRANGE FOR A CABLEMAN TO BE ON SITE FOR STANDBY.
2. PLEASE NOTE THAT A STANDBY PG&E EMPLOYEE IS REQUIRED DURING ANY EXCAVATION WITHIN 10 FEET OF THE GAS DISTRIBUTION LINE. CONTRACTOR SHALL CONTACT MIKE BADET, I&R SUPERVISOR, AT (650) 598-7346 TO ARRANGE FOR A STANDBY PG&E EMPLOYEE THREE (3) WORKING DAYS PRIOR TO ANY EXCAVATION WITHIN 10 FEET OF THE GAS TRANSMISSION LINE.
3. PG&E SHALL PARTIALLY RELOCATE THE EXISTING 12KV LINE (IN 6" CONDUIT) LOCATED APPROXIMATELY 4' TO 12' FROM THE EXISTING FACE OF CURB AT SPECIFIC RAIN GARDEN LOCATIONS (SEE PLAN AND PROFILES). THIS RELOCATION SHALL OCCUR DURING CONSTRUCTION AND CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING PG&E (ATTN: LORI RUSCA PH: (650) 598-7280) AND THOROUGHLY COORDINATING CONSTRUCTION SCHEDULES.

CALIFORNIA WATER SERVICE COMPANY (CALWATER) COORDINATION

1. INSTALLATION OF FIRE HYDRANTS AT STA.9+85± AND 16+45± WILL BE BY CALWATER. CONTRACTOR SHALL CONTACT LEIGHTON LOW, CONSTRUCTION SUPERINTENDENT, AT (650) 558-7862 IMMEDIATELY UPON AWARD OF CONTRACT TO COORDINATE WORK AND CONSTRUCTION SCHEDULES.
2. CALWATER SHALL SLURRY THE 8" PVC TRENCH IN THE VICINITY OF RAIN GARDEN #2 AND BOTH TREE BULB-OUTS. CONTRACTOR TO CONTACT LEIGHTON LOW AT (650) 558-7862 FOR COORDINATION OF WORK SCHEDULES.

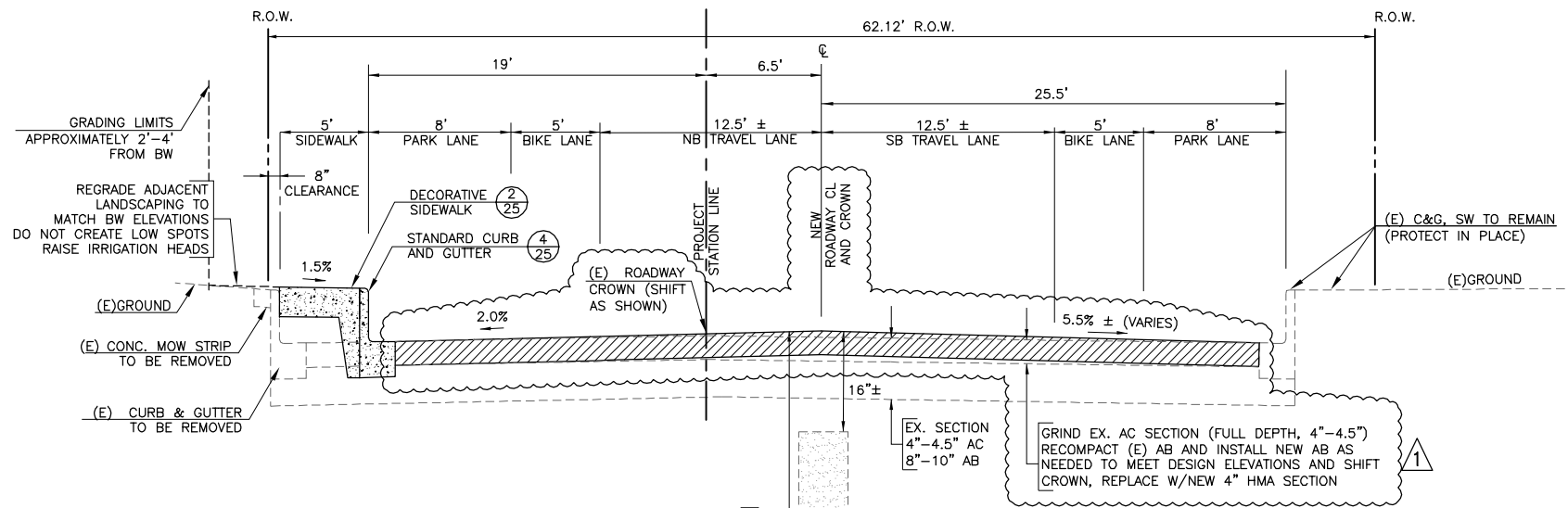
COLMA FIRE DEPARTMENT COORDINATION

1. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING EXACT PLACEMENT OF TWO (2) FIRE HYDRANTS (STA.9+85± AND 16+45±) WITH THE FIRE DEPARTMENT (BILL PARDINI, (650) 740-2073). LOCATION SHALL NOT BE FINALIZED WITHOUT APPROVAL FROM FIRE DEPARTMENT.

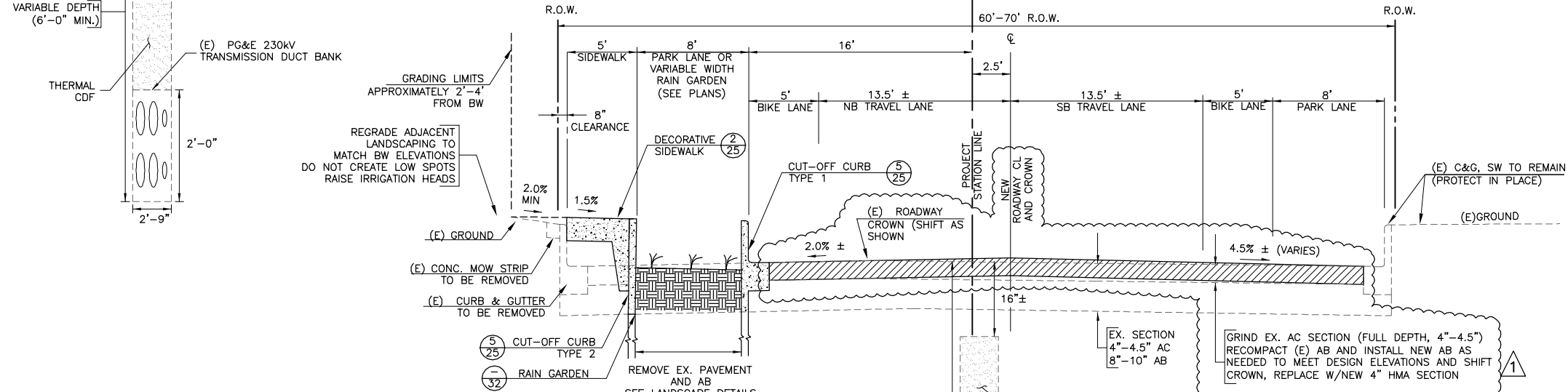


CONSTRUCTION SET
07/17/14

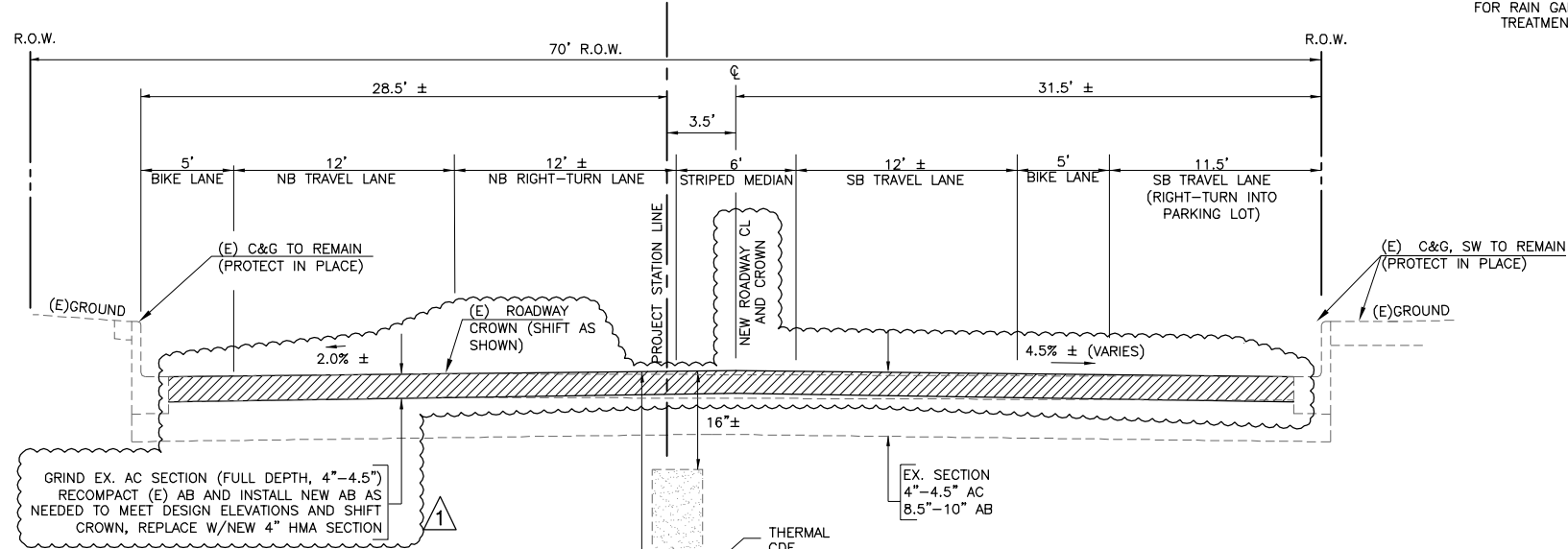
DESIGNED BY: ST	NO.	DATE
DRAWN BY: JOC/SH	REVISIONS	
APPROVED BY:		
PREPARED BY: CSG Consultants Inc. 1700 South Amphlett Boulevard, 3rd Floor San Mateo, CA 94402 Phone (650)522-2500 Fax (650)522-2599	PREPARED FOR: TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA. 94014	TITLE: CONSTRUCTION AND COORDINATION NOTES HILLSIDE BOULEVARD IMPROVEMENTS PROJECT, PHASE I TOWN OF COLMA CALIFORNIA
SHEET 4 of 48		DATE : 07/17/14 JOB# : 10.350



1 TYPICAL STREET CROSS-SECTION
 (NOT SHOWING RAIN GARDENS)
 STA. 10+00 TO 20+00
 HOFFMAN ST. TO F STREET
 N.T.S.

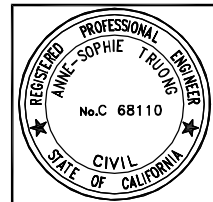


2 TYPICAL STREET CROSS-SECTION
 (SHOWING RAIN GARDENS)
 STA. 20+00 TO 33+00
 F STREET TO SERRAMONTE BLVD.
 N.T.S.



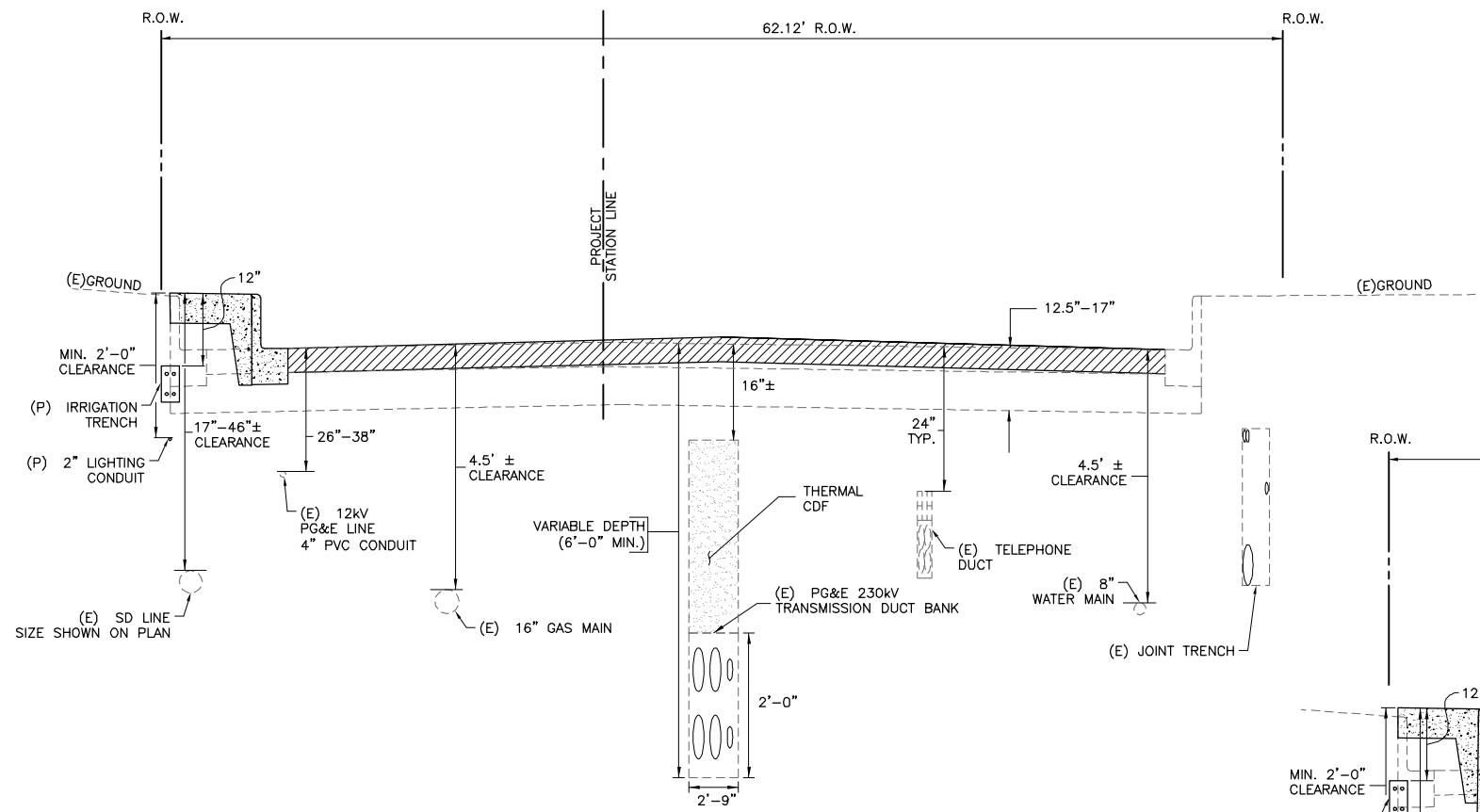
3 TYPICAL STREET CROSS-SECTION
 STA. 33+00 TO 37+00
 SERRAMONTE BLVD. TO END OF PROJECT
 N.T.S.

- NOTES:**
1. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
 2. SEE SPECIFICATIONS FOR RESULTS OF CORING OF (E) PAVEMENT.
 3. TO THE BEST OF THE TOWN'S KNOWLEDGE, THE DEPTH OF EXISTING ASPHALT CONCRETE IS AS SHOWN ON THESE SECTIONS. HOWEVER, THE TOWN CANNOT WARRANT THAT THE DEPTH IS COMPLETELY UNIFORM THROUGHOUT. GRINDING EXISTING SECTION "FULL-DEPTH" SHALL MEAN REMOVE ALL EXISTING ASPHALT CONCRETE DOWN TO BASE MATERIAL, AND MAY BE MORE THAN WHAT IS SHOWN ON THESE SECTIONS.
 4. TURN POCKETS ARE NOT SHOWN ON THE TYPICAL SECTION.
 5. FINISH GRADES SHALL REMAIN THE SAME AS EXISTING UNLESS NOTED ON PLAN.
 6. ONLY THE PG&E 230KV TRANSMISSION DUCT BANK IS SHOWN ON THESE SECTIONS. OTHER UNDERGROUND UTILITIES NOT SHOWN FOR CLARITY. REFER TO SHEET 6 FOR APPROXIMATE UTILITY LOCATIONS.

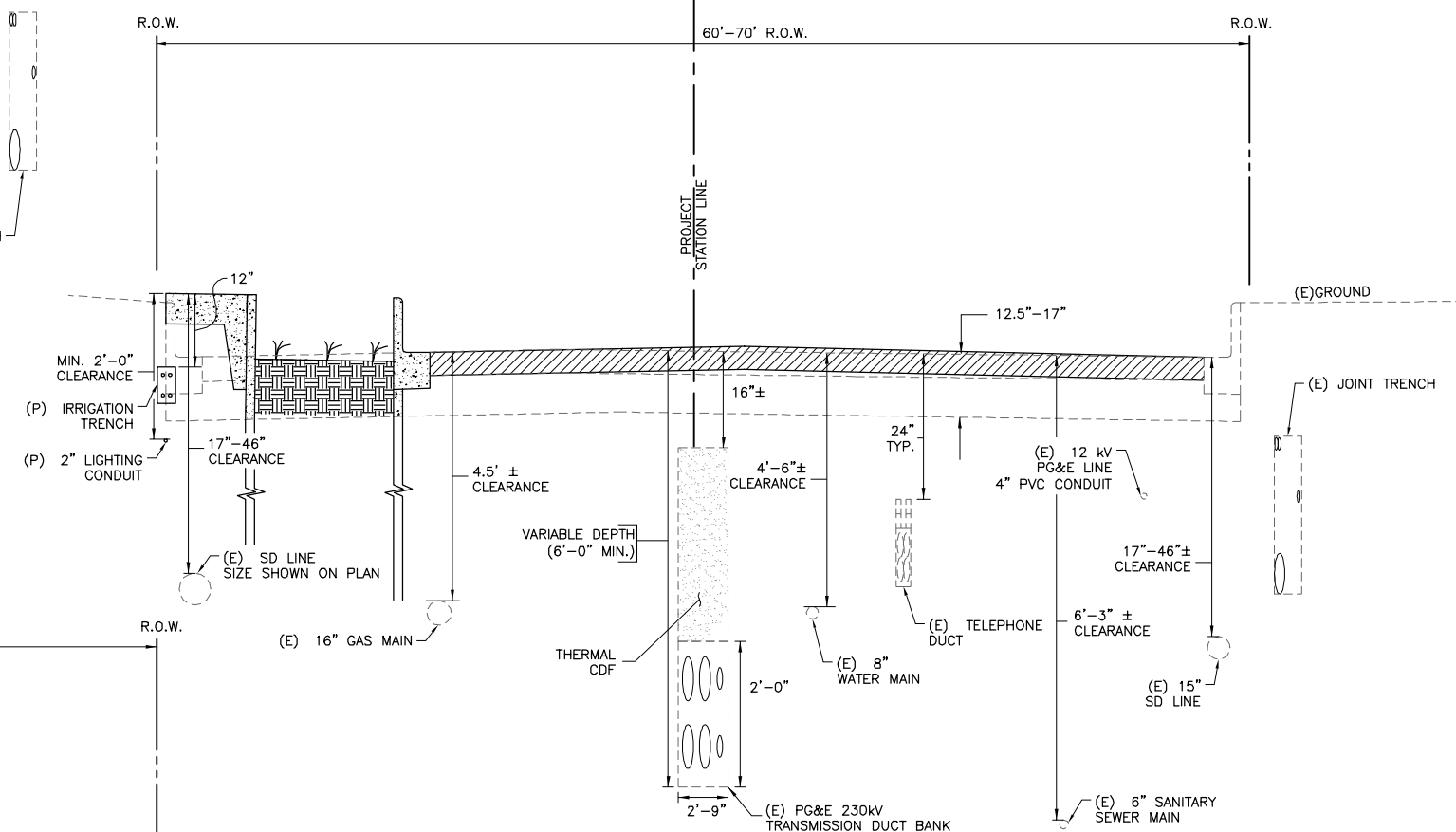


DESIGNED BY: ST	NO.	REVISIONS	DATE
DRAWN BY: JOC/SH			7/17/14
APPROVED BY:			
PREPARED BY: CSG Consultants Inc.	1700 South Amphlett Boulevard, 3rd Floor San Mateo, CA 94402 Phone (650)522-2500 Fax (650)522-2599		
PREPARED FOR: TOWN OF COLMA	1198 EL CAMINO REAL COLMA, CA. 94014		
TITLE: TYPICAL CROSS-SECTIONS	HILLSIDE BOULEVARD IMPROVEMENTS PROJECT, PHASE I		
	TOWN OF COLMA CALIFORNIA		
SHEET 5	DATE: 07/17/14		
OF 48	JOB#: 10.350		
CONSTRUCTION SET	07/17/14		

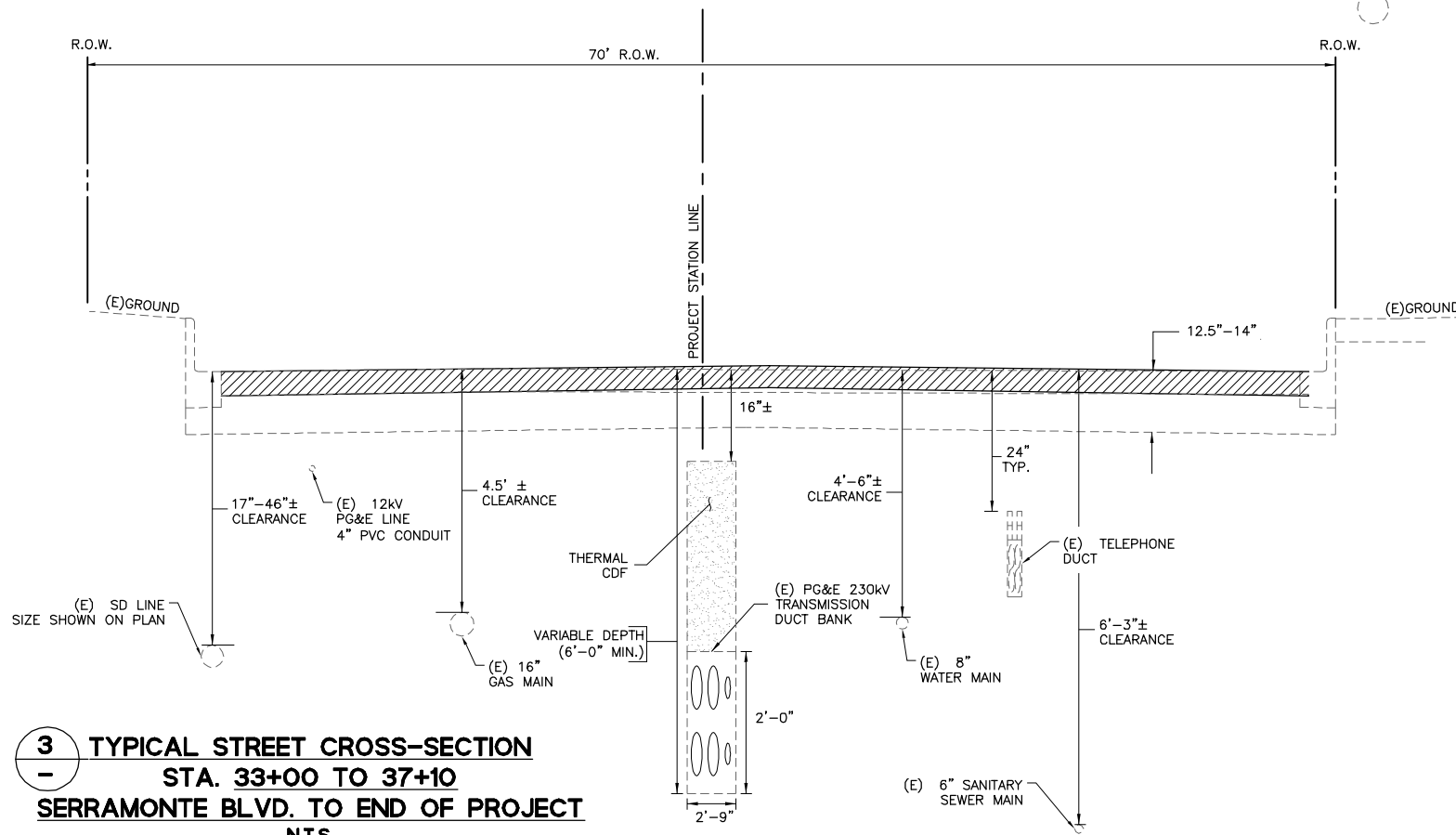
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1 TYPICAL STREET CROSS-SECTION
 (NOT SHOWING RAIN GARDENS)
 STA. 10+00 TO 20+00
 HOFFMAN ST. TO F STREET
 N.T.S.



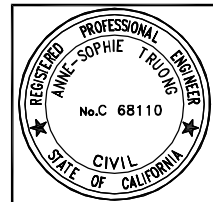
2 TYPICAL STREET CROSS-SECTION
 (SHOWING RAIN GARDENS)
 STA. 20+00 TO 33+00
 F STREET TO SERRAMONTE BLVD.
 N.T.S.



3 TYPICAL STREET CROSS-SECTION
 STA. 33+00 TO 37+10
 SERRAMONTE BLVD. TO END OF PROJECT
 N.T.S.

NOTES:

1. FINISH GRADES SHALL REMAIN THE SAME AS EXISTING UNLESS NOTED ON PLAN.
2. LOCATIONS OF UTILITIES ARE APPROXIMATE. CONTRACTOR SHALL CONFIRM EXACT LOCATIONS OF EXISTING UTILITIES.
3. ALL UTILITIES SHOWN ARE EXISTING, EXCEPT FOR THE IRRIGATION TRENCH AND 2\"/>



CONSTRUCTION SET
 07/17/14

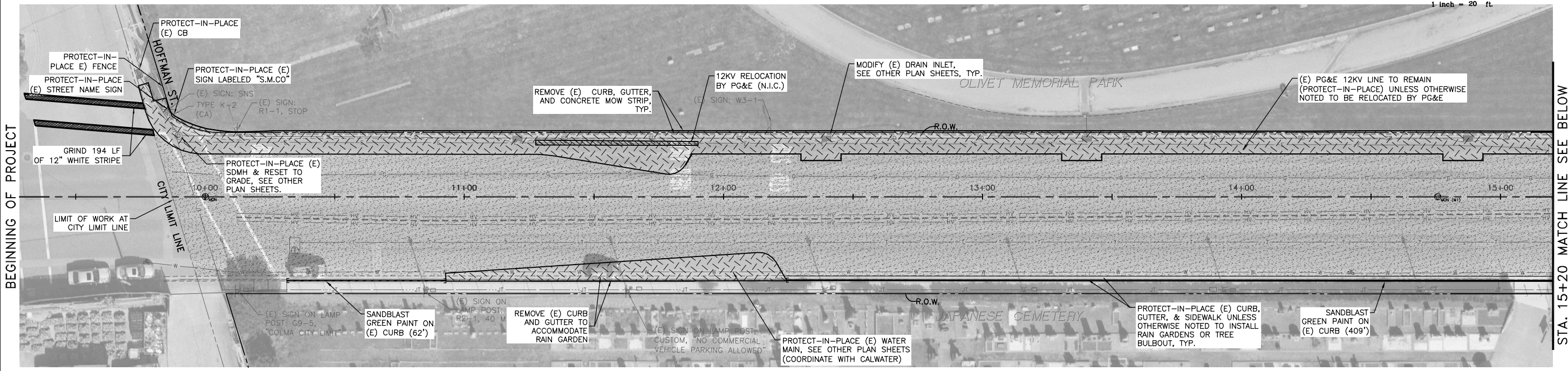
DESIGNED BY: ST	NO.	DATE
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APPROVED BY:		
PREPARED BY: CSG Consultants Inc.		
1700 South Amphlett Boulevard, 3rd Floor San Mateo, CA 94402 Phone (650)522-2500 Fax (650)522-2599		
PREPARED FOR: TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA. 94014		
TITLE: TYPICAL CROSS-SECTIONS SHOWING EXISTING UTILITIES HILLSIDE BOULEVARD IMPROVEMENTS PROJECT, PHASE I TOWN OF COLMA CALIFORNIA		
SHEET 6 of 48		
DATE: 07/17/14		
JOB#: 10.350		

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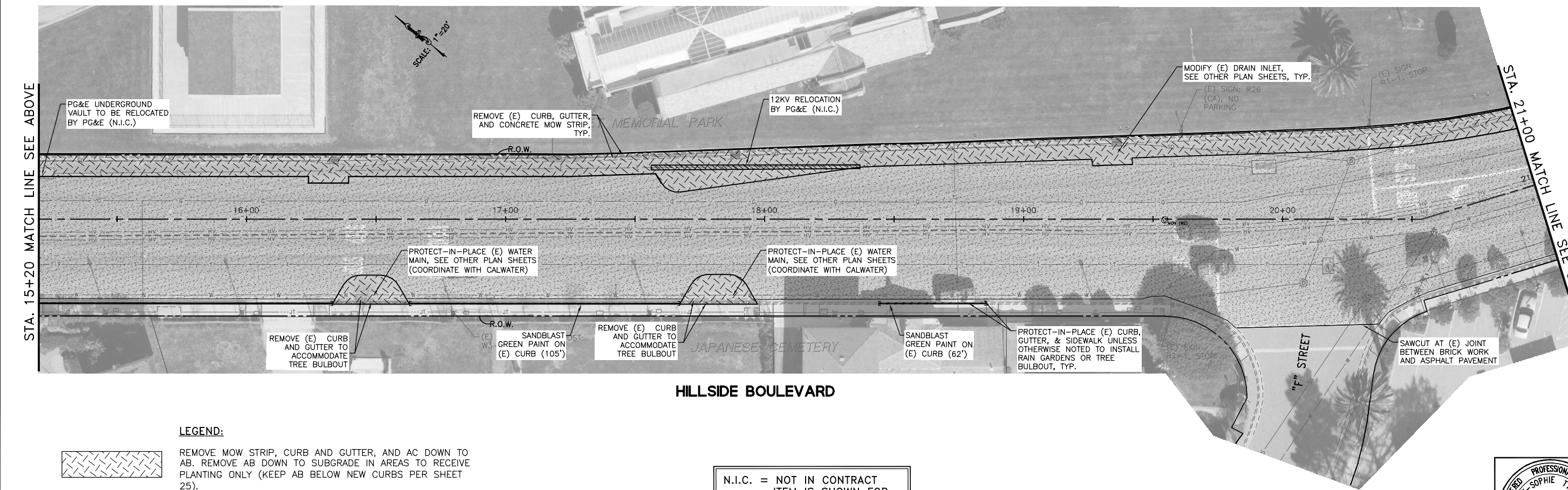
GRAPHIC SCALE



(IN FEET)
1 inch = 20 ft



HILLSIDE BOULEVARD



HILLSIDE BOULEVARD

LEGEND:



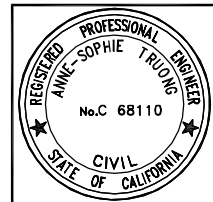
REMOVE MOW STRIP, CURB AND GUTTER, AND AC DOWN TO AB. REMOVE AB DOWN TO SUBGRADE IN AREAS TO RECEIVE PLANTING ONLY (KEEP AB BELOW NEW CURBS PER SHEET 25).



MILL AND FILL AREA, SEE TYPICAL SECTIONS ON SHEET 5 AND PAVING PLAN FOR DEPTH OF MILLING.

N.I.C. = NOT IN CONTRACT
ITEM IS SHOWN FOR
COORDINATION ONLY

SEE DEMOLITION NOTES SHEET 4



DESIGNED BY: ST	NO.	REVISIONS	DATE
DRAWN: JOC/SH			
APPROVED:			
PREPARED BY: CSG Consultants Inc.			
1700 South Amphlett Boulevard, 3rd Floor			
San Mateo, CA 94402			
Phone (650)522-2500 Fax (650)522-2599			
PREPARED FOR: TOWN OF COLMA			
1198 EL CAMINO REAL			
COLMA, CA. 94014			
TITLE: EXISTING CONDITIONS/DEMOLITION, STA. 57+70 TO STA. 69+00 HILLSIDE BOULEVARD IMPROVEMENTS PROJECT, PHASE I			
TOWN OF COLMA			
CALIFORNIA			
SHEET 7			
of			
48			
CONSTRUCTION SET			
07/17/14			
DATE: 07/17/14			
JOB#: 10.350			

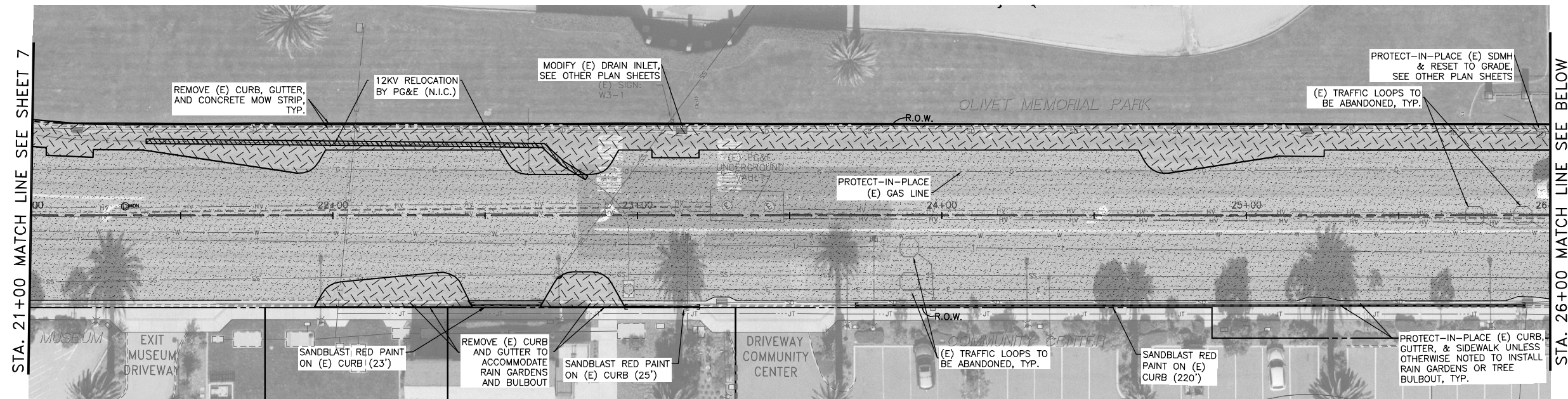
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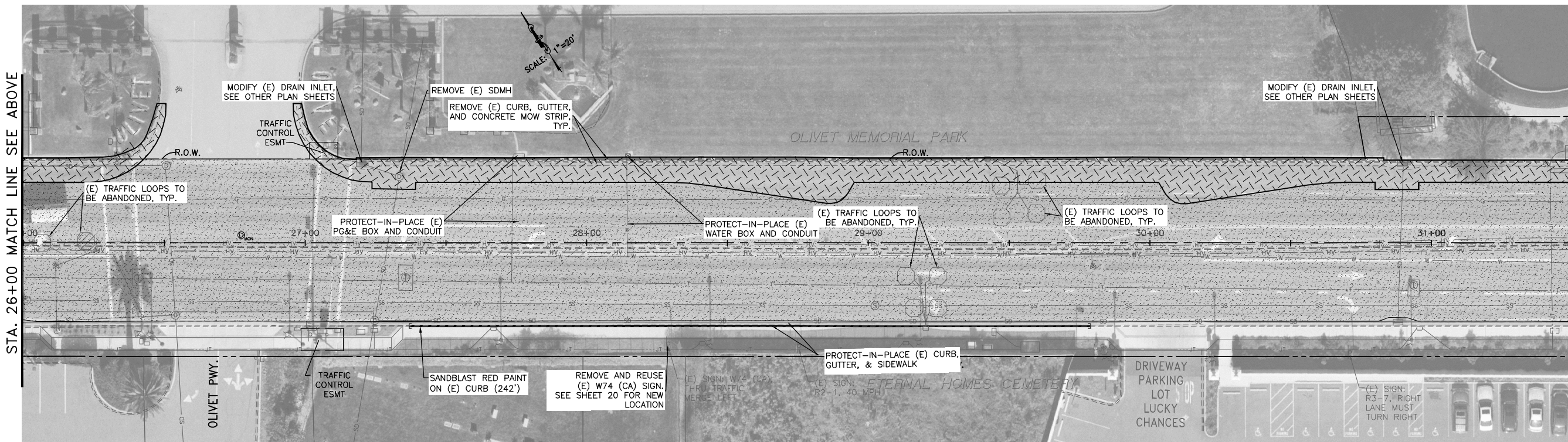
GRAPHIC SCALE



(IN FEET)
1 inch = 20 ft.



HILLSIDE BOULEVARD

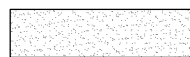


HILLSIDE BOULEVARD

LEGEND:



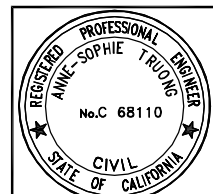
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MILL AND FILL AREA, SEE TYPICAL SECTIONS ON SHEET 5 AND PAVING PLAN FOR DEPTH OF MILLING.

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CONSTRUCTION SET
07/17/14

DESIGNED: ST	DATE
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APPROVED:	NO.
PREPARED BY: CSG Consultants Inc.	
1700 South Amphlett Boulevard, 3rd Floor San Mateo, CA 94402 Phone (650)522-2500 Fax (650)522-2599	
PREPARED FOR: TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA. 94014	
TITLE: EXISTING CONDITIONS/DEMOLITION, STA. 21+00 TO STA. 31+50 HILLSIDE BOULEVARD IMPROVEMENTS PROJECT, PHASE I TOWN OF COLMA CALIFORNIA	
SHEET 8 of 48	
DATE: 07/17/14	
JOB#: 10.350	

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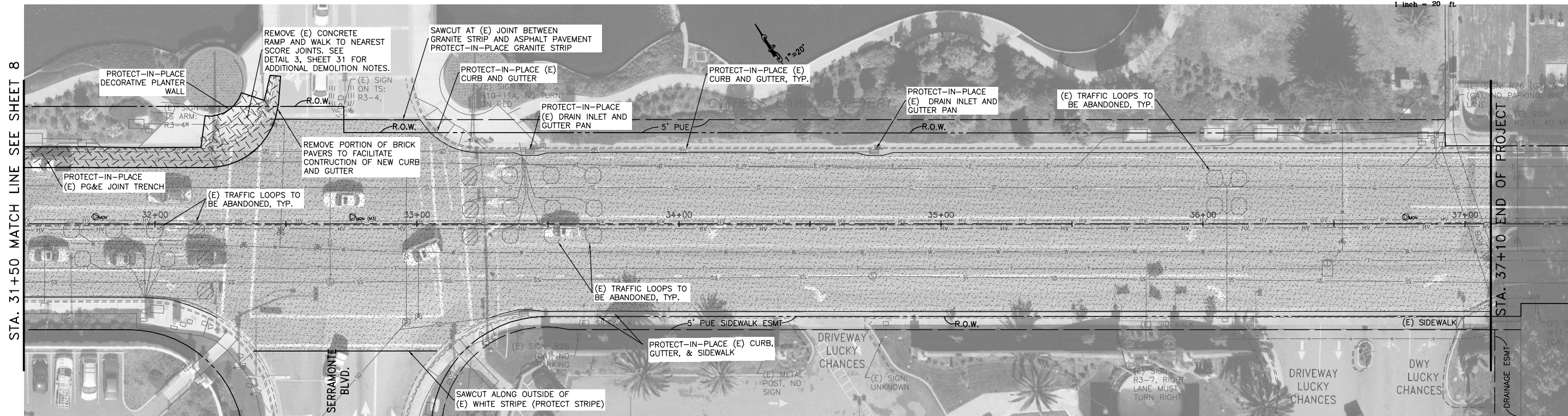
GRAPHIC SCALE



(IN FEET)
1 inch = 20 ft.

STA. 31+50 MATCH LINE SEE SHEET 8

STA. 37+10 END OF PROJECT

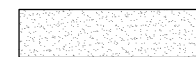


HILLSIDE BOULEVARD



LEGEND:

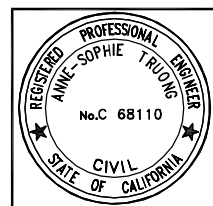
REMOVE MOW STRIP, CURB AND GUTTER, AND AC DOWN TO AB. REMOVE AB DOWN TO SUBGRADE IN AREAS TO RECEIVE PLANTING ONLY (KEEP AB BELOW NEW CURBS PER SHEET 25).



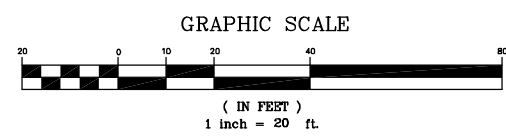
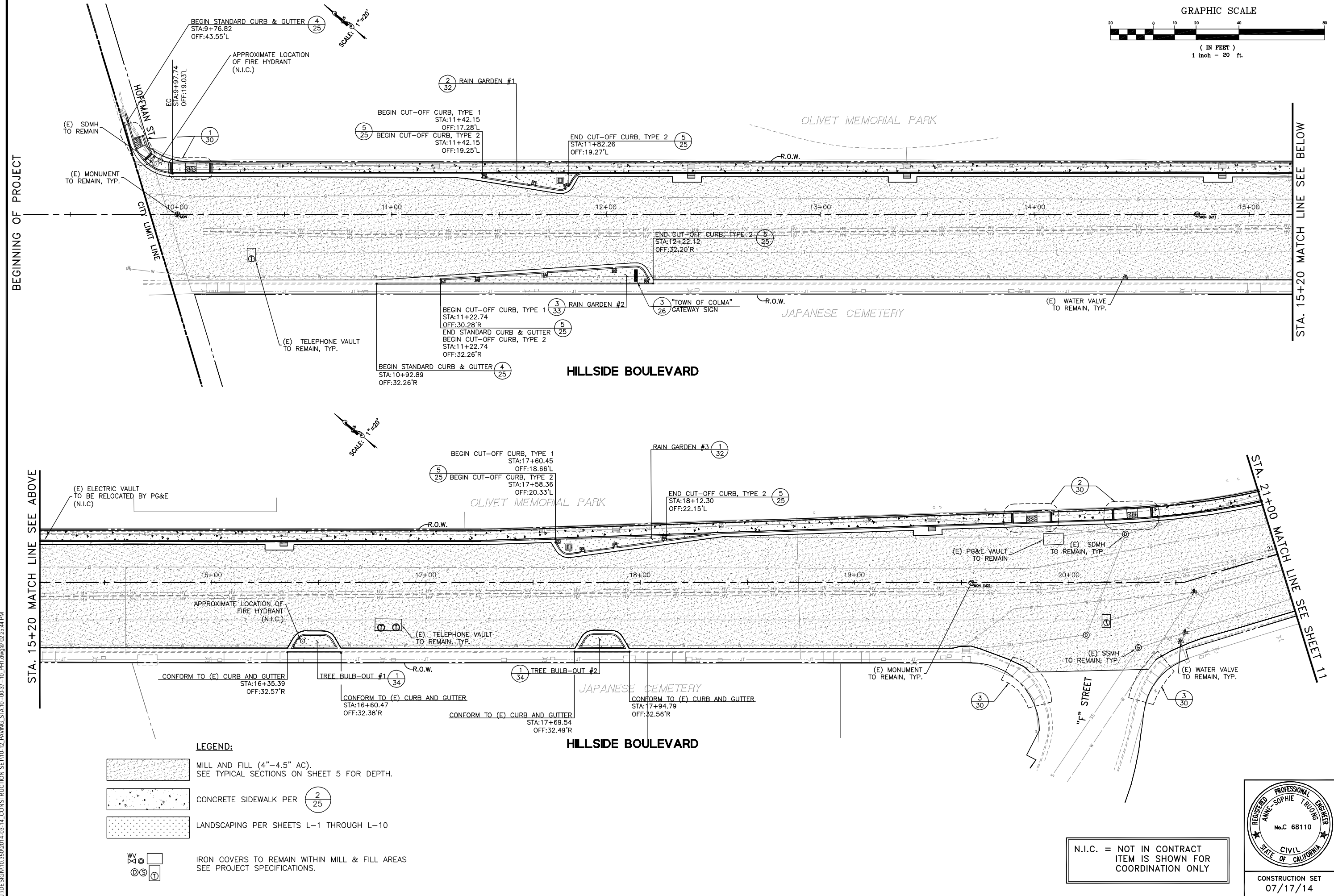
MILL AND FILL AREA, SEE TYPICAL SECTIONS ON SHEET 5 AND PAVING PLAN FOR DEPTH OF MILLING.

N.I.C. = NOT IN CONTRACT
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SEE DEMOLITION NOTES SHEET 4



DESIGNED BY: ST	NO.	REVISIONS	DATE
DRAWN BY: JOC/SH			
APPROVED BY:			
PREPARED BY: CSG Consultants Inc.	TOWN OF COLMA		
1700 South Amphlett Boulevard, 3rd Floor	1198 EL CAMINO REAL		
San Mateo, CA 94402	COLMA, CA. 94014		
Phone (650)522-2500 Fax (650)522-2599	TOWN OF COLMA		
TITLE: EXISTING CONDITIONS/DEMOLITION, STA. 31+50 TO STA. 37+10 HILLSIDE BOULEVARD IMPROVEMENTS PROJECT, PHASE I	CALIFORNIA		
SHEET 9	of		
48	DATE : 07/17/14		
CONSTRUCTION SET	JOB#: 10.350		
07/17/14			



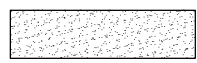
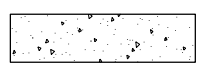
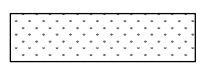

BEGINNING OF PROJECT

STA. 15+20 MATCH LINE SEE BELOW

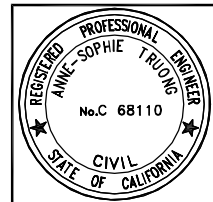
STA. 15+20 MATCH LINE SEE ABOVE

STA. 21+00 MATCH LINE SEE SHEET 11

LEGEND:

-  MILL AND FILL (4"-4.5" AC). SEE TYPICAL SECTIONS ON SHEET 5 FOR DEPTH.
-  CONCRETE SIDEWALK PER (2/25)
-  LANDSCAPING PER SHEETS L-1 THROUGH L-10
-  IRON COVERS TO REMAIN WITHIN MILL & FILL AREAS SEE PROJECT SPECIFICATIONS.

N.I.C. = NOT IN CONTRACT ITEM IS SHOWN FOR COORDINATION ONLY

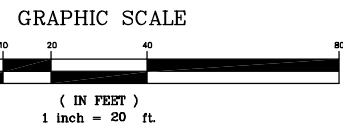
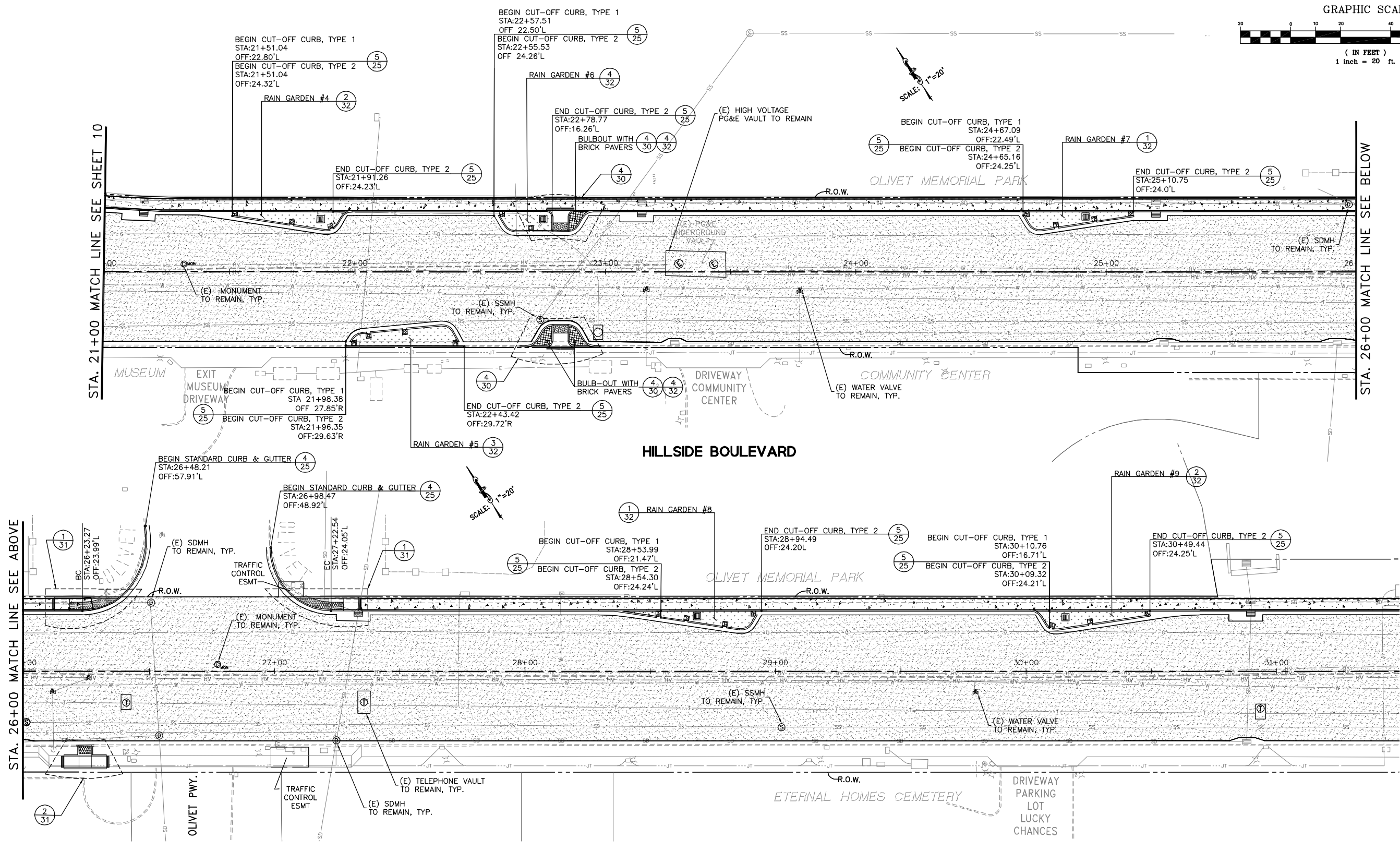


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DRAWN BY: JOC/SH	NO.:
APPROVED BY:	REVISIONS:
PREPARED BY: CSG Consultants Inc. 1700 South Amphlett Boulevard, 3rd Floor San Mateo, CA 94402 Phone (650)522-2500 Fax (650)522-2599	
PREPARED FOR: TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA. 94014	
TITLE: PAVING PLAN, STA. 57+70 TO STA. 69+00 HILLSIDE BOULEVARD IMPROVEMENTS PROJECT, PHASE I TOWN OF COLMA CALIFORNIA	
SHEET 10 of 48	
CONSTRUCTION SET 07/17/14	DATE: 07/17/14
	JOB#: 10.350

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Plotted on: 07/17/14 @ 02:25:59 PM



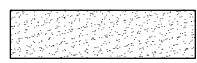
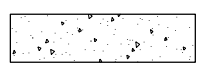
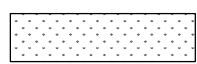

STA. 21+00 MATCH LINE SEE SHEET 10

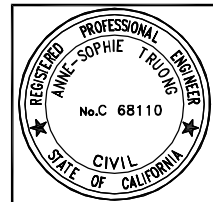
STA. 26+00 MATCH LINE SEE BELOW

STA. 26+00 MATCH LINE SEE ABOVE

STA. 31+50 MATCH LINE SEE SHEET 12

LEGEND:

-  MILL AND FILL (4"-4.5" AC). SEE TYPICAL SECTIONS ON SHEET 5 FOR DEPTH.
-  CONCRETE SIDEWALK PER (2/25)
-  LANDSCAPING PER SHEETS L-1 THROUGH L-10
-  IRON COVERS TO REMAIN WITHIN MILL & FILL AREAS SEE PROJECT SPECIFICATIONS.

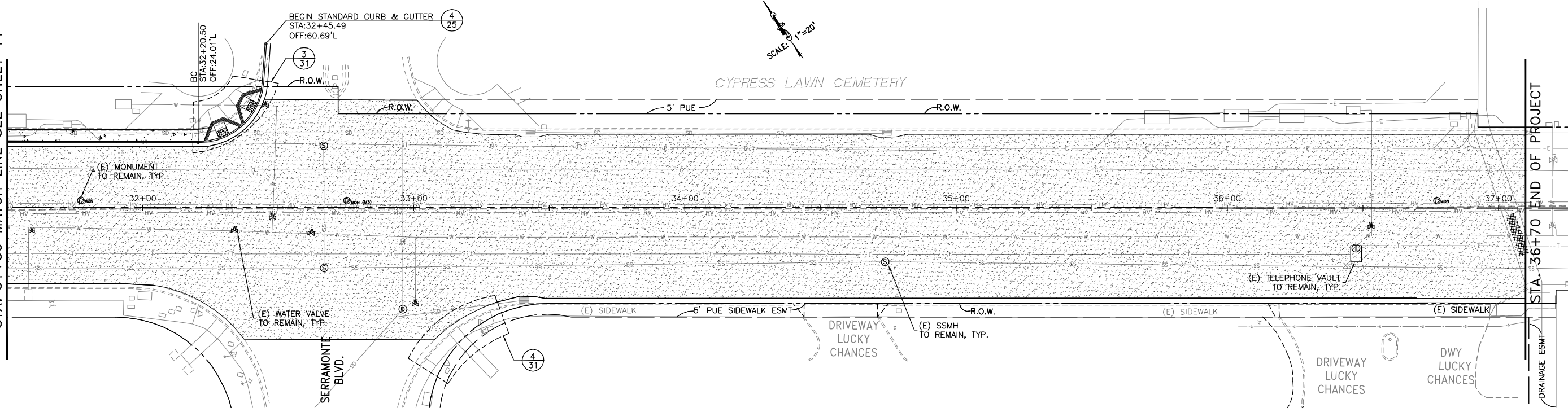
DESIGNED BY:	ST	DRAWN BY:	JOC/SH	APPROVED BY:		NO.	DATE
PREPARED BY:	CSG Consultants Inc. 1700 South Amphlett Boulevard, 3rd Floor San Mateo, CA 94402 Phone (650)522-2500 Fax (650)522-2599						
PREPARED FOR:	TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA. 94014						
TITLE:	PAVING PLAN, STA. 21+00 TO STA. 31+50 HILLSIDE BOULEVARD IMPROVEMENTS PROJECT, PHASE I TOWN OF COLMA CALIFORNIA						
				SHEET 11 of 48			
	CONSTRUCTION SET 07/17/14			DATE : 07/17/14 JOB# : 10.350			



(IN FEET)
1 inch = 20 ft.



STA. 31+50 MATCH LINE SEE SHEET 11



HILLSIDE BOULEVARD

STA. 36+70 END OF PROJECT

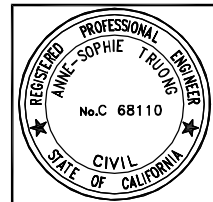
NO.	REVISIONS	DATE
		7/17/14

DESIGNED: ST
DRAWN: JOC/SH
APPROVED: _____
PREPARED BY: **CSG Consultants Inc.**
1700 South Amphlett Boulevard, 3rd Floor
San Mateo, CA 94402
Phone (650)522-2500 Fax (650)522-2599

PREPARED FOR:
TOWN OF COLMA
1198 EL CAMINO REAL
COLMA, CA. 94014

TITLE:
PAVING PLAN,
STA. 31+50 TO STA. 37+10
HILLSIDE BOULEVARD IMPROVEMENTS PROJECT,
PHASE I
TOWN OF COLMA CALIFORNIA

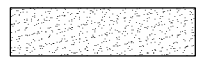

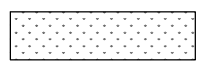
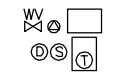
SHEET 12
of
48



CONSTRUCTION SET
07/17/14

DATE: 07/17/14
JOB#: 10.350







LEGEND:

-  MILL AND FILL (4"-4.5" AC).
SEE TYPICAL SECTIONS ON SHEET 5 FOR DEPTH.
-  CONCRETE SIDEWALK PER $\frac{2}{25}$
-  LANDSCAPING PER SHEETS L-1 THROUGH L-10
-  IRON COVERS TO REMAIN WITHIN MILL & FILL AREAS
SEE PROJECT SPECIFICATIONS.

PAVING QUANTITIES:

ITEM DESCRIPTION:	QTY.
AC PAVING (4"-4.5" AC)	15,728 SY
HMA PAVING - 4" THICK	3,300 TONS ¹
AGGREGATE BASE	1,400 TONS
CONCRETE SIDEWALK	9,292 SF
LANDSCAPING PER SHEETS L-1 THROUGH L-10	2045 SF

IRON COVERS WITHIN MILL & FILL LIMITS:

ITEM DESCRIPTION:	QTY.
 WATER VALVE	16 EA
 MONUMENT	8 EA
 STORM DRAIN MANHOLE	8 EA
 SANITARY SEWER MANHOLE	8 EA
 AT&T VAULT	7 EA ¹
 PG&E VAULT	4 EA

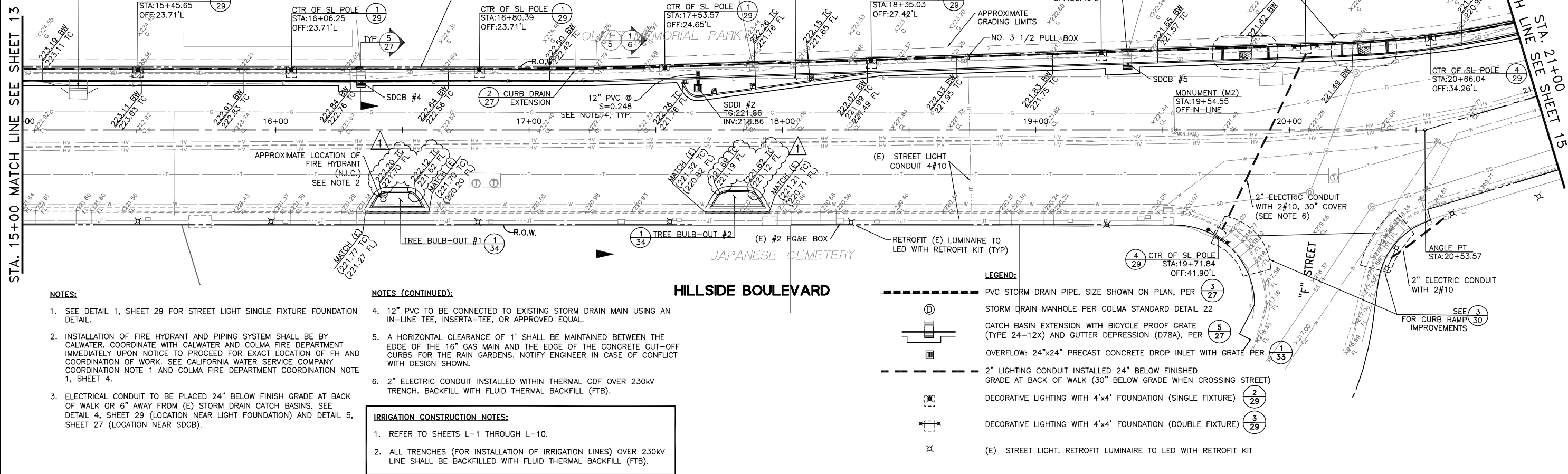
* ALL MONUMENTS AND UTILITY STRUCTURES SHALL BE RAISED TO FINAL FINISH GRADES.



(IN FEET)
1 inch = 20 ft.

STA. 15+00 MATCH LINE SEE SHEET 13

STA. 21+00 MATCH LINE SEE SHEET 15



NOTES:

- SEE DETAIL 1, SHEET 29 FOR STREET LIGHT SINGLE FIXTURE FOUNDATION DETAIL.
- INSTALLATION OF FIRE HYDRANT AND PIPING SYSTEM SHALL BE BY CALWATER. COORDINATE WITH CALWATER AND COLMA FIRE DEPARTMENT IMMEDIATELY UPON NOTICE TO PROCEED FOR EXACT LOCATION OF FH AND COORDINATION OF WORK. SEE CALIFORNIA WATER SERVICE COMPANY COORDINATION NOTE 1 AND COLMA FIRE DEPARTMENT COORDINATION NOTE 1, SHEET 4.
- ELECTRICAL CONDUIT TO BE PLACED 24" BELOW FINISH GRADE AT BACK OF WALK OR 6" AWAY FROM (E) STORM DRAIN CATCH BASINS. SEE DETAIL 4, SHEET 29 (LOCATION NEAR LIGHT FOUNDATION) AND DETAIL 5, SHEET 27 (LOCATION NEAR SDCB).

NOTES (CONTINUED):

- 12" PVC TO BE CONNECTED TO EXISTING STORM DRAIN MAIN USING AN IN-LINE TEE, INSERTA-TEE, OR APPROVED EQUAL.
- A HORIZONTAL CLEARANCE OF 1' SHALL BE MAINTAINED BETWEEN THE EDGE OF THE 16" GAS MAIN AND THE EDGE OF THE CONCRETE CUT-OFF CURBS FOR THE RAIN GARDENS. NOTIFY ENGINEER IN CASE OF CONFLICT WITH DESIGN SHOWN.
- 2" ELECTRIC CONDUIT INSTALLED WITHIN THERMAL CDF OVER 230KV TRENCH. BACKFILL WITH FLUID THERMAL BACKFILL (FTB).

IRRIGATION CONSTRUCTION NOTES:

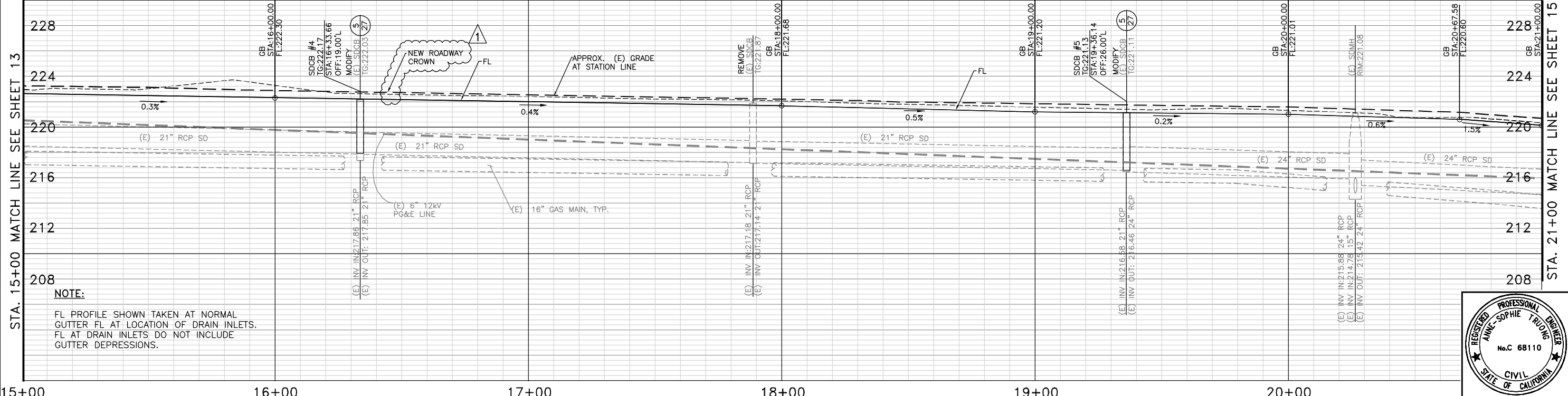
- REFER TO SHEETS L-1 THROUGH L-10.
- ALL TRENCHES (FOR INSTALLATION OF IRRIGATION LINES) OVER 230KV LINE SHALL BE BACKFILLED WITH FLUID THERMAL BACKFILL (FTB).

LEGEND:

- PVC STORM DRAIN PIPE, SIZE SHOWN ON PLAN, PER (3/27)
- STORM DRAIN MANHOLE PER COLMA STANDARD DETAIL 22
- CATCH BASIN EXTENSION WITH BICYCLE PROOF GRATE (TYPE 24-12X) AND GUTTER DEPRESSION (D78A), PER (5/27)
- OVERFLOW: 24"x24" PRECAST CONCRETE DROP INLET WITH GRATE PER (1/33)
- 2" LIGHTING CONDUIT INSTALLED 24" BELOW FINISHED GRADE AT BACK OF WALK (30" BELOW GRADE WHEN CROSSING STREET)
- DECORATIVE LIGHTING WITH 4'x4' FOUNDATION (SINGLE FIXTURE) (2/29)
- DECORATIVE LIGHTING WITH 4'x4' FOUNDATION (DOUBLE FIXTURE) (3/29)
- (E) STREET LIGHT. RETROFIT LUMINAIRE TO LED WITH RETROFIT KIT

STA. 15+00 MATCH LINE SEE SHEET 13

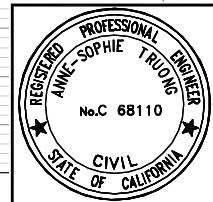
STA. 21+00 MATCH LINE SEE SHEET 15



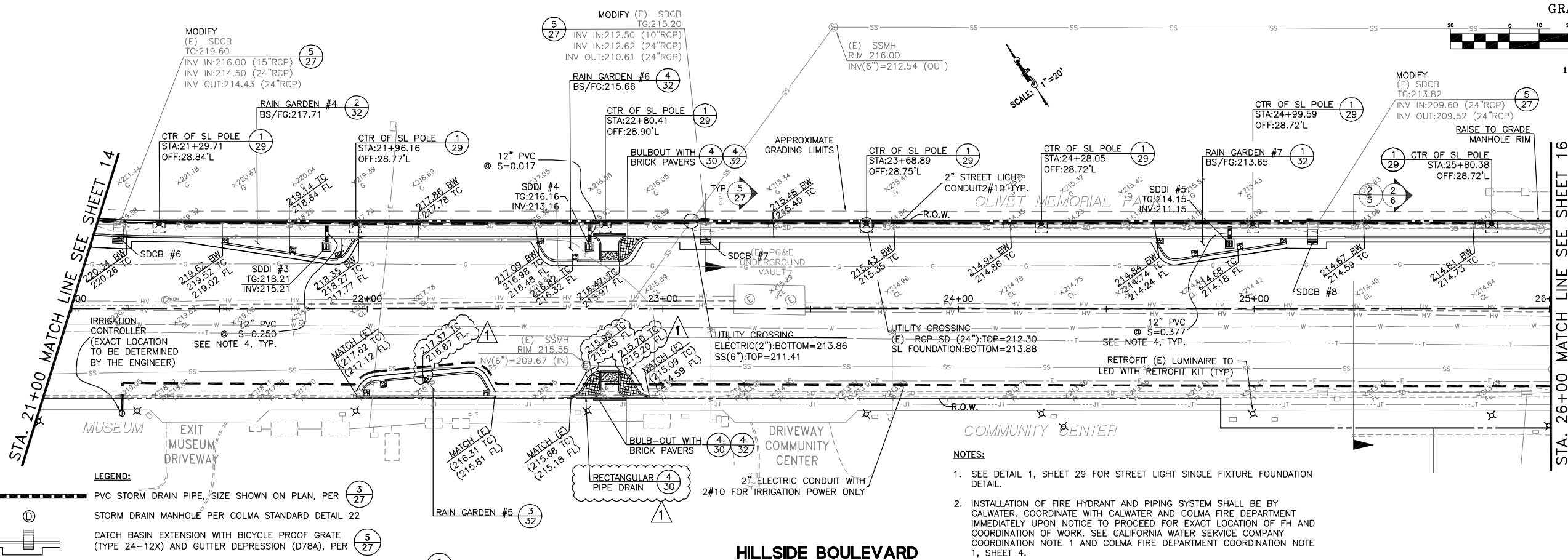
NOTE:

FL PROFILE SHOWN TAKEN AT NORMAL GUTTER FL AT LOCATION OF DRAIN INLETS. FL AT DRAIN INLETS DO NOT INCLUDE GUTTER DEPRESSIONS.

SCALE: HORIZONTAL 1"=20' ; VERTICAL 1"=4'



DESIGNED: ST	DATE: 7/17/14
DRAWN: JOC/SH	REVISIONS:
APPROVED:	NO.:
PREPARED BY: CSG Consultants Inc.	ADDENDUM #3
1700 South Amphlett Boulevard, 3rd Floor San Mateo, CA 94402 Phone (650)522-2500 Fax (650)522-2599	
PREPARED FOR: TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA. 94014	
TITLE: IMPROVEMENTS PLAN AND PROFILE, STA. 15+00 TO STA. 21+00 HILLSIDE BOULEVARD IMPROVEMENTS PROJECT, PHASE I TOWN OF COLMA CALIFORNIA	
SHEET 14 of 48	
CONSTRUCTION SET 07/17/14	DATE: 07/17/14 JOB#: 10.350



LEGEND:

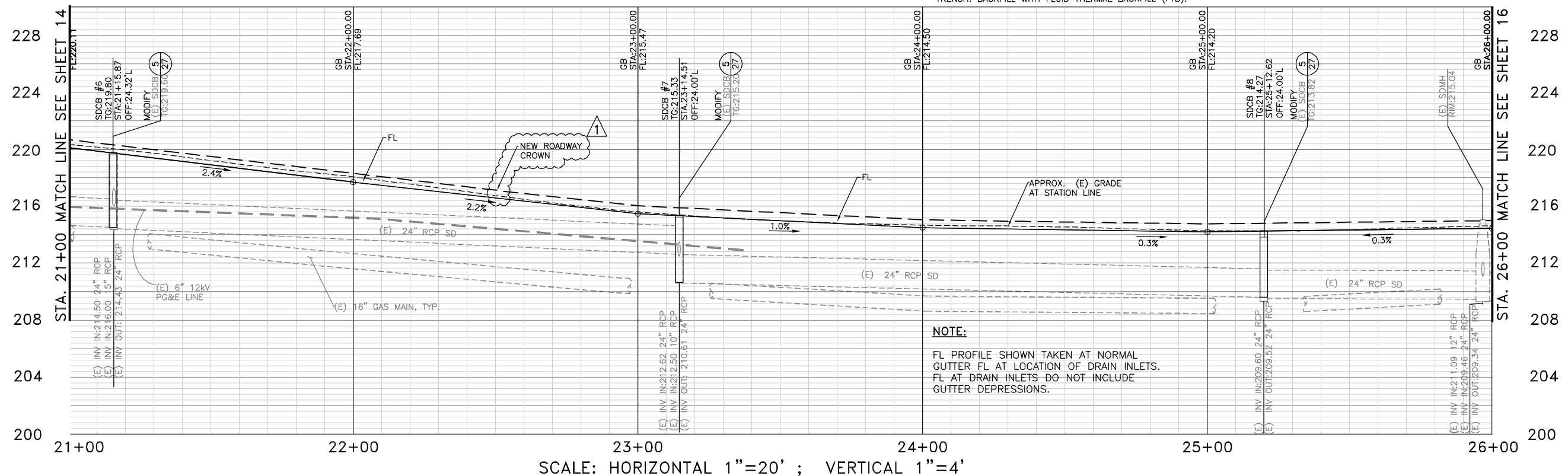
- ③ PVC STORM DRAIN PIPE, SIZE SHOWN ON PLAN, PER ③/27
- ① STORM DRAIN MANHOLE PER COLMA STANDARD DETAIL 22
- ⑤ CATCH BASIN EXTENSION WITH BICYCLE PROOF GRATE (TYPE 24-12X) AND GUTTER DEPRESSION (D78A), PER ⑤/27
- ① OVERFLOW: 24"x24" PRECAST CONCRETE DROP INLET WITH GRATE PER ①/33
- 2" LIGHTING CONDUIT INSTALLED 24" BELOW FINISHED GRADE AT BACK OF WALK (30" BELOW GRADE WHEN CROSSING STREET)
- ② DECORATIVE LIGHTING WITH 4'x4' FOUNDATION (SINGLE FIXTURE) ②/29
- ③ DECORATIVE LIGHTING WITH 4'x4' FOUNDATION (DOUBLE FIXTURE) ③/29
- ⊗ (E) STREET LIGHT. RETROFIT LUMINAIRE TO LED WITH RETROFIT KIT

IRRIGATION CONSTRUCTION NOTES:

- REFER TO SHEETS L-1 THROUGH L-10.
- ALL TRENCHES (FOR INSTALLATION OF IRRIGATION LINES) OVER 230KV LINE SHALL BE BACKFILLED WITH FLUID THERMAL BACKFILL (FTB).

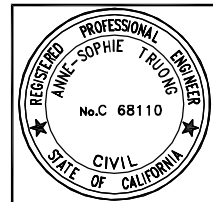
NOTES:

- SEE DETAIL 1, SHEET 29 FOR STREET LIGHT SINGLE FIXTURE FOUNDATION DETAIL.
- INSTALLATION OF FIRE HYDRANT AND PIPING SYSTEM SHALL BE BY CALWATER. COORDINATE WITH CALWATER AND COLMA FIRE DEPARTMENT IMMEDIATELY UPON NOTICE TO PROCEED FOR EXACT LOCATION OF FH AND COORDINATION OF WORK. SEE CALIFORNIA WATER SERVICE COMPANY COORDINATION NOTE 1 AND COLMA FIRE DEPARTMENT COORDINATION NOTE 1, SHEET 4.
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NOTE:

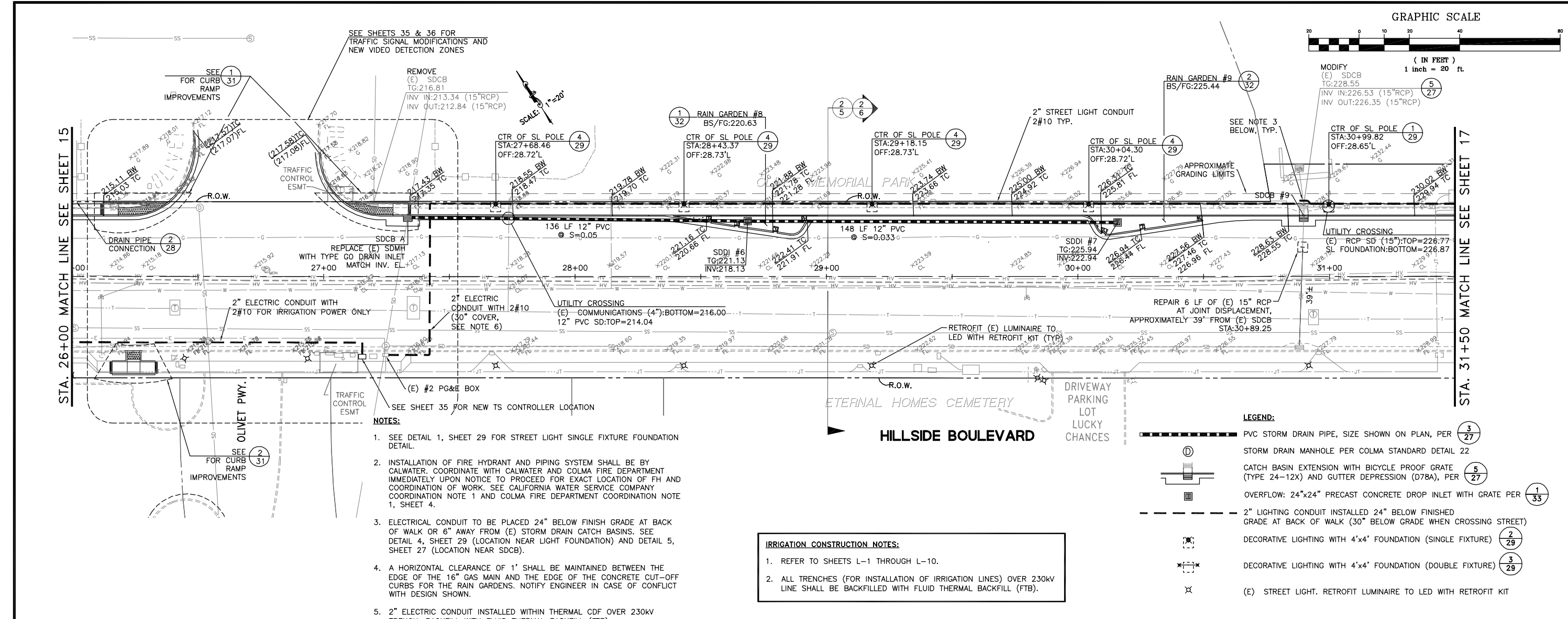
FL PROFILE SHOWN TAKEN AT NORMAL GUTTER FL AT LOCATION OF DRAIN INLETS. FL AT DRAIN INLETS DO NOT INCLUDE GUTTER DEPRESSIONS.



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1700 South Amphlett Boulevard, 3rd Floor San Mateo, CA 94402 Phone (650)522-2500 Fax (650)522-2599	
PREPARED FOR: TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA. 94014	
TITLE: IMPROVEMENTS PLAN AND PROFILE, STA. 21+00 TO STA. 26+00 HILLSIDE BOULEVARD IMPROVEMENTS PROJECT, PHASE I TOWN OF COLMA CALIFORNIA	
SHEET 15 of 48	
CONSTRUCTION SET 07/17/14	DATE: 07/17/14 JOB#: 10.350

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GRAPHIC SCALE



SEE SHEETS 35 & 36 FOR TRAFFIC SIGNAL MODIFICATIONS AND NEW VIDEO DETECTION ZONES

SEE (1) FOR CURB RAMP IMPROVEMENTS

REMOVE (E) SDCB
TG:216.81
INV IN:213.34 (15"RCP)
INV OUT:212.84 (15"RCP)

SCALE: 1"=20'

(1) RAIN GARDEN #8
BS/FG:220.63

CTR OF SL POLE (4)
STA:29+18.15
OFF:28.73'L

CTR OF SL POLE (4)
STA:30+04.30
OFF:28.72'L

MODIFY (E) SDCB
TG:228.55
INV IN:226.53 (15"RCP)
INV OUT:226.35 (15"RCP)

CTR OF SL POLE (1)
STA:30+99.82
OFF:28.65'L

REPLACE (E) SDMH WITH TYPE GO DRAIN INLET
27+00 MATCH INV. EL.

136 LF 12" PVC
S=0.05

148 LF 12" PVC
S=0.033

SDDI #7
TG:225.94
INV:222.94
30+00

UTILITY CROSSING
(E) RCP SD (15") TOP=226.77
SL FOUNDATION BOTTOM=228.87

2" ELECTRIC CONDUIT WITH 2#10 FOR IRRIGATION POWER ONLY

2" ELECTRIC CONDUIT WITH 2#10 (30" COVER, SEE NOTE 6)

UTILITY CROSSING (E) COMMUNICATIONS (4") BOTTOM=216.00
12" PVC SD TOP=214.04

RETROFIT (E) LUMINAIRE TO LED WITH RETROFIT KIT (TYP)

REPAIR 6 LF OF (E) 15" RCP AT JOINT DISPLACEMENT. APPROXIMATELY 39' FROM (E) SDCB STA:30+89.25

NOTES:

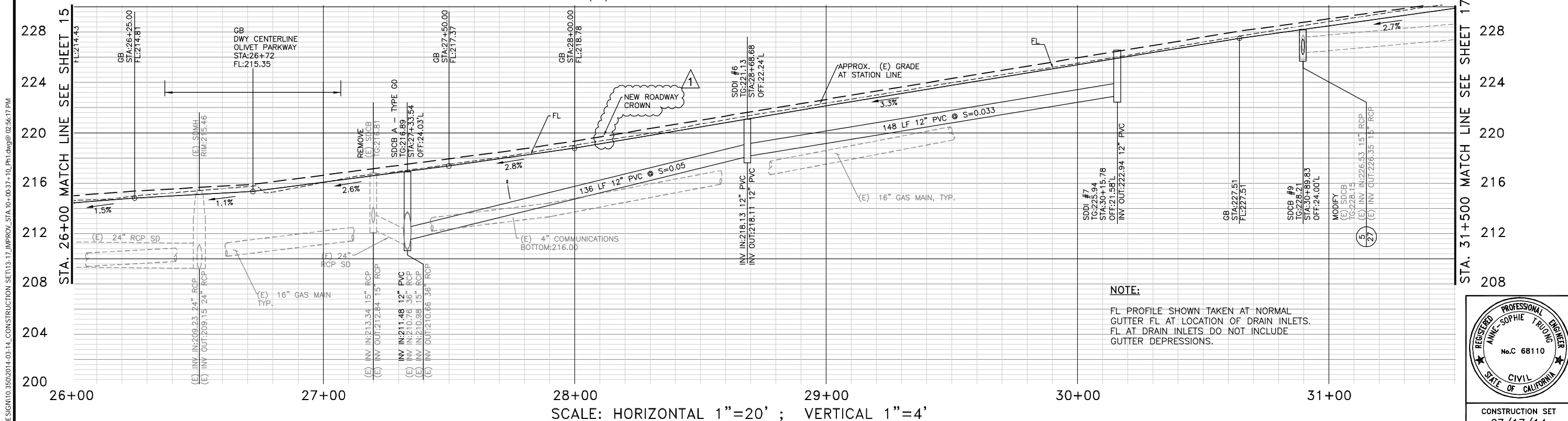
- SEE DETAIL 1, SHEET 29 FOR STREET LIGHT SINGLE FIXTURE FOUNDATION DETAIL.
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- 2" ELECTRIC CONDUIT INSTALLED WITHIN THERMAL CDF OVER 230KV TRENCH. BACKFILL WITH FLUID THERMAL BACKFILL (FTB).

IRRIGATION CONSTRUCTION NOTES:

- REFER TO SHEETS L-1 THROUGH L-10.
- ALL TRENCHES (FOR INSTALLATION OF IRRIGATION LINES) OVER 230KV LINE SHALL BE BACKFILLED WITH FLUID THERMAL BACKFILL (FTB).

LEGEND:

- PVC STORM DRAIN PIPE, SIZE SHOWN ON PLAN, PER (3) 27
- STORM DRAIN MANHOLE PER COLMA STANDARD DETAIL 22
- CATCH BASIN EXTENSION WITH BICYCLE PROOF GRATE (TYPE 24-12X) AND GUTTER DEPRESSION (D78A), PER (5) 27
- OVERFLOW: 24"x24" PRECAST CONCRETE DROP INLET WITH GRATE PER (1) 33
- 2" LIGHTING CONDUIT INSTALLED 24" BELOW FINISHED GRADE AT BACK OF WALK (30" BELOW GRADE WHEN CROSSING STREET)
- DECORATIVE LIGHTING WITH 4'x4' FOUNDATION (SINGLE FIXTURE) (2) 29
- DECORATIVE LIGHTING WITH 4'x4' FOUNDATION (DOUBLE FIXTURE) (3) 29
- (E) STREET LIGHT. RETROFIT LUMINAIRE TO LED WITH RETROFIT KIT



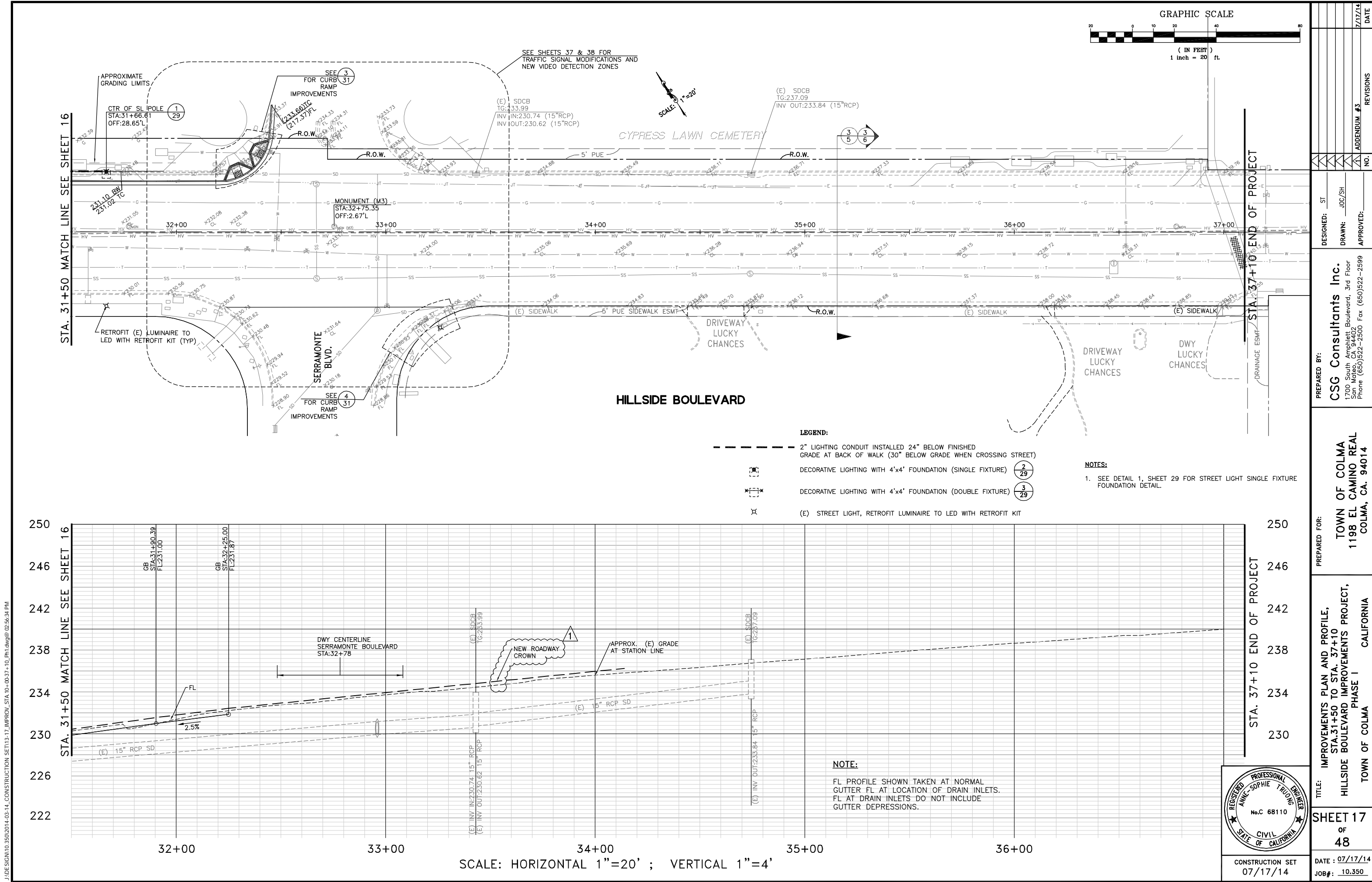
NOTE:

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APPROVED:	NO.:
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PREPARED FOR: TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA. 94014	
TITLE: IMPROVEMENTS PLAN AND PROFILE, STA.26+00 TO STA. 31+50 HILLSIDE BOULEVARD IMPROVEMENTS PROJECT, PHASE I TOWN OF COLMA CALIFORNIA	
SHEET 16 of 48	
CONSTRUCTION SET 07/17/14	DATE: 07/17/14 JOB#: 10.350

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GRAPHIC SCALE



(IN FEET)
1 inch = 20 ft.

CYPRESS LAWN CEMETERY

HILLSIDE BOULEVARD

LEGEND:

- 2" LIGHTING CONDUIT INSTALLED 24" BELOW FINISHED GRADE AT BACK OF WALK (30" BELOW GRADE WHEN CROSSING STREET)
- DECORATIVE LIGHTING WITH 4'x4' FOUNDATION (SINGLE FIXTURE) 2
29
- DECORATIVE LIGHTING WITH 4'x4' FOUNDATION (DOUBLE FIXTURE) 3
29
- (E) STREET LIGHT, RETROFIT LUMINAIRE TO LED WITH RETROFIT KIT

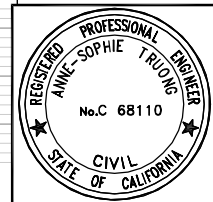
NOTES:

1. SEE DETAIL 1, SHEET 29 FOR STREET LIGHT SINGLE FIXTURE FOUNDATION DETAIL.

NOTE:

FL PROFILE SHOWN TAKEN AT NORMAL GUTTER FL AT LOCATION OF DRAIN INLETS. FL AT DRAIN INLETS DO NOT INCLUDE GUTTER DEPRESSIONS.

SCALE: HORIZONTAL 1"=20' ; VERTICAL 1"=4'



DESIGNED: ST	DRAWN: JOC/SH	APPROVED:	NO.	REVISIONS	DATE
PREPARED BY: CSG Consultants Inc. 1700 South Amphlett Boulevard, 3rd Floor San Mateo, CA 94402 Phone (650)522-2500 Fax (650)522-2599					
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TITLE: IMPROVEMENTS PLAN AND PROFILE, STA. 31+50 TO STA. 37+10 HILLSIDE BOULEVARD IMPROVEMENTS PROJECT, PHASE I			CALIFORNIA		
SHEET 17			DATE : 07/17/14		
of			JOB# : 10.350		
48			CONSTRUCTION SET 07/17/14		



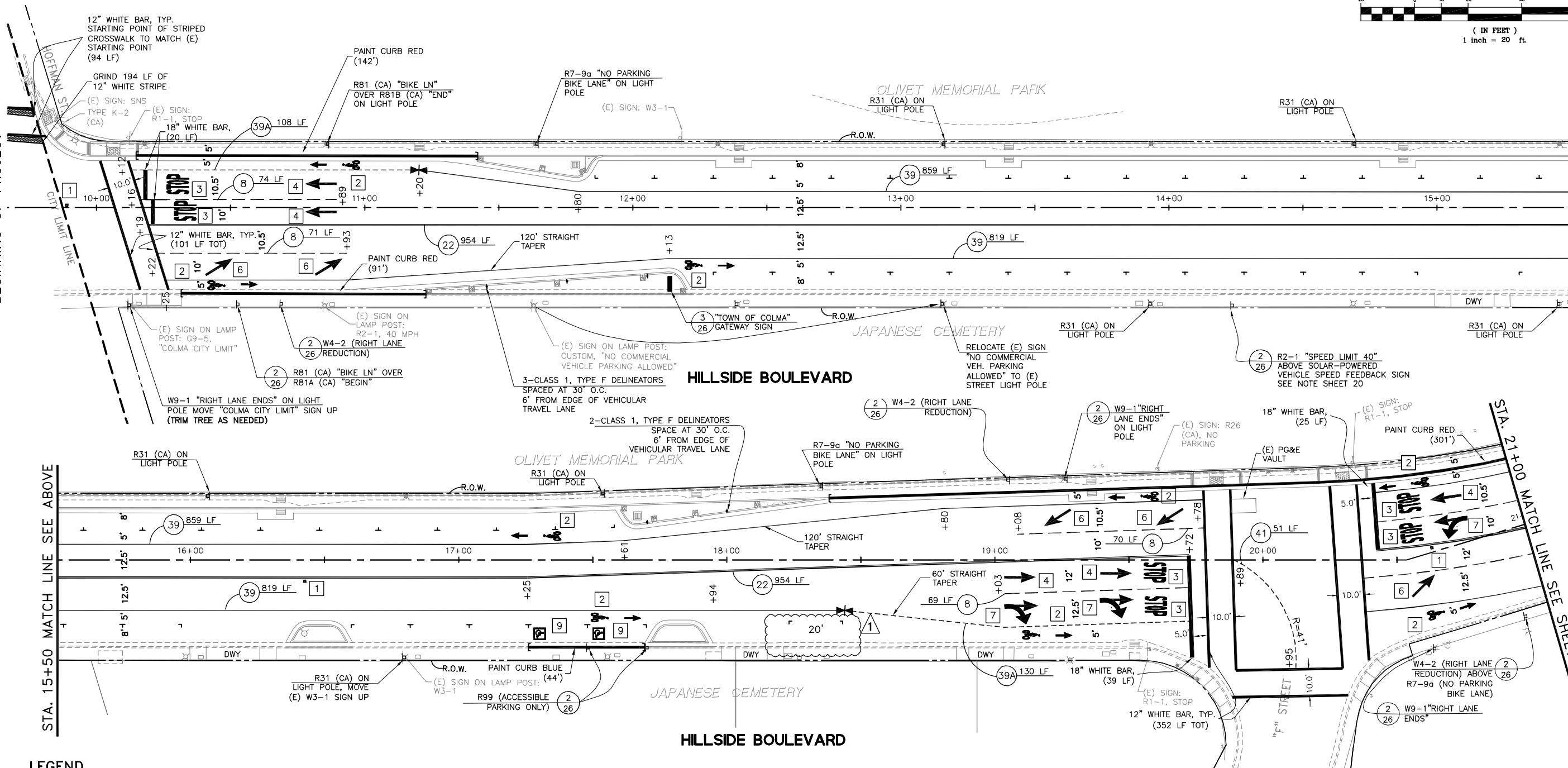
(IN FEET)
1 inch = 20 ft.

BEGINNING OF PROJECT

STA. 15+50 MATCH LINE SEE ABOVE

STA. 15+50 MATCH LINE SEE BELOW

STA. 21+00 MATCH LINE SEE SHEET 19



LEGEND

- CONSTRUCTION NOTE
- STRIPING DETAIL
- BIKE LANE SYMBOL WITH PERSON AND ARROW
- CHANGE IN PAVEMENT STRIPING DETAIL
- NEW ROADSIDE SIGN & POST
- BLUE FIRE HYDRANT MARKER
- PARTIAL STATIONING INDICATE BEGIN & END STRIPING
- CALTRANS DETAIL 8
- CALTRANS DETAIL 22
- CALTRANS DETAIL 29
- CALTRANS DETAIL 37B
- CALTRANS DETAIL 38
- CALTRANS DETAIL 39
- CALTRANS DETAIL 39A
- CALTRANS DETAILS 40, 41
- PAINT CURB, COLOR AND LOCATION AS SHOW ON PLAN

CONSTRUCTION NOTES:

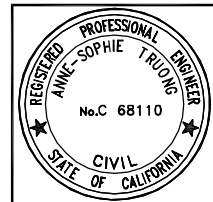
- BLUE FIRE HYDRANT MARKER 6" OFF CENTER STRIPE
- CALTRANS BIKE LANE ARROW (CALTRANS DETAILS/A24A) WITH BIKE LANE SYMBOL WITH PERSON (CALTRANS DETAILS/A24C)
- CALTRANS PAVEMENT MARKING LEGEND "STOP" (CALTRANS DETAILS/A24D) 8' FROM CROSS WALK STRIPE OR STOP BAR
- CALTRANS TYPE I ARROW (10") (CALTRANS DETAILS/A24A)
- CALTRANS TYPE IV ARROW (CALTRANS DETAILS/A24A)
- CALTRANS TYPE VI ARROW (CALTRANS DETAILS/A24A)
- CALTRANS TYPE VII ARROW (CALTRANS DETAILS/A24A)
- CALTRANS PAVEMENT MARKING LEGEND "ONLY" (CALTRANS DETAILS/A24E)
- CALTRANS PAVEMENT MARKING LEGEND INTERNATIONAL SYMBOL OF ACCESSIBILITY (ISA) (SHEET 28, DETAIL 1)

GENERAL MARKINGS AND STRIPING NOTES:

1. ALL STRIPING SHALL BE PER CALTRANS STANDARD PLANS, LATEST EDITION.
2. ALL STRIPING AND LEGENDS SHALL BE THERMOPLASTIC, EXCEPT STRIPING DETAILS 39, 39A, BIKE LANE MARKINGS AND BIKE LANE ARROWS.
3. TOWN TO APPROVE CAT-TRACKING PRIOR TO PLACEMENT OF PERMANENT STRIPING AND LEGENDS. CONTRACTOR TO ALLOW MINIMUM 1 WEEK REVIEW BY TOWN AFTER PLACEMENT OF CAT-TRACKING.
4. ADD "NO DUMPING-DRAINS TO BAY" STENCIL AT EVERY STORM DRAIN INLETS. SEE SPECIFICATIONS.
5. PLACE BLUE 2-WAY RETRO-REFLECTIVE MARKER 6" AWAY CENTERLINE, IN LINE WITH FIRE HYDRANT.
6. FOR SIGNS, STRIPING & PAVEMENT MARKING QUANTITIES SEE SHEET 20.
7. FOR STANDARD "T" PARKING STALL MARKING AND STALL DIMENSIONS, SEE DETAIL 4, SHEET 26.

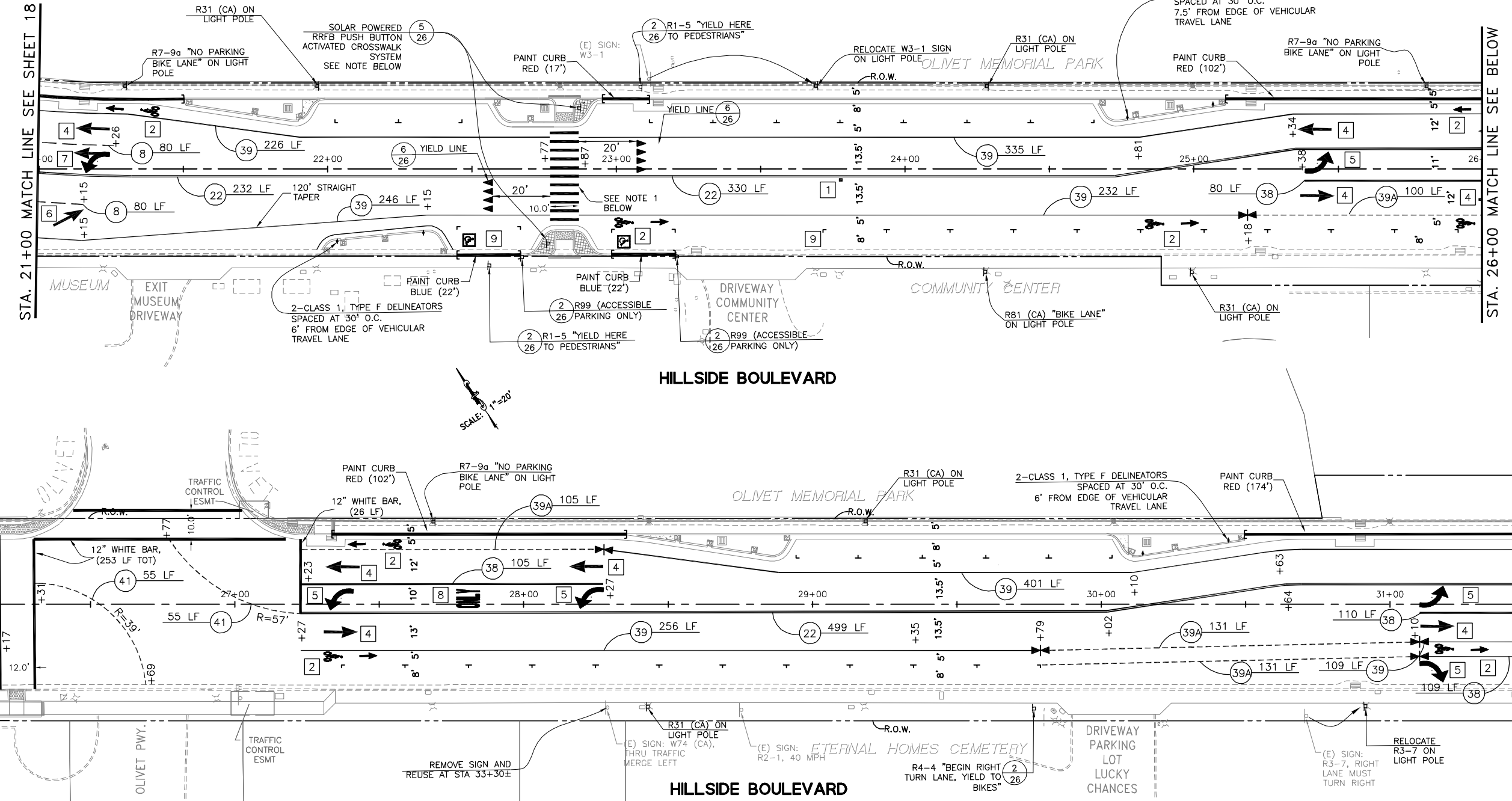
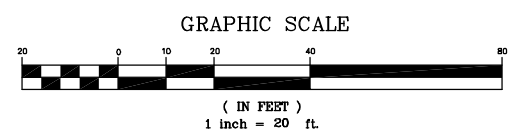
GENERAL SIGNAGE NOTES:

1. ALL SIGNS & MARKINGS SHALL BE PER THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION.
2. STREET NAME SIGNS AND GATEWAY SIGN SHALL BE PER THE TOWN OF COLMA'S MASTER SIGN PROGRAM.
3. INSTALLATION OF SIGNS, MARKINGS AND STRIPING SHALL BE PER PROJECT PLANS AND SPECIFICATIONS, HOWEVER, CONTRACTOR SHALL CONFIRM EXACT SIGN LOCATIONS IN THE FIELD WITH ENGINEER PRIOR TO EXCAVATION OF THE FOUNDATION.
4. UNLESS OTHERWISE SHOWN OR NOTED, ALL SIGNING SHOWN ON THESE PLANS SHALL BE NEW SIGNS MOUNTED ON NEW POLES / POSTS AND FOUNDATIONS PER PROJECT DETAILS.
5. WHERE REQUIRED, EXISTING "CUSTOM" SIGNS SHALL BE SALVAGED, MAINTAINED IN AN ACCEPTABLE CONDITION AND RE-INSTALLED ON NEW POLES / POSTS AND FOUNDATIONS PER PROJECT DETAILS.
6. FOR SIGN DESCRIPTION, DIMENSIONS AND QUANTITIES SEE SHEET 20.
7. WORDING FOR R31 (CA) SIGNS SHALL BE COORDINATED WITH THE ENGINEER PRIOR TO ORDERING SIGNS.
8. ALL SIGNS (EXISTING AND PROPOSED) WITHIN PROJECT LIMITS SHALL HAVE A MINIMUM CLEARANCE OF 7' TO THE BOTTOM SIGN. NOTIFY ENGINEER IN CASE OF DISCREPANCY.



DESIGNED: ST	NO.	REVISIONS	DATE
DRAWN: JOC/SH			7/17/14
APPROVED:			
PREPARED BY: CSG Consultants Inc.	ADDENDUM #3		
TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA. 94014			
SIGNING AND STRIPING PLAN, STA. 10+00 TO STA. 21+00 HILLSIDE BOULEVARD IMPROVEMENTS PROJECT, PHASE I TOWN OF COLMA CALIFORNIA			
SHEET 18 of 48			DATE: 07/17/14
CONSTRUCTION SET 07/17/14			JOB#: 10.350

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LEGEND

	CONSTRUCTION NOTE
	STRIPING DETAIL
	BIKE LANE SYMBOL WITH PERSON AND ARROW
	CHANGE IN PAVEMENT STRIPING DETAIL
	NEW ROADSIDE SIGN & POST
	BLUE FIRE HYDRANT MARKER
	PARTIAL STATIONING INDICATE BEGIN & END STRIPING
	CALTRANS DETAIL 8
	CALTRANS DETAIL 22
	CALTRANS DETAIL 29
	CALTRANS DETAIL 37B
	CALTRANS DETAIL 38
	CALTRANS DETAIL 39
	CALTRANS DETAIL 39A
	CALTRANS DETAILS 40, 41
	PAINT CURB, COLOR AND LOCATION AS SHOW ON PLAN

RRFB PUSH BUTTON ACTIVATED CROSSWALK SYSTEM NOTE:

SYSTEM SHALL CONSIST OF THE FOLLOWING:

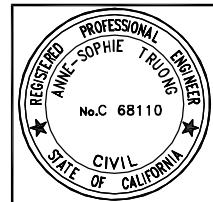
- (2) 13' TALL, 4.5" OUTER DIAMETER ALUMINUM POLE WITH FOUNDATION SYSTEM PER (5/26)
- (4) W11-2 SIGNS (FYG)
- (2) W16-7P (LEFT) (FYG)
- (2) W16-7P (RIGHT) (FYG)
- (4) LED LIGHT BARS
- SOLAR POWER WITH WIRELESS TRANSMISSION
- ALL SOFTWARE AND HARDWARE REQUIRED FOR INSTALLATION
- PUSH BUTTON (2)

*PRODUCT SHALL BE TAPCO OR APPROVED EQUAL

NOTES

- CROSSWALK STRIPING SHALL BE 10' LONG WHITE THERMOPLASTIC STRIPES, 12" WIDE SEPARATED BY 24" GAPS.

DATE	
REVISIONS	
NO.	
DESIGNED: ST	
DRAWN: JOC/SH	
APPROVED:	
PREPARED BY:	CSG Consultants Inc. 1700 South Amphlett Boulevard, 3rd Floor San Mateo, CA 94402 Phone (650)522-2500 Fax (650)522-2599
PREPARED FOR:	TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA. 94014
TITLE:	SIGNING AND STRIPING PLAN, STA. 21+00 TO STA. 31+50 HILLSIDE BOULEVARD IMPROVEMENTS PROJECT, PHASE I
	TOWN OF COLMA CALIFORNIA
SHEET 19	
OF 48	
CONSTRUCTION SET	DATE : 07/17/14
07/17/14	JOB# : 10.350

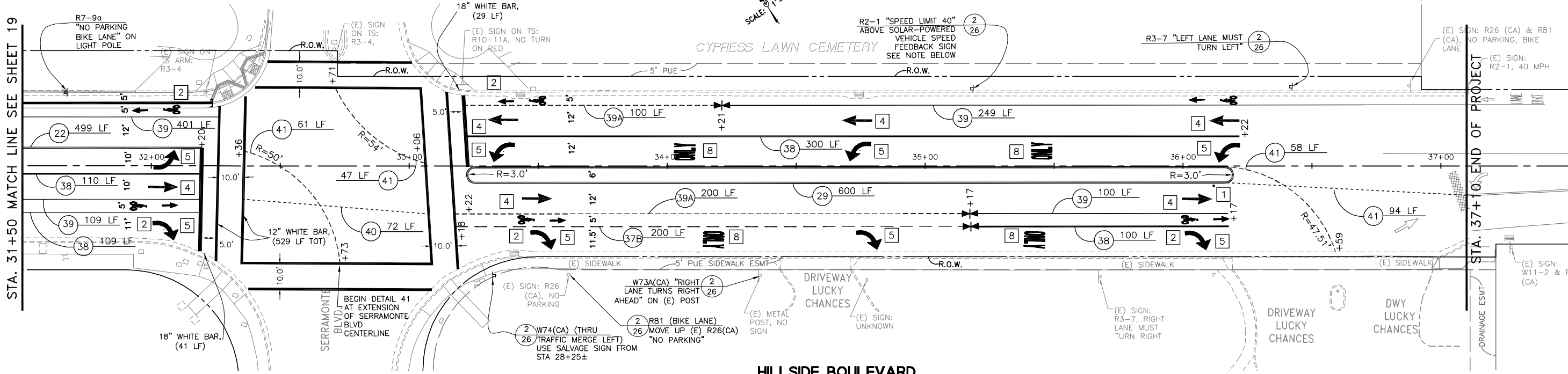


SEE NOTES SHEET 18



(IN FEET)
1 inch = 20 ft.

STA. 31+50 MATCH LINE SEE SHEET 19



HILLSIDE BOULEVARD

LEGEND

- CONSTRUCTION NOTE
- STRIPING DETAIL
- BIKE LANE SYMBOL WITH PERSON AND ARROW
- CHANGE IN PAVEMENT STRIPING DETAIL
- NEW ROADSIDE SIGN & POST
- BLUE FIRE HYDRANT MARKER
- PARTIAL STATIONING INDICATE BEGIN & END STRIPING
- CALTRANS DETAIL 8
- CALTRANS DETAIL 22
- CALTRANS DETAIL 29
- CALTRANS DETAIL 37B
- CALTRANS DETAIL 38
- CALTRANS DETAIL 39
- CALTRANS DETAIL 39A
- CALTRANS DETAILS 40, 41
- PAINT CURB, COLOR AND LOCATION AS SHOW ON PLAN

STRIPING QUANTITIES:

	CALTRANS DETAIL 8	444 LF
	CALTRANS DETAIL 22	2015 LF
	CALTRANS DETAIL 29	600 LF
	CALTRANS DETAIL 37B	200 LF
	CALTRANS DETAIL 38	804 LF
	CALTRANS DETAIL 39	2854 LF
	CALTRANS DETAIL 39A	1005 LF
	CALTRANS DETAILS 40, 41	500 LF
	12" WHITE CROSS WALK BAR	1465 LF
	18" WHITE STOP BAR	154 LF

SIGN QUANTITIES:

SIGN	DESCRIPTION	DIM.	QUAN.
R1-5	"YIELD HERE TO PEDESTRIANS"	30x30	2
R2-1	"SPEED LIMIT 40"	24x30	2
R3-4	"NO U-TURN" (SEE TRAFFIC SIGNAL PLANS)	24x24	1
R3-7	"LEFT LANE MUST TURN LEFT"	30x30	1
R4-4	"BEGIN RIGHT TURN LANE YIELD TO BIKES"	36x30	1
R7-9a	"NO PARKING BIKE LANE"	12x18	7
R31 (CA)	COORDINATE WITH THE ENGINEER*		13
R81 (CA)	BIKE LANE	12x8	4
R81A(CA)	BEGIN	8x5	1
R81B(CA)	END	8x5	1
R99 (CA)	ACCESSIBLE PARKING ONLY	18x12	4
W4-2	RIGHT LANE REDUCTION	36x36	3
W9-1	RIGHT LANE ENDS	36x36	3
W73A(CA)	RIGHT LANE TURNS RIGHT AHEAD CLASS 1, TYPE F DELINEATORS	36x36	1

PAVEMENT MARKINGS QUANTITIES:

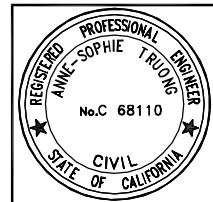
	EA	SF	TOTAL SF
BLUE FIRE HYDRANT MARKER	6		
6" OFF CENTER STRIPE			
CALTRANS BIKE LANE ARROW (CALTRANS DETAILS/A24A) WITH BIKE LANE SYMBOL WITH PERSON (CALTRANS DETAILS/A24C)	23	14	322
CALTRANS PAVEMENT MARKING LEGEND "STOP" (CALTRANS DETAILS/A24D) 8' FROM CROSS WALK STRIPE OR STOP BAR	6	22	132
CALTRANS TYPE I ARROW (10') (CALTRANS DETAILS/A24A)	20	14	280
CALTRANS TYPE IV ARROW (CALTRANS DETAILS/A24A)	14	15	210
CALTRANS TYPE VI ARROW (CALTRANS DETAILS/A24A)	6	42	252
CALTRANS TYPE VII ARROW (CALTRANS DETAILS/A24A)	4	27	108
CALTRANS PAVEMENT MARKING LEGEND "ONLY" (CALTRANS DETAILS/A24E)	5	22	110
CALTRANS PAVEMENT MARKING LEGEND INTERNATIONAL SYMBOL OF ACCESSIBILITY (ISA) (SHEET 28, DETAIL 1)	4	23	92

VEHICLE SPEED FEEDBACK SIGN NOTE:

SYSTEM SHALL CONSIST OF THE FOLLOWING:

- 18" CHARACTER DISPLAY
- SOLAR POWER 85 WATT PANEL
- RADAR RANGE: 1000' AVERAGE
- FULL MATRIX CAPABLE
- WHITE SIGN

*PRODUCT SHALL BE TAPCO BLINKER-RADAR LED RADAR DRIVER FEEDBACK SIGN OR APPROVED EQUAL.



DESIGNED BY: ST
DRAWN BY: JOC/SH
APPROVED BY:

PREPARED BY: CSG Consultants Inc.
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San Mateo, CA 94402
Phone (650)522-2500 Fax (650)522-2599

TOWN OF COLMA
1198 EL CAMINO REAL
COLMA, CA. 94014

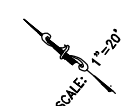
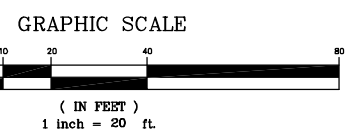
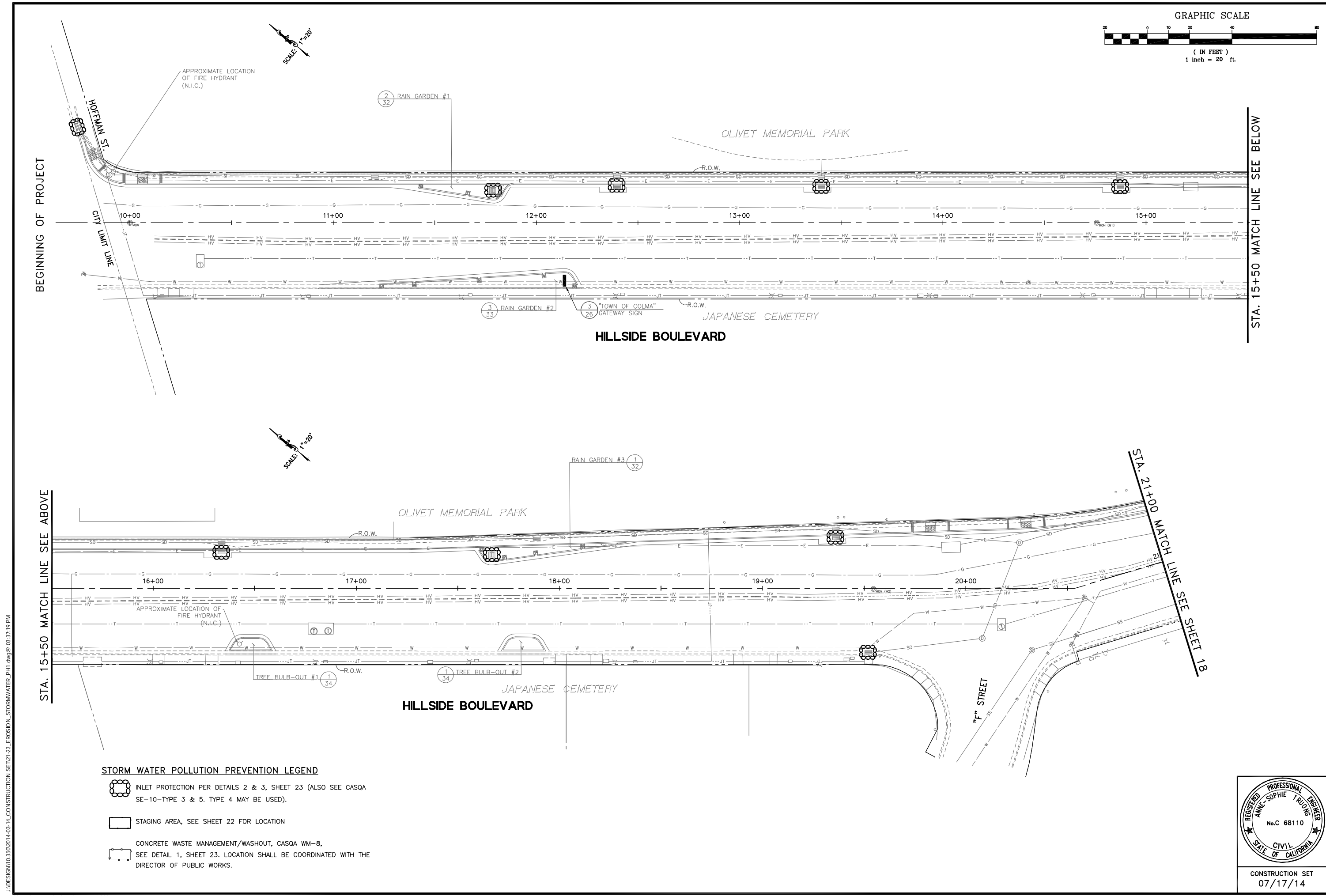
SIGNING AND STRIPING PLAN,
STA. 31+50 TO STA. 37+10
HILLSIDE BOULEVARD IMPROVEMENTS PROJECT,
PHASE I
TOWN OF COLMA CALIFORNIA

SHEET 20
of
48




DATE: 07/17/14
JOB#: 10.350

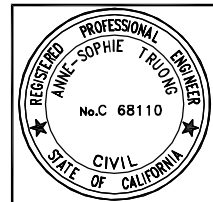
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STORM WATER POLLUTION PREVENTION LEGEND

-  INLET PROTECTION PER DETAILS 2 & 3, SHEET 23 (ALSO SEE CASQA SE-10-TYPE 3 & 5. TYPE 4 MAY BE USED).
-  STAGING AREA, SEE SHEET 22 FOR LOCATION
-  CONCRETE WASTE MANAGEMENT/WASHOUT, CASQA WM-8, SEE DETAIL 1, SHEET 23. LOCATION SHALL BE COORDINATED WITH THE DIRECTOR OF PUBLIC WORKS.

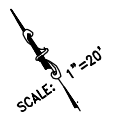


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APPROVED BY:		
PREPARED BY: CSG Consultants Inc. 1700 South Amphlett Boulevard, 3rd Floor San Mateo, CA 94402 Phone (650)522-2500 Fax (650)522-2599		
PREPARED FOR: TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA. 94014		
TITLE: EROSION/STORMWATER POLLUTION CONTROL PLAN, STA. 10+00 TO STA. 21+00 HILLSIDE BOULEVARD IMPROVEMENTS PROJECT, PHASE I		
SHEET 21 of 48		
CONSTRUCTION SET 07/17/14		DATE : 07/17/14
		JOB#: 10.350

GRAPHIC SCALE



(IN FEET)
1 inch = 20 ft.

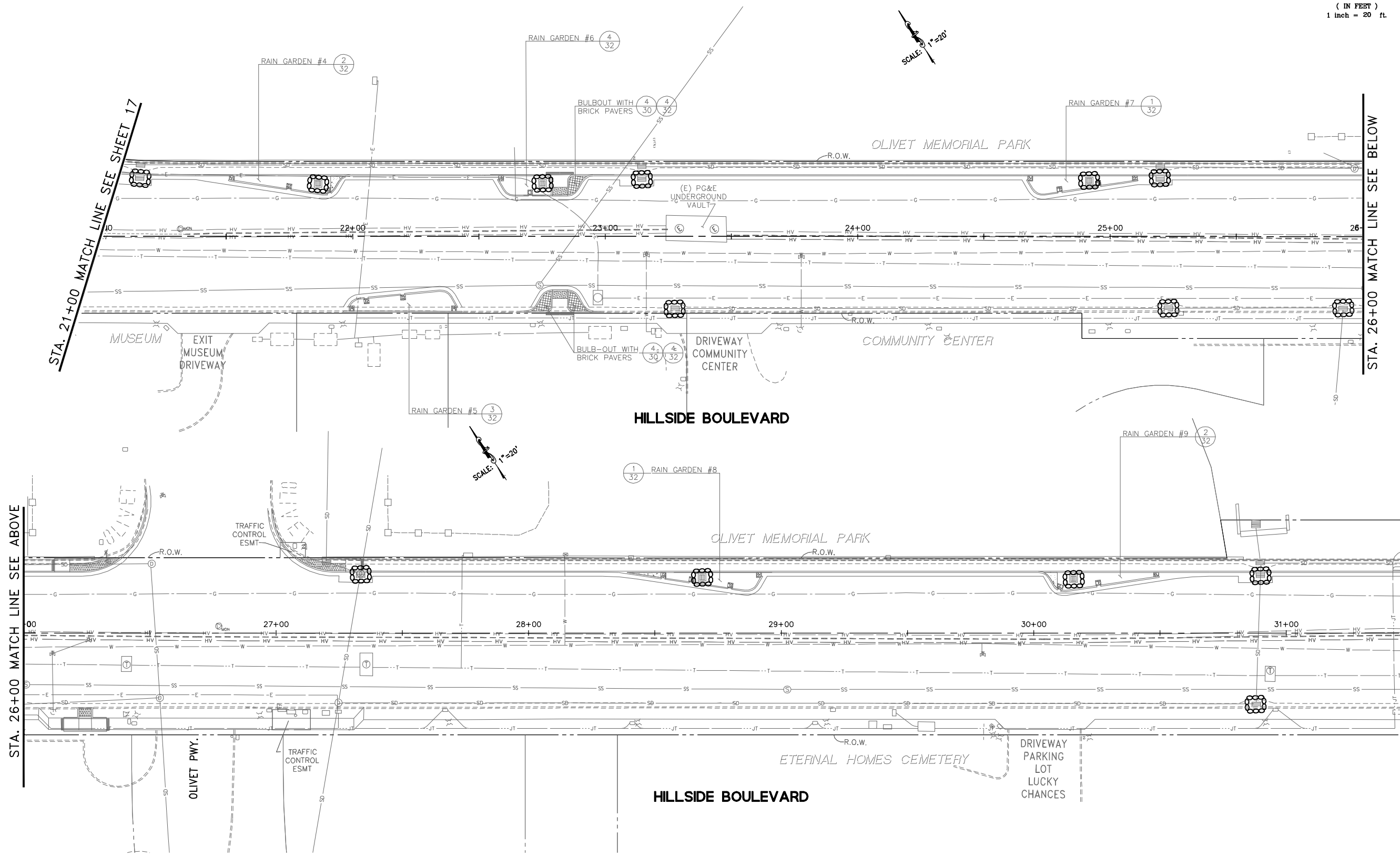


STA. 21+00 MATCH LINE SEE SHEET 17




STA. 26+00 MATCH LINE SEE BELOW

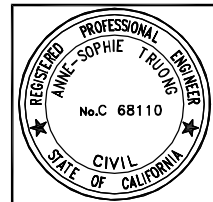
STA. 26+00 MATCH LINE SEE ABOVE

STA. 31+50 MATCH LINE SEE SHEET 19



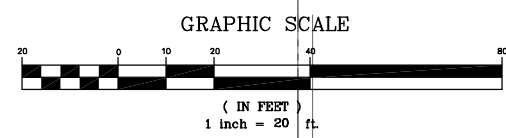
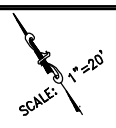
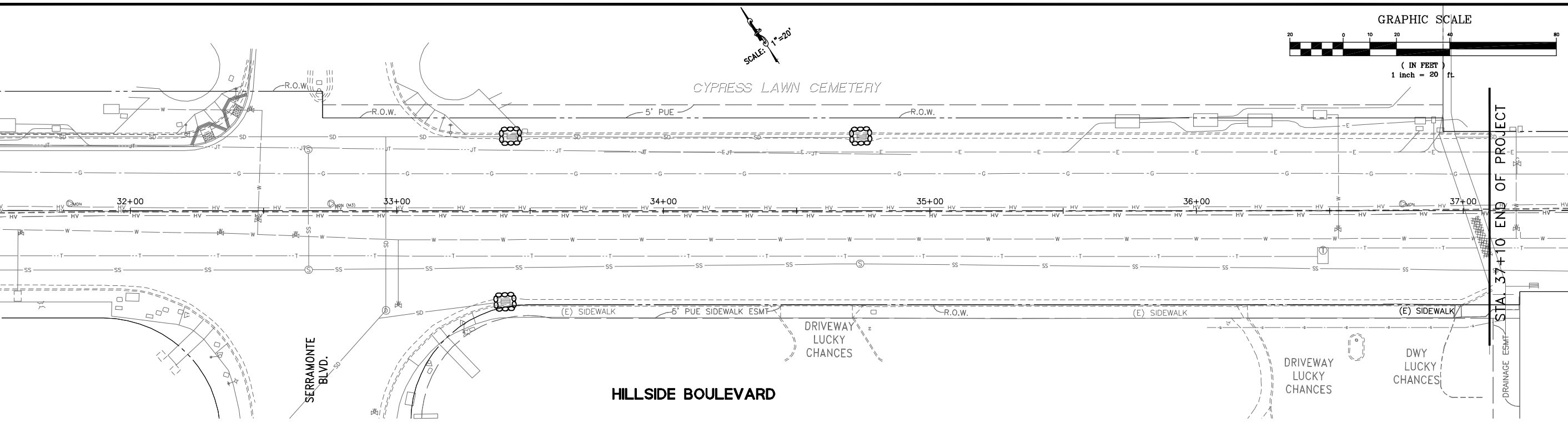
STORM WATER POLLUTION PREVENTION LEGEND

-  INLET PROTECTION PER DETAILS 2 & 3, SHEET 23 (ALSO SEE CASQA SE-10-TYPE 3 & 5. TYPE 4 MAY BE USED).
-  STAGING AREA, SEE SHEET 22 FOR LOCATION
-  CONCRETE WASTE MANAGEMENT/WASHOUT, CASQA WM-8, SEE DETAIL 1, SHEET 23. LOCATION SHALL BE COORDINATED WITH THE DIRECTOR OF PUBLIC WORKS.

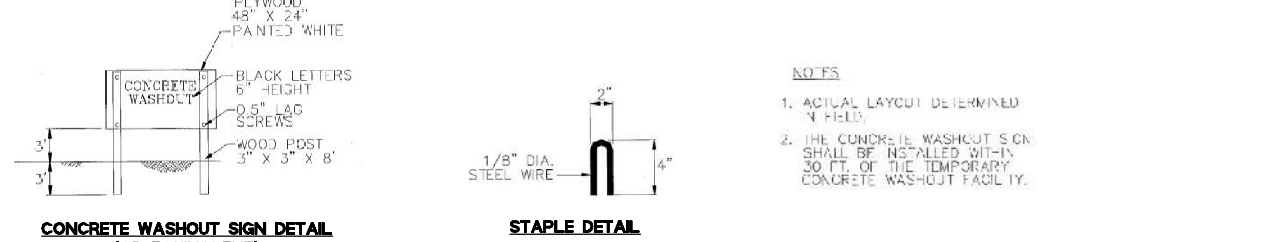
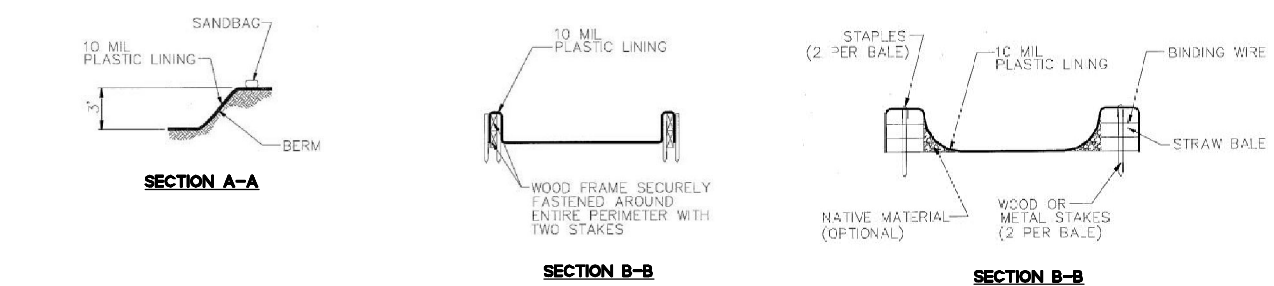
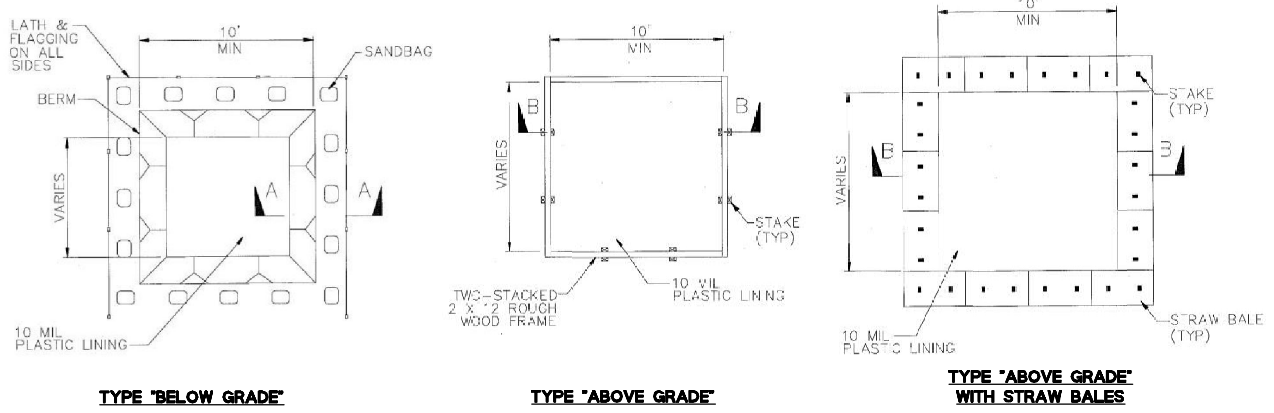


DESIGNED BY: ST	NO.	DATE
DRAWN: JOC/SH		
APPROVED:		
PREPARED BY: CSG Consultants Inc. 1700 South Amphlett Boulevard, 3rd Floor San Mateo, CA 94402 Phone (650)522-2500 Fax (650)522-2599		
PREPARED FOR: TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA. 94014		
TITLE: EROSION/STORMWATER POLLUTION CONTROL PLAN, STA. 21+00 TO STA. 31+50 PROJECT, HILLSIDE BOULEVARD IMPROVEMENTS PROJECT, PHASE I		
TOWN OF COLMA CALIFORNIA		
SHEET 22 of 48		
CONSTRUCTION SET 07/17/14		DATE : 07/17/14 JOB# : 10.350

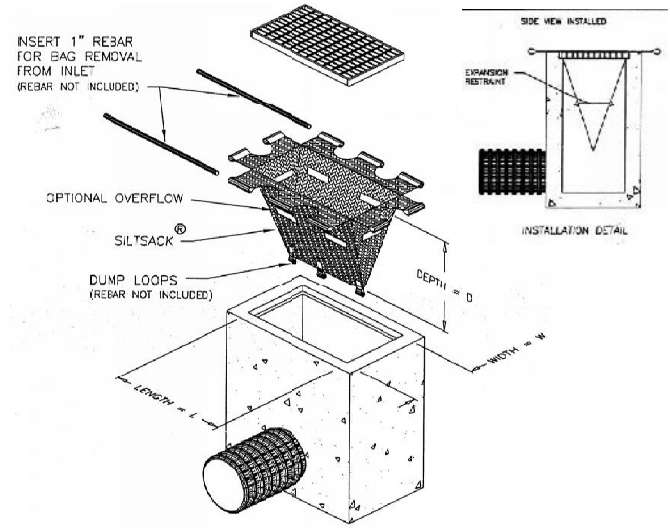
STA. 31+00 MATCH LINE SEE SHEET 18



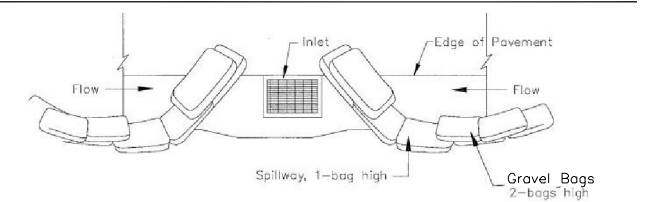
HILLSIDE BOULEVARD



1 **WM-8 CONCRETE WASTE MANAGEMENT/WASHOUT AREA**
NTS



2 **INLET SEDIMENT CONTROL DEVICE**
NTS



TYPICAL PROTECTION FOR INLET IN SUMP



TYPICAL PROTECTION FOR INLET ON GRADE

NOTES:
1. Intended for short-term use.
2. Use to inhibit non-storm water flow.
3. Allow for proper maintenance and cleanup.
4. Bags must be removed after adjacent operation is completed.
5. Not applicable in areas with high silts and clays without filter fabric.
6. INSTALL GRAVEL BAGS ON ALL SIDES OF DRAIN INLET DURING GRADING OR ROADWAY CONSTRUCTION PHASES ADJACENT TO INLET.

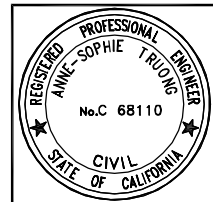
3 **SE-10 STORM DRAIN INLET PROTECTION**
NTS

GENERAL WATER POLLUTION CONTROL NOTES:

- SWPPP OBJECTIVES:** THE INFORMATION ON THIS PLAN IS INTENDED TO BE USED AS A GUIDELINE FOR THE CONTRACTOR AND SUBCONTRACTORS TO INSTALL WATER POLLUTION CONTROL DEVICES AT GENERAL LOCATIONS THROUGHOUT THE SITE. ADDITIONAL MEASURES SHALL BE IMPLEMENTED BY THE CONTRACTOR ON AN AS NEEDED BASIS TO PREVENT SEDIMENT LADEN WATER FROM LEAVING THE SITE AND ENTERING THE STORM DRAIN SYSTEM. THESE FACILITIES SHALL CONTROL AND CONTAIN EROSION-CAUSED SILT DEPOSITS AND PROVIDE FOR THE SAFE DISCHARGE OF SILT-FREE STORM WATER INTO EXISTING STORM DRAIN FACILITIES. DESIGN OF THESE FACILITIES MUST BE APPROVED BY THE TOWN ENGINEER. ADDITIONAL MEASURES SHALL BE AS PRESCRIBED IN THE CONSTRUCTION SITE BEST MANAGEMENT PRACTICES MANUAL, PREPARED BY CALTRANS.
- CONTACT INFORMATION:** THE CONTRACTOR SHALL FILE THE NAME OF THE PERSON RESPONSIBLE FOR THE MAINTENANCE OF THESE FACILITIES WITH THE TOWN OF COLMA DEPARTMENT OF PUBLIC WORKS ALONG WITH A PHONE NUMBER WHERE THEY CAN BE REACHED 24 HOURS A DAY.
- SUB-CONTRACTOR OVERSIGHT:** THE CONTRACTOR IS RESPONSIBLE FOR THE ENSURING THAT ALL SUB-CONTRACTORS AND SUPPLIERS ARE AWARE OF ALL STORM WATER QUALITY MEASURES AND WILL IMPLEMENT SUCH MEASURES. FAILURE TO COMPLY WITH THE APPROVED REPORT WILL RESULT IN THE ISSUANCE OF CORRECTION NOTICES, CITATIONS AND/OR A PROJECT STOP ORDER.
- CONSTRUCTION CONSIDERATIONS:** CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION WILL BE MINIMIZED. STATE AND LOCAL LAWS CONCERNING POLLUTION ABATEMENT SHALL BE COMPLIED WITH. ALL TRUCK TIRES SHALL BE CLEANED PRIOR TO EXITING THE SITE.
- SWPPP PLAN APPROVAL:** PRIOR TO START OF CONSTRUCTION, THE PROPOSED SWPPP MEASURES SHALL BE REVIEWED BY THE DIRECTOR OF PUBLIC WORKS. THE CONTRACTOR SHALL REVISE THE DOCUMENTS AS REQUIRED TO RECEIVE THE DIRECTOR OF PUBLIC WORKS' APPROVAL. PLANS ARE TO BE RESUBMITTED FOR TOWN APPROVAL UNTIL ACCEPTED BY THE TOWN OF COLMA.
- SWPPP IMPLEMENTATION:** CONTRACTOR SHALL MAINTAIN THE EROSION CONTROL AND STORM WATER POLLUTION PREVENTION MEASURES THROUGHOUT THE CONSTRUCTION PERIOD. WHENEVER RAIN IS FORECAST, AT THE END OF THE LAST DAY OF A WORK WEEK OR BEFORE ANY EXTENDED SUSPENSION OF THE WORK, THE CONTRACTOR SHALL ENSURE THAT THE MEASURES SHOWN ON THESE PLANS ARE IN PLACE AND SATISFACTORILY INSTALLED TO PROVIDE THE INTENDED PROTECTION. IF IT IS DETERMINED THAT A PARTICULAR MEASURE IS NOT PROVIDING THE INTENDED PROTECTION, THE CONTRACTOR SHALL NOTIFY THE TOWN ENGINEER TO DETERMINE ALTERNATIVE MEASURES. ALTERNATIVE DESIGNS WILL BE SUBMITTED TO THE TOWN FOR REVIEW PRIOR TO IMPLEMENTATION. THE CONTRACTOR SHALL KEEP ADEQUATE SUPPLIES ON SITE TO PROVIDE EMERGENCY REPAIRS AS REQUIRED. THESE SUPPLIES MAY INCLUDE ADDITIONAL FILTER FABRIC, HAY BALES, BAGS AND TARPS.
- STOCKPILES:** TEMPORARY STOCKPILES SHALL BE PROTECTED AT ALL TIMES WITH APPROPRIATE EROSION CONTROL MEASURES (TARPS, FIBER ROLLS, SILT FENCES, ETC.) TO ENSURE SILT DOES NOT LEAVE THE SITE OR ENTER THE STORM DRAIN SYSTEM.
- STAGING AREA:** CONSTRUCTION STAGING AREA SHALL BE ADEQUATELY SECURED BY USE OF TEMPORARY FENCING AND SCREENED FROM THE PUBLIC RIGHT-OF-WAY TO THE SATISFACTION OF THE TOWN ENGINEER. SCREENING SHALL CONSIST OF MATERIALS APPROVED BY THE TOWN ENGINEER AND SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION.
- STREET SWEEPING AND GENERAL CLEANUP:** CONTRACTOR SHALL SWEEP AND PICK UP DEBRIS AND SEDIMENT AT THE END OF EACH WORK DAY (AND THROUGHOUT THE WORKING DAY WHEN RAIN IS IN THE FORECAST). TRACKING OF SEDIMENT ON PUBLIC STREETS IS STRICTLY PROHIBITED.

STORM WATER POLLUTION PREVENTION LEGEND

- INLET PROTECTION PER DETAILS 2 & 3 - THIS SHEET
- STAGING AREA, SEE SHEET 22 FOR LOCATION
- CONCRETE WASTE MANAGEMENT/WASHOUT, CASQA WM-8, SEE DETAIL 1- THIS SHEET



CONSTRUCTION SET
07/17/14

DESIGNED BY: ST	DATE
DRAWN BY: JOC/SH	NO.
APPROVED BY:	REVISIONS
PREPARED BY: CSG Consultants Inc. 1700 South Amphlett Boulevard, 3rd Floor San Mateo, CA 94402 Phone (650)522-2500 Fax (650)522-2599	
PREPARED FOR: TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA. 94014	
TITLE: EROSION/STORMWATER POLLUTION CONTROL PLAN, STA. 31+50 TO STA. 37+10 DETAILS AND NOTES HILLSIDE BOULEVARD IMPROVEMENTS PROJECT, PHASE I	
TOWN OF COLMA CALIFORNIA	
SHEET 23 of 48	
DATE: 07/17/14	JOB#: 10.350

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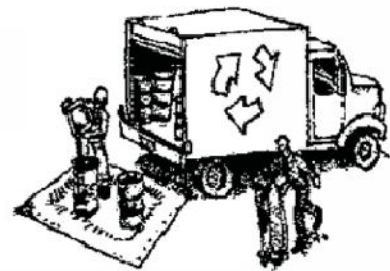


SAN MATEO COUNTYWIDE
Water Pollution Prevention Program
 Clean Water. Healthy Community.

Construction Best Management Practices (BMPs)

Construction projects are required to implement the stormwater best management practices (BMP) on this page, as they apply to your project, all year long.

Materials & Waste Management



Non-Hazardous Materials

- Berm and cover stockpiles of sand, dirt or other construction material with tarps when rain is forecast or if not actively being used within 14 days.
- Use (but don't overuse) reclaimed water for dust control.

Hazardous Materials

- Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state and federal regulations.
- Store hazardous materials and wastes in water tight containers, store in appropriate secondary containment, and cover them at the end of every work day or during wet weather or when rain is forecast.
- Follow manufacturer's application instructions for hazardous materials and be careful not to use more than necessary. Do not apply chemicals outdoors when rain is forecast within 24 hours.
- Arrange for appropriate disposal of all hazardous wastes.

Waste Management

- Cover waste disposal containers securely with tarps at the end of every work day and during wet weather.
- Check waste disposal containers frequently for leaks and to make sure they are not overfilled. Never hose down a dumpster on the construction site.
- Clean or replace portable toilets, and inspect them frequently for leaks and spills.
- Dispose of all wastes and debris properly. Recycle materials and wastes that can be recycled (such as asphalt, concrete, aggregate base materials, wood, gyp board, pipe, etc.)
- Dispose of liquid residues from paints, thinners, solvents, glues, and cleaning fluids as hazardous waste.

Construction Entrances and Perimeter

- Establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from site and tracking off site.
- Sweep or vacuum any street tracking immediately and secure sediment source to prevent further tracking. Never hose down streets to clean up tracking.

Equipment Management & Spill Control



Maintenance and Parking

- Designate an area, fitted with appropriate BMPs, for vehicle and equipment parking and storage.
- Perform major maintenance, repair jobs, and vehicle and equipment washing off site.
- If refueling or vehicle maintenance must be done onsite, work in a bermed area away from storm drains and over a drip pan big enough to collect fluids. Recycle or dispose of fluids as hazardous waste.
- If vehicle or equipment cleaning must be done onsite, clean with water only in a bermed area that will not allow rinse water to run into gutters, streets, storm drains, or surface waters.
- Do not clean vehicle or equipment onsite using soaps, solvents, degreasers, steam cleaning equipment, etc.

Spill Prevention and Control

- Keep spill cleanup materials (rags, absorbents, etc.) available at the construction site at all times.
- Inspect vehicles and equipment frequently for and repair leaks promptly. Use drip pans to catch leaks until repairs are made.
- Clean up spills or leaks immediately and dispose of cleanup materials properly.
- Do not hose down surfaces where fluids have spilled. Use dry cleanup methods (absorbent materials, cat litter, and/or rags).
- Sweep up spilled dry materials immediately. Do not try 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 immediately. You are required by law to report all significant releases of hazardous materials, including oil. To report a spill: 1) Dial 911 or your local emergency response number, 2) Call the Governor's Office of Emergency Services Warning Center, (800) 852-7550 (24 hours).

Earthwork & Contaminated Soils



Erosion Control

- Schedule grading and excavation work for dry weather only.
- Stabilize all denuded areas, install and maintain temporary erosion controls (such as erosion control fabric or bonded fiber matrix) until vegetation is established.
- Seed or plant vegetation for erosion control on slopes or where construction is not immediately planned.

Sediment Control

- Protect storm drain inlets, gutters, ditches, and drainage courses with appropriate BMPs, such as gravel bags, fiber rolls, berms, etc.
- Prevent sediment from migrating offsite by installing and maintaining sediment controls, such as fiber rolls, silt fences, or sediment basins.
- Keep excavated soil on the site where it will not collect into the street.
- Transfer excavated materials to dump trucks on the site, not in the street.
- Contaminated Soils
- If any of the following conditions are observed, test for contamination and contact the Regional Water Quality Control Board:
 - Unusual soil conditions, discoloration, or odor.
 - Abandoned underground tanks.
 - Abandoned wells
 - Buried barrels, debris, or trash.

Paving/Asphalt Work



- Avoid paving and seal coating in wet weather, or when rain is forecast before fresh pavement will have time to cure.
- Cover storm drain inlets and manholes when applying seal coat, tack coat, slurry seal, fog seal, etc.
- Collect and recycle or appropriately dispose of excess abrasive gravel or sand. Do NOT sweep or wash it into gutters.
- Do not use water to wash down fresh asphalt concrete pavement.

Sawcutting & Asphalt/Concrete Removal

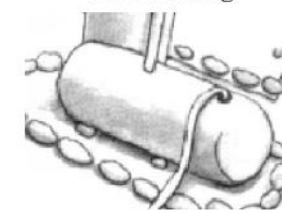
- Completely cover or barricade storm drain inlets when saw cutting. Use filter fabric, catch basin inlet filters, or gravel bags to keep slurry out of the storm drain system.
- Shovel, absorb, or vacuum saw-cut slurry and dispose of all waste as soon as you are finished in one location or at the end of each work day (whichever is sooner!).
- If sawcut slurry enters a catch basin, clean it up immediately.

Concrete, Grout & Mortar Application



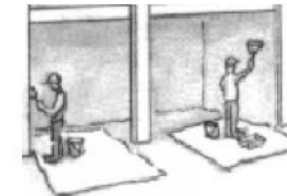
- Store concrete, grout and mortar under cover, on pallets and away from drainage areas. These materials must never reach a storm drain.
- Wash out concrete equipment/trucks offsite or in a contained area, so there is no discharge into the underlying soil or onto surrounding areas. Let concrete harden and dispose of as garbage.
- Collect the wash water from washing exposed aggregate concrete and remove it for appropriate disposal offsite.

Dewatering



- Effectively manage all run-on, all runoff within the site, and all runoff that discharges from the site. Divert run-on water from offsite away from all disturbed areas or otherwise ensure compliance.
- When dewatering, notify and obtain approval from the local municipality before discharging water to a street gutter or storm drain. Filtration or diversion through a basin, tank, or sediment trap may be required.
- In areas of known contamination, testing is required prior to reuse or discharge of groundwater. Consult with the Engineer to determine whether testing is required and how to interpret results. Contaminated groundwater must be treated or hauled off-site for proper disposal.

Painting & Paint Removal



Painting cleanup

- Never clean brushes or rinse paint containers into a street, gutter, storm drain, or surface waters.
- For water-based paints, paint out brushes to the extent possible. Rinse to the sanitary sewer once you have gained permission from the local wastewater treatment authority. Never pour paint down a drain.
- 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 residue and unusable thinner/solvents as hazardous waste.

Paint removal

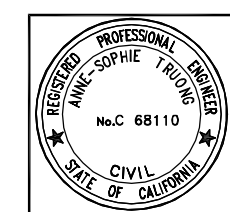
- Chemical paint stripping residue and chips and dust from marine paints or paints containing lead or tributyltin must be disposed of as hazardous waste.
- Paint chips and dust from non-hazardous dry stripping and sand blasting may be swept up or collected in plastic drop cloths and disposed of as trash.

Landscape Materials



- Contain stockpiled landscaping materials by storing them under tarps when they are not actively being used.
- Stack erodible landscape material on pallets. Cover or store these materials when they are not actively being used or applied.
- Discontinue application of any erodible landscape material within 2 days before a forecast rain event or during wet weather.

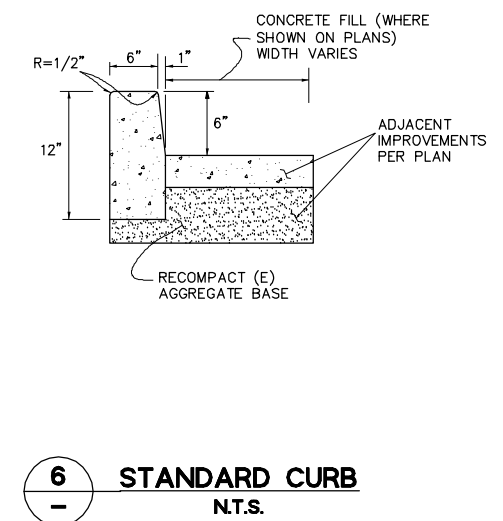
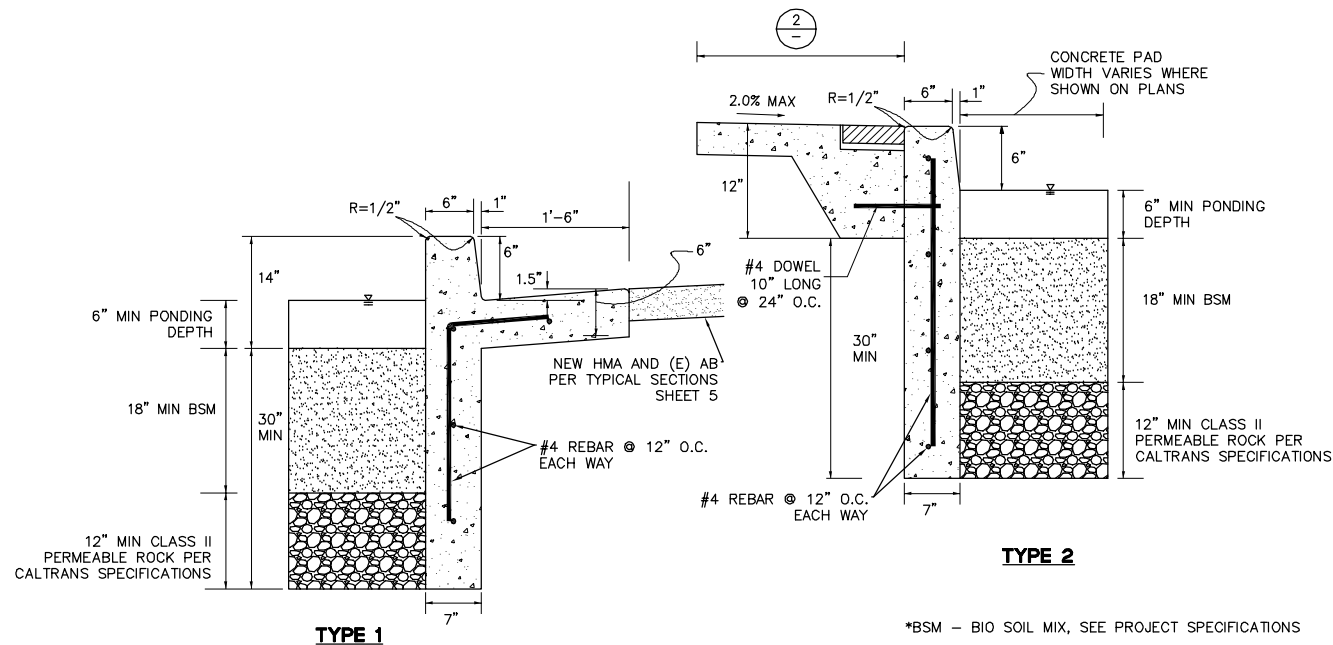
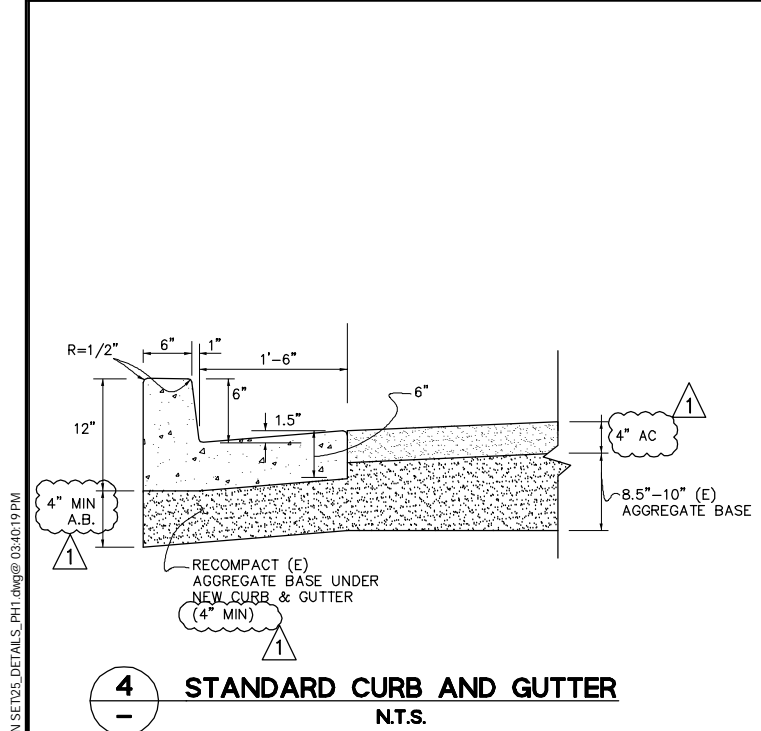
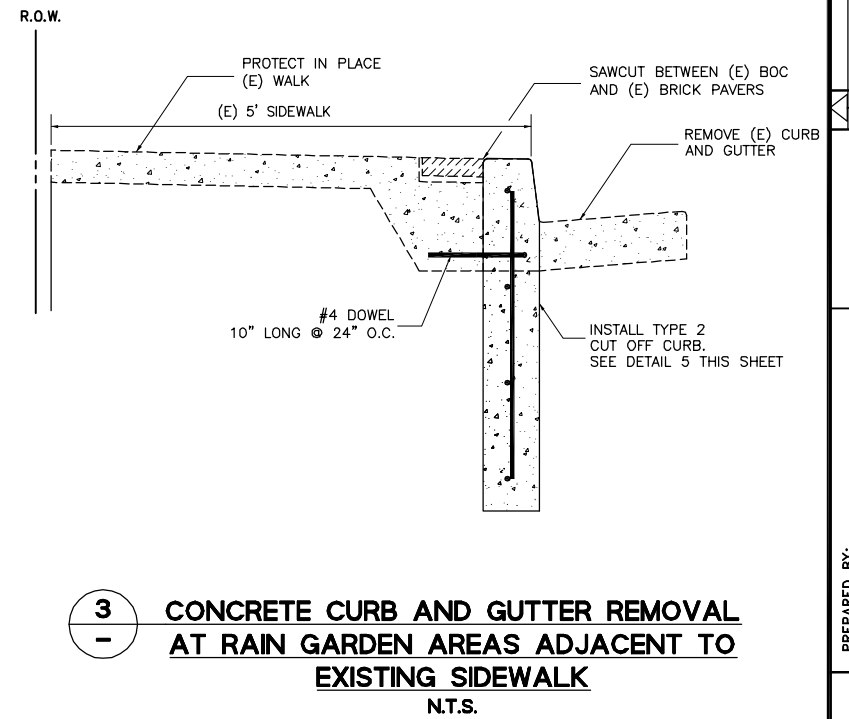
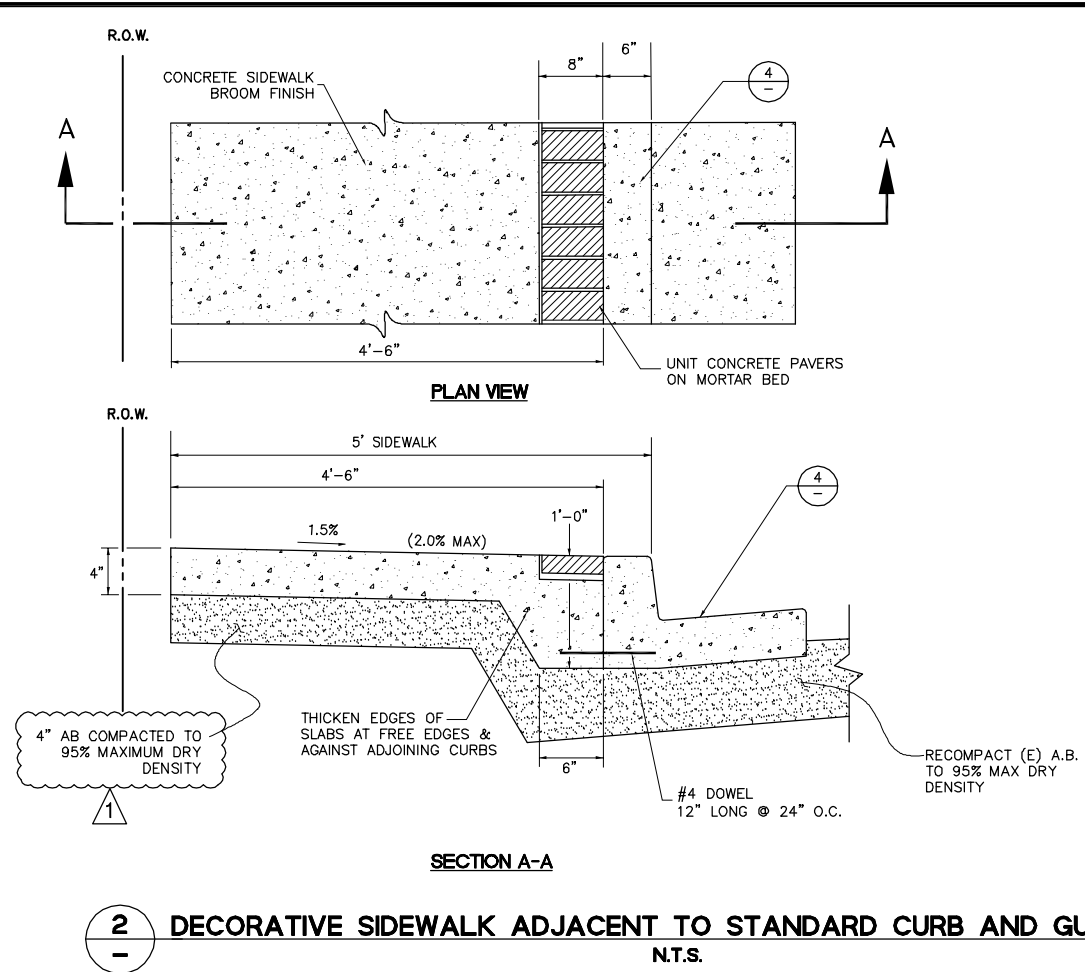
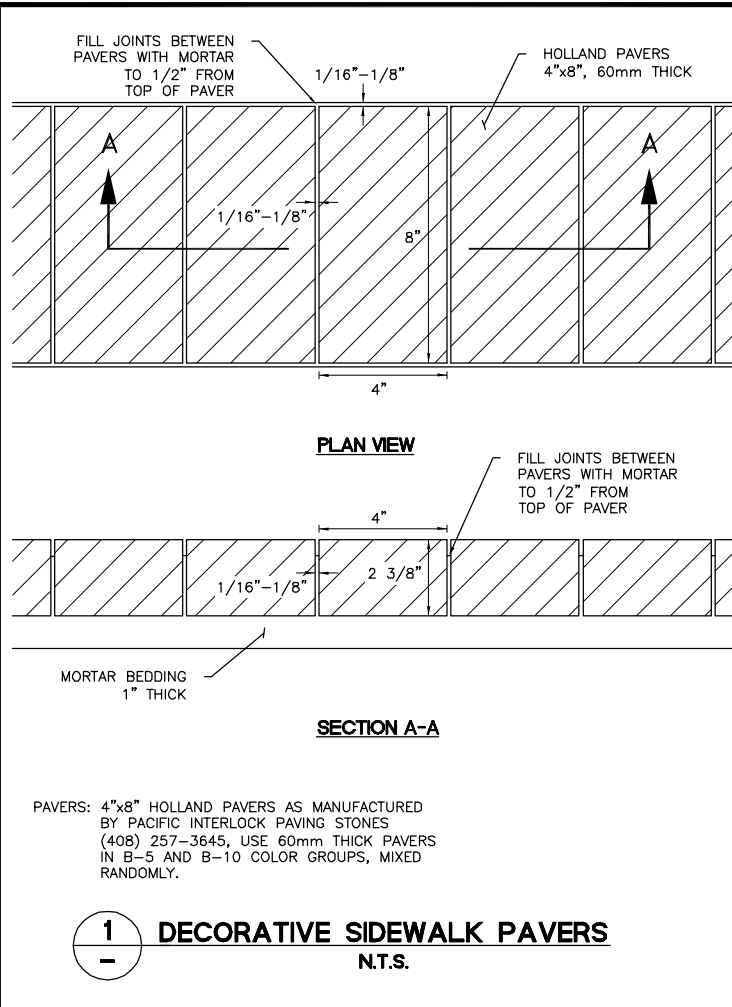
Storm drain polluters may be liable for fines of up to \$10,000 per day!



CONSTRUCTION SET
07/17/14

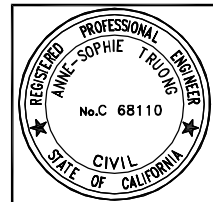
DESIGNED BY: ST	NO.	DATE
DRAWN BY: JOC/SH	REVISIONS	
APPROVED BY:		
PREPARED BY: CSG Consultants Inc.		
1700 South Amphlett Boulevard, 3rd Floor San Mateo, CA 94402 Phone (650)522-2500 Fax (650)522-2599		
PREPARED FOR: TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA. 94014		
TITLE: POLLUTION PREVENTION PLAN HILLSIDE BOULEVARD IMPROVEMENTS PROJECT, PHASE I TOWN OF COLMA CALIFORNIA		
SHEET 24 of 48		
DATE: 07/17/14		
JOB#: 10.350		

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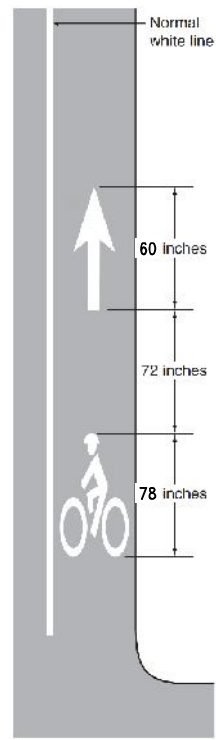


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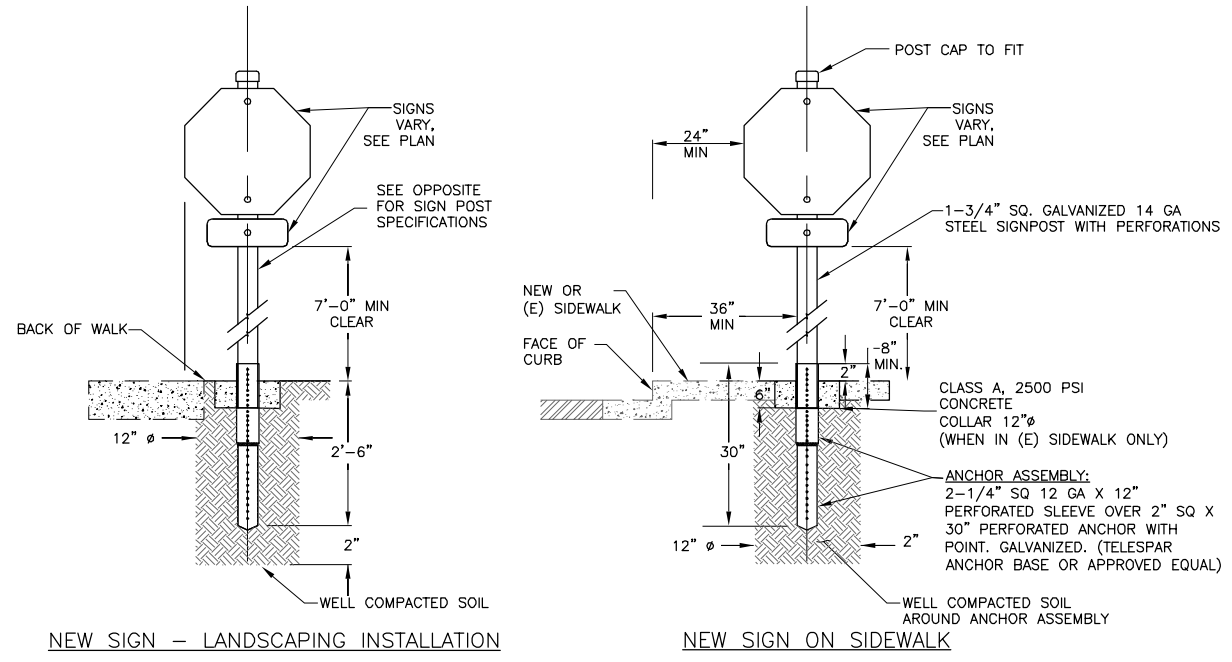
DESIGNED BY: ST	DATE: 7/17/14
DRAWN BY: JOC/SH	REVISIONS: NO.
APPROVED BY:	ADDENDUM #3
PREPARED BY: CSG Consultants Inc.	TITLE: HILLSIDE BOULEVARD IMPROVEMENTS PROJECT, PHASE I
1700 South Amphlett Boulevard, 3rd Floor San Mateo, CA 94402 Phone (650)522-2500 Fax (650)522-2599	TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA. 94014
CIVIL	CALIFORNIA
SHEET 25	TOWN OF COLMA
of 48	
CONSTRUCTION SET	DATE: 07/17/14
07/17/14	JOB#: 10.350



NOTES:

- HELMETED BICYCLE LEGEND PER CALTRANS STANDARD PLAN RSP A24C. - 7 S.F. WHITE PAINT
- BIKE LANE ARROW LEGEND PER CALTRANS STANDARD PLAN RSP A24A. - 7 S.F. WHITE PAINT
- ALL STRIPING AND MARKINGS FOR THE BIKE LANE SHALL BE PAINT, NOT THERMOPLASTIC.

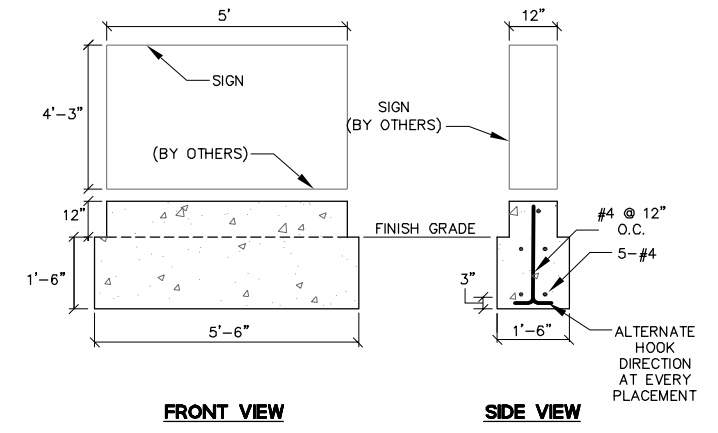
1 TYPICAL HELMETED BICYCLIST MARKING
N.T.S.



NOTES:

- SIGNS SHALL COMPLY WITH LATEST CALIFORNIA MUTCD.
- POST AND BASE FOR THE SIGN SHALL CONFORM TO THE SPECIFICATIONS.
- SIGNS SHALL BE INSTALLED WITH STRAIGHT BOLTS FOR CONVENTIONAL SIGN INSTALLATION AND SQUARE POST SYSTEM CORNER-BOLTS FOR BACK TO BACK INSTALLATION, IF REQUIRED.

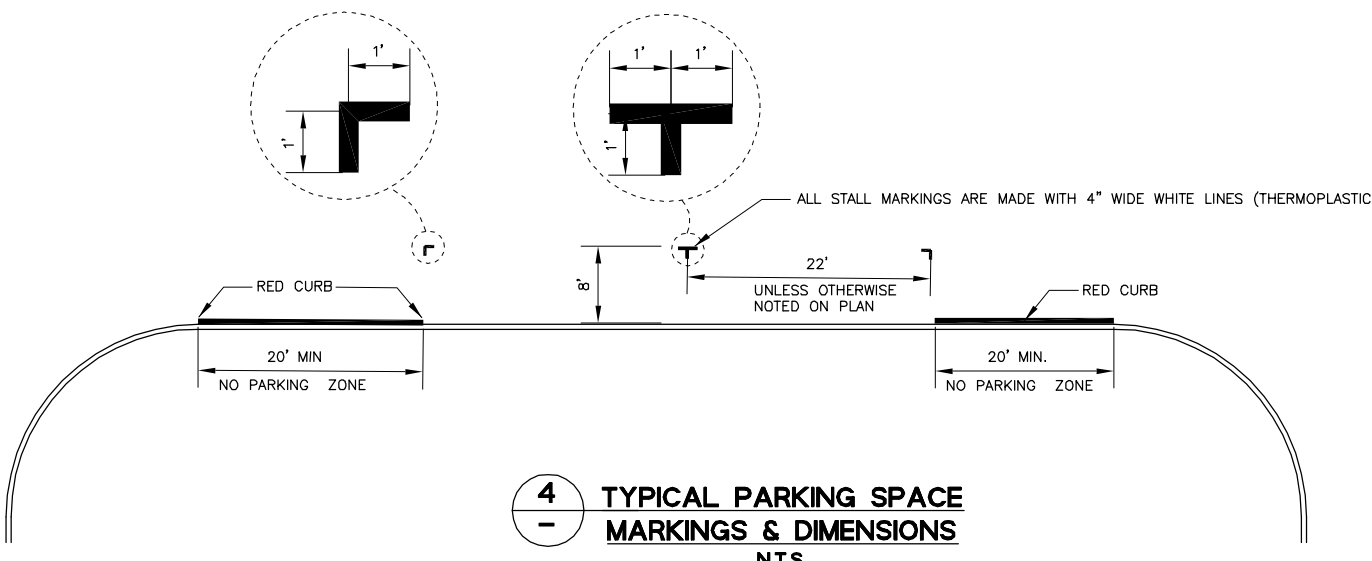
2 SIGN POST DETAIL
N.T.S.



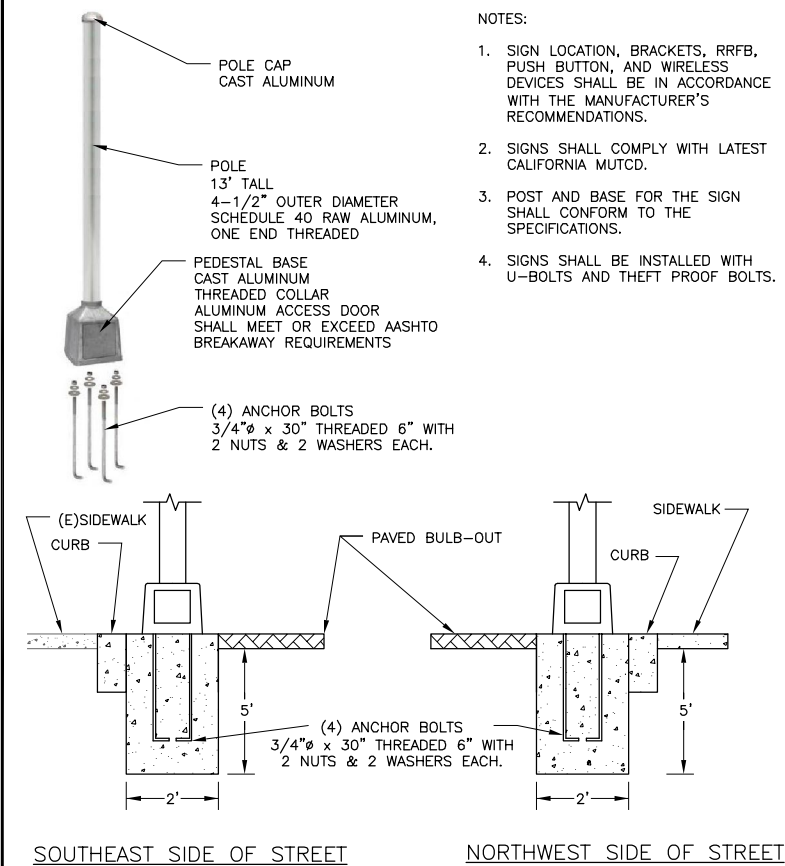
NOTE

CONFIRM FOUNDATION LOCATION AND ORIENTATION WITH ENGINEER PRIOR TO START OF EXCAVATION.

3 GATEWAY SIGN FOUNDATION
N.T.S.



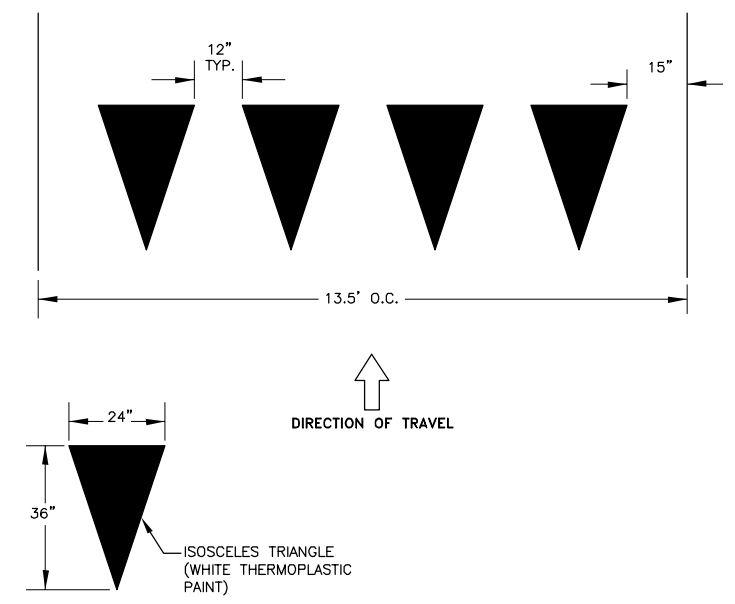
4 TYPICAL PARKING SPACE MARKINGS & DIMENSIONS
N.T.S.



NOTES:

- SIGN LOCATION, BRACKETS, RRFB, PUSH BUTTON, AND WIRELESS DEVICES SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- SIGNS SHALL COMPLY WITH LATEST CALIFORNIA MUTCD.
- POST AND BASE FOR THE SIGN SHALL CONFORM TO THE SPECIFICATIONS.
- SIGNS SHALL BE INSTALLED WITH U-BOLTS AND THEFT PROOF BOLTS.

5 RRFB POST & FOUNDATION
N.T.S.



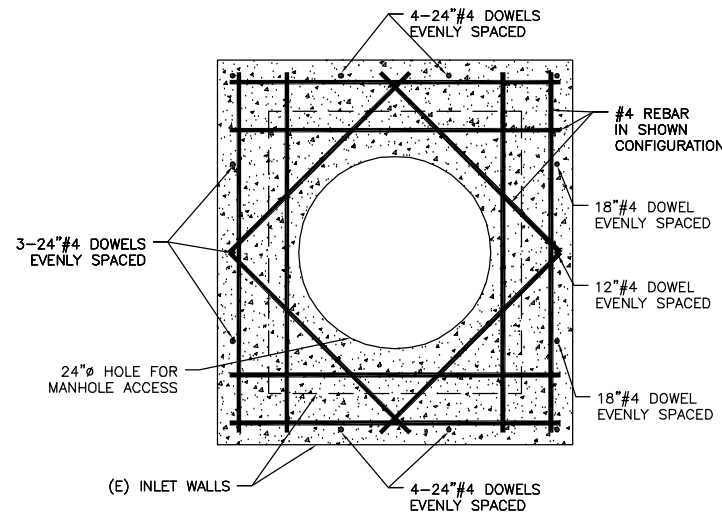
6 YIELD LINE LAYOUT
N.T.S.



CONSTRUCTION SET
07/17/14

DATE	
REVISIONS	
NO.	
DESIGNED BY: ST	
DRAWN BY: JOC/SH	
APPROVED BY:	
PREPARED BY: CSG Consultants Inc.	
1700 South Amphlett Boulevard, 3rd Floor	
San Mateo, CA 94402	
Phone (650)522-2500 Fax (650)522-2599	
TITLE: TOWN OF COLMA	
HILLSIDE BOULEVARD IMPROVEMENTS PROJECT, PHASE I	
CALIFORNIA	
1198 EL CAMINO REAL	
COLMA, CA. 94014	
SHEET 26	
of	
48	
DATE: 07/17/14	
JOB#: 10.350	

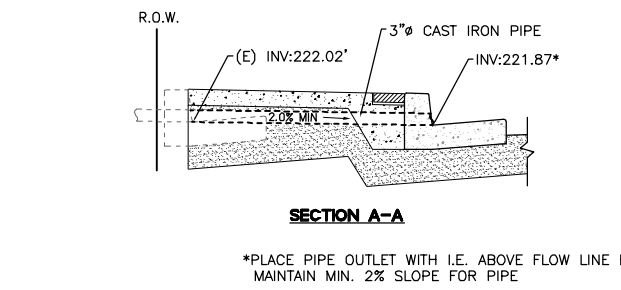
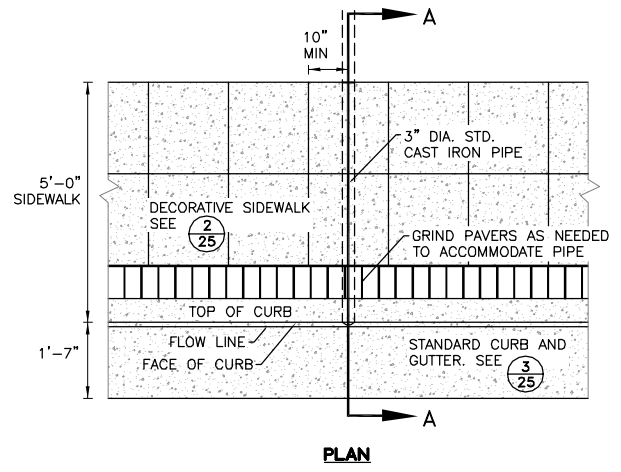
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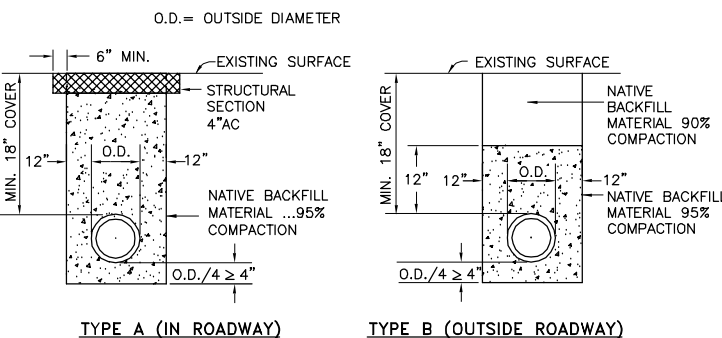
NOTES:

- DOWEL INTO WALLS OF (E) STORM DRAIN INLET.
- THE EXACT DIMENSIONS OF (E) STORM DRAIN INLETS ARE UNKNOWN. CONTRACTOR SHALL VERIFY DIMENSIONS BEFORE CONSTRUCTING SLAB COVER.

1 SLAB COVER FOR INLET MODIFICATION
N.T.S.



2 CURB DRAIN EXTENSION
N.T.S.

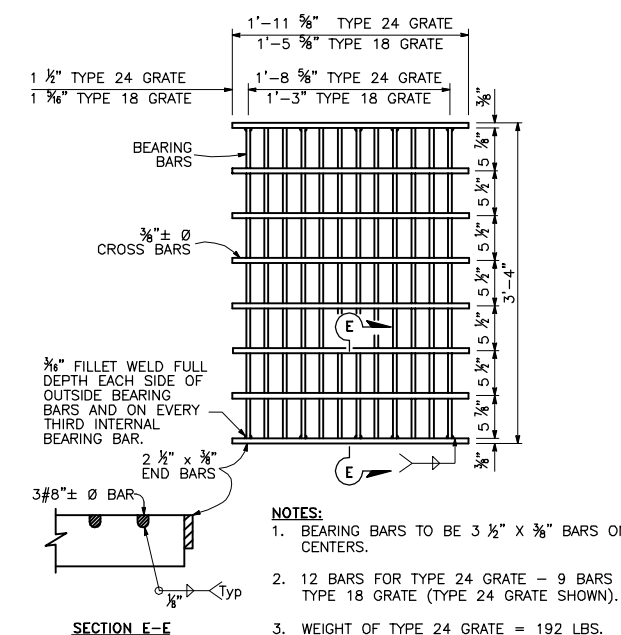


THERE SHALL BE A MINIMUM OF ONE AND ONE-HALF FEET (18 INCHES) OF COVER OVER ELECTRICAL CONDUIT AND TWO AND ONE-HALF FEET (30 INCHES) OF COVER OVER ALL STORM DRAIN PIPES UNLESS OTHERWISE DIRECTED BY THE TOWN.

NATIVE BACKFILL SHALL BE APPROVED BY THE TOWN PRIOR TO RE-USE AND SHALL BE FREE FROM STONES AND LUMPS EXCEEDING 4 INCHES IN GREATEST DIMENSION, VEGETABLE MATTER, OR OTHER UNSATISFACTORY MATERIAL.

CONTRACTOR TO SHORE ALL TRENCHES IN ACCORDANCE WITH OSHA AND STATE OF CALIFORNIA SAFETY STANDARDS.

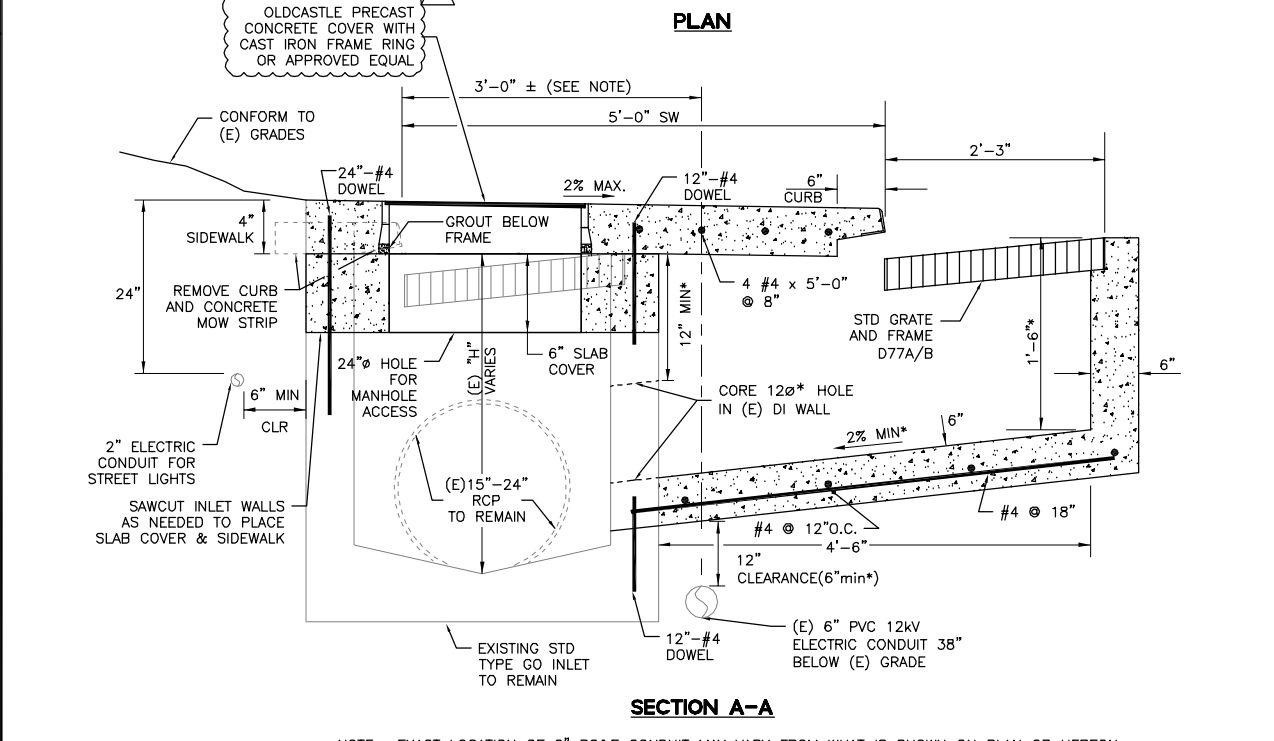
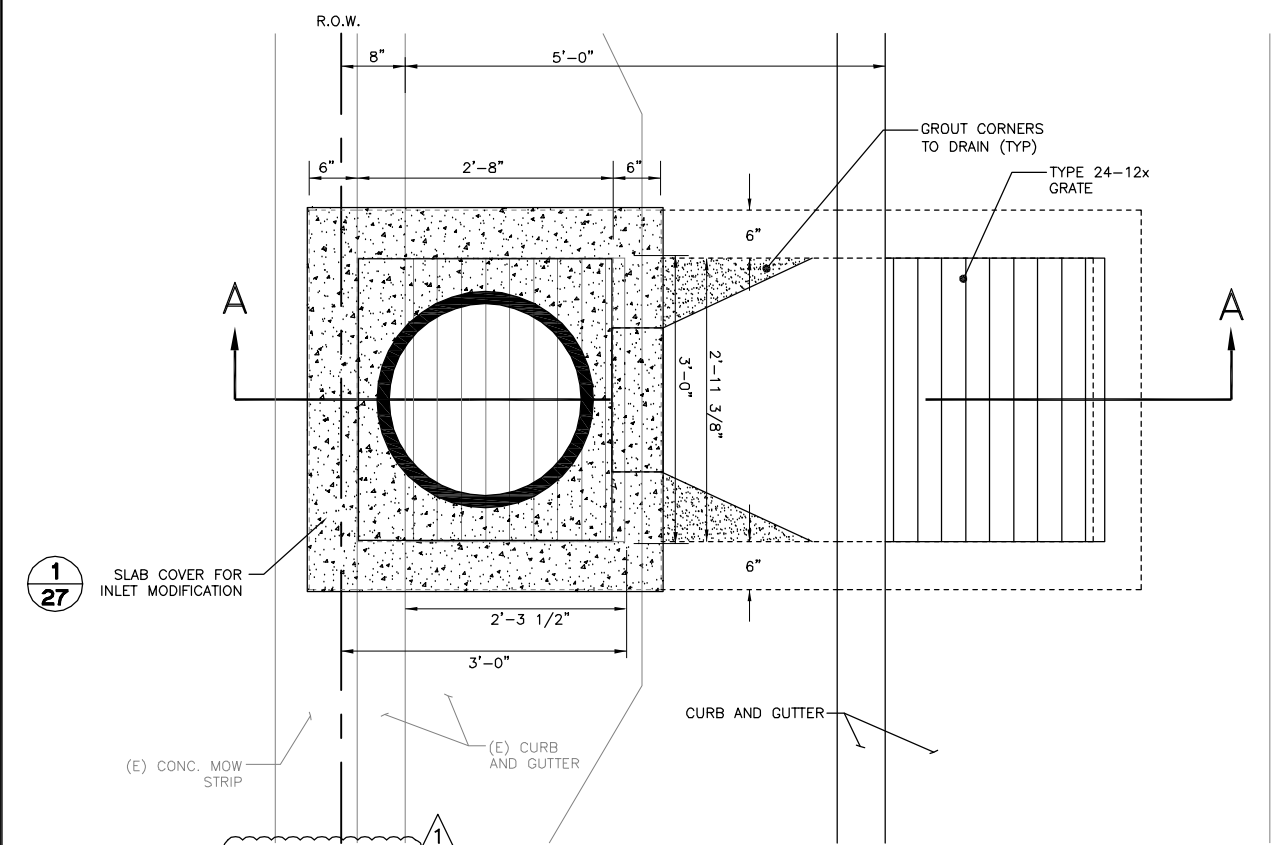
3 STANDARD TRENCH BACKFILL AND BEDDING DETAIL
STORM DRAIN PIPES AND ELECTRICAL CONDUIT
N.T.S.



NOTES:

- BEARING BARS TO BE 3 1/2" x 3/8" BARS ON 1 7/8" CENTERS.
- 12 BARS FOR TYPE 24 GRATE - 9 BARS FOR TYPE 18 GRATE (TYPE 24 GRATE SHOWN).
- WEIGHT OF TYPE 24 GRATE = 192 LBS.
- WEIGHT OF TYPE 18 GRATE = 145 LBS.
- 3/8" ± Ø CROSS BARS MAY BE FILLET WELDED, RESISTANCE WELDED OR ELECTROFORGED TO BEARING BARS.

4 TYPE 24-12X GRATE
N.T.S.



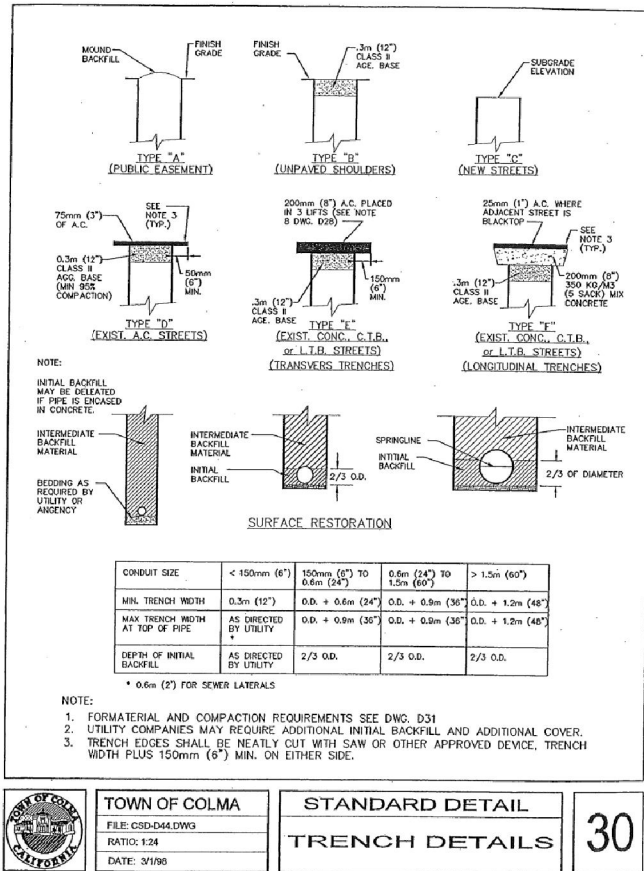
NOTE: EXACT LOCATION OF 6" PG&E CONDUIT MAY VARY FROM WHAT IS SHOWN ON PLAN OR HEREON. DIMENSIONS MARKED WITH "*" SHALL VARY TO ACCOMMODATE PG&E CONDUIT AT THE DISCRETION OF THE ENGINEER.

5 CATCH BASIN EXTENSION/CONNECTION DETAIL
N.T.S.



DESIGNED BY: ST	DATE: 7/17/14
DRAWN BY: JOC/SH	REVISIONS:
APPROVED BY:	NO.
PREPARED BY: CSG Consultants Inc.	ADDENDUM #3
1700 South Amphlett Boulevard, 3rd Floor San Mateo, CA 94402 Phone (650)522-2500 Fax (650)522-2599	
PREPARED FOR: TOWN OF COLMA	
HILLSIDE BOULEVARD IMPROVEMENTS PROJECT, PHASE I	
TOWN OF COLMA CALIFORNIA	
TITLE: SHEET 27 OF 48	
CONSTRUCTION SET	DATE: 07/17/14
07/17/14	JOB#: 10.350

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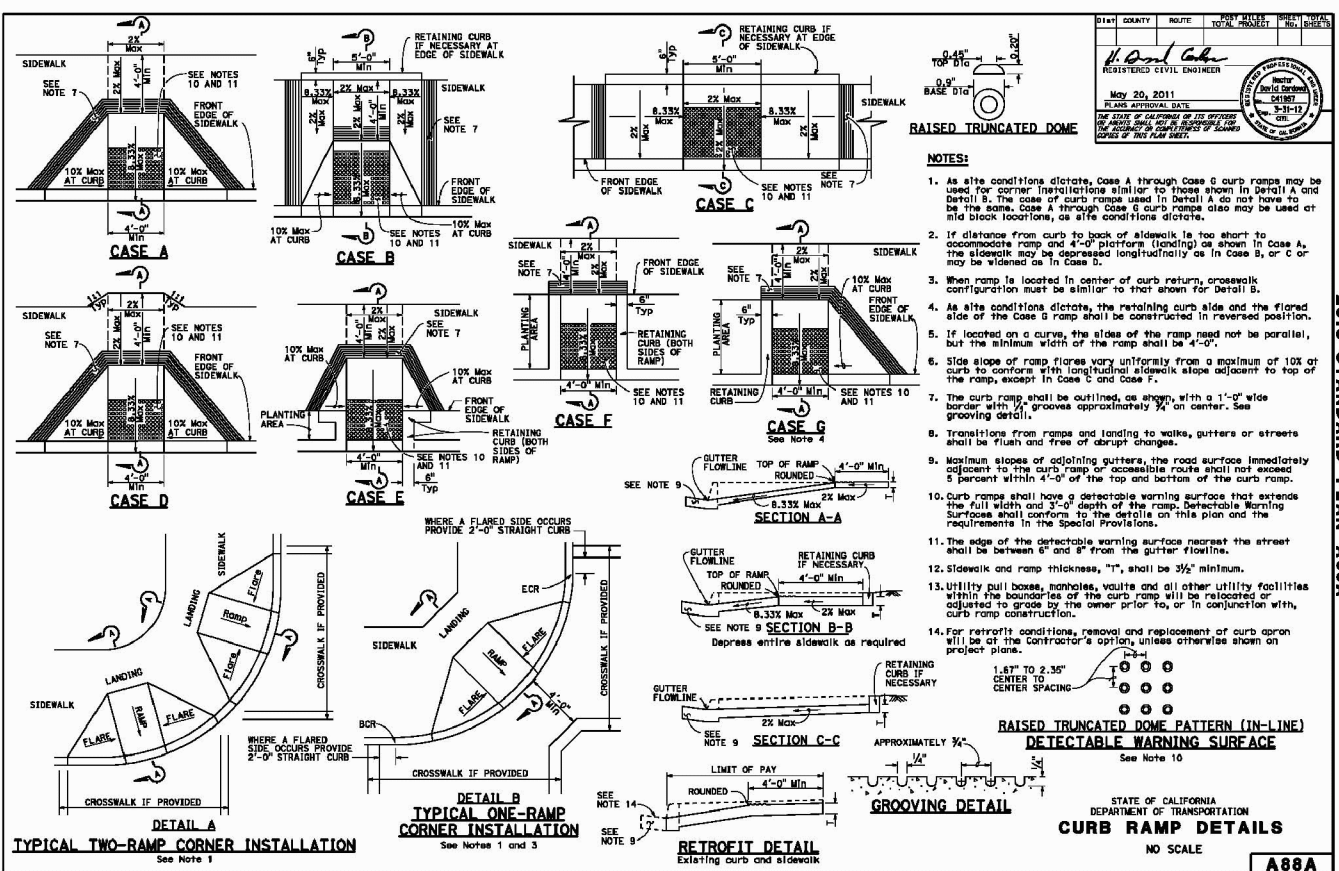
NOTES: TRENCH DETAILS

- INITIAL BACK FILL MATERIAL SHALL CONFORM TO REQUIREMENTS OF THE UTILITY HAVING JURISDICTION OVER THE INSTALLATION, AND SHALL ALSO MEET THE FOLLOWING MINIMUM REQUIREMENTS: AT LEAST 90% PASSING 19 mm (3/4") SIEVE, NOT MORE THAN 15% PASSING 75 MICRON (NO. 200) SIEVE, SAND EQUIVALENT OF AT LEAST 30, AND RELATIVE COMPACTION OF 95%.
- INTERMEDIATE BACK FILL SHALL BE ANY SUITABLE NATIVE OR IMPORTED GRANULAR MATERIAL. RELATIVE COMPACTION SHALL BE AT LEAST 95%.
- CLASS II AGGREGATE BASE SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE STATE OF CALIFORNIA. MINIMUM RELATIVE COMPACTION SHALL BE 95%. IF PAVEMENT HAVING A STRUCTURAL SECTION GREATER THAN 80 mm (1 1/2") IS CUT, ADDITIONAL BASE MATERIAL MAY BE REQUIRED BY THE CITY ENGINEER. BASE SHALL BE PLACED AND COMPACTED PRIOR TO PLACING THE TEMPORARY PAVEMENT.
- WHEN TRENCHES ARE BACK FILLED WITH GRANULAR MATERIALS, ADEQUATE PROVISIONS MUST BE MADE TO DRAIN OFF WATER WHICH WILL BE COLLECTED IN THE TRENCH.
- THE TESTING AND PERFORMANCE OF MATERIALS SHALL BE IN CONFORMANCE WITH THE METHODS STATED IN THE LATEST EDITION OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION MATERIALS MANUAL EXCEPT THAT RELATIVE COMPACTION MAY BE TESTED BY AASHTO METHOD T190-57c, OR TEST METHOD CALIF. 231 (NUCLEAR DENSITOMETER).
- ADDITIONAL THICKNESS AND LIFTS OF ASPHALT CONCRETE MAY BE REQUIRED TO MATCH THE EXISTING STRUCTURAL SECTION ON MAJOR ROADS.
- CONTRACTOR MUST SHORE ALL TRENCHES IN ACCORDANCE WITH OSHA AND STATE OF CALIFORNIA SAFETY STANDARDS.

TOWN OF COLMA
FILE: CSD-D48.DWG
RATIO: 1:24
DATE: 3/1/08

STANDARD DETAIL
NOTES
TRENCH DETAILS

30



2010 STANDARD PLAN A88A

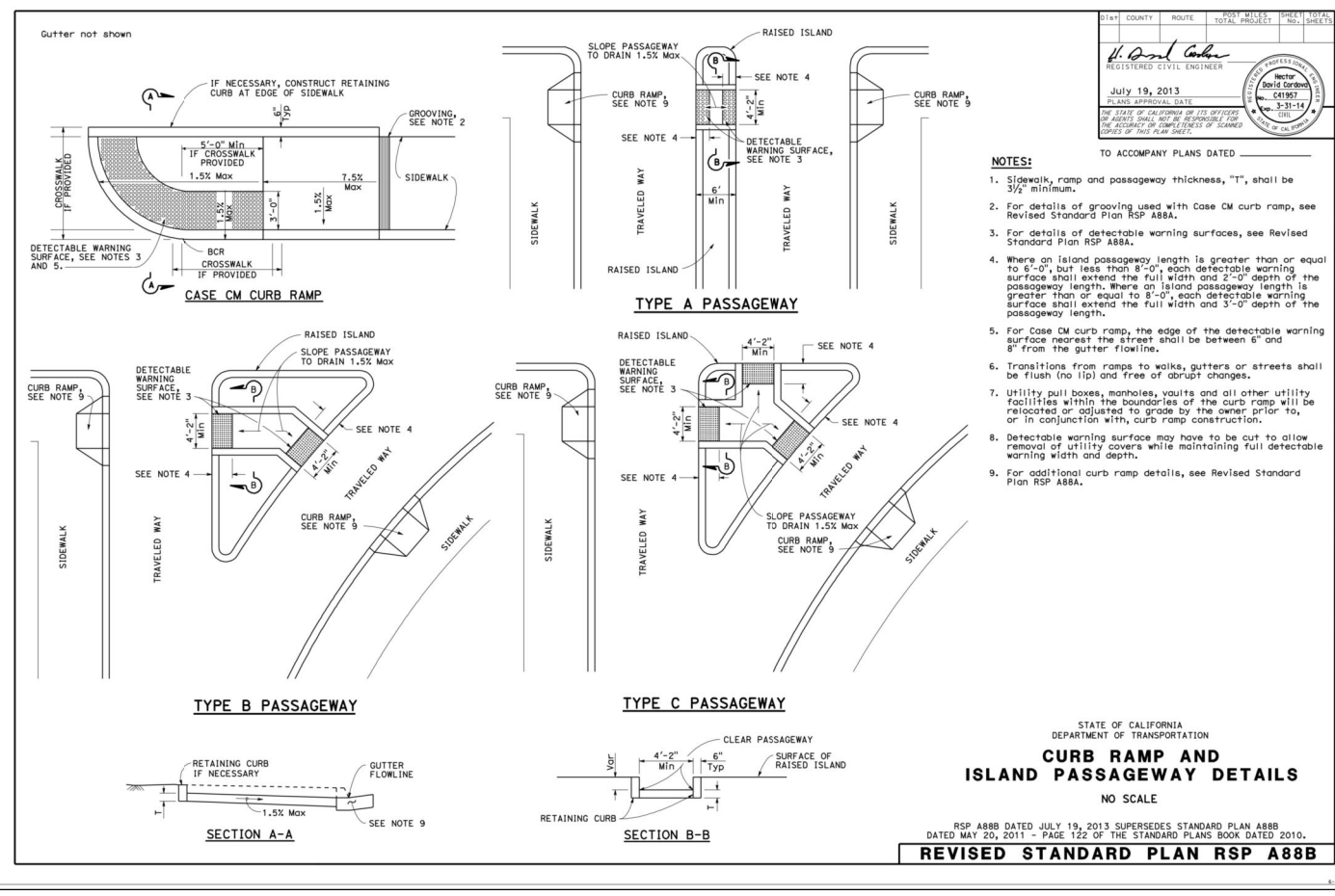
DESIGNED BY: ST
DRAWN: JOC/SH
APPROVED:

PREPARED BY: CSG Consultants Inc.
1700 South Amphlett Boulevard, 3rd Floor
San Mateo, CA 94402
Phone (650)522-2500 Fax (650)522-2599

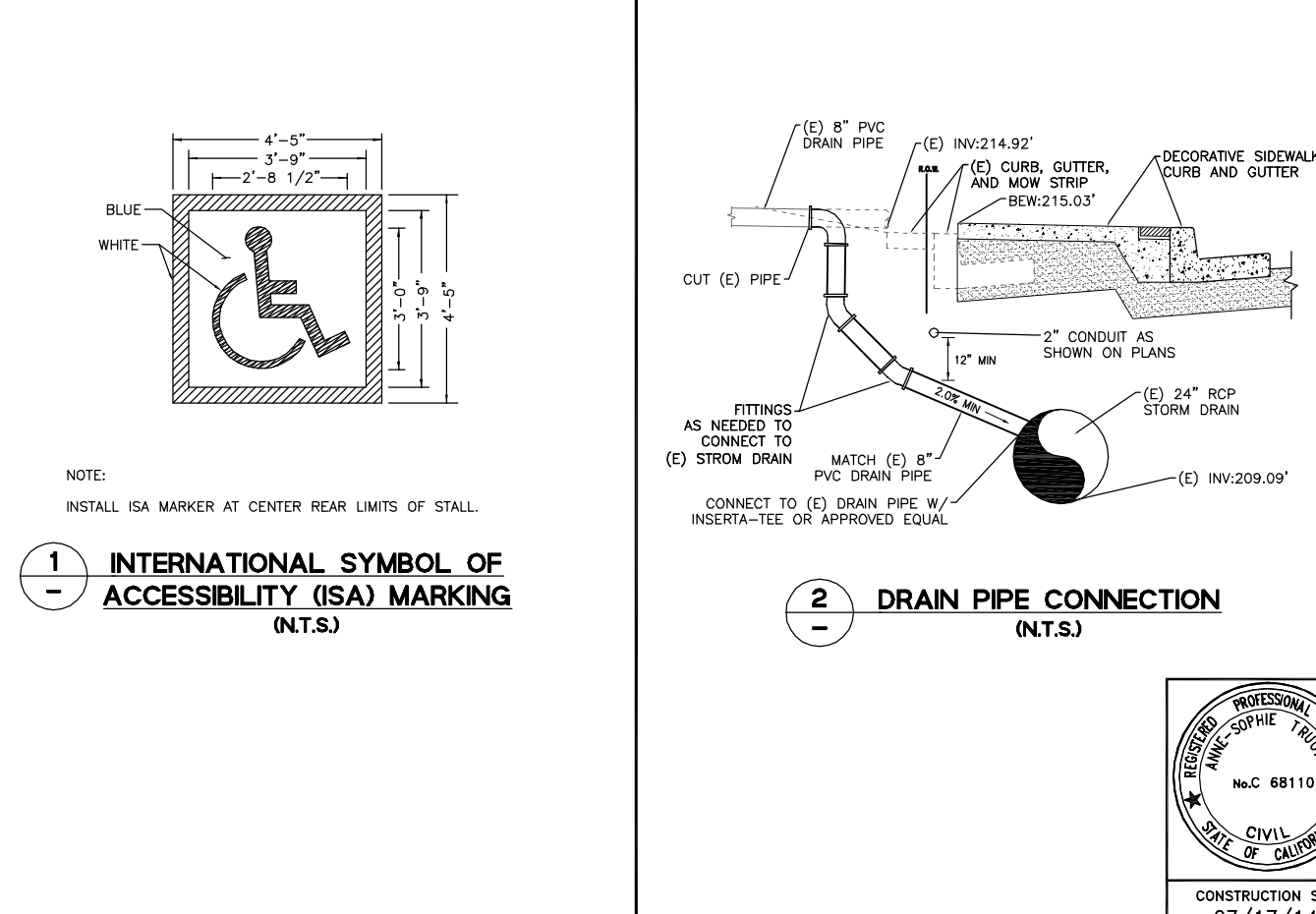
TITLE: HILLSIDE BOULEVARD IMPROVEMENTS PROJECT, PHASE I
TOWN OF COLMA, CALIFORNIA

SHEET 28 OF 48

DATE: 07/17/14
JOB#: 10.350



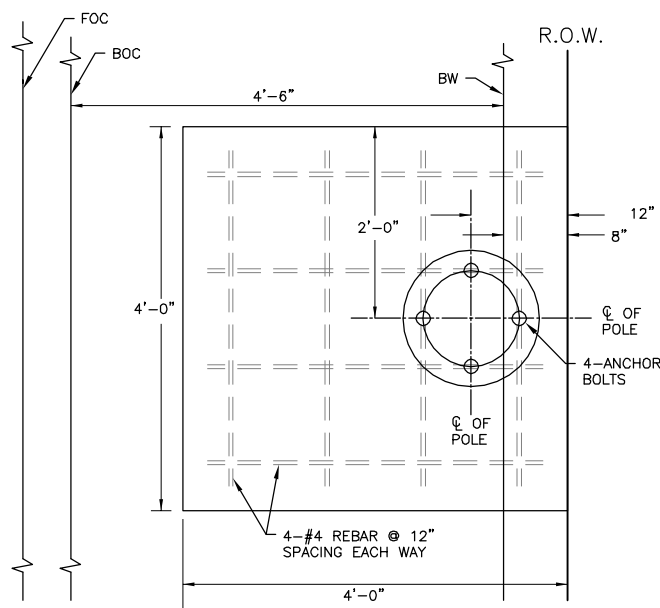
2010 REVISED STANDARD PLAN RSP A88B



REGISTERED PROFESSIONAL ENGINEER
ANNE SOPHIE TRUONG
No. C 68110
CIVIL
STATE OF CALIFORNIA

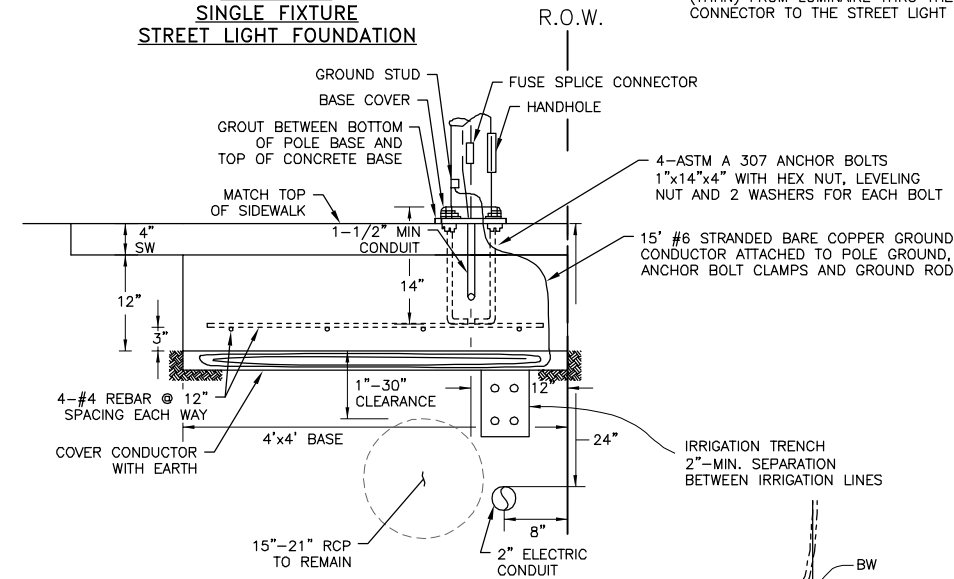
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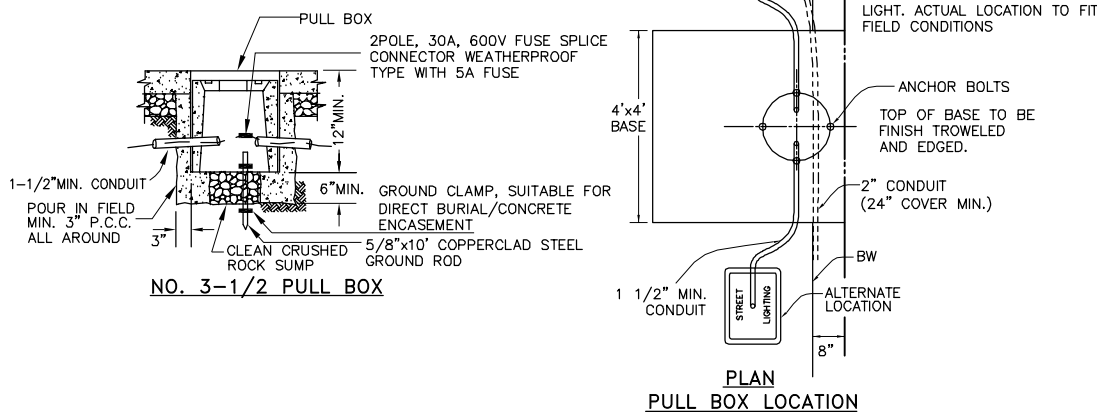


- GENERAL NOTES:**
1. LIGHTING STANDARD SHALL BE AS SPECIFIED IN THE SPECIFICATIONS.
 2. LIGHTING STANDARD SHALL BE IN PLACE AND TRULY PLUMBED BEFORE PLACING DRY PACK.
 3. LUMINAIRES SHALL BE WIRED TO A "MULTIPLE CIRCUIT".
 4. EACH STREET LIGHT STANDARD SHALL BE INSTALLED WITH A NO. 3-1/2 STREET LIGHT PULL BOX, AND A SPLICED-FUSED CONNECTOR.
 5. BONDING OF STREET LIGHT STANDARDS SHALL BE BY MEANS OF A BONDING WIRE OR BRAID ATTACHED TO ALL ANCHOR BOLTS.
 6. STREET LIGHT FOUNDATION CONCRETE SHALL BE PER THE SPECIFICATIONS.
 7. LUMINAIRE WIRING SHALL BE TWO #10 SOLID WIRES (THHN) FROM LUMINAIRE THRU THE SPLICED-FUSED CONNECTOR TO THE STREET LIGHT PULL BOX.

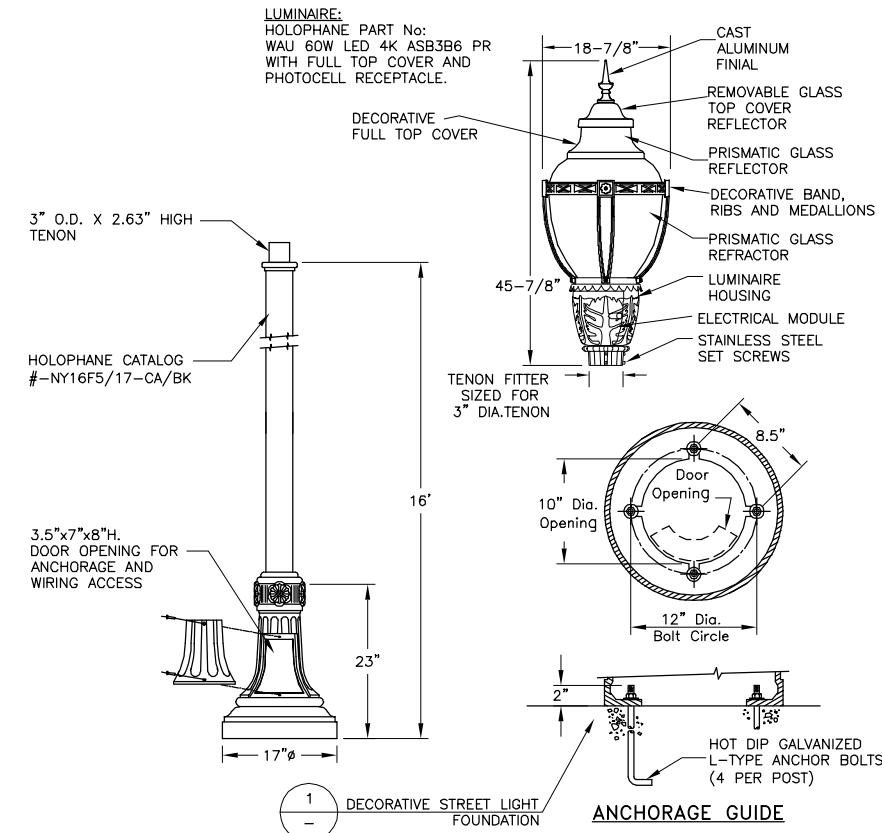
**PLAN VIEW
SINGLE FIXTURE
STREET LIGHT FOUNDATION**



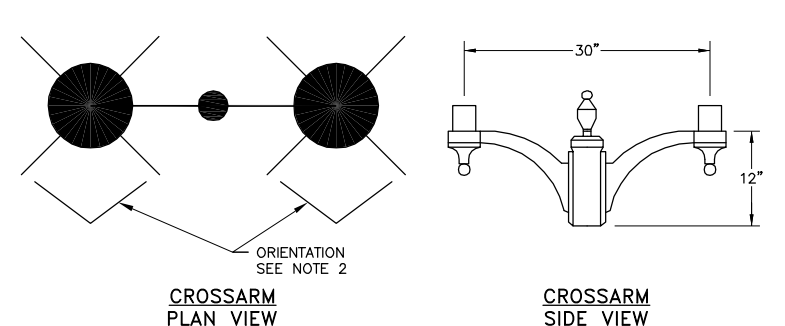
**SECTION VIEW
SINGLE FIXTURE
STREET LIGHT FOUNDATION**



**1 DECORATIVE STREET LIGHT FOUNDATION
SHALLOW INSTALLATION
(N.T.S.)**

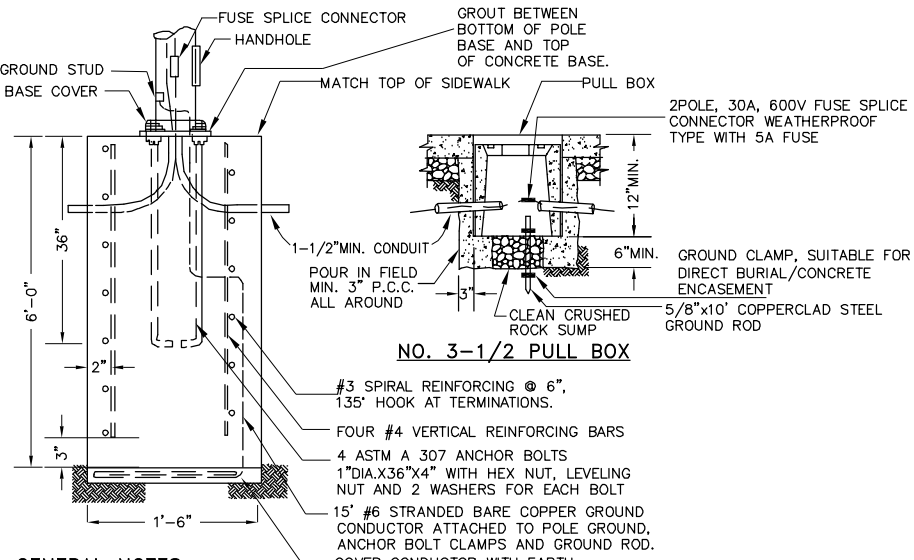


**2 DECORATIVE STREET LIGHT - SINGLE FIXTURE
(N.T.S.)**



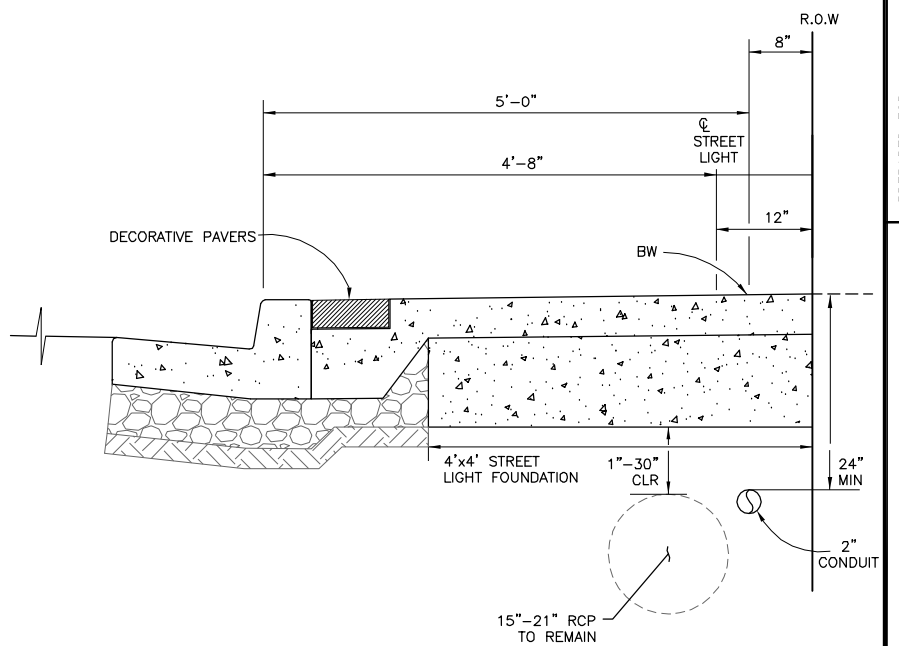
- NOTES:**
1. LIGHT POST, BASE, ANCHORAGE, LUMINAIRE HOUSING AND FOUNDATION SHALL BE THE SAME AS THE SINGLE FIXTURE.
 2. ORIENTATION OF BOTH LUMINAIRE ON A SINGLE POLE SHALL BE POINTED IN SAME DIRECTION.
 3. SEE THE SPECIFICATIONS FOR THE ORIENTATION OF THE DOUBLE FIXTURE TO THE INTERSECTION.
 4. CROSS ARM SHALL BE HOLOPHANE PART NO. ACA/2 BKH.
 5. FOR FOUNDATION AND LIGHT STANDARD, SEE DETAILS THIS SHEET.

**3 DECORATIVE STREET LIGHT - DOUBLE FIXTURE
(N.T.S.)**

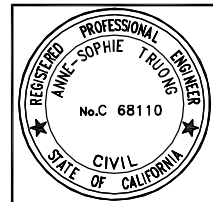


- GENERAL NOTES:**
1. LIGHTING STANDARD SHALL BE AS SPECIFIED IN THE SPECIFICATIONS.
 2. LIGHTING STANDARD SHALL BE IN PLACE AND TRULY PLUMBED BEFORE PLACING DRY PACK.
 3. LUMINAIRE SHALL BE WIRED TO A "MULTIPLE CIRCUIT".
 4. EACH STREET LIGHT STANDARD SHALL BE INSTALLED WITH A NO. 3-1/2 STREET LIGHT PULL BOX, AND A SPLICED-FUSED CONNECTOR.
 5. BONDING OF STREET LIGHT STANDARDS SHALL BE BY MEANS OF A BONDING WIRE OR BRAID ATTACHED TO ALL ANCHOR BOLTS.
 6. STREET LIGHT FOUNDATION CONCRETE SHALL BE PER THE SPECIFICATIONS.
 7. LUMINAIRE WIRING SHALL BE TWO #10 SOLID WIRES (THHN) FROM LUMINAIRE THRU THE SPLICED-FUSED CONNECTOR TO THE STREET LIGHT PULL BOX.

**4 DECORATIVE STREET LIGHT FOUNDATION
REGULAR INSTALLATION
(N.T.S.)**



**5 TYPICAL LOCATION OF
SHALLOW STREET LIGHT FOUNDATION
& UTILITIES IN SIDEWALK
(N.T.S.)**



DESIGNED BY: ST	DRAWN BY: JOC/SH	APPROVED BY:
CSG Consultants Inc. 1700 South Amphlett Boulevard, 3rd Floor San Mateo, CA 94402 Phone (650)522-2500 Fax (650)522-2599		
PREPARED FOR:	TOWN OF COLMA HILLSIDE BOULEVARD IMPROVEMENTS PROJECT, PHASE I TOWN OF COLMA CALIFORNIA	
TITLE:	SHEET 29 of 48	
DATE:	03/04/14 JOB#: 10.350	

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1 HILLSIDE BLVD AT HOFFMAN STREET (NORTHEAST)
SCALE 1"=10'

2 HILLSIDE BLVD AT F STREET (NORTH)
SCALE 1"=10'

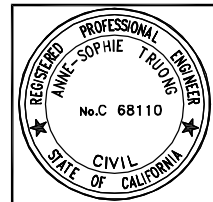
3 HILLSIDE BLVD AT F STREET (SOUTHWEST)
SCALE 1"=10'

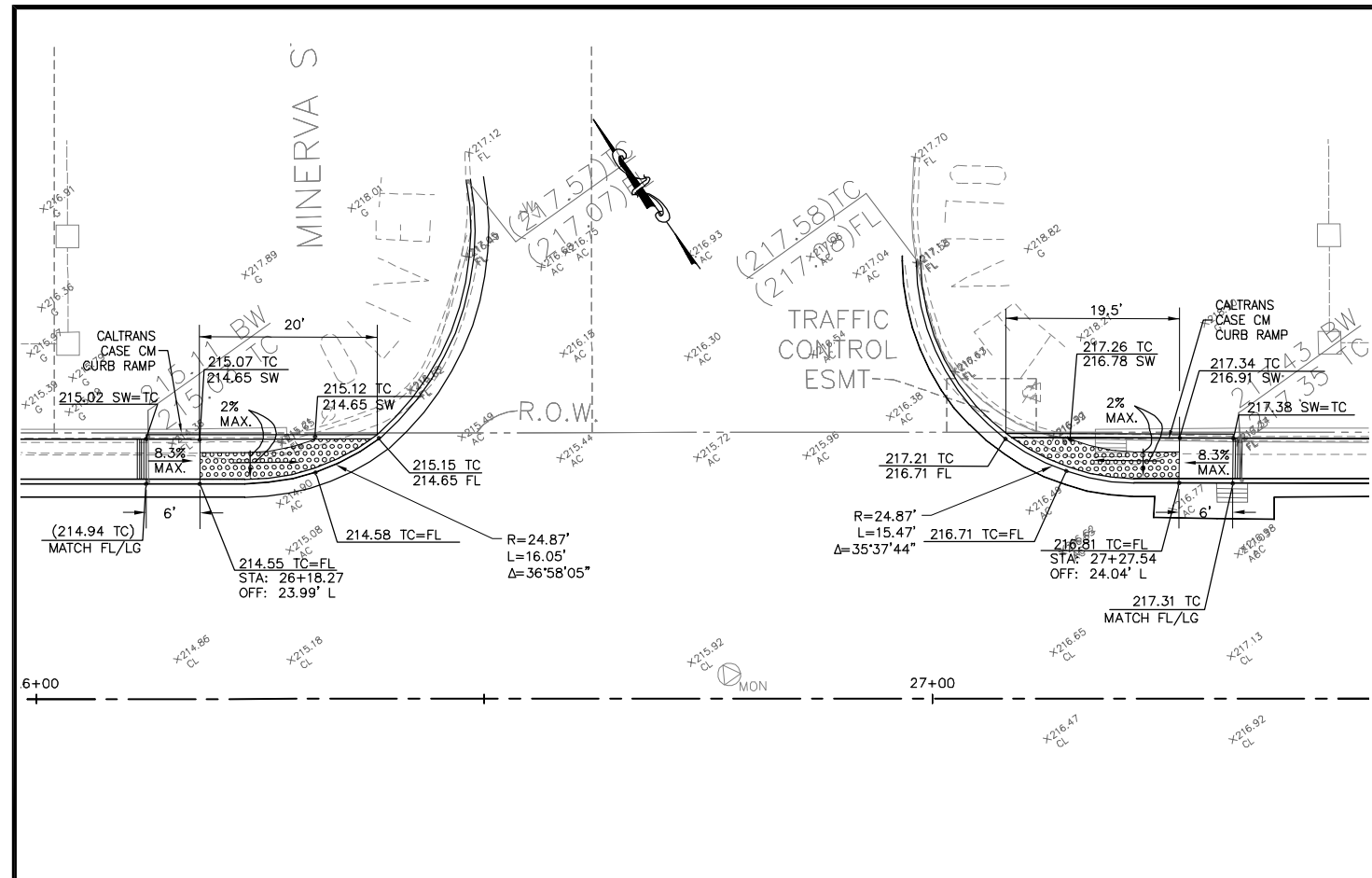
4 HILLSIDE BLVD AT STA 22+80
SCALE 1"=10'

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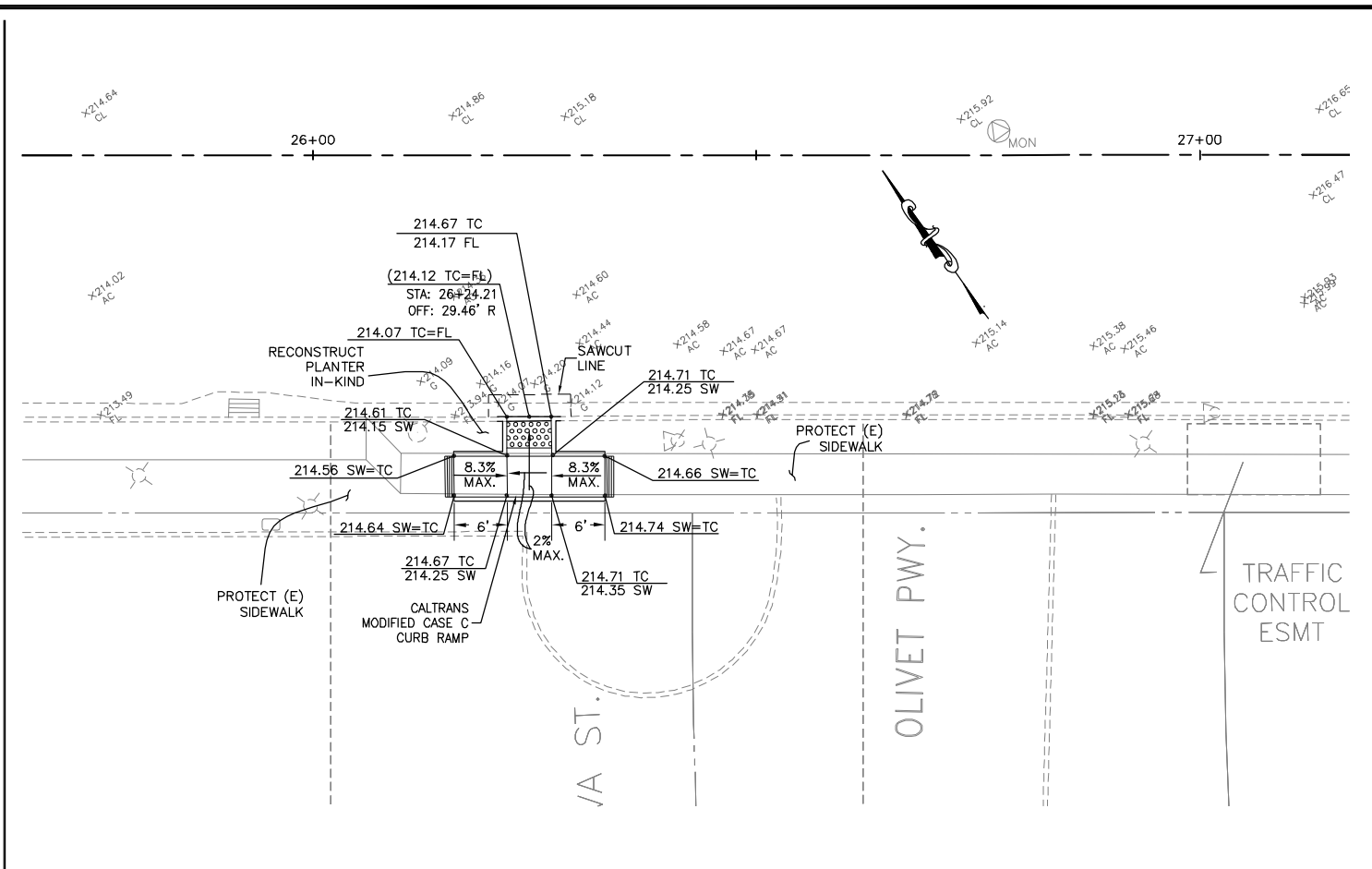
Plotted on: 07/17/14 @ 03:22:21 PM

DESIGNED BY: ST	NO.	REVISIONS	DATE
DRAWN: JOC/SH	ADDENDUM #3		7/17/14
APPROVED:			
PREPARED BY: CSG Consultants Inc.	1700 South Amphlett Boulevard, 3rd Floor San Mateo, CA 94402 Phone (650)522-2500 Fax (650)522-2599		
PREPARED FOR: TOWN OF COLMA	1198 EL CAMINO REAL COLMA, CA. 94014		
TITLE: CURB RAMPS & INTERSECTION DETAILS	HILLSIDE BOULEVARD IMPROVEMENTS PROJECT, PHASE I		
	CALIFORNIA		
	TOWN OF COLMA		
SHEET 30	of 48		
CONSTRUCTION SET	DATE: 07/17/14		
07/17/14	JOB#: 10.350		

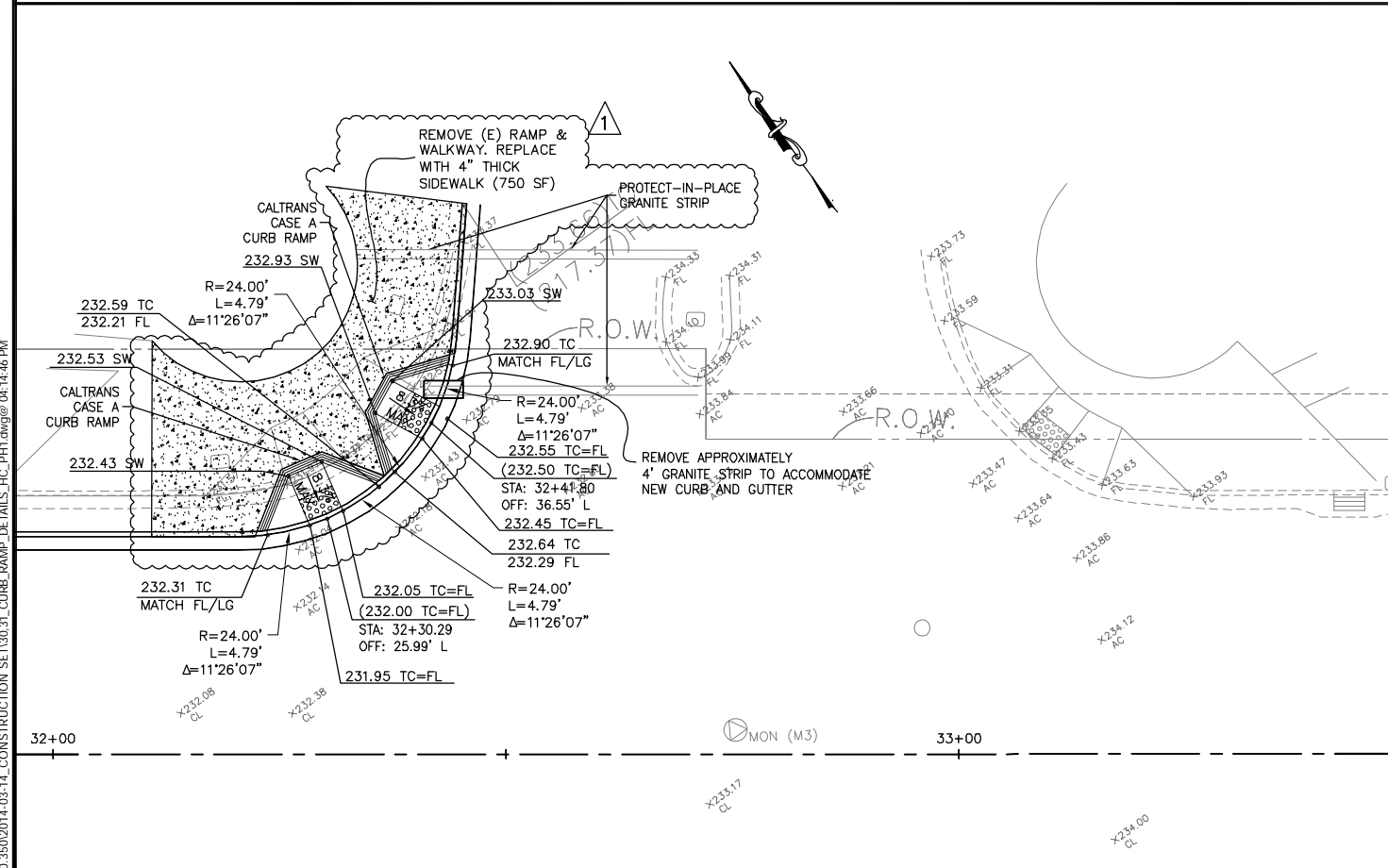




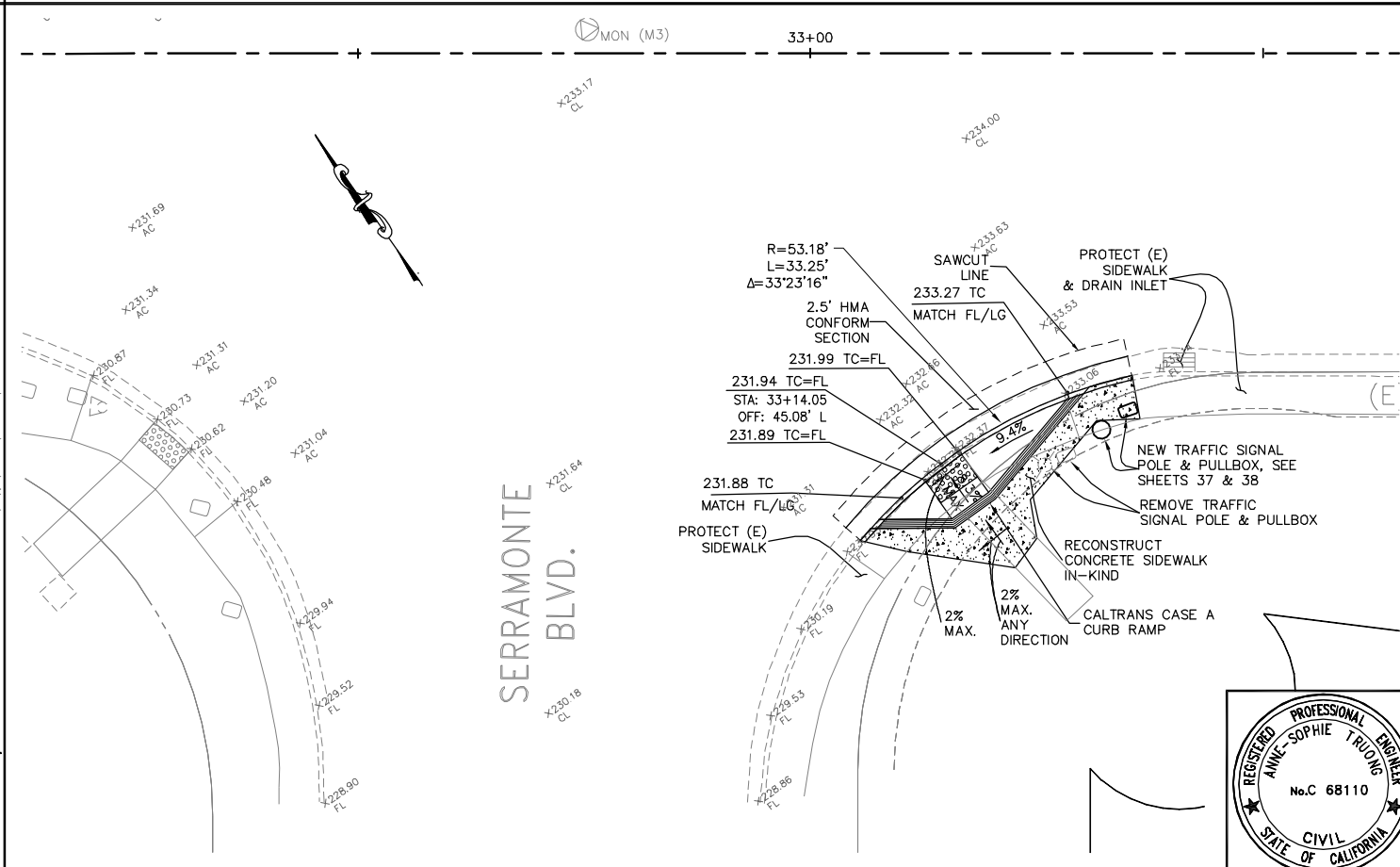
1 HILLSIDE BLVD AT OLIVET PARKWAY (NORTH)
SCALE: 1"=10'



2 HILLSIDE BLVD AT OLIVET PARKWAY (SOUTH)
SCALE: 1"=10'



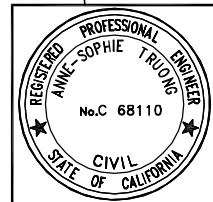
3 HILLSIDE BLVD AT SERRAMONTE BLVD. (NORTH)
SCALE: 1"=10'



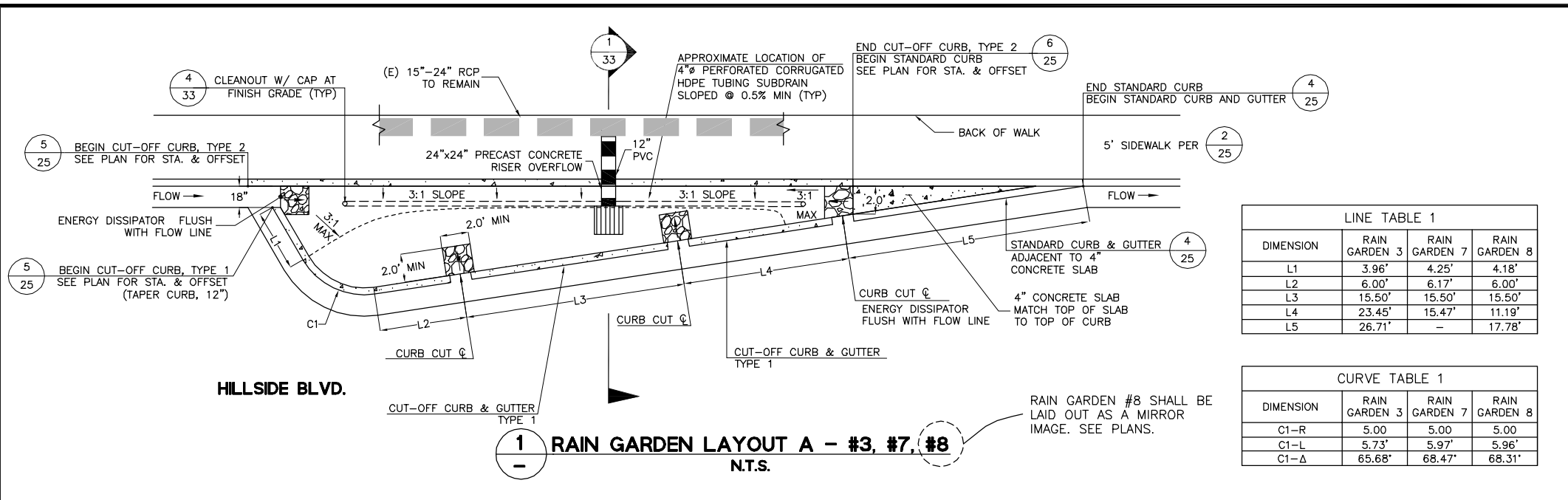
4 HILLSIDE BLVD AT SERRAMONTE BLVD. (SOUTH)
SCALE: 1"=10'

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Plotted on: 07/17/14 @ 04:14:46 PM



DESIGNED BY: ST	NO.	REVISIONS	DATE
DRAWN: JOC/SH			7/17/14
APPROVED:			
PREPARED BY: CSG Consultants Inc.	ADDENDUM #3		
TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA. 94014			
TITLE: CURB RAMPS & INTERSECTION DETAILS HILLSIDE BOULEVARD IMPROVEMENTS PROJECT, PHASE I TOWN OF COLMA CALIFORNIA			
SHEET 31		DATE: 07/17/14	
OF 48		JOB#: 10.350	
CONSTRUCTION SET		07/17/14	



LINE TABLE 1

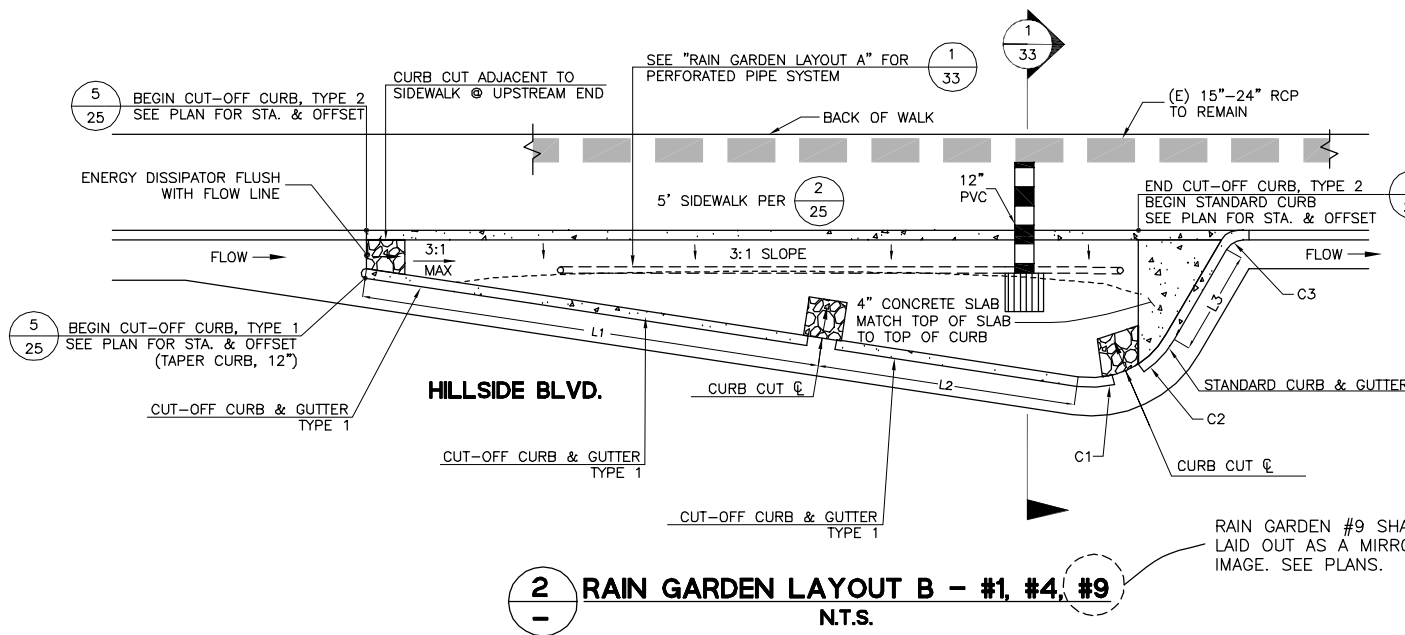
DIMENSION	RAIN GARDEN 3	RAIN GARDEN 7	RAIN GARDEN 8
L1	3.96'	4.25'	4.18'
L2	6.00'	6.17'	6.00'
L3	15.50'	15.50'	15.50'
L4	23.45'	15.47'	11.19'
L5	26.71'	-	17.78'

CURVE TABLE 1

DIMENSION	RAIN GARDEN 3	RAIN GARDEN 7	RAIN GARDEN 8
C1-R	5.00	5.00	5.00
C1-L	5.73'	5.97'	5.96'
C1-Δ	65.68'	68.47'	68.31'

- RAIN GARDEN LAYOUT NOTES**
- CAD FILES SHALL BE OBTAINED FROM CSG CONSULTANTS FOR ADDITIONAL HORIZONTAL CONTROL DATA NOT PRESENTED HEREON (SUCH AS ANGULAR DIMENSIONS OR BEARINGS).
 - FINISH GRADE OF BOTTOM OF RAIN GARDENS SHALL BE FLAT UNLESS OTHERWISE NOTED.
 - ALL ENERGY DISSIPATORS SHALL BE INSTALLED TO SLOPE TOWARDS CENTER OF RAIN GARDEN WITH A SLOPE OF 2% MIN. AND 5% MAX. PER DETAILS 1 & 2, SHEET 33.
 - 4" HDPE TUBING SUBDRAIN SHALL BE PLACED IN A STRAIGHT OR MEANDER FASHION, WITH PERFORATIONS POINTED DOWN, AROUND AND A MIN. OF 6" AWAY FROM ROOTBALL OF NEW TREES.
 - FINAL LOCATION OF TREE SHALL BE ESTABLISHED AND REFERENCED PRIOR TO INSTALLATION OF OVERFLOWS TO AVOID CONFLICTS, IF APPLICABLE.
 - 12" PVC FROM OVERFLOW DROP INLET TO BE CONNECTED TO EXISTING STORM DRAIN SYSTEM USING AN IN-LINE TEE, INSERTA-TEE, OR APPROVED EQUAL.

1 RAIN GARDEN LAYOUT A - #3, #7, #8
N.T.S.



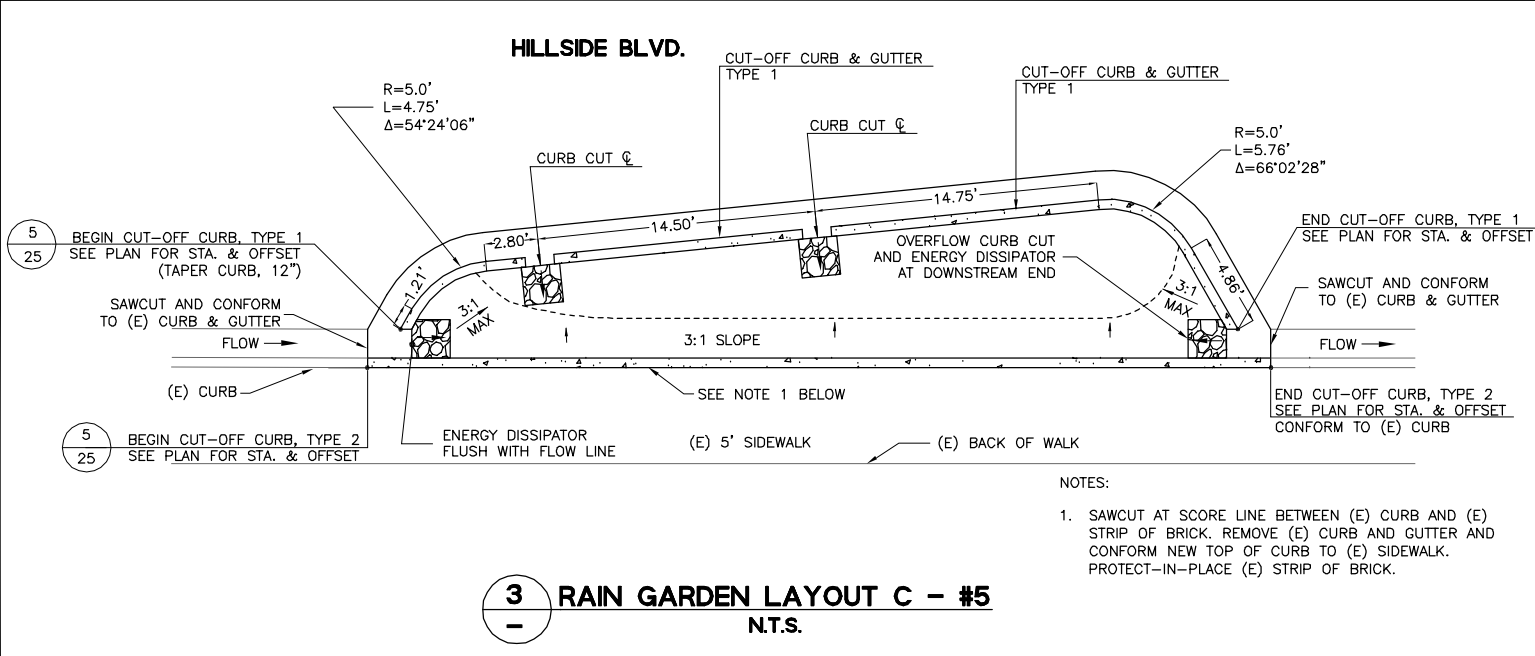
LINE TABLE 2

DIMENSION	RAIN GARDEN 1	RAIN GARDEN 4	RAIN GARDEN 9
L1	24.00'	24.00'	24.00'
L2	12.17'	13.49'	13.29'
L3	3.38'	5.42'	3.02'

CURVE TABLE 2

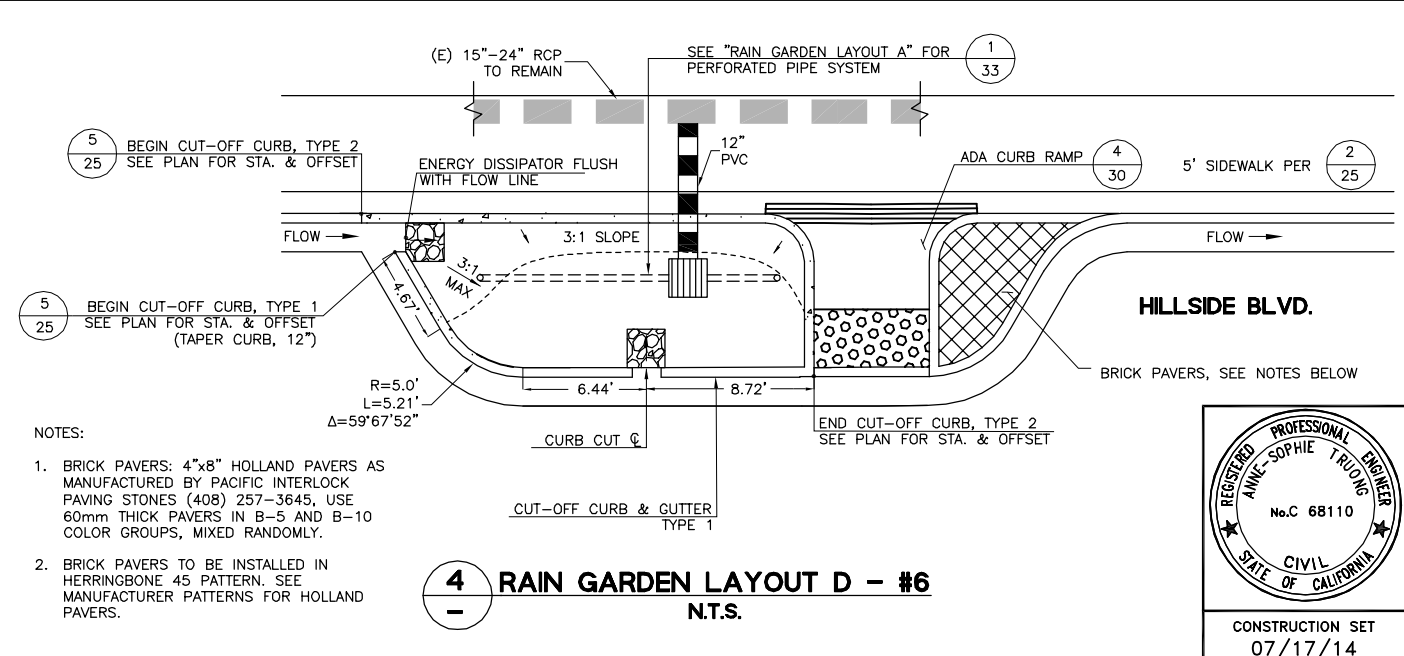
DIMENSION	RAIN GARDEN 1	RAIN GARDEN 4	RAIN GARDEN 9
C1-R	5.00	5.00	5.00
C1-L	3.42'	1.96'	1.97'
C1-Δ	39.23'	22.46'	22.52'
C2-R	5.00	5.00	5.00
C2-L	0.92'	2.32'	2.55'
C2-Δ	10.53'	26.61'	29.25'
C3-R	5.00	5.00	5.00
C3-L	5.21'	5.22'	5.22'
C4-Δ	59.68'	59.77'	59.87'

2 RAIN GARDEN LAYOUT B - #1, #4, #9
N.T.S.



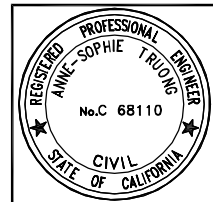
- NOTES:
- SAWCUT AT SCORE LINE BETWEEN (E) CURB AND (E) STRIP OF BRICK. REMOVE (E) CURB AND GUTTER AND CONFORM NEW TOP OF CURB TO (E) SIDEWALK. PROTECT-IN-PLACE (E) STRIP OF BRICK.

3 RAIN GARDEN LAYOUT C - #5
N.T.S.



- NOTES:
- BRICK PAVERS: 4"x8" HOLLAND PAVERS AS MANUFACTURED BY PACIFIC INTERLOCK PAVING STONES (408) 257-3645, USE 60mm THICK PAVERS IN B-5 AND B-10 COLOR GROUPS, MIXED RANDOMLY.
 - BRICK PAVERS TO BE INSTALLED IN HERRINGBONE 45 PATTERN. SEE MANUFACTURER PATTERNS FOR HOLLAND PAVERS.

4 RAIN GARDEN LAYOUT D - #6
N.T.S.



CONSTRUCTION SET
07/17/14

DESIGNED BY: ST
DRAWN BY: JOC/SH
APPROVED BY:

PREPARED BY: CSG Consultants Inc.
1700 South Amphlett Boulevard, 3rd Floor
San Mateo, CA 94402
Phone (650)522-2500 Fax (650)522-2599

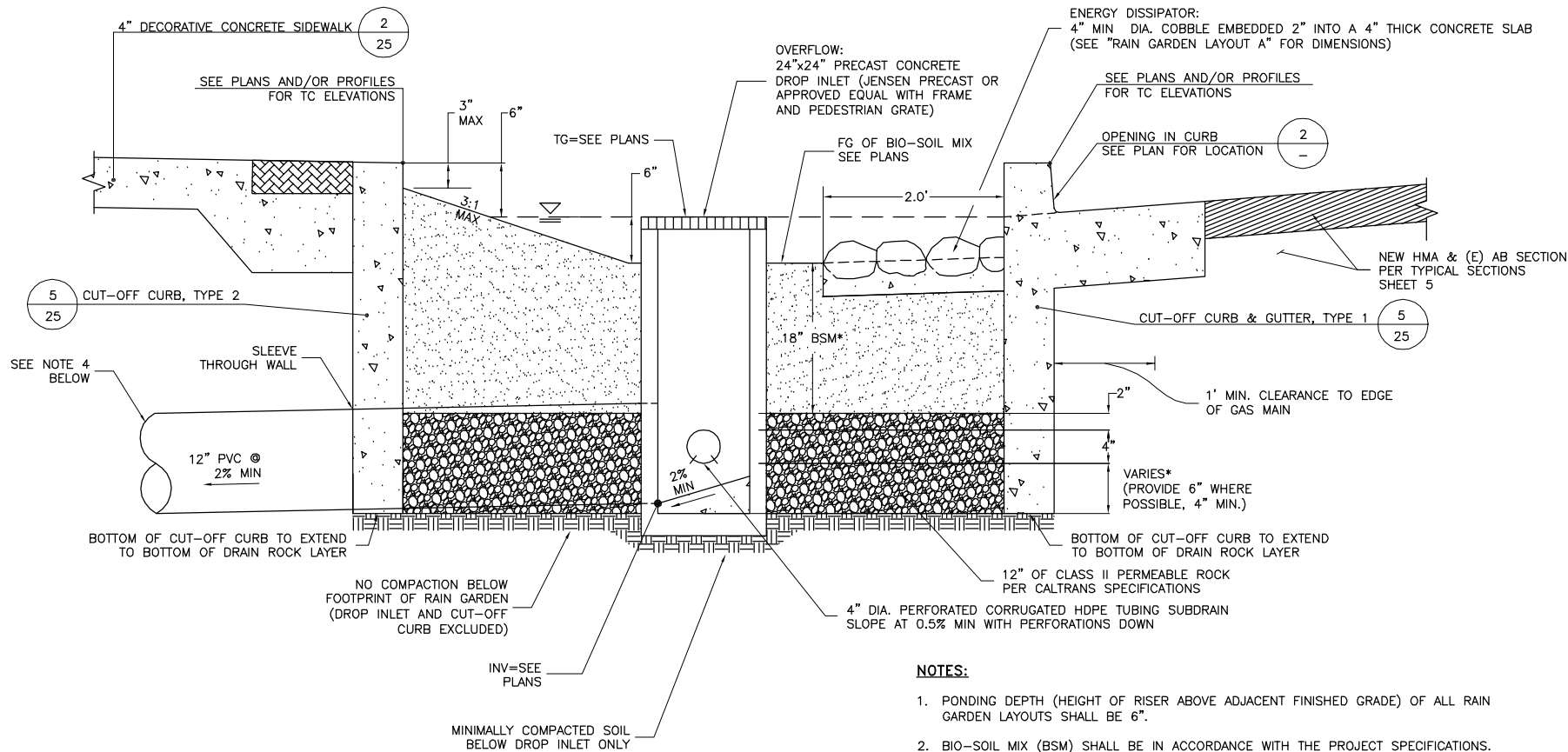
PREPARED FOR: TOWN OF COLMA
1198 EL CAMINO REAL
COLMA, CA. 94014

TITLE: RAIN GARDEN TYPICAL LAYOUT AND DETAILS AND DETAILS HILLSIDE BOULEVARD IMPROVEMENTS PROJECT, PHASE I
TOWN OF COLMA CALIFORNIA

SHEET 32 OF 48

DATE: 07/17/14
JOB#: 10.350

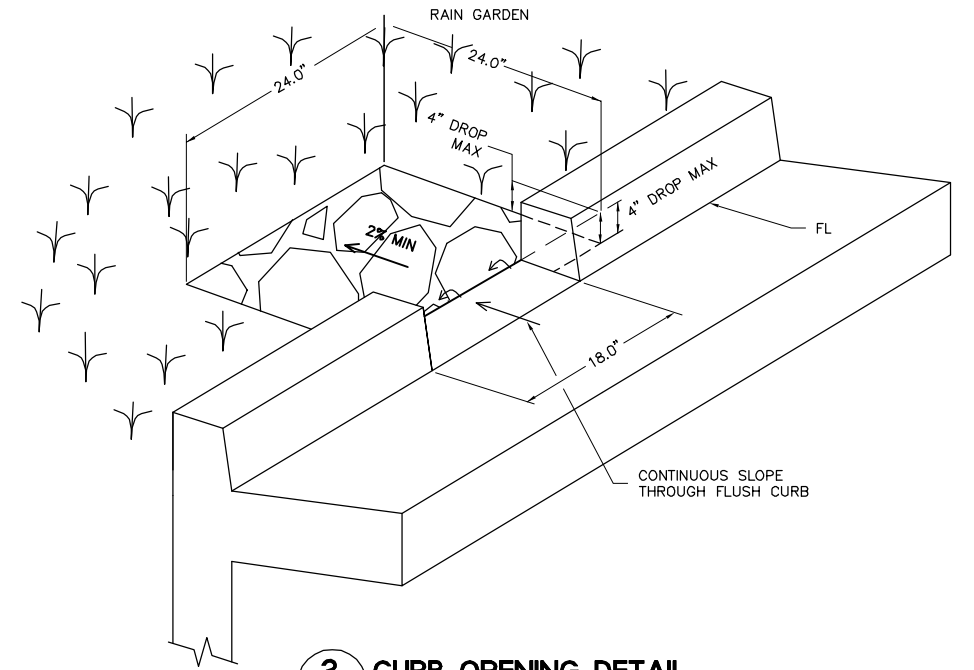
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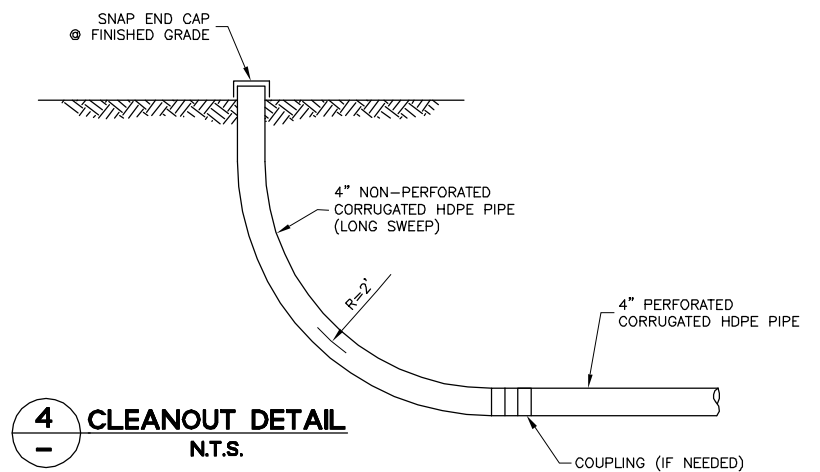
1
RAIN GARDEN
TYPICAL SECTION
N.T.S.

NOTES:

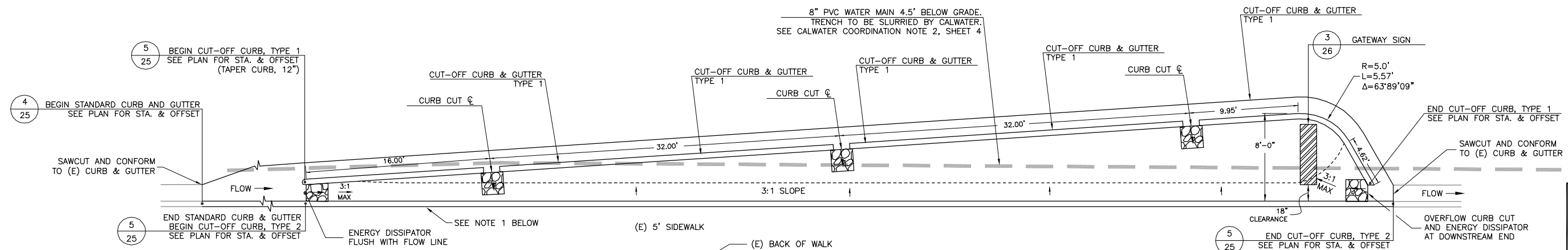
- PONDING DEPTH (HEIGHT OF RISER ABOVE ADJACENT FINISHED GRADE) OF ALL RAIN GARDEN LAYOUTS SHALL BE 6".
- BIO-SOIL MIX (BSM) SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
- DIMENSIONS MARKED WITH A "*" MAY BE MODIFIED TO ACCOMMODATE REQUIRED CHANGES IN THE INVERT ELEVATION OF THE OVERFLOW INLET TO ACCOMMODATE EXISTING UTILITIES. MAINTAIN 18" OF BIO-SOIL MIX AND 12" OF CLASS II ROCK WHENEVER POSSIBLE.
- 12" PVC TO BE CONNECTED TO EXISTING STORM DRAIN SYSTEM USING AN IN-LINE TEE, INSERT-A-TEE, OR APPROVED EQUAL.



2
CURB OPENING DETAIL
N.T.S.



4
CLEANOUT DETAIL
N.T.S.



3
RAIN GARDEN LAYOUT E - #2
N.T.S.

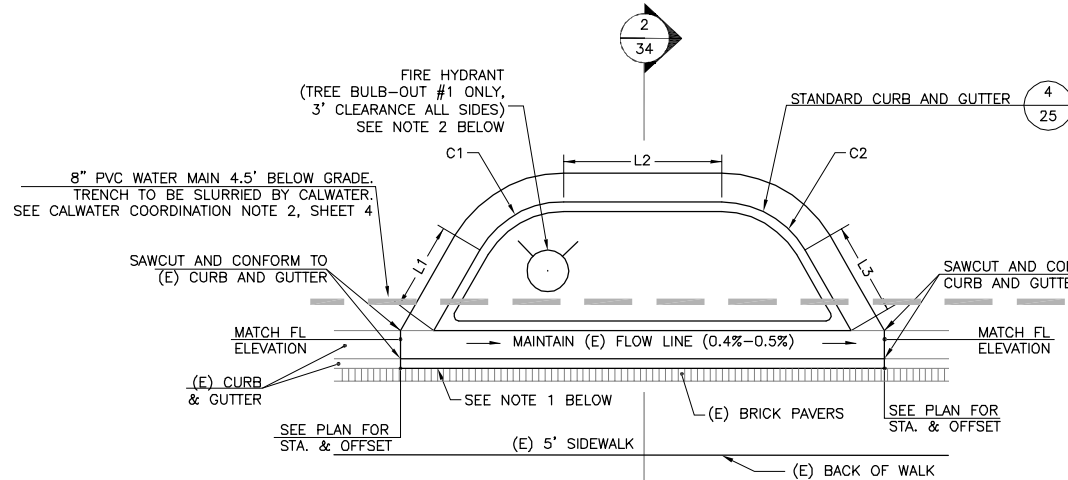
- NOTES:**
- SAWCUT AT SCORE LINE BETWEEN (E) CURB AND (E) STRIP OF BRICK. REMOVE (E) CURB AND GUTTER AND CONFORM NEW TOP OF CURB TO (E) SIDEWALK. PROTECT-IN-PLACE (E) STRIP OF BRICK.

SEE "RAIN GARDEN LAYOUT NOTES", SHEET 32



DESIGNED BY: ST	DATE
DRAWN BY: JOC/SH	REVISIONS
APPROVED BY:	NO.
PREPARED BY: CSG Consultants Inc.	1700 South Amphlett Boulevard, 3rd Floor San Mateo, CA 94402 Phone (650)522-2500 Fax (650)522-2599
PREPARED FOR: TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA. 94014	TITLE: RAIN GARDEN TYPICAL LAYOUT AND DETAILS HILLSIDE BOULEVARD IMPROVEMENTS PROJECT, PHASE I TOWN OF COLMA CALIFORNIA
SHEET 33 OF 48	DATE: 07/17/14
CONSTRUCTION SET 07/17/14	JOB#: 10.350

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 Plotted on: 07/17/14 @ 03:45:17 PM

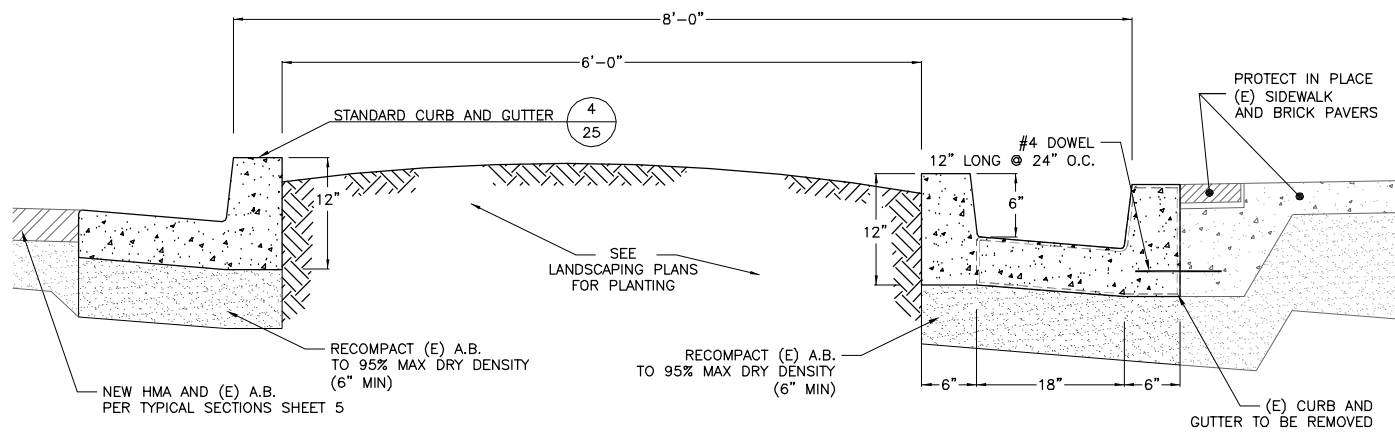


DIMENSION	TREE BULB-OUT 1	TREE BULB-OUT 2
L1	3.65'	4.05'
L2	8.23'	8.11'
L3	3.52'	3.83'

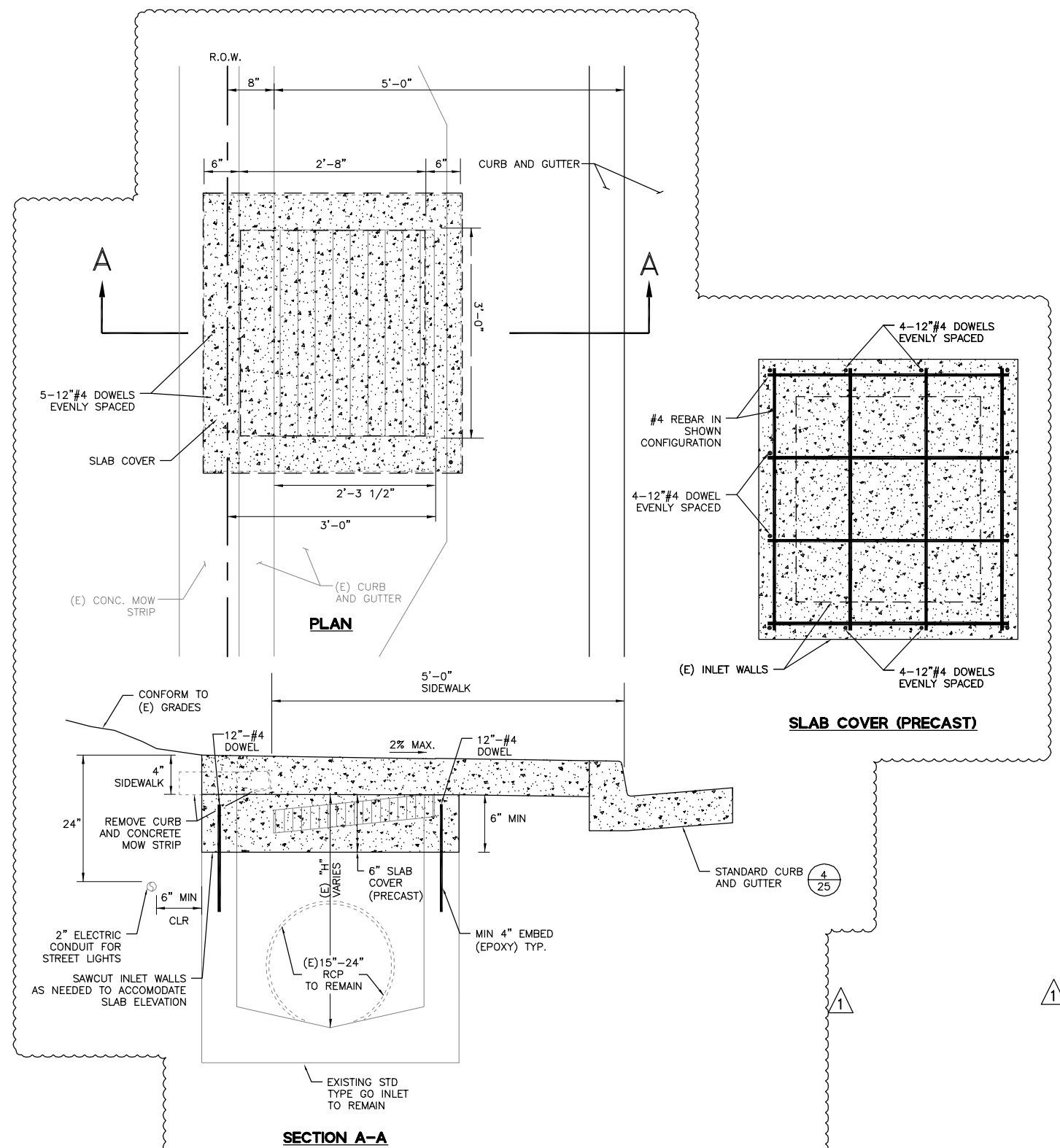
DIMENSION	TREE BULB-OUT 1	TREE BULB-OUT 2
C1-R	5.00	5.00
C1-L	5.25'	5.23'
C1-Δ	60.14°	59.87°
C2-R	5.00	5.00
C2-L	5.23'	5.20'
C2-Δ	59.92°	59.55°

- NOTES:
- SAWCUT AT SCORE LINE BETWEEN (E) CURB AND (E) STRIP OF BRICK. REMOVE (E) CURB AND GUTTER AND CONFORM NEW TOP OF CURB TO (E) SIDEWALK/BRICK PAVERS. PROTECT-IN-PLACE (E) STRIP OF BRICK.
 - EXACT PLACEMENT OF FIRE HYDRANT TO BE COORDINATED WITH CALWATER AND THE TOWN OF COLMA FIRE DEPARTMENT. SEE CALIFORNIA WATER SERVICE COMPANY COORDINATION NOTE 1 AND COLMA FIRE DEPARTMENT COORDINATION NOTE 1, SHEET 4.

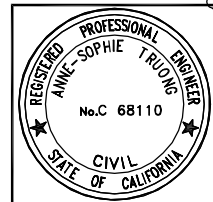
1 TREE BULB-OUT LAYOUT
N.T.S.



2 TREE BULB-OUT SECTION
N.T.S.

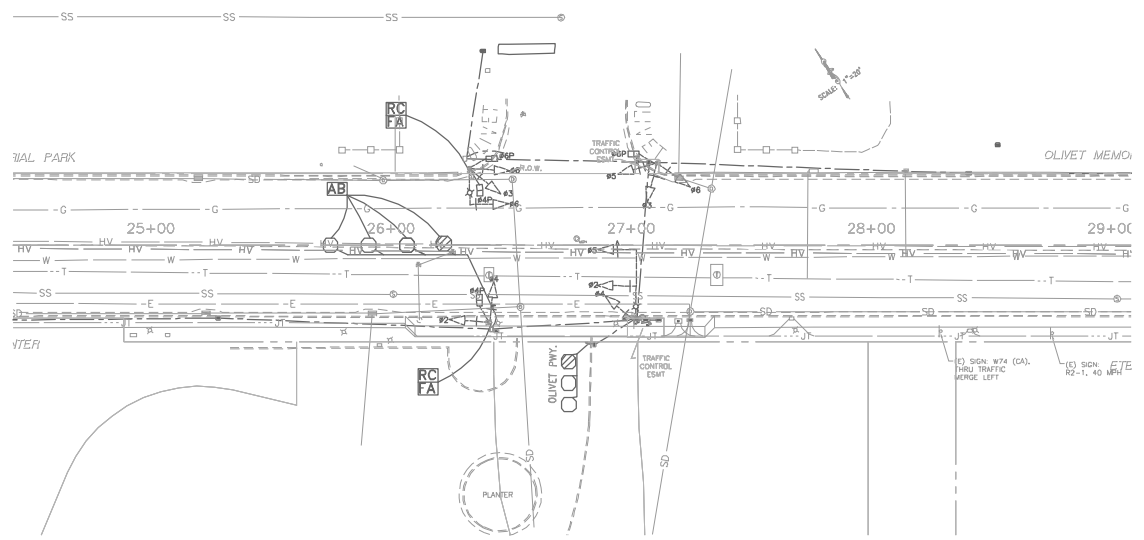


3 STORM DRAIN INLET MODIFICATION
(COVER ONLY)
N.T.S.

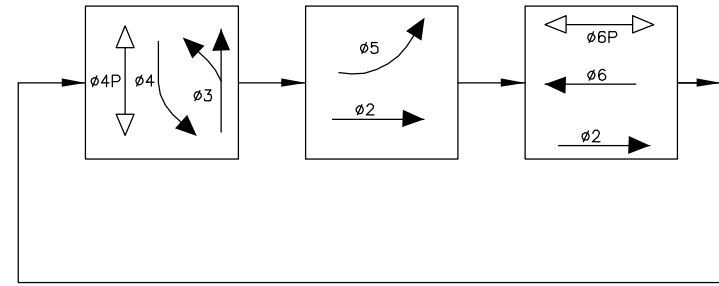


DESIGNED BY: ST	DRAWN BY: JOC/SH	APPROVED BY:
CSG Consultants Inc. 1700 South Amphlett Boulevard, 3rd Floor San Mateo, CA 94402 Phone (650)522-2500 Fax (650)522-2599		
PREPARED FOR:	TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA. 94014	
TITLE:	TREE BULB-OUT LAYOUT & MISCELLANEOUS DETAILS HILLSIDE BOULEVARD IMPROVEMENTS PROJECT, PHASE I TOWN OF COLMA CALIFORNIA	
SHEET 34	DATE: 07/17/14	REVISIONS
OF 48	JOB#: 10.350	ADDENDUM #3
CONSTRUCTION SET	07/17/14	NO.
		DATE

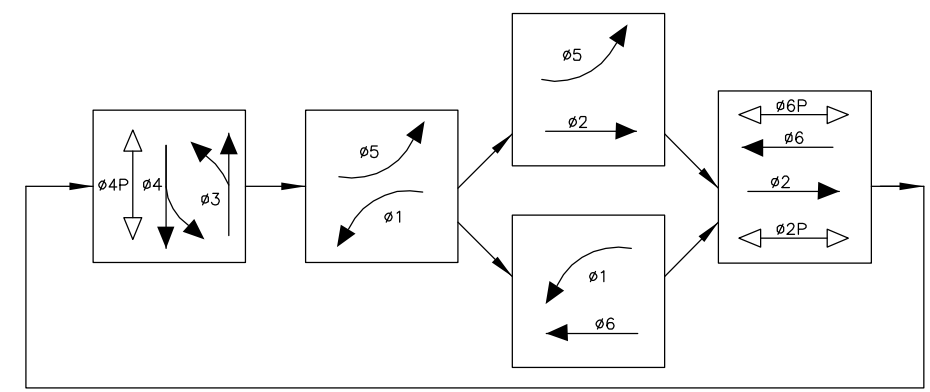
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EXISTING SIGNAL SYSTEM



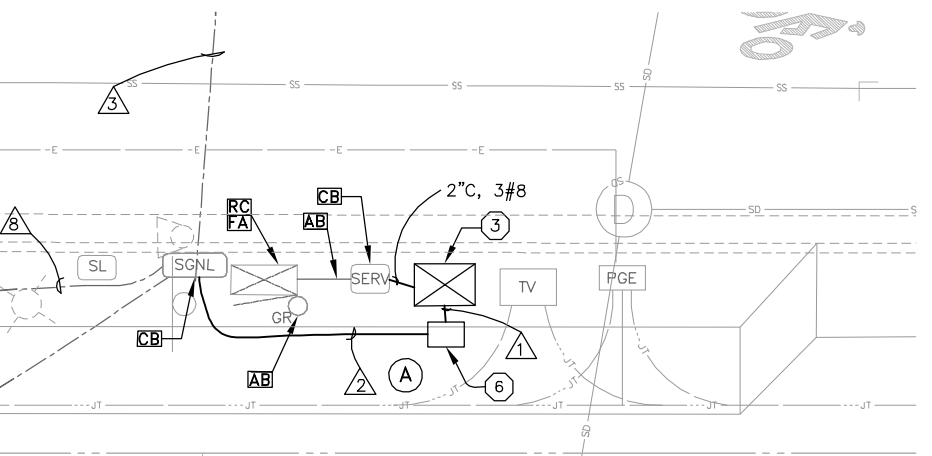
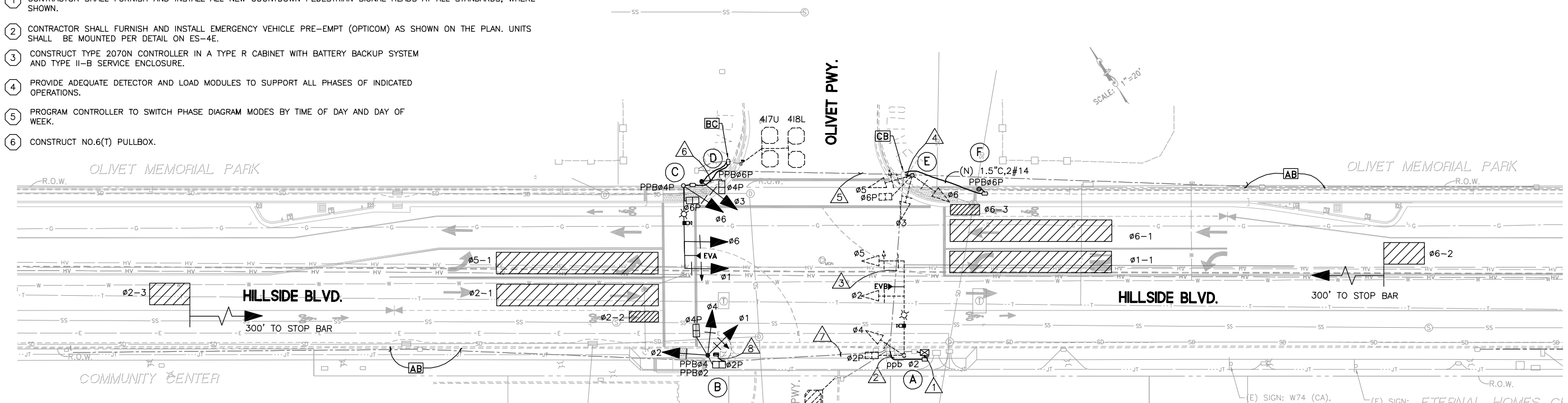
EXISTING TRAFFIC PHASE DIAGRAM



PROPOSED TRAFFIC PHASE DIAGRAM

PROJECT NOTES

- 1 CONTRACTOR SHALL FURNISH AND INSTALL ALL NEW COUNTDOWN PEDESTRIAN SIGNAL HEADS AT ALL STANDARDS, WHERE SHOWN.
- 2 CONTRACTOR SHALL FURNISH AND INSTALL EMERGENCY VEHICLE PRE-EMPT (OPTICOM) AS SHOWN ON THE PLAN. UNITS SHALL BE MOUNTED PER DETAIL ON ES-4E.
- 3 CONSTRUCT TYPE 2070N CONTROLLER IN A TYPE R CABINET WITH BATTERY BACKUP SYSTEM AND TYPE II-B SERVICE ENCLOSURE.
- 4 PROVIDE ADEQUATE DETECTOR AND LOAD MODULES TO SUPPORT ALL PHASES OF INDICATED OPERATIONS.
- 5 PROGRAM CONTROLLER TO SWITCH PHASE DIAGRAM MODES BY TIME OF DAY AND DAY OF WEEK.
- 6 CONSTRUCT NO.6(T) PULLBOX.

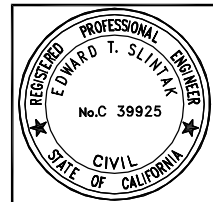
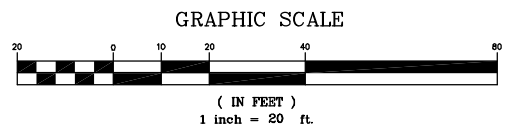


SIGNAL CONTROLLER DETAIL

SERVICE ENCLOSURE INCLUDE FOLLOWING CIRCUIT BREAKERS:

- 100A, 240V, 2P MAIN
- 30A, 240V, 2P LIGHTING
- 50A, 120V, 1P SIGNALS
- 20A, 120V, 1P IRRIGATION

PROVIDE 2°C, 2#10 TO IRRIGATION CONTROLLER LOCATION



DESIGNED BY: ED	DATE:
DRAWN BY: JOC/SH	REVISIONS:
APPROVED BY:	NO.:
PREPARED BY: CSG Consultants Inc.	NO.:
1700 South Amphlett Boulevard, 3rd Floor	DATE: 07/17/14
San Mateo, CA 94402	JOB#: 10.350
Phone (650)522-2500 Fax (650)522-2599	
TITLE: TRAFFIC SIGNAL MODIFICATION PLAN, OLIVET PKWY./ HILLSIDE BLVD. HILLSIDE BOULEVARD IMPROVEMENT PROJECT TOWN OF COLMA	
TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA. 94014	
SHEET 35 OF 48	

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POLE AND EQUIPMENT SCHEDULE												
POLE LOCATION	STANDARD		VEHICLE SIGNAL		PEDESTRIAN SIGNAL			ILLUMINATED STREET NAME SIGN WORDING	NOTES	LUMINAIRE	STATION	OFFSET
	TYPE	SIG. M.A.	LUM. ARM	MOUNTING	PHASE	MOUNTING	PHASE					
A	(EXIST)	35'	MAS	2	SP-1-T	2P	2P	REMOVE EXISTING SIGN	INSTALL VIDEO CAMERA RETROFIT LUMINAIRE INSTALL OPTICOM DETECTOR	72W LED		
			MAS	5								
			SV-1-T	4								
B	1-B (NEW)		TV-3-T	1,4,2	SP-1-T	2P	2P 4P					
C	19-4-100 (NEW)	30'	MAS	1	SP-1-T	6P	4P		INSTALL VIDEO CAMERA INSTALL OPTICOM DETECTOR	72W LED		
			MAS	6								
			SV-1-T	6								
D	1-B (NEW)		TV-1-T	3	SP-1-T	4P	6P					
E	1-B (EXIST)		TV-3-T	3,5,6	SP-1-T	6P						
F	PPB POST (NEW)						6P					

GENERAL NOTES

- ALL SIGNAL WORK SHALL BE DONE IN CONFORMANCE WITH THE LATEST EDITION OF TOWN OF COLMA STANDARD PLANS AND SPECIFICATIONS, CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) STANDARD SPECIFICATIONS, STANDARD PLANS (DATED MAY 06), SPECIAL PROVISIONS.
- STANDARDS, MAST ARMS, SIGNAL HEADS AND DETECTORS SHALL BE APPROVED BY THE ENGINEER.
- SIGNAL PLANS ARE ACCURATE FOR EQUIPMENT AND ELECTRICAL WORK ONLY.
- EXISTING CONDUITS, PULL BOXES DETECTOR LOOPS SHALL BE REMOVED OR ABANDONED AS INDICATED OR DESIGNATED BY ENGINEER.
- PRIOR TO PERFORMING ANY EXCAVATION, CONTRACTOR SHALL CALL U.S.A. (UNDERGROUND SERVICE ALERT) AT 800-642-2444, NOT LESS THEN 48 HOURS BEFORE ALL PLANNED EXCAVATION OPERATIONS.
- CONTRACTOR SHALL OBTAIN ENCROACHMENT PERMIT FROM TOWN OF COLMA FOR ALL WORK WITHIN THE RIGHT OF WAY.
- ALL SIGNAL WORK SHALL BE COORDINATED WITH THE TOWN ENGINEER OF THE TOWN OF COLMA.
- LANE CLOSURES ALLOWED ONLY BETWEEN 9:00 AM-3:00 PM MONDAY THROUGH FRIDAY. TRAFFIC CONTROL PLAN MUST FIRST BE APPROVED BY THE ENGINEER BEFORE ANY LANES ARE CLOSED OR DIVERTED.

CONDUCTOR AND CONDUIT SCHEDULE														
AWG OR CABLE	CONDUCTOR RUN	1	2	3	4	5	6	7	8	9	10	11	12	13
		#14	ø1	6	6	3		3	3	3	3			
ø2	3		3					3	3					
ø3	3		3	3	3	3								
ø4	3		3					3	3					
ø5	3		3	3	3									
ø6	3		3	3	3	3	3							
ø2PB	2		2						2	2				
ø4PB	4		4	2		2			2	2				
ø6PB	2		2	2		2	2							
ø2PPB	1		1						1	1				
ø4PPB	1		1	1		1	1		1					
ø6PPB	1		1	1	1	1								
Ped Neutral	2		2	1	1	1	1	1	1	1				
PEU	4		4											
Spares	6	6	3	3	3	3	3	3	3					
Total # 14	44	44	22	14	19	13	19	19						
#8	STREET LIGHTS	2	2	2		2	2							
	Intern. Illuminated Street Name Sign (120V) (ISNS)	2	2	2		2	2							
	Signal Neutral	1	1	1	1	1	1							
	Total # 8	5	5	5	1	5	5							
Opticom Cable (3#20)	EVA	1	1	1		1	1							
	EVB	1	1											
	TOTAL CABLE	2	2	1		1	1							
DETECTOR LOOP CABLE	111U	1*		1*										
	212U	1*												
	214U	1*												
	315U	1	1											
	418L	1	1	1		1*								
	417U	1	1	1		1*								
	5J1L	1*												
	6J2L	1*		1*				1*	1*					
6J4L			1*											
TOTAL DETECTOR LOOP CABLE	3	3	2											
VIDEO CAMERA CABLE	ø1 + ø6	1	1	1		1	1							
	ø2 + ø5	1	1											
	TOTAL VIDEO CAMERA CABLE	2	2	1		1	1							
TOTAL	49	26	28	13	24	22	1	1						
CONDUIT SIZE	2-3"	2-3"	2"	2"	2"	2"	1-1/2"	1-1/2"						
CONDUIT STATUS	N	N	E	N	E	N	E	E						

* CONDUCTORS TO BE REMOVED

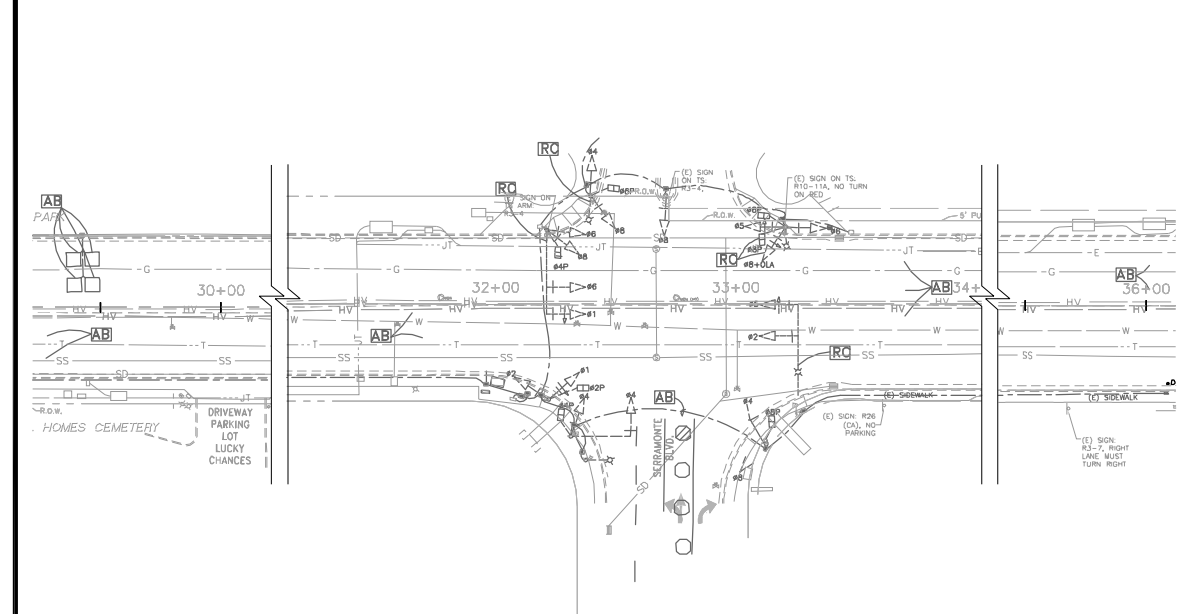
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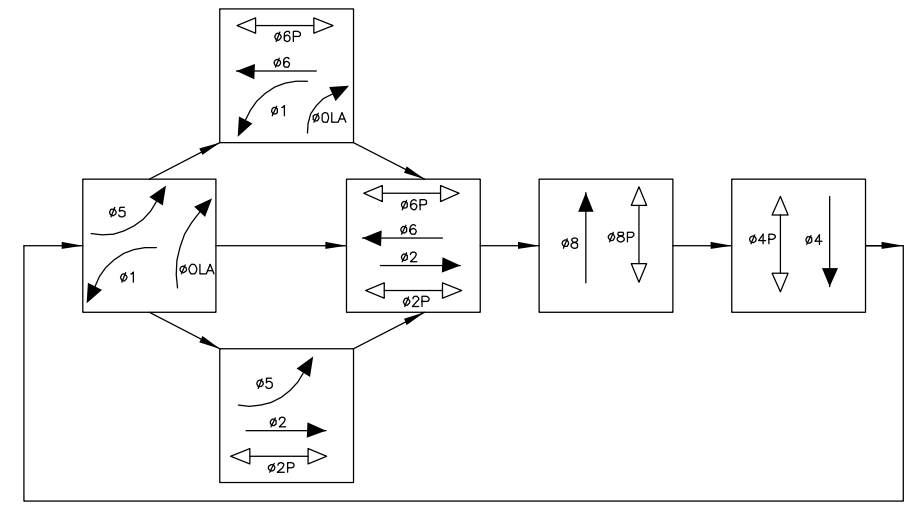


DESIGNED BY: ED	DRAWN BY: JOC/SH	APPROVED BY:
CSG Consultants Inc. 1700 South Amphlett Boulevard, 3rd Floor San Mateo, CA 94402 Phone (650)522-2500 Fax (650)522-2599		
PREPARED FOR: TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA. 94014		
TITLE: TRAFFIC SIGNAL MODIFICATION PLAN, OLIVET PWY./ HILLSIDE BLVD. HILLSIDE BOULEVARD IMPROVEMENT PROJECT TOWN OF COLMA CALIFORNIA		
SHEET 36 OF 48		DATE : 07/17/14 JOB# : 10.350

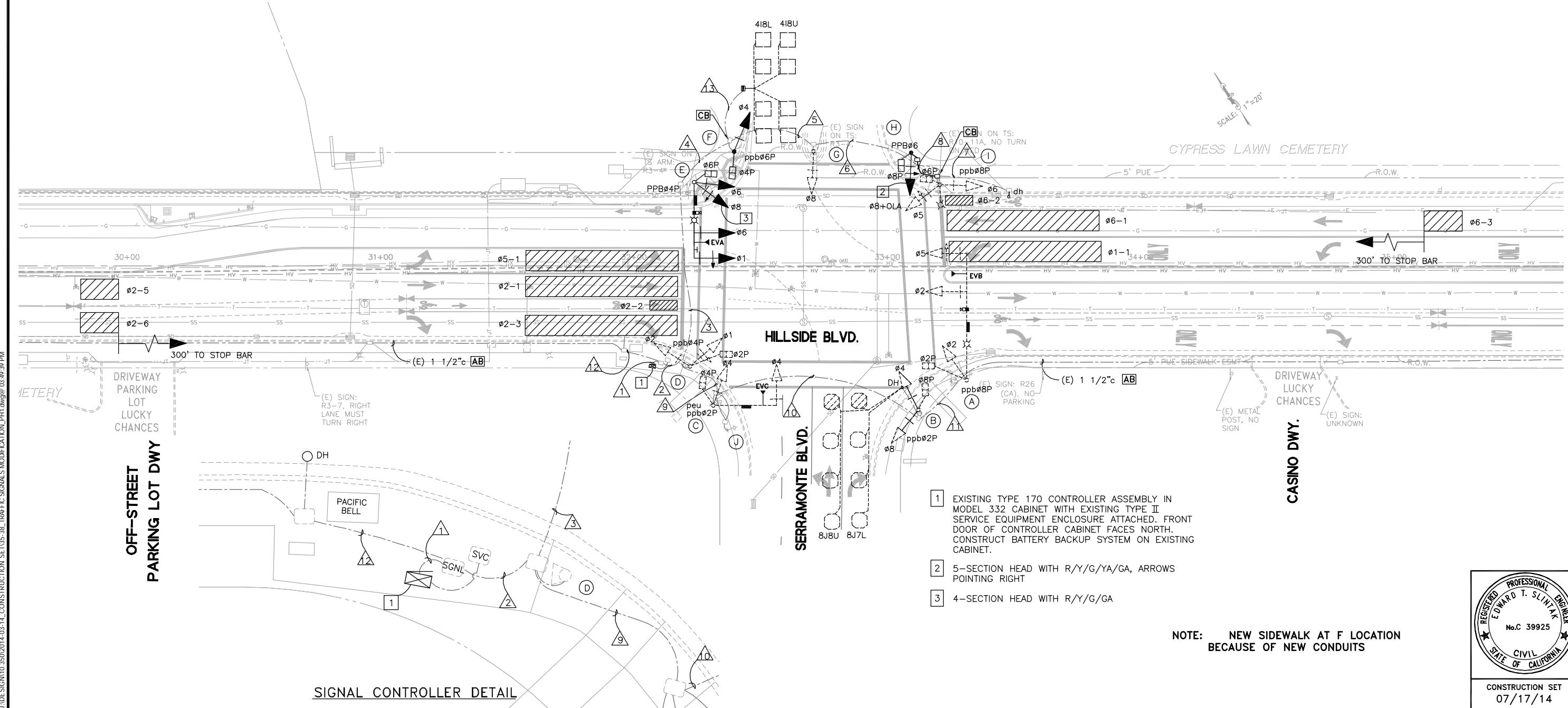
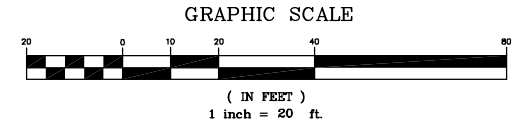
CONSTRUCTION SET 07/17/14



EXISTING SIGNAL SYSTEM



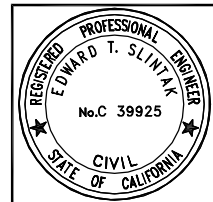
EXISTING AND PROPOSED TRAFFIC PHASE DIAGRAM



SIGNAL CONTROLLER DETAIL

- 1 EXISTING TYPE 170 CONTROLLER ASSEMBLY IN MODEL 332 CABINET WITH EXISTING TYPE II SERVICE EQUIPMENT ENCLOSURE ATTACHED. FRONT DOOR OF CONTROLLER CABINET FACES NORTH. CONSTRUCT BATTERY BACKUP SYSTEM ON EXISTING CABINET.
- 2 5-SECTION HEAD WITH R/Y/G/YA/GA, ARROWS POINTING RIGHT
- 3 4-SECTION HEAD WITH R/Y/G/GA

NOTE: NEW SIDEWALK AT F LOCATION BECAUSE OF NEW CONDUITS



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APPROVED BY:			
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TITLE: TRAFFIC SIGNAL MODIFICATION PLAN, SERRAMONTE BLVD./ HILLSIDE BLVD. HILLSIDE BOULEVARD IMPROVEMENT PROJECT TOWN OF COLMA CALIFORNIA			
SHEET 37		DATE : 07/17/14	
OF 48		JOB# : 10.350	
CONSTRUCTION SET		07/17/14	

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POLE AND EQUIPMENT SCHEDULE

POLE LOCATION	STANDARD			VEHICLE SIGNAL		PEDESTRIAN SIGNAL			ILLUMINATED STREET NAME SIGN WORDING	NOTES	LUMINAIRE	STATION	OFFSET
	TYPE	SIG. M.A.	LUM. ARM	MOUNTING	PHASE	MOUNTING	PHASE	PPB					
(A)	26-4-70 (EXISTING)	45'	12'	MAS MAS SV-1-T	2 5 2	SP-1-T	2P	8P	Serramonte Blvd. (EXISTING)	INSTALL VIDEO CAMERA RETROFIT LUMINAIRE INSTALL OPTICOM DETECTOR	108W LED		
(B)	1-B (EXISTING)			TV-2-T	4,8	SP-1-T	8P	2P		R13A (CA) (NO RIGHT TURN ON RED) REMOVE (E) SIGN			
(C)	18-2-70 (EXISTING)	30'		MAS SV-1-T	4 4	SP-1-T	4P	4P	Hillside Blvd. (EXISTING)	INSTALL OPTICOM DETECTOR			
(D)	1-B (EXISTING)			TV-2-T	1,2	SP-1-T	2P	4P					
(E)	19-4-100 (NEW)	30'	15'	MAS MAS SV-1-T	1 6 6	SP-1-T	6P	4P	Serramonte Blvd.	R3-4 (NO U-TURN) ON SMA INSTALL VIDEO CAMERA INSTALL OPTICOM DETECTOR	108W LED		
(F)	1-B (NEW)			TV-1-T	4	SP-1-T	4P	6P					
(G)	1-B (EXISTING)			TV-1-T	8					(E) R3-4 (NO U-TURN)			
(H)	1B (NEW)			SV-1-T	8	SP-1-T	8P	6P		R13A (CA) (NO RIGHT TURN ON RED)			
(I)	15 (EXISTING)			SV-2-T	5,6	SP-1-T	6P	8P		REMOVE Ø8 SIGNAL RETROFIT LUMINAIRE REMOVE (E) SIGN	108W LED		
(J)	15 (EXISTING)									RETROFIT LUMINAIRE	108W LED		

GENERAL NOTES

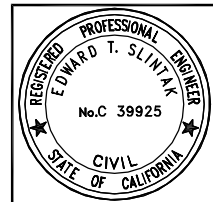
- ALL SIGNAL WORK SHALL BE DONE IN CONFORMANCE WITH THE LATEST EDITION OF TOWN OF COLMA STANDARD PLANS AND SPECIFICATIONS, CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) STANDARD SPECIFICATIONS, STANDARD PLANS (DATED MAY 06), SPECIAL PROVISIONS.
- STANDARDS, MAST ARMS, SIGNAL HEADS AND DETECTORS SHALL BE APPROVED BY THE ENGINEER.
- SIGNAL PLANS ARE ACCURATE FOR EQUIPMENT AND ELECTRICAL WORK ONLY.
- EXISTING CONDUITS, PULL BOXES, DETECTOR LOOPS SHALL BE REMOVED OR ABANDONED AS INDICATED OR DESIGNATED BY ENGINEER.
- PRIOR TO PERFORMING ANY EXCAVATION, CONTRACTOR SHALL CALL U.S.A. (UNDERGROUND SERVICE ALERT) AT 800-642-2444, NOT LESS THEN 48 HOURS BEFORE ALL PLANNED EXCAVATION OPERATIONS.
- CONTRACTOR SHALL OBTAIN ENCROACHMENT PERMIT FROM TOWN OF COLMA FOR ALL WORK WITHIN THE RIGHT OF WAY.
- ALL SIGNAL WORK SHALL BE COORDINATED WITH THE TOWN ENGINEER OF THE TOWN OF COLMA.
- LANE CLOSURES ALLOWED ONLY BETWEEN 9:00 AM-3:00 PM MONDAY THROUGH FRIDAY. TRAFFIC CONTROL PLAN MUST FIRST BE APPROVED BY THE ENGINEER BEFORE ANY LANES ARE CLOSED OR DIVERTED.

CONDUCTOR AND CONDUIT SCHEDULE

AWG OR CABLE	CONDUCTOR RUN	1	2	3	4	5	6	7	8	9	10	11	12	13						
		△	△	△	△	△	△	△	△	△	△	△	△	△	△					
#14	Ø 1	3	3	3																
	Ø 2	3	3								3	3	3							
	Ø 4	3	3	3	3						3	3								
	Ø 5	3	3	3	3	3	3				3	3	3							
	Ø 6	3	3	3	3	3	3													
	Ø 8	3	3	3	3	3	3			3	3	3								
	Ø 2P	2	2								2	2	2							
	Ø 4P	2	2	2	2						2									
	Ø 6P	2	2	2	2	2	2													
	Ø 8P	2	2	2	2	2	2			2	2	2								
	Ø 0LA	2	2	2	2	2	2			2										
	Ø 2PPB	1	1								1	1								
	Ø 4PPB	1	1	1																
	Ø 6PPB	1	1	1	1	1	1		1											
	Ø 8PPB	1	1	1	1	1	1				1	1	1							
	Ped Neutral	2	2	1	1	1	1			1	1	1	1							
	PEU	3	3																	
Spares	6	6	3	3	3	3			3	3	3	3								
Total # 14		43	43	30	26	21	21	0	12	25	23	14	0	0						
#8	STREET LIGHTS	2	2	2			2			2	2	2								
	Intern. Illuminated Street Name Sign (120V) (IISNS)	2	2	2							2	2	2							
	Signal Neutral	2	2	1	1	1	1	1	1	1	1	1	1							
	Total # 8		6	6	5	1	1	3	1	1	5	5	5							
Opticom Cable (3#20)	EVA	1	1	1																
	EVB	1	1								1	1	1							
	EVC	1	1								1									
	TOTAL CABLE		3	3	1						2	1	1							
DETECTOR LOOP CABLE	418L	1	1	1	1														1	
	418U	1	1	1	1														1	
	8J8U	1	1								1	1								
	8J7L	1	1								1	1								
	TOTAL DETECTOR LOOP CABLE		4	4	2	2					2	2							2	
VIDEO CAMERA CABLE	Ø 1 + Ø 6	1	1	1																
	Ø 2 + Ø 5	1	1								1	1	1							
	TOTAL VIDEO CAMERA CABLE		2	2	1						1	1	1							
CONDUIT SIZE		2-3"	2-3"	2-1/2"	3"	3"	3"	2"	1-1/2"	1-1/2"	1-1/2"	1-1/2"	2"	2"						
CONDUIT STATUS		E	E	E	E	E	E	E	N	E	E	E	E	E						

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Plotted on: 07/17/14 @ 03:49:51 PM



DESIGNED BY: ED
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Phone (650)522-2500 Fax (650)522-2599

PREPARED FOR: **TOWN OF COLMA**
1198 EL CAMINO REAL
COLMA, CA. 94014

TITLE: **TRAFFIC SIGNAL MODIFICATION PLAN, SERRAMONTE BLVD./ HILLSIDE BLVD. HILLSIDE BOULEVARD IMPROVEMENT PROJECT TOWN OF COLMA CALIFORNIA**

SHEET 38
of
48

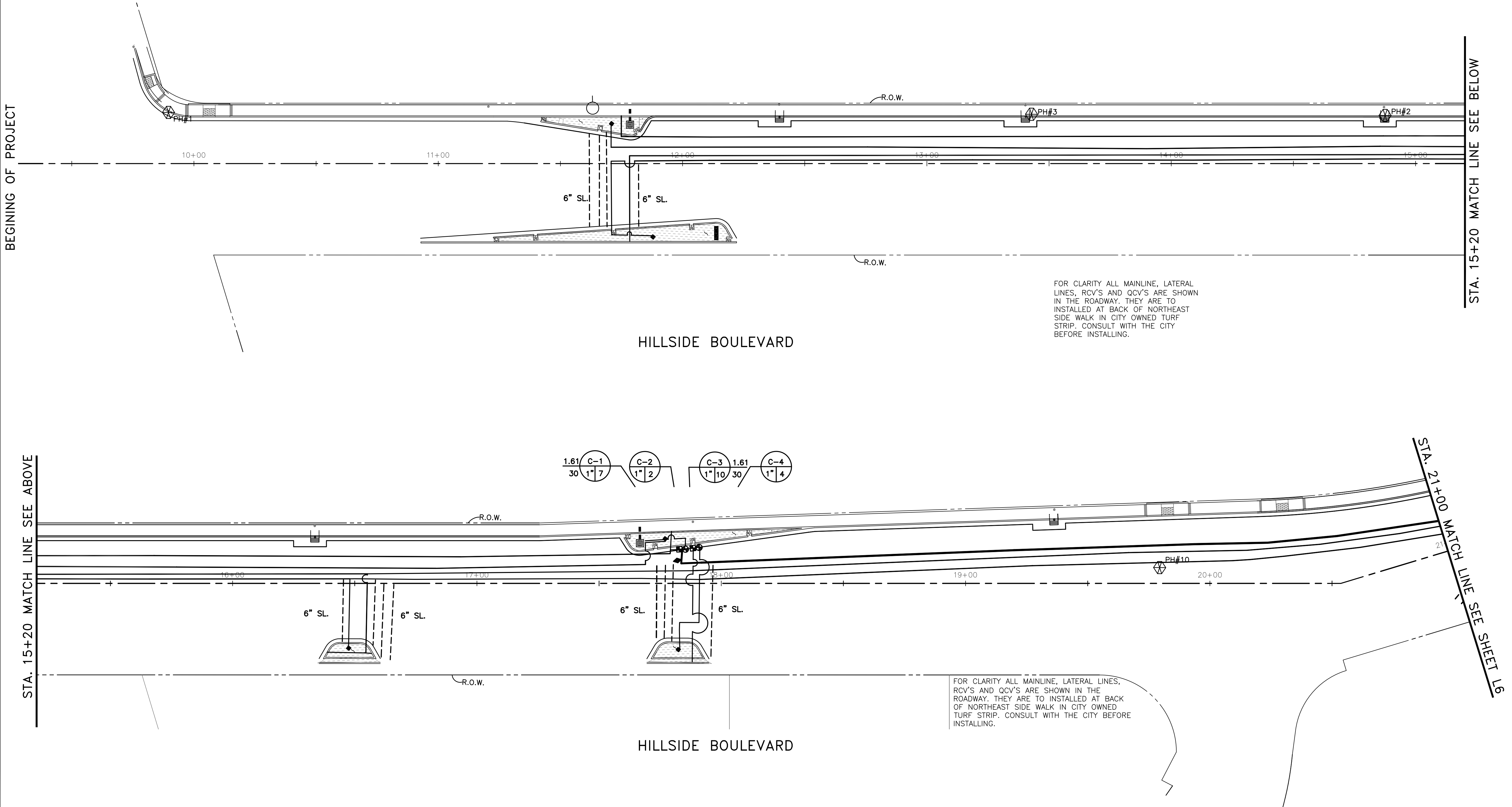
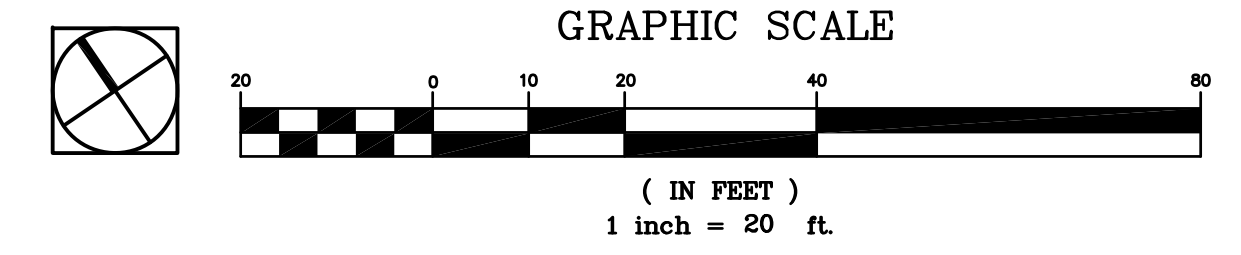
CONSTRUCTION SET
07/17/14

DATE: 07/17/14
JOB#: 10.350

REVISIONS
NO.

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BEGINNING OF PROJECT



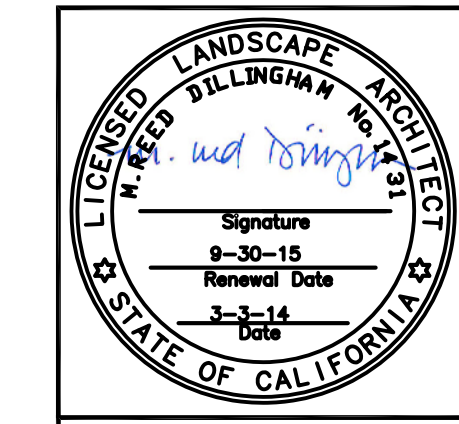
STA. 15+20 MATCH LINE SEE ABOVE

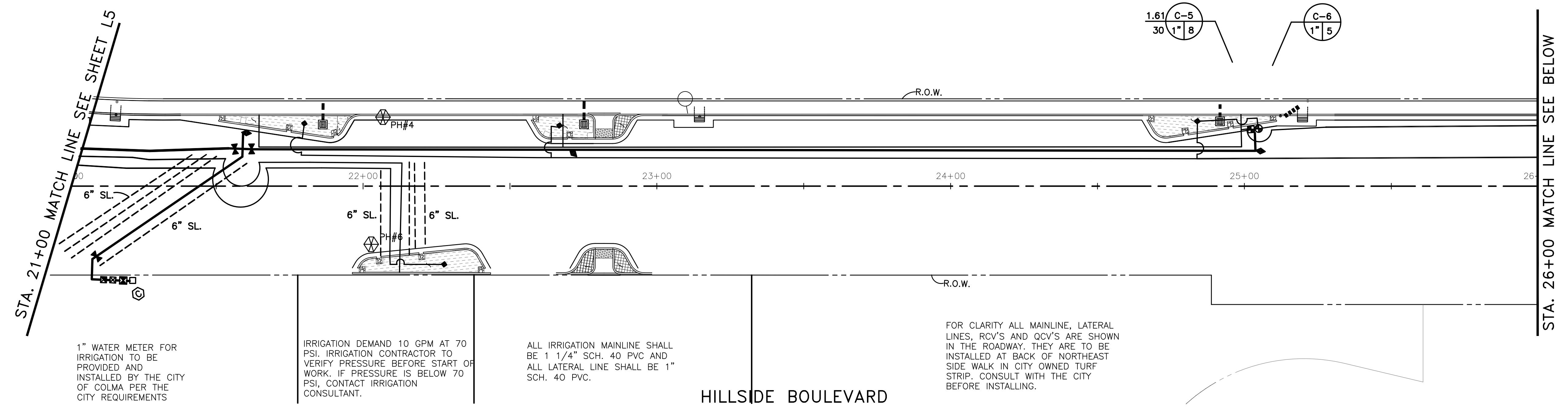
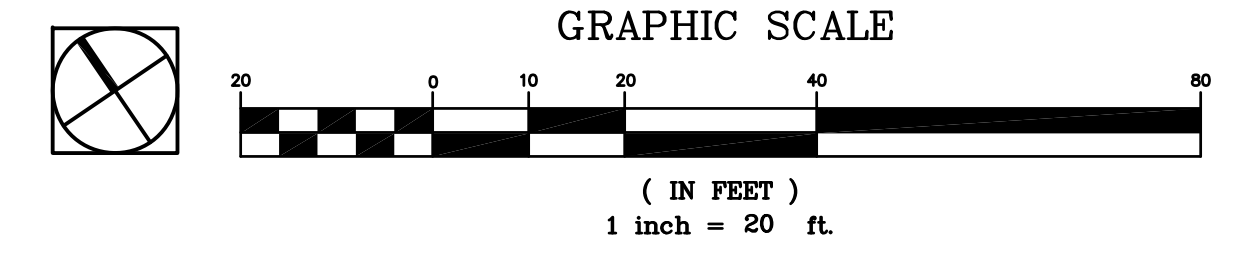
STA. 15+20 MATCH LINE SEE BELOW

STA. 21+00 MATCH LINE SEE SHEET L6

DESIGNED BY: ST	NO.	DATE
DRAWN BY: ST/OC/EB/SH		
APPROVED BY:		
PREPARED BY: Dillingham Associates 2927 Newbury Street, Berkeley, CA 94703 Phone (510)548-4700 Fax (510)548-0265		
PREPARED FOR: TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA. 94014		
TITLE: IRRIGATION PLAN, STA. 57+70 TO STA. 69+00 HILLSIDE BOULEVARD BEAUTIFICATION PROJECT TOWN OF COLMA		
SHEET L5 OF 47		
DATE: 3/04/14		
JOB#: 10.350		

BROOKWATER
IRRIGATION CONSULTANTS
TWO CROW CANYON COURT, SUITE 100
SAN RAMON, CALIFORNIA 94583
TEL 925.853.0417 FAX 925.853.0357
E-MAIL ANN@BROOKWATER.COM





STATIC PRESSURE HAS BEEN STATED TO BE 117 PSI, SET PRV DOWNSTREAM OF THE BACKFLOW TO 70 PSI

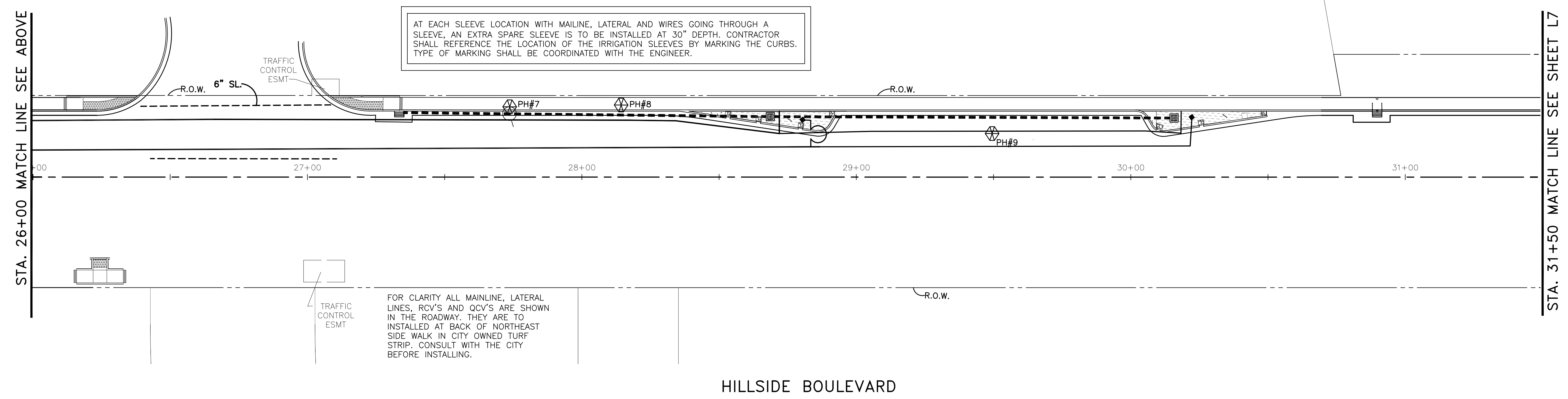
1" WATER METER FOR IRRIGATION TO BE PROVIDED AND INSTALLED BY THE CITY OF COLMA PER THE CITY REQUIREMENTS

IRRIGATION DEMAND 10 GPM AT 70 PSI. IRRIGATION CONTRACTOR TO VERIFY PRESSURE BEFORE START OF WORK. IF PRESSURE IS BELOW 70 PSI, CONTACT IRRIGATION CONSULTANT.

ALL IRRIGATION MAINLINE SHALL BE 1 1/4" SCH. 40 PVC AND ALL LATERAL LINE SHALL BE 1" SCH. 40 PVC.

FOR CLARITY ALL MAINLINE, LATERAL LINES, RCV'S AND QCV'S ARE SHOWN IN THE ROADWAY. THEY ARE TO BE INSTALLED AT BACK OF NORTHEAST SIDE WALK IN CITY OWNED TURF STRIP. CONSULT WITH THE CITY BEFORE INSTALLING.

HILLSIDE BOULEVARD



AT EACH SLEEVE LOCATION WITH MAILINE, LATERAL AND WIRES GOING THROUGH A SLEEVE, AN EXTRA SPARE SLEEVE IS TO BE INSTALLED AT 30" DEPTH. CONTRACTOR SHALL REFERENCE THE LOCATION OF THE IRRIGATION SLEEVES BY MARKING THE CURBS. TYPE OF MARKING SHALL BE COORDINATED WITH THE ENGINEER.

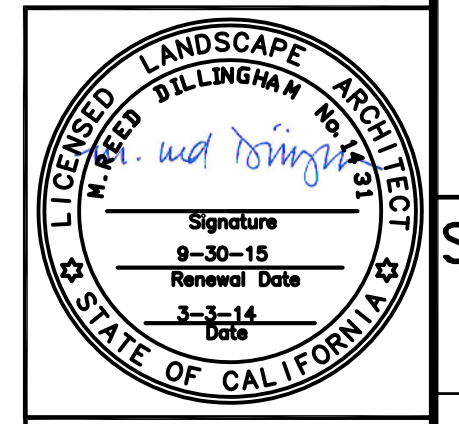
FOR CLARITY ALL MAINLINE, LATERAL LINES, RCV'S AND QCV'S ARE SHOWN IN THE ROADWAY. THEY ARE TO BE INSTALLED AT BACK OF NORTHEAST SIDE WALK IN CITY OWNED TURF STRIP. CONSULT WITH THE CITY BEFORE INSTALLING.

HILLSIDE BOULEVARD

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DRAWN BY: ST/OC/EB/SH			
APPROVED BY:			
PREPARED BY: Dillingham Associates 2927 Newbury Street, Berkeley, CA 94703 Phone (510)548-4700 Fax (510)548-0265			
PREPARED FOR: TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA. 94014			
TITLE: IRRIGATION PLAN, STA. 21+00 TO STA. 31+50 HILLSIDE BOULEVARD BEAUTIFICATION PROJECT TOWN OF COLMA			
SHEET L6 OF 47			
DATE: 3/04/14			
JOB#: 10.350			



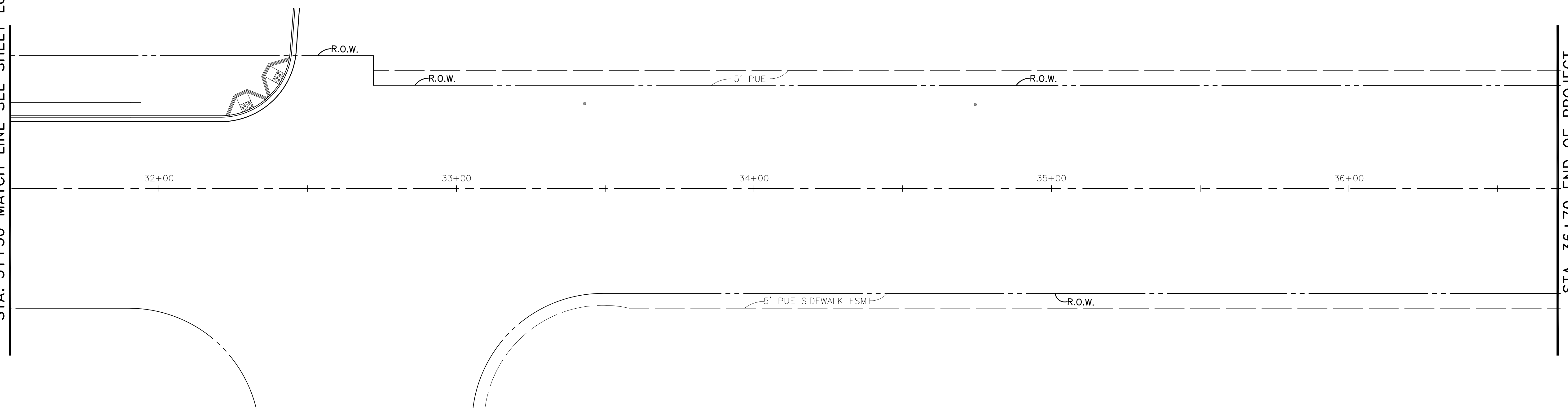
BROOKWATER
IRRIGATION CONSULTANTS
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SAN RAMON, CALIFORNIA 94583
TEL 925.855.0417 FAX 925.855.0357
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BID SET
3/04/14

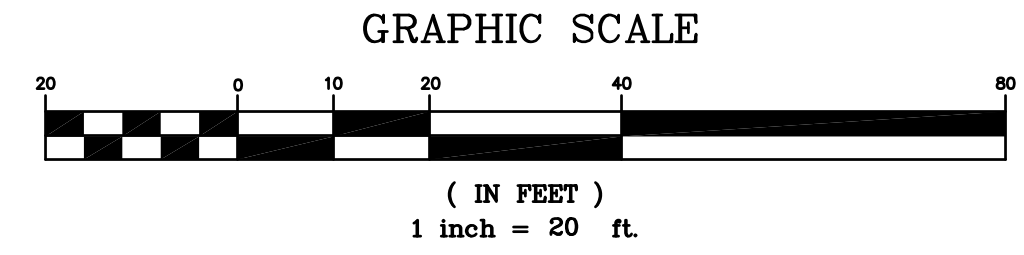
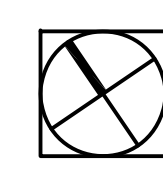
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STA. 31+50 MATCH LINE SEE SHEET L6

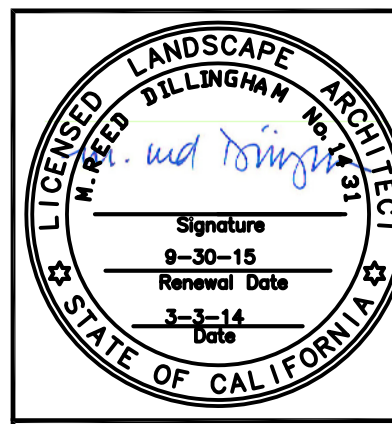


HILLSIDE BOULEVARD



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APPROVED:			
PREPARED BY: Dillingham Associates 2927 Newbury Street, Berkeley, CA 94703 Phone (510)548-4700 Fax (510)548-0265			
PREPARED FOR: TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA. 94014			
TITLE: IRRIGATION PLAN STA.31+50 TO STA. 36+70 HILLSIDE BOULEVARD BEAUTIFICATION PROJECT TOWN OF COLMA CALIFORNIA			
	SHEET L7 OF 47		
		DATE : 3/04/14	
		JOB# : 10.350	

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BID SET
3/04/14

IRRIGATION NOTES

- THE CONTRACTOR SHALL REVIEW RELATED DRAWINGS AND SHALL ENSURE COORDINATION WITH ALL APPLICABLE TRADES PRIOR TO SUBMITTING BID.
- THE IRRIGATION SYSTEM SHALL BE INSTALLED IN CONFORMANCE WITH ALL APPLICABLE STATE AND LOCAL CODES AND ORDINANCES BY LICENSED CONTRACTORS AND EXPERIENCED WORKMEN. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND FEES RELATING TO HIS WORK.
- THIS DESIGN IS DIAGRAMMATIC. ALL PIPING, VALVES, ETC. SHOWN WITHIN PAVED AREAS IS FOR DESIGN CLARIFICATION ONLY AND SHALL BE INSTALLED IN PLANTING AREAS WHERE POSSIBLE. AVOID ANY CONFLICTS BETWEEN THE SPRINKLER SYSTEM, PLANTING AND ARCHITECTURAL FEATURES. PARALLEL PIPES MAY BE INSTALLED IN COMMON TRENCH. PIPES ARE NOT TO BE INSTALLED DIRECTLY ABOVE ONE ANOTHER.
- DO NOT WILLFULLY INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS, GRADE DIFFERENCES OR DIFFERENCES IN THE AREA DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE ENGINEERING. SUCH OBSTRUCTIONS OR DIFFERENCES SHOULD BE BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE. IN THE EVENT THAT THIS NOTIFICATION IS NOT PERFORMED, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY.
- IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO FAMILIARIZE HIMSELF WITH ALL GRADE DIFFERENCES, LOCATION OF WALLS, RETAINING WALLS, ETC. HE SHALL COORDINATE HIS WORK WITH THE GENERAL CONTRACTOR AND OTHER SUBCONTRACTORS FOR THE LOCATION AND THE INSTALLATION OF PIPE SLEEVES THROUGH WALLS, UNDER ROADWAYS, PAVING, STRUCTURES, ETC. CONTRACTOR TO VERIFY THE LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES PRIOR TO THE EXCAVATION OF TRENCHES. CONTRACTOR IS TO REPAIR ANY DAMAGE CAUSED BY HIS WORK AT NO ADDITIONAL COST TO THE OWNER.
- DUE TO THE SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, SLEEVES, ETC., WHICH MAY BE REQUIRED. THE CONTRACTOR SHALL CAREFULLY INVESTIGATE THE STRUCTURAL AND FINISHED CONDITIONS AFFECTING ALL OF HIS WORK AND PLAN HIS WORK ACCORDINGLY, FURNISHING SUCH FITTINGS, ETC., AS MAY BE REQUIRED TO MEET SUCH CONDITIONS. DRAWINGS ARE GENERALLY DIAGRAMMATIC AND INDICATIVE OF THE WORK TO BE INSTALLED. THE WORK SHALL BE INSTALLED IN SUCH A MANNER AS TO AVOID CONFLICTS BETWEEN IRRIGATION SYSTEMS, PLANTING, AND ARCHITECTURAL FEATURES.
- ELECTRICAL CONTRACTOR TO SUPPLY 120 VAC (2.5 AMP) SERVICE TO CONTROLLER LOCATION. IRRIGATION CONTRACTOR TO MAKE FINAL CONNECTION FROM ELECTRICAL STUB-OUT TO CONTROLLER. IRRIGATION CONTROL WIRE SHALL BE #14, U.L. APPROVED FOR DIRECT BURIAL. COMMON WIRE SHALL BE #12 U.L. APPROVED AND SHALL BE WHITE IN COLOR. WIRING TO INDIVIDUAL REMOTE CONTROL VALVES SHALL BE COLOR OTHER THAN WHITE.
- EACH CONTROLLER SHALL HAVE ITS OWN INDEPENDENT GROUND WIRE.
- REMOTE CONTROL VALVES SHALL BE WIRED TO CONTROLLER IN SEQUENCE AS SHOWN ON PLANS. RUN WIRE FROM EACH RCV TO THE CONTROLLER. SPLICING WIRES TOGETHER OUTSIDE OF VALVE BOXES WILL NOT BE PERMITTED.
- SPLICING OF 24-VOLT WIRES WILL NOT BE PERMITTED EXCEPT IN VALVE BOXES. LEAVE A 36" COIL OF EXCESS WIRE AT EACH SPLICE AND 100 FEET ON CENTER ALONG WIRE RUN. TAPE WIRE IN BUNDLES 10 FEET ON CENTER. NO TAPING PERMITTED INSIDE SLEEVES.
- INSTALL THREE (3) SPARE CONTROL WIRES ALONG THE ENTIRE MAIN LINE. SPARE WIRES SHALL BE THE SAME COLOR (ONE WITH A WHITE STRIPE) AND OF A DIFFERENT COLOR THAN OTHER CONTROL WIRES. LOOP 36" EXCESS WIRE INTO EACH SINGLE VALVE BOX AND INTO ONE VALVE BOX IN EACH GROUP OF VALVES.
- VALVE LOCATIONS SHOWN ARE DIAGRAMMATIC. INSTALL IN GROUND COVER/SHRUB AREAS.
- INSTALL VALVE BOXES MINIMUM 12" FROM AND PERPENDICULAR TO WALK, CURB, LAWN, BUILDING OR LANDSCAPE FEATURE. AT MULTIPLE VALVE BOX GROUPS, EACH BOX SHALL BE AN EQUAL DISTANCE FROM THE WALK, CURB, LAWN, ETC. AND EACH BOX SHALL BE MINIMUM 12" APART. SHORT SIDE OF VALVE BOXES SHALL BE PARALLEL TO WALK, CURB, LAWN, ETC.
- LOCATE QUICK COUPLING VALVE 12" FROM HARDSCAPE AREA.
- IN LOCATIONS WHERE LOW HEAD DRAINAGE WILL CAUSE EROSION AND EXCESS WATER, INSTALL KING BROS. CV SERIES CHECK VALVES IN LATERAL LINES FOR EVERY 10' OF ELEVATION CHANGE.
- THE IRRIGATION CONTRACTOR SHALL FLUSH AND ADJUST ALL IRRIGATION SUBSURFACE FOR OPTIMUM PERFORMANCE. ADJUST THE FLOW CONTROL AT EACH VALVE TO OBTAIN THE OPTIMUM OPERATING PRESSURE FOR EACH SYSTEM. ALL MAIN LINES SHALL BE FLUSHED PRIOR TO THE INSTALLATION OF IRRIGATION HEADS. AT 30 DAYS AFTER INSTALLATION EACH SYSTEM SHALL BE FLUSHED TO ELIMINATE GLUE AND DIRT PARTICLES FROM THE LINES.
- NOTIFY ARCHITECT OF ANY ASPECTS OF LAYOUT THAT WILL PROVIDE INCOMPLETE OR INSUFFICIENT WATER COVERAGE OF PLANT MATERIAL AND DO NOT PROCEED UNTIL HIS INSTRUCTIONS ARE OBTAINED.
- LOCATE BUBBLERS ON UPHILL SIDE OF TREES. TREE BUBBLERS ARE FOR ESTABLISHMENT AND DROUGHT CONDITIONS. THEY ARE TO BE TURNED OFF AFTER TREES ARE ESTABLISHED AND TURNED ON DURING DROUGHT CONDITIONS.
- IN ADDITION TO THE SLEEVES AND CONDUITS SHOWN ON THE DRAWINGS, THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE INSTALLATION OF SLEEVES AND CONDUITS OF SUFFICIENT SIZE UNDER ALL PAVED AREAS.
- ALL EXCAVATIONS ARE TO BE FILLED WITH COMPACTED BACKFILL. CONTRACTOR TO REPAIR ALL SETTLED TRENCHES PROMPTLY, FOR A PERIOD OF 1 YEAR AFTER COMPLETION OF WORK. ADDITIONALLY, CONTRACTOR SHALL WARRANT THAT THE IRRIGATION SYSTEM WILL BE FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF 1 YEAR AFTER FINAL ACCEPTANCE OF WORK.
- THE SPRINKLER SYSTEM DESIGN IS BASED ON THE MINIMUM OPERATING PRESSURE SHOWN ON THE IRRIGATION DRAWINGS. THE IRRIGATION CONTRACTOR SHALL VERIFY WATER PRESSURE PRIOR TO CONSTRUCTION. REPORT ANY DIFFERENCE BETWEEN THE WATER PRESSURE INDICATED ON THE DRAWINGS AND THE ACTUAL PRESSURE READING AT THE IRRIGATION POINT OF CONNECTION TO THE OWNER'S AUTHORIZED REPRESENTATIVE.
- IRRIGATION DEMAND: 13 GPM AT 64 PSI.
- OPERATE IRRIGATION CONTROLLER(S) BETWEEN THE HOURS OF 10:00 PM AND 7:00 AM.
- IRRIGATION CONTRACTOR TO NOTIFY ALL LOCAL JURISDICTIONS FOR INSPECTION AND TESTING OF INSTALLED BACKFLOW PREVENTION DEVICE.
- THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT AT 811 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION

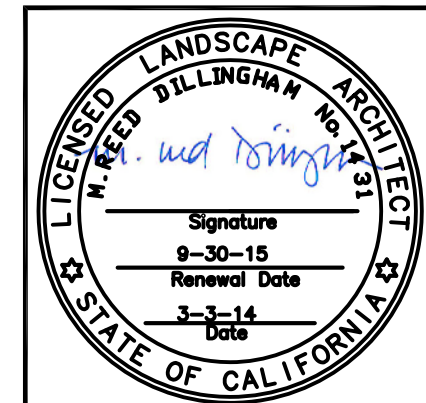
DRIPLINE NOTES:

- PLANS ARE DIAGRAMMATIC. INSTALL DRIPLINE AND COMPONENTS PER MANUFACTURERS INSTRUCTIONS AND INSTALLATION DETAILS.
- INSTALL DRIPLINE A MAXIMUM OF 18" APART WITH EMITTERS TRIANGULARLY SPACED. INSTALL 2" FROM PERIMETER OF PLANTED AREA. THERE SHOULD BE A MINIMUM OF TWO DRIPLINE LATERALS IN EACH PLANTED AREA. DRIPLINE SHALL BE INSTALLED AT A CONSISTANT DEPTH THROUGHOUT THE CIRCUIT.
- PLACE AIR/VACUUM RELIEF VALVES AT THE HIGHEST POINTS OF EACH ZONE AND JUST BELOW CHECK VALVES ON SLOPES. INSTALL ONE AIR/VACUUM RELIEF VALVE FOR EVERY 390' OF TOTAL DRIPLINE PER ZONE.
- PLACE FLUSH VALVES AT THE HYDRAULIC CENTER OF THE EXHAUST HEADER OR AT LOW POINT ON SLOPES.
- INSTALL IN-LINE CHECK VALVES ON SLOPES GREATER THAN 3% AND WHERE LOW-LINE DRAINAGE COULD CAUSE WET AREAS IN THE LOWEST AREAS OF AN IRRIGATION ZONE. CHECK VALVES SHALL BE PLACED EVERY 4-5 FEET BETWEEN DRIPLINE LATERALS AND BEFORE THE FLUSH VALVE.
- ON ALL SLOPES AND MOUNDS, PLACE THE DRIPLINE LATERALS PARALLEL TO THE SLOPE CONTOUR WHERE POSSIBLE. INCREASE THE LATERAL SPACING BY 25% ON THE LOWER ONE-THIRD OF THE SLOPE TO AVOID EXCESS DRAINAGE.
- PVC SUPPLY AND FLUSH LINE SIZING GUIDE (ALL SUPPLY AND FLUSH LINES SHALL BE THE SAME SIZE FOR THE ENTIRE ZONE):
 - 0-8 GPM - 3/4"
 - 8.1-15 GPM - 1"
 - 15.1-25 GPM - 1 1/4"
- FITTINGS SHALL BE OF THE SAME MANUFACTURER AS DRIPLINE.
- THOROUGHLY FLUSH EACH INSTALLATION SEGMENT TO ENSURE NO DEBRIS CONTAMINATION OCCURS.
- IN TURF OR NOW-MOW GRASS AREAS, A TEMPORARY OVERHEAD SPRAY SYSTEM WILL NEED TO BE PROVIDED UNTIL THE TURF SEED OR SOD IS ESTABLISHED. OVERHEAD WATERING CAN BE DISCONTINUED WHEN EDGES OF THE SOD CANNOT BE PULLED UP. RUN THE DRIPLINE

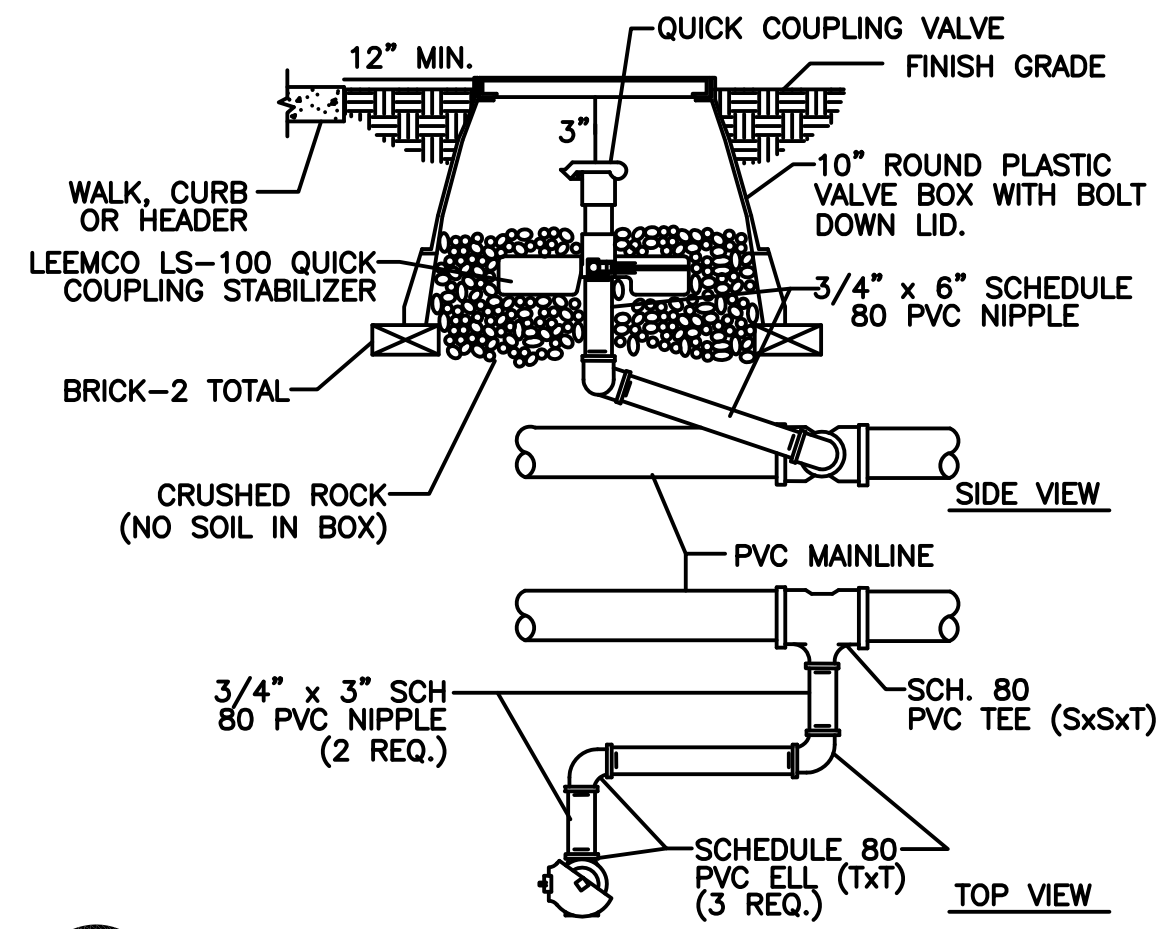
IRRIGATION LEGEND

SYMBOL	MODEL NUMBER	DESCRIPTION	PSI	GPM	MAX. RADIUS	MAX. SPACING
■	1402	RAIN BIRD BUBBLER FOR TREES-2 PER TREE	30	1		GPM PER TREE
---	TL050MFV-1 (NOT SHOWN)	NETAFIM AUTOMATIC FLUSH VALVE				
■	XCZ-LF-100-PRF/WLT-1"-T PRM30	RAIN BIRD REMOTE CONTROL VALVE LOW FLOW CONTROL ZONE KIT WITH PR FILTER (DISCARD THE COMPRESSION FITTING), KBI BALL VALVE				
⊕	100-PEB-PRS-DIAL/WLT-1"-T	RAIN BIRD REMOTE CONTROL VALVE WITH PRESSURE REGULATION/KBI BALL VALVE				
■	600L-1"	WILKINS PRESSURE REGULATOR				
■	3300-100	SUPERIOR MASTER VALVE-NORMALLY OPEN-INCLUDED WITH CONTROLLER				
⊗	IFS100C-1"	CREATIVE SENSOR TECHNOLOGY FLOW SENSOR-INCLUDED WITH CONTROLLER				
⊗	T-113JRR	NIBCO GATE VALVE (LINE SIZE)				
◆	33DNP	RAIN BIRD QUICK COUPLING VALVE				
■	825YA-1"-SBBC-15AL	FEBCO REDUCED PRESSURE BACKFLOW PREVENTOR-MOUNT IN STRONG BOX ENCLOSURE				
⊕	ICA6-RB3-8/ETMA-LX/1FS100C/3300-100/SP/MP16	RAIN BIRD CONTROLLER WITH RAIN BIRD ET MANAGER CARTRIDGE CONTACT IMPERIAL TECHNICAL SERVICES AT 209-404-1746 FOR PRE CONSTRUCTION FOR MEETING AND FOR POST INSTALLATION CERTIFICATION. MASTER VALVE SHALL BE PROGRAMMED SO THAT MASTER VALVE WILL BE CLOSED DURING NON-OPERATION OF THE IRRIGATION SYSTEM. MAINLINE WILL NOT BE UNDER CONSTANT PRESSURE DURING NON-OPERATION.				
---	LIMR	RAIN BIRD LANDSCAPE IRRIGATION AND MAINTENANCE REMOTE				
⊕	WR2-RS	RAIN BIRD WIRELESS RAIN SENSOR				
⊕	C-1	CONTROLLER AND STATION NUMBER				
⊕	1" 12	APPROXIMATE GALLONS PER MINUTE				
⊕	1" 12	REMOTE CONTROL VALVE SIZE				
⊕	C-1	CONTROLLER AND STATION NUMBER				
⊕	1" 12	PRECIPITATION RATE				
⊕	.71	APPROXIMATE PRESSURE				
⊕	30	APPROXIMATE GALLONS PER MINUTE				
⊕	1" 12	REMOTE CONTROL VALVE SIZE				
---		MAIN LINE: 1 1/2" 1120-SCHEDULE 40 PVC SOLVENT WELD PIPE WITH SCHEDULE 40 PVC SOLVENT WELD FITTINGS. 18" COVER.				
---		LATERAL LINE: 1120-SCHEDULE 40 PVC SOLVENT WELD PIPE WITH SCHEDULE 40 PVC SOLVENT WELD FITTINGS. 12" COVER.				
---		DRIPLINE: NETAFIM TECHLINE TLDCV-6-12-250 FOR SUBSURFACE DRIPLINE, 12" EMITTER SPACING X 12" ROW SPACING. .6 GPH 30 PSI. FOR TECH FILTER THE MODEL NUMBER IS TF-10612-300CV. THIS MODEL NUMBER COMES WITH 300' OF TECHLINE. USE NETAFIM TECHLINE CV DRIPPERLINE FITTINGS. 2" COVER.				
---		SLEEVE (SL): 1120-200 PSI PVC PLASTIC PIPE. 30" COVER.				

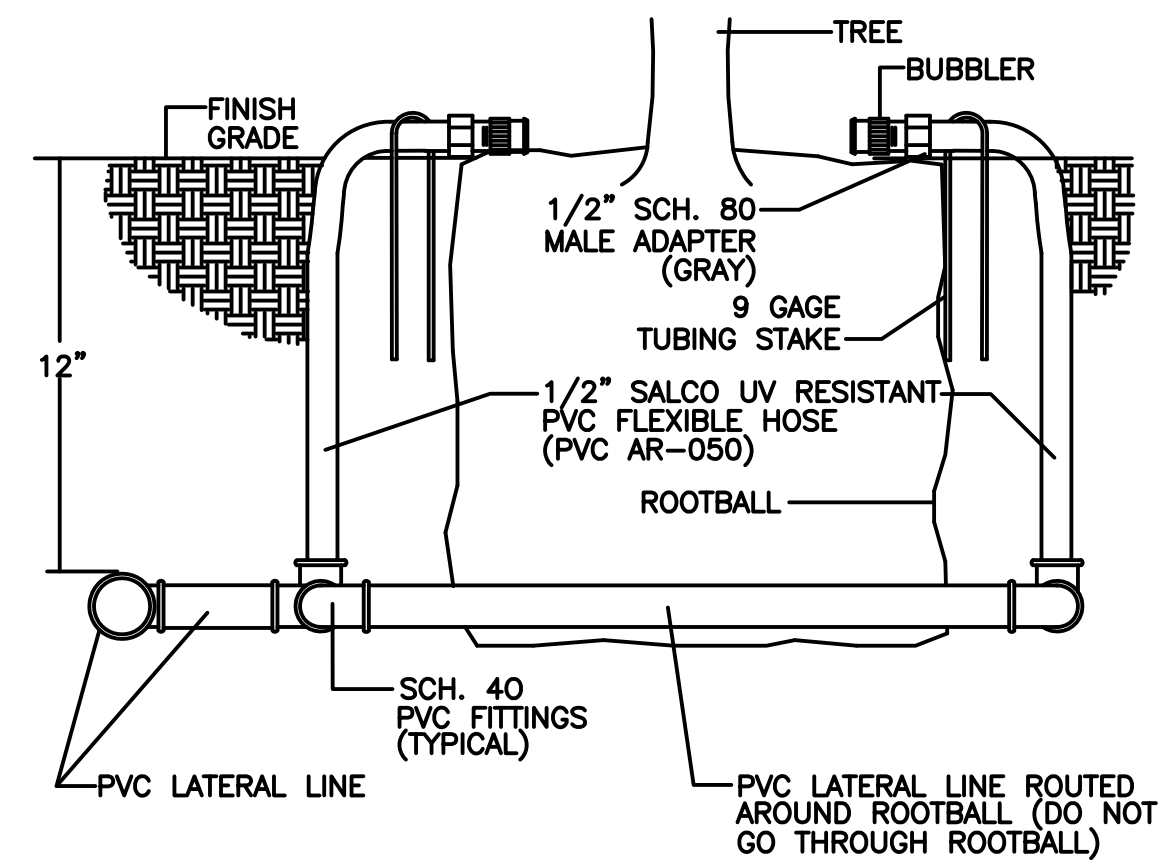
DESIGNED BY: ST	DATE
DRAWN BY: ST/OC/EE/SH	REVISIONS
APPROVED BY:	NO.
PREPARED BY: Dillingham Associates 2927 Newbury Street, Berkeley, CA 94703 Phone (510)548-4700 Fax (510)548-0265	
PREPARED FOR: TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA. 94014	
TITLE: IRRIGATION LEGEND AND NOTES HILLSIDE BOULEVARD BEAUTIFICATION PROJECT TOWN OF COLMA	
SHEET L8 OF 47	
BID SET 3/04/14	DATE : 3/04/14 JOB# : 10.350



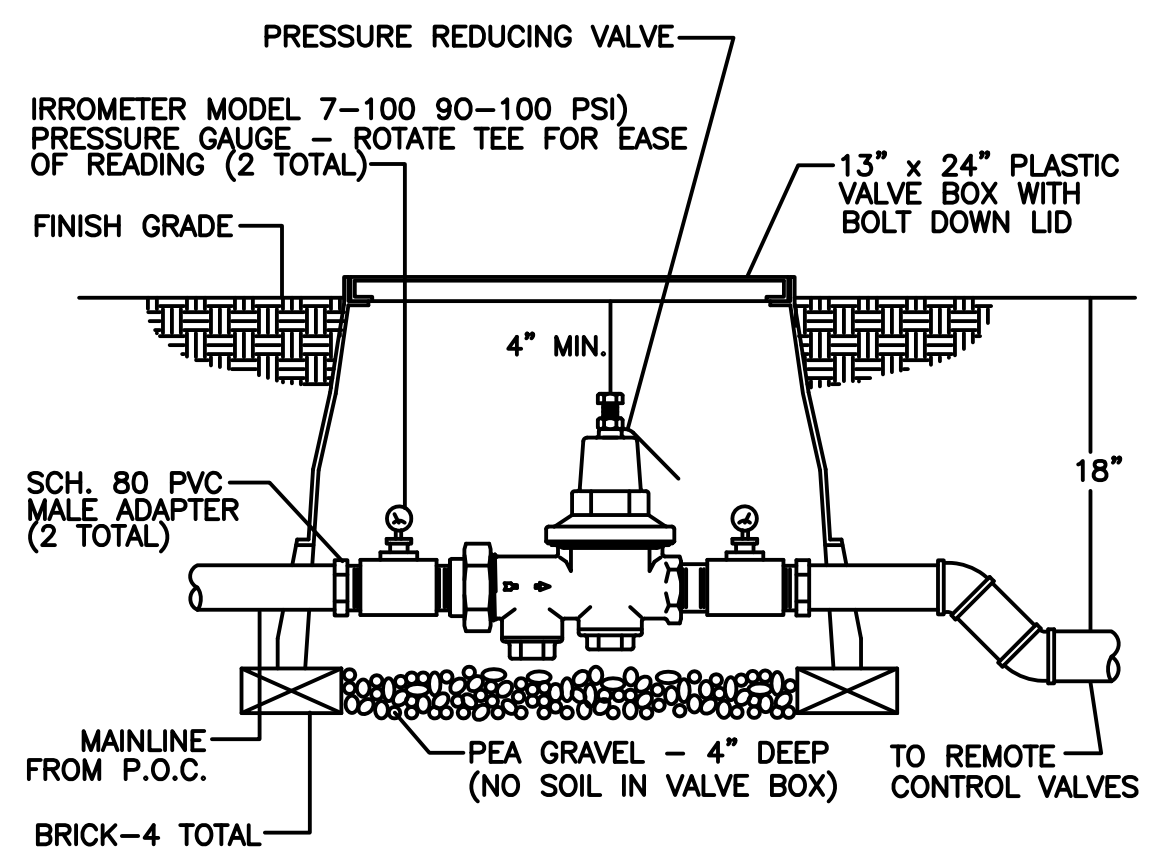
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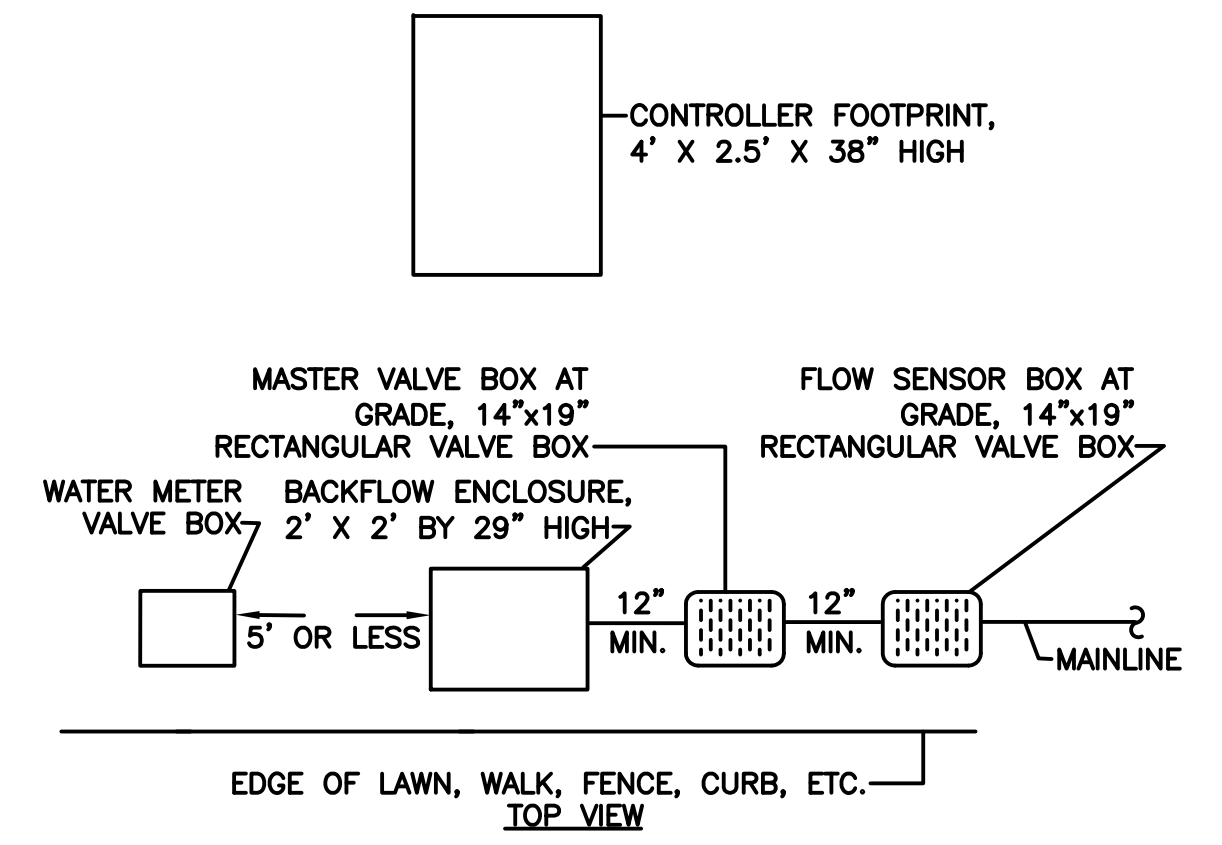
12 QUICK COUPLER IN BOX DETAIL
NOT TO SCALE



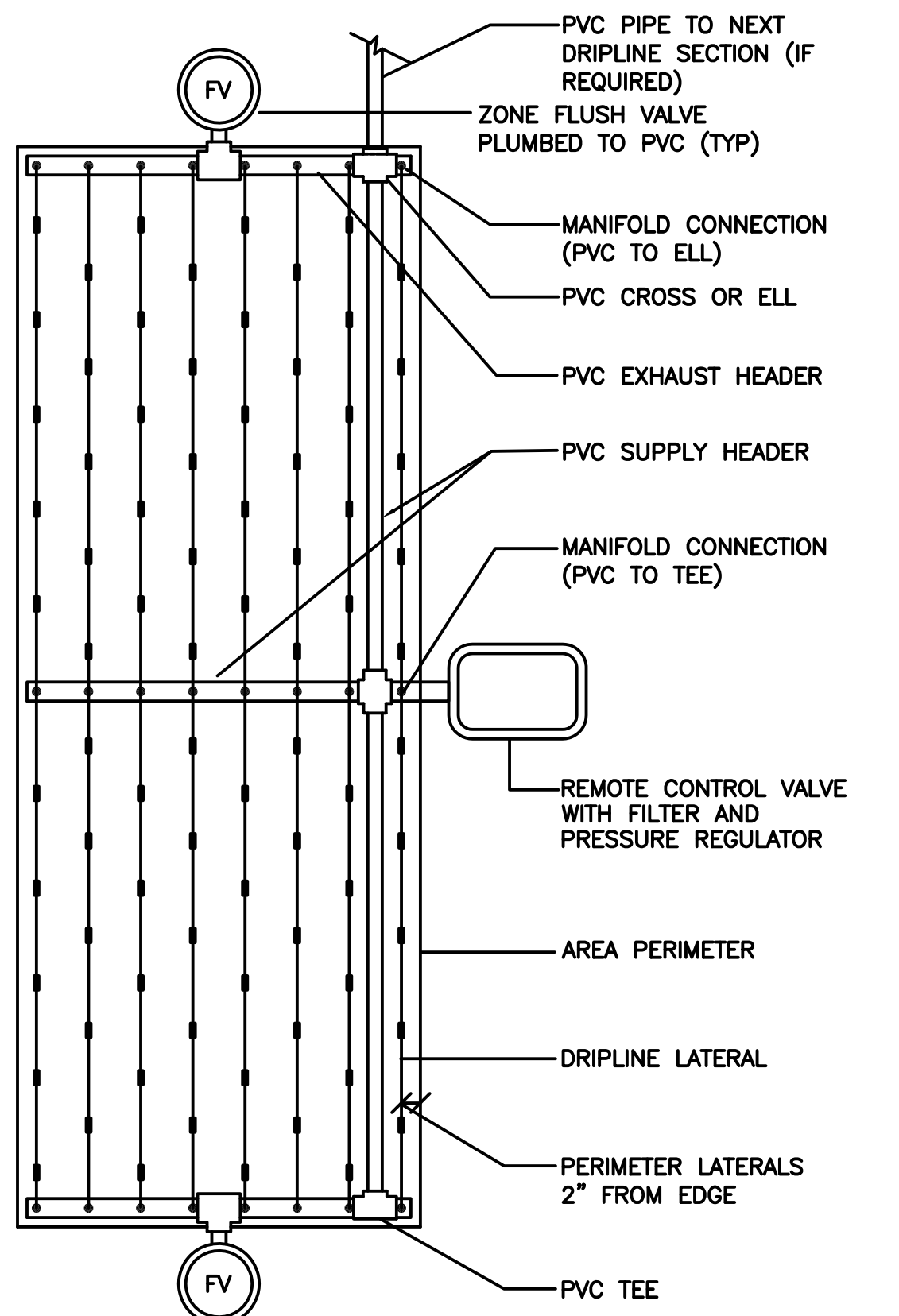
13 TREE BUBBLER DETAIL
NOT TO SCALE



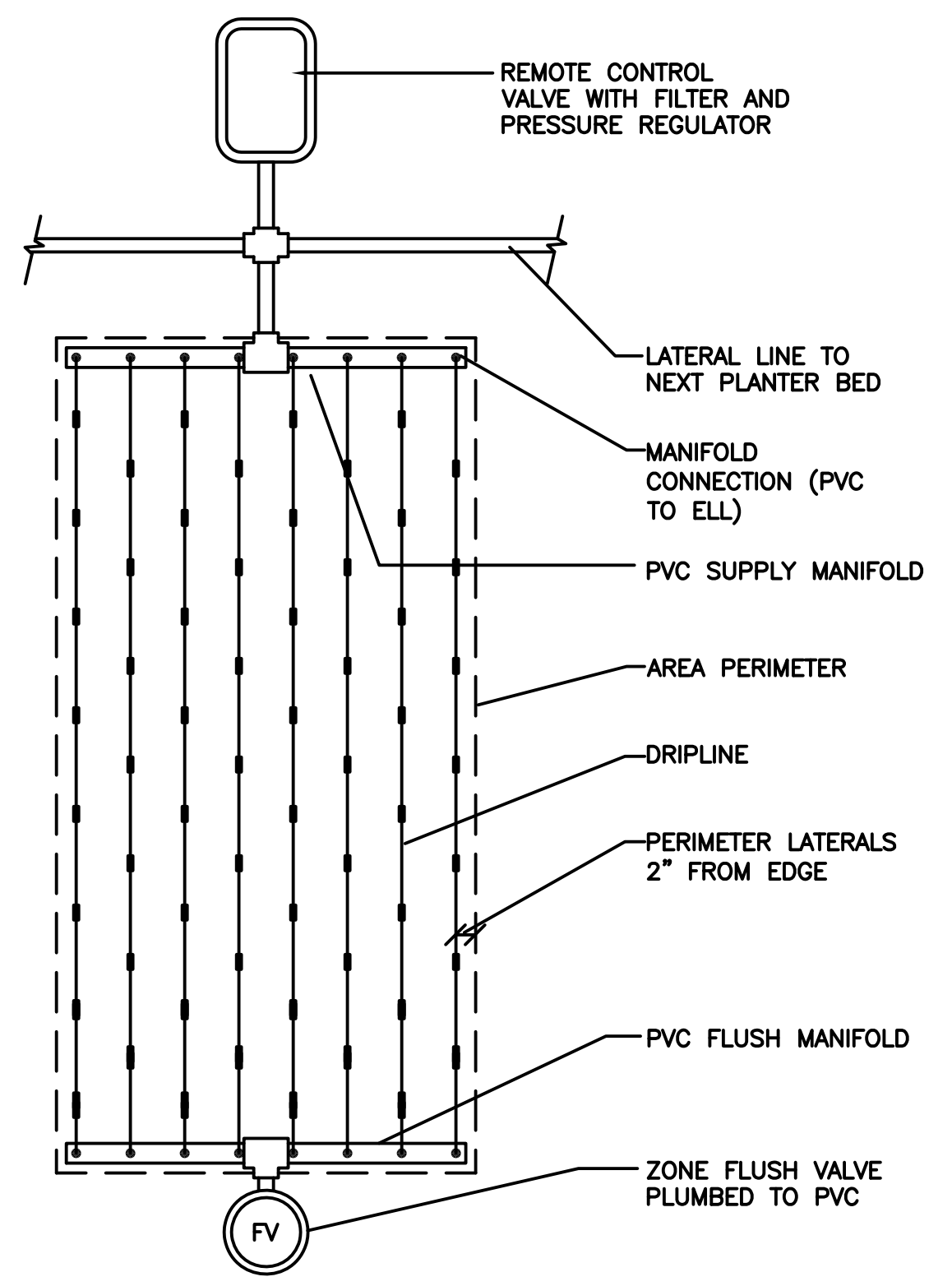
14 PRESSURE REDUCING VALVE
NOT TO SCALE



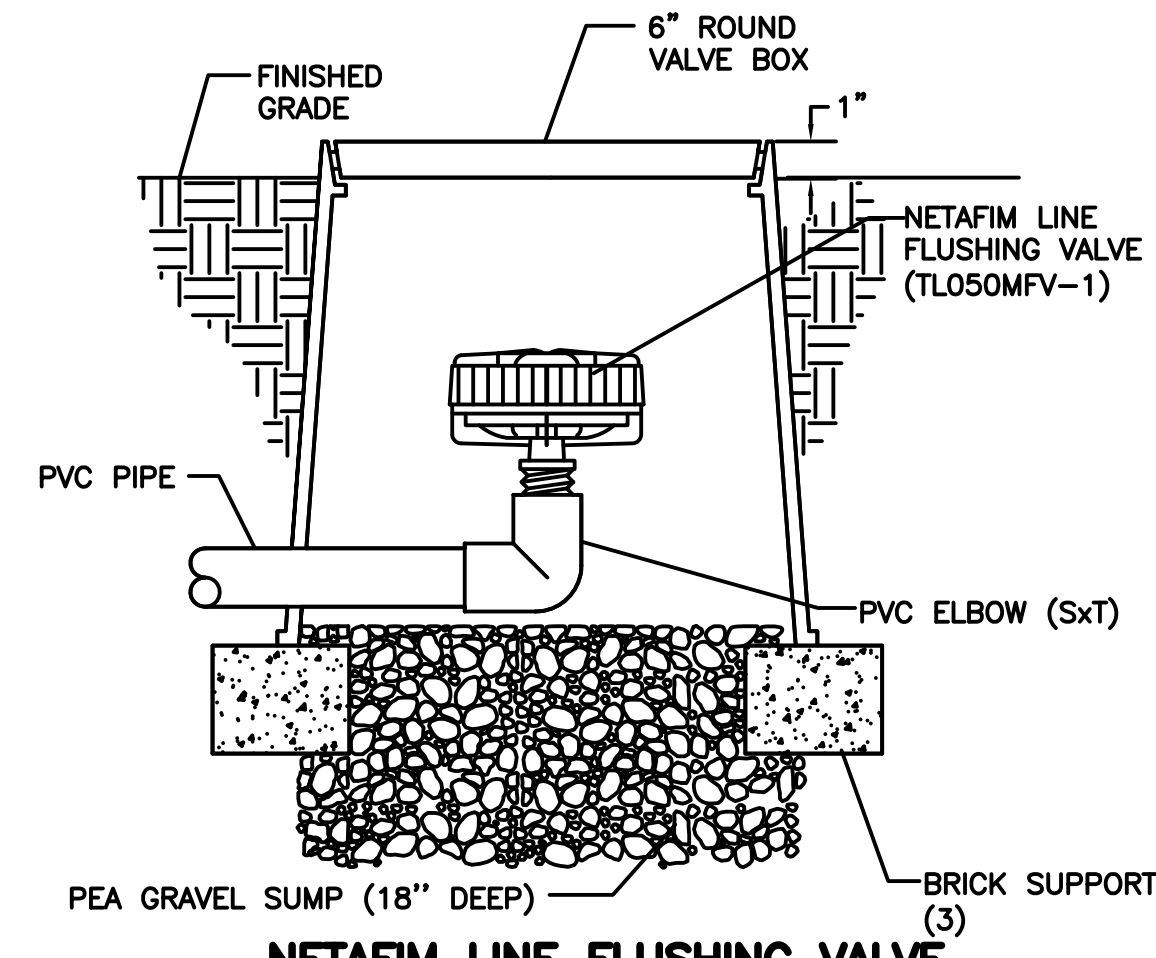
15 ESTIMATED POC COMPONENT FOOTPRINT
NOT TO SCALE



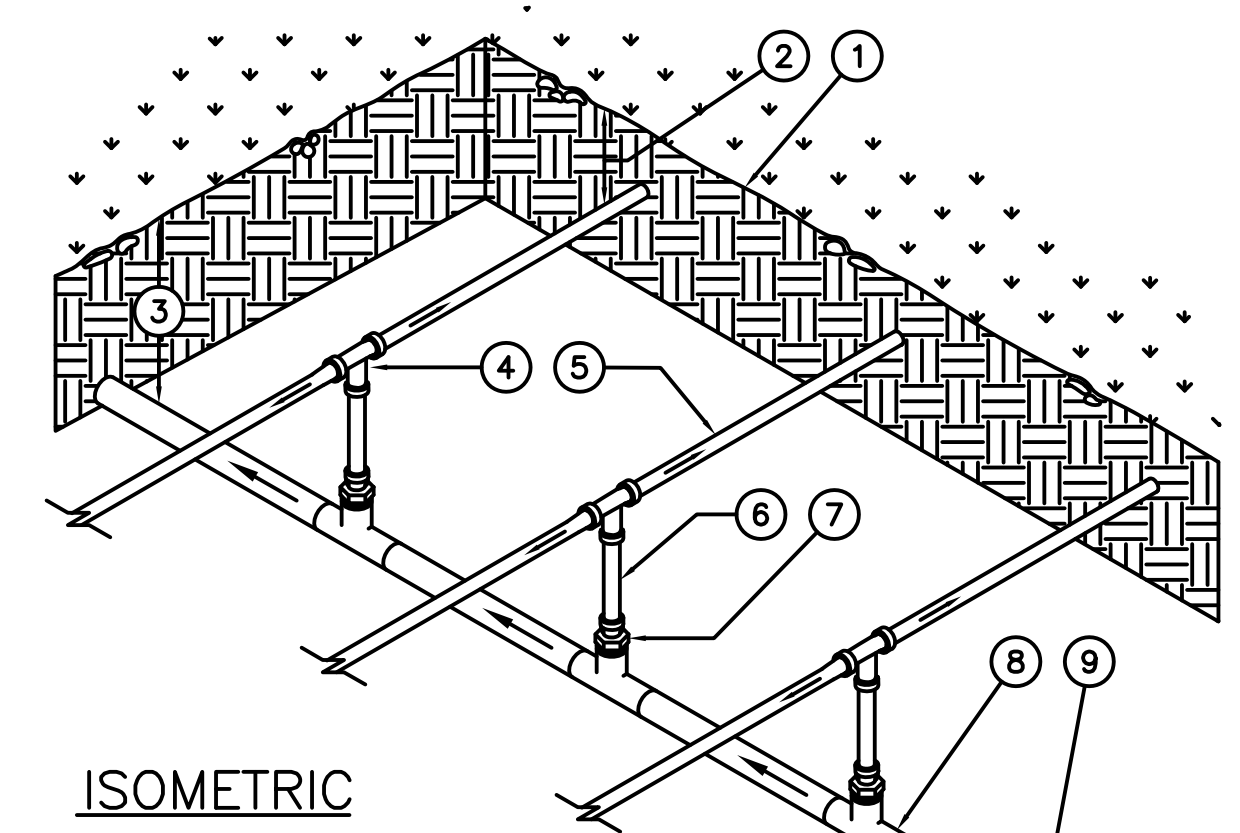
16 CENTER FEED INLINE DRIP LAYOUT
NOT TO SCALE



17 END FEED INLINE DRIP LAYOUT
NOT TO SCALE



18 NETAFIM LINE FLUSHING VALVE - PLUMBED TO PVC
NOT TO SCALE

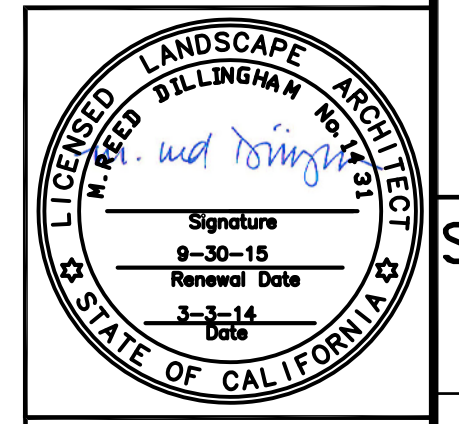


- ISOMETRIC
- LEGEND
1. FINISH GRADE.
 2. DEPTH OF TUBING PER SPECIFICATIONS
 3. DEPTH OF PVC SUPPLY MANIFOLD PER SPECIFICATIONS.
 4. DRIPLINE TEE FITTING.
 5. DRIPLINE LATERAL.
 6. BLANK POLY TUBING, LENGTH AS NECESSARY.
 7. DRIPLINE MPT ADAPTER.
 8. PVC TEE (SxSxT) WITH 1/2" FPT OUTLET.
 9. PVC SUPPLY MANIFOLD FROM REMOTE CONTROL VALVE ASSEMBLY.

19 CENTER FEED MANIFOLD
NOT TO SCALE

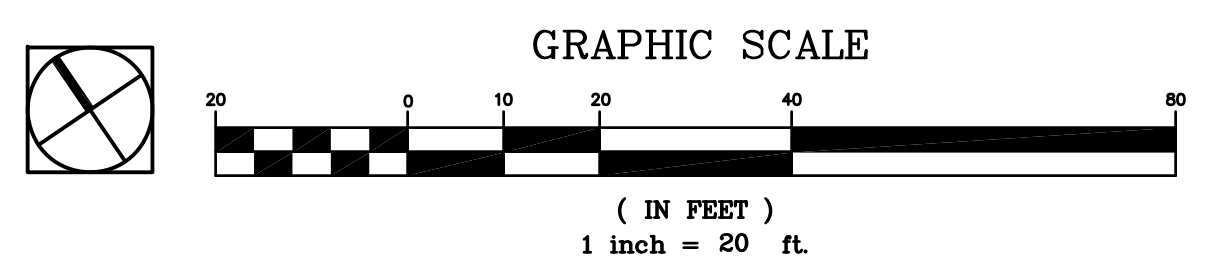
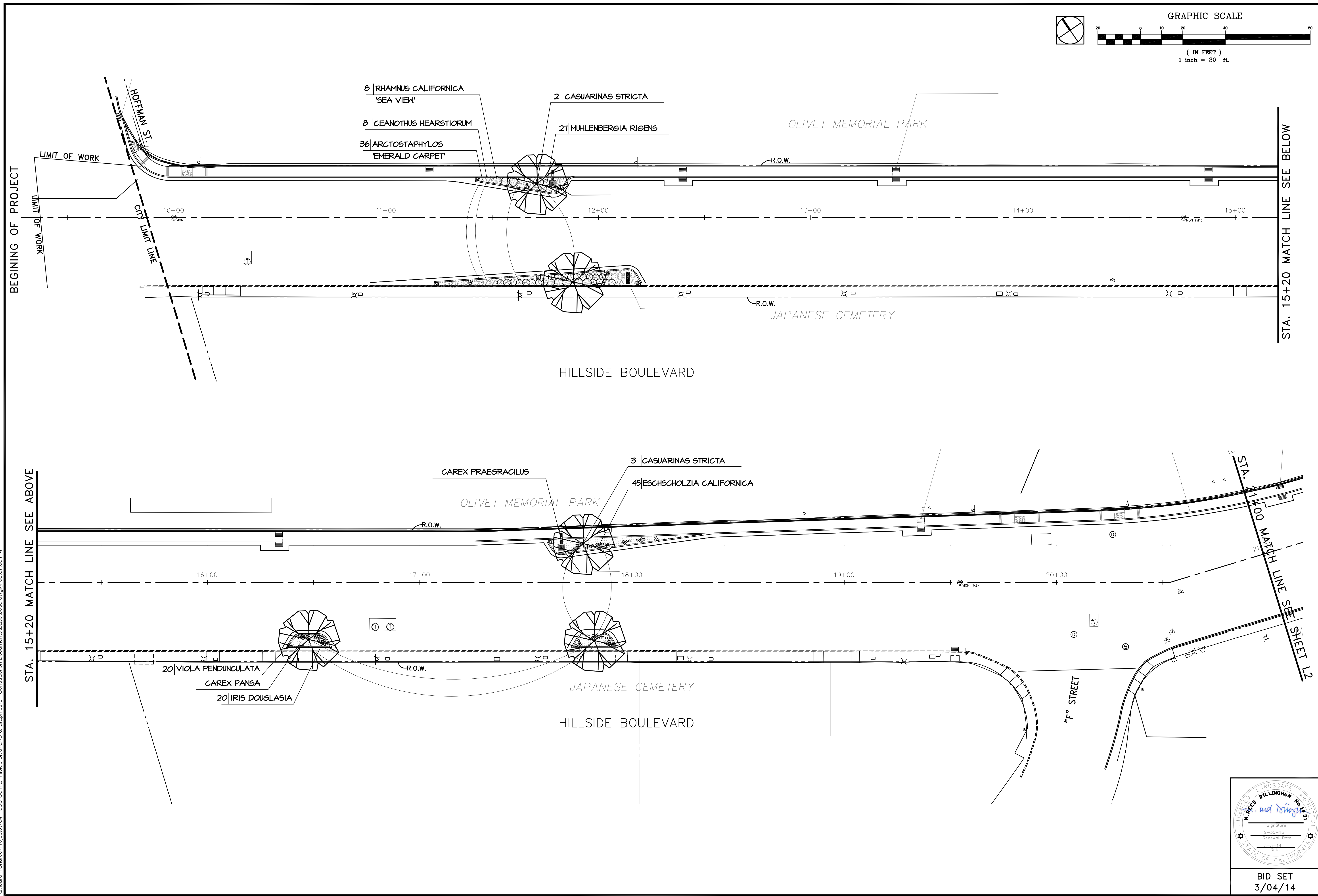
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BROOKWATER
IRRIGATION CONSULTANTS
TWO CROW CANYON COURT, SUITE 100
SAN RAMON, CALIFORNIA 94583
TEL 925.855.0417 FAX 925.855.0357
E-MAIL ANN@BROOKWATER.COM

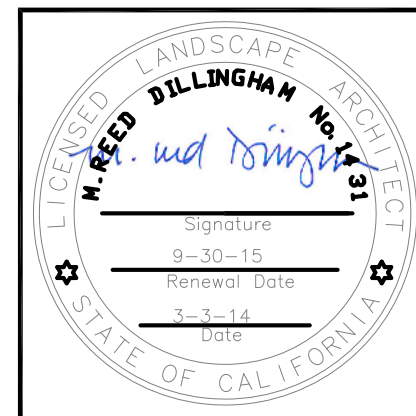


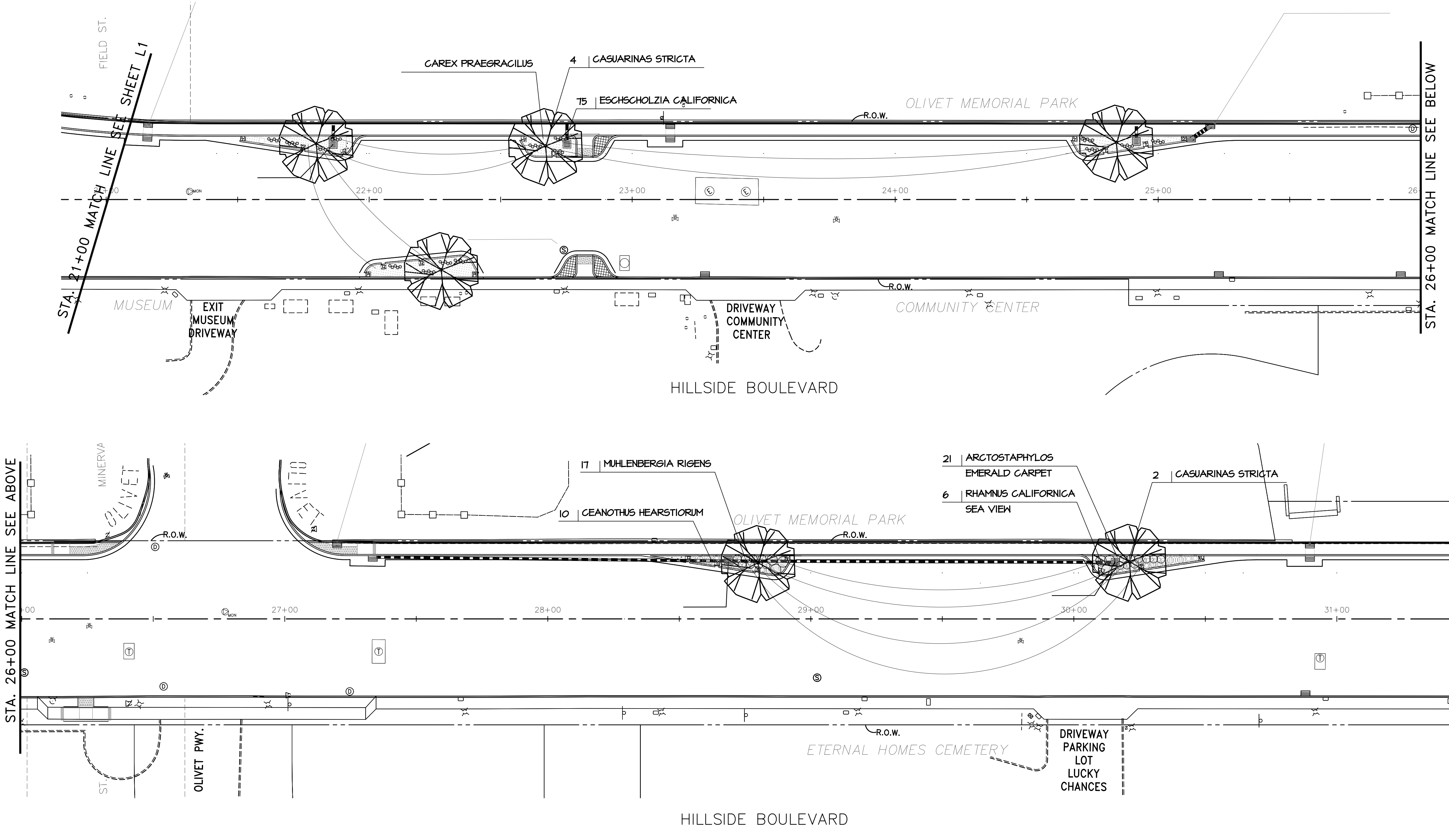
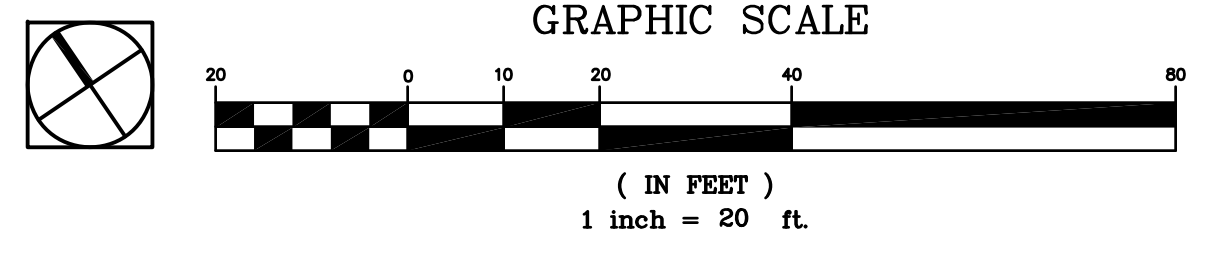
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PREPARED FOR: TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA. 94014	
IRRIGATION DETAILS	TITLE:
HILLSIDE BOULEVARD BEAUTIFICATION PROJECT TOWN OF COLMA	SHEET 10 OF 47
	DATE: 3/04/14
	JOB#: 10.350
	BID SET 3/04/14

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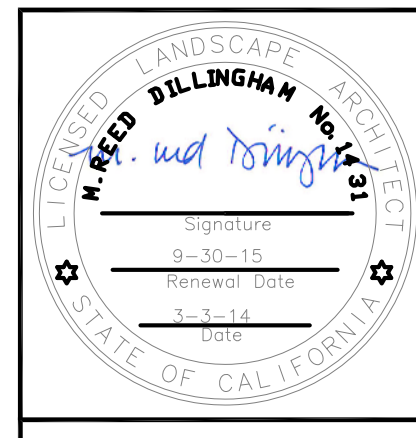


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PREPARED FOR: TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA. 94014		
TITLE: PLANTING PLAN, STA.57+70 TO STA. 69+00 HILLSIDE BOULEVARD BEAUTIFICATION PROJECT TOWN OF COLMA CALIFORNIA		
SHEET L1 OF 47		
DATE: 3/04/14 JOB#: 10.350		
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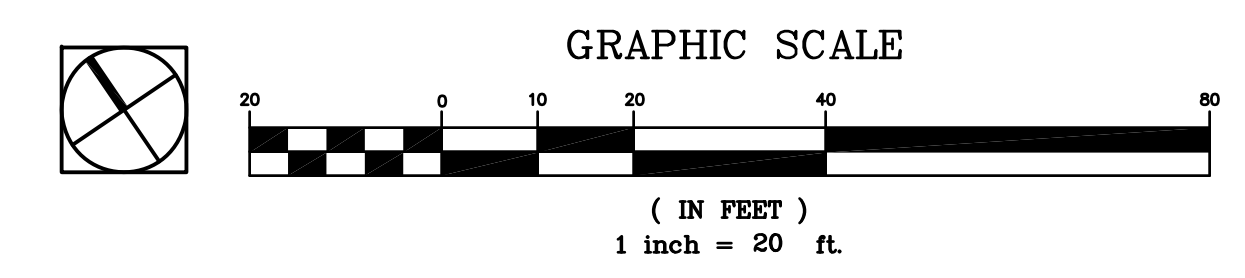




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PREPARED FOR: TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA. 94014		
TITLE: PLANTING PLAN, STA.21+00 TO STA. 31+50 HILLSIDE BOULEVARD BEAUTIFICATION PROJECT TOWN OF COLMA CALIFORNIA		
SHEET L2 OF 47		
DATE: 3/04/14 JOB#: 10.350		
BID SET 3/04/14		

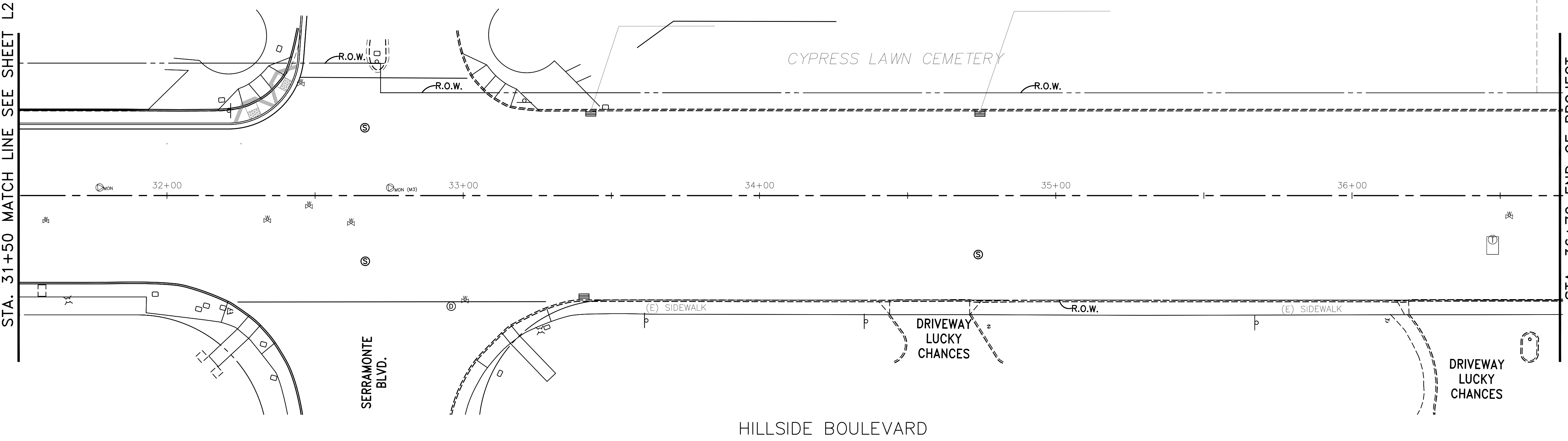


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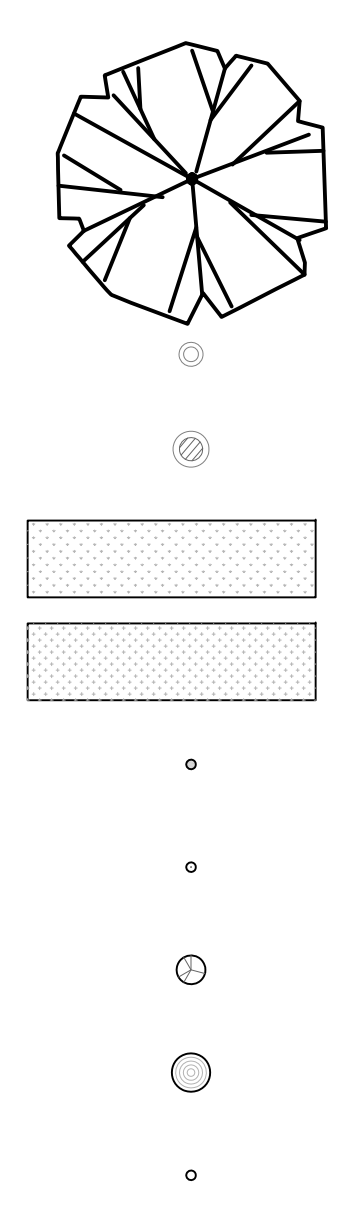


STA. 31+50 MATCH LINE SEE SHEET L2

STA. 36+70 END OF PROJECT



PLANT LEGENDS

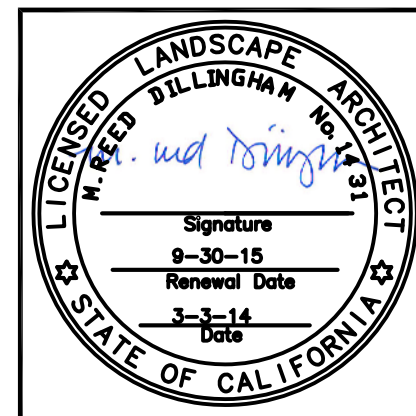


BOTANICAL NAME	COMMON NAME	SPACING	SIZE	QUANTITY
Trees				
<i>Casuarina stricta</i>	She-Oak -	24" Box		11
Shrubs				
<i>Arctostaphylos 'Emerald Carpet'</i>	Manzanita 'Emerald Carpet'	30" o.c.	5 Gal	58
<i>Ceanothus leucanthemum</i>	Ceanothus	4'	5 Gal	18
<i>Carex pansa</i> *18	California Meadow Sedge	12" o.c.	plug/rp	220
<i>Carex praegracilis</i> *18	Clustered Field Sedge	12" o.c.	Plug/rp	800
<i>Eschscholzia californica</i>	California Poppy		4"	120
<i>Iris douglasii</i>	Douglas Iris		1 Gal	20
<i>Muhlenbergia rigens</i>	Deer Grass	3'	1 Gal	44
<i>Rhamnus californica 'Sea View'</i>	California Coffeeberry	4'	5 Gal	14
<i>Viola pendiculata</i>	California Golden Viola		4"	20

PLANTING NOTES

- ALL LANDSCAPE AND MAINTENANCE OF SAME SHALL CONFORM TO TOWN OF COLMA LANDSCAPE & IRRIGATION GUIDELINES, AND ANY OTHER APPLICABLE CODES, ORDINANCES AND LAWS.
- LANDSCAPE CONTRACTOR SHALL COORDINATE ALL WORK WITH RELATED CONTRACTORS AND WITH THE GENERAL CONSTRUCTION OF THE PROJECT.
- VERIFY ALL SITE CONDITIONS AND UTILITY LOCATIONS PRIOR TO COMMENCING WORK.
- DIMENSIONS FOR PLACEMENT AND LAYOUT OF PLANT MATERIALS SHOWN ON DRAWINGS ARE APPROXIMATE. LAYOUT OF PLANT MATERIALS SHALL BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION OF PLANT MATERIALS IN CONFORMANCE WITH DRAWINGS AND SPECIFICATIONS. IF, HOWEVER, IN-THE-FIELD CONFLICTS ARISE BETWEEN PLANT AND UTILITY LOCATIONS, CONTRACTOR SHALL, WITH THE APPROVAL OF OWNER'S REPRESENTATIVE, MAKE THE NECESSARY ADJUSTMENTS TO PLANT PLACEMENT IN ORDER TO ACHIEVE OPTIMUM DESIGN.
- CONTRACTOR SHALL ORDER PLANT MATERIALS WITHIN TEN DAYS OF THE NOTICE TO PROCEED AND SUBMIT PROOF OF PURCHASE TO ENSURE ADEQUATE QUANTITIES AND SIZES OF PLANT MATERIAL AVAILABLE, IN CONFORMANCE WITH DRAWINGS AND SPECIFICATIONS. CONTRACTOR SHALL NOTIFY OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES IN INSUFFICIENT PLANT QUANTITIES DUE TO DIFFERENCES IN PLAN AND ACTUAL FIELD CONDITIONS.
- CONTRACTOR SHALL CONFIRM SOURCE OF ALL PLANT MATERIAL. ALL PLANT MATERIAL OF SAME SPECIES SHALL BE FROM A SINGLE SOURCE.
- ALL PLANTS TO BE OF THE FINEST QUALITY AND FREE OF DISEASE OR DAMAGE. PLANT MATERIALS TO BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION. IF NOT REVIEWED, OWNER'S REPRESENTATIVE MAY MAKE CHANGES OR REJECT MATERIALS AT NO ADDITIONAL COSTS TO OWNER.
- ALL TREES SHALL BE STAKED/GUYED AS SHOWN ON DETAILS OR AS MAY BE REQUIRED TO MAINTAIN TREES SECURELY.
- TAKE CARE TO PROTECT EXISTING PLANTS TO REMAIN. PROVIDE FENCES OR OTHER BARRIERS AS NECESSARY AT THE DRIP LINE OR AROUND TREE TRUNKS TO PROTECT EXISTING PLANTS FROM DAMAGE DURING CONSTRUCTION. PROVIDE ADEQUATE IRRIGATION DURING CONSTRUCTION. REPLACE ANY TREE DAMAGED DURING CONSTRUCTION WITH PLANTS OF EQUAL SIZE AND VALUE AT NO ADDITIONAL COST TO THE OWNER.
- AVOID UNNECESSARY ROOT DISTURBANCE, COMPACTION OF SOILS WITHIN DRIP LINE, OR LIMB BREAKAGE. DO NOT STORE MATERIAL OR EQUIPMENT OR DISPOSE OF ANY MATERIAL OTHER THAN CLEAN WATER WITHIN DRIP LINE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE PLANT ESTABLISHMENT OF THE ENTIRE SITE FOR THE DURATION OF THE CONTRACT AND PLANT ESTABLISHMENT PERIOD, AS INDICATED IN SPECIFICATIONS, INCLUDING, BUT NOT LIMITED TO, ALL WATERING, MOWING, EDGING, TRIMMING, PRUNING, WEEDING, FERTILIZING, AND KEEPING ALL PLANT MATERIAL (BOTH EXISTING AND NEW) IN HEALTHY GROWING CONDITIONS AND NEAT AND ATTRACTIVE IN APPEARANCE, REPLACE ALL DEAD AND/OR DAMAGED PLANT MATERIAL ON A WEEKLY BASIS.
- THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL FROM THE OWNER'S PROPERTY OF ALL WASTE MATERIAL GENERATED FROM THE PLANTING OPERATIONS.
- IN ALL AREAS WHERE ASPHALT OR CONCRETE PAVING IS TO BE REMOVED AND REPLACED WITH NEW PLANTING, REMOVE ALL EXISTING AGGREGATE BASE, GRAVEL, ETC. LEAVE ONLY NATIVE SOIL OR EXISTING CLEAN FILL.
- SEE SPECIFICATIONS AND DETAILS FOR SOIL AMENDMENTS, PLANTING AND MAINTENANCE INSTRUCTIONS.
- PERFORM FINE GRADING IN PLANTING AREA PER CIVIL DRAWING.
- PROVIDE IMPORT PLANTING SOIL FOR ALL BIO RETENTION PLANTING AREA PER SPECIFICATION.
- INSTALL MINIMUM 3" DEEP MULCH WITH MULCH PROTECTOR AT SHRUB AND TREE PLANTING AREA AND MINIMUM 2" DEEP MULCH WITH MULCH PROTECTOR AT GROUNDCOVER AREA.
- KEEP PROPOSED TREES MINIMUM 18" CLEARANCE FROM ENERGIZED WIRE (150 VOLTS OR MORE) PER CFCU GENERAL ORDER 450.
- SPECIFIED PLANT MATERIAL MAY REQUIRE CONTRACT GROWTH. ALLOW THREE (3) MONTH MINIMUM FOR CONTRACT GROWTH PERIOD IN NURSERY. SEE BELOW FOR PREAPPROVED NURSERIES

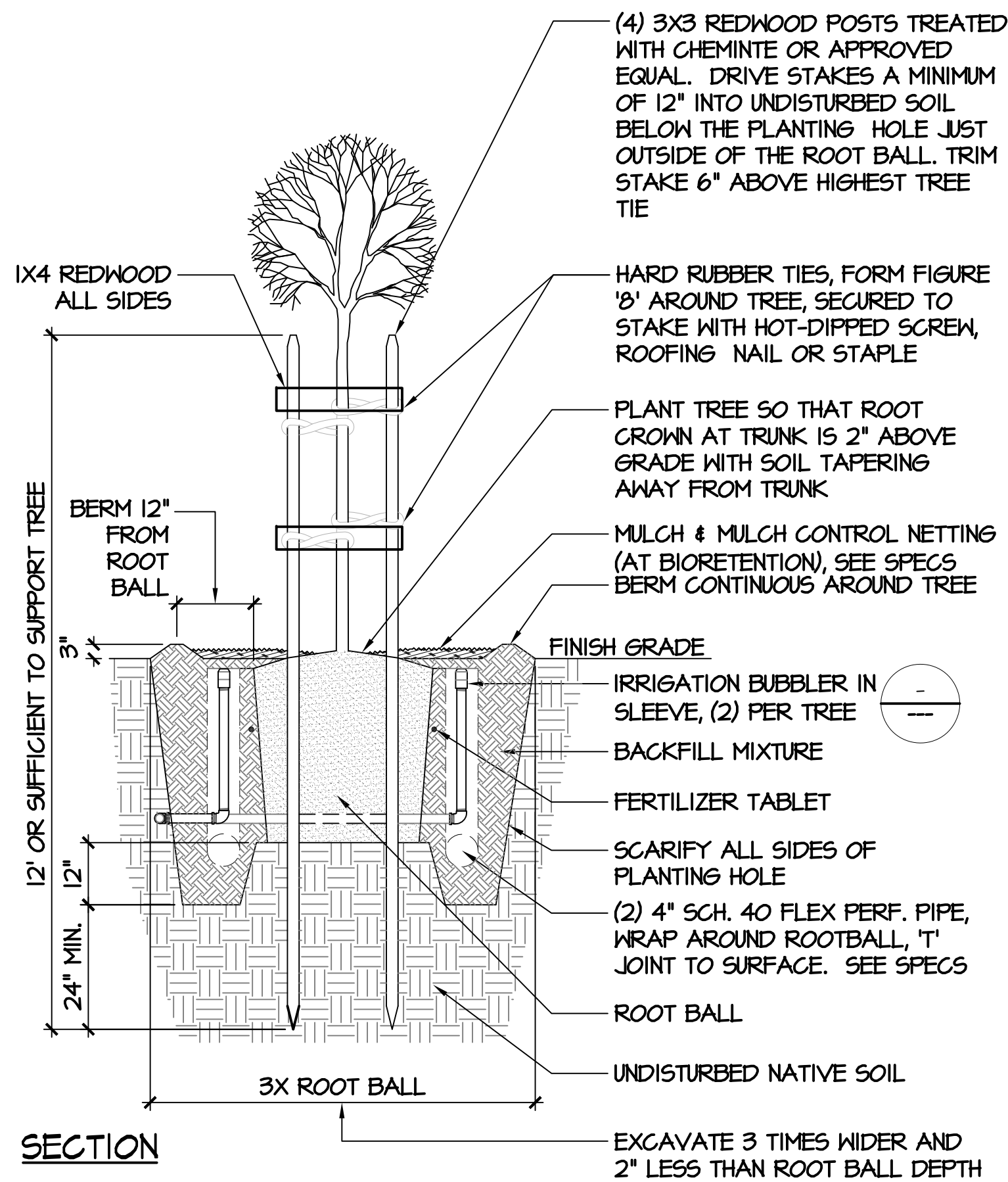
WATERSHED NURSERY, RICHMOND CALIFORNIA, 510-234-2222
 OAKTOWN NURSERY, BERKELEY, CALIFORNIA, 510-387-9744
 CENTRAL COAST WILD, SANTA CRUZ, 831-454-0655



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PREPARED BY: Dillingham Associates 2927 Newbury Street, Berkeley, CA 94703 Phone: (510)548-4700 Fax: (510)548-0265		
PREPARED FOR: TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA. 94014		
TITLE: PLANTING PLAN NOTES & LEGENDS STA.31+50 TO STA. 36+70 HILLSIDE BOULEVARD BEAUTIFICATION PROJECT TOWN OF COLMA CALIFORNIA		
SHEET L3 OF 47		
DATE: 3/04/14 JOB#: 10.350		

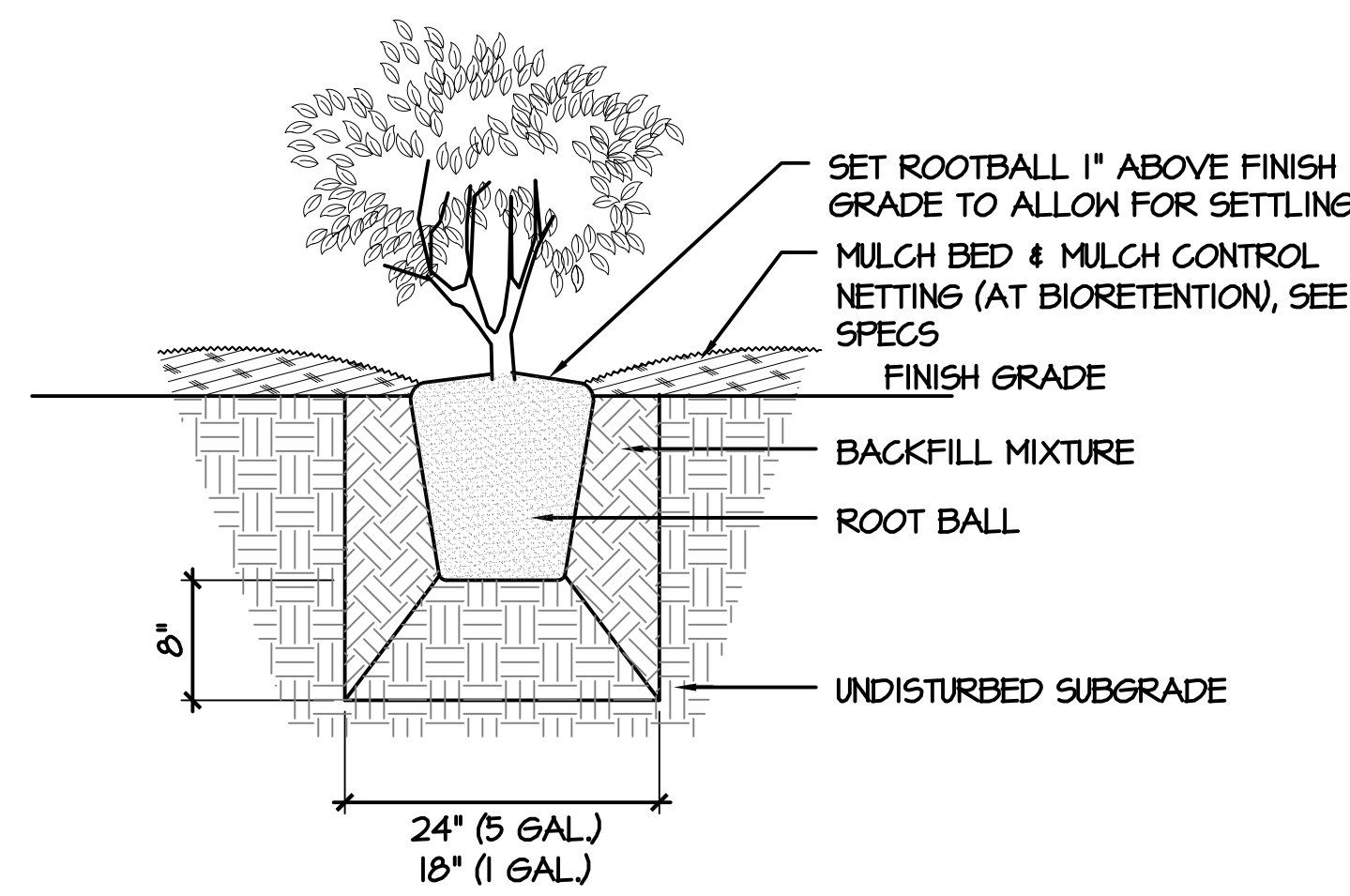
HOLE SIZE BOX	WIDTH	DEPTH
15 GAL	30"	24"
24"	48"	24"
36"	54"	27"

PLAN



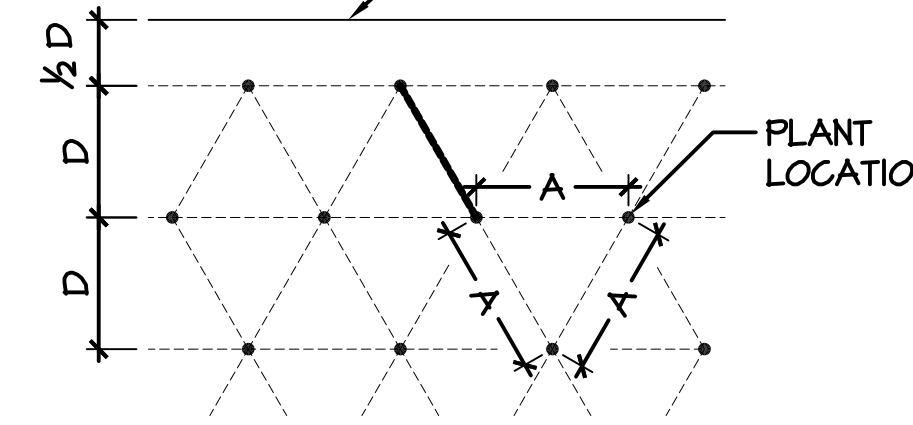
SECTION

1 TYPICAL TREE PLANTING
SCALE: 1" = 1'-0"



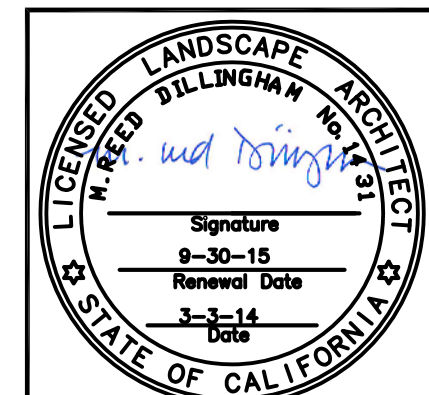
3 SHRUB PLANTING
SCALE: 1" = 1'-0"

EDGE OF PLANTING AREA



SPACING (A)	ROW SPACING (D)
12" O.C.	10 1/2"
15" O.C.	13"
18" O.C.	15 1/2"
24" O.C.	21"
30" O.C.	26"
36" O.C.	31"

2 TRIANGULAR SPACING DIAGRAM
SCALE: 1" = 1'-0"



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PREPARED FOR: TOWN OF COLMA 1198 EL CAMINO REAL COLMA, CA. 94014		
TITLE: PLANTING DETAILS HILLSIDE BOULEVARD BEAUTIFICATION PROJECT TOWN OF COLMA CALIFORNIA		
SHEET L4 OF 47		
DATE: 3/04/14 BID SET: 3/04/14 JOB#: 10.350		