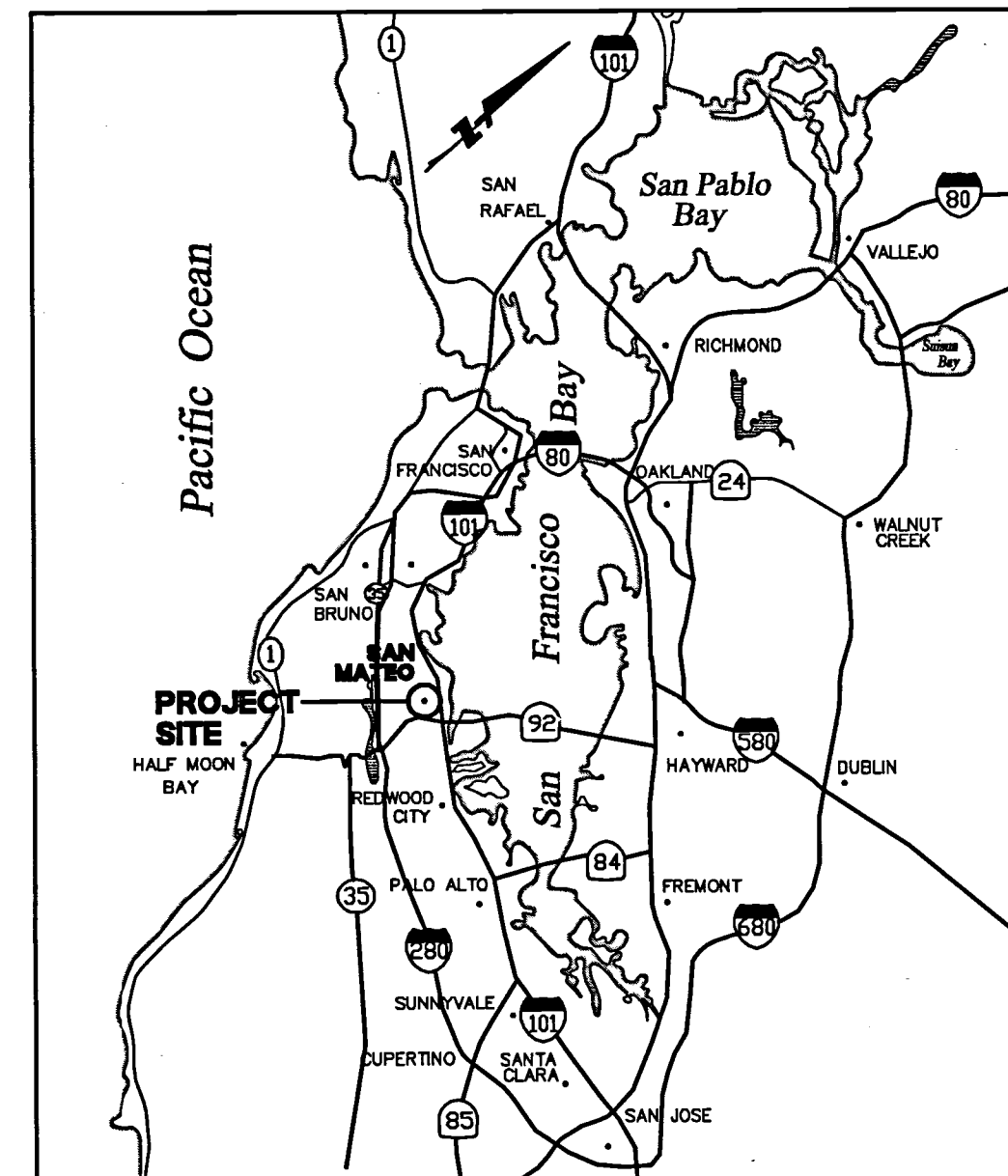


# STREET IMPROVEMENT PLANS FOR HIGHLAND ESTATES - TICONDEROGA DRIVE, COBBLEHILL PLACE & COWPENS WAY

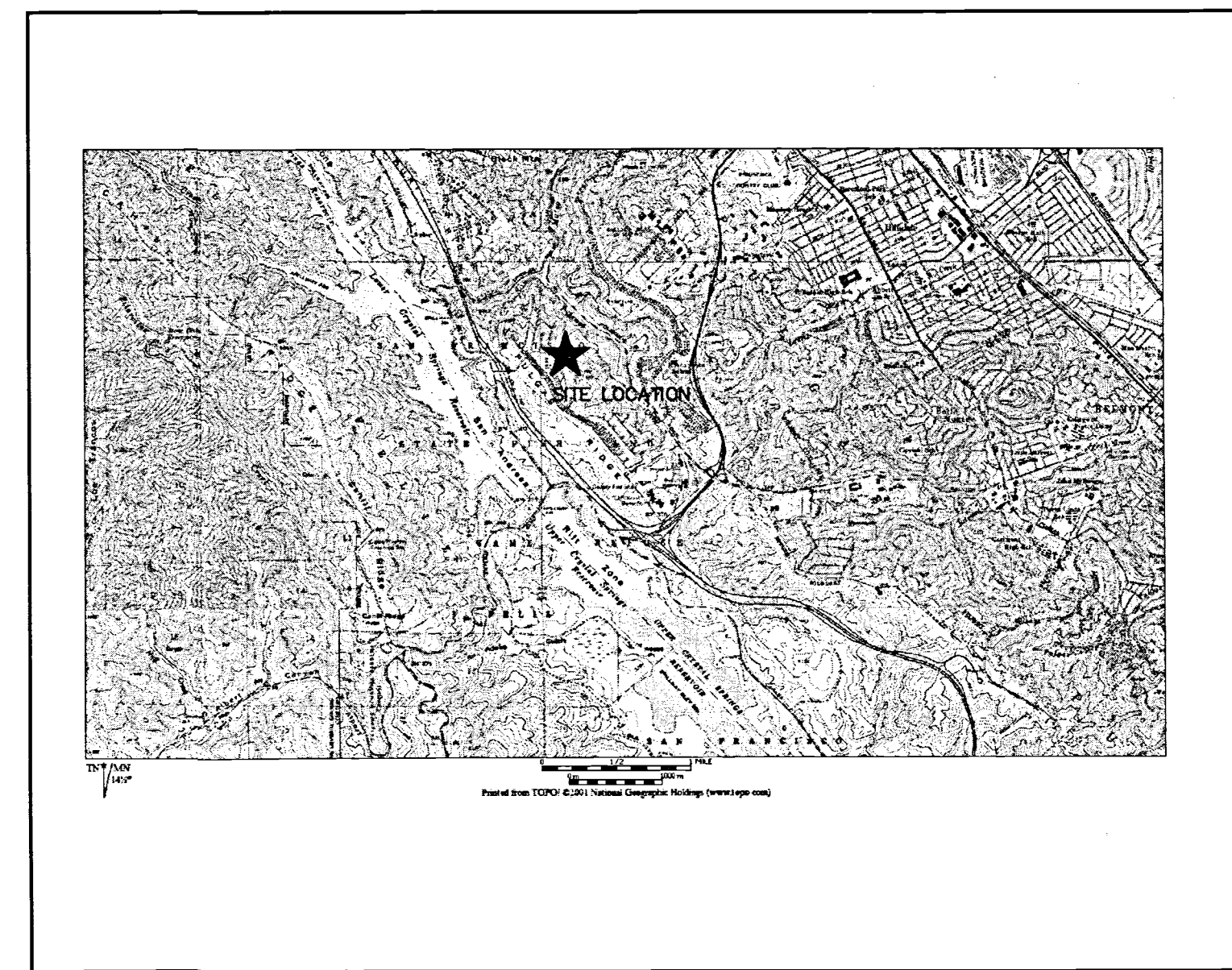
COUNTY OF SAN MATEO, CALIFORNIA

**SHEET INDEX**

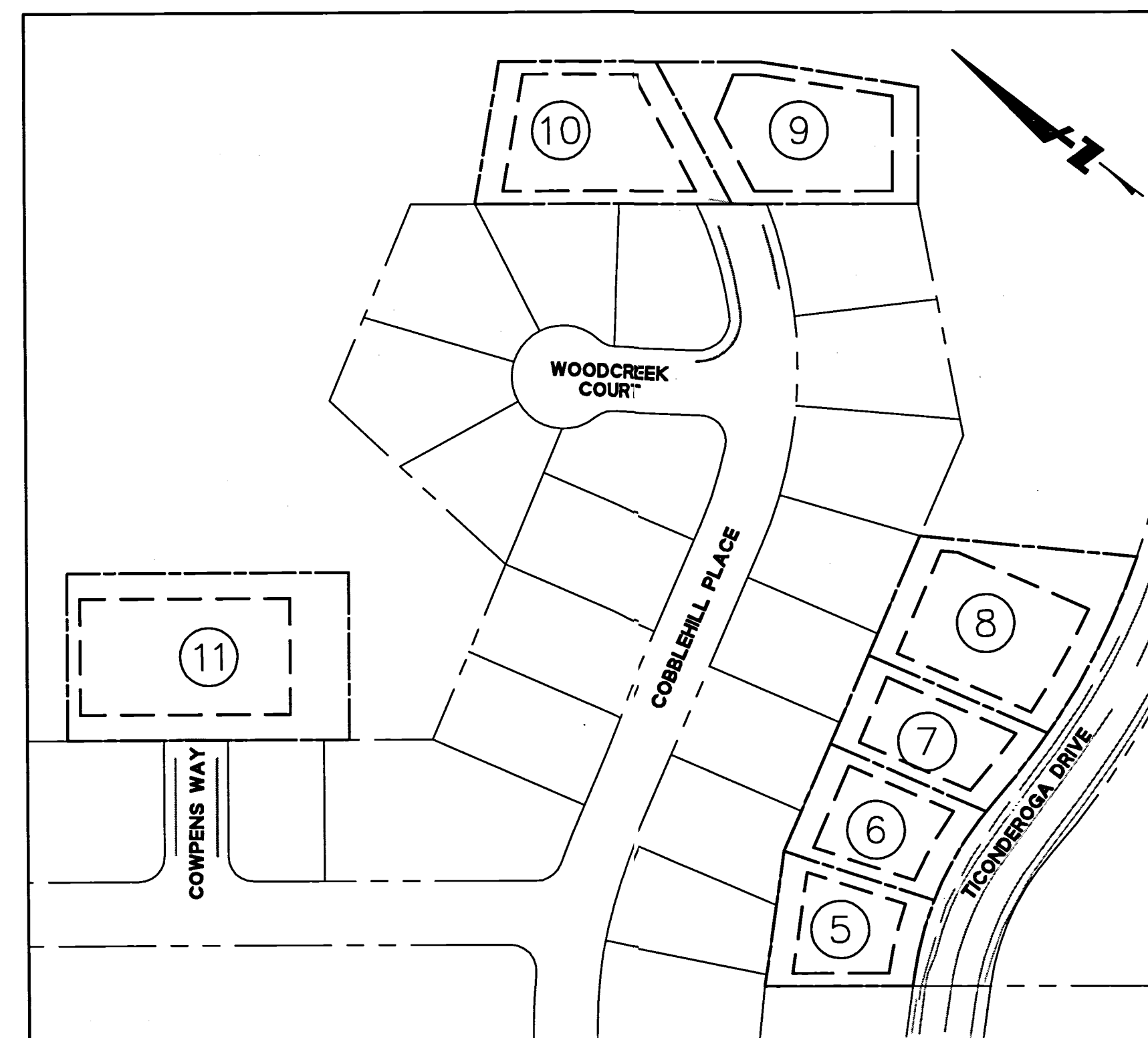
SHEET NO	DESCRIPTION
C1.00	COVER SHEET
C2.00	GENERAL NOTES, LEGEND AND ABBREVIATIONS
C3.00	PLAN & PROFILE - TICONDEROGA DRIVE
C3.10	PLAN & PROFILE - COBBLEHILL PLACE
C3.20	PLAN & PROFILE - COWPENS WAY
C4.00	CONSTRUCTION STAGING & EROSION CONTROL
C4.10	CONSTRUCTION STAGING & EROSION CONTROL
C5.00	EROSION CONTROL DETAILS AND NOTES
C6.00	CONSTRUCTION DETAILS
C6.10	CONSTRUCTION DETAILS
C6.20	CONSTRUCTION DETAILS
C6.30	CONSTRUCTION DETAILS
C6.40	CONSTRUCTION DETAILS
C6.50	CONSTRUCTION DETAILS
RW-1	RETAINING WALL PLAN



**VICINITY MAP**  
NTS



**LOCATION MAP**  
NTS



**SITE PLAN**  
SCALE: 1" = 100'

**PROJECT DATA**

**ENGINEER:** BKF ENGINEERS  
255 SHORELINE DRIVE, SUITE 200  
REDWOOD CITY, CA 94065  
(650) 482-6300

**WATER SUPPLY:** CAL WATER SERVICE  
341 N. DELAWARE STREET  
SAN MATEO, CA 94401-1808  
(650) 343-1808

**SEWAGE DISPOSAL:** CITY OF SAN MATEO & CRYSTAL SPRINGS COUNTY  
SANITATION DISTRICT

**GAS & ELECTRIC:** PG&E

**TELEPHONE:** AT&T

**FIRE PROTECTION:** CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION

**CABLE:** COMCAST

**STORM DRAINAGE:** COUNTY OF SAN MATEO  
CITY OF SAN MATEO

**TOPOGRAPHIC BASE MAP:** AERO-GEODIC CORP.  
JOB NO. 950168  
DATE OF PHOTOGRAPHY 9/18/87

255 SHORELINE DRIVE, SUITE 200  
REDWOOD CITY, CA 94065  
PHONE: (650) 482-6300  
FAX: (650) 482-6399



HIGHLAND ESTATES - STREET IMPROVEMENT PLANS  
TICONDEROGA DRIVE, COBBLEHILL PLACE & COWPENS WAY  
TITLE SHEET  
CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

**RECEIVED**  
MAY 17 2016  
San Mateo County  
Planning Division

**ENGINEER'S STATEMENT**

THESE IMPROVEMENT PLANS HAVE BEEN PREPARED BY ME OR UNDER MY DIRECTION IN ACCORDANCE WITH STANDARD ENGINEERING PRACTICE.

*Roland N.V. Haga* 5/2/16  
ROLAND N.V. HAGA DATE  
R.C.E. NO. 43971 EXP 06/30/17  
BKF ENGINEERS

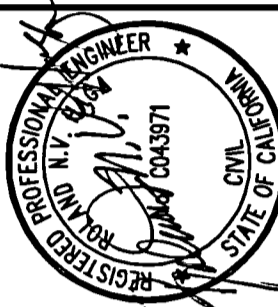
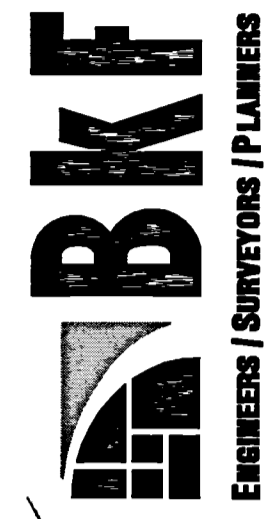


Revisions	No.	Date	Scale	Design	Drawn	Approved	Job No.
		05/12/16	NTS	JT	AG	RH	950168-20

Sheet Number:  
**C1.00**  
OF

DRAWING NAME: J:\Projects\950168\CD\Off-Site for Lots 5 - 11\C1.00-HECDTS.dwg  
PLOT DATE: 05-12-16  
PLOTTED BY: trat





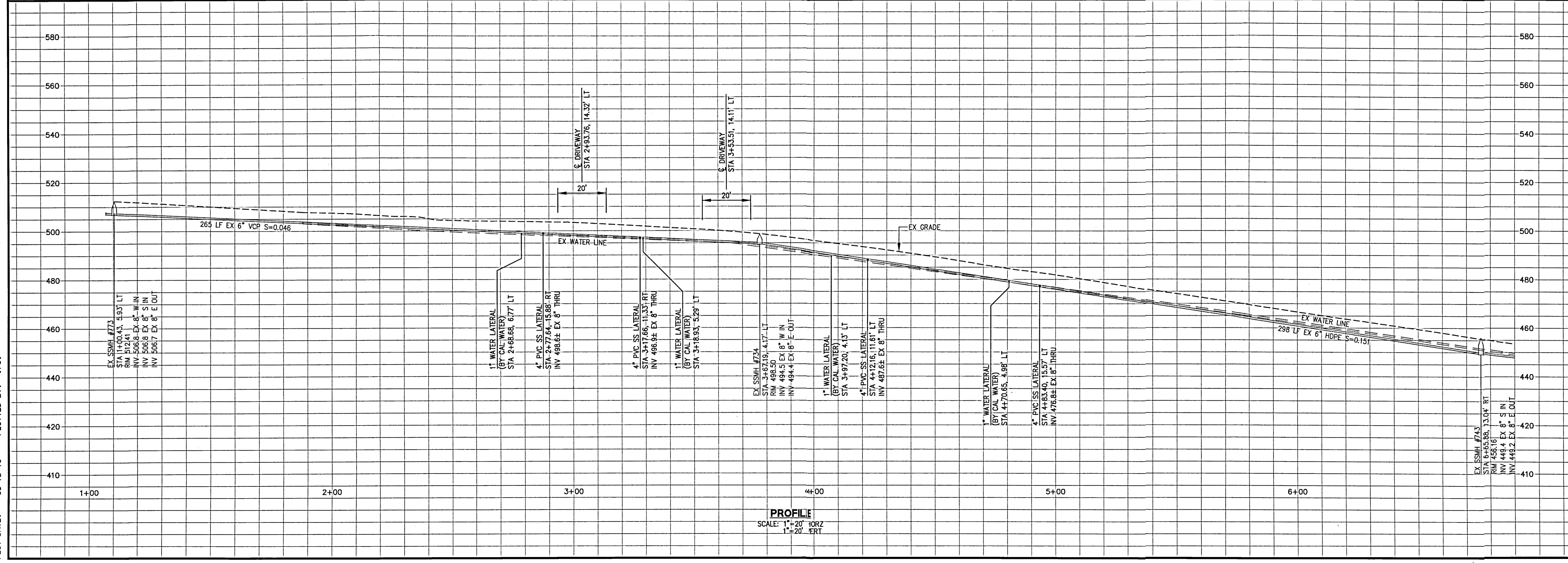
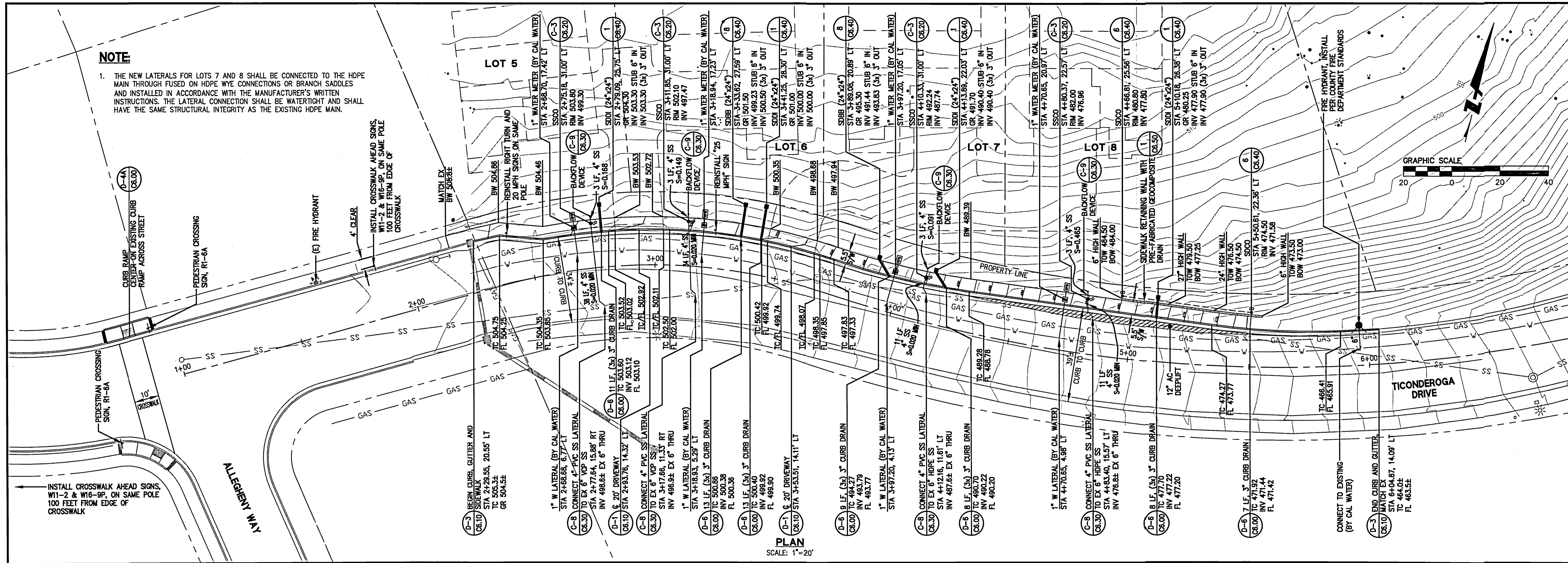
HIGHLAND ESTATES - STREET IMPROVEMENT PLANS  
 TICONDEROGA DRIVE, COBBLEHILL PLACE & COMPENS WAY  
 PLAN & PROFILE - TICONDEROGA DRIVE  
 CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

Date	05/12/16	No.	Revisions
Scale	AS SHOWN	JT	
Drawn	AG		
Approved	RH		
Job No.	95088-20		

Sheet Number:  
**C3.00**

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 PLOT DATE: 05-13-16 PLOTTED BY: trt

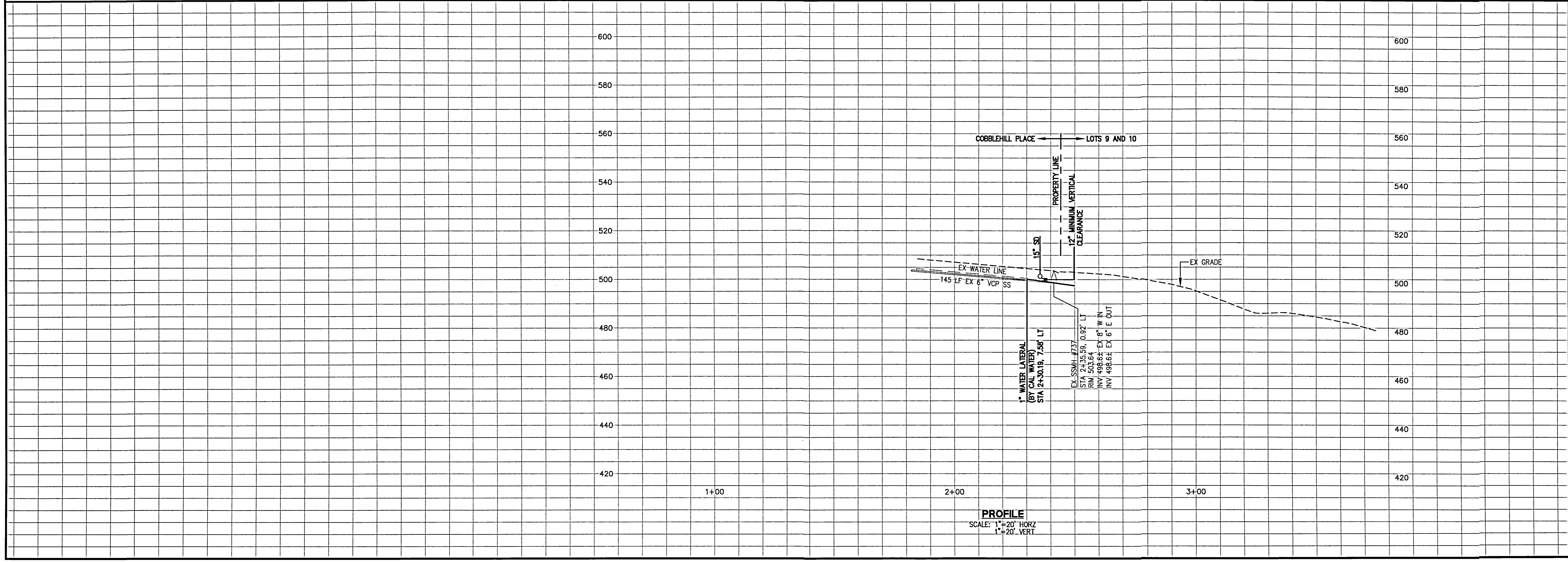
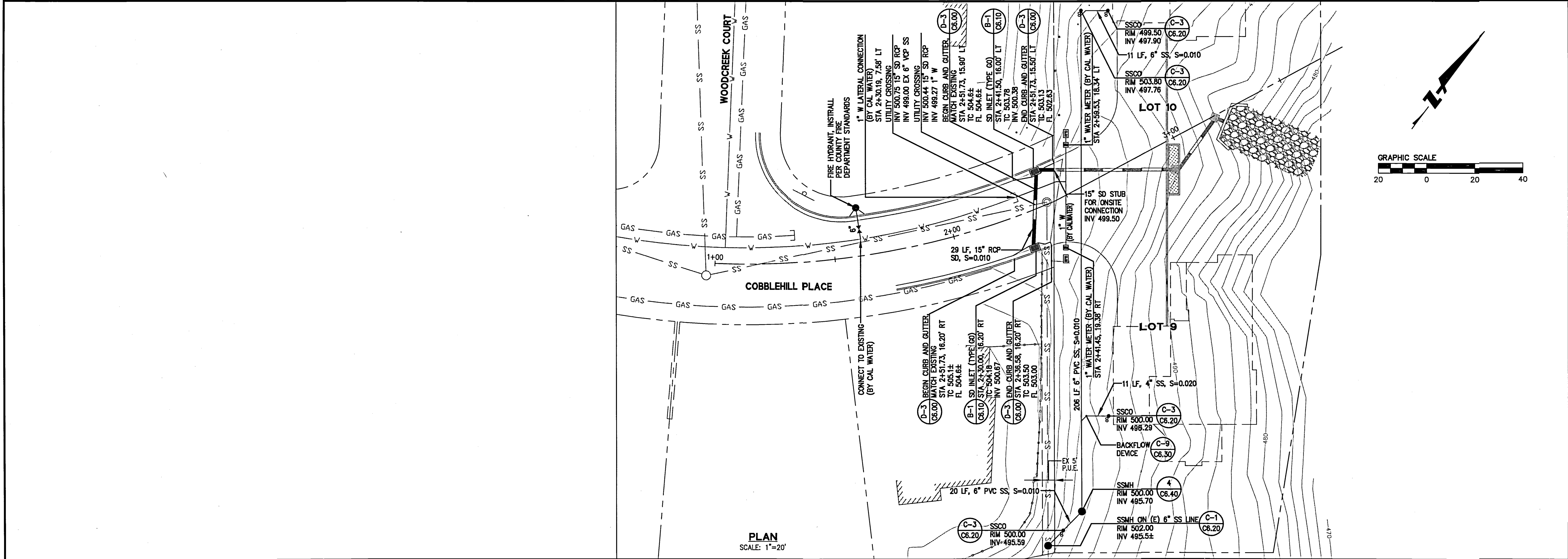


**PROFILE**  
 SCALE: 1" = 20' VERT  
 1" = 20' HORIZ

**NOTE**

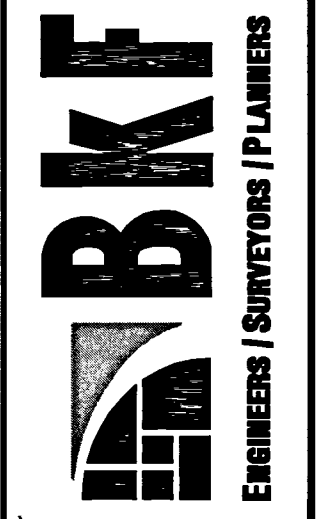
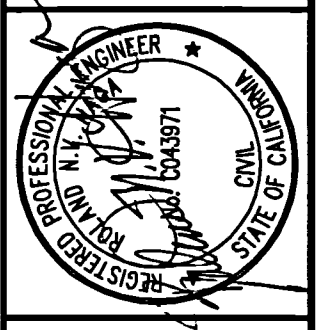
1. THE NEW LATERALS FOR LOTS 7 AND 8 SHALL BE CONNECTED TO THE HOPE MAIN THROUGH FUSED ON HOPE WYE CONNECTIONS OR BRANCH SADDLES AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS. THE LATERAL CONNECTION SHALL BE WATERTIGHT AND SHALL HAVE THE SAME STRUCTURAL INTEGRITY AS THE EXISTING HOPE MAIN.

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 PLOT DATE: 05-12-16 PLOTTED BY: trat



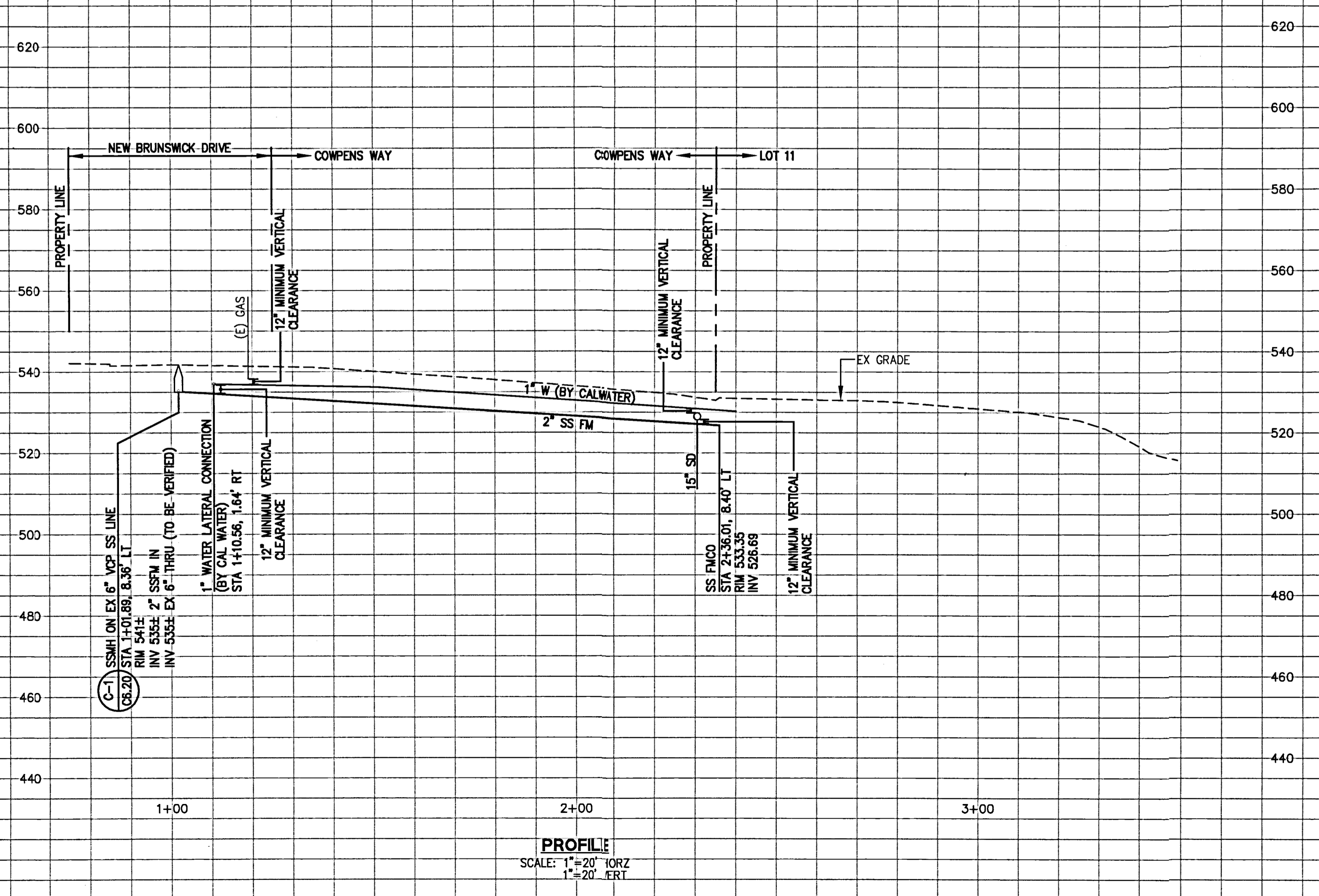
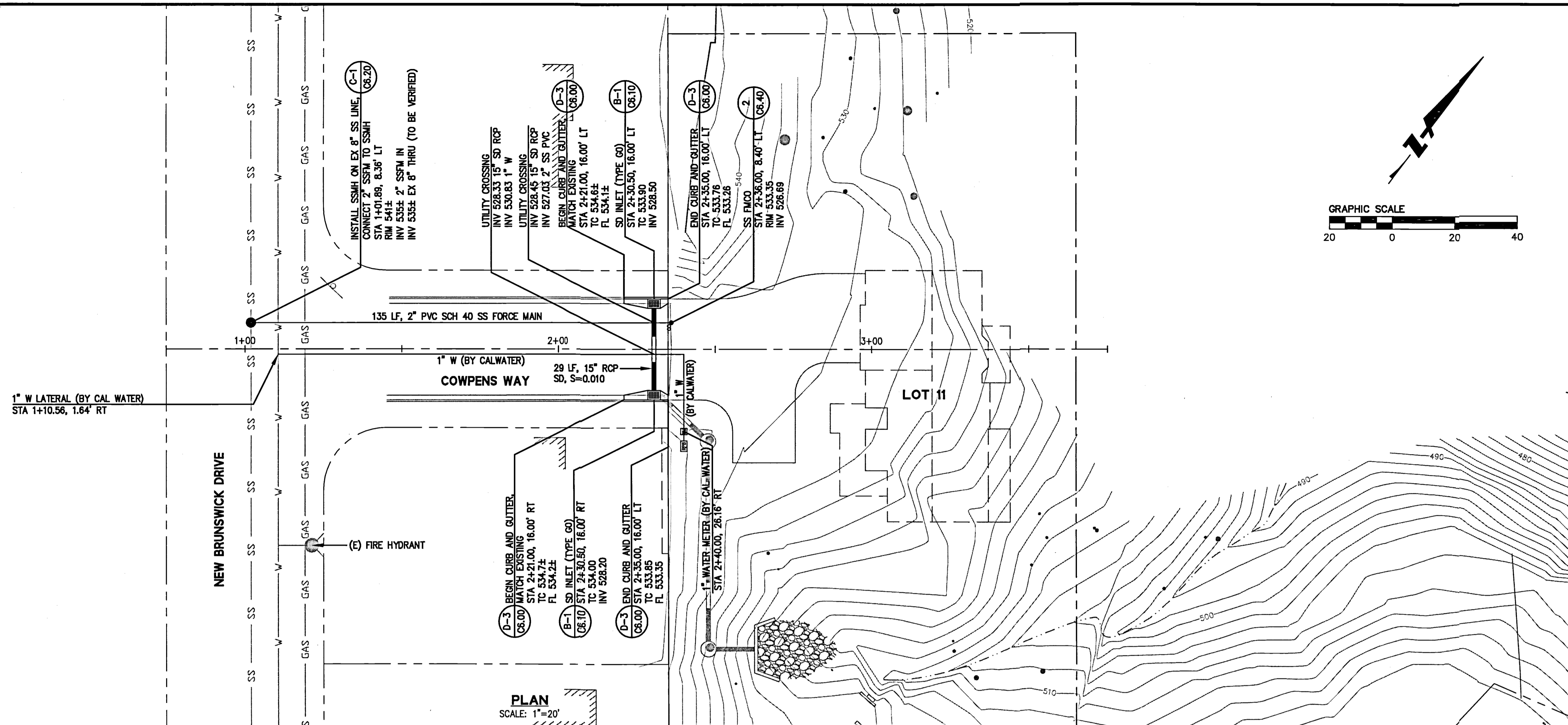
**HIGHLAND ESTATES - STREET IMPROVEMENT PLANS**  
**TICONDEROGA DRIVE, COBBLEHILL PLACE & COMPENS WAY**  
**PLAN & PROFILE - COBBLEHILL PLACE**  
 CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

Date	05/12/16	No.	Revisions
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Design	JT		
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Approved	RH		
Job No.	95088-20		
Sheet Number:	<b>C3.10</b>		

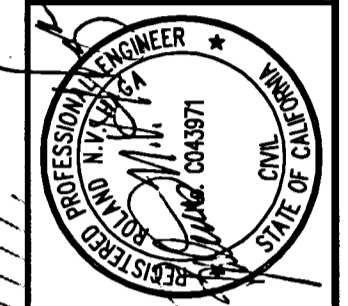


255 SHORELINE DRIVE, SUITE 200  
 REDWOOD CITY, CA 94065  
 PHONE: (650) 482-6300  
 FAX: (650) 482-6399

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 PLOT DATE: 05-13-16 PLOTTED BY: trat



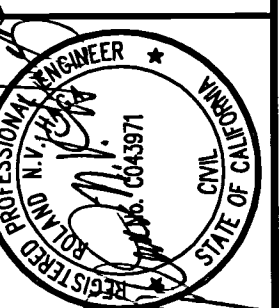
255 SHORELINE DRIVE, SUITE 200  
 REDWOOD CITY, CA 94065  
 PHONE: (650) 422-5300  
 FAX: (650) 422-6399



HIGHLAND ESTATES - STREET IMPROVEMENT PLANS  
 TICONDEROGA DRIVE, COBBLEHILL PLACE & COWPENS WAY  
 PLAN & PROFILE - COWPENS WAY  
 SAN MATEO COUNTY CALIFORNIA

Date	05/12/16	No.	Revisions
Scale	AS SHOWN		
Design	JT		
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Approved	RH		
Job No.	850168-20		

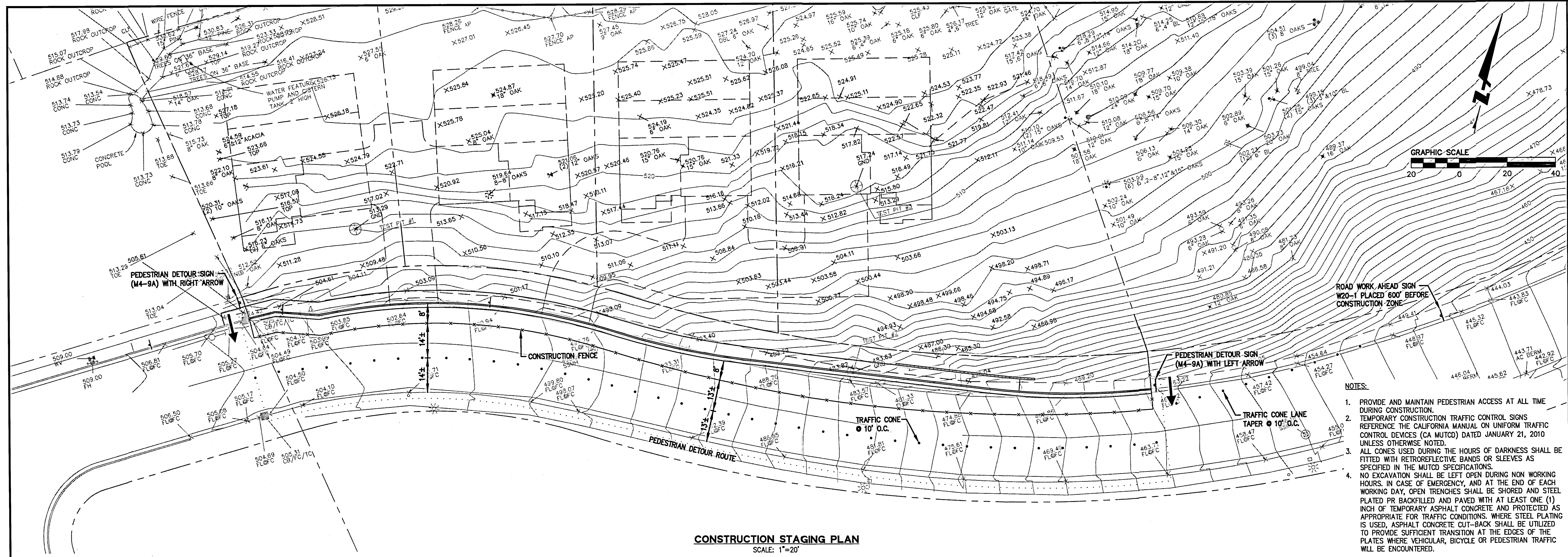
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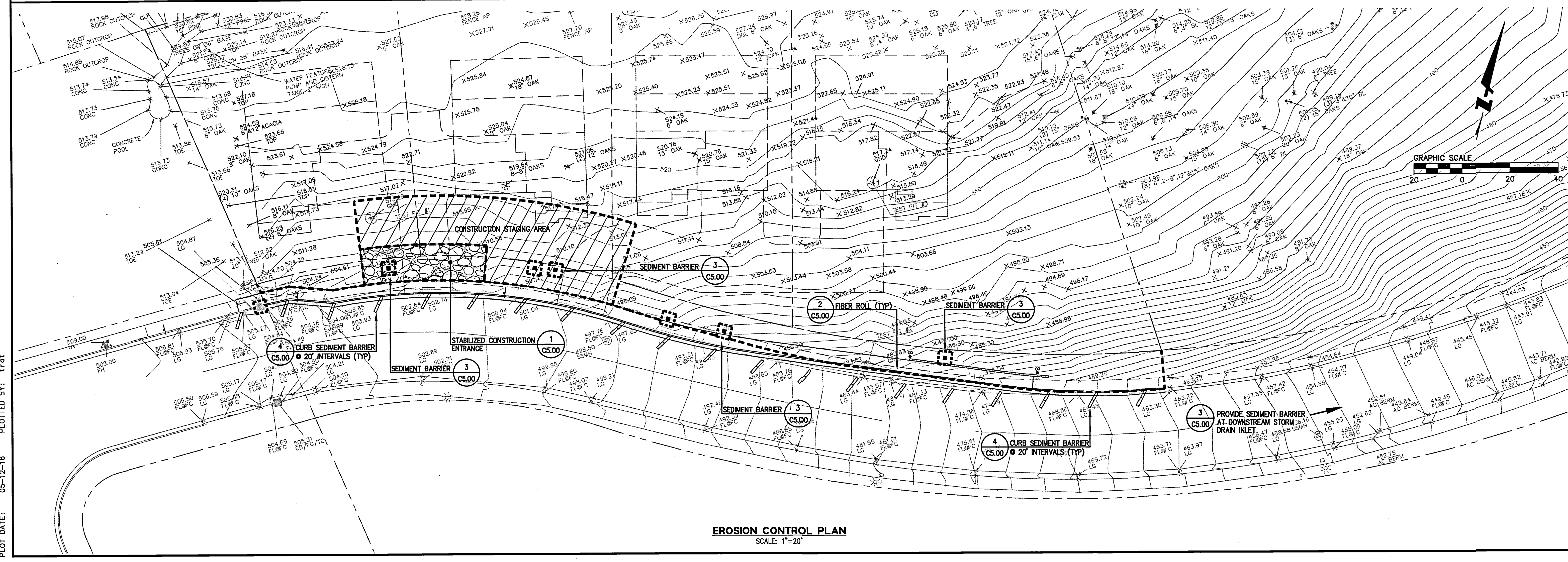
HIGHLAND ESTATES - STREET IMPROVEMENT PLANS  
TICONDEROGA DRIVE, COBBLEHILL PLACE & COMPENS WAY  
CONSTRUCTION STAGING & EROSION CONTROL PLANS  
SAN MATEO COUNTY  
CITY OF SAN MATEO

No.	Date	Revisions
1	05/12/16	AS SHOWN
2		DESIGN
3		DRAWN
4		APPROVED
5		REVISION

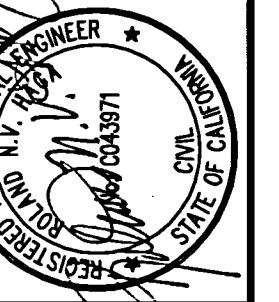
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Sheet Number: C4.00



- NOTES:
1. PROVIDE AND MAINTAIN PEDESTRIAN ACCESS AT ALL TIME DURING CONSTRUCTION.
  2. TEMPORARY CONSTRUCTION TRAFFIC CONTROL SIGNS REFER TO THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD) DATED JANUARY 21, 2010 UNLESS OTHERWISE NOTED.
  3. ALL CONES USED DURING THE HOURS OF DARKNESS SHALL BE FITTED WITH RETROREFLECTIVE BANDS OR SLEEVES AS SPECIFIED IN THE MUTCD SPECIFICATIONS.
  4. NO EXCAVATION SHALL BE LEFT OPEN DURING NON WORKING HOURS, IN CASE OF EMERGENCY, AND AT THE END OF EACH WORKING DAY, OPEN TRENCHES SHALL BE SHORED AND STEEL PLATED OR BACKFILLED AND PAVED WITH AT LEAST ONE (1) INCH OF TEMPORARY ASPHALT CONCRETE AND PROTECTED AS APPROPRIATE FOR TRAFFIC CONDITIONS. WHERE STEEL PLATING IS USED, ASPHALT CONCRETE CUT-BACK SHALL BE UTILIZED TO PROVIDE SUFFICIENT TRANSITION AT THE EDGES OF THE PLATES WHERE VEHICULAR, BICYCLE OR PEDESTRIAN TRAFFIC WILL BE ENCOUNTERED.

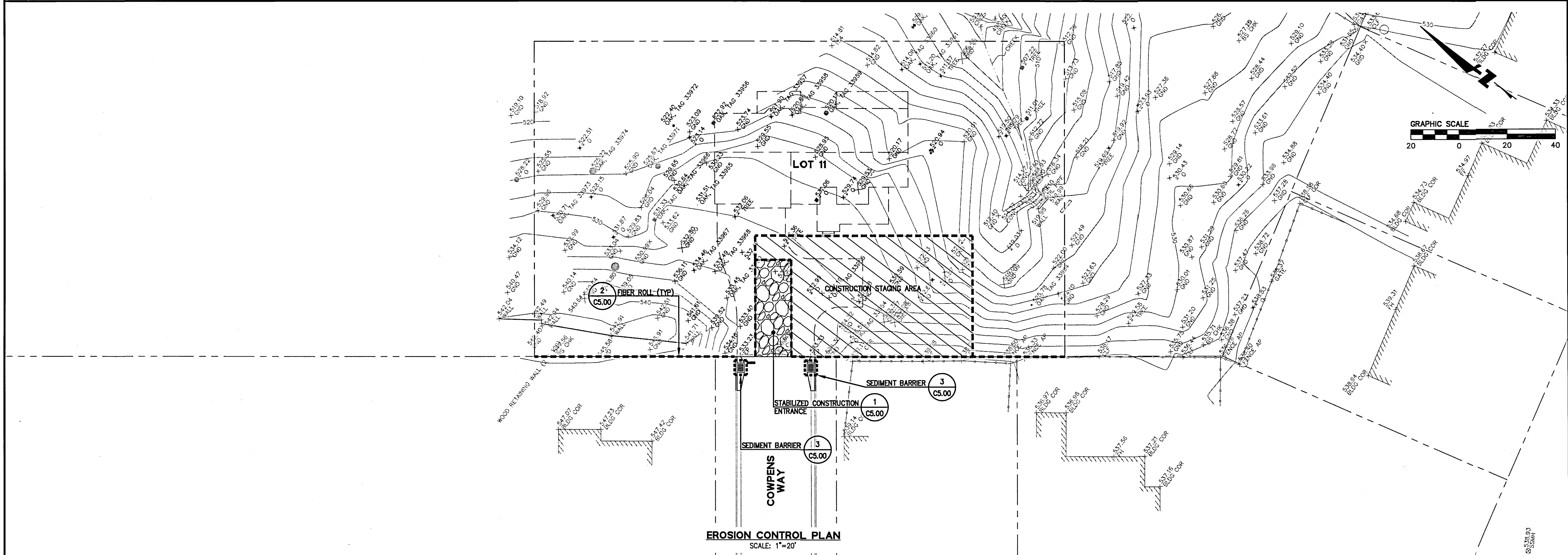
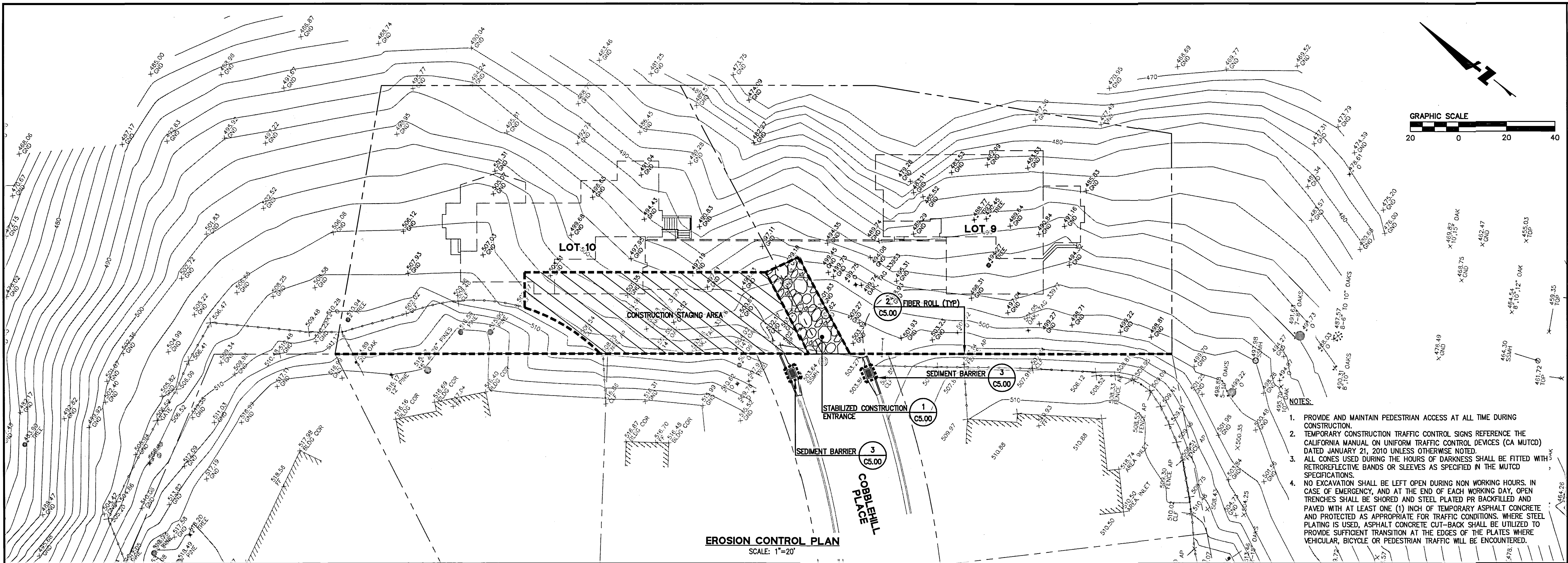


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PLOT DATE: 05-12-16  
PLOT BY: trt



**HIGHLAND ESTATES - STREET IMPROVEMENT PLANS**  
**TICONDEROGA DRIVE, COBBLEHILL PLACE & COMPENS WAY**  
**EROSION CONTROL PLANS**

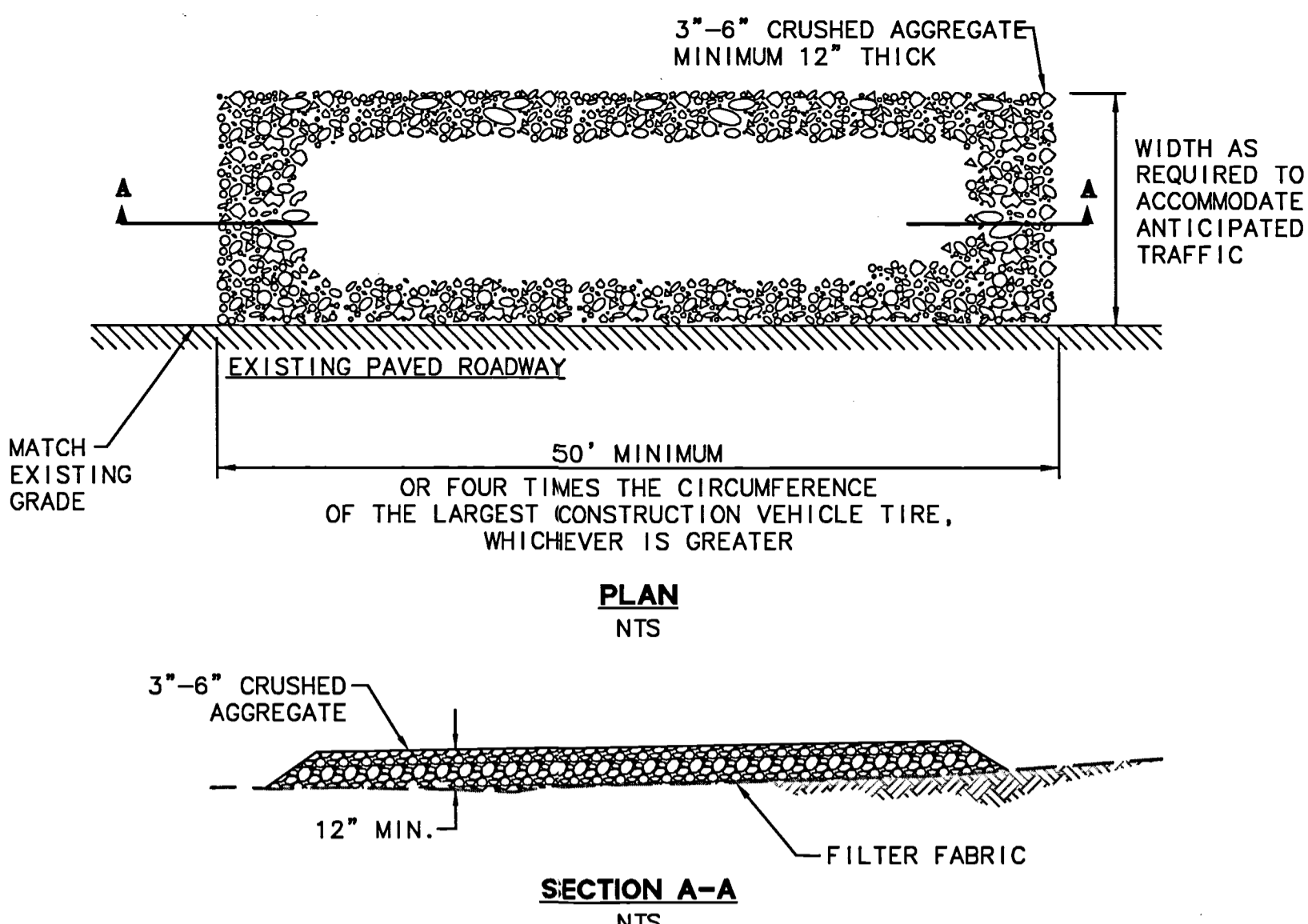
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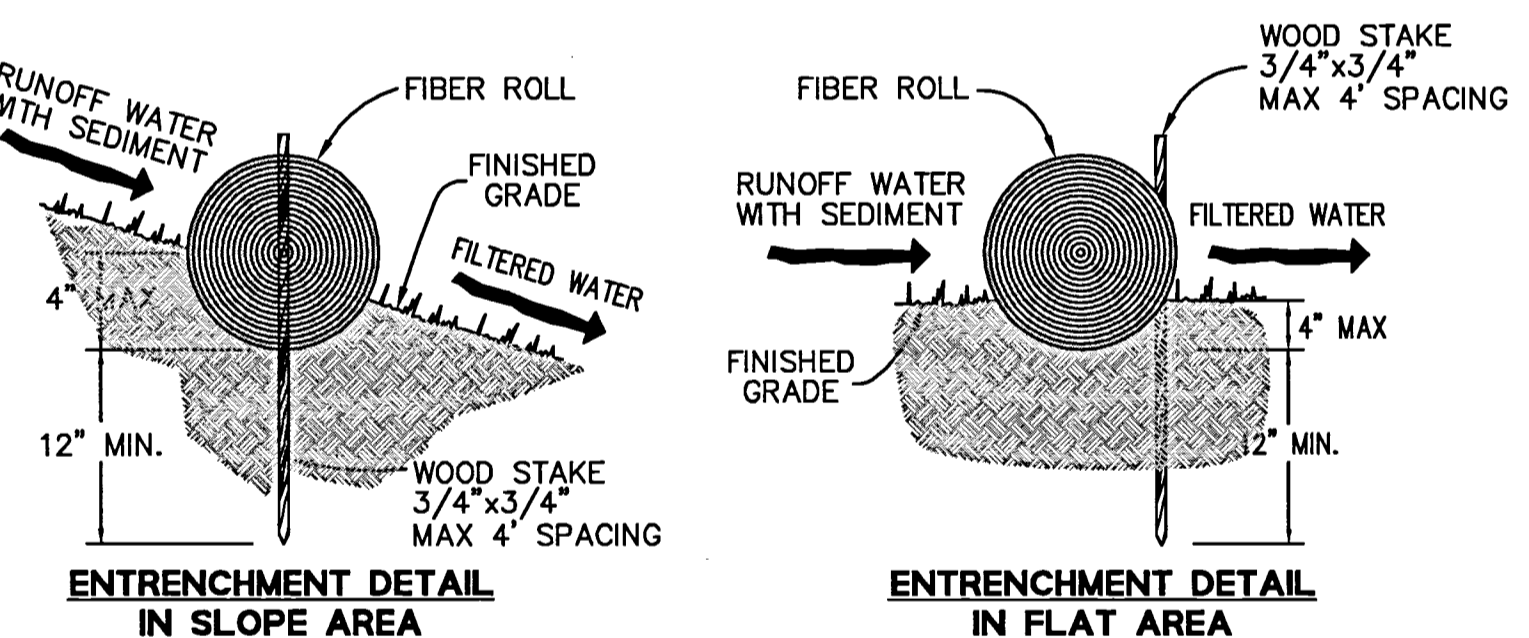
**EROSION CONTROL NOTES**

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
- ALTHOUGH SPECIFIC LOCATIONS FOR SEDIMENT CONTROL FACILITIES ARE SHOWN ON THESE PLANS, IT IS INTENDED THIS EROSION CONTROL PLAN BE MODIFIED WHEN NECESSARY TO MEET FIELD CONDITIONS. BASIN AND TRAP SIZES AND ELEVATIONS MAY BE ADJUSTED AS LONG AS THE MINIMUM AREAS AND DEPTHS FOR SEDIMENT SETTLING AND STORAGE ARE NOT REDUCED.
- THE INTENT OF THESE PLANS IS TO PROVIDE THE INITIAL CONCEPT FOR INTERIM EROSION CONTROL. THE CONTRACTOR SHALL UPDATE THE PLANS TO REFLECT CHANGING SITE CONDITIONS. PLAN UPDATES SHALL BE BASED UPON GENERAL SURVEY DATA. EROSION CONTROL EFFECTIVENESS SHALL ALSO BE MONITORED AND THE PLANS UPGRADED AS REQUIRED TO PREVENT SIGNIFICANT QUANTITIES OF SEDIMENT FROM ENTERING THE DOWNSLOPE DRAINAGE SYSTEM.
- THIS PLAN MAY NOT COVER ALL THE SITUATIONS THAT ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. IN GENERAL, THE CONTRACTOR IS RESPONSIBLE FOR KEEPING THE STORM RUN OFF FROM LEAVING THE SITE. FIBER ROLLS, SAND BAGS, AND SILT FENCES SHALL BE USED BY THE CONTRACTOR ON AN AS NEEDED BASIS TO INHIBIT SILT FROM LEAVING THE SITE AND ENTERING THE STORM DRAIN SYSTEM. ALL EXISTING, TEMPORARY, OR PERMANENT CATCH BASINS SHALL USE ONE OF THE SEDIMENT BARRIERS SHOWN.
- THE CONTRACTOR WILL BE LIABLE FOR ANY AND ALL DAMAGES TO PUBLIC AND/OR PRIVATE OWNED AND MAINTAINED ROAD CAUSED BY THE CONTRACTOR'S GRADING ACTIVITIES, AND WILL BE RESPONSIBLE FOR THE CLEANUP OF ANY MATERIAL SPILLED ON ANY PUBLIC ROAD ON THE HAUL ROUTE. ADJACENT PUBLIC ROADS SHALL BE CLEANED AT THE END OF EACH WORKING DAY.
- BEST MANAGEMENT PRACTICES SHALL BE OPERABLE YEAR AROUND.
- DURING THE RAINY SEASON, ALL PAVED AREAS ARE TO BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE IS TO BE MAINTAINED SO AS TO MINIMIZE SEDIMENT-LADEN RUNOFF TO ANY STORM DRAIN SYSTEM.
- ALL EROSION CONTROL FACILITIES MUST BE INSPECTED AND REPAIRED DAILY DURING THE RAINY SEASON. ALL SLOPES SHALL BE REPAIRED AS SOON AS POSSIBLE WHEN DAMAGED.
- THE FIRST PHASE OF CONSTRUCTION SHALL REQUIRE 30 PERCENT OF CONSTRUCTION EQUIPMENT TO MEET TIER 1 EPA CERTIFICATION STANDARDS FOR CLEAN TECHNOLOGY. THE REMAINDER OF CONSTRUCTION EQUIPMENT (70 PERCENT), WHICH WOULD CONSIST OF OLDER TECHNOLOGIES, SHALL BE REQUIRED TO USE EMULSIFIED FUELS.
- THE SECOND PHASE OF CONSTRUCTION SHALL REQUIRE 30 PERCENT OF CONSTRUCTION EQUIPMENT TO MEET TIER 2 EPA CERTIFICATION STANDARDS FOR CLEAN TECHNOLOGY AND 50 PERCENT TO MEET TIER 1 EPA CERTIFICATION STANDARDS. THE REMAINING 20 PERCENT OF CONSTRUCTION EQUIPMENT, WHICH WOULD CONSIST OF OLDER TECHNOLOGIES, SHALL USE EMULSIFIED FUELS.
- FOR ALL LARGER VEHICLES, INCLUDING CEMENT MIXERS OR OTHER DEVICES THAT MUST BE DELIVERED BY LARGE TRUCKS, VEHICLES SHALL BE EQUIPPED WITH CARB LEVEL THREE VERIFIED CONTROL DEVICES.
- WATER ALL ACTIVE CONSTRUCTION AREAS AT LEAST TWICE DAILY.
- COVER ALL TRUCKS HAULING SOIL, SAND, AND OTHER LOOSE MATERIALS OR REQUIRE ALL TRUCKS TO MAINTAIN AT LEAST TWO FEET OF FREEBOARD.
- PAVE, APPLY WATER THREE TIMES DAILY, OR APPLY NON-TOXIC SOIL STABILIZERS ON ALL UNPAVED ACCESS ROADS, PARKING AREAS, AND STAGING AREAS AT THE CONSTRUCTION SITES.
- SWEEP DAILY (WITH WATER SWEEPERS) ALL PAVED ACCESS ROADS, PARKING AREAS, AND STAGING AREAS AT THE CONSTRUCTION SITES.
- SWEEP PUBLIC STREETS ADJACENT TO CONSTRUCTION SITES DAILY (WITH WATER SWEEPERS) IF VISIBLE SOIL MATERIAL IS CARRIED ONTO THE STREETS.
- HYDROSEED OR APPLY NON-TOXIC SOIL STABILIZERS TO INACTIVE CONSTRUCTION AREAS (PREVIOUSLY GRADED AREAS INACTIVE FOR TEN DAYS OR MORE).
- TEMPORARY AND PERMANENT SLOPES GREATER THAN 3 FEET SHALL BE SEEDED UNLESS ALTERNATIVE MEASURES ARE USED.
- SEED MIX FOR REVEGETATION AND HYDROSEEDING:  
 NORTHERN CALIFORNIA COVER MIX BY ACRIGHT OR EQUAL  
 30% BLUE WILDRIE  
 30% MEADOW BARLEY  
 20% ZORRO FESCUE  
 10% PURPLE NEEDLE GRASS  
 10% CALIFORNIA NATIVE WILDFLOWERS  
 APPLY AT 40 POUNDS PER ACRE MINIMUM
- ENCLOSE, COVER, WATER TWICE DAILY, OR APPLY NON-TOXIC SOIL BINDERS TO EXPOSED STOCKPILES (DIRT, SAND, ETC.). LIMIT TRAFFIC SPEEDS ON UNPAVED ROADS TO 15 MILES PER HOUR.
- LIMIT TRAFFIC SPEEDS ON UNPAVED ROADS TO 15 MILES PER HOUR.
- INSTALL SANDBAGS OR OTHER EROSION CONTROL MEASURES TO PREVENT SILT RUNOFF TO PUBLIC ROADWAYS.
- REPLANT VEGETATION IN DISTURBED AREAS AS SOON AS POSSIBLE.
- INSTALL WHEEL WASHERS FOR ALL EXITING TRUCKS OR WASH OFF THE TIRES OR TRACKS OF ALL TRUCKS AND EQUIPMENT LEAVING THE CONSTRUCTION SITE.
- INSTALL WIND BREAKS AT THE WINDWARD SIDES OF THE CONSTRUCTION AREAS.
- SUSPEND EXCAVATION AND GRADING ACTIVITIES WHEN WIND (AS INSTANTANEOUS GUSTS) EXCEEDS 25 MILES PER HOUR.
- NO GRADING SHALL BE ALLOWED DURING THE WINTER SEASON (OCTOBER 15 TO APRIL 15) TO AVOID POTENTIAL SOIL EROSION UNLESS APPROVED, IN WRITING, BY THE COMMUNITY DEVELOPMENT DIRECTOR. THE PROPERTY OWNERS SHALL SUBMIT A LETTER TO THE CURRENT PLANNING SECTION, AT LEAST TWO WEEKS PRIOR TO COMMENCEMENT OF GRADING, STATING THE DATE WHEN GRADING WILL BEGIN.
- STABILIZE ALL DENUDED AREAS AND MAINTAIN EROSION CONTROL MEASURES CONTINUOUSLY BETWEEN OCTOBER 15 AND APRIL 15. STABILIZING SHALL INCLUDE BOTH PROACTIVE MEASURES, SUCH AS THE PLACEMENT OF STRAW BALES OR COIR NETTING, AND PASSIVE MEASURES, SUCH AS MINIMIZING VEGETATION REMOVAL AND REVEGETATING DISTURBED AREAS WITH VEGETATION THAT IS COMPATIBLE WITH THE SURROUNDING ENVIRONMENT.
- STORE, HANDLE, AND DISPOSE OF CONSTRUCTION MATERIALS AND WASTES PROPERLY, SO AS TO PREVENT THEIR CONTACT WITH STORMWATER.
- CONTROL AND PREVENT THE DISCHARGE OF ALL POTENTIAL POLLUTANTS, INCLUDING PAVEMENT CUTTING WASTES, PAINTS, CONCRETE, PETROLEUM PRODUCTS, CHEMICALS, WASH WATER OR SEDIMENTS, AND NON-STORMWATER DISCHARGES TO STORM DRAINS AND WATERCOURSES.
- USE SEDIMENT CONTROLS OR FILTRATION TO REMOVE SEDIMENT WHEN DEWATERING SITE AND OBTAINING ALL NECESSARY PERMITS
- AVOID CLEANING, FUELING, OR MAINTAINING VEHICLES ON-SITE, EXCEPT IN A DESIGNATED AREA WHERE WASH WATER IS CONTAINED AND TREATED.
- DELINEATE WITH FIELD MARKERS CLEARING LIMITS, SETBACKS, AND DRAINAGE COURSES.
- PROTECT ADJACENT PROPERTIES AND UNDISTURBED AREAS FROM CONSTRUCTION IMPACTS USING VEGETATIVE BUFFER STRIPS, SEDIMENT BARRIERS OR FILTERS, DIKES, MULCHING, OR OTHER MEASURES AS APPROPRIATE.
- PERFORM CLEARING AND EARTH-MOVING ACTIVITIES ONLY DURING DRY WEATHER.
- LIMIT AND TIME APPLICATIONS OF PESTICIDES AND FERTILIZERS TO PREVENT POLLUTED RUNOFF.
- LIMIT CONSTRUCTION ACCESS ROUTES AND STABILIZE DESIGNATED ACCESS POINTS.
- ALL GRADED SURFACES AND MATERIALS, WHETHER FILLED, EXCAVATED, TRANSPORTED OR STOCKPILED, SHALL BE WETTED, PROTECTED OR CONTAINED IN SUCH A MANNER AS TO PREVENT ANY SIGNIFICANT NUISANCE FROM DUST, OR SPILLAGE UPON ADJOINING WATER BODY, PROPERTY, OR STREETS. EQUIPMENT AND MATERIALS ON THE SITE SHALL BE USED IN SUCH A MANNER AS TO AVOID EXCESSIVE DUST. A DUST CONTROL PLAN MAY BE REQUIRED AT ANYTIME DURING THE COURSE OF THE PROJECT.
- A DUST PALLIATIVE SHALL BE APPLIED TO THE SITE WHEN REQUIRED BY THE COUNTY. THE TYPE AND RATE OF APPLICATION SHALL BE RECOMMENDED BY THE SOILS ENGINEER AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS, THE PLANNING AND BUILDING DEPARTMENT'S GEOTECHNICAL SECTION, AND THE REGIONAL WATER QUALITY CONTROL BOARD.
- IF NO WORK HAS PROCEEDED FOR A PERIOD OF 6-WEEKS, FINAL DRAINAGE AND EROSION CONTROL IMPROVEMENTS SHALL BE INSTALLED IN ACCORDANCE WITH AN APPROVED WINTERIZATION PLAN.
- PADS SHALL BE GRADED TO MINIMIZE STANDING WATER. SPECIFIC LOCATIONS REQUIRING SUPPLEMENTAL GRADING TO ACHIEVE ACCEPTABLE DRAINAGE SHALL BE DETERMINED BY THE CONSTRUCTION MANAGER. ALL SPOILS AND SOIL STOCKPILES REMAINING ON SITE SHALL BE ENCLOSED BY SILT FENCES/FIBER ROLLS.
- STUBBED OUT ENDS OF PARTIALLY COMPLETED SUBDRAINS SHALL BE WRAPPED WITH AN APPROVED FABRIC TO PREVENT SOIL AND DEBRIS FROM ENTERING THE PIPE.
- HAUL ROADS ARE CURRENTLY NOT SHOWN ON THE PLANS. EROSION CONTROL MEASURES SHALL BE TAKEN TO MINIMIZE EROSION RELATED TO HAUL ROADS.
- GRADING SCHEDULE SHALL BE SUBMITTED FOR APPROVAL TO SAN MATEO COUNTY PUBLIC WORKS BY AUGUST 15.
- THE NAME, ADDRESS, AND 24 HOUR TELEPHONE NUMBER OF THE PERSON RESPONSIBLE FOR IMPLEMENTATION OF EROSION AND SEDIMENTATION CONTROL PLAN SHALL BE PROVIDED TO THE CITY.
- SHOULD IT APPEAR THAT THE EROSION CONTROL PLAN, OR ANY OTHER MATTER THERETO, IS NOT SUFFICIENTLY DETAILED OR EXPLAINED ON THESE PLANS, THE CONTRACTOR SHALL CONTACT THE BKF PROJECT ENGINEER AT (650) 462-6300 FOR SUCH FURTHER EXPLANATIONS AS MAY BE NECESSARY.



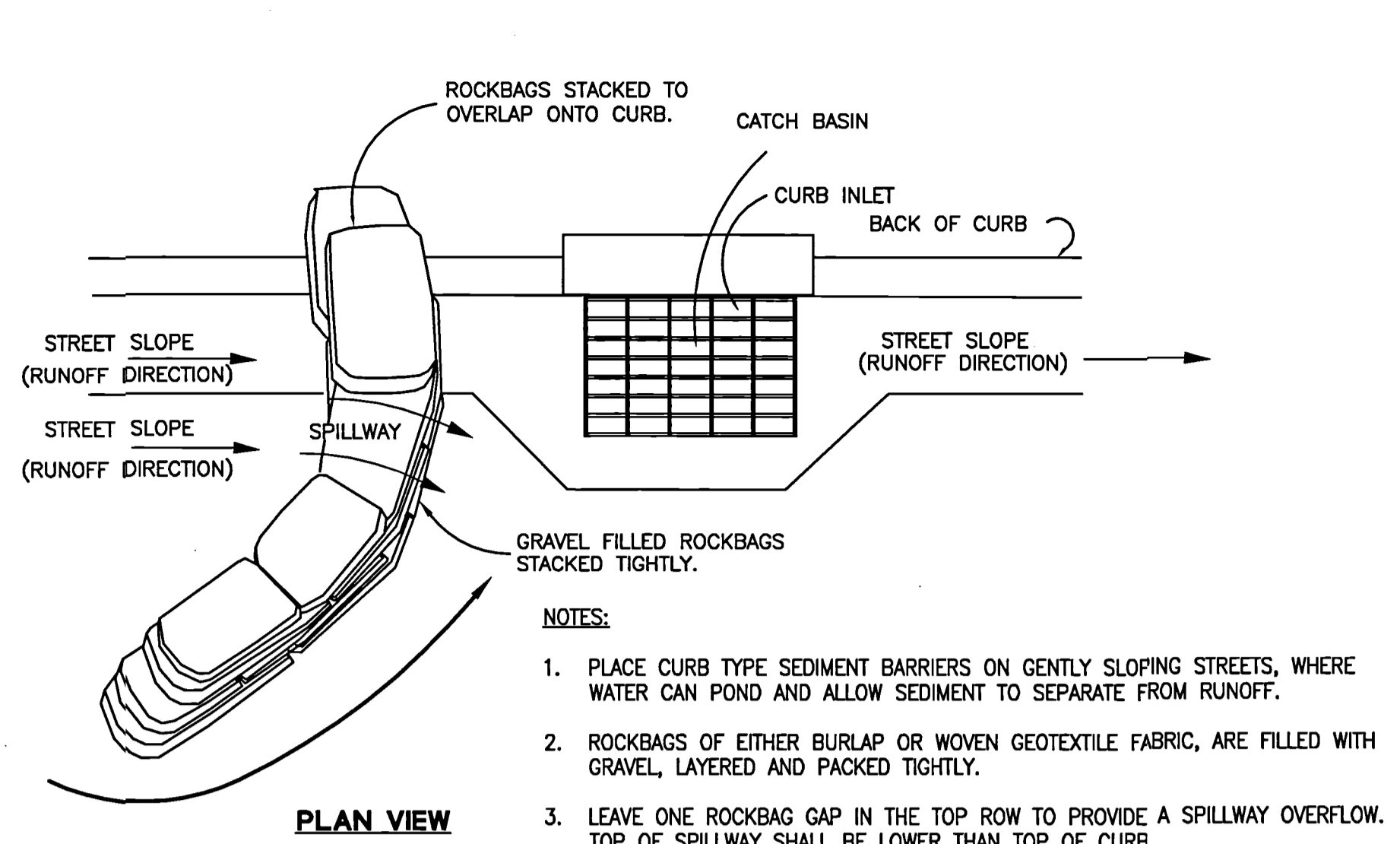
- NOTES:**
- ALL CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAYS SHALL BE REMOVED IMMEDIATELY.
  - WHEELS SHALL BE CLEAN PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAYS. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE THROUGH USE OF INLET PROTECTION (E.G. SAND BAGS OR OTHER APPROVED METHODS).
  - THE MATERIAL FOR CONSTRUCTION OF THE PAD SHALL BE 3" TO 6" STONE.
  - THE THICKNESS OF THE PAD SHALL NOT BE LESS THAN 12".
  - THE WIDTH OF THE PAD SHALL NOT BE LESS THAN THE FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
  - THE LENGTH OF THE PAD SHALL NOT BE LESS THAN 50'.

**1** STABILIZED CONSTRUCTION ENTRANCE  
 NTS

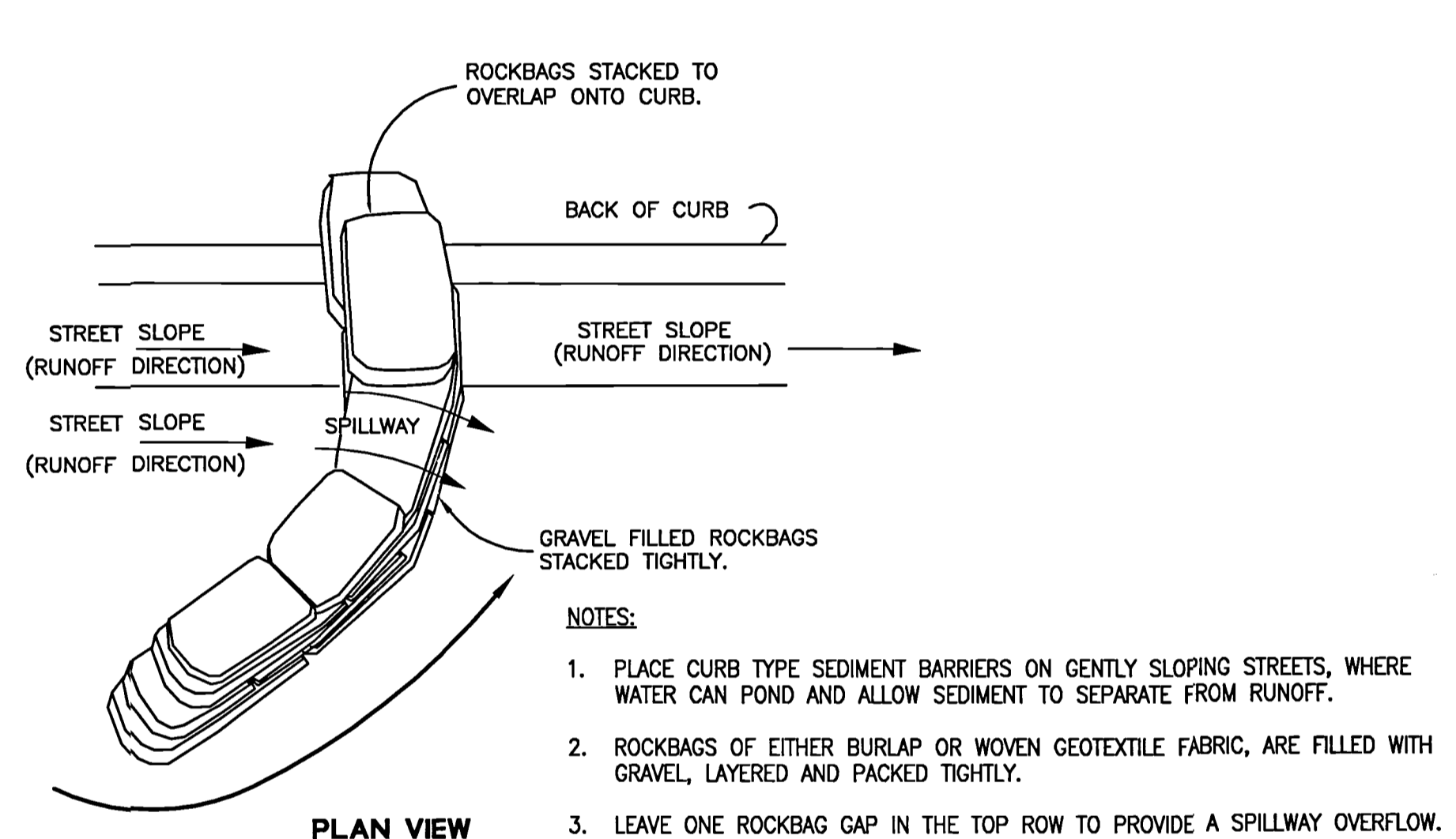


- NOTES:**
- FIBER ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3" TO 4" DEEP, DUG ON CONTOUR.
  - ADJACENT ROLLS SHALL TIGHTLY ABUT.
  - RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND FIBER ROLL.

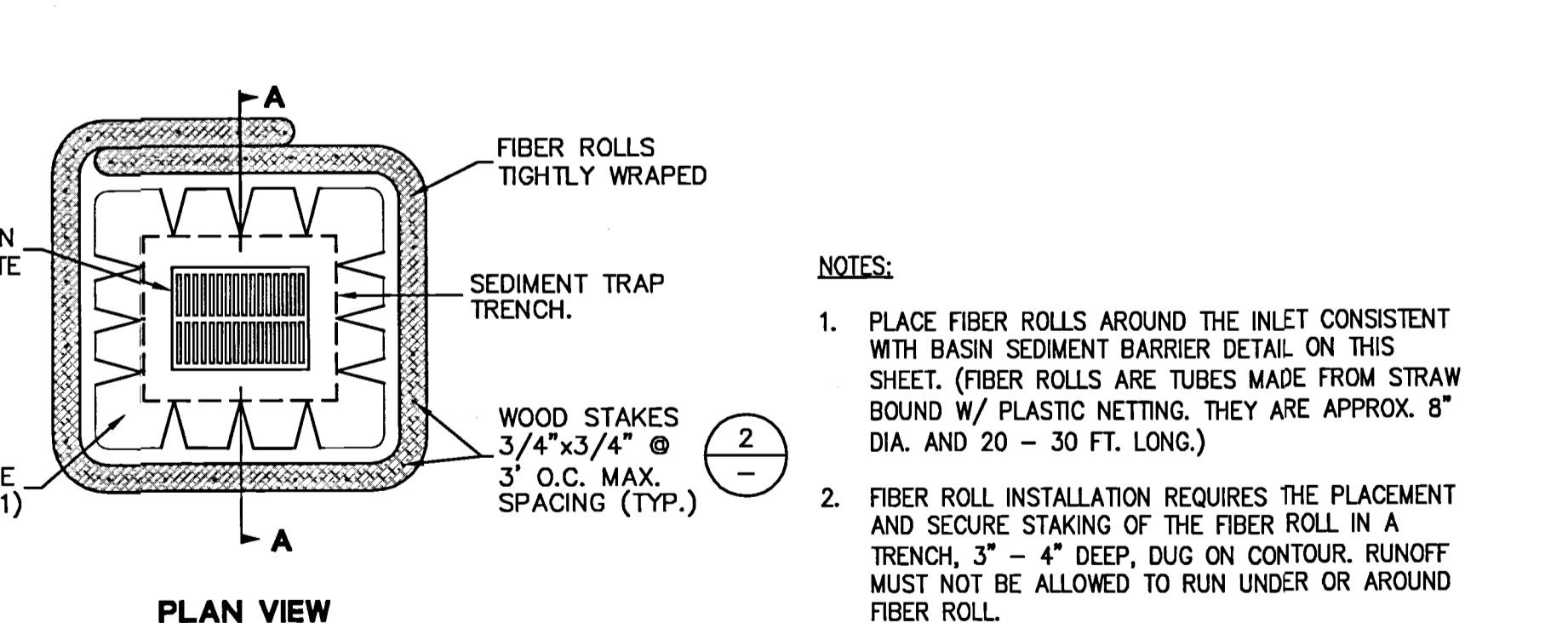
**2** FIBER ROLL  
 NTS



- NOTES:**
- PLACE CURB TYPE SEDIMENT BARRIERS ON GENTLY SLOPING STREETS, WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
  - ROCKBAGS OF EITHER BURLAP OR WOVEN GEOTEXTILE FABRIC, ARE FILLED WITH GRAVEL, LAYERED AND PACKED TIGHTLY.
  - LEAVE ONE ROCKBAG GAP IN THE TOP ROW TO PROVIDE A SPILLWAY OVERFLOW. TOP OF SPILLWAY SHALL BE LOWER THAN TOP OF CURB.
  - INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT, SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.



- NOTES:**
- PLACE CURB TYPE SEDIMENT BARRIERS ON GENTLY SLOPING STREETS, WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
  - ROCKBAGS OF EITHER BURLAP OR WOVEN GEOTEXTILE FABRIC, ARE FILLED WITH GRAVEL, LAYERED AND PACKED TIGHTLY.
  - LEAVE ONE ROCKBAG GAP IN THE TOP ROW TO PROVIDE A SPILLWAY OVERFLOW. TOP OF SPILLWAY SHALL BE LOWER THAN TOP OF CURB.
  - INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT, SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.



- NOTES:**
- PLACE FIBER ROLLS AROUND THE INLET CONSISTENT WITH BASIN SEDIMENT BARRIER DETAIL ON THIS SHEET. (FIBER ROLLS ARE TUBES MADE FROM STRAW BOUND W/ PLASTIC NETTING. THEY ARE APPROX. 8" DIA. AND 20 - 30 FT. LONG.)
  - FIBER ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE FIBER ROLL IN A TRENCH, 3" - 4" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND FIBER ROLL.
  - THE TOP OF THE STRUCTURE (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BY-PASSING THE INLET. EXCAVATION OF A BASIN ADJACENT TO THE DROP INLET OR A TEMPORARY DIKE ON THE DOWNSLOPE OF THE STRUCTURE MAY BE NECESSARY.

**5** DROP INLET FIBER ROLLS SEDIMENT BARRIER  
 NTS  
 (TIME FRAME: AREA DRAINS - BETWEEN AREA DRAIN INSTALLATION AND PROJECT COMPLETION  
 CURB INLETS - BETWEEN CURB INLET INSTALLATION AND FINAL PAVING OPERATIONS)

ALL EROSION CONTROL MEASURES SHALL BE IN PLACE BY OCTOBER 15 AND MAINTAINED DURING ALL PHASES OF CONSTRUCTION.

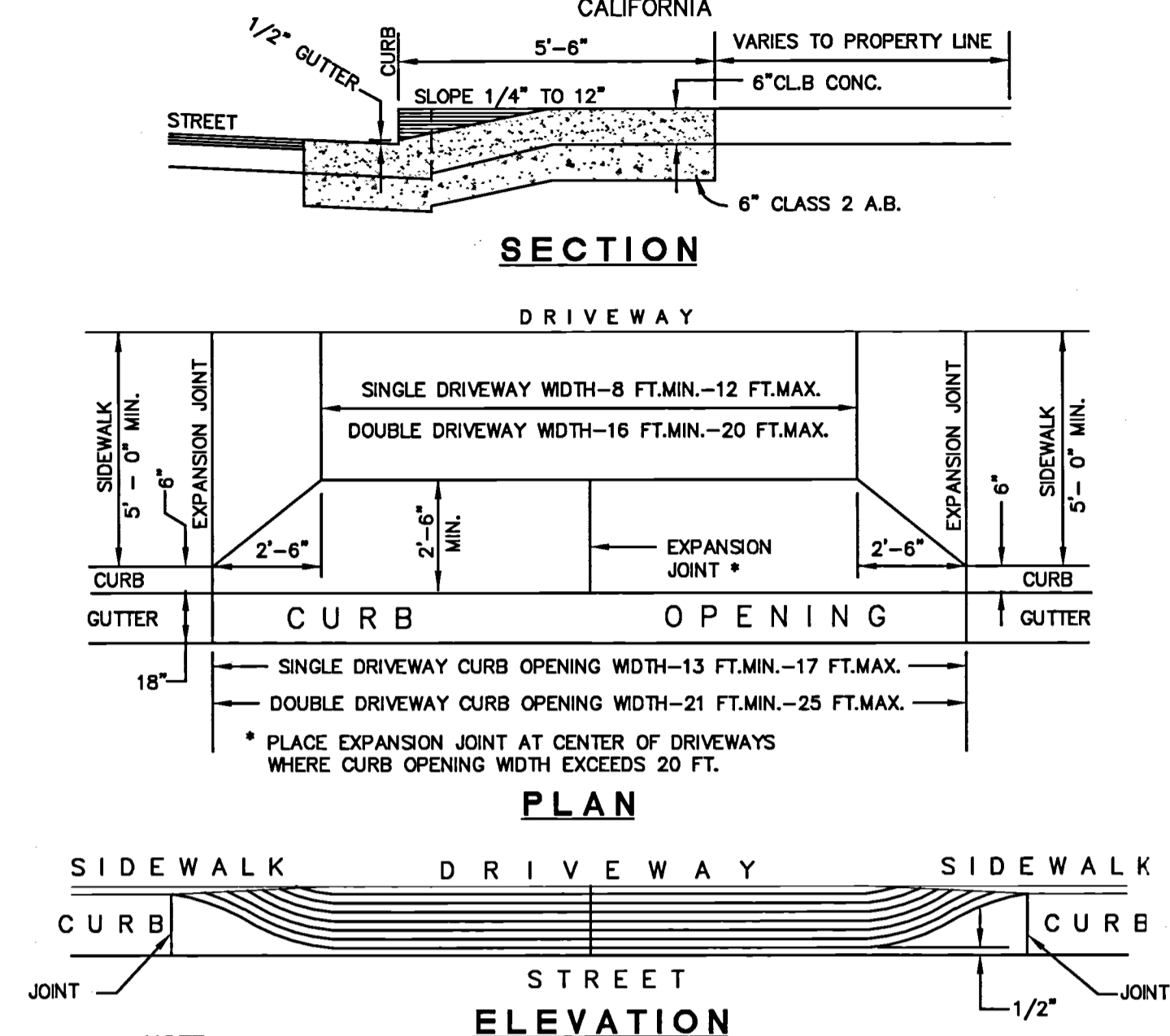
DRAWING NAME: J:\Eng95\950168\dwg\CD\Off-Site for Lots 5 - 11\CS.00-HECDEC.dwg  
 PLOT DATE: 05-12-16

No.	Date	By	Check	Job No.
	05/12/16	AS SHOWN		950168-20
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		Drawn		
		Approved		

Sheet Number: **C5.00**  
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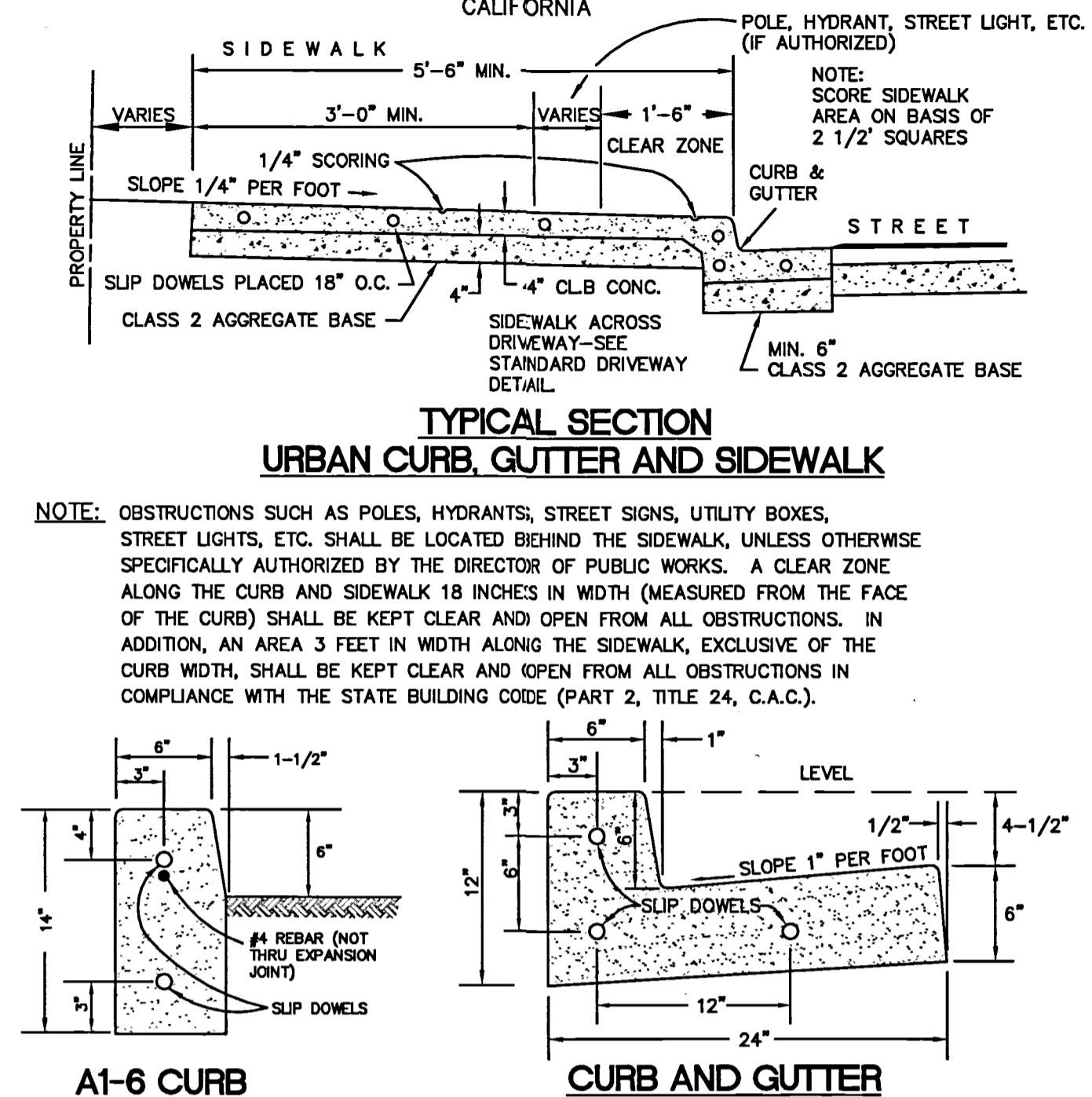
SAN MATEO COUNTY DEPARTMENT OF PUBLIC WORKS  
 DRAWN BY: D.P. CHECK BY: J.A.L. APPROVED BY: N.R.C.  
 SCALE: NONE DATE: 6/95 REVISED: 4/97



**STANDARD STRUCTURES  
 DRIVEWAY WIDTHS AND CURB OPENINGS  
 FOR  
 SINGLE FAMILY RESIDENTIAL DWELLINGS**

D-1

SAN MATEO COUNTY DEPARTMENT OF PUBLIC WORKS  
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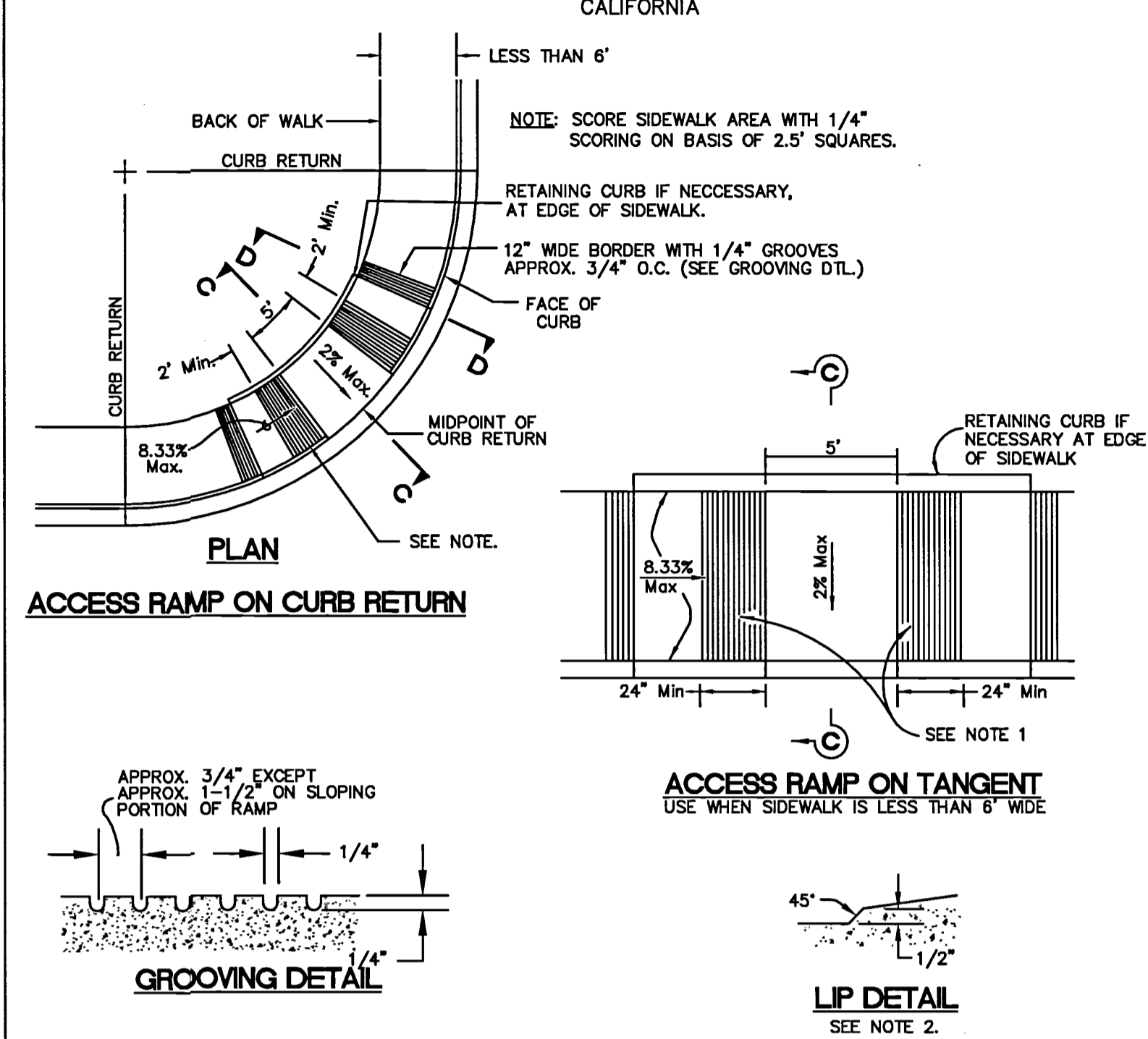


**TYPICAL SECTIONS**

- NOTES:
1. ALL CONCRETE TO BE CLASS B CONCRETE.
  2. MINIMUM SIDEWALK THICKNESS = 4 INCHES PCC.
  3. PLACE 1/2" DIAMETER X 18" LONG DOWELS AT EXPANSION JOINTS AS SHOWN.
  4. PLACE 1/2" THICK EXPANSION JOINTS FULL WIDTH 20' ON CENTER.
  5. CONSTRUCT MONOLITHIC CURB, GUTTER AND SIDEWALK UNLESS OTHERWISE SPECIFICALLY AUTHORIZED BY THE DIRECTOR OF PUBLIC WORKS.
  6. SUB-BASE MATERIALS WITHIN 30" OF SUBGRADE SHALL BE COMPACTED TO 95%.

D-3

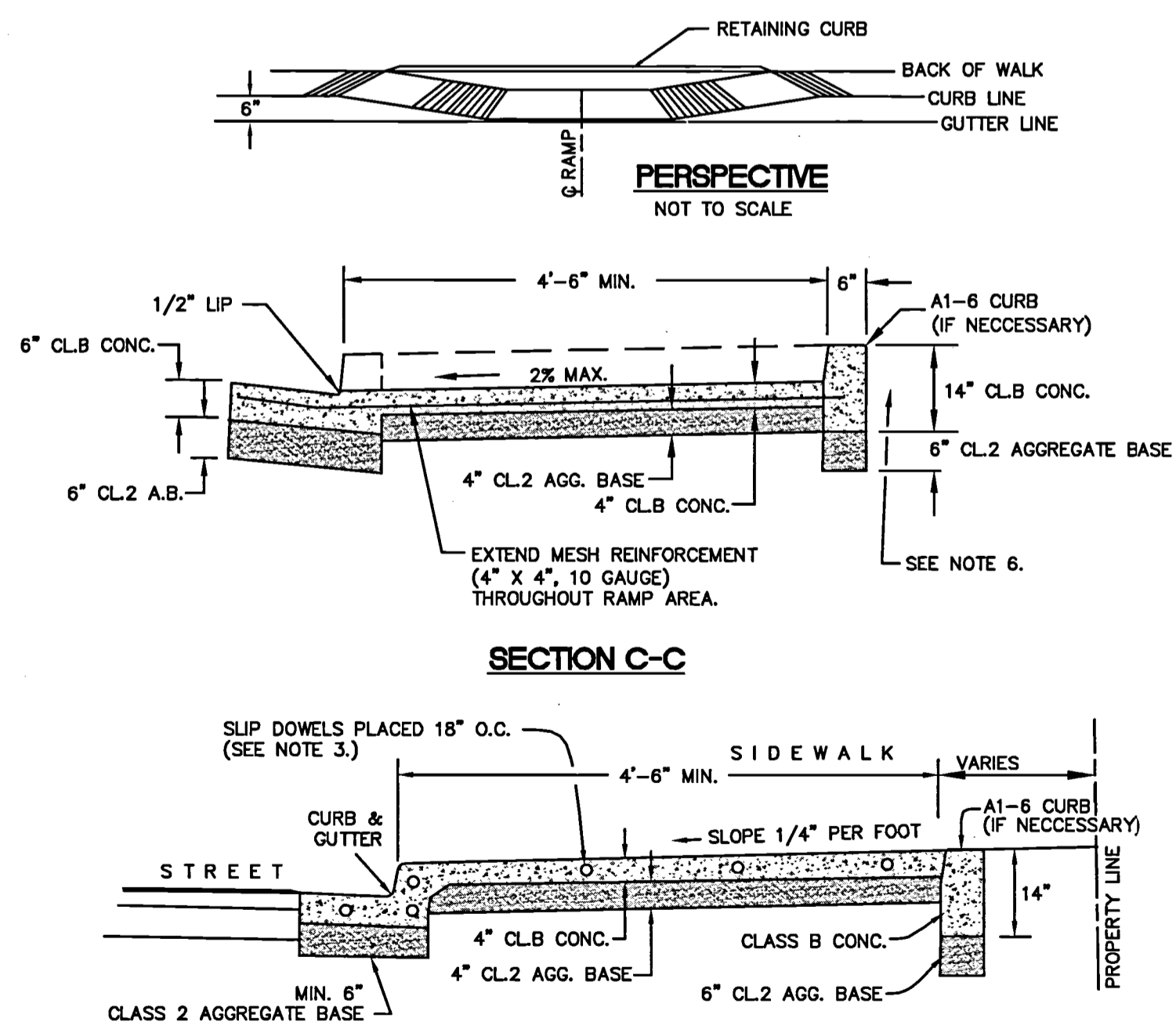
SAN MATEO COUNTY DEPARTMENT OF PUBLIC WORKS  
 DRAWN BY: D.P. CHECK BY: J.A.L. APPROVED BY: N.R.C.  
 SCALE: NONE DATE: 7/97 REVISED:



**SIDEWALK ACCESS RAMP  
 FOR SIDEWALKS LESS THAN 6' WIDE**

NO SCALE  
 (SHEET 1 OF 3)  
 D-4A

SAN MATEO COUNTY DEPARTMENT OF PUBLIC WORKS  
 DRAWN BY: D.P. CHECK BY: J.A.L. APPROVED BY: N.R.C.  
 SCALE: NONE DATE: 7/97 REVISED:



**SIDEWALK ACCESS RAMP  
 FOR SIDEWALKS LESS THAN 6' WIDE**

NO SCALE  
 (SHEET 2 OF 3)  
 D-4B

SAN MATEO COUNTY DEPARTMENT OF PUBLIC WORKS  
 DRAWN BY: D.P. CHECK BY: J.A.L. APPROVED BY: N.R.C.  
 SCALE: NONE DATE: 7/97 REVISED:

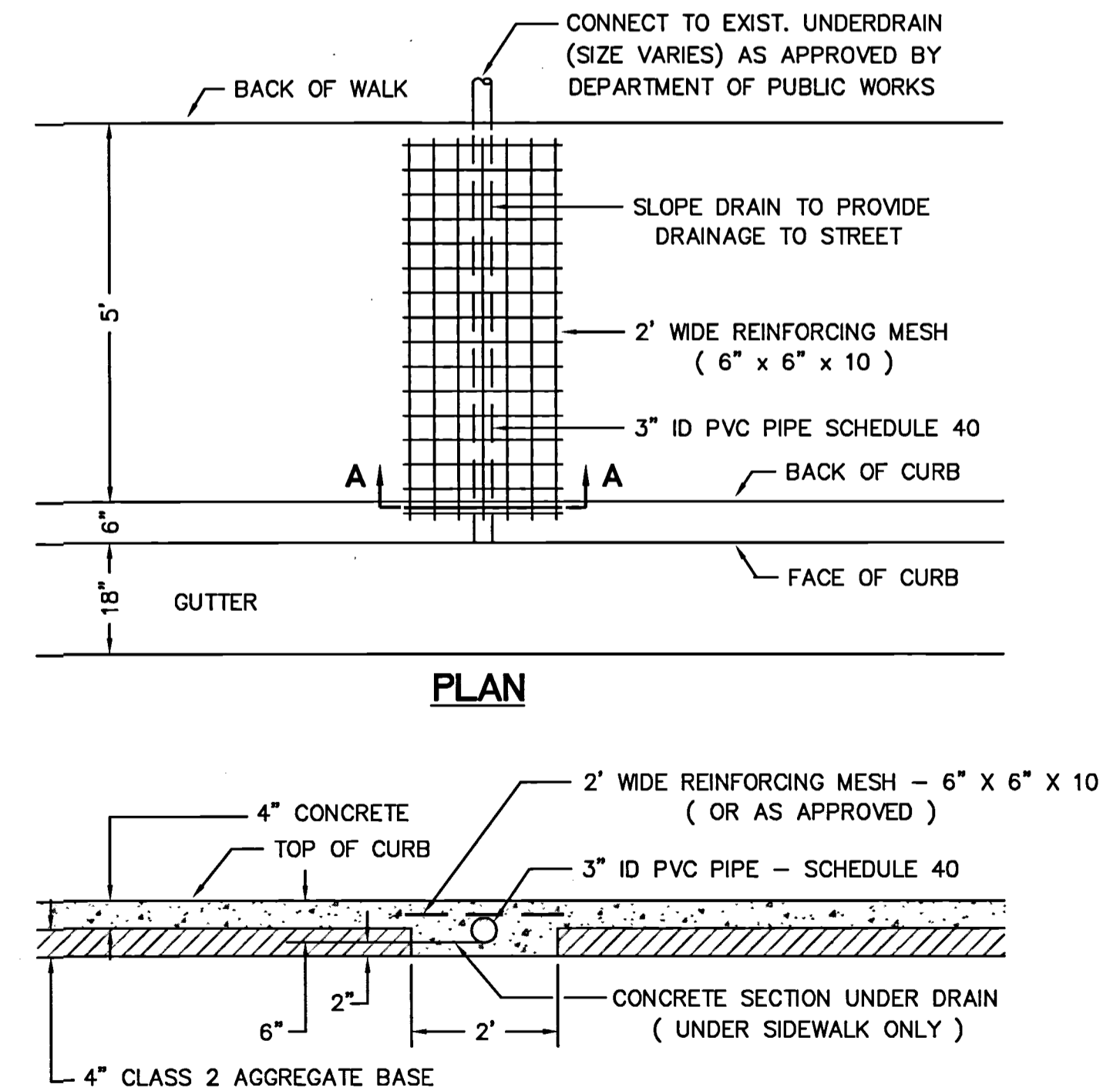
**GENERAL NOTES**

1. CURB RAMPS THAT HAVE A RAMP SLOPE FLATTER THAN 6.67% SHALL HAVE A DETECTABLE WARNING SURFACE THAT EXTENDS THE FULL WIDTH OF THE RAMP AND 24" MINIMUM LENGTH. DETECTABLE WARNING SURFACES, AT THE OPTION OF THE CONTRACTOR, SHALL BE CONSTRUCTED BY CAST-IN-PLACE OR STAMPED METHOD, OR CONSIST OF A PREFABRICATED SURFACE. THE PRE-FABRICATED SURFACE SHALL REQUIRE APPROVAL BY THE ENGINEER.
2. TRANSITIONS FROM RAMPS TO WALKS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES. THE BOTTOM OF THE RAMP SHALL HAVE A 1/2" LIP AT 45°.
3. INSTALL SLIP DOWELS 18" O.C. AT EXPANSION JOINTS.
4. MINIMUM WIDTH OF RAMP, NOT INCLUDING RETAINING CURB, SHALL BE 4 FEET.
5. THE SURFACE OF RAMP SHALL HAVE A TRANSVERSE BROOMED SURFACE TEXTURE ROUGHER THAN THE SURROUNDING SIDEWALK EXCEPT WHEN LOCATED IN CENTER OF CURB RETURN.
6. BACKFILL MATERIAL TO BE PLACED FLUSH WITH TOP OF CURB.
7. CONSTRUCT MONOLITHIC CURB, GUTTER, AND SIDEWALK.
8. SUB-BASE MATERIAL WITHIN 2.5' OF SUBGRADE SHALL BE COMPACTED TO 95%.
9. RECONSTRUCT SIDEWALK TO NEAREST SCORE LINE AND INSTALL EXPANSION JOINT.
10. UTILITY PULL BOXES, MANHOLES, VAULTS AND ALL OTHER UTILITY FACILITIES WITHIN THE BOUNDARIES OF THE CURB RAMP WILL BE RELOCATED BY OTHERS PRIOR TO, OR IN CONJUNCTION WITH, CURB RAMP CONSTRUCTION

**SIDEWALK ACCESS RAMP  
 FOR SIDEWALKS LESS THAN 6' WIDE**

NO SCALE  
 (SHEET 3 OF 3)  
 D-4C

SAN MATEO COUNTY DEPARTMENT OF PUBLIC WORKS  
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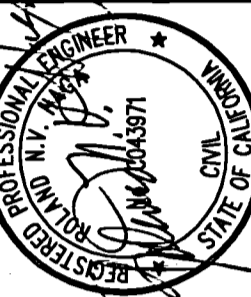


**DRAINAGE UNDER SIDEWALK**

D-6

DRAWING NAME: J:\eng95\950168.dwg\CD\Off-Site for Lots 5 - 11\06-00-HECDDT.dwg PLOTTED BY: trat

255 SHORELINE DRIVE, SUITE 200  
 REDWOOD CITY, CA 94065  
 PHONE: (650) 462-6300  
 FAX: (650) 462-6399



HIGHLAND ESTATES - STREET IMPROVEMENT PLANS  
 TICONDEROGA DRIVE, COBBLEHILL PLACE & COMPENS WAY  
 CONSTRUCTION DETAILS  
 SAN MATEO COUNTY CALIFORNIA

Date	Scale	AS SHOWN	Design	Drawn	AG	Approved	RH	Job No
05/12/16								950168-20

Sheet Number:  
**C6.00**  
 OF

SAN MATEO COUNTY DEPARTMENT  
OF  
PUBLIC WORKS  
REDWOOD CITY  
CALIFORNIA

DRAWN BY: A.G.M.      SCALE: NONE  
CHECK BY: R.L.F.      DATE: 6/95  
APPROVED BY: N.R.C.      REVISED: 4/97

TABLE B

Curb Type	Normal Curb Height	Curb Batter	b
A1-6	6"	1 1/2"	12 1/2"
A1-8	8"	2"	12
B	6"	4"	10
Dike	6"	3"	

**INLET  
TYPE GO**

	H=3'-0" TO 8'-0" (T=6")		H=8'-1" TO 20'-0" (T=8")	
	'H=3'-0"	ADDITIONAL P.C.C. PER FT. (C.Y.)	H=8'-1"	ADDITIONAL P.C.C. PER FT. (C.Y.)
GO	1.24	0.245	3.39	0.346

TABLE BASED ON 8" FLOOR SLAB, NO DEDUCTION FOR PIPE OPENINGS, AND CURB TYPE GIVING HIGHEST QUANTITY OF CONCRETE. NO DEDUCTIONS OR ADJUSTMENTS ARE TO BE MADE TO THESE QUANTITIES BECAUSE OF PIPE OPENINGS, DIFFERENT FLOOR ALTERNATIVES OR DIFFERENT CURB TYPE.

B-1

SAN MATEO COUNTY DEPARTMENT  
OF  
PUBLIC WORKS  
REDWOOD CITY  
CALIFORNIA

DRAWN BY: A.G.M.      SCALE: NONE  
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APPROVED BY: N.R.C.      REVISED:

**APRON DETAILS**  
NO SCALE

	ON GRADE	IN SAG
INLET		
GO	0.3843	0.3880

B-1A

SAN MATEO COUNTY DEPARTMENT  
OF  
PUBLIC WORKS  
REDWOOD CITY  
CALIFORNIA

DRAWN BY: B.M.A.      SCALE: NONE  
CHECK BY: R.L.F.      DATE: 6/95  
APPROVED BY: N.R.C.      REVISED:

**TYPE 24-10S GRATE**  
WELDED STEEL (RETICULINE TYPE)

INLET TYPE	GRATE TYPE	NO. GRATES	WEIGHT LBS.
GO, GOL	24-10S	1	229

NOTE:  
ALL STEEL TO BE HOT DIP GALVANIZED AFTER ALL WELDING IS COMPLETE.

B-4

SAN MATEO COUNTY DEPARTMENT  
OF  
PUBLIC WORKS  
REDWOOD CITY  
CALIFORNIA

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APPROVED BY: N.R.C.      REVISED: 7/97

O.D. = OUTSIDE DIAMETER

**STANDARD TRENCH BACKFILL  
AND BEDDING DETAIL  
STORM DRAIN PIPES**

THERE SHALL BE A MINIMUM OF TWO AND ONE-HALF FEET (30 INCHES) OF COVER OVER ALL PIPES AND CONDUITS UNLESS OTHERWISE DIRECTED BY COUNTY ROAD INSPECTOR.

STRUCTURE BACKFILL MATERIAL...MATERIAL WITH SAND EQUIVALENT NOT LESS THAN 20 AND SIEVE GRADATION BY WEIGHT AS FOLLOWS:

SIEVE SIZE	% PASSING SIEVES
3"	100
NO.4	35-100
NO.30	20-100

BACKFILL MATERIAL...MATERIAL FROM EXCAVATION, FREE FROM STONES OR LUMPS EXCEEDING 3 INCHES IN GREATEST DIMENSION, VEGETABLE MATTER, OR OTHER UNSATISFACTORY MATERIAL.

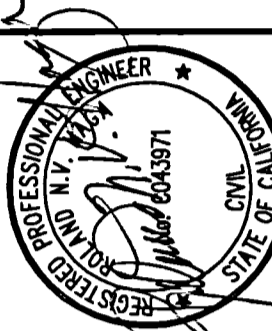
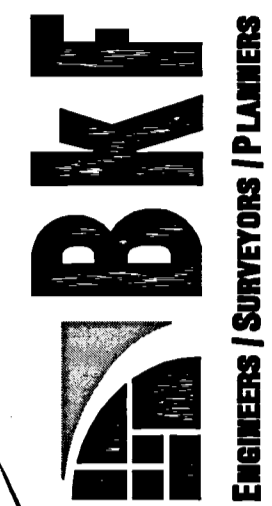
\*IN AREAS OF CEMENT TREATED BASES, THE REPLACEMENT MATERIAL SHALL CONSIST OF A MINIMUM OF 3" OF ASPHALT CONCRETE (TYPE B) OVER A MINIMUM OF 8" OF PORTLAND CEMENT CONCRETE (CLASS B).

FOR TRENCH BACKFILL REQUIREMENTS FOR SANITARY SEWER PIPE, SEE STANDARD DRAWINGS C6 AND C7.

B-15

DRAWING NAME: J:\Eng95\950168\dwg\CD\Off-Site for Lots 5 - 11\C6.10-HECDDT.dwg  
PLOT DATE: 05-12-16 PLOTTED BY: trat

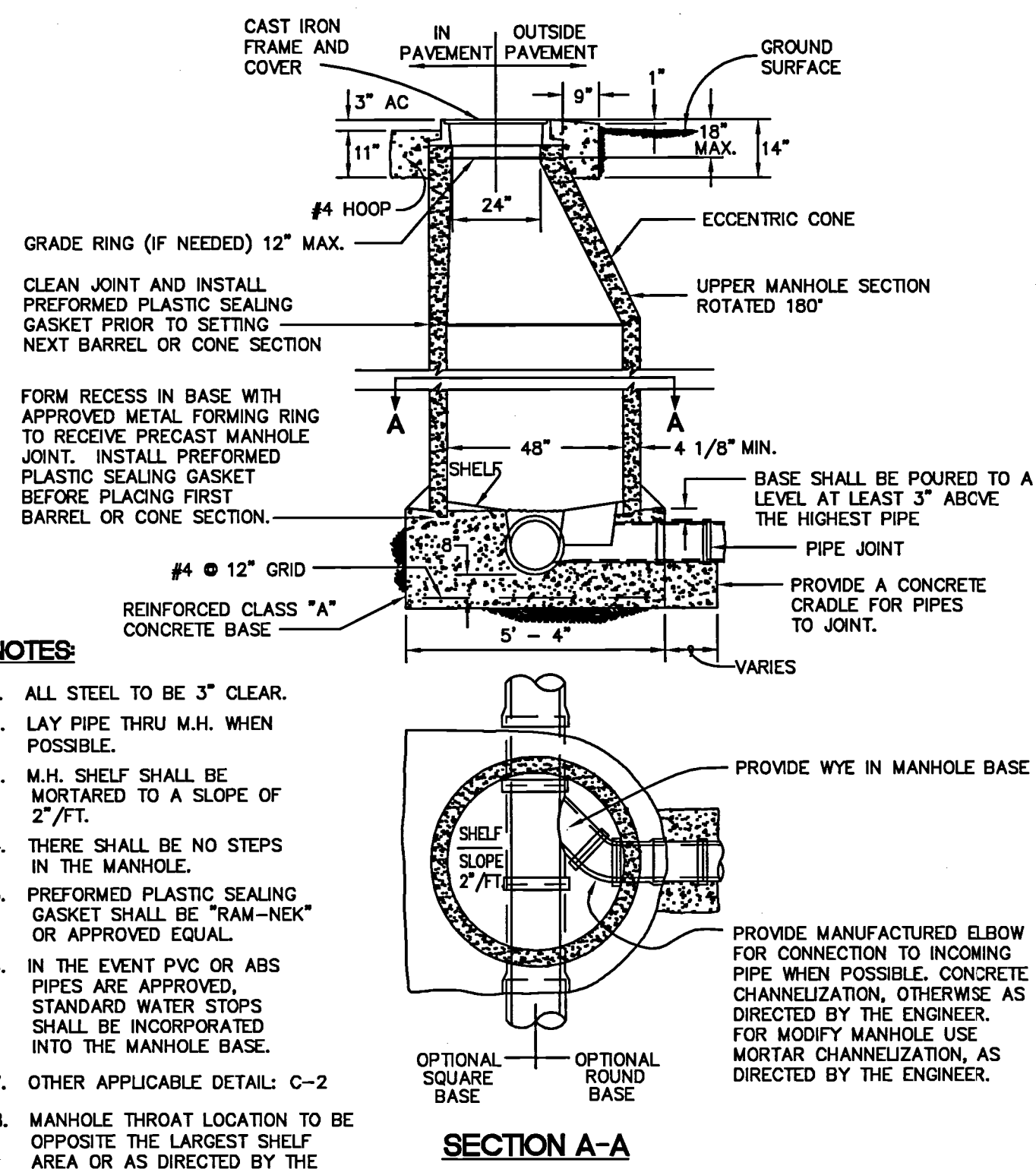
255 SHORELINE DRIVE, SUITE 200  
REDWOOD CITY, CA 94065  
PHONE: (650) 482-6300  
FAX: (650) 482-6399



HIGHLAND ESTATES - STREET IMPROVEMENT PLANS  
TICONDEROGA DRIVE, COBBLEHILL PLACE & COMPENS WAY  
CONSTRUCTION DETAILS  
SAN MATEO COUNTY  
CITY OF SAN MATEO  
CALIFORNIA

Date	Scale	AS SHOWN	Design	Drawn	AG	Approved	RH	Job No.
05/12/16			JT					950168-20
Revisions								
No.								
Sheet Number: <b>C6.10</b>								

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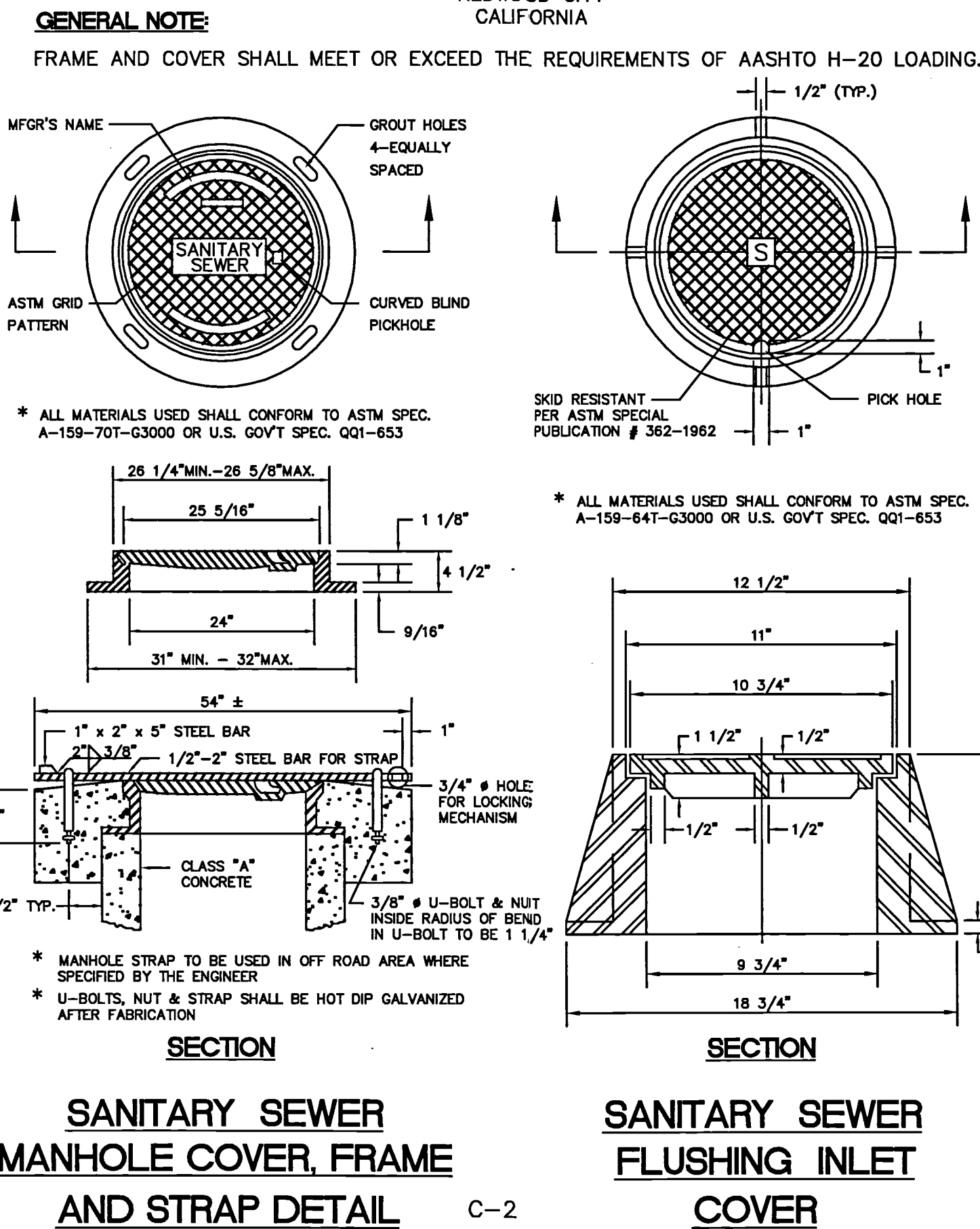
NOTES:

- 1. ALL STEEL TO BE 3" CLEAR. 2. LAY PIPE THRU M.H. WHEN POSSIBLE. 3. M.H. SHELF SHALL BE MORTARED TO A SLOPE OF 2"/FT. 4. THERE SHALL BE NO STEPS IN THE MANHOLE. 5. PREFORMED PLASTIC SEALING GASKET SHALL BE "RAM-NEK" OR APPROVED EQUAL. 6. IN THE EVENT PVC OR ABS PIPES ARE APPROVED, STANDARD WATER STOPS SHALL BE INCORPORATED INTO THE MANHOLE BASE. 7. OTHER APPLICABLE DETAIL: C-2 8. MANHOLE THROAT LOCATION TO BE OPPOSITE THE LARGEST SHELF AREA OR AS DIRECTED BY THE ENGINEER

SANITARY SEWER MANHOLE DETAIL

C-1

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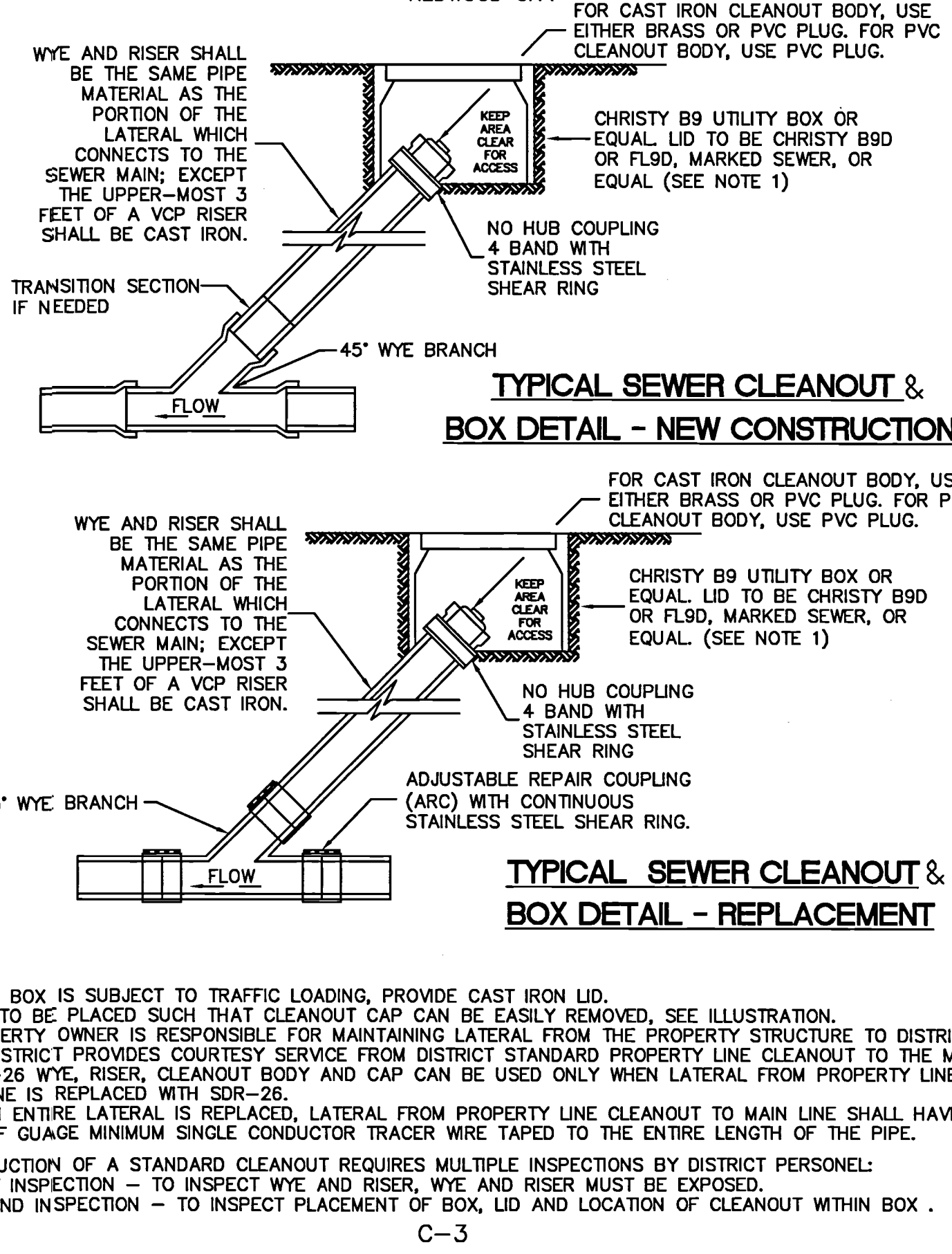


SANITARY SEWER MANHOLE COVER, FRAME AND STRAP DETAIL

C-2

SANITARY SEWER FLUSHING INLET COVER

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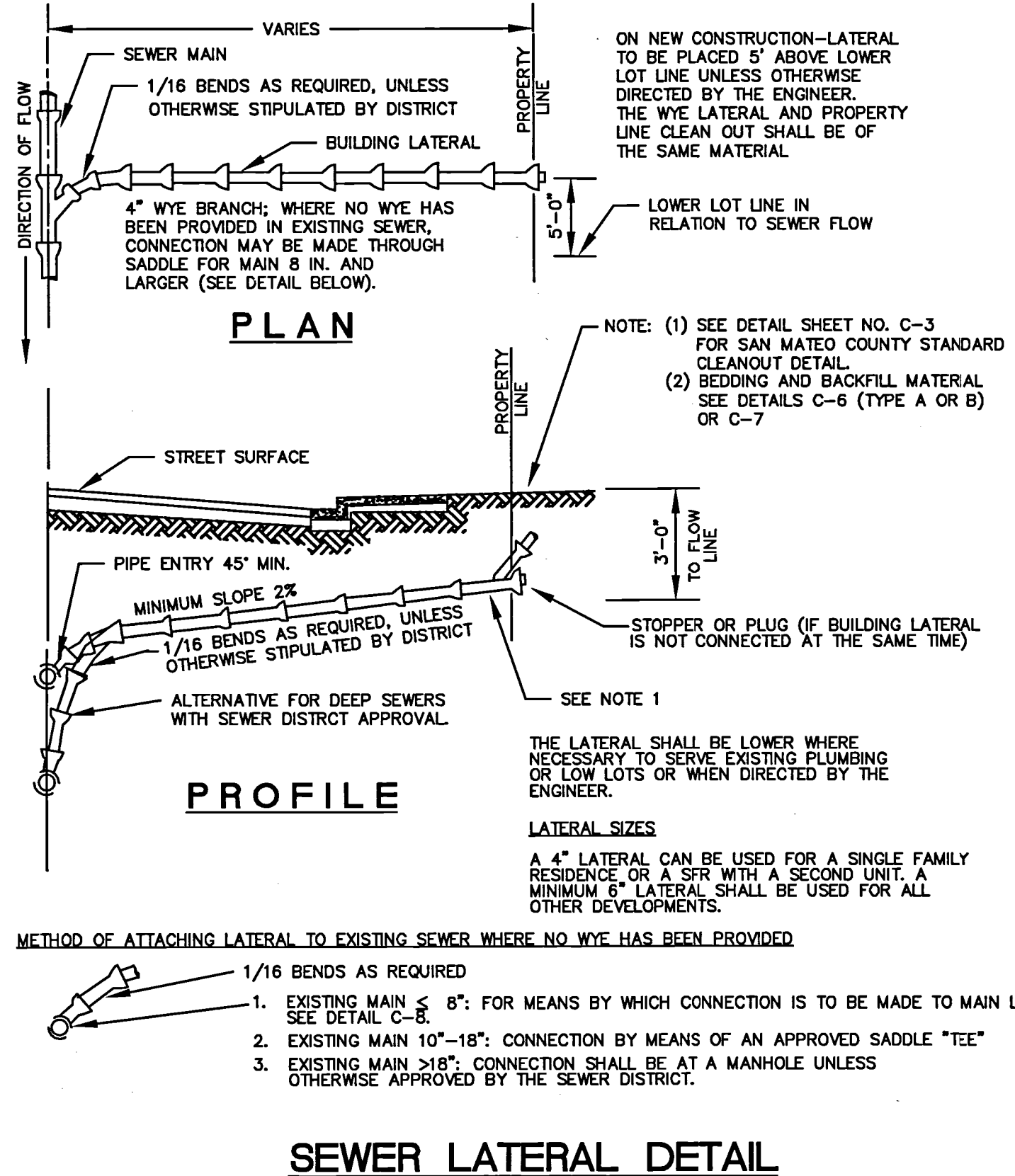


NOTES:

- 1. WHEN BOX IS SUBJECT TO TRAFFIC LOADING, PROVIDE CAST IRON LID. 2. BOX TO BE PLACED SUCH THAT CLEANOUT CAP CAN BE EASILY REMOVED. SEE ILLUSTRATION. 3. PROPERTY OWNER IS RESPONSIBLE FOR MAINTAINING LATERAL FROM THE PROPERTY STRUCTURE TO DISTRICT MAIN. DISTRICT PROVIDES COURTESY SERVICE FROM DISTRICT STANDARD PROPERTY LINE CLEANOUT TO THE MAIN. 4. SDR-26 WYE, RISER, CLEANOUT BODY AND CAP CAN BE USED ONLY WHEN LATERAL FROM PROPERTY LINE TO MAIN LINE IS REPLACED WITH SDR-26. 5. WHEN ENTIRE LATERAL IS REPLACED, LATERAL FROM PROPERTY LINE CLEANOUT TO MAIN LINE SHALL HAVE A 14-1-UF GAUGE MINIMUM SINGLE CONDUCTOR TRACER WIRE TAPED TO THE ENTIRE LENGTH OF THE PIPE. CONSTRUCTION OF A STANDARD CLEANOUT REQUIRES MULTIPLE INSPECTIONS BY DISTRICT PERSONNEL: 1. FIRST INSPECTION - TO INSPECT WYE AND RISER, WYE AND RISER MUST BE EXPOSED. 2. SECOND INSPECTION - TO INSPECT PLACEMENT OF BOX, LID AND LOCATION OF CLEANOUT WITHIN BOX.

C-3

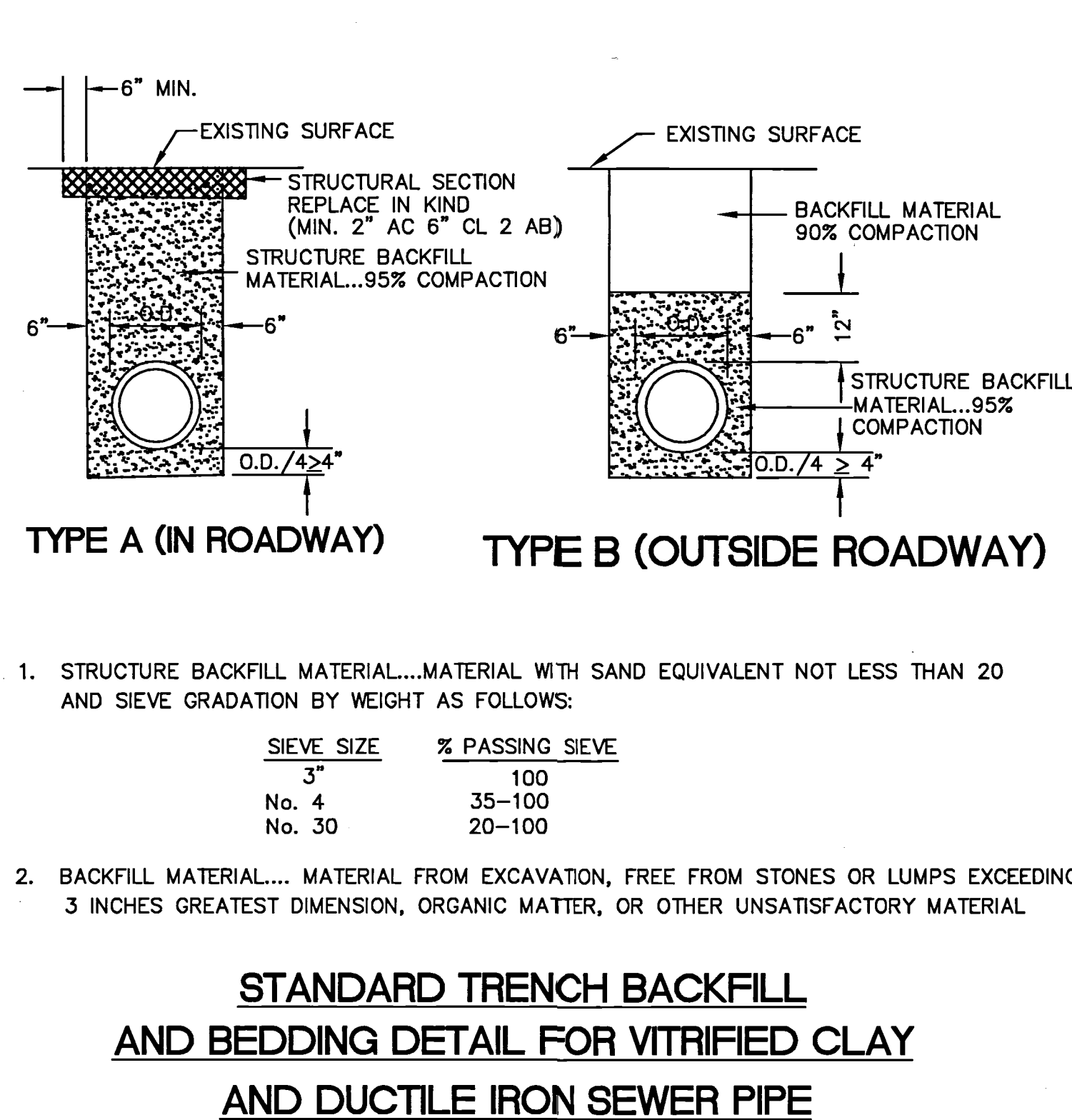
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SEWER LATERAL DETAIL

C-5

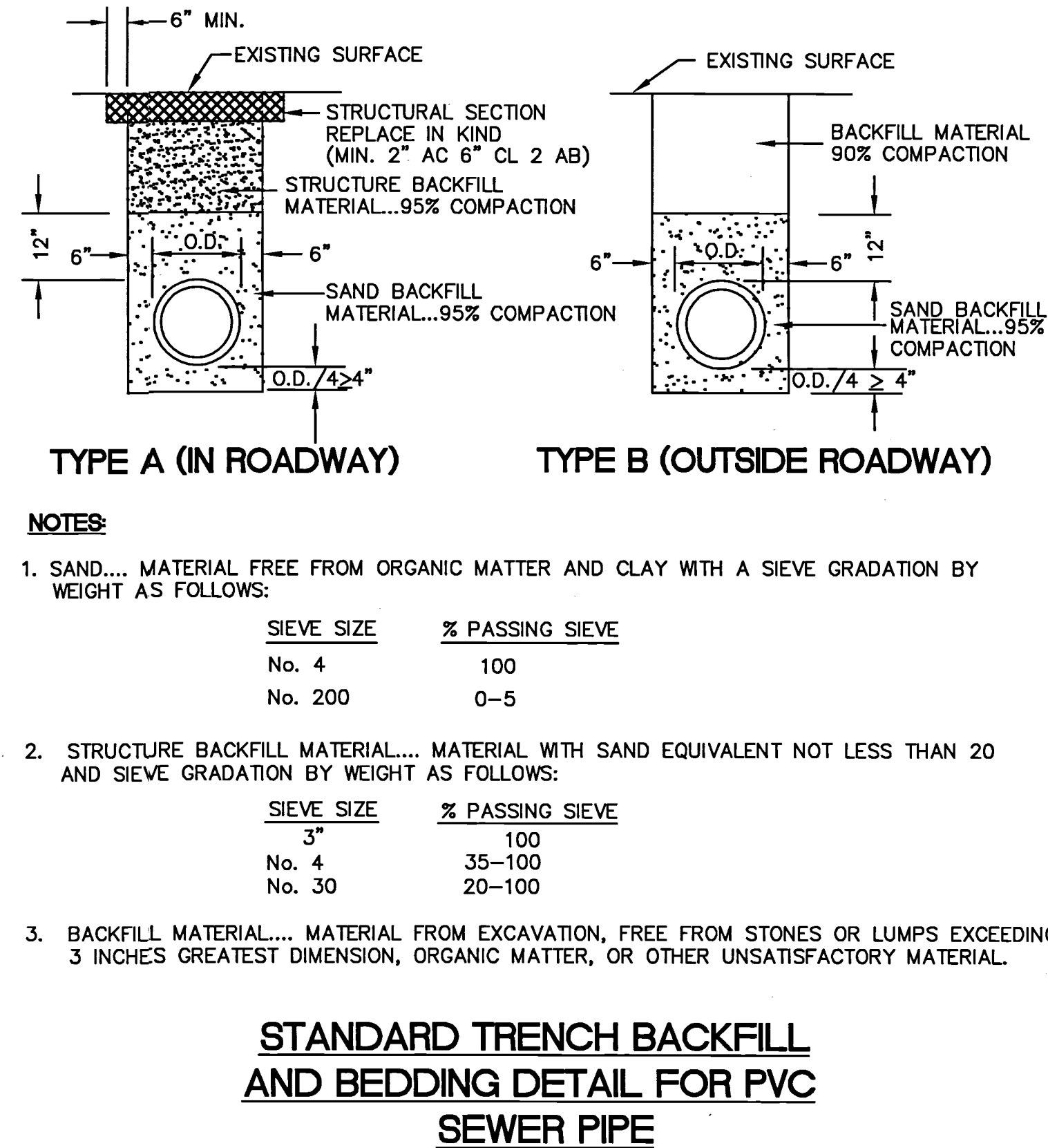
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STANDARD TRENCH BACKFILL AND BEDDING DETAIL FOR VITRIFIED CLAY AND DUCTILE IRON SEWER PIPE

C-6

SAN MATEO COUNTY DEPARTMENT OF PUBLIC WORKS SCALE: NONE DATE: 6/95 REVISED: 7/97



STANDARD TRENCH BACKFILL AND BEDDING DETAIL FOR PVC SEWER PIPE

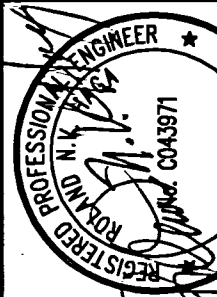
C-7

NOTES:

- 1. SAND... MATERIAL FREE FROM ORGANIC MATTER AND CLAY WITH A SIEVE GRADATION BY WEIGHT AS FOLLOWS: SIEVE SIZE 3" 100, No. 4 35-100, No. 200 0-5. 2. STRUCTURE BACKFILL MATERIAL... MATERIAL WITH SAND EQUIVALENT NOT LESS THAN 20 AND SIEVE GRADATION BY WEIGHT AS FOLLOWS: SIEVE SIZE 3" 100, No. 4 35-100, No. 30 20-100. 3. BACKFILL MATERIAL... MATERIAL FROM EXCAVATION, FREE FROM STONES OR LUMPS EXCEEDING 3 INCHES GREATEST DIMENSION, ORGANIC MATTER, OR OTHER UNSATISFACTORY MATERIAL.

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255 SHORELINE DRIVE, SUITE 200 REDWOOD CITY, CA 94065 PHONE: (650) 462-6300 FAX: (650) 462-6399

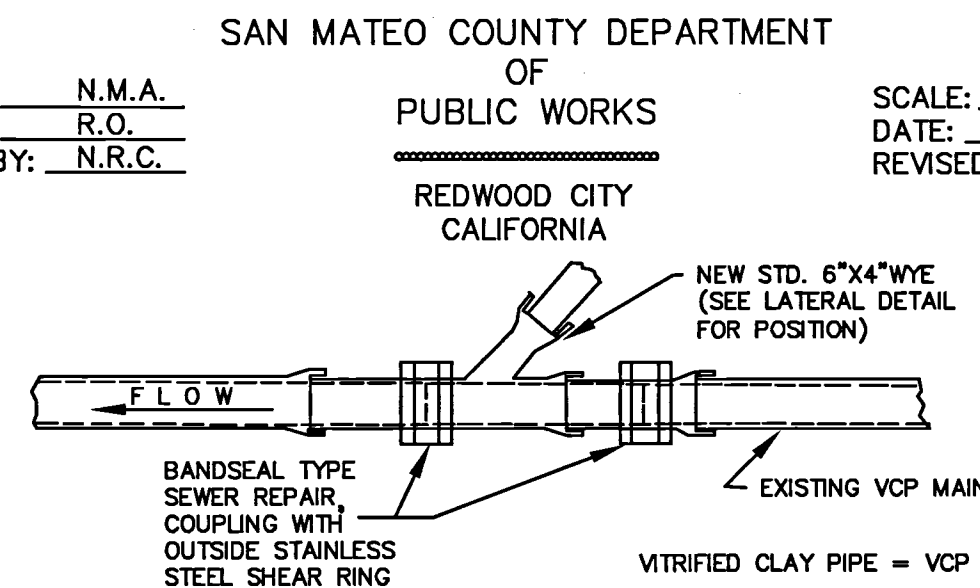


HIGHLAND ESTATES - STREET IMPROVEMENT PLANS TICONDEROGA DRIVE, COBBLEHILL PLACE & COMPENS WAY CONSTRUCTION DETAILS

Table with columns: Date, Scale, Design, Drawn, Approved, Job No. 950168-20

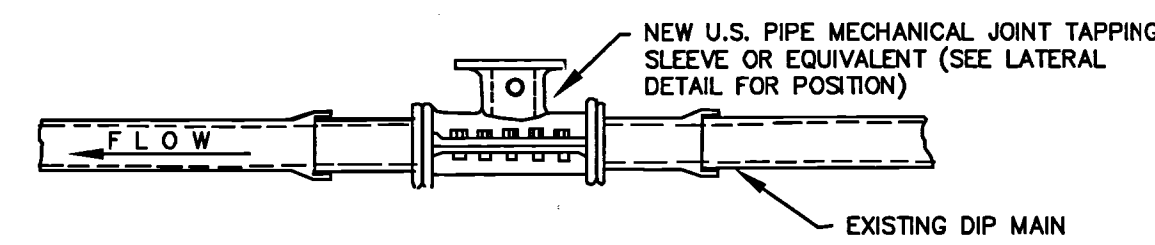
C6.20 OF

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 CHECK BY: R.O. DATE: 6/95  
 APPROVED BY: N.R.C. REVISED:



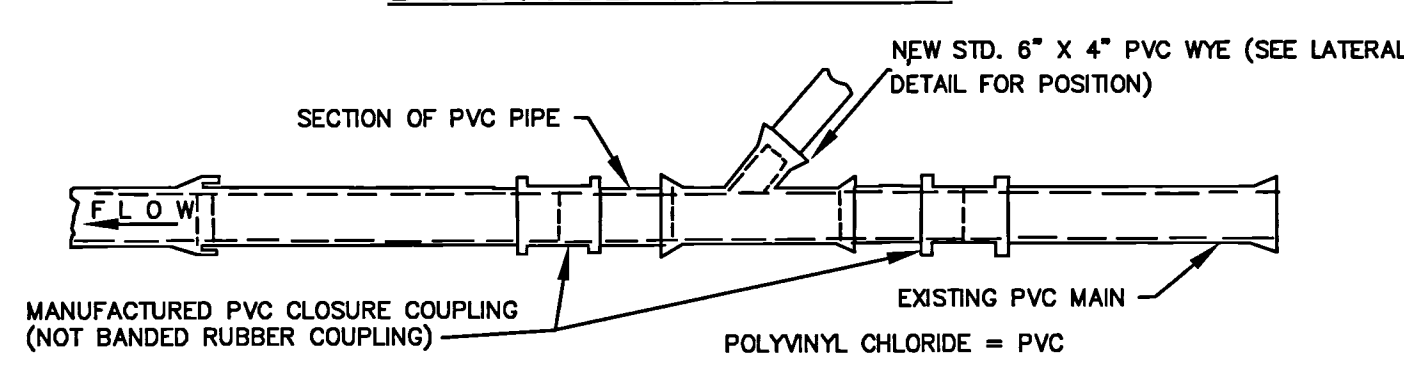
NOTE: (1) THE NEWLY INSTALLED WYE SHALL BE OF THE SAME MATERIAL AS THE EXISTING MAIN.

**PLAN VITRIFIED CLAY**



NOTES: HORIZONTAL PIPE ENTRY ANGLE WILL BE 90°, INSTEAD OF 45° (SEE LATERAL DETAIL, PLAN VIEW)  
 VERTICAL PIPE ENTRY ANGLE SHALL BE 45° MINIMUM (SEE LATERAL DETAIL PROFILE VIEW)

**PLAN DUCTILE IRON PIPE**



NOTE: ALL PVC, PIPE AND FITTINGS SHALL BE SDR 35 35 AND SHALL HAVE RUBBER GASKETED JOINTS. SOLVENT WELDED JOINTS SHALL NOT BE ALLOWED.

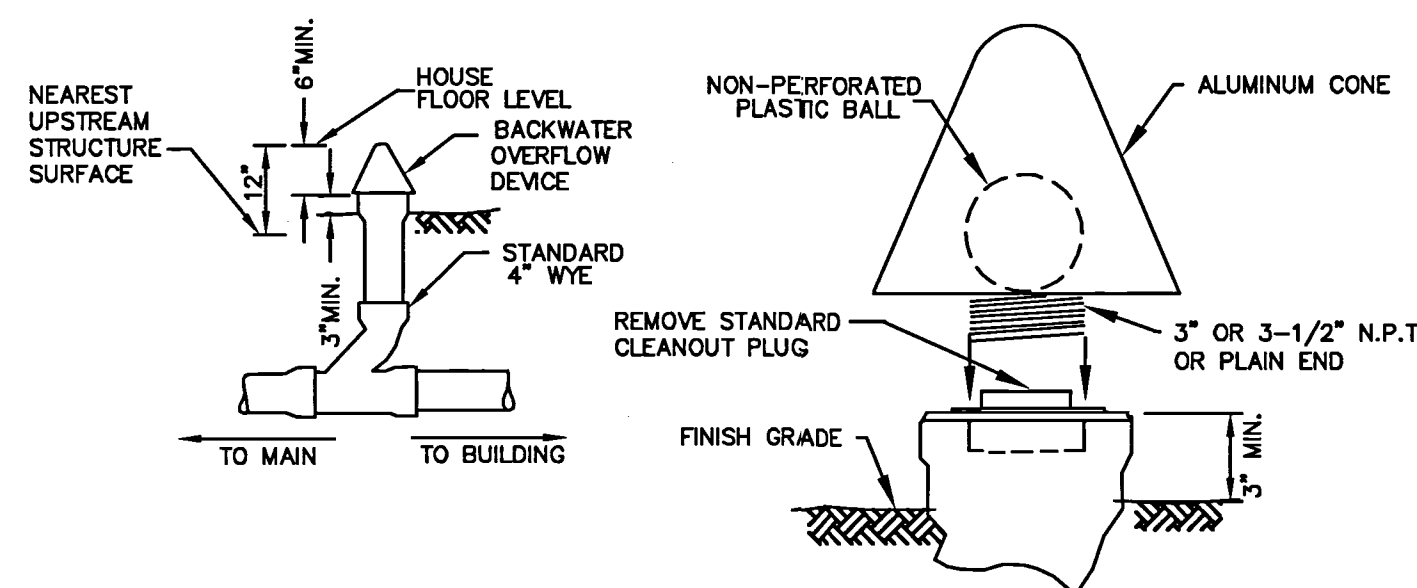
**PLAN POLYVINYL CHLORIDE PIPE**

**LATERAL CONNECTION INSTALLATION DETAIL ON EXISTING PIPE**

NOTE: LATERAL CONNECTION INSTALLATION ON NEWLY INSTALLED PIPE WILL BE AS DIRECTED BY THE DEPARTMENT OF PUBLIC WORKS.

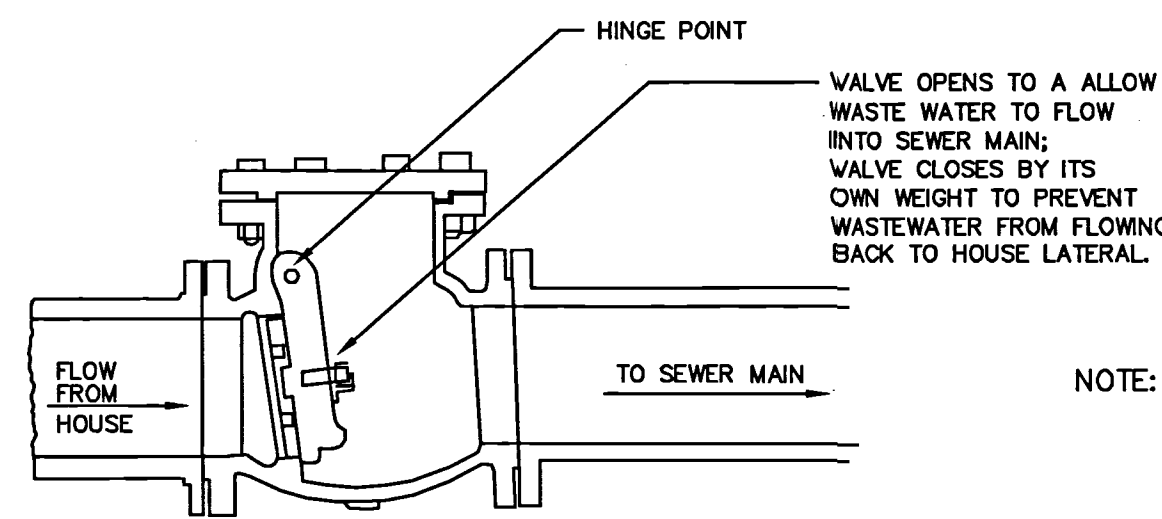
C-8

SAN MATEO COUNTY DEPARTMENT OF PUBLIC WORKS  
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 CHECK BY: R.O. DATE: 6/95  
 APPROVED BY: N.R.C. REVISED:



NOTE: LOCATION OF DEVICE TO APPROVAL OF DISTRICT AND BUILDING DEPARTMENT PRIOR TO INSTALLATION

**OVERFLOW DEVICE**



NOTE: LOCATION OF DEVICE TO APPROVAL OF DISTRICT AND BUILDING DEPARTMENT PRIOR TO INSTALLATION

**BACKFLOW DEVICE**

**OVERFLOW AND BACKFLOW DEVICE DETAIL**

C-9

SAN MATEO COUNTY DEPARTMENT OF PUBLIC WORKS  
 DRAWN BY: M.L. SCALE: NONE  
 CHECK BY: R.O. DATE: 8/06  
 APPROVED BY: N.R.C. REVISED:

**SAN MATEO COUNTY SEWER AND SANITATION DISTRICTS STANDARD SPECIFICATIONS**

**GENERAL NOTES**

- ALL REFERENCES TO "DISTRICT" IN THESE GENERAL NOTES SHALL MEAN THE APPROPRIATE COUNTY SEWER OR SANITATION DISTRICT.
- THE APPROVAL OF THESE PLANS BY THE DISTRICT SHALL BE INTERPRETED TO MEAN THAT THE SANITARY SEWER DESIGN SHOWN ON THESE PLANS MEETS THE DISTRICT'S STANDARDS. THE DISTRICT'S APPROVAL IN NO WAY GUARANTEES ANY OTHER ASPECT OF THIS PLAN OR ITS ACCURACY RELATIVE TO ACTUAL FIELD CONDITIONS.
- THE CONTRACTOR SHALL CONTACT THE DISTRICT AT 363-4765 OR 363-4100 TWO (2) WORKING DAYS IN ADVANCE OF BEGINNING ANY SANITARY SEWER WORK. THE CONTRACTOR SHALL THEREAFTER KEEP THE INSPECTOR FOR THE DISTRICT INFORMED OF HIS SCHEDULE FOR SANITARY SEWER WORK.
- ALL SANITARY SEWER WORK CONSTRUCTED WITHOUT INSPECTION BY THE DISTRICT SHALL BE REMOVED AND RECONSTRUCTED WITH INSPECTION.
- THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT FORTY-EIGHT (48) HOURS IN ADVANCE OF BEGINNING ANY WORK.
- THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL UTILITIES BEFORE BEGINNING ANY EXCAVATING.
- THE CONTRACTOR SHALL OBTAIN ANY AND ALL PERMITS REQUIRED BY THE COUNTY OR CITY BEFORE BEGINNING ANY SANITARY SEWER WORK.
- UPON THE COMPLETION OF CONSTRUCTION A COMPLETE SET OF REPRODUCIBLE "AS-CONSTRUCTED" PLANS SHALL BE PROVIDED TO THE DISTRICT.
- SANITARY SEWER SERVICE SHALL BE MAINTAINED AT ALL TIMES. THE CONTRACTOR SHALL USE WHATEVER MEANS ARE NECESSARY (E.G. PUMPS, ETC.) TO MAINTAIN THIS SERVICE DURING CONSTRUCTION.
- PRIOR TO COMMENCING ANY SANITARY SEWER WORK IN OFF-SITE EASEMENTS THE CONTRACTOR SHALL PROVIDE THE DISTRICT WITH ADEQUATE EVIDENCE THAT ALL AFFECTED PROPERTY OWNERS (AND TENANTS WHERE APPLICABLE) WERE NOTIFIED WELL IN ADVANCE OF THE DATE WORK IN THESE EASEMENTS WAS TO BEGIN AND THAT THEY HAVE UPDATED THAT NOTICE IN A TIMELY MANNER WHEN THOSE DATES HAVE CHANGED.

C-13

SAN MATEO COUNTY DEPARTMENT OF PUBLIC WORKS  
 DRAWN BY: N.M.A. SCALE: NONE  
 CHECK BY: R.O. DATE: 6/95  
 APPROVED BY: N.R.C. REVISED:

**SAN MATEO COUNTY SEWER AND SANITATION DISTRICTS STANDARD SPECIFICATIONS**

**PIPE AND FITTINGS**

**POLYVINYL CHLORIDE PIPE (PVC)**

- ALL PIPE AND FITTINGS SHALL CONFORM TO ASTM SPECIFICATIONS D3034, SDR 35.
- ALL JOINTS SHALL BE A BELL AND SPIGOT ASSEMBLY WITH ELASTOMERIC SEALING GASKETS. SEALING GASKETS SHALL MEET THE REQUIREMENTS OF ASTM SPECIFICATION D1869. SOLVENT CEMENT JOINTS ARE NOT PERMITTED.
- ALL PIPE ENTERING OR LEAVING A CONCRETE STRUCTURE SHALL HAVE A RUBBER WATERSTOP GASKET ATTACHED TO IT. THE WATERSTOP GASKET SHALL CONFORM TO THE PIPE MANUFACTURER'S SPECIFICATIONS. THE WATERSTOP GASKET SHALL BE SEATED FIRMLY AROUND THE PIPE EXTERIOR AND BE CAST INTO THE CONCRETE STRUCTURE.
- ALL PIPE JOINTS SHALL BE MADE USING MANUFACTURED PVC COUPLINGS. BAND TYPE COMPRESSION COUPLINGS ARE NOT PERMITTED.

**DUCTILE IRON PIPE (DIP)**

- ALL PIPE SHALL BE THICKNESS CLASS 50 (FOUR INCH PIPE SHALL BE THICKNESS CLASS 51) IN ACCORDANCE WITH ANSI SPECIFICATIONS A21.51. FITTINGS SHALL BE IN ACCORDANCE WITH ANSI SPECIFICATION A21.10.
- JOINTS SHALL BE PUSH-ON TYPE OR MECHANICAL JOINT TYPE IN ACCORDANCE WITH ANSI SPECIFICATION A21.11. RUBBER GASKETS FOR PUSH-ON JOINTS SHALL BE IN ACCORDANCE WITH ANSI SPECIFICATIONS HEREIN.
- PIPE AND FITTINGS SHALL HAVE A BITUMINOUS COATING OUTSIDE IN ACCORDANCE WITH ASTM SPECIFICATION A746-86, UNLESS OTHERWISE SPECIFIED HEREIN.
- PIPE AND FITTINGS SHALL HAVE A 1/16" (ONE-SIXTEENTH INCH) CEMENT-MORTAR LINING WITH AN ASPHALTIC SEAL COAT.

**VITRIFIED CLAY PIPE (VCP)**

- PIPE AND FITTINGS SHALL BE EXTRA STRENGTH, UNGLAZED, BELL AND SPIGOT, CONFORMING TO THE LATEST REVISION OF ASTM SPECIFICATION C700.
- JOINTS SHALL BE A BELL AND SPIGOT ASSEMBLY WITH FACTORY INSTALLED FLEXIBLE COMPRESSION TYPE GASKETS MADE OF PLASTICIZED POLYVINYL OR POLYURETHANE CONFORMING TO THE LATEST REVISION OF ASTM SPECIFICATIONS C425. BAND TYPE COUPLINGS ARE NOT ALLOW.

C-14

SAN MATEO COUNTY DEPARTMENT OF PUBLIC WORKS  
 DRAWN BY: N.M.A. SCALE: NONE  
 CHECK BY: R.O. DATE: 6/95  
 APPROVED BY: N.R.C. REVISED:

**SAN MATEO COUNTY SEWER AND SANITATION DISTRICTS STANDARD SPECIFICATIONS**

**TESTING REQUIREMENTS**

- ALL REFERENCES TO "DISTRICT" IN THESE TESTING REQUIREMENTS SHALL MEAN THE APPROPRIATE COUNTY SEWER OR SANITATION DISTRICT.
- ALL REQUIRED CLEANING AND TESTING OF SANITARY SEWER MAINS AND LATERALS SHALL BE PERFORMED IN THE PRESENCE OF A REPRESENTATIVE OF THE DISTRICT.
- ALL SANITARY SEWER MAINS BEING CONSTRUCTED SHALL BE CLEANED BY MEANS OF A HIGH SPEED JET RODDER PRIOR TO TESTING. VCP AND DIP SHALL BE TESTED FOR OBSTRUCTION BY BALL ROLLING.
- ALL SANITARY SEWER MAINS BEING CONSTRUCTED SHALL PASS A LOW PRESSURE AIR TEST. EACH SECTION OF MAIN SHALL BE TESTED BETWEEN SUCCESSIVE MANHOLES. THE LOW PRESSURE AIR TEST SHALL BE CONDUCTED IN THE FOLLOWING MANNER.

A COMPRESSED AIR SUPPLY SHALL BE ATTACHED TO AN AIR FITTING ON THE MAIN AND THE AIR PRESSURE WITHIN THE LINE INCREASED TO FOUR (4) POUNDS PER SQUARE INCH. (PSI). AFTER THE AIR SUPPLY IS SECURELY TURNED OFF OR DISCONNECTED, THERE SHALL BE A TWO (2) MINUTE WAITING PERIOD BEFORE THE ACTUAL TEST PERIOD BEGINS TO ALLOW STABILIZATION OF AIR WITHIN THE MAIN.

IN NO CASE SHALL THE AIR PRESSURE WITHIN THE LINE BE LESS THAN 3.5 PSI AT THE BEGINNING OF THE TEST PERIOD. REFER TO THE CHART WHICH FOLLOWS FOR THE LENGTH OF THE TEST PERIOD. THE MINIMUM LENGTH OF TEST IS TWO (2) MINUTES. THE ALLOWABLE AIR PRESSURE LOSS DURING THE TEST PERIOD SHALL BE 1.0 PSI. A WRITTEN RECORD OF THE TEST SHALL BE SUBMITTED TO THE DISTRICT BY THE CONTRACTOR.

NOMINAL PIPE SIZE (inches)	LENGTH OF LINE (feet)	LENGTH OF TEST (minutes)
4	ALL	2
6	0 - 300	2
6	300 - 370	2 1/2
6	370 AND GREATER	3
8	0 - 170	2
8	170 - 210	2 1/2
8	210 - 250	3
8	250 - 290	3 1/2
8	290 AND GREATER	3 3/4
10	0 - 110	2
10	110 - 165	3
10	165 - 215	4
10	215 AND GREATER	4 3/4

C-15

SAN MATEO COUNTY DEPARTMENT OF PUBLIC WORKS  
 DRAWN BY: N.M.A. SCALE: NONE  
 CHECK BY: R.O. DATE: 6/95  
 APPROVED BY: N.R.C. REVISED:

**SAN MATEO COUNTY SEWER AND SANITATION DISTRICTS STANDARD SPECIFICATIONS**

**TESTING REQUIREMENTS**

- A TELEVISION INSPECTION SHALL BE MADE OF ALL SANITARY SEWER MAINS BEING CONSTRUCTED. IMMEDIATELY PRIOR TO TELEVISIONING THE SEWER, AN AMOUNT OF WATER ACCEPTABLE TO THE DISTRICT'S REPRESENTATIVE SHALL BE INTRODUCED INTO THE SEWER MAIN BEING INSPECTED.

A VIDEO TAPE IN VHS FORMAT AT SP, OR EQUIVALENT, SPEED SHALL BE MADE OF THE INSPECTION AND DELIVERED ALONG WITH A TYPED LOG OF THE INSPECTION TO THE DISTRICT (SAN MATEO COUNTY DEPARTMENT OF PUBLIC WORKS) FOR REVIEW AND ACCEPTANCE.

SUBMITTED VIDEO TAPES SHALL INCLUDE A CONTINUOUS ON-SCREEN DISPLAY WHICH CONTAINS, AS A MINIMUM, THE DATE OF THE FILMING, IDENTIFICATION OF THE LINE AND SEGMENT (REACH) OF THE LINE BEING VIEWED, AND A READOUT, IN FEET, SHOWING THE DISTANCE TO THE ENTRY POINT.

IF, IN THE OPINION OF THE DISTRICT, THE SUBMITTED VIDEO TAPES ARE OF POOR QUALITY, THE DISTRICT MAY REJECT THE VIDEO TAPES AND REQUIRE THE VIDEO INSPECTION TO BE REPEATED AND NEW VIDEO TAPES SUBMITTED TO THE DISTRICT FOR REVIEW AND ACCEPTANCE. ALL VIDEO TAPES SHALL BECOME THE PROPERTY OF THE DISTRICT.

- DEFLECTION TESTING OF POLYVINYL CHLORIDE (PVC) SEWER MAINS SHALL BE PERFORMED AFTER THE PLACEMENT OF ALL TRENCH BACKFILL. PIPE DEFLECTION SHALL BE TESTED BY PULLING BY HAND A GO/NO-GO MANDREL THROUGH THE INSTALLED SECTIONS OF SEWER MAIN.

THE MANDREL USED SHALL HAVE A MINIMUM LENGTH EQUAL TO ITS DIAMETER. THE MANDREL SHALL BE CONSTRUCTED WITH A MINIMUM OF NINE (9) RIBS FABRICATED PARALLEL TO ITS LONGITUDINAL AXIS. BOTH THE DESIGN OF THE MANDREL AND THE FABRICATED MANDREL ITSELF SHALL BE INSPECTED AND APPROVED BY THE DISTRICT WELL IN ADVANCE OF THE DEFLECTION TEST.

THE MANDREL DIAMETER SHALL BE 95% OF THE PIPE'S AVERAGE INSIDE DIAMETER AS DEFINED BY ASTM SPECIFICATION D3034, AND AS DETAILED IN THE FOLLOWING TABLE:

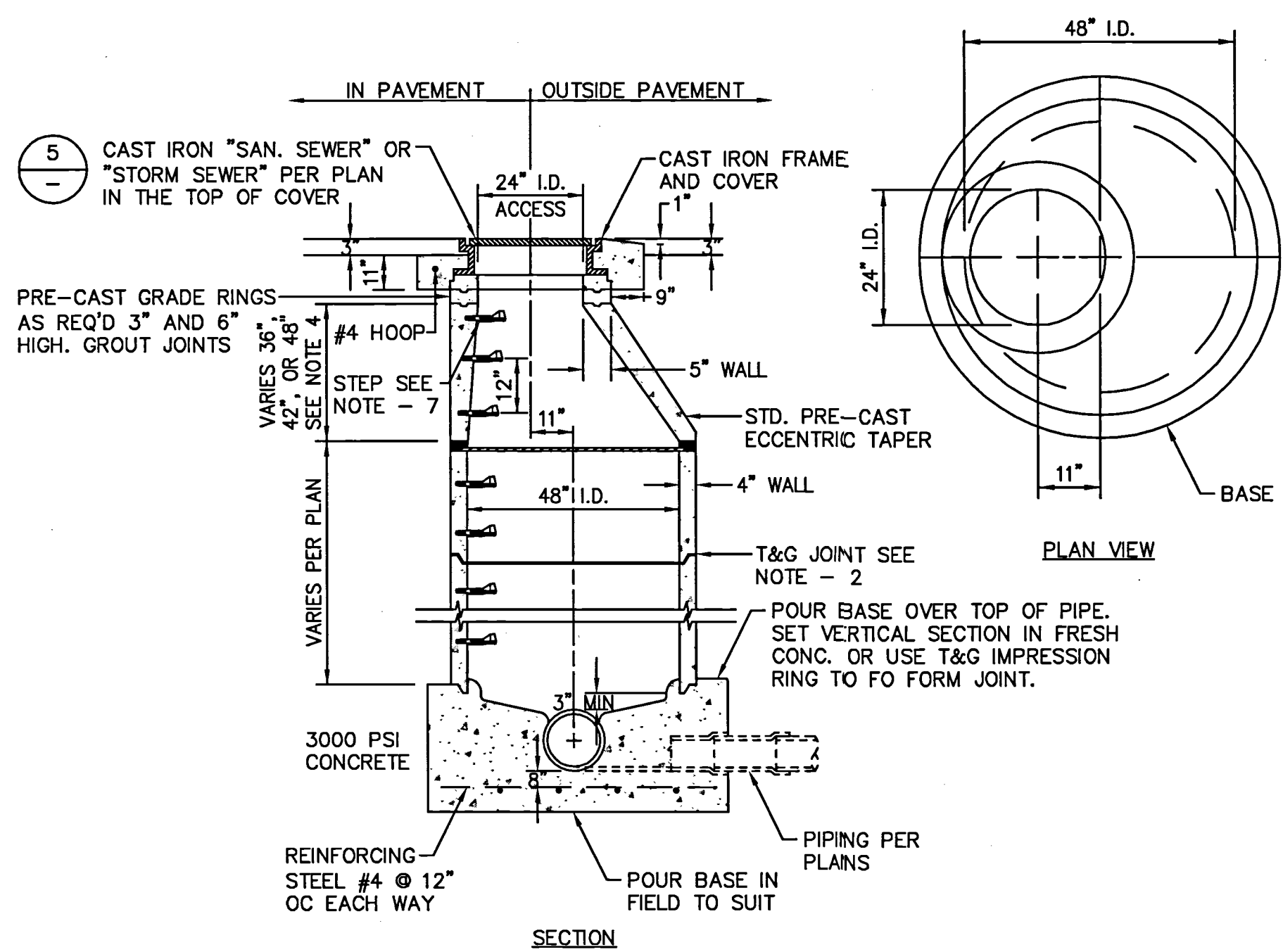
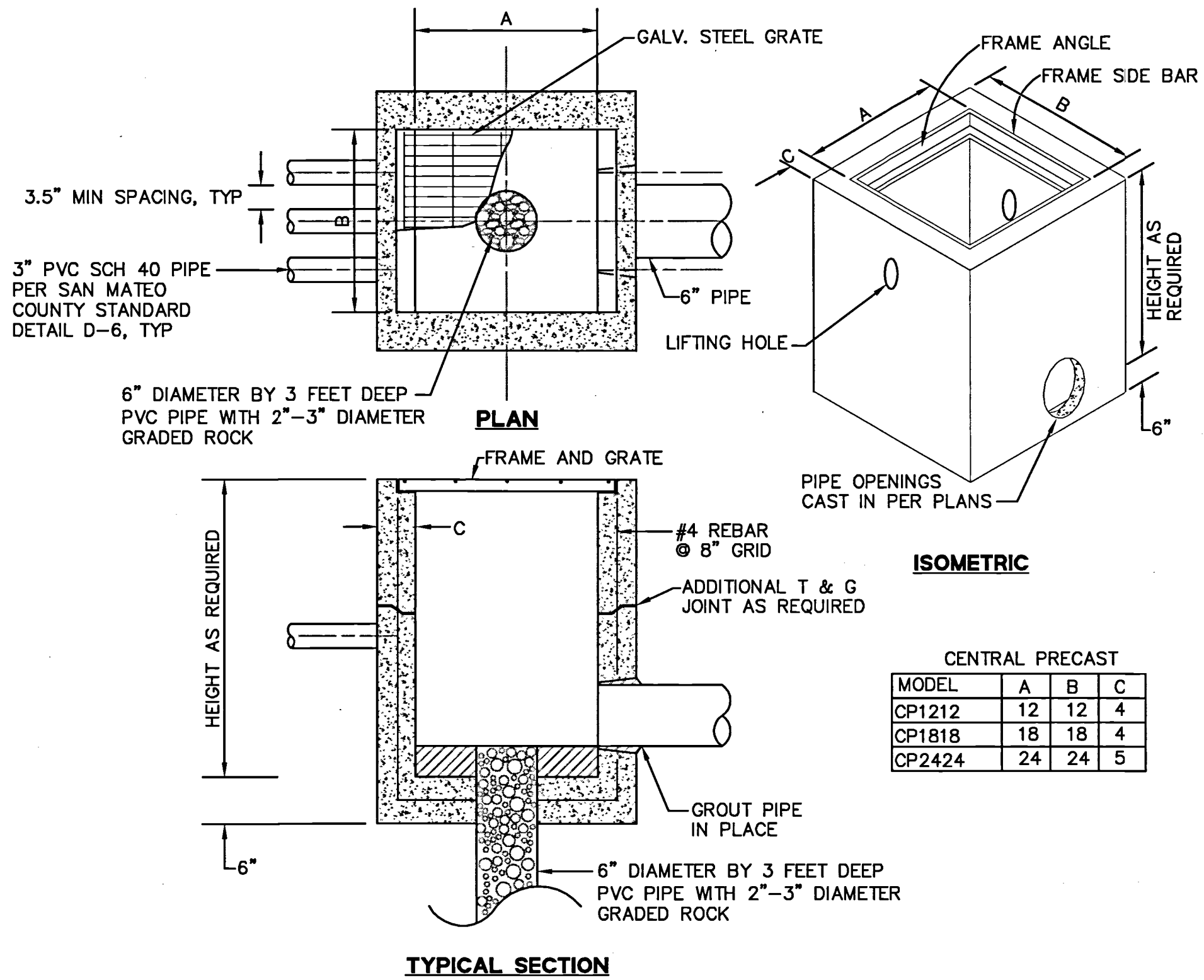
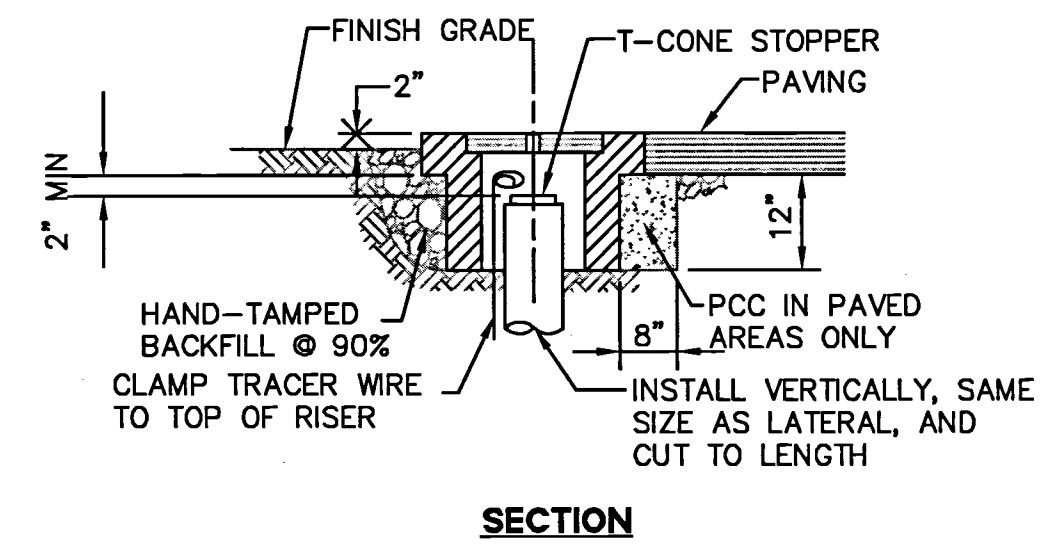
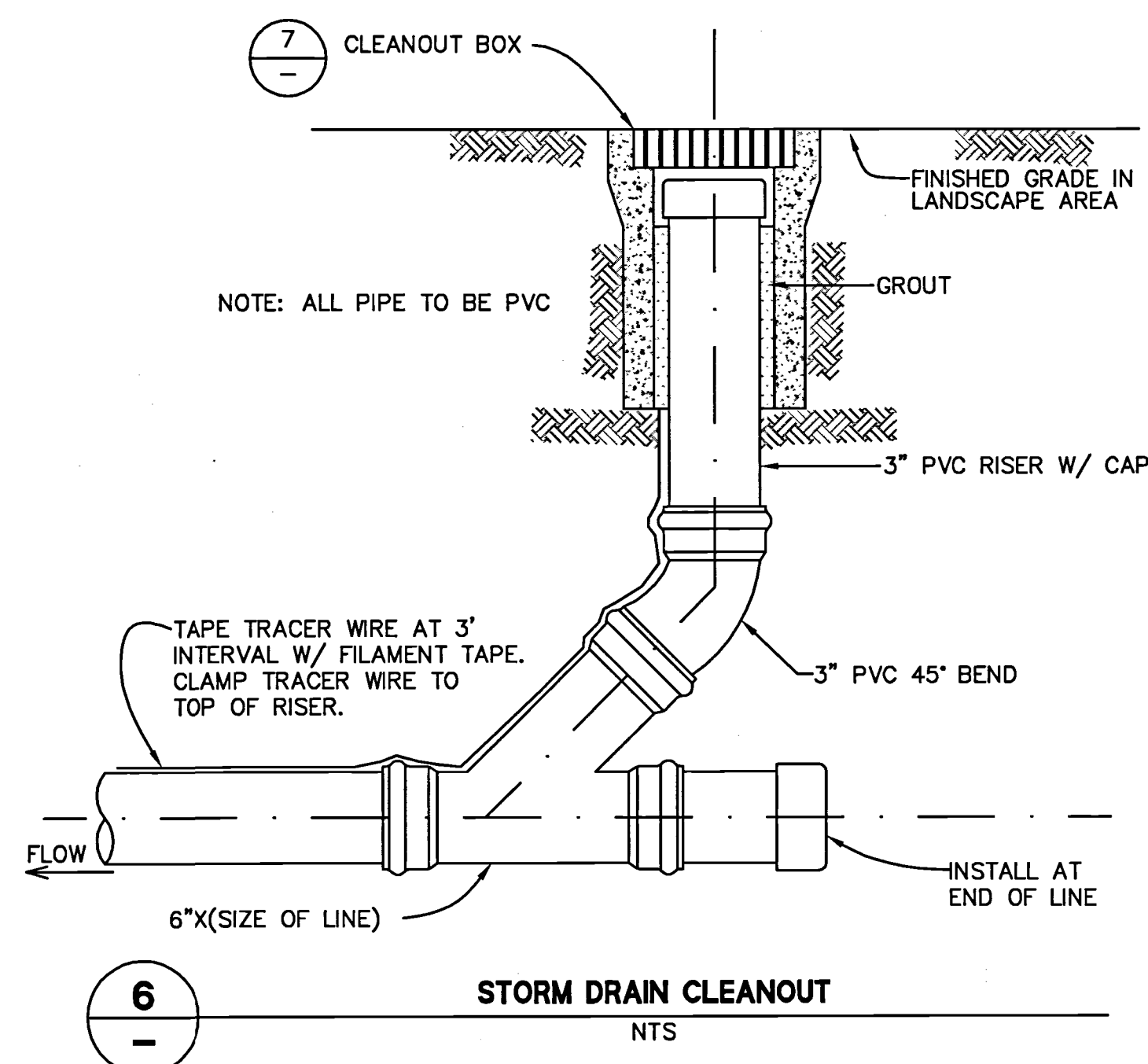
NOMINAL PIPE SIZE (inches)	AVERAGE INSIDE DIAMETER (inches)	MINIMUM MANDREL DIAMETER (inches)
6	5.893	5.598
8	7.891	7.497
10	9.864	9.371

NOTE: AVERAGE INSIDE DIAMETER = AVERAGE OUTSIDE DIAMETER - 2(1.0)T; WHERE T = MINIMUM WALL THICKNESS AS DEFINED BY ASTM SPECIFICATION D3034.

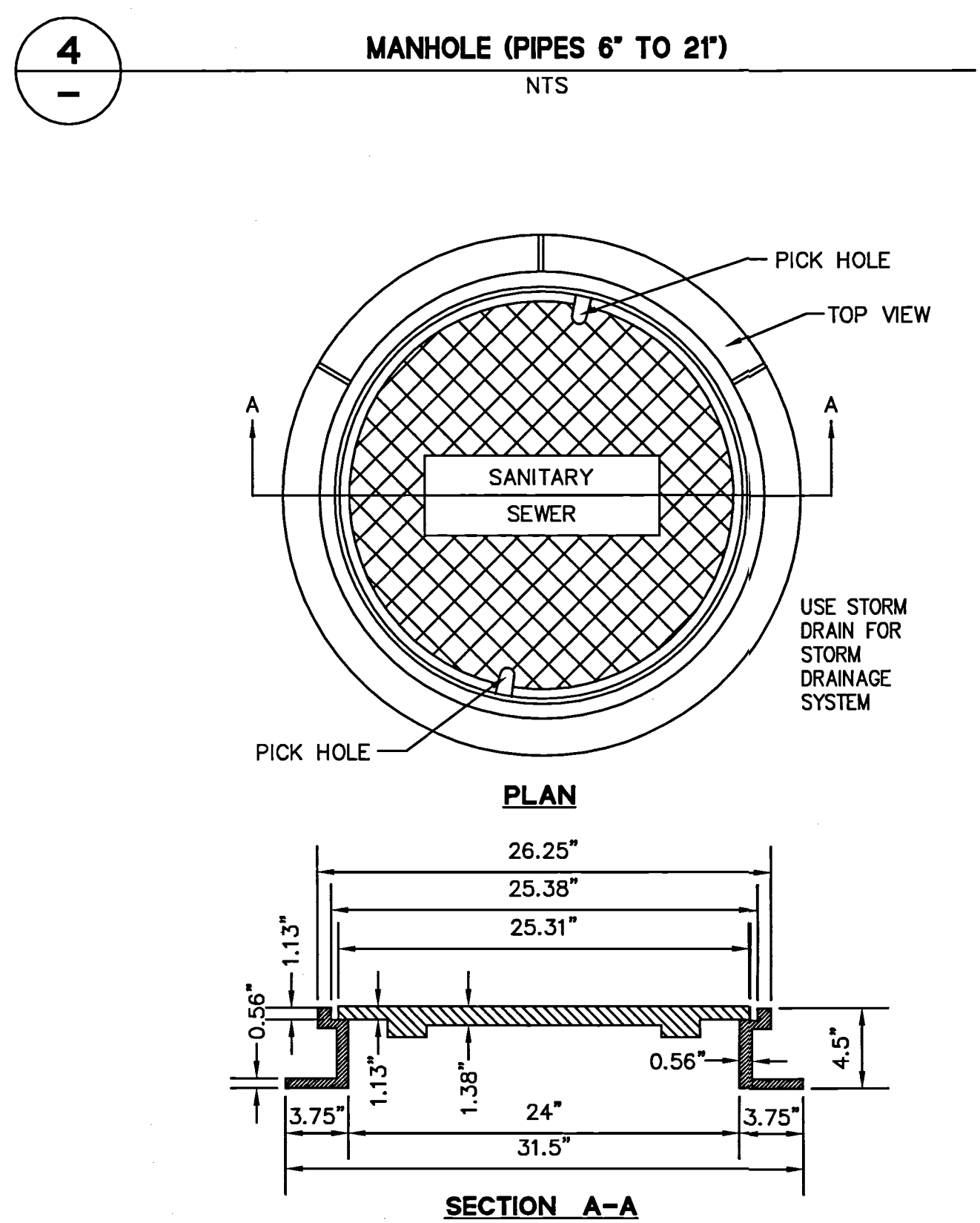
C-16

DRAWING NAME: J:\Eng95\950188.dwg\CD\01-Site for Lots 5 - 11\06.30-HECDDT.dwg  
 PLOT DATE: 05-12-16  
 PLOTTED BY: tret

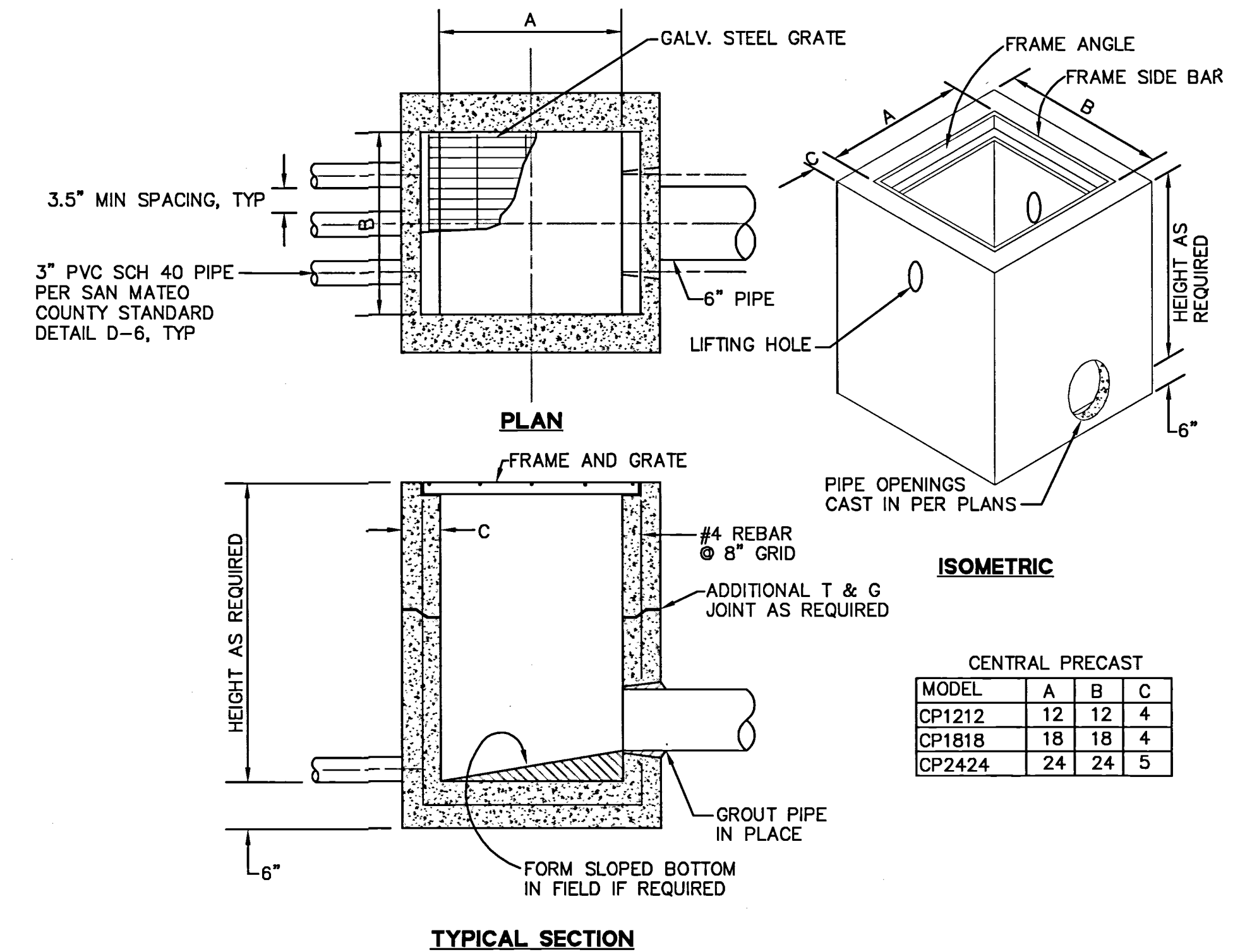
255 SHORELINE DRIVE, SUITE 200  
 REDWOOD CITY, CA 94065  
 PHONE: (650) 482-6390  
 FAX: (650) 482-6399  
**BKF**  
 ENGINEERS / SURVEYORS / PLANNERS  
 PROFESSIONAL ENGINEER  
 STATE OF CALIFORNIA  
 No. 50818  
 HIGHLAND ESTATES - STREET IMPROVEMENT PLANS  
 TICONDEROGA DRIVE, COBBLEHILL PLACE & COMPENS WAY  
 CONSTRUCTION DETAILS  
 CITY OF SAN MATEO  
 SAN MATEO COUNTY  
 CALIFORNIA  
 Revisions  
 No. \_\_\_\_\_  
 Date 05/12/16  
 Scale AS SHOWN  
 Design JT  
 Draw AG  
 Approved RH  
 Job No. 950188-20  
 Sheet Number:  
**C6.30**  
 OF



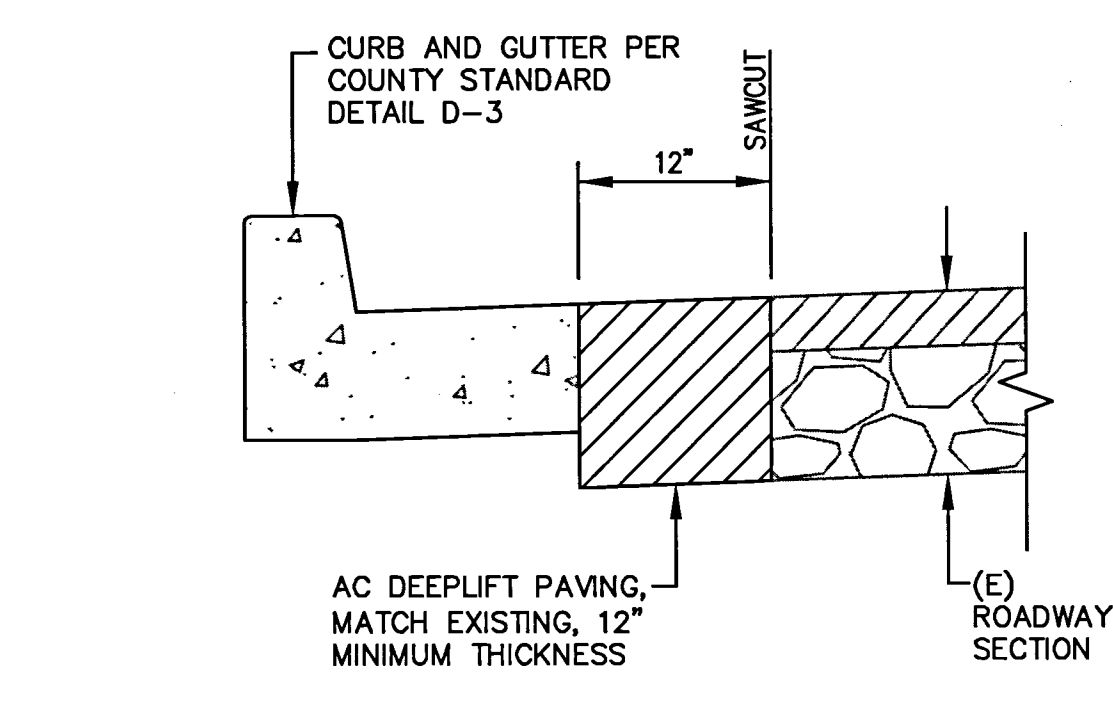
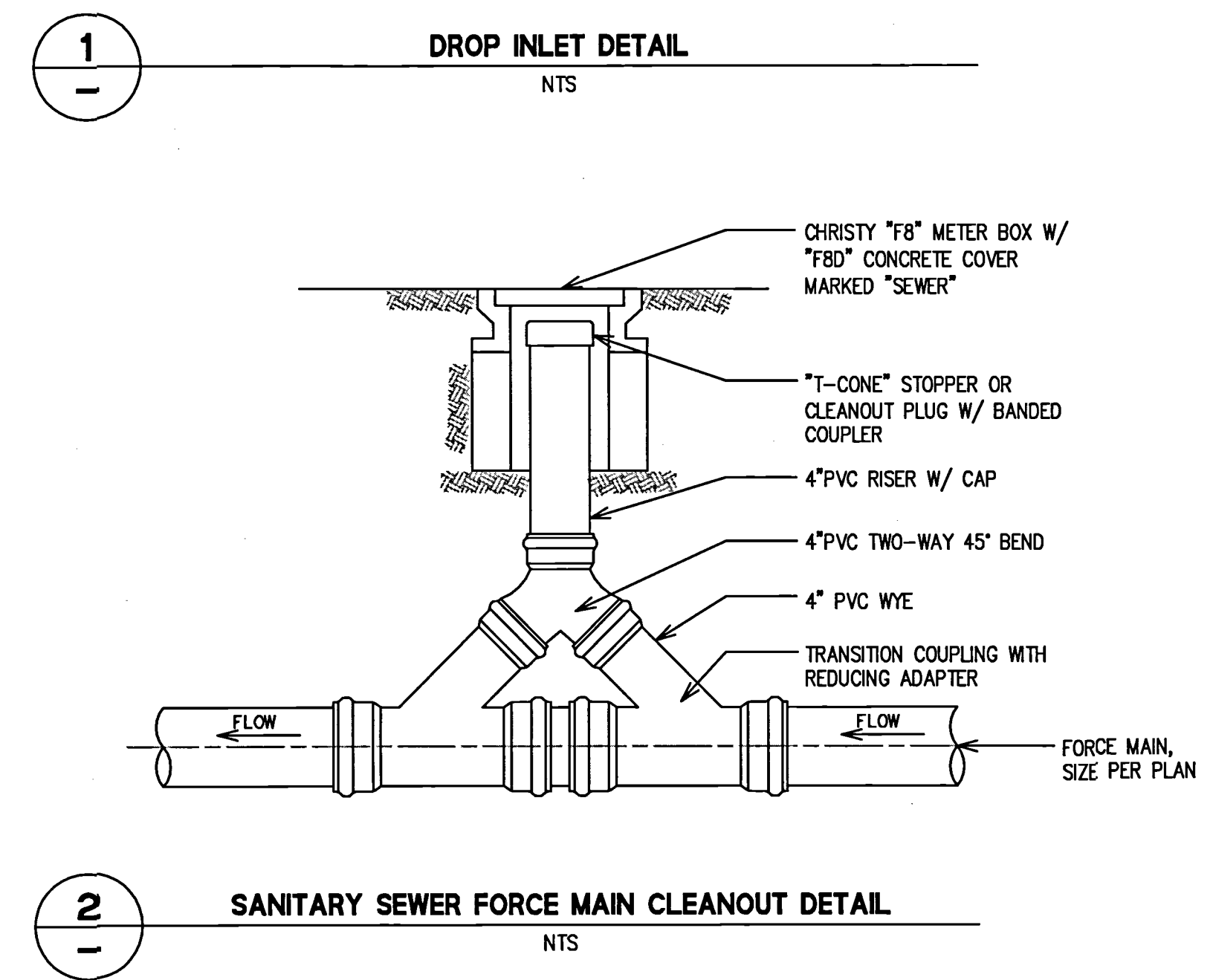
- NOTES:**
- PRE-CAST MANHOLE MATERIAL SHALL BE MANUFACTURED TO ASTM SPECIFICATION C478.
  - GROUT JOINTS WITH 1:3 MORTAR MIX OR USE RAM-NEK JOINT COMPOUND.
  - A 36° TAPER MAY BE COMBINED WITH A 12° VERTICAL TO FORM A 48° TAPER SECTION.
  - ALL CONCRETE JOINTS SHALL BE LEANED, WETTED, AND MORTARED PRIOR TO SETTING THE NEXT SECTION. THE JOINTS SHALL BE PACKED, TOWELLED AND BRUSHED WHILE THE MORTAR IS PLASTIC.
  - MANHOLE SHALL BE SET TO GRADE SUBSEQUENT TO PLACING AC OR RCC.
  - XYPEX CONCENTRATE/CRYSTALLINE COATING ON INTERIOR CONCRETE SURFACES.
  - STEPS NOT REQUIRED IN MANHOLES 3.5 FEET OR LESS IN DEPTH.



- NOTES:**
- ALL MATERIAL USED IN MANUFACTURING SHALL CONFORM TO A.S.T.M. A48, CLASS 30.
  - ALL CASTINGS TO BE COMPLETELY CLEANED AND PAINTED WITH ASPHALTIC VARNISH, AFTER MANUFACTURE.
  - USE PHOENIX P-1090, D&L SUPPLY A-1024, OR EQUAL.

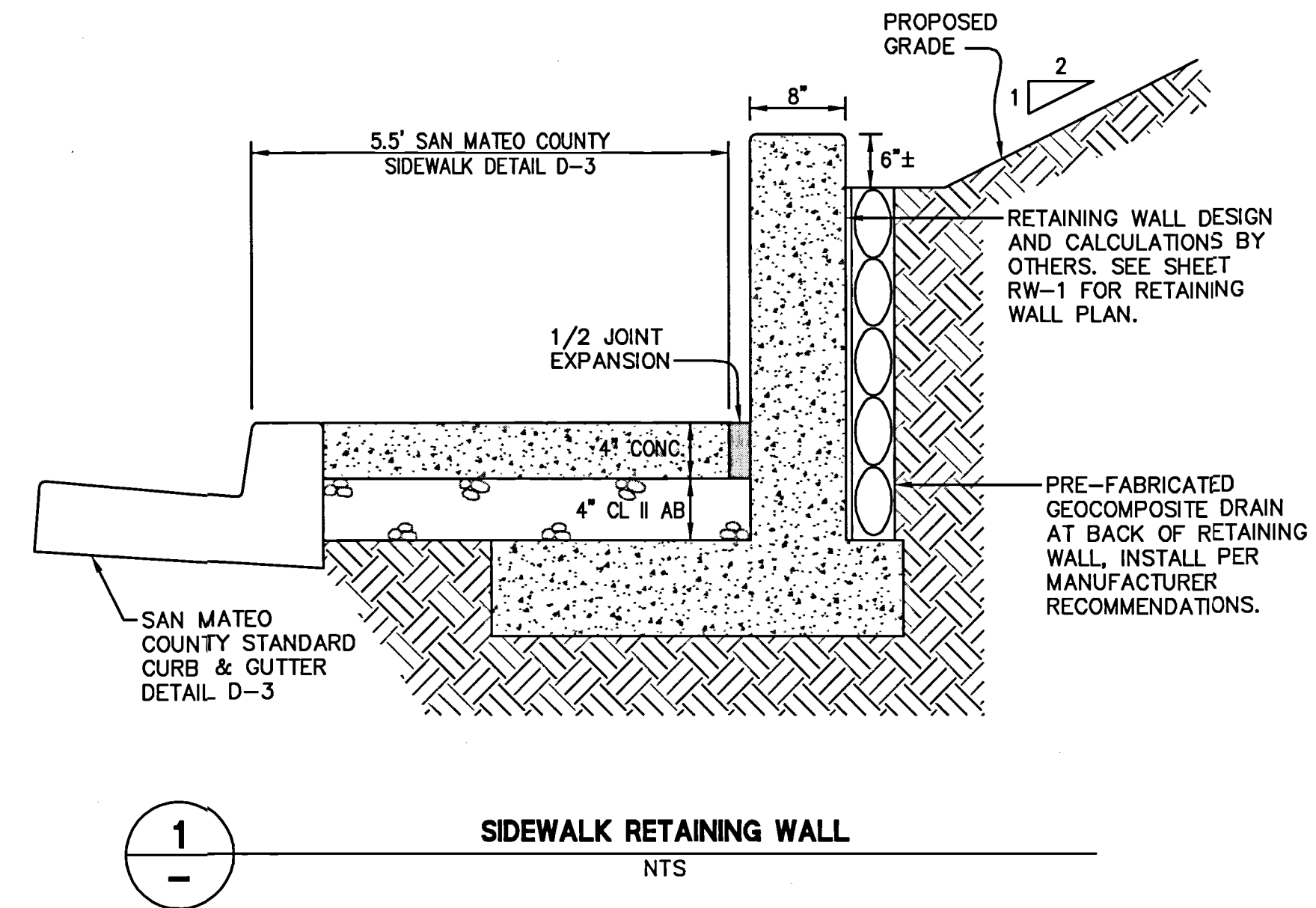


- NOTES:**
- DROP INLETS SHALL BE CENTRAL PRECAST OR APPROVED EQUAL.
  - AN ENGINEERED PRECAST DROP INLET UNIT CAN BE USED AS AN ALTERNATE.
  - SEE PLAN FOR DROP INLET SIZE AND LOCATION.



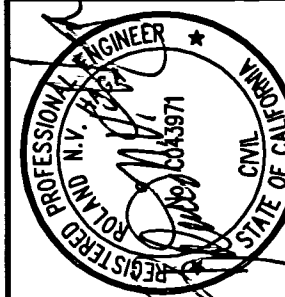
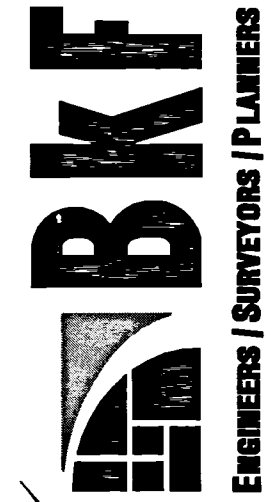
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 PLOT DATE: 05-12-16  
 PLOTTED BY: trat

DRAWING NAME: J:\eng95\950168\dwg\CD\Off-Site for Lots 5 - 11\C6.50-HEC00T.dwg  
 PLOT DATE: 05-12-16 PLOTTED BY: trat



1  
 SIDEWALK RETAINING WALL  
 NTS

255 SHORELINE DRIVE, SUITE 200  
 SAN MATEO, CA 94403  
 PHONE: (650) 482-6300  
 FAX: (650) 482-6399



HIGHLAND ESTATES - STREET IMPROVEMENT PLANS  
 TICONDEROGA DRIVE, COBBLEHILL PLACE & COMPENS WAY  
 CONSTRUCTION DETAILS  
 CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

Date	05/12/16	No.	Revisions
Scale	AS SHOWN		
Design	JT		
Drawn	AG		
Approved	RH		
Job No	950168-20		

Sheet Number:  
**C6.50**  
 OF

## CONCRETE

1. ALL CONCRETE SHALL CONFORM TO THE LATEST EDITION OF THE CALIFORNIA BUILDING CODE.
2. CONCRETE SHALL BE DESIGNED AND TESTED AS OUTLINED IN THE SPECS.
3. ALL CEMENT SHALL CONFORM TO ASTM C-150. PLEASE CROSS-REFERENCE EXPOSURE CLASS SHOWN BELOW WITH CORROSION TABLE ON SON-2 FOR CONCRETE REQUIREMENTS.
4. FINE AND COARSE AGGREGATE SHALL CONFORM TO ASTM C-33 FOR STANDARD WEIGHT CONCRETE AND ASTM C-330 FOR LIGHT WEIGHT CONCRETE.
5. ALL AGGREGATE SHALL BE COMPARABLE TO "SAN GABRIEL VALLEY" AGGREGATE. THE SHRINKAGE SHALL BE AS PER ASTM C-157 WITH AVERAGE DRYING SHRINKAGE AT 28-DAYS NOT EXCEEDING 0.04%.
6. DRYPACK SHALL BE COMPOSED OF ONE PART PORTLAND CEMENT TO NOT MORE THAN THREE PARTS SAND.
7. ANCHOR BOLTS, HOLDOWN BOLTS, DOWELS, INSERTS, ETC. SHALL BE SECURELY TIED IN PLACE PRIOR TO POURING CONCRETE.
8. CONCRETE SHALL BE CURED BY KEEPING CONTINUOUSLY WET FOR 10-DAYS OR BY AN APPROVED CURING COMPOUND.
9. REFER TO ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR MISCELLANEOUS ITEMS TO BE CAST INTO CONCRETE AND FLOOR DEPRESSIONS, PITS, ETC.
10. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF EXPANSION JOINTS, SCORING, ETC. FOR CONCRETE WALKS AND SLABS.
11. ALL CONCRETE, TYPE V  $f'_c = 2,500$  PSI  
ALL CONCRETE SHALL REACH MINIMUM COMPRESSIVE STRENGTH 28 - DAYS.
12. ALL CONCRETE WITH  $f'_c$  GREATER THAN 2,500 PSI SHALL HAVE SPECIAL INSPECTION PER SECTION 1704 OF THE 2010 CBC UNLESS NOTED OTHERWISE.
13. CONCRETE FOR SLAB ON GRADE SHALL HAVE A MAXIMUM OF 5 IN. OF SLUMP PER ASTM C-143. 5 SACKS OF CEMENT PER CUBIC YARD OF CONCRETE. CEMENT ASTM C-150 TYPE 1 OR 2 MIN.

## REINFORCING STEEL

1. ALL REINFORCING SHALL BE ASTM A-615 GRADE 40 FOR #5 BARS AND SMALLER. ALL REINFORCING SHALL BE ASTM A-615 GRADE 60 FOR #6 BARS AND LARGER. WELDED WIRE FABRIC TO BE ASTM A-185, LAP 1-1/2 SPACES, 9" MIN. FOR STRUCTURAL SLABS ALL REINFORCING #5 AND LARGER TO BE ASTM A-615 GRADE 60.
2. ALL BARS SHALL BE CLEAN OF LOOSE FLAKY RUST, GREASE OR OTHER MATERIALS LIKELY TO IMPAIR BOND.
3. ALL BENDS SHALL BE MADE COLD.
4. ALL BENDS SHALL HAVE A MIN. LAPPING OF 42 DIA. OR 32" MIN., WHICH EVER IS GREATER, IN ALL CONTINUOUS REINFORCEMENT OF FOOTINGS AND CONCRETE WALLS, EXCEPT AS NOTED ON PLANS. MASONRY REINFORCEMENT SHALL HAVE LAPPINGS OF 40 DIA. FOR GRADE 40 & 48 DIA. FOR GRADE 60 MIN. OR 2'-0", WHICH EVER IS GREATER.
5. ALL REINFORCING BARS SHALL BE ACCURATELY AND SECURELY PLACED BEFORE POURING CONCRETE.
6. CONCRETE PROTECTION FOR REINFORCEMENT SHALL BE AT LEAST EQUAL TO THE DIAMETER OF THE BARS. COVER SHALL BE AS FOLLOWS:

	CONC	MASONRY
A. POURED AGAINST EARTH	3"	2"
B. POURED AGAINST FORM BELOW GRADE	2"	2"
#6 AND LARGER	2"	2"
#5 AND SMALLER	1 1/2"	1 1/2"
C. FORMED SLABS	1"	1"
D. SLABS ON GRADE (FROM TOP OF SLAB)	1"	1"
E. COLUMNS AND BEAMS TO MAIN BARS	1 1/2"	2"
F. WALLS - EXPOSED TO WEATHER	1 1/2"	1 1/2"
NOT EXPOSED TO WEATHER, #11 AND SMALLER	3/4"	3/4"
#14 AND #18	1 1/2"	1 1/2"

## DRAINAGE AND WATERPROOFING

ALL RETAINING WALLS SHOULD BE PROVIDED WITH PERFORATED PIPE AND GRAVEL SUBDRAINS TO PREVENT ENTRAPMENT OF WATER IN THE BACKFILL. PERFORATED PIPE SHOULD CONSIST OF 4-INCH MINIMUM DIAMETER ABS SDR-35 OR PVC SCHEDULE 40 WITH THE PERFORATIONS LAID DOWN. THE PIPE SHOULD BE ENCASED IN A MINIMUM 1-FOOT WIDE COLUMN OF 3/4" TO 1-1/2-INCH TO OPENGRADED GRAVEL. THE GRAVEL SHOULD EXTEND ABOVE THE WALL FOOTINGS TO AN ELEVATION EQUAL TO ONE-THIRDS THE WALL HEIGHT, OR TO A MINIMUM HEIGHT OF 1.5 FEET, WHICHEVER IS GREATER. THE GRAVEL SHOULD BE WRAPPED IN FILTER FABRIC CONSISTING OF MIRAFIL 140N, OR EQUIVALENT. SOLID OUTLET PIPES SHOULD BE CONNECTED TO THE SUBDRAINS AND THEN ROUTED TO THE ONSITE AREA DRAIN SYSTEM FOR DISCHARGE OF ANY ACCUMULATED WATER. PIPE SHOULD BE LAID ON AT LEAST 2' OF OPEN GRADED GRAVEL. SEE SOIL REPORT FOR ADDITIONAL INFORMATION.

## SPECIFICATIONS FOR RETAINING WALLS

1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS ON JOB.
2. TYPE OF SOIL AND BEARING VALUE SUBJECT TO BUILDING INSPECTOR APPROVAL.
3. ALLOWABLE BEARING VALUE 1500 PSF.
4. EXTENDED ALL FOOTINGS 18" MINIMUM BELOW UNDISTURBED NATURAL SOIL.
5. CONCRETE BLOCKS USED FOR THE CONSTRUCTION OF RETAINING WALLS SHALL BE NORMAL WEIGHT UNITS AND SHALL CONFORM TO THE REQUIREMENTS FOR GRADE NJ UNITS OF ASTM SPECIFICATIONS C-90 (LATEST REVISION).
6. TYPE "S" MORTAR : 1 PART CEMENT, 4 1/2 PARTS SAND, 1/2 PART LIME PUTTY.
7. GROUT SHALL BE ACCORDING TO CBC TABLE 21-B  $f'_m = 2000$  PSI MIN.
8. REINFORCING SHALL BE INTERMEDIATE GRADE DEFORMED BARS SHALL CONFORM TO ASTM SPECIFICATION A-305 (LATEST REVISION) AND A-615 (LATEST REVISION).
9. ALL REINFORCING STEEL TO LAP WHERE SPLICED 40 DIAMETERS WITH A MINIMUM LAP OF 24".
10. REINFORCING BARS SHALL BE SET STRAIGHT AND SECURED ACCURATELY IN POSITION.
11. VERTICAL MORTAR JOINTS SHALL BE STAGGERED AND CENTERED ON BLOCKS OF EACH COURSE DIRECTLY BELOW. ALL CELLS SHALL BE VERTICALLY ALIGNED SO AS TO MAINTAIN A 5" x 5" MINIMUM CONCRETE VERTICAL STUD, ALIGNED SO AS TO MAINTAIN (4 1/2" x 8 1/2" FOR 12" CONCRETE BLOCKS).
12. CALL BUILDING DEPARTMENT FOR INSPECTIONS BEFORE POURING FOOTINGS AND AGAIN BEFORE FILLING CELLS WITH CONCRETE.
13. UNLESS OTHERWISE SPECIFIED, NO CONTINUOUS INSPECTION IS REQUIRED.
14. CELL WALLS AND CROSS WEBS WHICH FORM CELLS TO BE FILLED SHALL BE FULL BEDDED IN MORTAR TO PREVENT LEAKAGE OF CONCRETE, AND ALL ALIGNED SO AS TO MAINTAIN JOINTS AROUND SUCH CELLS SHALL BE STRUCK SMOOTH.
15. CELLS SHALL BE FILLED WITH CONCRETE IN LIFTS NOT TO EXCEED A HEIGHT OF 4'-0", IF OVER 4'-0" PROVIDE CLEANOUT HOLES AT BOTTOM OF EACH CELL AND EACH LIFT OF CONCRETE. ALL MORTAR CROPPINGS OR DEBRIS SHALL BE REMOVED FROM CELLS AND CLEANOUT HOLES SHALL BE SEALED BEFORE CONCRETE IS PLACED.
16. IMPERFECT JOINTING AND WALL SURFACES EXHIBITING DEFECTIVE BLOCKS WILL BE REJECTED AND MUST BE REPLACED AT NO COST TO THE OWNER.
17. RETAINING WALLS ARE NOT DESIGNED FOR SURCHARGE OF PAVING EQUIPMENT. EQUIPMENT SHOULD BE KEPT BACK FROM TOP OF WALL A MINIMUM DISTANCE EQUAL TO HEIGHT OF WALL ABOVE FOOTINGS.
18. BACKFILLING SHALL NOT BE STARTED FOR AT LEAST 14 DAYS AFTER THE FILLING OF THE CELLS WITH CONCRETE.
19. DIMENSIONS AND NOTATIONS SUPERCEDE SCALE OF DRAWINGS.
20. FOR WALLS WHERE CONCRETE SLAB IS USED TO SECURE TOP OF WALL, ADEQUATE TEMPORARY SHORING SHOULD BE PROVIDED PRIOR TO BACK FILLINGS.
21. PROVIDE 4" x 4" MIN. KEY AT BOTTOM OF WALL INTO FOOTING. UNLESS SLAB PROVIDED AT LOW END OF WALL.

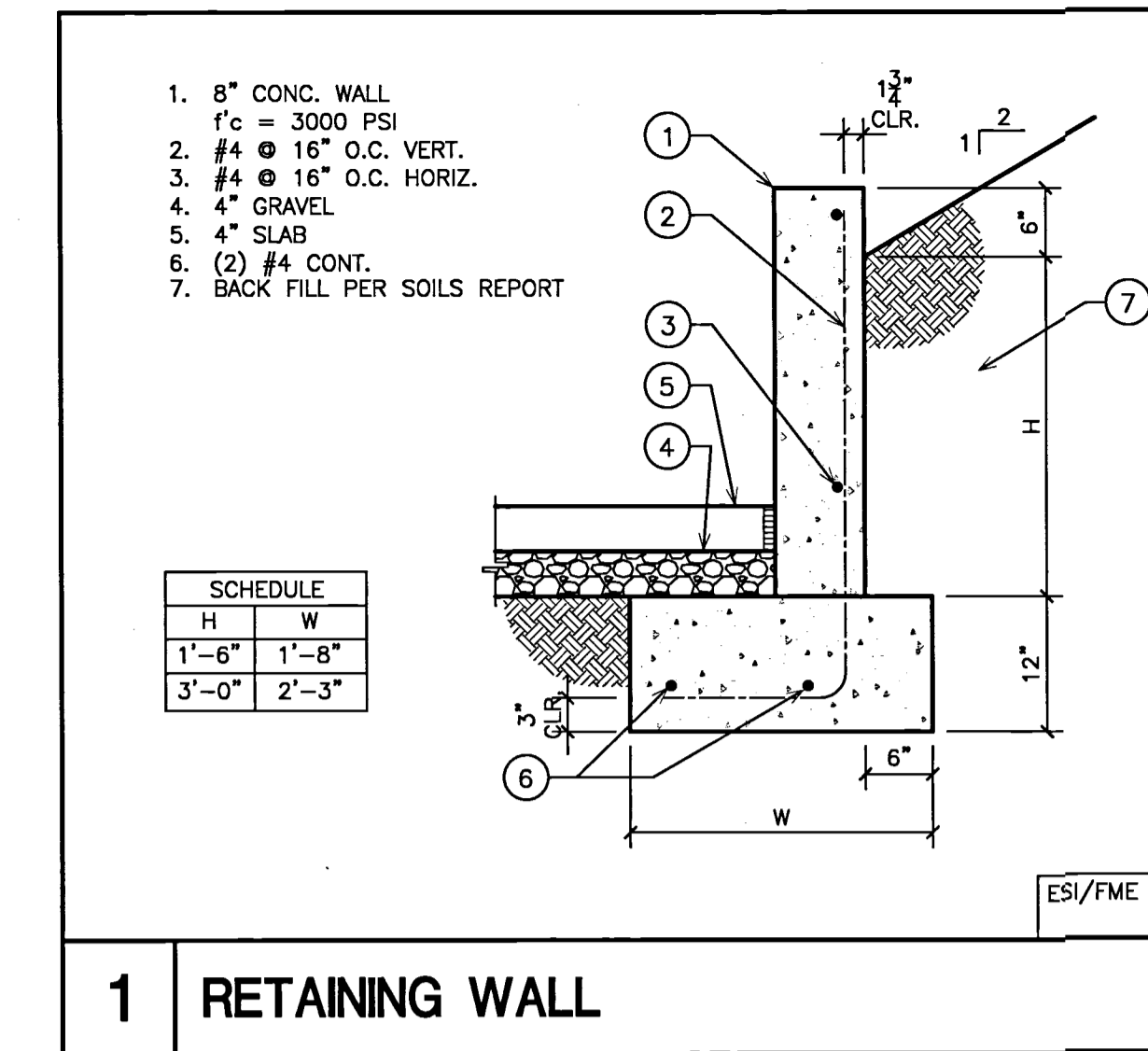
## STRUCTURAL OBSERVATION REQ.

1. STRUCTURAL OBSERVATIONS SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 1709 OF THE CALIFORNIA BUILDING CODE FOR THIS PROJECT. STRUCTURAL OBSERVATION IS DEFINED IN CBC SECTION 1702 AS "...THE VISUAL OBSERVATION OF THE STRUCTURAL SYSTEM FOR GENERAL CONFORMANCE TO THE APPROVED PLANS AND SPECIFICATIONS AT SIGNIFICANT CONSTRUCTION STAGES AND AT COMPLETION OF THE STRUCTURAL SYSTEM..."
2. STRUCTURAL OBSERVATION SHALL BE PERFORMED BY THE ENGINEER RESPONSIBLE FOR THE DESIGN OF THE STRUCTURAL SYSTEM, OR BY AN OBSERVER DESIGNATED BY THE ENGINEER OF RECORD. THE STRUCTURAL OBSERVER SHALL BE EMPLOYED BY THE ES/FME, INC. NOT THE CONTRACTOR.
3. REQUIRED OBSERVATION: SINGLE FAMILY-MODELS / MULTI-FAMILY-ALL UNITS  
A. FOUNDATION (MULTI-FAMILY ONLY)  
B. COMPLETE FRAMING PRIOR TO WRAPPING

## SOILS REPORT

1. THE FOUNDATION DESIGN IS BASED ON THE 2013 CBC.

PASS = 250
ACTIVE = 65
SEP = 1500



1 RETAINING WALL

REVISIONS

ES/FME, INC.  
STRUCTURAL ENGINEERS  
1800 E. 16TH ST. STE. B  
SANTA ANA, CA 92701  
PHONE: 714-895-2800  
FAX: 714-895-2819



FOUNDATION  
PLAN

HIGHLAND ESTATES  
RETAINING WALL  
SAN MATEO, CA



DRAWN  
-  
CHECKED  
-  
PLOT DATE  
05/03/2016  
JOB NO.  
E776  
SHEET

RW-1

SHEET: 1 OF: 1

# STREET IMPROVEMENT PLANS FOR HIGHLAND ESTATES - TICONDEROGA DRIVE, COBBLEHILL PLACE & COWPENS WAY

COUNTY OF SAN MATEO, CALIFORNIA

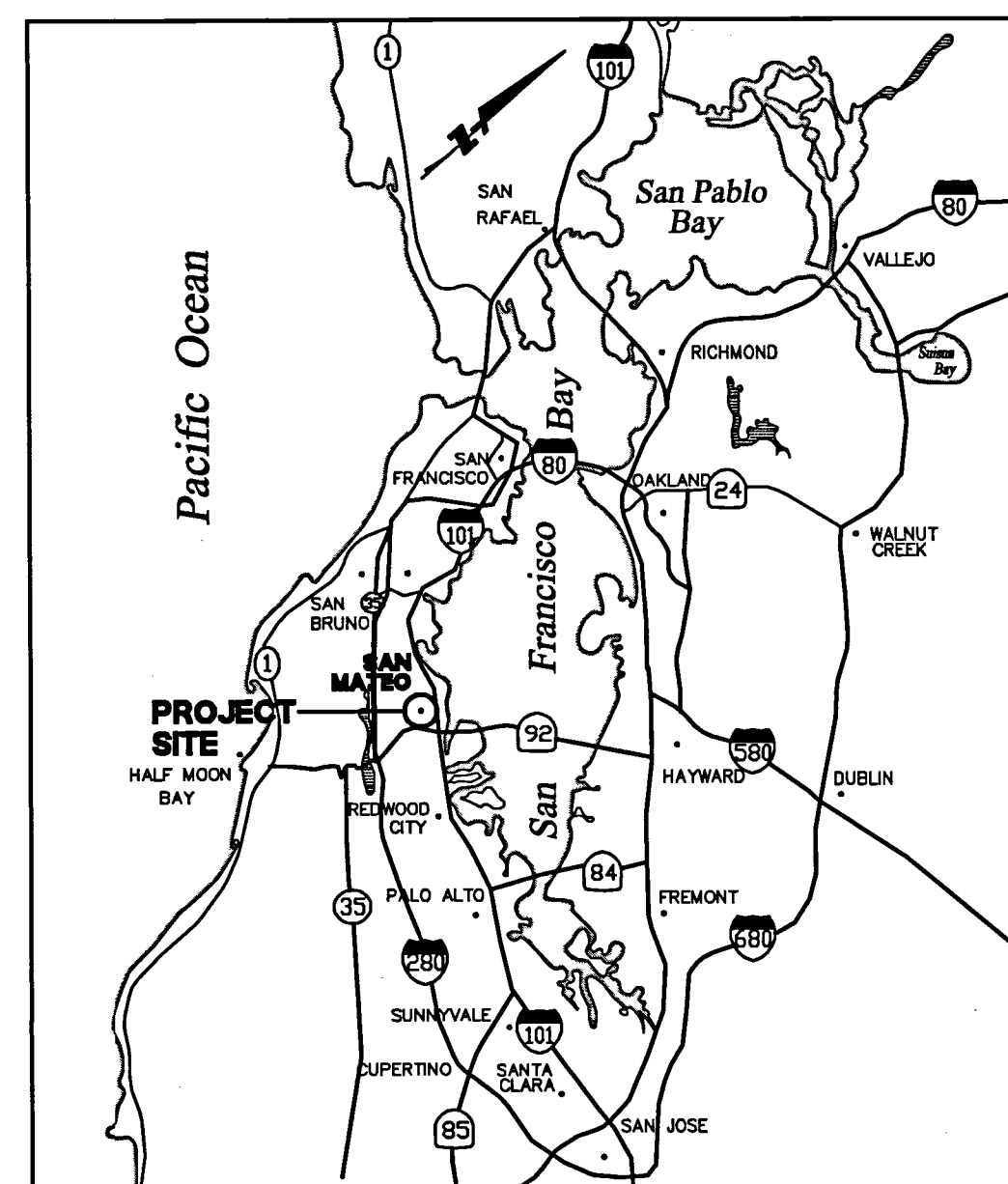
*Street Improvement  
Plans  
4/27/16*

255 SHORELINE DRIVE, SUITE 200  
REDWOOD CITY, CA 94065  
PHONE: (650) 482-6300  
FAX: (650) 482-6399

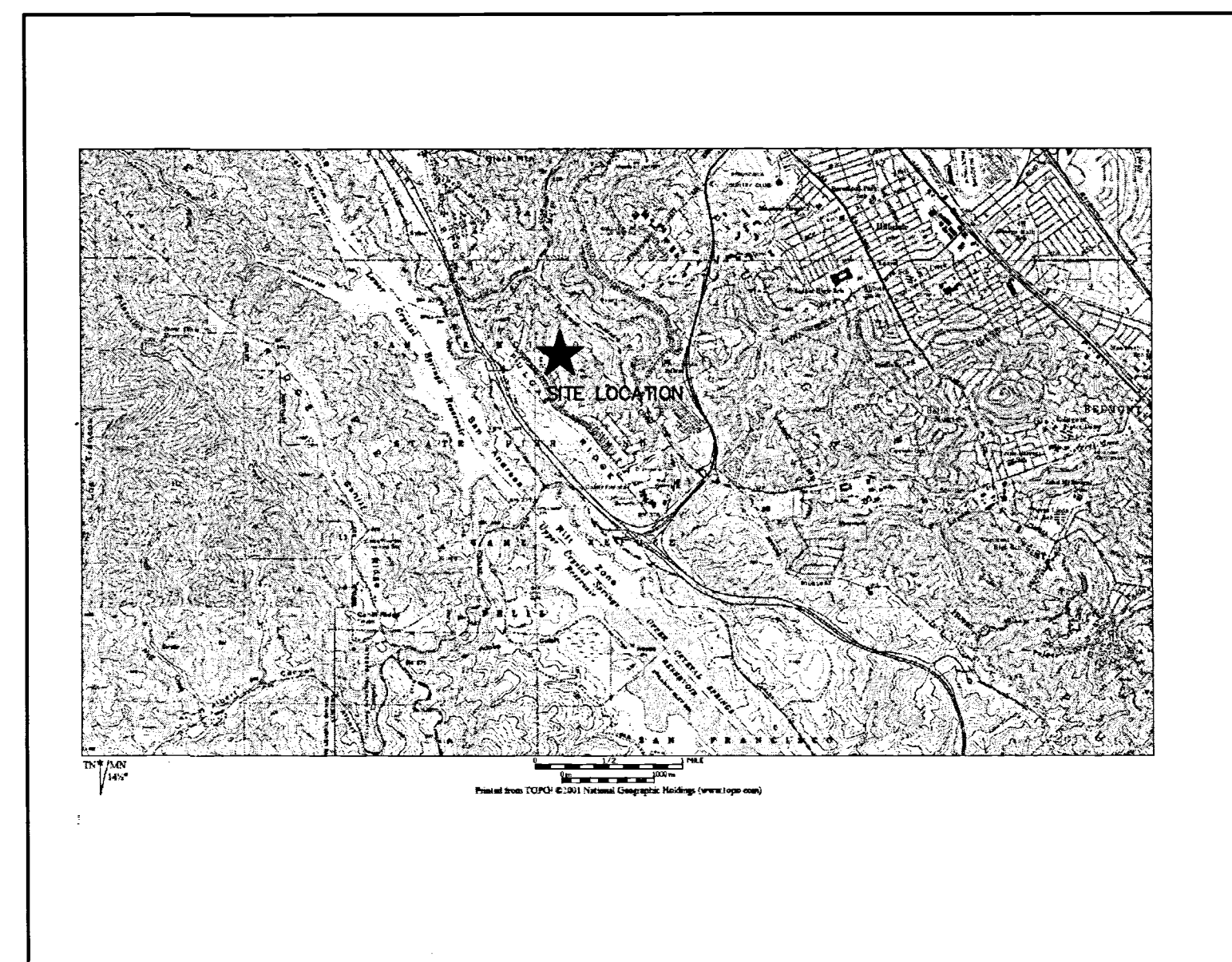


### SHEET INDEX

SHEET NO	DESCRIPTION
C1.00	COVER SHEET
C2.00	GENERAL NOTES, LEGEND AND ABBREVIATIONS
C3.00	PLAN & PROFILE - TICONDEROGA DRIVE
C3.10	PLAN & PROFILE - COBBLEHILL PLACE
C3.20	PLAN & PROFILE - COWPENS WAY
C4.00	CONSTRUCTION STAGING & EROSION CONTROL
C4.10	CONSTRUCTION STAGING & EROSION CONTROL
C5.00	EROSION CONTROL DETAILS AND NOTES
C6.00	CONSTRUCTION DETAILS
C6.10	CONSTRUCTION DETAILS
C6.20	CONSTRUCTION DETAILS
C6.30	CONSTRUCTION DETAILS
C6.40	CONSTRUCTION DETAILS
C6.50	CONSTRUCTION DETAILS



**VICINITY MAP**  
NTS



**LOCATION MAP**  
NTS

### PROJECT DATA

**ENGINEER:** BKF ENGINEERS  
255 SHORELINE DRIVE, SUITE 200  
REDWOOD CITY, CA 94065  
(650) 482-6300

**WATER SUPPLY:** CAL WATER SERVICE  
341 N. DELAWARE STREET  
SAN MATEO, CA 94401-1808  
(650) 343-1808

**SEWAGE DISPOSAL:** CITY OF SAN MATEO & CRYSTAL SPRINGS COUNTY  
SANITATION DISTRICT

**GAS & ELECTRIC:** PG&E

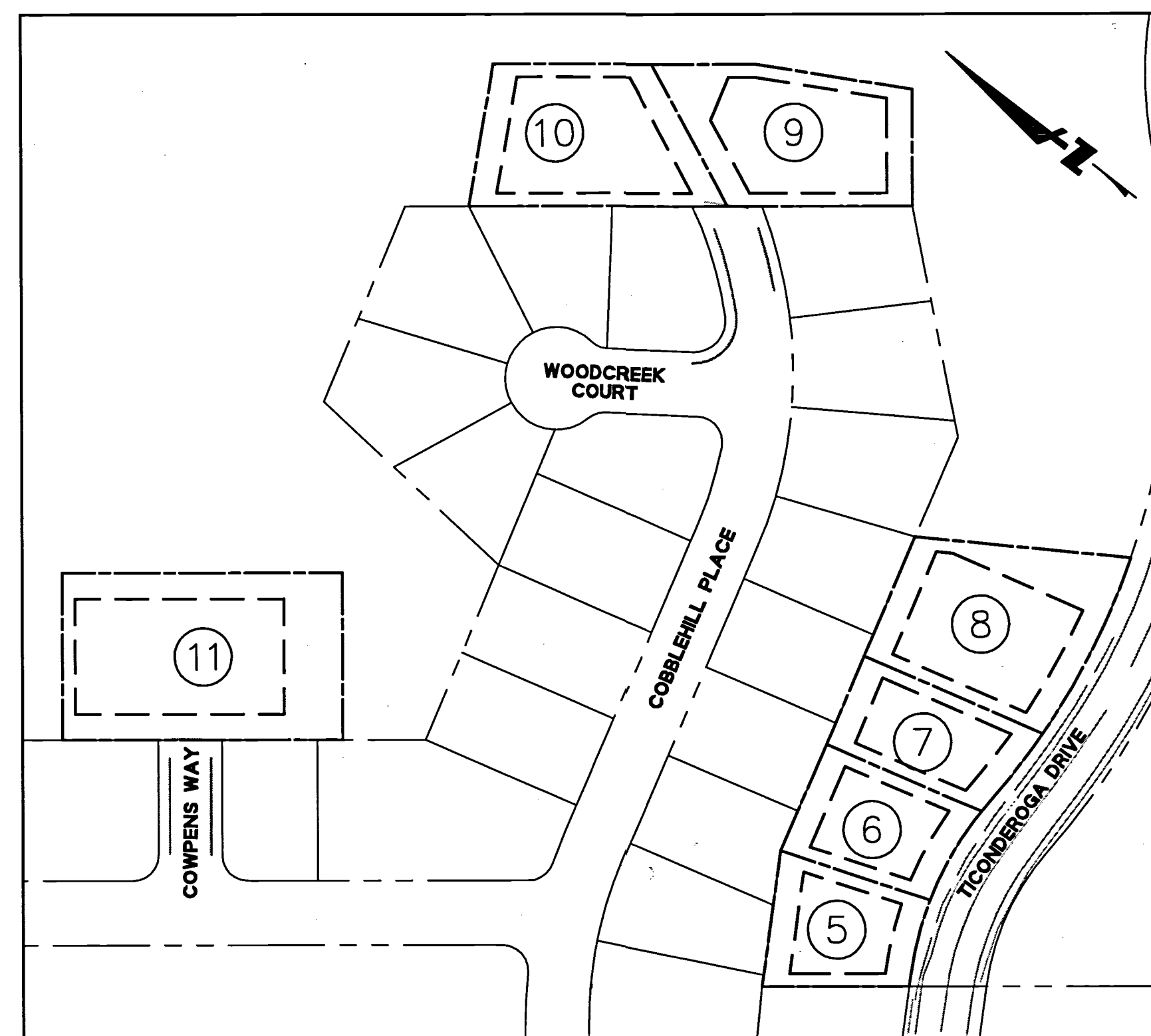
**TELEPHONE:** AT&T

**FIRE PROTECTION:** CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION

**CABLE:** COMCAST

**STORM DRAINAGE:** COUNTY OF SAN MATEO  
CITY OF SAN MATEO

**TOPOGRAPHIC BASE MAP:** AERO-GEODIC CORP.  
JOB NO. 950168  
DATE OF PHOTOGRAPHY 9/18/87



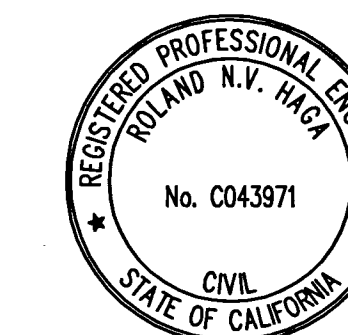
**SITE PLAN**  
SCALE: 1" = 100'

### ENGINEER'S STATEMENT

THESE IMPROVEMENT PLANS HAVE BEEN PREPARED BY ME OR UNDER MY DIRECTION IN ACCORDANCE WITH STANDARD ENGINEERING PRACTICE.

ROLAND N.V. HAGA  
R.C.E. NO. 43971 EXP 06/30/17  
BKF ENGINEERS

DATE



HIGHLAND ESTATES - STREET IMPROVEMENT PLANS  
TICONDEROGA DRIVE, COBBLEHILL PLACE & COWPENS WAY  
TITLE SHEET  
CITY OF SAN MATEO  
SAN MATEO COUNTY  
CALIFORNIA

Date	No.	Revisions
04/27/16	NTS	
	Design	
	Drawn	
	Approved	
	Job No	950168-20

Sheet Number:  
**C1.00**  
OF



NOTES:

I. GENERAL NOTES

- 1. WORK SHALL CONFORM TO THE COUNTY OF SAN MATEO PUBLIC WORKS STANDARD DRAWINGS FOR PUBLIC IMPROVEMENTS, REVISED SEPTEMBER 2007 AND THE SAN MATEO COUNTY SEWER AND SANITATION DISTRICTS STANDARD SPECIFICATIONS, DATED JUNE 1995.
2. PERFORM WORK IN CONFORMANCE WITH THE RECOMMENDATION OF THE PROJECT GEOTECHNICAL ENGINEERING REPORT TITLED "UPDATED GEOTECHNICAL INVESTIGATION, HIGHLAND ESTATES LOTS 5 THROUGH 11, TICONDEROGA DRIVE/COBBLEHILL PLACE/COMPENS WAY, SAN MATEO COUNTY, CALIFORNIA" PREPARED BY CORNERSTONE EARTH GROUP, DATED OCTOBER 30, 2015. GRADING WORK WILL BE SUBJECT TO APPROVAL OF GEOTECHNICAL ENGINEER.
...
24. MAKE EFFORTS TO MINIMIZE CONSTRUCTION NOISE.

- 24.A. MAINTAIN EQUIPMENT USED ON SITE IN GOOD MECHANICAL CONDITION TO MINIMIZE NOISE CREATED BY FAULTY OR POORLY MAINTAINED ENGINE, DRIVE-TRAIN AND OTHER COMPONENTS.
24.B. EQUIPMENT EXCEEDING 110 DBA MEASURED 25 FEET FROM THE PIECE OF EQUIPMENT WILL NOT BE ALLOWED ON SITE.
24.C. SELECT APPROPRIATE EQUIPMENT TO MINIMIZE NOISE GENERATION. USE THE FOLLOWING TECHNIQUES TO MINIMIZE NOISE GENERATION SUBJECT TO EQUIPMENT AVAILABILITY AND COST CONSIDERATIONS. USE SCRAPERS AS MUCH AS POSSIBLE FOR EARTH REMOVAL, RATHER THAN NOISIER LOADERS AND HAUL TRUCKS. USE BACKHOES FOR BACKFILLING AS IT IS QUIETER THAN DOZERS OR LOADERS. USE MOTOR GRADERS RATHER THAN BULLDOZERS FOR FINAL GRADING.

II. EXISTING CONDITIONS

- 1. EXISTING TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS IS BASED UPON A FIELD TOPOGRAPHIC SURVEY OF THE PROJECT SITE BY BKF ENGINEERS, DATED JUNE 2009. ACTUAL CONDITIONS ENCOUNTERED ON SITE MAY VARY FROM THOSE SHOWN ON THE PLANS. CONTRACTOR SHALL REVIEW CONSTRUCTION DOCUMENTS AND CONDUCT THEIR OWN INVESTIGATIONS TO UNDERSTAND AND VERIFY EXISTING CONDITIONS AT THE SITE.
2. EXISTING SUBSURFACE IMPROVEMENTS AND UTILITIES SHOWN ON THESE PLANS WERE TAKEN FROM RECORD INFORMATION KNOWN TO THE ENGINEER AND FIELD SURVEY OF ABOVE GRADE FEATURES. THESE PLANS ARE NOT MEANT TO BE A FULL CATALOG OF EXISTING SUBSURFACE CONDITIONS. CONDUCT FIELD INVESTIGATION TO VERIFY THE LOCATIONS AND ELEVATIONS OF EXISTING SUBSURFACE IMPROVEMENTS AND UTILITIES.
...
4. CONTACT USA (UNDERGROUND SERVICES ALERT) AT 1-800-227-2600, AND AFFECTED UTILITY COMPANIES A MINIMUM OF 2 WORKING DAYS PRIOR TO STARTING WORK TO REQUEST UTILITIES BE MARKED.

III. DEMOLITION

- 1. REMOVE FROM SITE AND DISPOSE OF IN LAWFUL MANNER EXISTING STRUCTURES, UTILITIES, AND OTHER FEATURES NOT REMOVED DURING DEMOLITION OR ROUGH GRADING AND ENCOUNTERED DURING WORK ON SITE.
1.A. REMOVE WOOD OR CONCRETE STRUCTURES, SLABS, FOOTINGS, GRADE BEAMS, DECKS, DOCKS, AND OTHER SIMILAR STRUCTURES.
1.B. REMOVE LANDSCAPING, UTILITIES AND IRRIGATION LINES AS SPECIFIED BY GEOTECHNICAL ENGINEER.
1.C. REMOVE ABANDONED IN-GROUND STRUCTURES, SUCH AS CULVERTS, UTILITY VAULTS, AND FOUNDATIONS AS SPECIFIED BY GEOTECHNICAL ENGINEER.

IV. DEWATERING

- 1. DEWATER AREAS COVERED WITH STANDING WATER PRIOR TO PLACEMENT OF FILL.
2. DISPOSE OF WATER FROM DEWATERING OPERATION IN CONFORMANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

V. UTILITIES

- 1. DO NOT OPERATE WATER VALVES OR OTHER WATER DISTRICT FACILITIES. REQUIRED OPERATION WILL BE PERFORMED BY UTILITY DISTRICT PERSONNEL ONLY. NOTIFY UTILITY DISTRICT 2 WORKING DAYS PRIOR TO REQUIRING FACILITY OPERATION.
2. PROVIDE MINIMUM 12 INCH VERTICAL CLEARANCE FROM EDGE OF PIPE TO EDGE OF PIPE BETWEEN ADJACENT UTILITY PIPES AT UTILITY CROSSINGS UNLESS OTHERWISE NOTED.
3. COMPLETE ELECTRIC, GAS, TELEPHONE, CABLE AND OTHER JOINT TRENCH WORK IN CONFORMANCE WITH THE REQUIREMENTS OF THE RESPECTIVE UTILITY PROVIDER. NOTIFY UTILITY PROVIDER MINIMUM 2 WORKING DAYS PRIOR TO COMMENCING WORK. IF EXISTING WATER, SEWER, GAS OR OTHER UTILITY SERVICES ARE DISTURBED OR DAMAGED DURING CONSTRUCTION, NOTIFY UTILITY OWNER IMMEDIATELY.
...
14. A MINIMUM OF 6' IS REQUIRED BETWEEN THE PROPERTY LINE CLEANOUT AND STRUCTURE.

VI. EARTHWORK AND GRADING

- 1. OFF-SITE IMPORT FILL MATERIAL SHALL CONFORM TO THE SPECIFICATIONS AND THE REQUIREMENTS OF THE GEOTECHNICAL REPORT.
2. TOPSOIL, ROOTS, VEGETABLE MATTER, TRASH AND DEBRIS WILL NOT BE CONSIDERED ACCEPTABLE FILL MATERIAL.
3. REMOVE DEBRIS FROM AREAS OF EARTHWORK PRIOR TO PLACING FILL OR STARTING GRADING OPERATIONS.
4. PLACE AND COMPACT FILL MATERIAL AS RECOMMENDED IN GEOTECHNICAL REPORT. PLACE FILL MATERIAL IN MAXIMUM 8 INCH UNCOMPACTED THICKNESS. COMPACTION BY FLOODING, PONDING OR JETTING WILL NOT BE PERMITTED.
5. CONTRACTOR SHALL MAKE HIS OWN DETERMINATION OF EARTHWORK QUANTITIES.

VII. RECORD DRAWINGS

- 1. KEEP ACCURATE RECORD OF THE FINAL LOCATION, ELEVATION AND DESCRIPTION OF WORK ON A COPY OF THE FINAL APPROVED CONSTRUCTION DOCUMENTS. NOTE THE LOCATIONS AND ELEVATIONS OF EXISTING IMPROVEMENTS ENCOUNTERED THAT VARY FROM THE LOCATIONS SHOWN ON THE IMPROVEMENT PLANS. PROVIDE COPY OF RECORD INFORMATION TO OWNER AT COMPLETION OF PROJECT AND WHEN REQUESTED.

VIII. 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 BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD BOTH DESIGN PROFESSIONAL AND THE COUNTY OF SAN MATEO 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 COUNTY OF SAN MATEO, RESPECTIVELY.

IX. 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 COUNTY ENGINEER AND THE PREPARER OF THESE PLANS.

X. DRAWING LANGUAGE

- 1. NOTES AND CALLOUTS ON DRAWINGS MAY USE IMPERATIVE LANGUAGE. REQUIREMENTS EXPRESSED IMPERATIVELY ARE TO BE PERFORMED BY THE CONTRACTOR UNLESS NOTED OTHERWISE.

CONDITIONS OF APPROVAL NOTES

CONSTRUCTION NOTES

- 1. THE FIRST PHASE OF CONSTRUCTION SHALL REQUIRE 30 PERCENT OF CONSTRUCTION EQUIPMENT TO MEET TIER 1 EPA CERTIFICATION STANDARDS FOR CLEAN TECHNOLOGY. THE REMAINDER OF CONSTRUCTION EQUIPMENT (70 PERCENT), WHICH WOULD CONSIST OF OLDER TECHNOLOGIES, SHALL BE REQUIRED TO USE EMULSIFIED FUELS.
2. THE SECOND PHASE OF CONSTRUCTION SHALL REQUIRE 30 PERCENT OF CONSTRUCTION EQUIPMENT TO MEET TIER 2 EPA CERTIFICATION STANDARDS FOR CLEAN TECHNOLOGY AND 50 PERCENT TO MEET TIER 1 EPA CERTIFICATION STANDARDS. THE REMAINING 20 PERCENT OF CONSTRUCTION EQUIPMENT, WHICH WOULD CONSIST OF OLDER TECHNOLOGIES, SHALL USE EMULSIFIED FUELS.
3. FOR ALL LARGER VEHICLES, INCLUDING CEMENT MIXERS OR OTHER DEVICES THAT MUST BE DELIVERED BY LARGE TRUCKS, VEHICLES SHALL BE EQUIPPED WITH CARB LEVEL THREE VERIFIED CONTROL DEVICES.
...
14. SUSPEND EXCAVATION AND GRADING ACTIVITIES WHEN WIND (AS INSTANTANEOUS GUSTS) EXCEEDS 25 MILES PER HOUR.

NOISE NOTES

- 1. EQUIPMENT AND TRUCKS USED FOR PROJECT GRADING AND CONSTRUCTION WOULD UTILIZE THE BEST AVAILABLE NOISE CONTROL TECHNIQUES (E.G., IMPROVED EXHAUST MUFFLERS, EQUIPMENT REDESIGN, USE OF INTAKE SILENCERS, DUCTS, ENGINE ENCLOSURES, AND ACOUSTICALLY-ATTENUATING SHIELDS OR SHROUDS) IN ORDER TO MINIMIZE CONSTRUCTION NOISE IMPACTS.
2. EQUIPMENT USED FOR PROJECT GRADING AND CONSTRUCTION WOULD BE HYDRAULICALLY OR ELECTRICALLY POWERED IMPACT TOOLS (E.G., JACK HAMMERS AND PAVEMENT BREAKERS) WHEREVER POSSIBLE TO AVOID NOISE ASSOCIATED WITH COMPRESSED AIR EXHAUST FROM PNEUMATICALLY-POWERED TOOLS. COMPRESSED AIR EXHAUST SILENCERS WOULD BE USED ON OTHER EQUIPMENT. OTHER QUIETER PROCEDURES WOULD BE USED SUCH AS DRILLING RATHER THAN IMPACT EQUIPMENT WHENEVER FEASIBLE.
3. THE GRADING AND CONSTRUCTION ACTIVITY WOULD BE KEPT TO THE HOURS OF 7:00 AM TO 7:00 PM, MONDAY THROUGH FRIDAY. SATURDAY HOURS (8:00 AM TO 5:00 PM) ARE PERMITTED UPON THE DISCRETION OF COUNTY APPROVAL BASED ON

INPUT FROM NEARBY RESIDENTS AND BUSINESSES. SATURDAY CONSTRUCTION (8:00 AM TO 5:00 PM) WOULD BE ALLOWED ONCE THE BUILDINGS ARE FULLY ENCLOSED. NOISE GENERATING GRADING AND CONSTRUCTION ACTIVITIES SHALL NOT OCCUR AT ANY TIME ON SUNDAYS, THANKSGIVING AND CHRISTMAS.

- 4. RESIDENTIAL PROPERTY OWNERS WITHIN 200 FEET OF PLANNED CONSTRUCTION AREAS SHALL BE NOTIFIED OF THE CONSTRUCTION SCHEDULE IN WRITING, PRIOR TO CONSTRUCTION; THE PROJECT SPONSOR SHALL DESIGNATE A "DISTURBANCE COORDINATOR" WHO SHALL BE RESPONSIBLE FOR RESPONDING TO ANY LOCAL COMPLAINTS REGARDING CONSTRUCTION NOISE; THE COORDINATOR (WHO MAY BE AN EMPLOYEE OF THE DEVELOPER OR GENERAL CONTRACTOR) SHALL DETERMINE THE CAUSE OF THE COMPLAINT AND SHALL REQUIRE THAT REASONABLE MEASURES WARRANTED TO CORRECT THE PROBLEM BE IMPLEMENTED; A TELEPHONE NUMBER OF THE NOISE DISTURBANCE COORDINATOR SHALL BE CONSPICUOUSLY POSTED AT THE CONSTRUCTION SITE FENCE AND ON THE NOTIFICATION SENT TO NEIGHBORS ADJACENT TO THE SITE.

ASBESTOS NOTES

- 1. IF NATURALLY OCCURRING ASBESTOS IS IDENTIFIED AT THE SITE, A SITE HEALTH AND SAFETY (H&S) PLAN INCLUDING METHODS FOR CONTROL OF AIRBORNE DUST SHALL BE PREPARED. THIS PLAN SHALL BE REVIEWED AND APPROVED BY THE COUNTY OF SAN MATEO PRIOR TO GRADING IN AREAS UNDERLAIN BY SERPENTINE-BEARING SOILS OR BEDROCK AND NATURALLY OCCURRING ASBESTOS. THE H&S PLAN SHALL STRICTLY CONTROL DUST-GENERATING EXCAVATION AND COMPACTION OF MATERIAL CONTAINING NATURALLY OCCURRING ASBESTOS. THE PLAN SHALL ALSO IDENTIFY SITE-MONITORING ACTIVITIES DEEMED NECESSARY DURING CONSTRUCTION (E.G., AIR MONITORING). WORKER MONITORING SHALL ALSO BE PERFORMED AS APPROPRIATE. THE PLAN SHALL DEFINE PERSONAL PROTECTION METHODS TO BE USED BY CONSTRUCTION WORKERS. ALL WORKER PROTECTION AND MONITORING SHALL COMPLY WITH PROVISIONS OF THE MINING SAFETY AND HEALTH ADMINISTRATION (MSHA) GUIDELINES, CALIFORNIA DIVISION OF OCCUPATIONAL SAFETY AND HEALTH (DOSH), AND THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).
2. IF NATURALLY OCCURRING ASBESTOS IS FOUND AT THE SITE, A SOIL MANAGEMENT PLAN SHALL BE DEVELOPED AND APPROVED BY THE COUNTY PLANNING DEPARTMENT TO PROVIDE DETAILED DESCRIPTIONS OF THE CONTROL AND DISPOSITION OF SOILS CONTAINING NATURALLY OCCURRING ASBESTOS. SERPENTINE MATERIAL PLACED AS FILL SHALL BE SUFFICIENTLY BURIED IN ORDER TO PREVENT EROSION BY WIND OR SURFACE WATER RUNOFF OR EXPOSURE TO FUTURE HUMAN ACTIVITIES, SUCH AS LANDSCAPING OR SHALLOW TRENCHES. ADDITIONALLY, THE BAOQM SHALL BE NOTIFIED PRIOR TO THE START OF ANY EXCAVATION IN AREAS CONTAINING NATURALLY OCCURRING ASBESTOS.

GRADING NOTES

- 1. NO GRADING SHALL BE ALLOWED DURING THE WINTER SEASON (OCTOBER 15 TO APRIL 15) TO AVOID POTENTIAL SOIL EROSION UNLESS APPROVED, IN WRITING, BY THE COMMUNITY DEVELOPMENT DIRECTOR. THE PROPERTY OWNERS SHALL SUBMIT A LETTER TO THE CURRENT PLANNING SECTION, AT LEAST TWO WEEKS PRIOR TO COMMENCEMENT OF GRADING, STATING THE DATE WHEN GRADING WILL BEGIN.

TREE PROTECTION NOTES

- 1. THE APPLICANT SHALL ESTABLISH AND MAINTAIN TREE PROTECTION ZONES THROUGHOUT THE ENTIRE LENGTH OF THE PROJECT. TREE PROTECTION ZONES SHALL BE DELINEATED USING 4-FOOT TALL ORANGE PLASTIC FENCING SUPPORTED BY POLES POUNDED INTO THE GROUND, LOCATED AS CLOSE TO THE DRIP LINES AS POSSIBLE WHILE STILL ALLOWING ROOM FOR CONSTRUCTION/GRADING TO SAFELY CONTINUE. THE APPLICANT SHALL MAINTAIN TREE PROTECTION ZONES FREE OF EQUIPMENT AND MATERIALS STORAGE AND SHALL NOT CLEAN ANY EQUIPMENT WITHIN THESE AREAS. SHOULD ANY LARGE ROOTS OR LARGE MASSES OF ROOTS NEED TO BE CUT, THE ROOTS SHALL BE INSPECTED BY A CERTIFIED ARBORIST OR REGISTERED FORESTER PRIOR TO CUTTING. ANY ROOT CUTTING SHALL BE MONITORED BY AN ARBORIST OR FORESTER AND DOCUMENTED. ROOTS TO BE CUT SHOULD BE SEVERED CLEANLY WITH A SAW OR TOPPERS. NORMAL IRRIGATION SHALL BE MAINTAINED, BUT OAKS SHOULD NOT NEED SUMMER IRRIGATION. THE ABOVE INFORMATION SHALL BE ON-SITE AT ALL TIMES.

VEGETATION REMOVAL/REPLACEMENT NOTES

- 1. VEGETATION REMOVED IN AREAS OUTSIDE OF BUILDING FOOTPRINTS, DRIVEWAYS, AND CONSTRUCTION ACCESS AREAS SHALL BE REPLACED WITH DROUGHT-TOLERANT, NON-INVASIVE PLANTS, IMMEDIATELY AFTER GRADING IS COMPLETE IN THAT AREA. PRIOR TO THE ISSUANCE OF ANY BUILDING PERMITS, THE APPLICANT SHALL SUBMIT PHOTOGRAPHS DEMONSTRATING COMPLIANCE WITH THIS CONDITION TO THE CURRENT PLANNING SECTION, SUBJECT TO REVIEW AND APPROVAL BY THE COMMUNITY DEVELOPMENT DIRECTOR.
2. THE APPLICANT SHALL REPLACE ALL VEGETATION REMOVED IN ALL AREAS NOT COVERED BY CONSTRUCTION WITH DROUGHT-TOLERANT, NON-INVASIVE PLANTS, ONCE CONSTRUCTION IS COMPLETED. PRIOR TO THE CURRENT PLANNING SECTION'S FINAL APPROVAL OF ANY BUILDING PERMIT, THE APPLICANT SHALL SUBMIT PHOTOGRAPHS DEMONSTRATING COMPLIANCE WITH THIS CONDITION, SUBJECT TO REVIEW AND APPROVAL BY THE COMMUNITY DEVELOPMENT DIRECTOR.

DUST CONTROL NOTES

- 1. ALL GRADED SURFACES AND MATERIALS, WHETHER FILLED, EXCAVATED, TRANSPORTED OR STOCKPILED, SHALL BE WETTED, PROTECTED OR CONTAINED IN SUCH A MANNER AS TO PREVENT ANY SIGNIFICANT NUISANCE FROM DUST, OR SPILLAGE UPON ADJOINING WATER BODY, PROPERTY, OR STREETS. EQUIPMENT AND MATERIALS ON THE SITE SHALL BE USED IN SUCH A MANNER AS TO AVOID EXCESSIVE DUST. A DUST CONTROL PLAN MAY BE REQUIRED AT ANYTIME DURING THE COURSE OF THE PROJECT.
2. A DUST PALLIATIVE SHALL BE APPLIED TO THE SITE WHEN REQUIRED BY THE COUNTY. THE TYPE AND RATE OF APPLICATION SHALL BE RECOMMENDED BY THE SOILS ENGINEER AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS, THE PLANNING AND BUILDING DEPARTMENT'S GEOTECHNICAL SECTION, AND THE REGIONAL WATER QUALITY CONTROL BOARD.

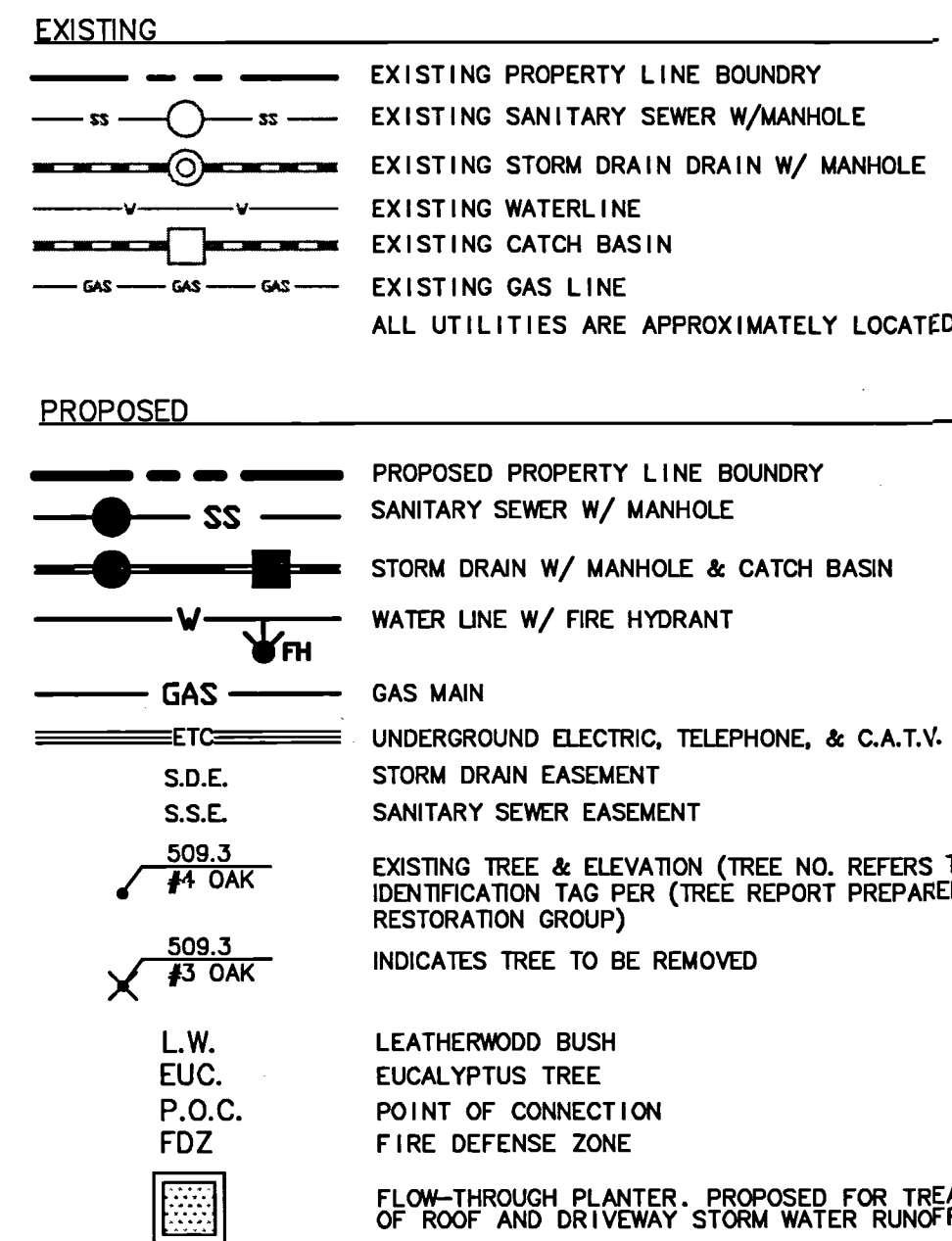
DISCOVERY OF HUMAN REMAINS NOTE

- 1. THE APPLICANT AND CONTRACTORS MUST BE PREPARED TO CARRY OUT THE REQUIREMENTS OF CALIFORNIA STATE LAW WITH REGARD TO THE DISCOVERY OF HUMAN REMAINS DURING CONSTRUCTION, WHETHER HISTORIC OR PREHISTORIC. IN THE EVENT THAT ANY HUMAN REMAINS ARE ENCOUNTERED DURING SITE DISTURBANCE, ALL GROUND-DISTURBING WORK SHALL CEASE IMMEDIATELY AND THE COUNTY CORONER SHALL BE NOTIFIED IMMEDIATELY. IF THE CORONER DETERMINES THE REMAINS TO BE NATIVE AMERICAN, THE NATIVE AMERICAN HERITAGE COMMISSION SHALL BE CONTACTED WITHIN 24 HOURS. A QUALIFIED ARCHAEOLOGIST, IN CONSULTATION WITH THE NATIVE AMERICAN HERITAGE COMMISSION, SHALL RECOMMEND SUBSEQUENT MEASURES FOR DISPOSITION OF THE REMAINS.

GEOTECHNICAL INSPECTION NOTE

- 1. PRIOR TO ISSUANCE OF BUILDING PERMITS, THE PROJECT GEOTECHNICAL CONSULTANT SHALL FIELD INSPECT (AND INVESTIGATE, AS NEEDED) ALL PROPOSED DRAINAGE DISCHARGE LOCATIONS AND VERIFY THAT PROPOSED DRAINAGE DESIGNS ARE ACCEPTABLE FROM A SLOPE STABILITY/EROSION PERSPECTIVE OR RECOMMEND APPROPRIATE MODIFICATIONS.

LEGEND



ABBREVIATIONS

Table with columns for abbreviations and full names. Includes: AC ASPHALTIC CONCRETE, BEG BEGINNING, BL BAY LAUREL, BLDG COR BUILDING CORNER, BOW BOTTOM OF WALL, CB BACK OF WALK, CL CATCH BASIN, CLF CENTERLINE, CMP CHAIN LINK FENCE, CONC CORRUGATED METAL PIPE, CONCRETE CONCRETE, DG DECOMPOSED GRANITE, DI DRAIN INLET, EC EXISTING GRADE, EP EDGE OF PAVEMENT, EU EUCALYPTUS TREE, EX (E) EXISTING, FC FACE OF CURB, FG FINISH GRADE, FL FLOW LINE, FNC FENCE, GB GRADE BREAK, GM GAS METER, GND GROUND SHOT, GR GRATE, GW GRAVEL, INV INVERT, JP JOINT POLE, LG LIP OF GUTTER, NIC NOT IN CONTRACT, O OAK TREE, P PEPPER TREE, PD PLANNED DEVELOPMENT, PINE PINE TREE, PD PLANNED DEVELOPMENT, P.U.E. PUBLIC UTILITY EASEMENT, RCP REINFORCED CONCRETE PIPE, RDW REDWOOD TREE, RET WALL RETAINING WALL, ROW RIGHT OF WAY, S SLOPE, SD STORM DRAIN, SDCB STORM DRAIN CATCH BASIN, SDCC STORM DRAIN CLEANOUT, SDDI STORM DRAIN DROP INLET, SDMH STORM DRAIN MANHOLE, SS SANITARY SEWER, SSCO SANITARY SEWER CLEAN OUT, SSMH SANITARY SEWER MANHOLE, T TREE, TOP OF CURB, TOE TOP OF SLOPE, TOP OF SLOPE, TOP OF WALL, UB UTILITY BOX, W WATER, WM WATER METER, WV WATER VALVE.

BENCHMARK:

THE PROJECT BENCHMARK IS THE TOP OF AN IRON PIPE, ELEVATION OF 538.23, LOCATED WITHIN A MONUMENT BOX AT THE INTERSECTION OF THE CENTERLINES OF COBBLEHILL PLACE AND NEW BRUNSWICK DRIVE IN SAN MATEO, CALIFORNIA. THE ELECTAION SHOWN IN BASED UPON A SURVEY BY BKF ENGINEERS IN MARCH OF 2011 AND IS BASED UPON AN ASSUMED ELEVATION.

BASIS OF BEARINGS:

THE BEARING NORTH 47° 00' 00" EAST BETWEEN TWO FOUND MONUMENTS ON CENTERLINE OF BUNKER HILL DRIVE AS SAID CENTERLINE AND DRIVE IS SHOWN ON THAT CERTAIN MAP ENTITLED "TRACT NO. 762, THE HIGHLANDS, UNIT NO. 8" FILED FOR RECORD DECEMBER 18, 1957 IN VOLUME 48 OF MAPS AT PAGES 16-17 IN THE OFFICE OF THE RECORDER, SAN MATEO COUNTY, WAS TAKEN AS THE BASIS OF BEARINGS FOR THIS MAP.

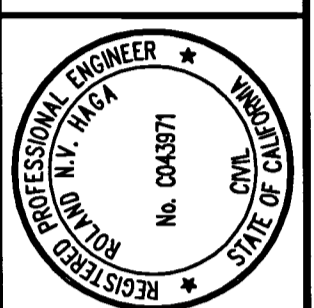
Vertical strip on the right side containing the BKF logo, project title 'HIGHLAND ESTATES - STREET IMPROVEMENT PLANS', address 'TICONDEROGA DRIVE, COBBLEHILL PLACE & COMPENS WAY', and other project details.

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PLOT DATE: 04-28-16
PLOTTED BY: trat

Revisions table with columns for No., Date, and Description. Includes entries for NTS, Design, and Approval.

811 logo with text 'Know what's below. Call before you dig.' and 'C2.00 OF'.

235 SHORELINE DRIVE, SUITE 200  
 REDWOOD CITY, CA 94065  
 PHONE: (650) 965-6500  
 FAX: (650) 482-6539

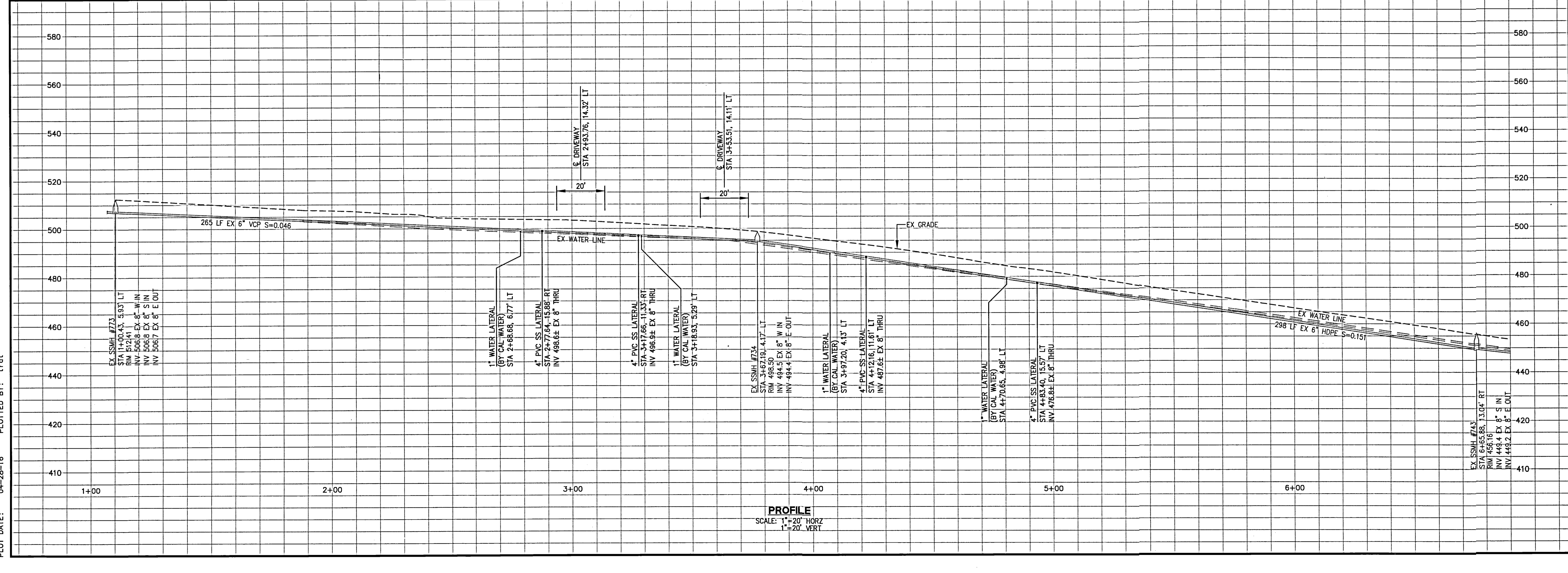
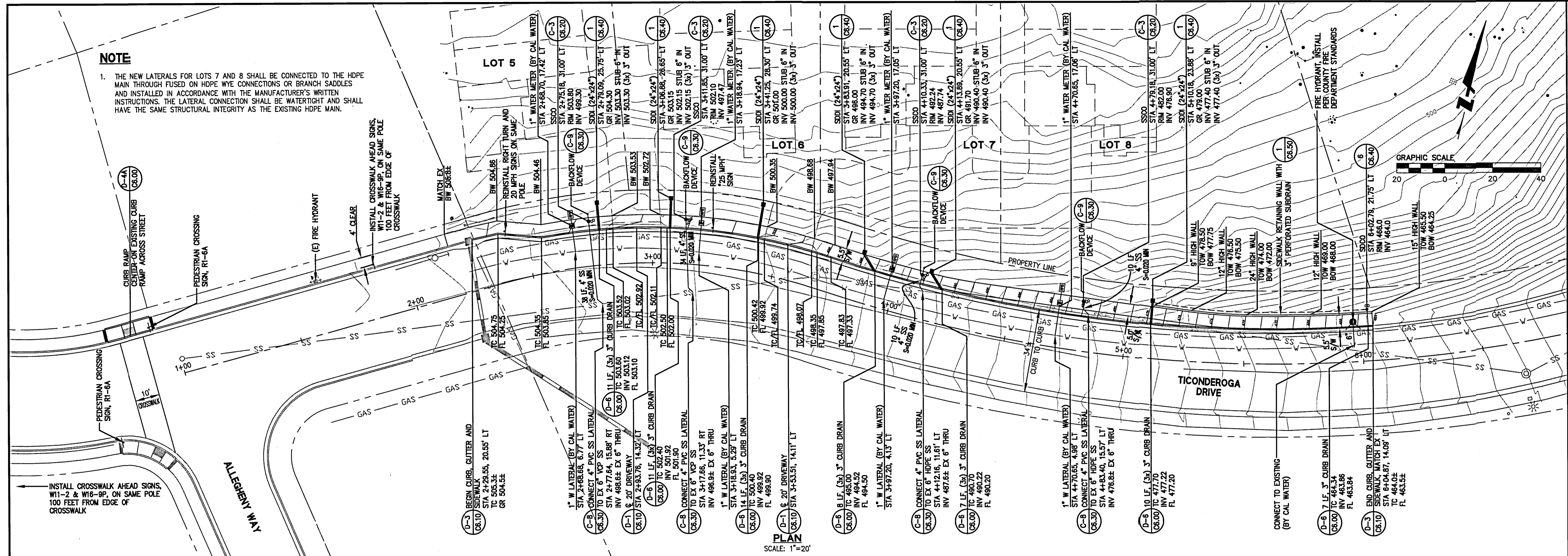


**HIGHLAND ESTATES - STREET IMPROVEMENT PLANS**  
**TICONDEROGA DRIVE, COBBLEHILL PLACE & COMPENS WAY**  
**PLAN & PROFILE - TICONDEROGA DRIVE**  
 CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

Date	No.	Revisions
04/27/16	AS SHOWN	
	Design	
	Drawn	
	Approved	
	Job No	50168-20

Sheet Number: **C3.00** OF

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 PLOT DATE: 04-28-16 PLOTTED BY: trt

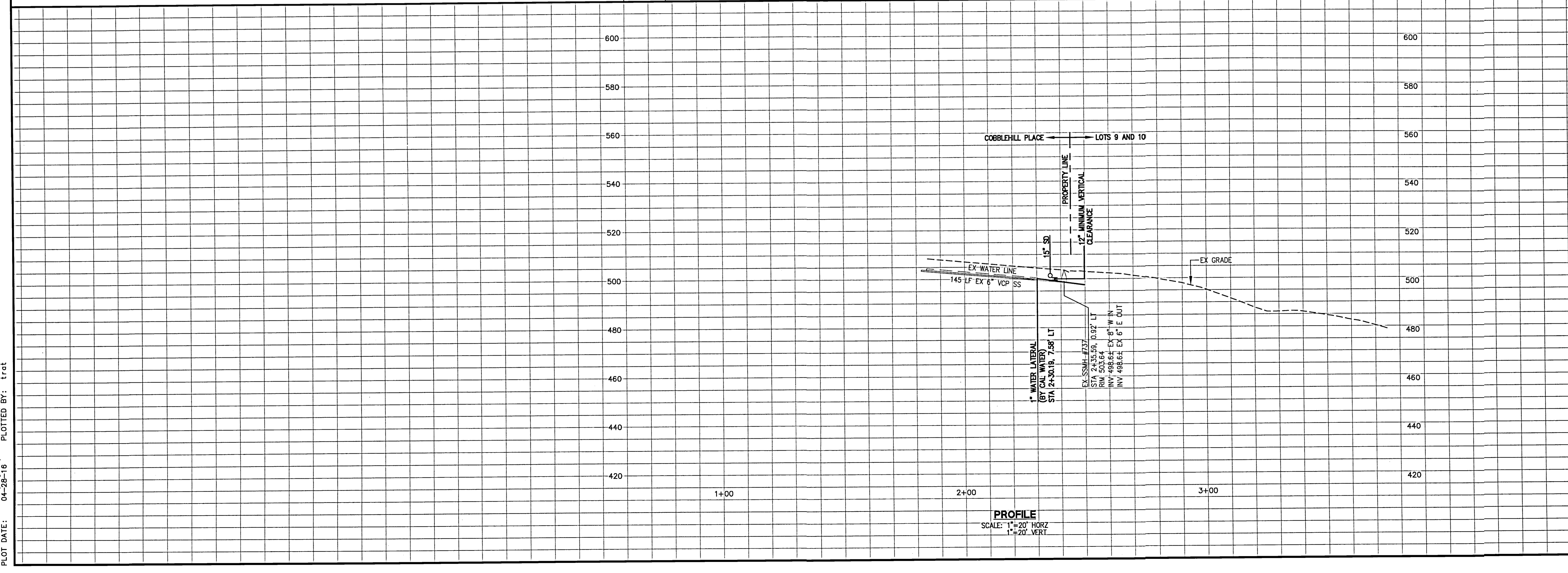
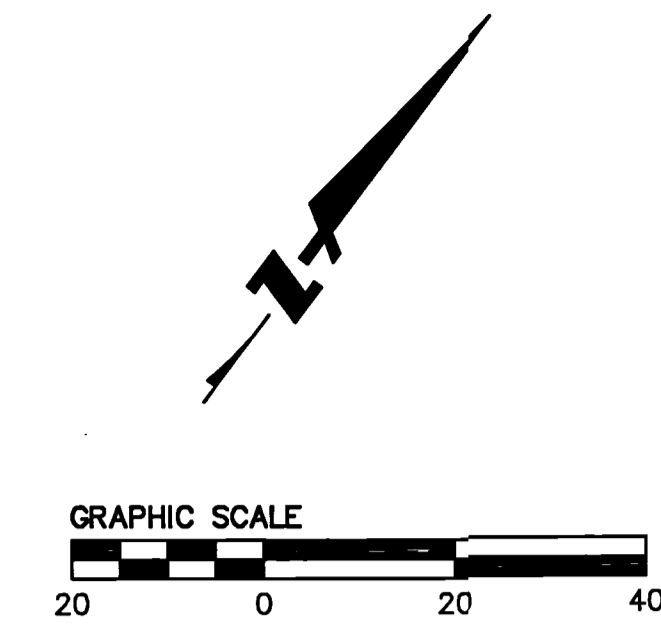
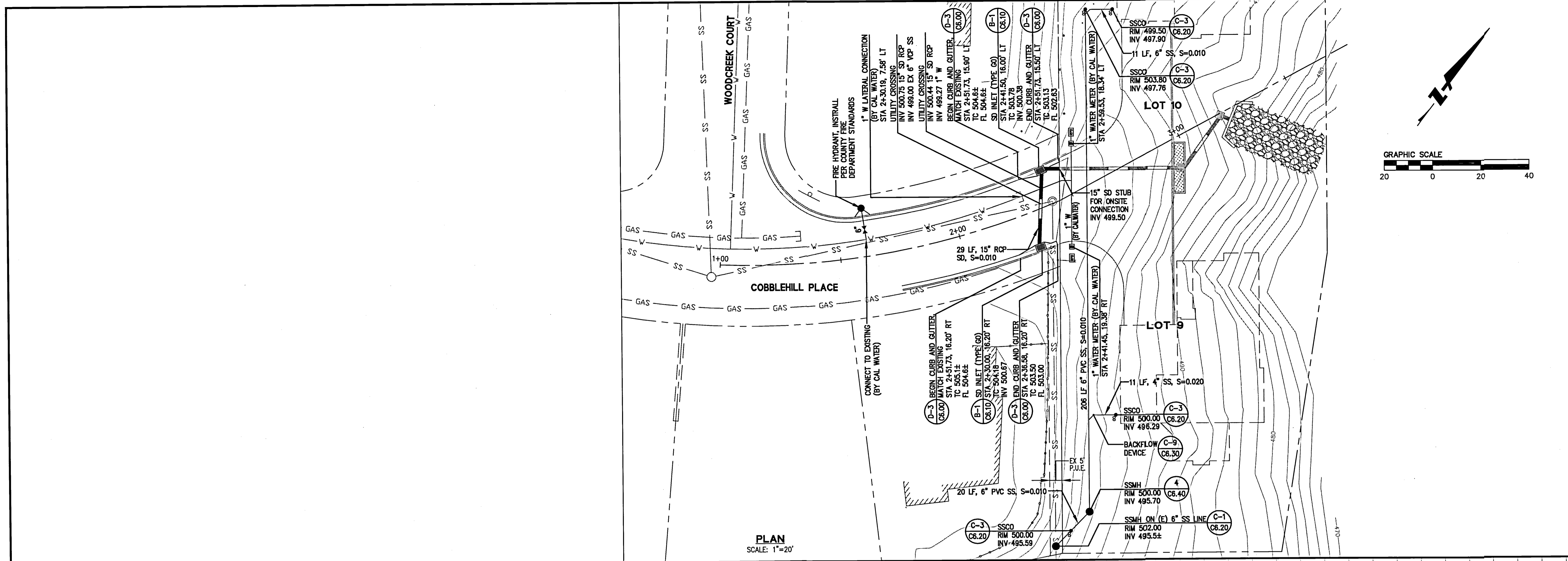


EX. SSMH #773  
 STA 1+00.45, 5.93' LT  
 RIM 512.41  
 INV. 506.8 EX. 8" W IN  
 INV. 506.8 EX. 8" S IN  
 INV. 506.7 EX. 8" E OUT

EX. SSMH #734  
 STA 3+62.19, 4.17' LT  
 RIM 498.50  
 INV. 494.5 EX. 8" W IN  
 INV. 494.4 EX. 8" E OUT

EX. SSMH #743  
 STA 6+55.89, 13.04' RT  
 RIM 456.16  
 INV. 449.4 EX. 8" W IN  
 INV. 449.2 EX. 8" E OUT

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 PLOT DATE: 04-26-16 PLOTTED BY: trc



**HIGHLAND ESTATES - STREET IMPROVEMENT PLANS**  
**TICONDEROGA DRIVE, COBBLEHILL PLACE & COMPENS WAY**  
**PLAN & PROFILE - COBBLEHILL PLACE**  
 CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

255 SHORELINE DRIVE, SUITE 200  
 TIBURON, CALIFORNIA 94920  
 PHONE: (650) 482-6300  
 FAX: (650) 482-6399

**BKF**  
 ENGINEERS | SURVEYORS | PLANNERS

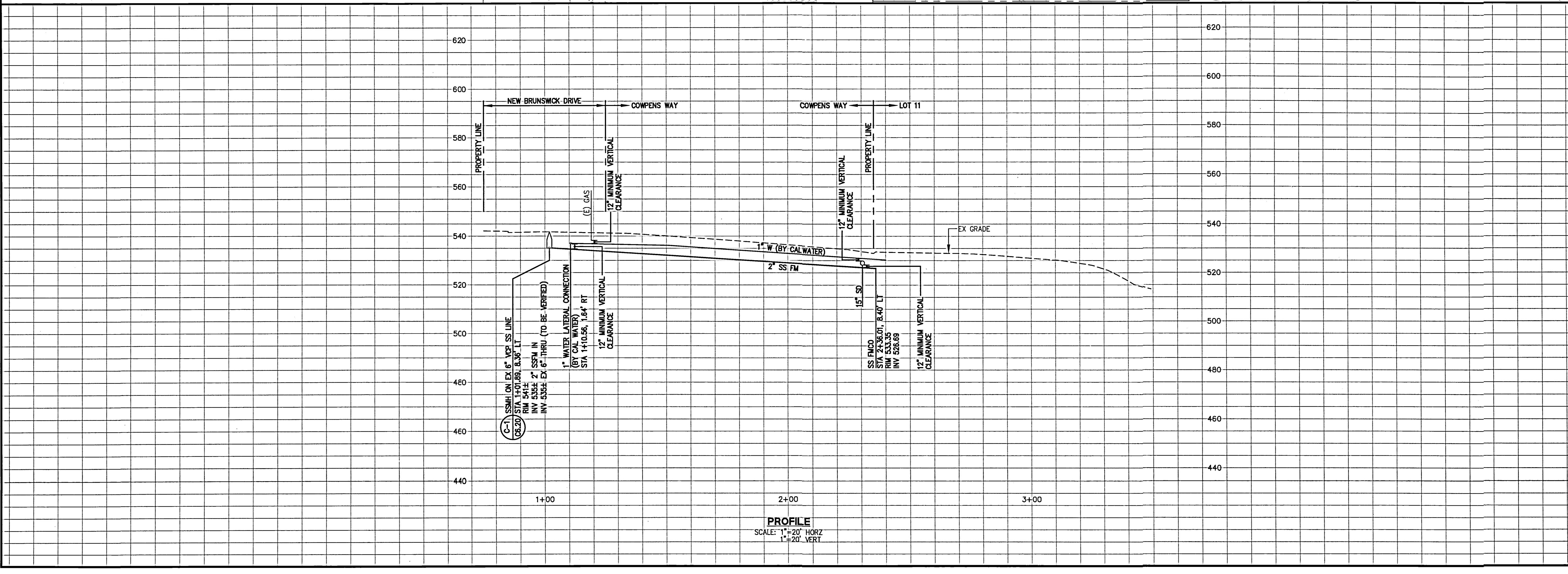
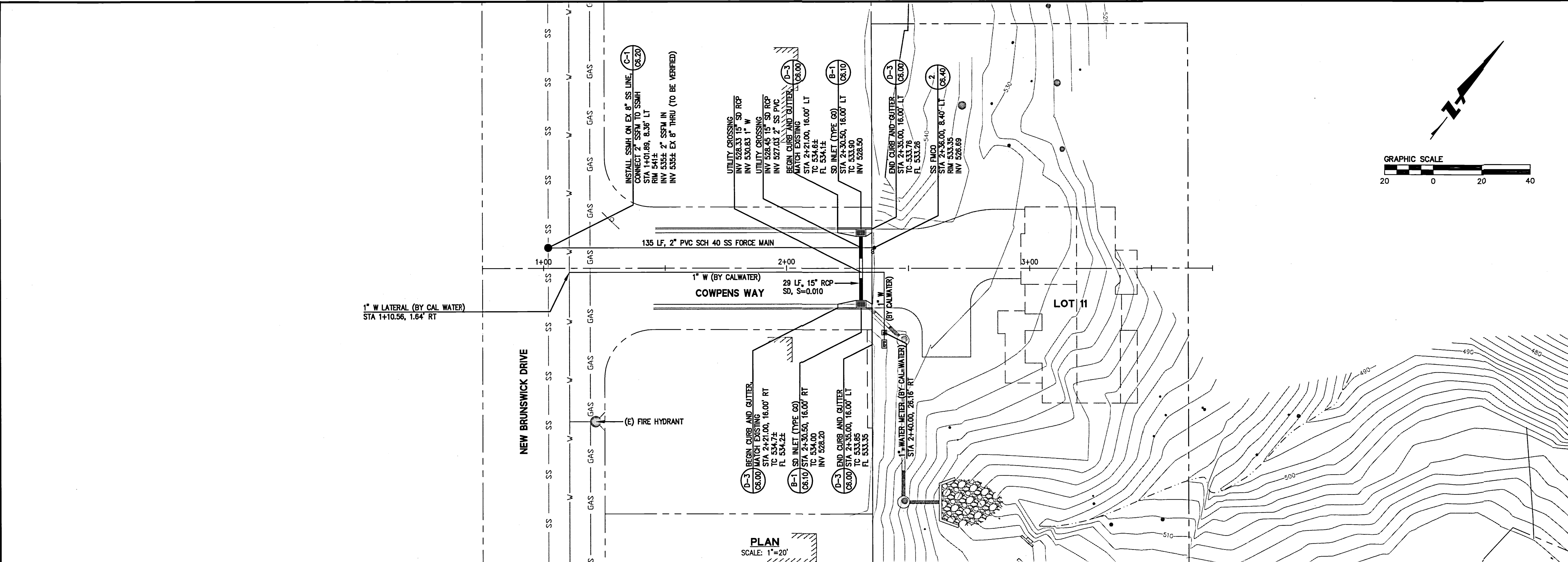
PROFESSIONAL ENGINEER  
 No. 040871  
 CIVIL ENGINEER

Date	By	No.	Revisions
04/27/16	JT		

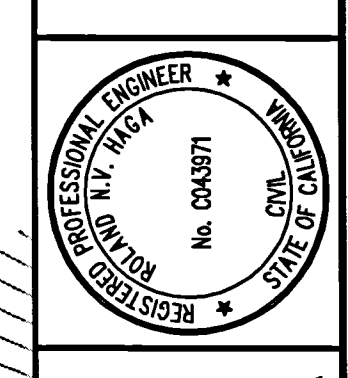
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 Design JT  
 Drawn AG  
 Approved RH  
 Job No. 950168-20

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 OF

DRAWING NAME: J:\Eng95\950168\dwg\CD\01-Site for Lots 5 - 11\C3.20-HECDPP.dwg  
 PLOT DATE: 04-28-16 PLOTTED BY: trat



255 SHORELINE DRIVE, SUITE 200  
 REDWOOD CITY, CA 94065  
 PHONE: (650) 482-6500  
 FAX: (650) 482-6399

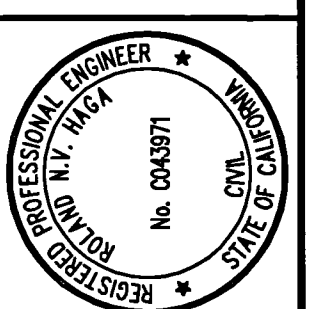
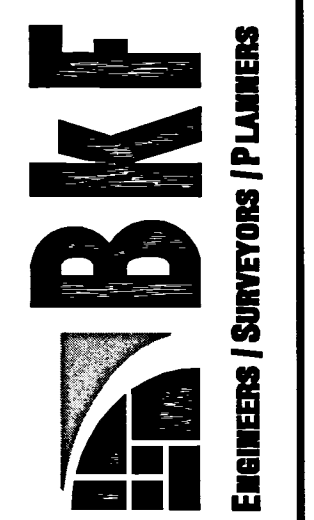


**HIGHLAND ESTATES - STREET IMPROVEMENT PLANS**  
**TICONDEROGA DRIVE, COBBLEHILL PLACE & COWPENS WAY**  
**PLAN & PROFILE - COWPENS WAY**  
 CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

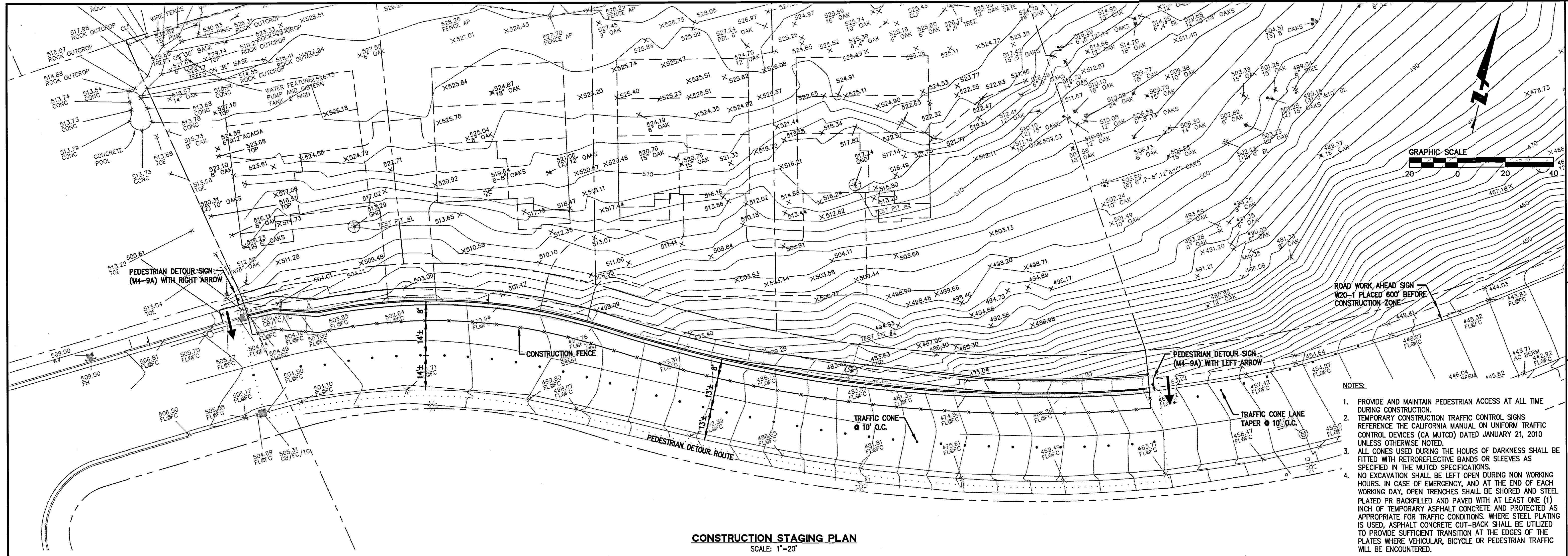
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No.	Date
	04/27/16
	Scale AS SHOWN
	Design JT
	Drawn
	Approved RH
	Job No 950168-20

Sheet Number: **C3.20**  
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255 SHORELINE DRIVE, SUITE 200  
REDWOOD CITY, CA 94063  
PHONE: (650) 482-6300  
FAX: (650) 482-6399

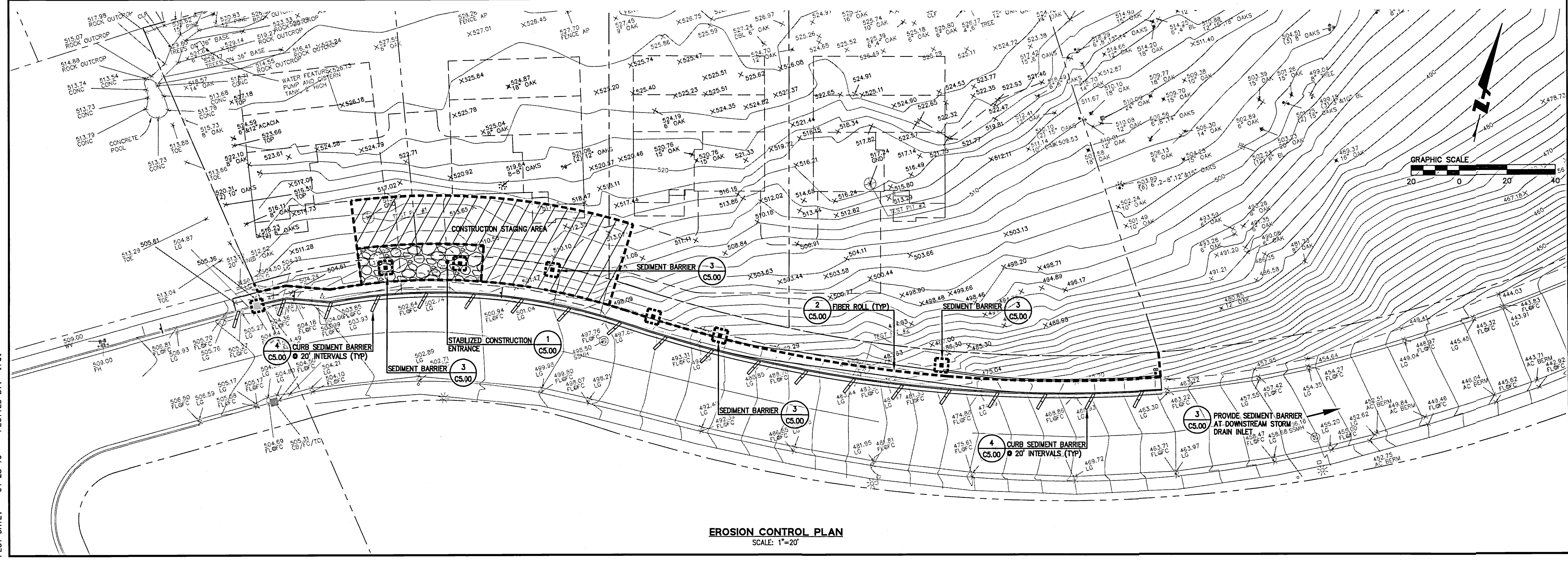


HIGHLAND ESTATES - STREET IMPROVEMENT PLANS  
TICONDEROGA DRIVE, COBBLEHILL PLACE & COMPENS WAY  
CONSTRUCTION STAGING & EROSION CONTROL PLANS  
CITY OF SAN MATEO  
SAN MATEO COUNTY, CALIFORNIA



CONSTRUCTION STAGING PLAN  
SCALE: 1"=20'

- NOTES:
1. PROVIDE AND MAINTAIN PEDESTRIAN ACCESS AT ALL TIME DURING CONSTRUCTION.
  2. TEMPORARY CONSTRUCTION TRAFFIC CONTROL SIGNS REFERENCE THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTOS) DATED JANUARY 21, 2010 UNLESS OTHERWISE NOTED.
  3. ALL CONES USED DURING THE HOURS OF DARKNESS SHALL BE FITTED WITH RETROREFLECTIVE BANDS OR SLEEVES AS SPECIFIED IN THE MUTCD SPECIFICATIONS.
  4. NO EXCAVATION SHALL BE LEFT OPEN DURING NON WORKING HOURS. IN CASE OF EMERGENCY, AND AT THE END OF EACH WORKING DAY, OPEN TRENCHES SHALL BE SHORED AND STEEL PLATED PR BACKFILLED AND PAVED WITH AT LEAST ONE (1) INCH OF TEMPORARY ASPHALT CONCRETE AND PROTECTED AS APPROPRIATE FOR TRAFFIC CONDITIONS. WHERE STEEL PLATING IS USED, ASPHALT CONCRETE OUT-BACK SHALL BE UTILIZED TO PROVIDE SUFFICIENT TRANSITION AT THE EDGES OF THE PLATES WHERE VEHICULAR, BICYCLE OR PEDESTRIAN TRAFFIC WILL BE ENCOUNTERED.



EROSION CONTROL PLAN  
SCALE: 1"=20'

Date	By	Scale	As Shown	Revisions
04/27/16	JT	AS SHOWN	AS SHOWN	
	Design			
	Drawn			
	Approved			
	Job No	95098-20		

Sheet Number: **C4.00**  
OF

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PLOT DATE: 04-28-16 PLOTTED BY: trat

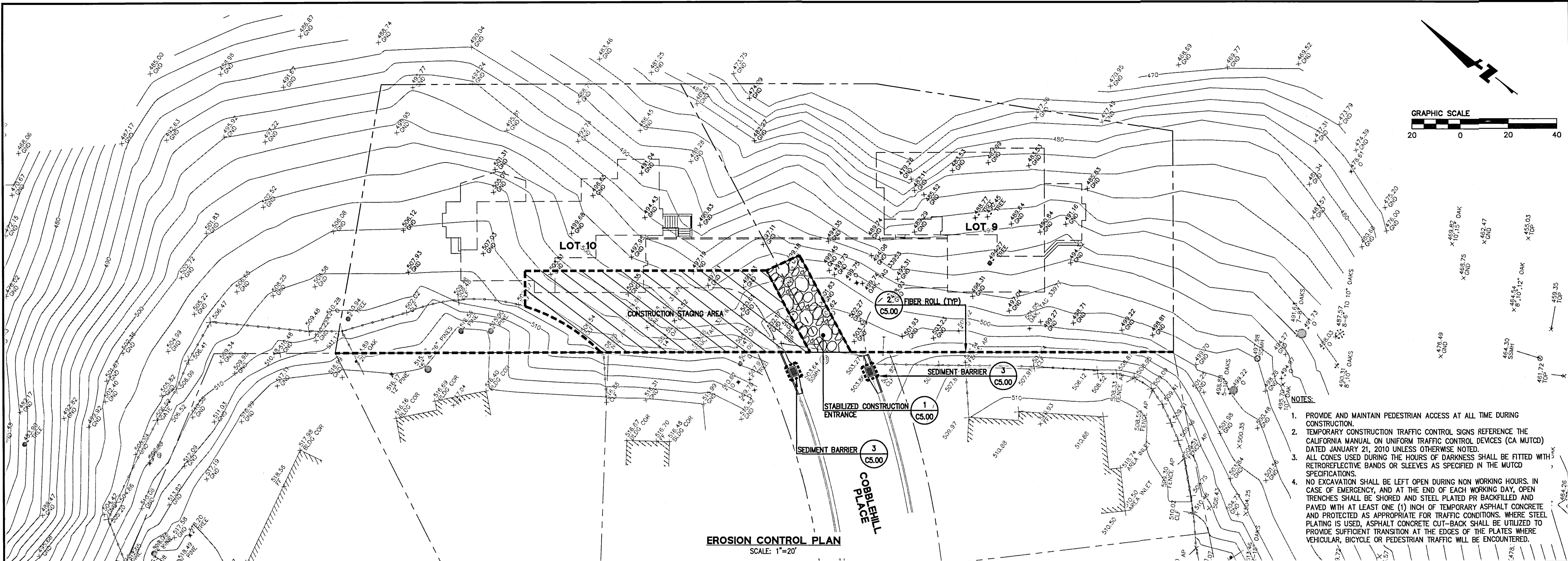
255 SHORELINE DRIVE, SUITE 200  
REDWOOD CITY, CA 94063  
PHONE: (650) 482-6399  
FAX: (650) 482-6399



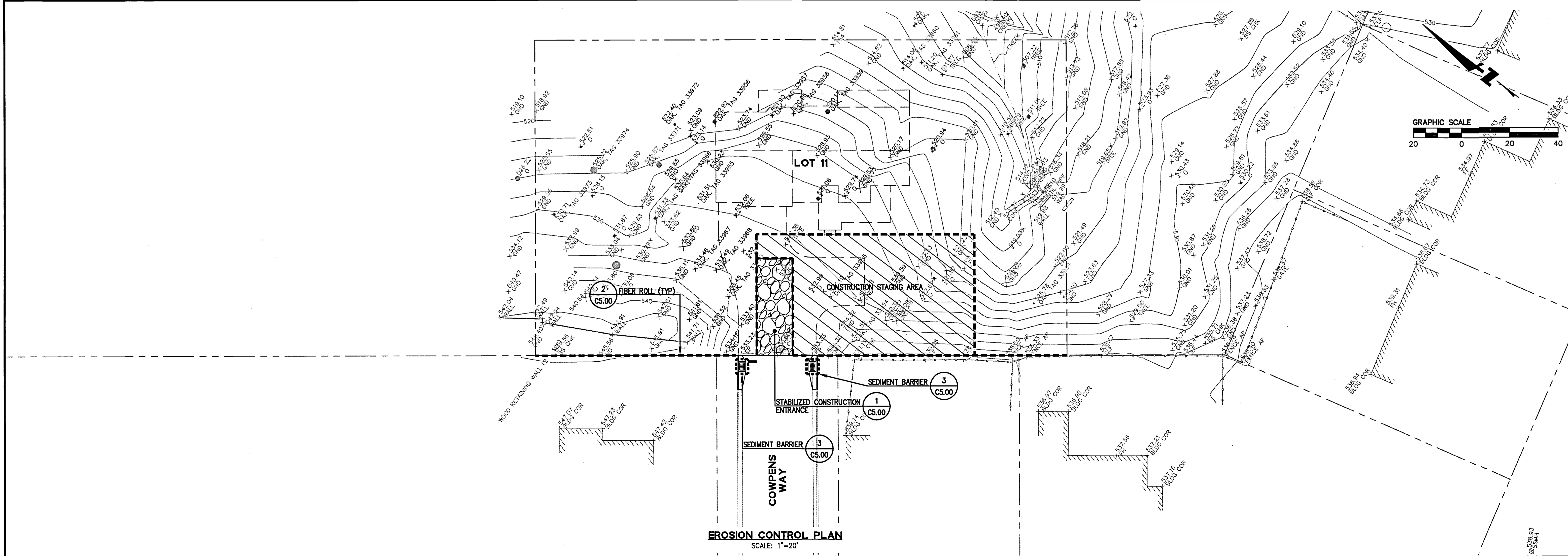
HIGHLAND ESTATES - STREET IMPROVEMENT PLANS  
TICONDEROGA DRIVE, COBBLEHILL PLACE & COMPENS WAY  
EROSION CONTROL PLANS  
SAN MATEO COUNTY  
CITY OF SAN MATEO  
CALIFORNIA

Date	Revisions	No.
04/27/16	AS SHOWN	JT
	Design	AC
	Drawn	AC
	Approved	RH
	Job No	50668-20

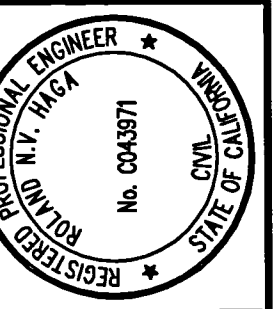
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OF



- NOTES:**
1. PROVIDE AND MAINTAIN PEDESTRIAN ACCESS AT ALL TIME DURING CONSTRUCTION.
  2. TEMPORARY CONSTRUCTION TRAFFIC CONTROL SIGNS REFERENCE THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD) DATED JANUARY 21, 2010 UNLESS OTHERWISE NOTED.
  3. ALL CONES USED DURING THE HOURS OF DARKNESS SHALL BE FITTED WITH RETROREFLECTIVE BANDS OR SLEEVES AS SPECIFIED IN THE MUTCD SPECIFICATIONS.
  4. NO EXCAVATION SHALL BE LEFT OPEN DURING NON WORKING HOURS, IN CASE OF EMERGENCY, AND AT THE END OF EACH WORKING DAY, OPEN TRENCHES SHALL BE SHORED AND STEEL PLATED OR BACKFILLED AND PAVED WITH AT LEAST ONE (1) INCH OF TEMPORARY ASPHALT CONCRETE AND PROTECTED AS APPROPRIATE FOR TRAFFIC CONDITIONS. WHERE STEEL PLATING IS USED, ASPHALT CONCRETE CUT-BACK SHALL BE UTILIZED TO PROVIDE SUFFICIENT TRANSITION AT THE EDGES OF THE PLATES WHERE VEHICULAR, BICYCLE OR PEDESTRIAN TRAFFIC WILL BE ENCOUNTERED.



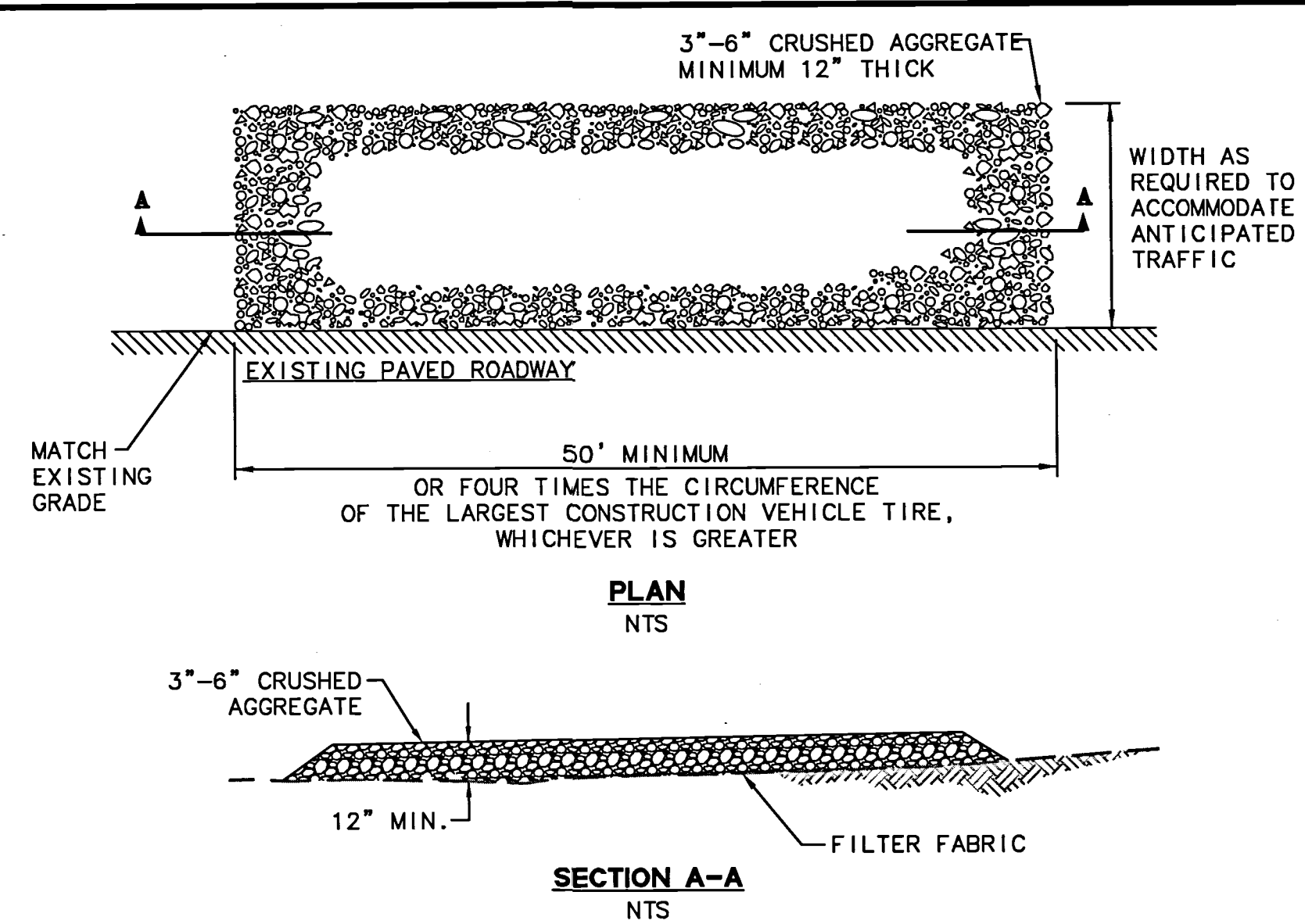
255 SHORELINE DRIVE SUITE 200  
DUBLIN, CA 94568  
PHONE: (650) 482-6300  
FAX: (650) 482-6399



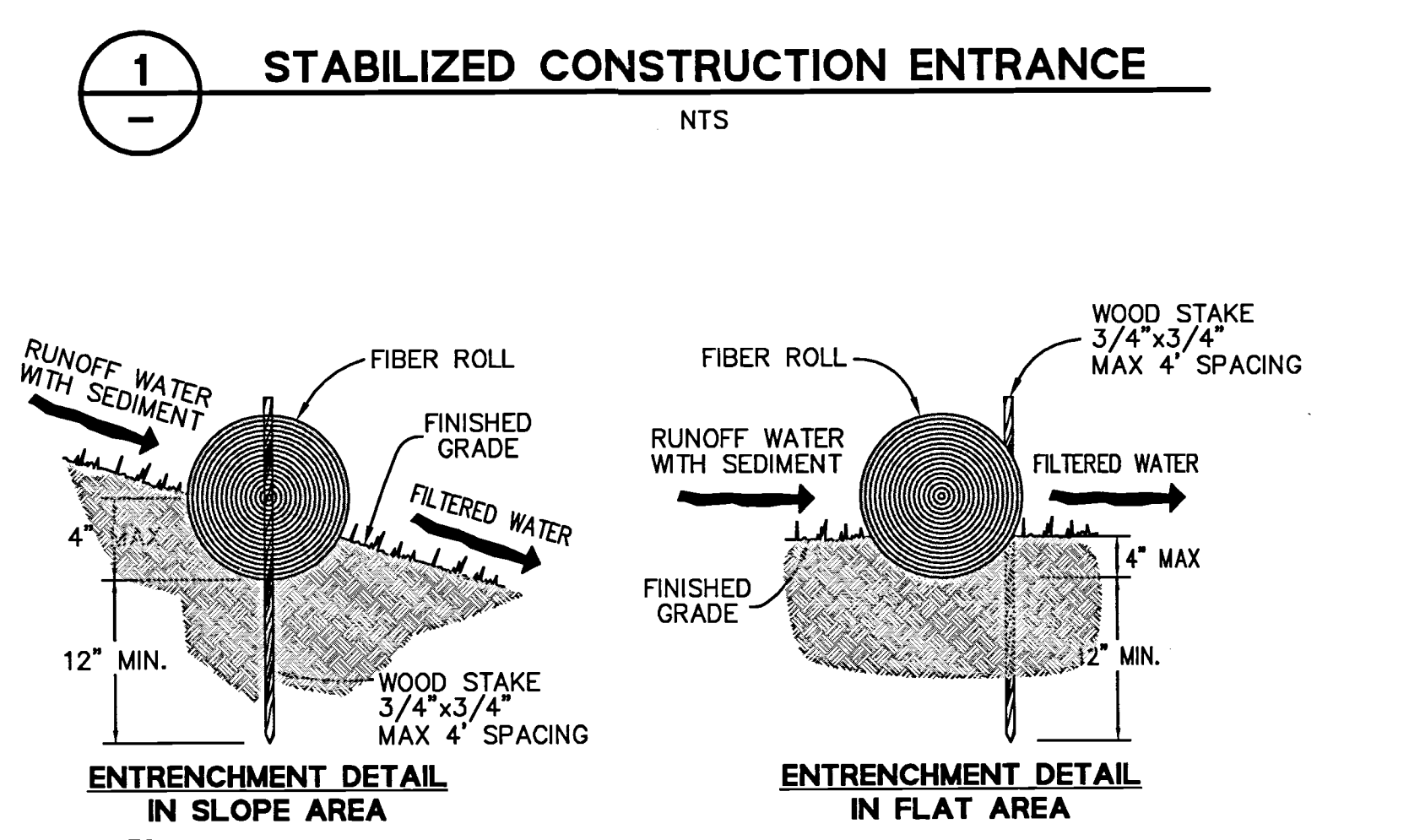
HIGHLAND ESTATES - STREET IMPROVEMENT PLANS  
TICONDEROGA DRIVE, COBBLEHILL PLACE & COMPENS WAY  
EROSION CONTROL DETAILS AND NOTES  
CITY OF SAN MATEO COUNTY  
SAN MATEO COUNTY  
CALIFORNIA

**EROSION CONTROL NOTES**

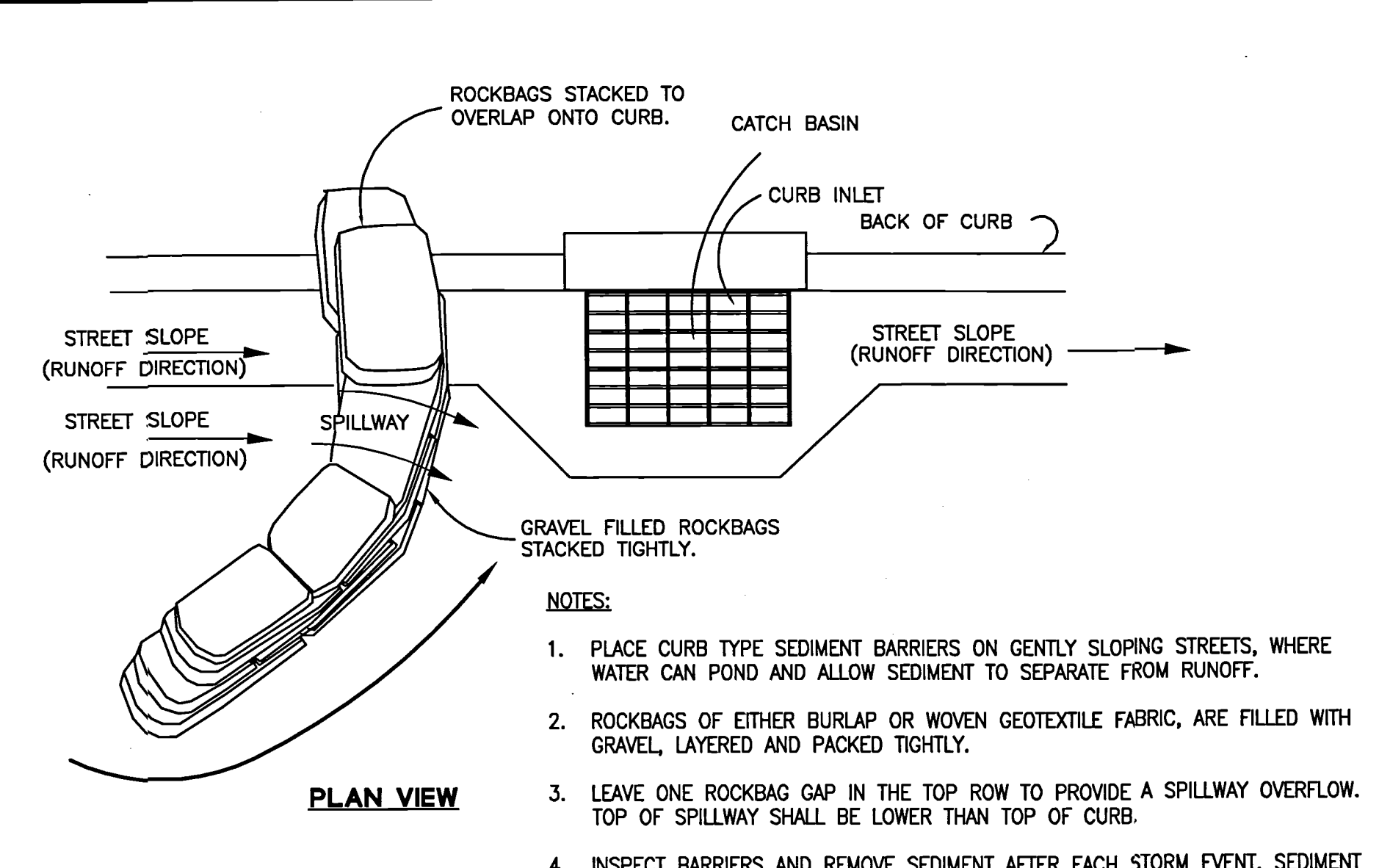
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
- ALTHOUGH SPECIFIC LOCATIONS FOR SEDIMENT CONTROL FACILITIES ARE SHOWN ON THESE PLANS, IT IS INTENDED THIS EROSION CONTROL PLAN BE MODIFIED WHEN NECESSARY TO MEET FIELD CONDITIONS. BASIN AND TRAP SIZES AND ELEVATIONS MAY BE ADJUSTED AS LONG AS THE MINIMUM AREAS AND DEPTHS FOR SEDIMENT SETTLING AND STORAGE ARE NOT REDUCED.
- THE INTENT OF THESE PLANS IS TO PROVIDE THE INITIAL CONCEPT FOR INTERIM EROSION CONTROL. THE CONTRACTOR SHALL UPDATE THE PLANS TO REFLECT CHANGING SITE CONDITIONS. PLAN UPDATES SHALL BE BASED UPON GENERAL SURVEY DATA. EROSION CONTROL EFFECTIVENESS SHALL ALSO BE MONITORED AND THE PLANS UPGRADED AS REQUIRED TO PREVENT SIGNIFICANT QUANTITIES OF SEDIMENT FROM ENTERING THE DOWNSTREAM DRAINAGE SYSTEM.
- THIS PLAN MAY NOT COVER ALL THE SITUATIONS THAT ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. IN GENERAL, THE CONTRACTOR IS RESPONSIBLE FOR KEEPING THE STORM RUN OFF FROM LEAVING THE SITE. FIBER ROLLS, SAND BAGS, AND SILT FENCES SHALL BE USED BY THE CONTRACTOR ON AN AS NEEDED BASIS TO INHIBIT SILT FROM LEAVING THE SITE AND ENTERING THE STORM DRAIN SYSTEM. ALL EXISTING, TEMPORARY, OR PERMANENT CATCH BASINS SHALL USE ONE OF THE SEDIMENT BARRIERS SHOWN.
- THE CONTRACTOR WILL BE LIABLE FOR ANY AND ALL DAMAGES TO PUBLIC AND/OR PRIVATE OWNED AND MAINTAINED ROAD CAUSED BY THE CONTRACTOR'S GRADING ACTIVITIES, AND WILL BE RESPONSIBLE FOR THE CLEANUP OF ANY MATERIAL SPILLED ON ANY PUBLIC ROAD ON THE HAUL ROUTE. ADJACENT PUBLIC ROADS SHALL BE CLEANED AT THE END OF EACH WORKING DAY.
- BEST MANAGEMENT PRACTICES SHALL BE OPERABLE YEAR AROUND.
- DURING THE RAINY SEASON, ALL PAVED AREAS ARE TO BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE IS TO BE MAINTAINED SO AS TO MINIMIZE SEDIMENT-LADEN RUNOFF TO ANY STORM DRAIN SYSTEM.
- ALL EROSION CONTROL FACILITIES MUST BE INSPECTED AND REPAIRED DAILY DURING THE RAINY SEASON. ALL SLOPES SHALL BE REPAIRED AS SOON AS POSSIBLE WHEN DAMAGED.
- THE FIRST PHASE OF CONSTRUCTION SHALL REQUIRE 30 PERCENT OF CONSTRUCTION EQUIPMENT TO MEET TIER 1 EPA CERTIFICATION STANDARDS FOR CLEAN TECHNOLOGY. THE REMAINDER OF CONSTRUCTION EQUIPMENT (70 PERCENT), WHICH WOULD CONSIST OF OLDER TECHNOLOGIES, SHALL BE REQUIRED TO USE EMULSIFIED FUELS.
- THE SECOND PHASE OF CONSTRUCTION SHALL REQUIRE 30 PERCENT OF CONSTRUCTION EQUIPMENT TO MEET TIER 2 EPA CERTIFICATION STANDARDS FOR CLEAN TECHNOLOGY AND 50 PERCENT TO MEET TIER 1 EPA CERTIFICATION STANDARDS. THE REMAINING 20 PERCENT OF CONSTRUCTION EQUIPMENT, WHICH WOULD CONSIST OF OLDER TECHNOLOGIES, SHALL USE EMULSIFIED FUELS.
- FOR ALL LARGER VEHICLES, INCLUDING CEMENT MIXERS OR OTHER DEVICES THAT MUST BE DELIVERED BY LARGE TRUCKS, VEHICLES SHALL BE EQUIPPED WITH CURB LEVEL THREE VERIFIED CONTROL DEVICES.
- WATER ALL ACTIVE CONSTRUCTION AREAS AT LEAST TWICE DAILY.
- COVER ALL TRUCKS HAULING SOIL, SAND, AND OTHER LOOSE MATERIALS OR REQUIRE ALL TRUCKS TO MAINTAIN AT LEAST TWO FEET OF FREEBOARD.
- PAVE, APPLY WATER THREE TIMES DAILY, OR APPLY NON-TOXIC SOIL STABILIZERS ON ALL UNPAVED ACCESS ROADS, PARKING AREAS, AND STAGING AREAS AT THE CONSTRUCTION SITES.
- SWEEP DAILY (WITH WATER SWEEPERS) ALL PAVED ACCESS ROADS, PARKING AREAS, AND STAGING AREAS AT THE CONSTRUCTION SITES.
- SWEEP PUBLIC STREETS ADJACENT TO CONSTRUCTION SITES DAILY (WITH WATER SWEEPERS) IF VISIBLE SOIL MATERIAL IS CARRIED ONTO THE STREETS.
- HYDROSEED OR APPLY NON-TOXIC SOIL STABILIZERS TO INACTIVE CONSTRUCTION AREAS (PREVIOUSLY GRADED AREAS INACTIVE FOR TEN DAYS OR MORE).
- TEMPORARY AND PERMANENT SLOPES GREATER THAN 3 FEET SHALL BE SEEDED UNLESS ALTERNATIVE MEASURES ARE USED.
- SEED MIX FOR REVEGETATION AND HYDROSEEDING:  
NORTHERN CALIFORNIA COVER MIX BY ACBRIGHT OR EQUAL  
30% BLUE WILDRIE  
30% MEADOW BARLEY  
20% ZORRO FESCUE  
10% PURPLE NEEDLE GRASS  
10% CALIFORNIA NATIVE WILDFLOWERS  
APPLY AT 40 POUNDS PER ACRE MINIMUM
- ENCLOSE, COVER, WATER TWICE DAILY, OR APPLY NON-TOXIC SOIL BINDERS TO EXPOSED STOCKPILES (DIRT, SAND, ETC.). LIMIT TRAFFIC SPEEDS ON UNPAVED ROADS TO 15 MILES PER HOUR.
- LIMIT TRAFFIC SPEEDS ON UNPAVED ROADS TO 15 MILES PER HOUR.
- INSTALL SANDBAGS OR OTHER EROSION CONTROL MEASURES TO PREVENT SILT RUNOFF TO PUBLIC ROADWAYS.
- REPLANT VEGETATION IN DISTURBED AREAS AS SOON AS POSSIBLE.
- INSTALL WHEEL WASHERS FOR ALL EXITING TRUCKS OR WASH OFF THE TIRES OR TRACKS OF ALL TRUCKS AND EQUIPMENT LEAVING THE CONSTRUCTION SITE.
- INSTALL WIND BREAKS AT THE WINDWARD SIDES OF THE CONSTRUCTION AREAS.
- SUSPEND EXCAVATION AND GRADING ACTIVITIES WHEN WIND (AS INSTANTANEOUS GUSTS) EXCEEDS 25 MILES PER HOUR.
- NO GRADING SHALL BE ALLOWED DURING THE WINTER SEASON (OCTOBER 15 TO APRIL 15) TO AVOID POTENTIAL SOIL EROSION UNLESS APPROVED, IN WRITING, BY THE COMMUNITY DEVELOPMENT DIRECTOR. THE PROPERTY OWNERS SHALL SUBMIT A LETTER TO THE CURRENT PLANNING SECTION, AT LEAST TWO WEEKS PRIOR TO COMMENCEMENT OF GRADING, STATING THE DATE WHEN GRADING WILL BEGIN.
- STABILIZE ALL DENUDED AREAS AND MAINTAIN EROSION CONTROL MEASURES CONTINUOUSLY BETWEEN OCTOBER 15 AND APRIL 15. STABILIZING SHALL INCLUDE BOTH PROACTIVE MEASURES, SUCH AS THE PLACEMENT OF STRAW BALES OR COIR NETTING, AND PASSIVE MEASURES, SUCH AS MINIMIZING VEGETATION REMOVAL AND REVEGETATING DISTURBED AREAS WITH VEGETATION THAT IS COMPATIBLE WITH THE SURROUNDING ENVIRONMENT.
- STORE, HANDLE, AND DISPOSE OF CONSTRUCTION MATERIALS AND WASTES PROPERLY, SO AS TO PREVENT THEIR CONTACT WITH STORMWATER.
- CONTROL AND PREVENT THE DISCHARGE OF ALL POTENTIAL POLLUTANTS, INCLUDING PAVEMENT CUTTING WASTES, PAINTS, CONCRETE, PETROLEUM PRODUCTS, CHEMICALS, WASH WATER OR SEDIMENTS, AND NON-STORMWATER DISCHARGES TO STORM DRAINS AND WATERCOURSES.
- USE SEDIMENT CONTROLS OR FILTRATION TO REMOVE SEDIMENT WHEN DEWATERING SITE AND OBTAINING ALL NECESSARY PERMITS.
- AVOID CLEANING, FUELING, OR MAINTAINING VEHICLES ON-SITE, EXCEPT IN A DESIGNATED AREA WHERE WASH WATER IS CONTAINED AND TREATED.
- DELINEATE WITH FIELD MARKERS CLEARING LIMITS, SETBACKS, AND DRAINAGE COURSES.
- PROTECT ADJACENT PROPERTIES AND UNDISTURBED AREAS FROM CONSTRUCTION IMPACTS USING VEGETATIVE BUFFER STRIPS, SEDIMENT BARRIERS OR FILTERS, DIKES, MULCHING, OR OTHER MEASURES AS APPROPRIATE.
- PERFORM CLEARING AND EARTH-MOVING ACTIVITIES ONLY DURING DRY WEATHER.
- LIMIT AND TIME APPLICATIONS OF PESTICIDES AND FERTILIZERS TO PREVENT POLLUTED RUNOFF.
- LIMIT CONSTRUCTION ACCESS ROUTES AND STABILIZE DESIGNATED ACCESS POINTS.
- ALL GRADED SURFACES AND MATERIALS, WHETHER FILLED, EXCAVATED, TRANSPORTED OR STOCKPILED, SHALL BE WETTED, PROTECTED OR CONTAINED IN SUCH A MANNER AS TO PREVENT ANY SIGNIFICANT NUISANCE FROM DUST, OR SPILLAGE UPON ADJOINING WATER BODY, PROPERTY, OR STREETS. EQUIPMENT AND MATERIALS ON THE SITE SHALL BE USED IN SUCH A MANNER AS TO AVOID EXCESSIVE DUST. A DUST CONTROL PLAN MAY BE REQUIRED AT ANYTIME DURING THE COURSE OF THE PROJECT.
- A DUST PALLIATIVE SHALL BE APPLIED TO THE SITE WHEN REQUIRED BY THE COUNTY. THE TYPE AND RATE OF APPLICATION SHALL BE RECOMMENDED BY THE SOILS ENGINEER AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS, THE PLANNING AND BUILDING DEPARTMENTS' GEOTECHNICAL SECTION, AND THE REGIONAL WATER QUALITY CONTROL BOARD.
- IF NO WORK HAS PROGRESSED FOR A PERIOD OF 6-WEEKS, FINAL DRAINAGE AND EROSION CONTROL IMPROVEMENTS SHALL BE INSTALLED IN ACCORDANCE WITH AN APPROVED WINTERIZATION PLAN.
- PADS SHALL BE GRADED TO MINIMIZE STANDING WATER. SPECIFIC LOCATIONS REQUIRING SUPPLEMENTAL GRADING TO ACHIEVE ACCEPTABLE DRAINAGE SHALL BE DETERMINED BY THE CONSTRUCTION MANAGER. ALL SPILLS AND SOIL STOCKPILES REMAINING ON SITE SHALL BE ENCLOSED BY SILT FENCES/FIBER ROLLS.
- STUBBED OUT ENDS OF PARTIALLY COMPLETED SUBDRAINS SHALL BE WRAPPED WITH AN APPROVED FABRIC TO PREVENT SOIL AND DEBRIS FROM ENTERING THE PIPE.
- HAUL ROADS ARE CURRENTLY NOT SHOWN ON THE PLANS. EROSION CONTROL MEASURES SHALL BE TAKEN TO MINIMIZE EROSION RELATED TO HAUL ROADS.
- GRADING SCHEDULE SHALL BE SUBMITTED FOR APPROVAL TO SAN MATEO COUNTY PUBLIC WORKS BY AUGUST 15.
- THE NAME, ADDRESS, AND 24 HOUR TELEPHONE NUMBER OF THE PERSON RESPONSIBLE FOR IMPLEMENTATION OF EROSION AND SEDIMENTATION CONTROL PLAN SHALL BE PROVIDED TO THE CITY.
- SHOULD IT APPEAR THAT THE EROSION CONTROL PLAN, OR ANY OTHER MATTER THERETO, IS NOT SUFFICIENTLY DETAILED OR EXPLAINED ON THESE PLANS, THE CONTRACTOR SHALL CONTACT THE BKF PROJECT ENGINEER AT (650) 482-6300 FOR SUCH FURTHER EXPLANATIONS AS MAY BE NECESSARY.



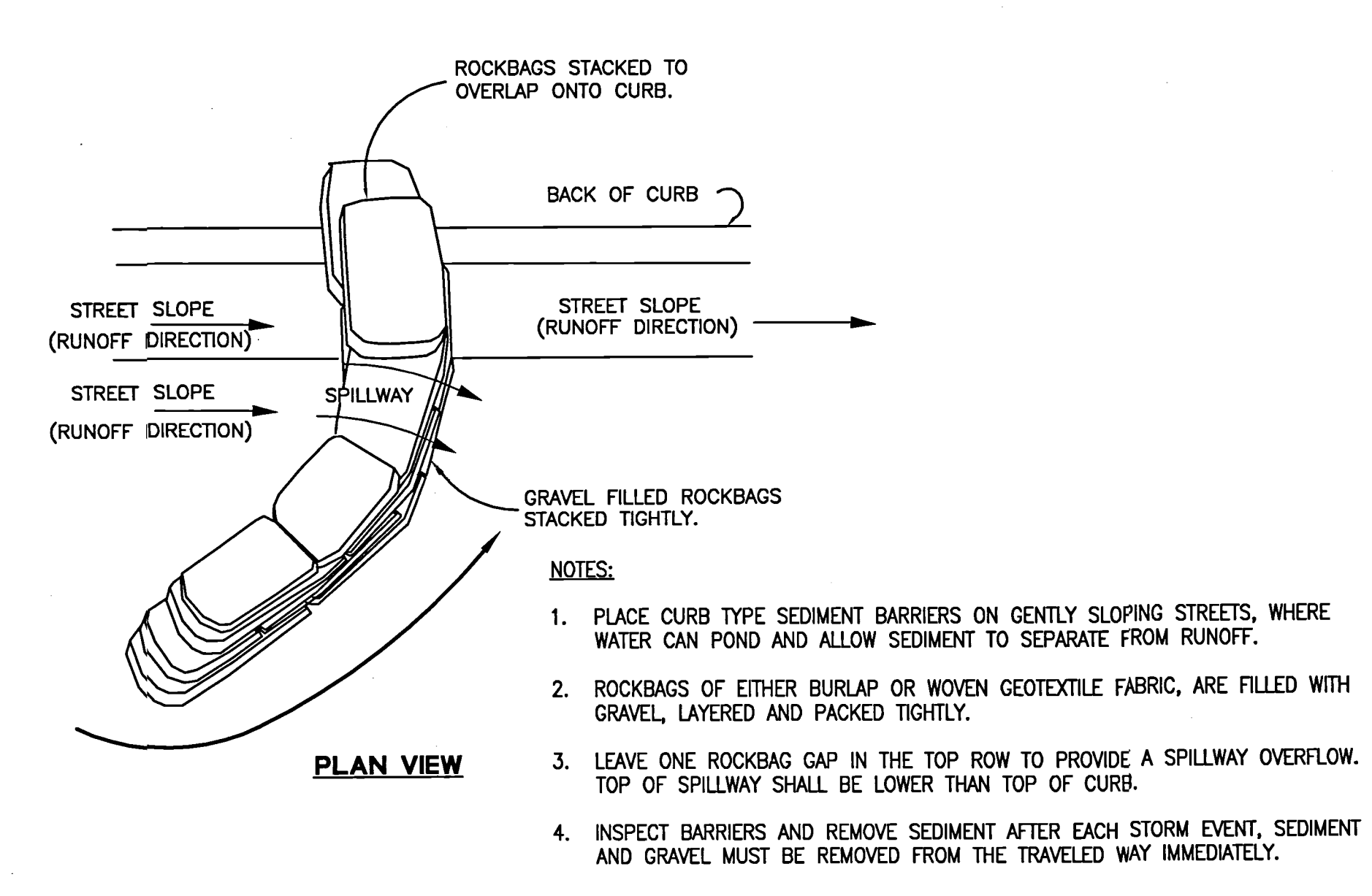
- NOTES:**
- ALL CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USE TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAYS SHALL BE REMOVED IMMEDIATELY.
  - WHEELS SHALL BE CLEAN PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAYS. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CONSTRUCTION STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE THROUGH USE OF SILT PROTECTION (E.G. SAND BAGS OR OTHER APPROVED METHODS).
  - THE MATERIAL FOR CONSTRUCTION OF THE PAD SHALL BE 3" TO 6" STONE.
  - THE THICKNESS OF THE PAD SHALL NOT BE LESS THAN 12".
  - THE WIDTH OF THE PAD SHALL NOT BE LESS THAN THE FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
  - THE LENGTH OF THE PAD SHALL NOT BE LESS THAN 50'.



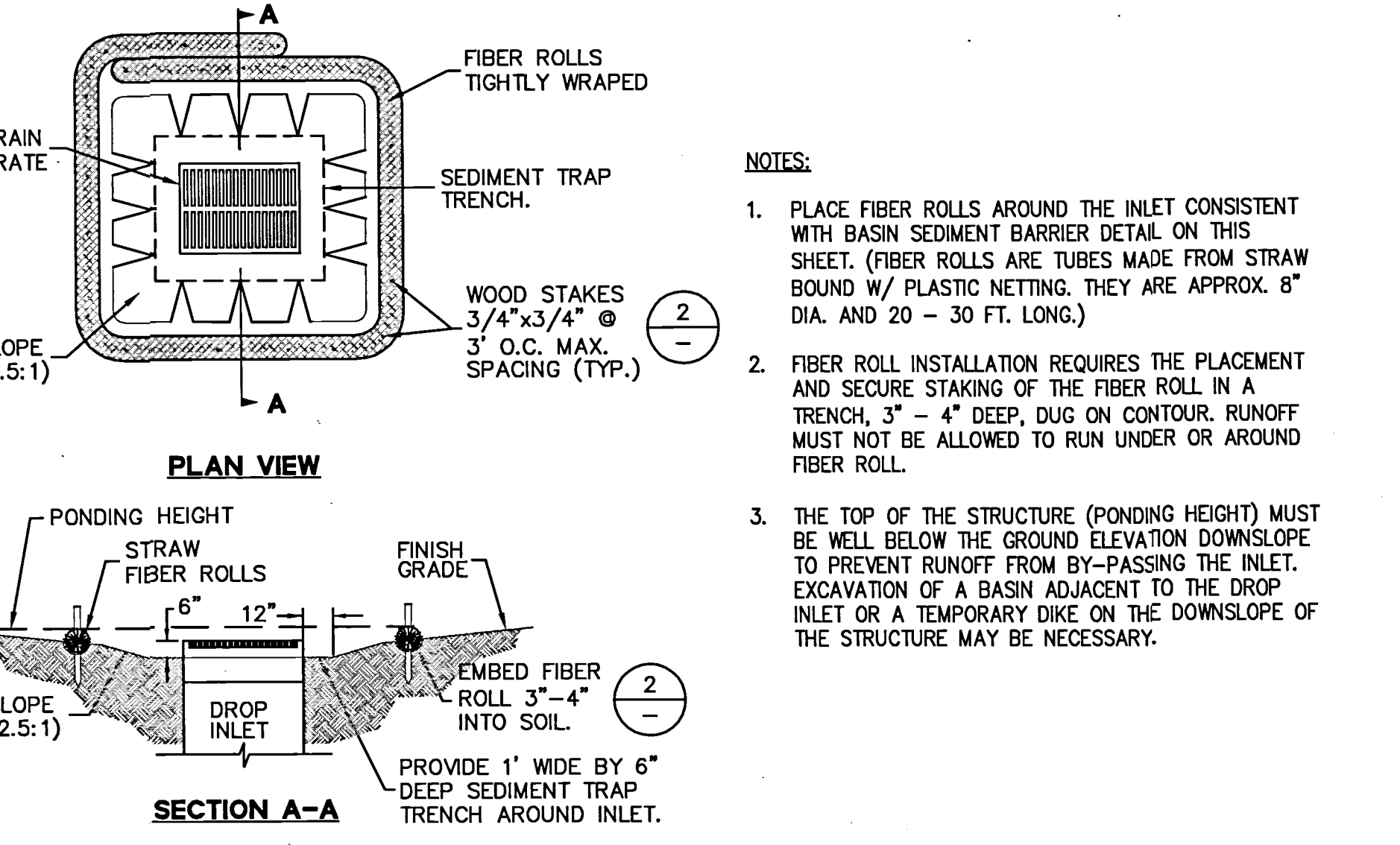
- NOTES:**
- FIBER ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3" TO 4" DEEP, DUG ON CONTOUR.
  - ADJACENT ROLLS SHALL TIGHTLY ABUT.
  - RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND FIBER ROLL.



- NOTES:**
- PLACE CURB TYPE SEDIMENT BARRIERS ON GENTLY SLOPING STREETS, WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
  - ROCKBAGS OF EITHER BURLAP OR WOVEN GEOTEXTILE FABRIC, ARE FILLED WITH GRAVEL, LAYERED AND PACKED TIGHTLY.
  - LEAVE ONE ROCKBAG GAP IN THE TOP ROW TO PROVIDE A SPILLWAY OVERFLOW. TOP OF SPILLWAY SHALL BE LOWER THAN TOP OF CURB.
  - INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT, SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.



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- PLACE CURB TYPE SEDIMENT BARRIERS ON GENTLY SLOPING STREETS, WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
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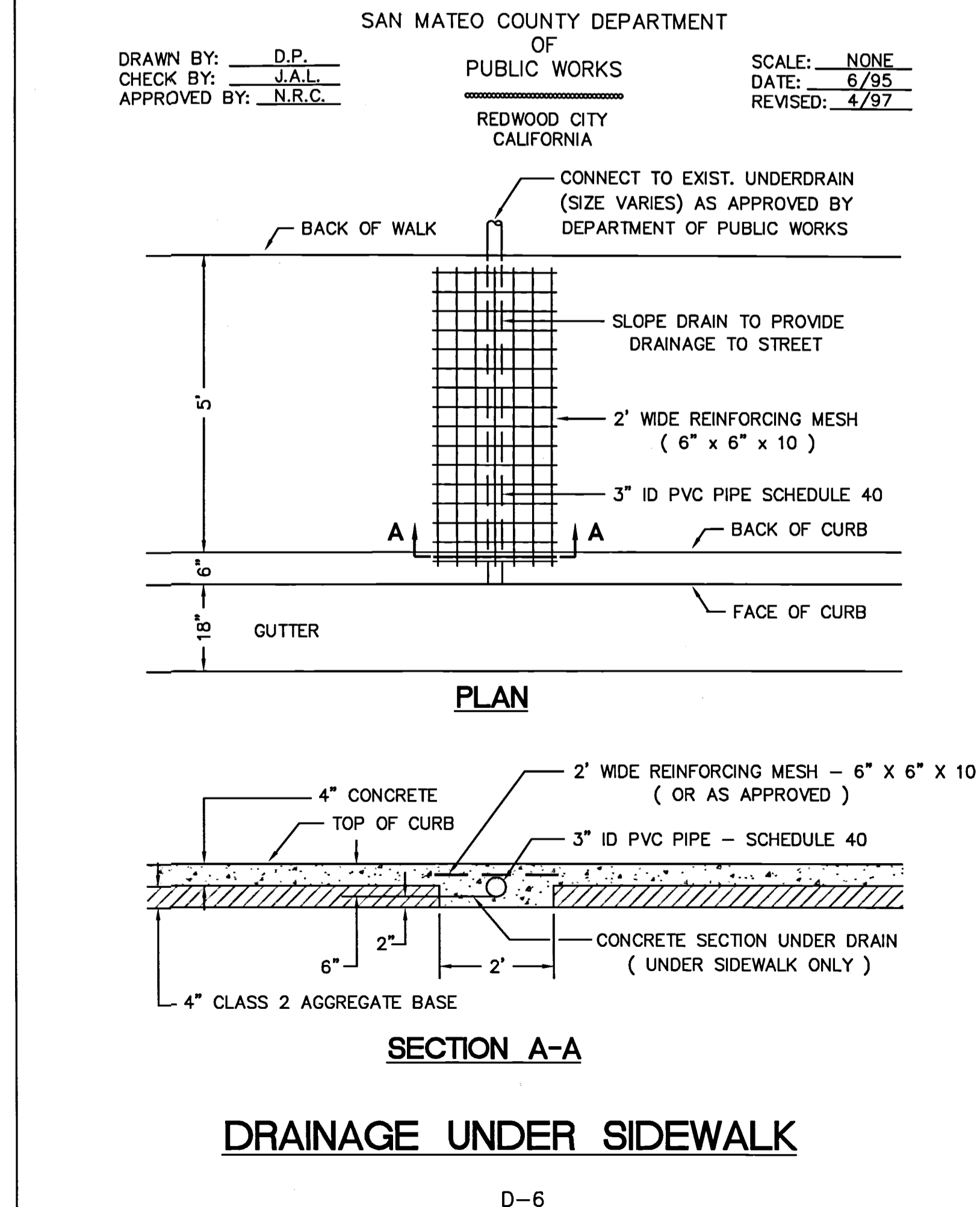
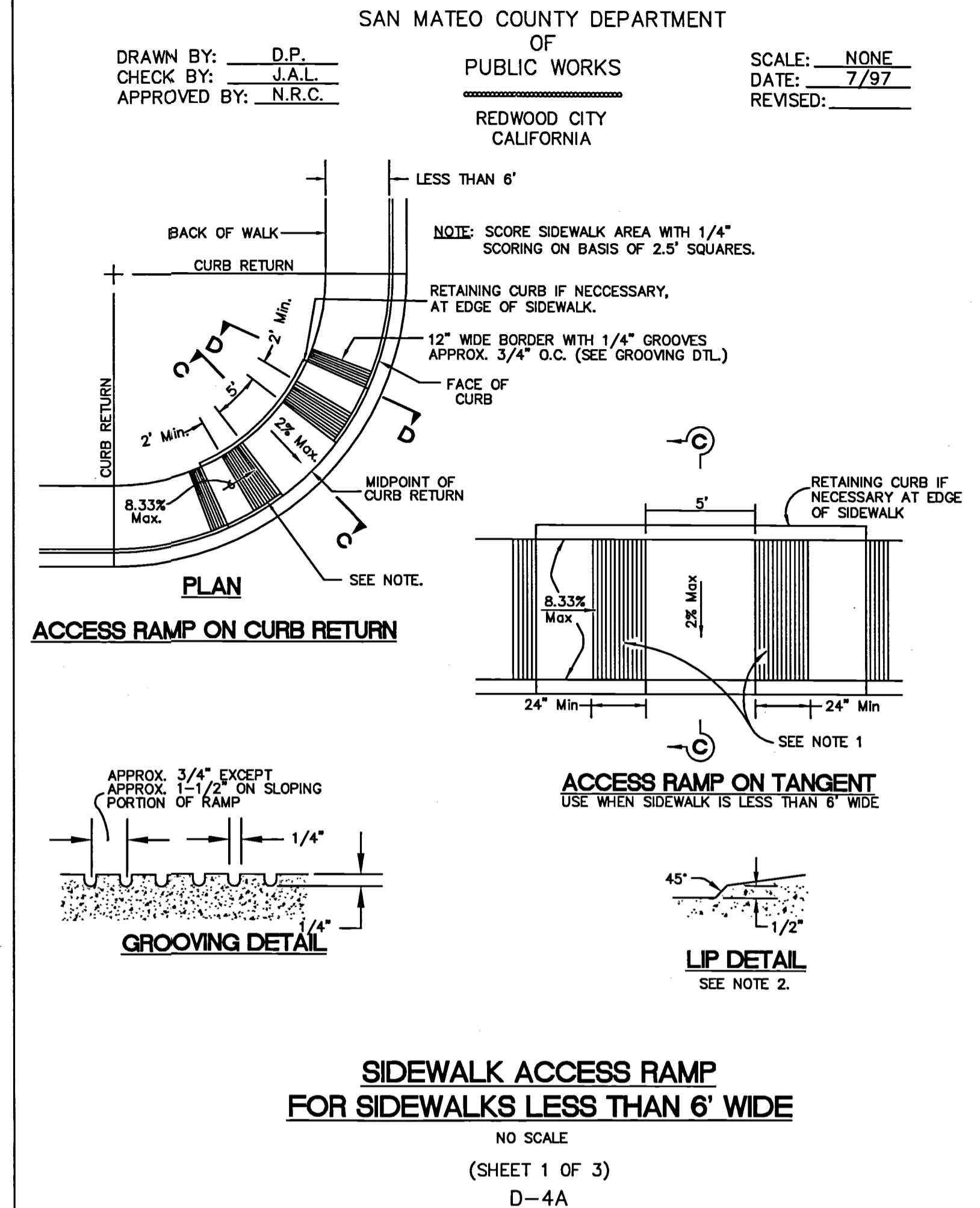
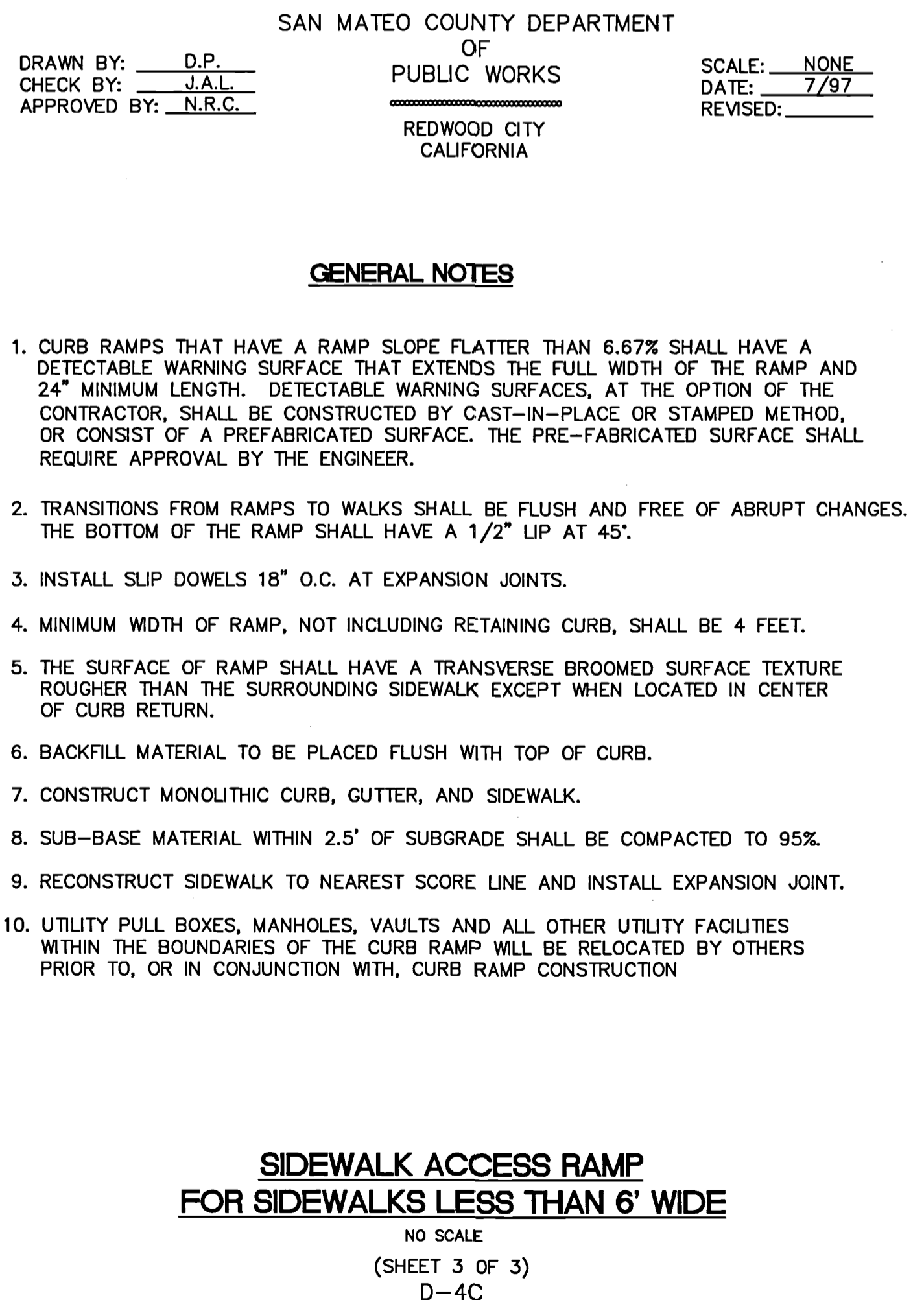
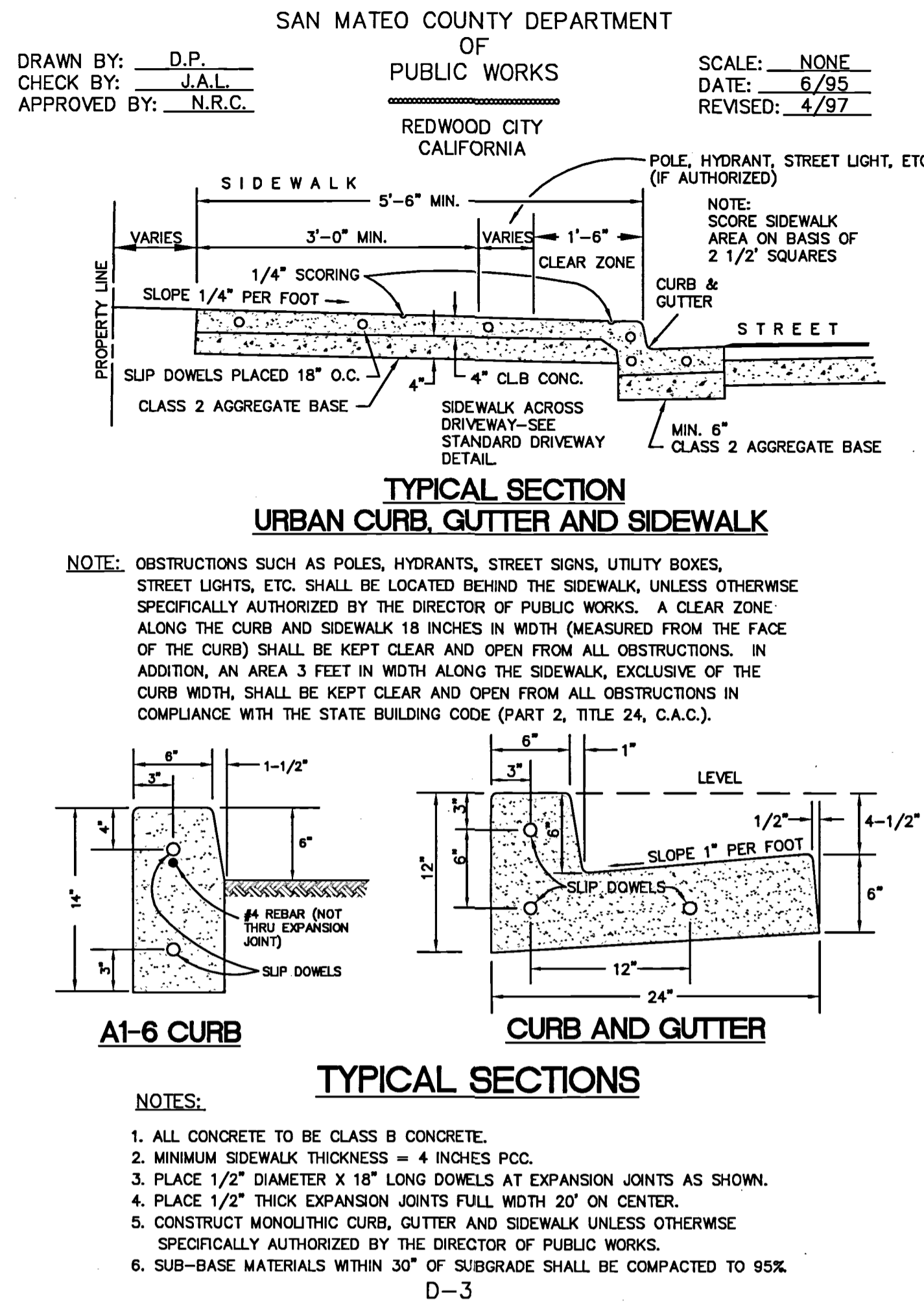
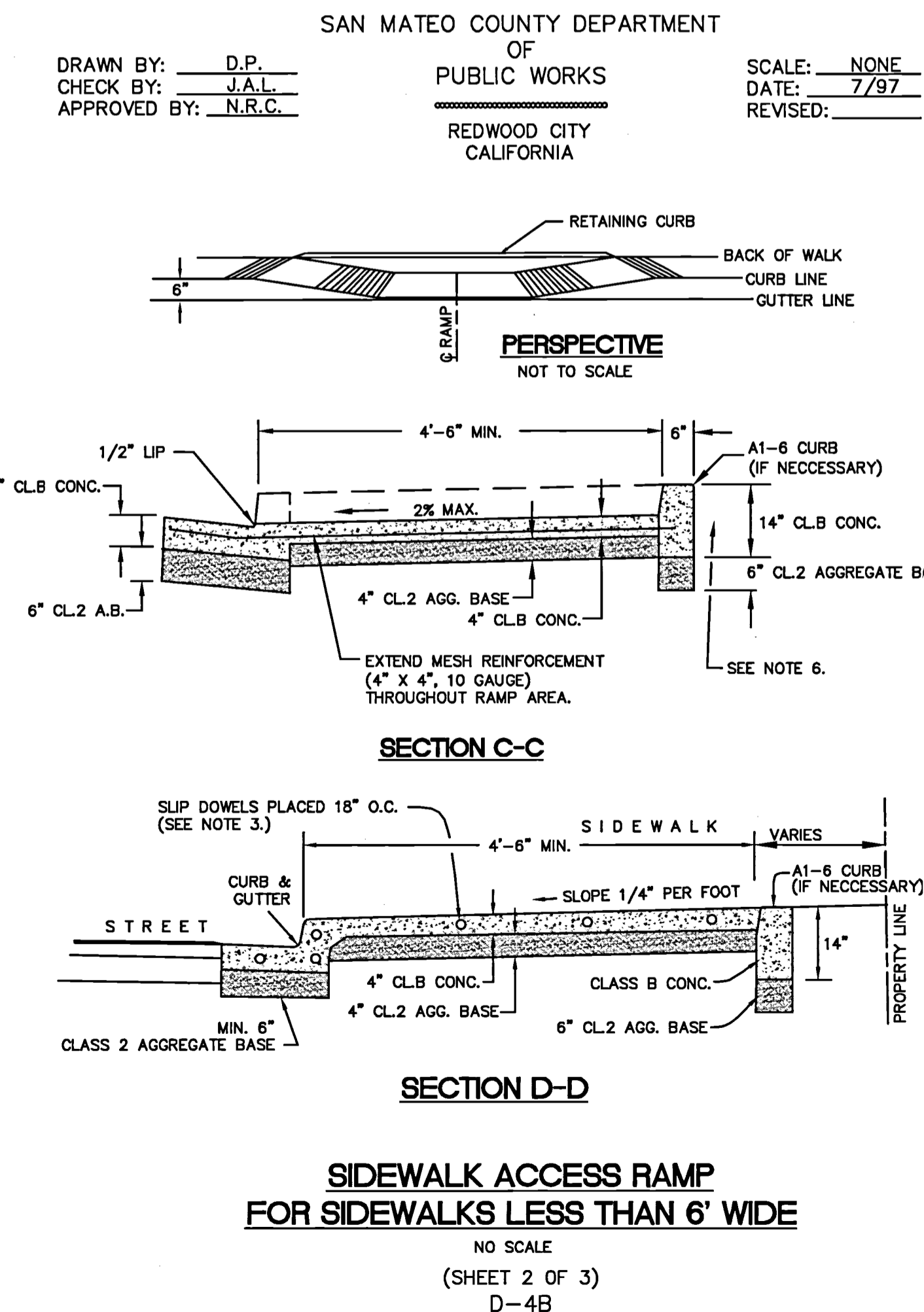
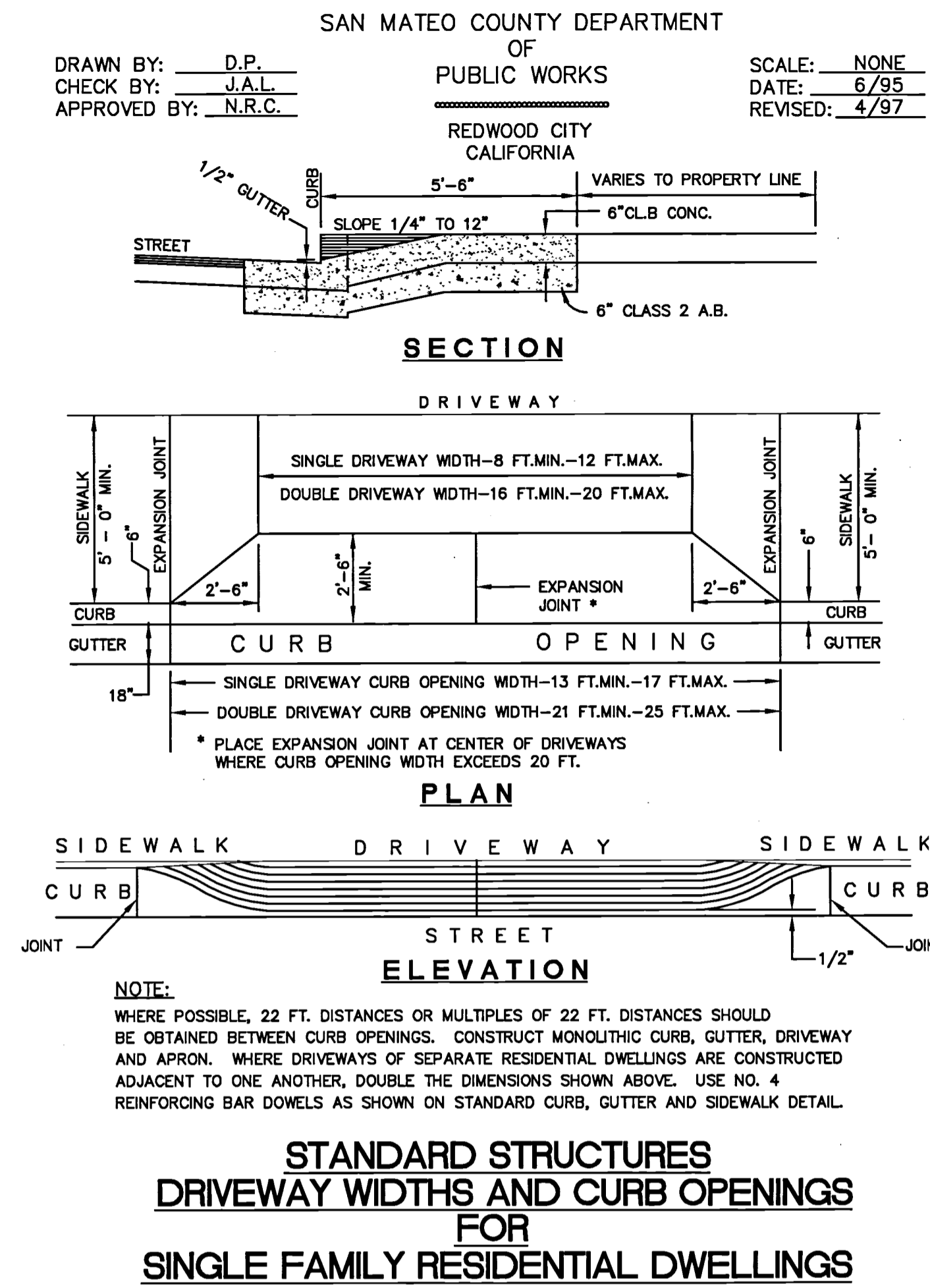
- NOTES:**
- PLACE FIBER ROLLS AROUND THE INLET CONSISTENT WITH BASIN SEDIMENT BARRIER DETAIL ON THIS SHEET. (FIBER ROLLS ARE TUBES MADE FROM STRAW BOUND W/ PLASTIC NETTING. THEY ARE APPROX. 8" DIA. AND 20 - 30 FT. LONG.)
  - FIBER ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE FIBER ROLL IN A TRENCH, 3" - 4" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND FIBER ROLL.
  - THE TOP OF THE STRUCTURE (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BY-PASSING THE INLET. EXCAVATION OF A BASIN ADJACENT TO THE DROP INLET OR A TEMPORARY DIKE ON THE DOWNSLOPE OF THE STRUCTURE MAY BE NECESSARY.

ALL EROSION CONTROL MEASURES SHALL BE IN PLACE BY OCTOBER 15 AND MAINTAINED DURING ALL PHASES OF CONSTRUCTION.

DRAWING NAME: J:\Eng95\950168.dwg CD:\Off-Site for Lots 5 - 11\C5.00-HEDEC.dwg  
PLOT DATE: 04-28-16  
PLOT BY: trat

Revisions	No.	Date	Scale	Design	Drawn	Approved	Job No.
	AS SHOWN	04/27/16		JT	AG	RH	950168-20

Sheet Number: **C5.00**  
OF



DRAWING NAME: J:\Eng95\950168\dwg\CD\Off-Site for Lots 5 - 11\06.00-HECDDT.dwg  
PLOT DATE: 04-28-16 PLOTTED BY: trat

255 SHORELINE DRIVE, SUITE 200  
 REDWOOD CITY, CA 94061  
 PHONE: (650) 482-6300  
 FAX: (650) 482-6399

**BKF**  
 ENGINEERS / SURVEYORS / PLANNERS

REGISTERED PROFESSIONAL ENGINEER  
 STATE OF CALIFORNIA  
 No. 008971

**HIGHLAND ESTATES - STREET IMPROVEMENT PLANS**  
**TICONDEROGA DRIVE, COBBLEHILL PLACE & COMPENS WAY**  
**CONSTRUCTION DETAILS**

CITY OF SAN MATEO  
 SAN MATEO COUNTY  
 CALIFORNIA

No.	Date	Revisions
	04/27/16	
	AS SHOWN	
	Design	
	Drawn	
	Approved	
	Job No.	950168-20

Sheet Number: **C6.00**



SAN MATEO COUNTY DEPARTMENT  
OF  
PUBLIC WORKS  
REDWOOD CITY  
CALIFORNIA

SCALE: NONE  
DATE: 6/95  
REVISED: 4/97

DRAWN BY: A.G.M.  
CHECK BY: R.L.F.  
APPROVED BY: N.R.C.

Curb Type	Normal Curb Height	Curb Batter	b
A1-6	6"	1 1/2"	12 1/2"
A1-8	8"	2"	12
B	6"	4"	10
Dike	6"	3"	

**SECTION G-G**                      **INLET TYPE GO**                      **PLAN**

	H=3'-0" TO 8'-0" (T=6")		H=8'-1" TO 20'-0" (T=8")	
	'H=3'-0"	ADDITIONAL P.C.C. PER FT. (C.Y.)	H=8'-1"	ADDITIONAL P.C.C. PER FT. (C.Y.)
GO	1.24	0.245	3.39	0.346

TABLE BASED ON 8" FLOOR SLAB, NO DEDUCTION FOR PIPE OPENINGS, AND CURB TYPE GIVING HIGHEST QUANTITY OF CONCRETE. NO DEDUCTIONS OR ADJUSTMENTS ARE TO BE MADE TO THESE QUANTITIES BECAUSE OF PIPE OPENINGS, DIFFERENT FLOOR ALTERNATIVES OR DIFFERENT CURB TYPE.

B-1

SAN MATEO COUNTY DEPARTMENT  
OF  
PUBLIC WORKS  
REDWOOD CITY  
CALIFORNIA

SCALE: NONE  
DATE: 6/95  
REVISED:

DRAWN BY: A.G.M.  
CHECK BY: R.L.F.  
APPROVED BY: N.R.C.

**TYPE GO INLET ON SAG**

**TYPE GO INLET ON GRADE**

	INLET	ON GRADE	IN SAG
GO		0.3843	0.3880

**APRON DETAILS**  
NO SCALE

B-1A

SAN MATEO COUNTY DEPARTMENT  
OF  
PUBLIC WORKS  
REDWOOD CITY  
CALIFORNIA

SCALE: NONE  
DATE: 6/95  
REVISED:

DRAWN BY: B.M.A.  
CHECK BY: R.L.F.  
APPROVED BY: N.R.C.

**PLAN**

**SECTION D-D**

**TYPE 24-10S GRATE**  
WELDED STEEL (RETICULINE TYPE)

INLET TYPE	GRATE TYPE	NO. GRATES	WEIGHT LBS.
GO, GOL	24-10S	1	229

NOTE:  
ALL STEEL TO BE HOT DIP GALVANIZED AFTER ALL WELDING IS COMPLETE.

B-4

SAN MATEO COUNTY DEPARTMENT  
OF  
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REDWOOD CITY  
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SCALE: NONE  
DATE: 6/95  
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DRAWN BY: A.G.M.  
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APPROVED BY: N.R.C.

O.D. = OUTSIDE DIAMETER

**TYPE A (IN ROADWAY)**                      **TYPE B (OUTSIDE ROADWAY)**

THERE SHALL BE A MINIMUM OF TWO AND ONE-HALF FEET (30 INCHES) OF COVER OVER ALL PIPES AND CONDUITS UNLESS OTHERWISE DIRECTED BY COUNTY ROAD INSPECTOR.

STRUCTURE BACKFILL MATERIAL...MATERIAL WITH SAND EQUIVALENT NOT LESS THAN 20 AND SIEVE GRADATION BY WEIGHT AS FOLLOWS:

SIEVE SIZE	% PASSING SIEVES
3"	100
NO.4	35-100
NO.30	20-100

BACKFILL MATERIAL...MATERIAL FROM EXCAVATION, FREE FROM STONES OR LUMPS EXCEEDING 3 INCHES IN GREATEST DIMENSION, VEGETABLE MATTER, OR OTHER UNSATISFACTORY MATERIAL.

\*IN AREAS OF CEMENT TREATED BASES, THE REPLACEMENT MATERIAL SHALL CONSIST OF A MINIMUM OF 3" OF ASPHALT CONCRETE (TYPE B) OVER A MINIMUM OF 8" OF PORTLAND CEMENT CONCRETE (CLASS B).

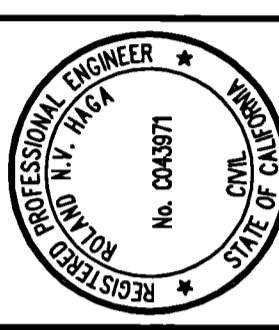
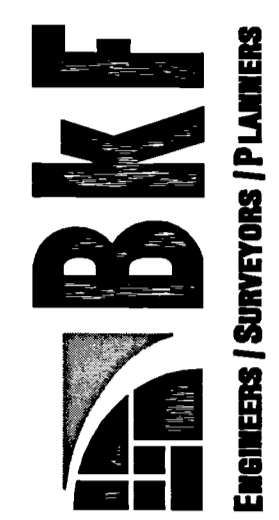
FOR TRENCH BACKFILL REQUIREMENTS FOR SANITARY SEWER PIPE, SEE STANDARD DRAWINGS C6 AND C7.

**STANDARD TRENCH BACKFILL AND BEDDING DETAIL**  
**STORM DRAIN PIPES**

B-15

DRAWING NAME: J:\Eng95\950108\dwg\CD\Off-Site for Lots 5 - 11\C6.10-HECDDT.dwg  
PLOT DATE: 04-28-16  
PLOT BY: trat

255 SHORELINE DRIVE, SUITE 200  
REDWOOD CITY, CA 94063  
PHONE: (650) 482-6399  
FAX: (650) 482-6399

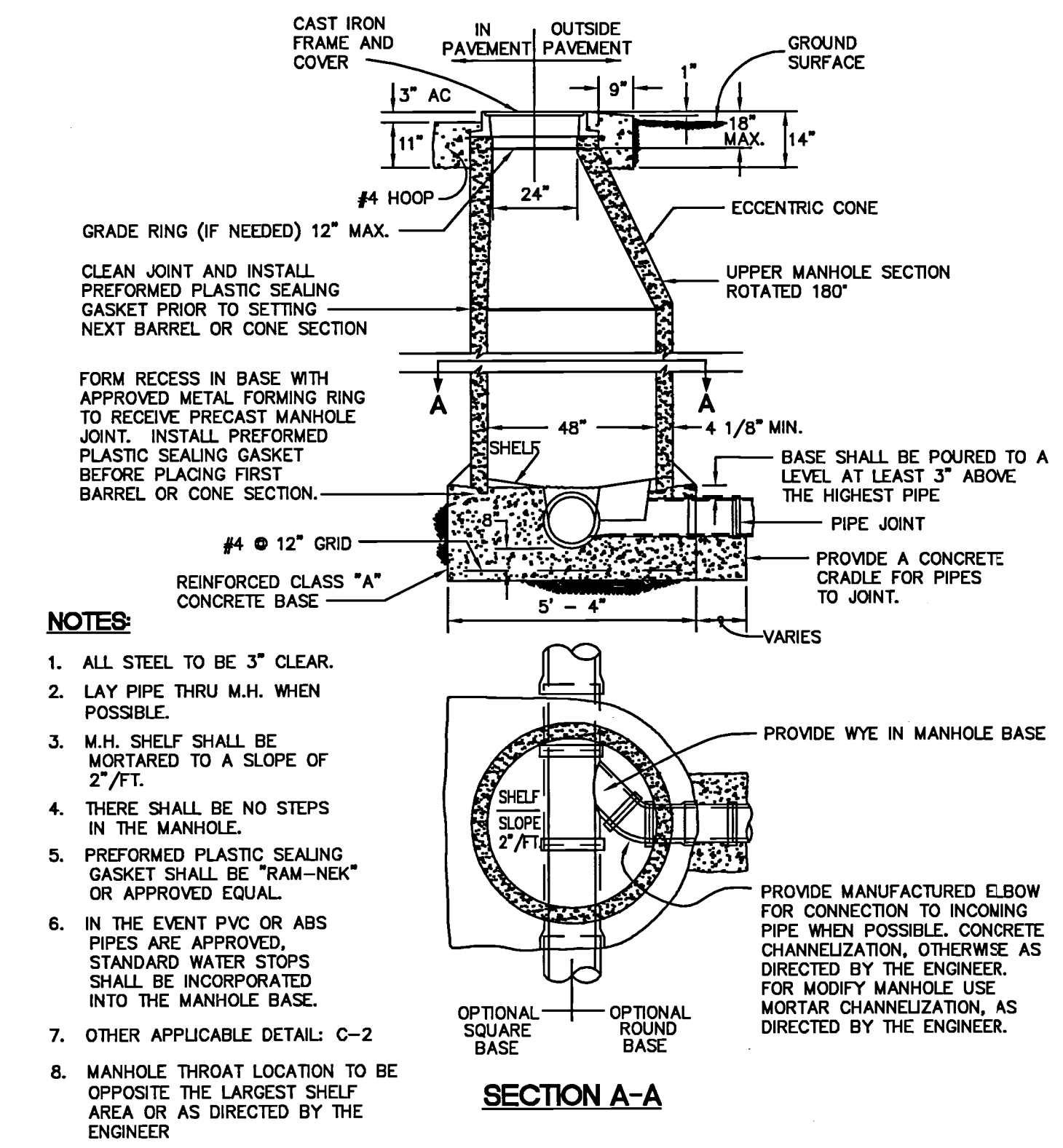


HIGHLAND ESTATES - STREET IMPROVEMENT PLANS  
TICONDEROGA DRIVE, COBBLEHILL PLACE & COMPENS WAY  
CONSTRUCTION DETAILS  
SAN MATEO COUNTY  
CITY OF SAN MATEO  
CALIFORNIA

Date	Revisions
04/27/16	No.
Scale AS SHOWN	Design
Drawn	AG
Approved	RH
Job No. 950108-20	

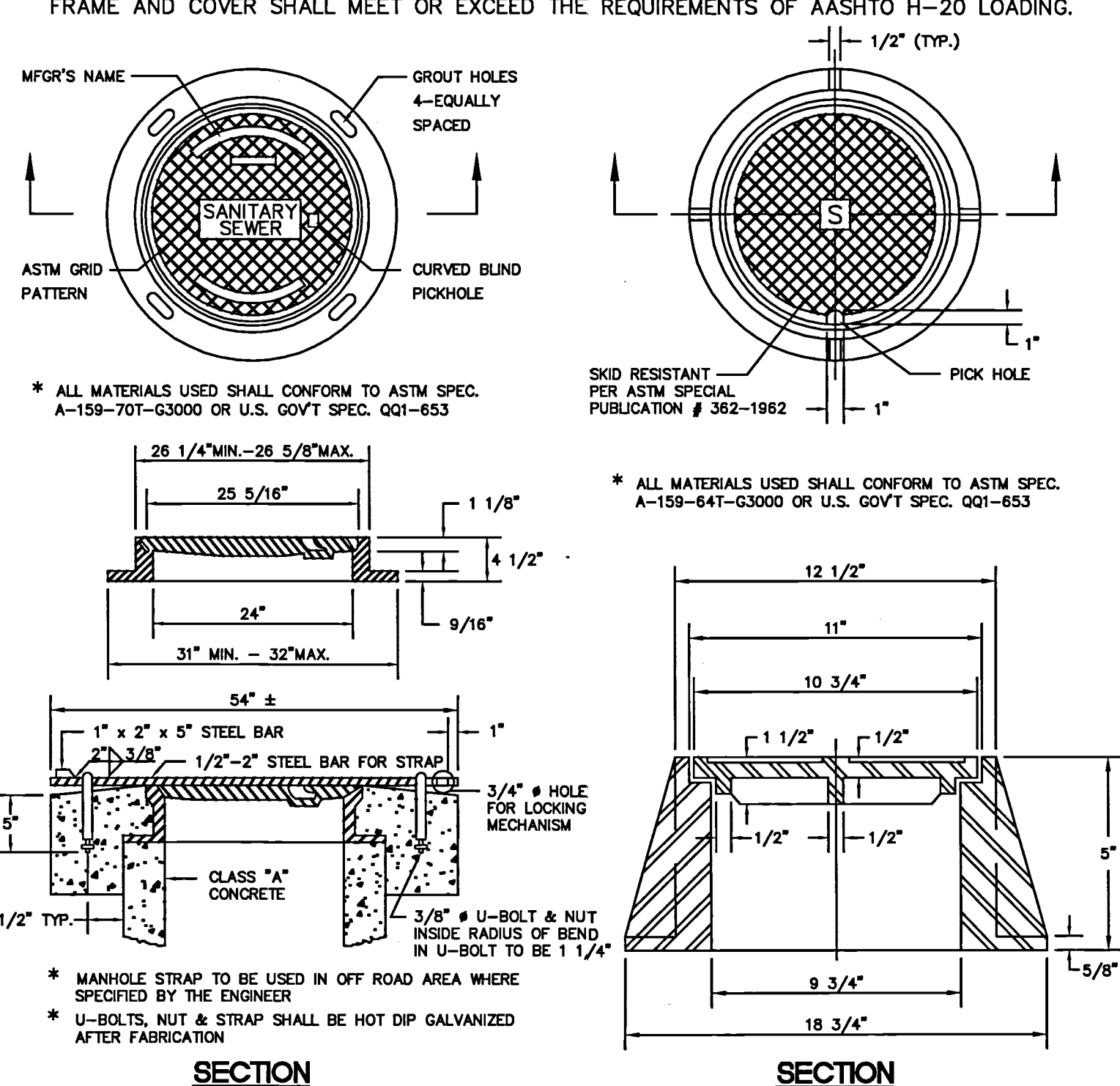
Sheet Number: **C6.10**  
OF

SAN MATEO COUNTY DEPARTMENT OF PUBLIC WORKS  
 REDWOOD CITY CALIFORNIA  
 DRAWN BY: D.P.  
 CHECK BY: R.O.  
 APPROVED BY: N.R.C.  
 SCALE: NONE  
 DATE: 6/95  
 REVISED: 7/97



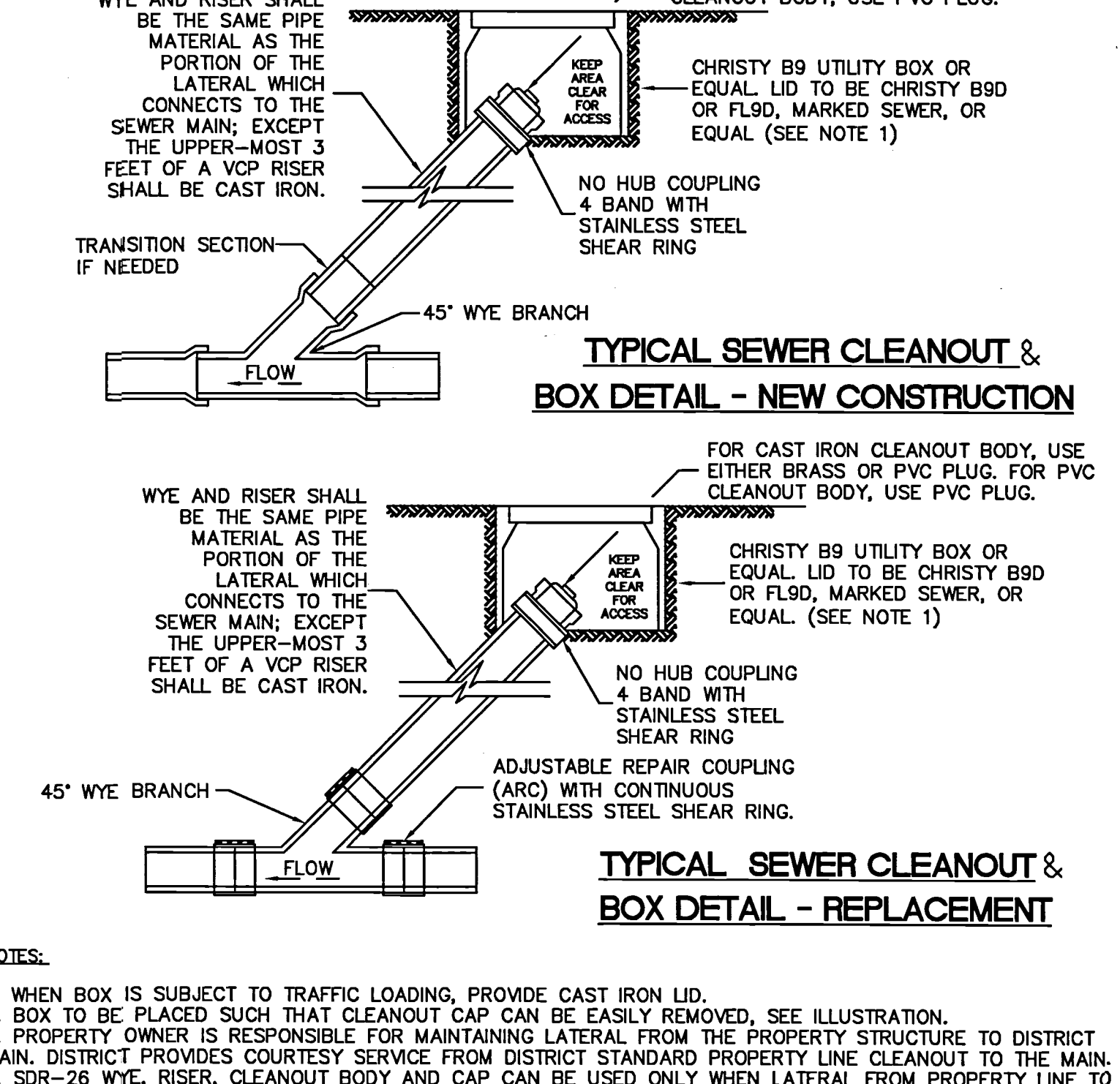
**SANITARY SEWER MANHOLE DETAIL**

SAN MATEO COUNTY DEPARTMENT OF PUBLIC WORKS  
 REDWOOD CITY CALIFORNIA  
 DRAWN BY: M.L.  
 CHECK BY: R.O.  
 APPROVED BY: N.R.C.  
 SCALE: NONE  
 DATE: 6/95  
 REVISED: 7/97



**SANITARY SEWER MANHOLE COVER, FRAME AND STRAP DETAIL**

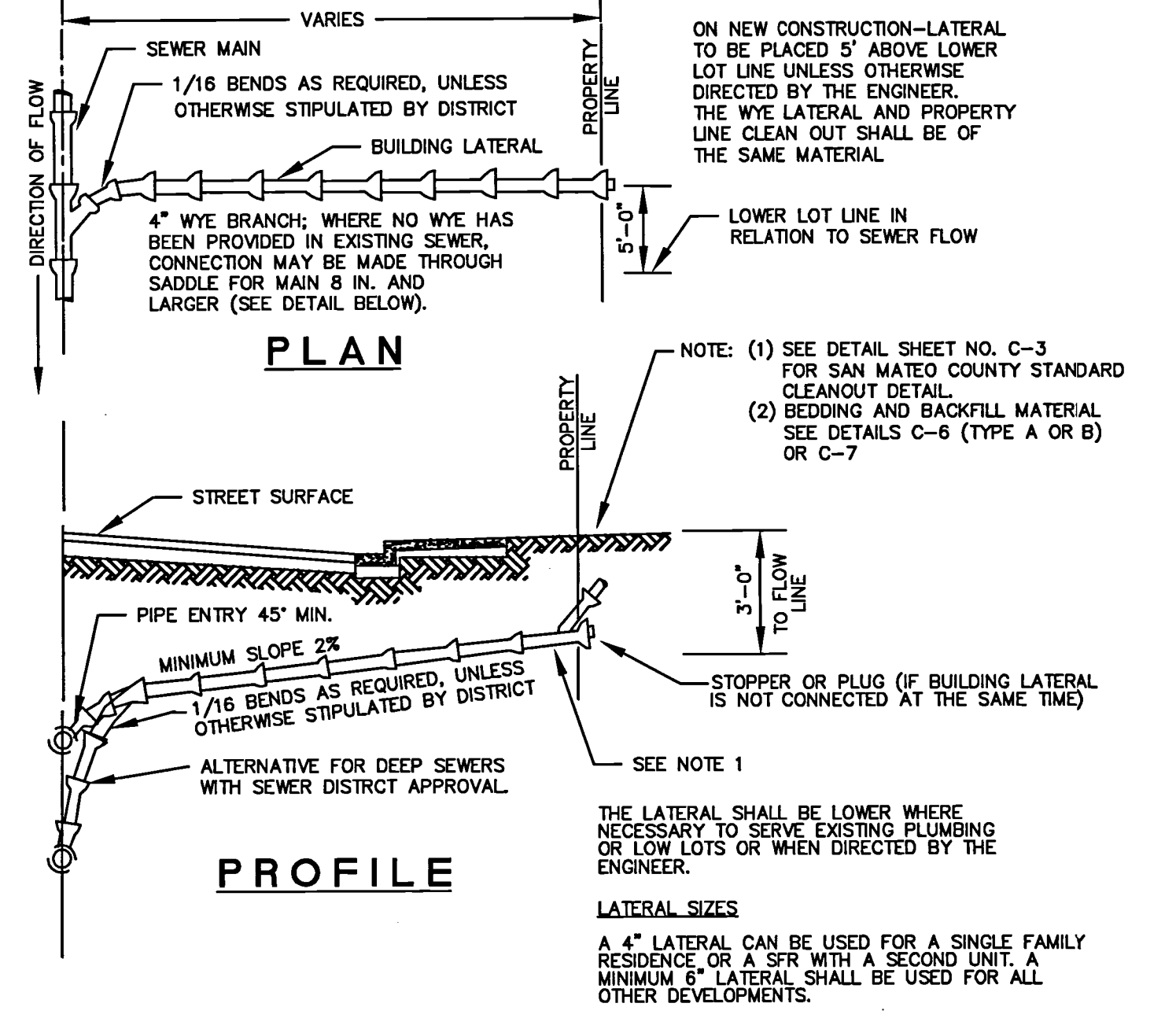
SAN MATEO COUNTY DEPARTMENT OF PUBLIC WORKS  
 REDWOOD CITY CALIFORNIA  
 DRAWN BY: M.L.  
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 APPROVED BY: N.R.C.  
 SCALE: NONE  
 DATE: 8/06  
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**TYPICAL SEWER CLEANOUT & BOX DETAIL - NEW CONSTRUCTION**

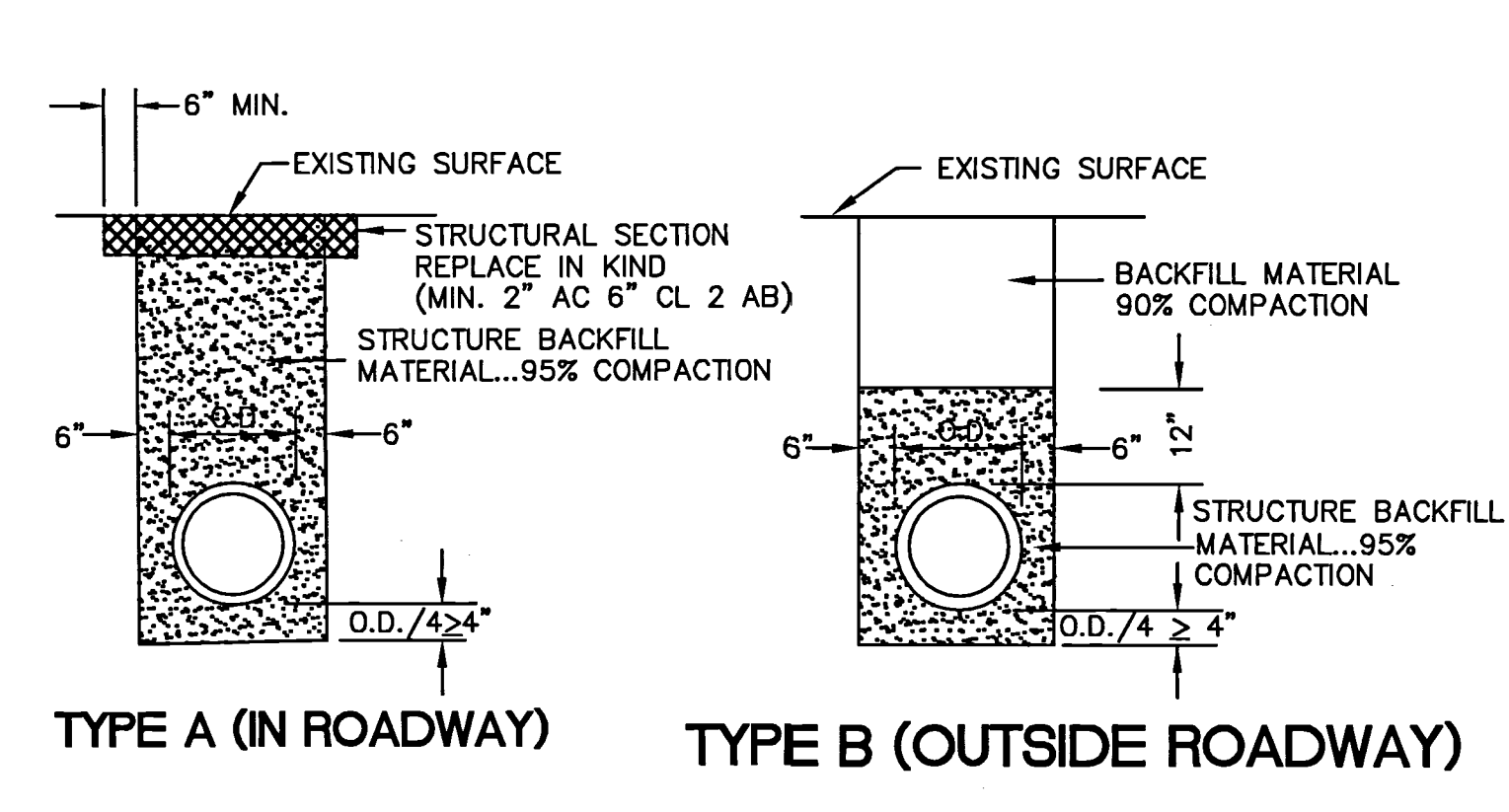
**TYPICAL SEWER CLEANOUT & BOX DETAIL - REPLACEMENT**

SAN MATEO COUNTY DEPARTMENT OF PUBLIC WORKS  
 REDWOOD CITY CALIFORNIA  
 DRAWN BY: N.M.A.  
 CHECK BY: R.O.  
 APPROVED BY: N.R.C.  
 SCALE: NONE  
 DATE: 6/95  
 REVISED: 7/97



**SEWER LATERAL DETAIL**

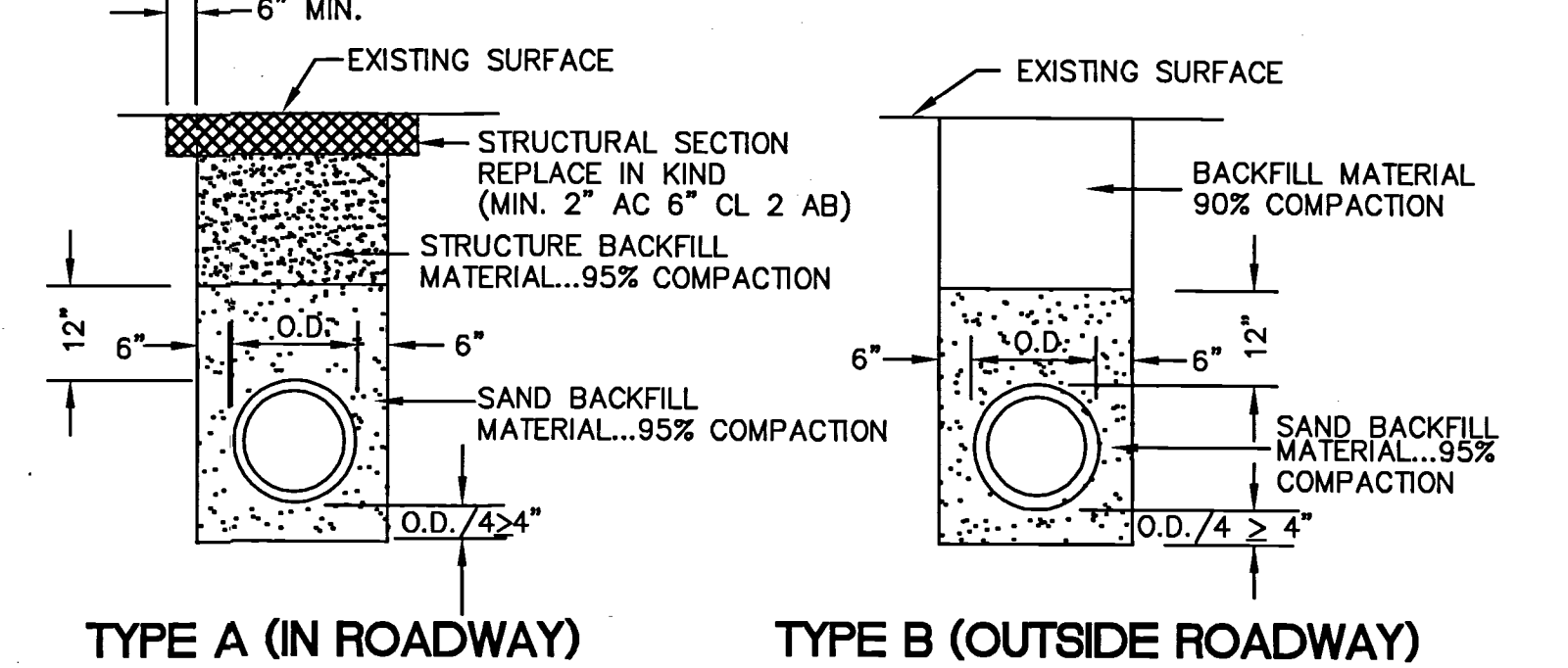
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 CHECK BY: R.O.  
 APPROVED BY: N.R.C.  
 SCALE: NONE  
 DATE: 6/95  
 REVISED: 7/97



- STRUCTURE BACKFILL MATERIAL... MATERIAL WITH SAND EQUIVALENT NOT LESS THAN 20 AND SIEVE GRADATION BY WEIGHT AS FOLLOWS:
- | SIEVE SIZE | % PASSING SIEVE |
|------------|-----------------|
| 3"         | 100             |
| No. 4      | 35-100          |
| No. 30     | 20-100          |
- BACKFILL MATERIAL... MATERIAL FROM EXCAVATION, FREE FROM STONES OR LUMPS EXCEEDING 3 INCHES GREATEST DIMENSION, ORGANIC MATTER, OR OTHER UNSATISFACTORY MATERIAL

**STANDARD TRENCH BACKFILL AND BEDDING DETAIL FOR VITRIFIED CLAY AND DUCTILE IRON SEWER PIPE**

SAN MATEO COUNTY DEPARTMENT OF PUBLIC WORKS  
 REDWOOD CITY CALIFORNIA  
 DRAWN BY: N.M.A.  
 CHECK BY: R.O.  
 APPROVED BY: N.R.C.  
 SCALE: NONE  
 DATE: 6/95  
 REVISED: 7/97

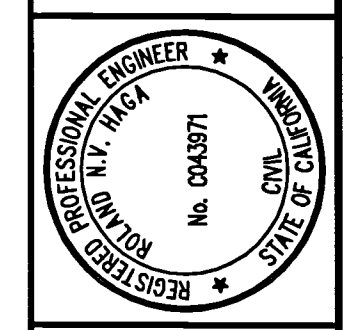


- NOTES:**
- SAND... MATERIAL FREE FROM ORGANIC MATTER AND CLAY WITH A SIEVE GRADATION BY WEIGHT AS FOLLOWS:
- | SIEVE SIZE | % PASSING SIEVE |
|------------|-----------------|
| No. 4      | 100             |
| No. 200    | 0-5             |
- STRUCTURE BACKFILL MATERIAL... MATERIAL WITH SAND EQUIVALENT NOT LESS THAN 20 AND SIEVE GRADATION BY WEIGHT AS FOLLOWS:
- | SIEVE SIZE | % PASSING SIEVE |
|------------|-----------------|
| 3"         | 100             |
| No. 4      | 35-100          |
| No. 30     | 20-100          |
- BACKFILL MATERIAL... MATERIAL FROM EXCAVATION, FREE FROM STONES OR LUMPS EXCEEDING 3 INCHES GREATEST DIMENSION, ORGANIC MATTER, OR OTHER UNSATISFACTORY MATERIAL.

**STANDARD TRENCH BACKFILL AND BEDDING DETAIL FOR PVC SEWER PIPE**

DRAWING NAME: J:\Eng95\950168\dwg\CD\Off-Site for Lots 5 - 11\06.20-HECDDT.dwg  
 PLOT DATE: 04-28-16  
 PLOTTED BY: trat

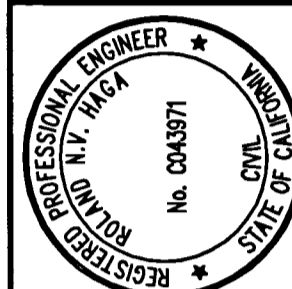
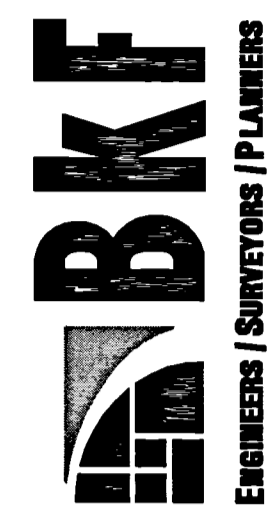
255 SHORELINE DRIVE, SUITE 200  
 REDWOOD CITY, CA 94061  
 PHONE: (650) 482-6300  
 FAX: (650) 482-6399



HIGHLAND ESTATES - STREET IMPROVEMENT PLANS  
 TICONDEROGA DRIVE, COBBLEHILL PLACE & COMPENS WAY  
 CONSTRUCTION DETAILS  
 CITY OF SAN MATEO  
 SAN MATEO COUNTY  
 CALIFORNIA

Date	Scale	AS SHOWN	Design	Drawn	AG	Approved	RH	Job No.	550168-20
04/27/16									
Revisions									
No.									
Sheet Number: <b>C6.20</b>									

255 SHORELINE DRIVE, SUITE 200  
 REDWOOD CITY, CA 94063  
 PHONE: (650) 462-6300  
 FAX: (650) 462-6399



HIGHLAND ESTATES - STREET IMPROVEMENT PLANS  
 TICONDEROGA DRIVE, COBBLEHILL PLACE & COPPENS WAY  
 CONSTRUCTION DETAILS  
 SAN MATEO COUNTY  
 CITY OF SAN MATEO  
 CALIFORNIA

Date	04/27/16	Scale	AS SHOWN	Design	JT	Drawn	AG	Approved	RH	Job No	95068-20
Sheet Number:											

**C6.30**  
OF

SAN MATEO COUNTY DEPARTMENT  
OF  
PUBLIC WORKS  
REDWOOD CITY  
CALIFORNIA

DRAWN BY: N.M.A. SCALE: NONE  
 CHECK BY: R.O. DATE: 6/95  
 APPROVED BY: N.R.C. REVISED:

NOTE: (1) THE NEWLY INSTALLED WYE SHALL BE OF THE SAME MATERIAL AS THE EXISTING MAIN.

**PLAN  
VITRIFIED CLAY**

NOTES: HORIZONTAL PIPE ENTRY ANGLE WILL BE 90°, INSTEAD OF 45° (SEE LATERAL DETAIL, PLAN VIEW)  
 VERTICAL PIPE ENTRY ANGLE SHALL BE 45° MINIMUM (SEE LATERAL DETAIL PROFILE VIEW)

**PLAN  
DUCTILE IRON PIPE**

NOTE: ALL PVC, PIPE AND FITTINGS SHALL BE SDR 35 AND SHALL HAVE RUBBER GASKETED JOINTS. SOLVENT WELDED JOINTS SHALL NOT BE ALLOWED.

**PLAN  
POLYVINYL CHLORIDE PIPE**

**LATERAL CONNECTION INSTALLATION DETAIL ON EXISTING PIPE**

NOTE: LATERAL CONNECTION INSTALLATION ON NEWLY INSTALLED PIPE WILL BE AS DIRECTED BY THE DEPARTMENT OF PUBLIC WORKS.

C-8

SAN MATEO COUNTY DEPARTMENT  
OF  
PUBLIC WORKS  
REDWOOD CITY  
CALIFORNIA

DRAWN BY: N.M.A. SCALE: NONE  
 CHECK BY: R.O. DATE: 6/95  
 APPROVED BY: N.R.C. REVISED:

**OVERFLOW DEVICE**

NOTE: LOCATION OF DEVICE TO APPROVAL OF DISTRICT AND BUILDING DEPARTMENT PRIOR TO INSTALLATION

**BACKFLOW DEVICE**

NOTE: LOCATION OF DEVICE TO APPROVAL OF DISTRICT AND BUILDING DEPARTMENT PRIOR TO INSTALLATION

**OVERFLOW AND BACKFLOW DEVICE DETAIL**

C-9

SAN MATEO COUNTY DEPARTMENT  
OF  
PUBLIC WORKS  
REDWOOD CITY  
CALIFORNIA

DRAWN BY: M.L. SCALE: NONE  
 CHECK BY: R.O. DATE: 8/06  
 APPROVED BY: N.R.C. REVISED:

**SAN MATEO COUNTY SEWER AND SANITATION DISTRICTS  
STANDARD SPECIFICATIONS  
GENERAL NOTES**

- ALL REFERENCES TO "DISTRICT" IN THESE GENERAL NOTES SHALL MEAN THE APPROPRIATE COUNTY SEWER OR SANITATION DISTRICT.
- THE APPROVAL OF THESE PLANS BY THE DISTRICT SHALL BE INTERPRETED TO MEAN THAT THE SANITARY SEWER DESIGN SHOWN ON THESE PLANS MEETS THE DISTRICT'S STANDARDS. THE DISTRICT'S APPROVAL IN NO WAY GUARANTEES ANY OTHER ASPECT OF THIS PLAN OR ITS ACCURACY RELATIVE TO ACTUAL FIELD CONDITIONS.
- THE CONTRACTOR SHALL CONTACT THE DISTRICT AT 363-4765 OR 363-4100 TWO (2) WORKING DAYS IN ADVANCE OF BEGINNING ANY SANITARY SEWER WORK. THE CONTRACTOR SHALL THEREAFTER KEEP THE INSPECTOR FOR THE DISTRICT INFORMED OF HIS SCHEDULE FOR SANITARY SEWER WORK.
- ALL SANITARY SEWER WORK CONSTRUCTED WITHOUT INSPECTION BY THE DISTRICT SHALL BE REMOVED AND RECONSTRUCTED WITH INSPECTION.
- THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT FORTY-EIGHT (48) HOURS IN ADVANCE OF BEGINNING ANY WORK.
- THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL UTILITIES BEFORE BEGINNING ANY EXCAVATING.
- THE CONTRACTOR SHALL OBTAIN ANY AND ALL PERMITS REQUIRED BY THE COUNTY OR CITY BEFORE BEGINNING ANY SANITARY SEWER WORK.
- UPON THE COMPLETION OF CONSTRUCTION A COMPLETE SET OF REPRODUCIBLE "AS-CONSTRUCTED" PLANS SHALL BE PROVIDED TO THE DISTRICT.
- SANITARY SEWER SERVICE SHALL BE MAINTAINED AT ALL TIMES. THE CONTRACTOR SHALL USE WHATEVER MEANS ARE NECESSARY (E.G. PUMPS, ETC.) TO MAINTAIN THIS SERVICE DURING CONSTRUCTION.
- PRIOR TO COMMENCING ANY SANITARY SEWER WORK IN OFF-SITE EASEMENTS THE CONTRACTOR SHALL PROVIDE THE DISTRICT WITH ADEQUATE EVIDENCE THAT ALL AFFECTED PROPERTY OWNERS (AND TENANTS WHERE APPLICABLE) WERE NOTIFIED WELL IN ADVANCE OF THE DATE WORK IN THESE EASEMENTS WAS TO BEGIN AND THAT THEY HAVE UPDATED THAT NOTICE IN A TIMELY MANNER WHEN THOSE DATES HAVE CHANGED.

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SAN MATEO COUNTY DEPARTMENT  
OF  
PUBLIC WORKS  
REDWOOD CITY  
CALIFORNIA

DRAWN BY: N.M.A. SCALE: NONE  
 CHECK BY: R.O. DATE: 6/95  
 APPROVED BY: N.R.C. REVISED:

**SAN MATEO COUNTY SEWER AND SANITATION DISTRICTS  
STANDARD SPECIFICATIONS  
PIPE AND FITTINGS**

**POLYVINYL CHLORIDE PIPE (PVC)**

- ALL PIPE AND FITTINGS SHALL CONFORM TO ASTM SPECIFICATIONS D3034, SDR 35.
- ALL JOINTS SHALL BE A BELL AND SPIGOT ASSEMBLY WITH ELASTOMERIC SEALING GASKETS. SEALING GASKETS SHALL MEET THE REQUIREMENTS OF ASTM SPECIFICATION D1869. SOLVENT CEMENT JOINTS ARE NOT PERMITTED.
- ALL PIPE ENTERING OR LEAVING A CONCRETE STRUCTURE SHALL HAVE A RUBBER WATERSTOP GASKET ATTACHED TO IT. THE WATERSTOP GASKET SHALL CONFORM TO THE PIPE MANUFACTURER'S SPECIFICATIONS. THE WATERSTOP GASKET SHALL BE SEATED FIRMLY AROUND THE PIPE EXTERIOR AND BE CAST INTO THE CONCRETE STRUCTURE.
- ALL PIPE JOINTS SHALL BE MADE USING MANUFACTURED PVC COUPLINGS. BAND TYPE COMPRESSION COUPLINGS ARE NOT PERMITTED.

**DUCTILE IRON PIPE (DIP)**

- ALL PIPE SHALL BE THICKNESS CLASS 50 (FOUR INCH PIPE SHALL BE THICKNESS CLASS 51) IN ACCORDANCE WITH ANSI SPECIFICATIONS A21.51. FITTINGS SHALL BE IN ACCORDANCE WITH ANSI SPECIFICATION A21.10.
- JOINTS SHALL BE PUSH-ON TYPE OR MECHANICAL JOINT TYPE IN ACCORDANCE WITH ANSI SPECIFICATION A21.11. RUBBER GASKETS FOR PUSH-ON JOINTS SHALL BE IN ACCORDANCE WITH ANSI SPECIFICATIONS HEREIN.
- PIPE AND FITTINGS SHALL HAVE A BITUMINOUS COATING OUTSIDE IN ACCORDANCE WITH ASTM SPECIFICATION A746-86, UNLESS OTHERWISE SPECIFIED HEREIN.
- PIPE AND FITTINGS SHALL HAVE A 1/16" (ONE-SIXTEENTH INCH) CEMENT-MORTAR LINING WITH AN ASPHALTIC SEAL COAT.

**VITRIFIED CLAY PIPE (VCP)**

- PIPE AND FITTINGS SHALL BE EXTRA STRENGTH, UNGLAZED, BELL AND SPIGOT, CONFORMING TO THE LATEST REVISION OF ASTM SPECIFICATION C700.
- JOINTS SHALL BE A BELL AND SPIGOT ASSEMBLY WITH FACTORY INSTALLED FLEXIBLE COMPRESSION TYPE GASKETS MADE OF PLASTICIZED POLYVINYL OR POLYURETHANE CONFORMING TO THE LATEST REVISION OF ASTM SPECIFICATIONS C425. BAND TYPE COUPLINGS ARE NOT ALLOWED.

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SAN MATEO COUNTY DEPARTMENT  
OF  
PUBLIC WORKS  
REDWOOD CITY  
CALIFORNIA

DRAWN BY: N.M.A. SCALE: NONE  
 CHECK BY: R.O. DATE: 6/95  
 APPROVED BY: N.R.C. REVISED: 7/97

**SAN MATEO COUNTY SEWER AND SANITATION DISTRICTS  
STANDARD SPECIFICATIONS  
TESTING REQUIREMENTS**

- ALL REFERENCES TO "DISTRICT" IN THESE TESTING REQUIREMENTS SHALL MEAN THE APPROPRIATE COUNTY SEWER OR SANITATION DISTRICT.
- ALL REQUIRED CLEANING AND TESTING OF SANITARY SEWER MAINS AND LATERALS SHALL BE PERFORMED IN THE PRESENCE OF A REPRESENTATIVE OF THE DISTRICT.
- ALL SANITARY SEWER MAINS BEING CONSTRUCTED SHALL BE CLEANED BY MEANS OF A HIGH SPEED JET RODDER PRIOR TO TESTING. VCP AND DIP SHALL BE TESTED FOR OBSTRUCTION BY BALL ROLLING.
- ALL SANITARY SEWER MAINS BEING CONSTRUCTED SHALL PASS A LOW PRESSURE AIR TEST. EACH SECTION OF MAIN SHALL BE TESTED BETWEEN SUCCESSIVE MANHOLES. THE LOW PRESSURE AIR TEST SHALL BE CONDUCTED IN THE FOLLOWING MANNER.

A COMPRESSED AIR SUPPLY SHALL BE ATTACHED TO AN AIR FITTING ON THE MAIN AND THE AIR PRESSURE WITHIN THE LINE INCREASED TO FOUR (4) POUNDS PER SQUARE INCH (PSI). AFTER THE AIR SUPPLY IS SECURELY TURNED OFF OR DISCONNECTED, THERE SHALL BE A TWO (2) MINUTE WAITING PERIOD BEFORE THE ACTUAL TEST PERIOD BEGINS TO ALLOW STABILIZATION OF AIR WITHIN THE MAIN.

IN NO CASE SHALL THE AIR PRESSURE WITHIN THE LINE BE LESS THAN 3.5 PSI AT THE BEGINNING OF THE TEST PERIOD. REFER TO THE CHART WHICH FOLLOWS FOR THE LENGTH OF THE TEST PERIOD. THE MINIMUM LENGTH OF TEST IS TWO (2) MINUTES. THE ALLOWABLE AIR PRESSURE LOSS DURING THE TEST PERIOD SHALL BE 1.0 PSI. A WRITTEN RECORD OF THE TEST SHALL BE SUBMITTED TO THE DISTRICT BY THE CONTRACTOR.

NOMINAL PIPE SIZE (inches)	LENGTH OF LINE (feet)	LENGTH OF TEST (minutes)
4	ALL	2
6	0 - 300	2
6	300 - 370	2 1/2
6	370 AND GREATER	3
8	0 - 170	2
8	170 - 210	2 1/2
8	210 - 250	3
8	250 - 290	3 1/2
8	290 AND GREATER	3 3/4
10	0 - 110	2
10	110 - 165	3
10	165 - 215	4
10	215 AND GREATER	4 3/4

C-15

SAN MATEO COUNTY DEPARTMENT  
OF  
PUBLIC WORKS  
REDWOOD CITY  
CALIFORNIA

DRAWN BY: N.M.A. SCALE: NONE  
 CHECK BY: R.O. DATE: 6/95  
 APPROVED BY: N.R.C. REVISED: 7/97

- A TELEVISION INSPECTION SHALL BE MADE OF ALL SANITARY SEWER MAINS BEING CONSTRUCTED. IMMEDIATELY PRIOR TO TELEVISIONING THE SEWER, AN AMOUNT OF WATER ACCEPTABLE TO THE DISTRICT'S REPRESENTATIVE SHALL BE INTRODUCED INTO THE SEWER MAIN BEING INSPECTED.

A VIDEO TAPE IN VHS FORMAT AT SP, OR EQUIVALENT, SPEED SHALL BE MADE OF THE INSPECTION AND DELIVERED ALONG WITH A TYPED LOG OF THE INSPECTION TO THE DISTRICT (SAN MATEO COUNTY DEPARTMENT OF PUBLIC WORKS) FOR REVIEW AND ACCEPTANCE.

SUBMITTED VIDEO TAPES SHALL INCLUDE A CONTINUOUS ON-SCREEN DISPLAY WHICH CONTAINS, AS A MINIMUM, THE DATE OF THE FILMING, IDENTIFICATION OF THE LINE AND SEGMENT (REACH) OF THE LINE BEING VIEWED, AND A READOUT, IN FEET, SHOWING THE DISTANCE TO THE ENTRY POINT.

IF, IN THE OPINION OF THE DISTRICT, THE SUBMITTED VIDEO TAPES ARE OF POOR QUALITY, THE DISTRICT MAY REJECT THE VIDEO TAPES AND REQUIRE THE VIDEO INSPECTION TO BE REPEATED AND NEW VIDEO TAPES SUBMITTED TO THE DISTRICT FOR REVIEW AND ACCEPTANCE. ALL VIDEO TAPES SHALL BECOME THE PROPERTY OF THE DISTRICT.

- DEFLECTION TESTING OF POLYVINYL CHLORIDE (PVC) SEWER MAINS SHALL BE PERFORMED AFTER THE PLACEMENT OF ALL TRENCH BACKFILL. PIPE DEFLECTION SHALL BE TESTED BY PULLING BY HAND A GO/NO-GO MANDREL THROUGH THE INSTALLED SECTIONS OF SEWER MAIN.

THE MANDREL USED SHALL HAVE A MINIMUM LENGTH EQUAL TO ITS DIAMETER. THE MANDREL SHALL BE CONSTRUCTED WITH A MINIMUM OF NINE (9) RIBS FABRICATED PARALLEL TO ITS LONGITUDINAL AXIS. BOTH THE DESIGN OF THE MANDREL AND THE FABRICATED MANDREL ITSELF SHALL BE INSPECTED AND APPROVED BY THE DISTRICT WELL IN ADVANCE OF THE DEFLECTION TEST.

THE MANDREL DIAMETER SHALL BE 95% OF THE PIPE'S AVERAGE INSIDE DIAMETER AS DEFINED BY ASTM SPECIFICATION D3034, AND AS DETAILED IN THE FOLLOWING TABLE:

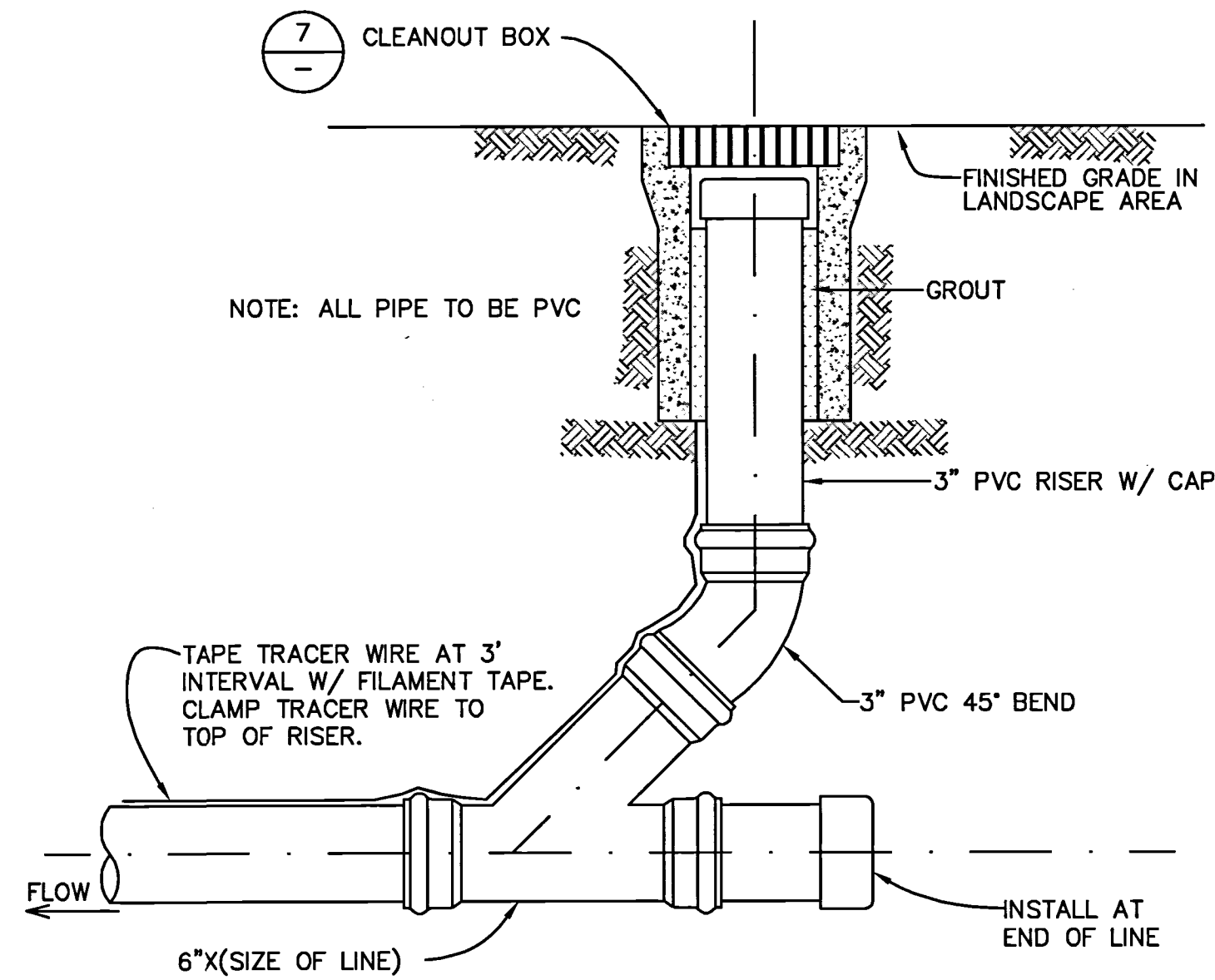
NOMINAL PIPE SIZE (inches)	AVERAGE INSIDE DIAMETER (inches)	MINIMUM MANDREL DIAMETER (inches)
6	5.893	5.598
8	7.891	7.497
10	9.864	9.371

NOTE: AVERAGE INSIDE DIAMETER = AVERAGE OUTSIDE DIAMETER - 2(1.06)T; WHERE T = MINIMUM WALL THICKNESS AS DEFINED BY ASTM SPECIFICATION D3034.

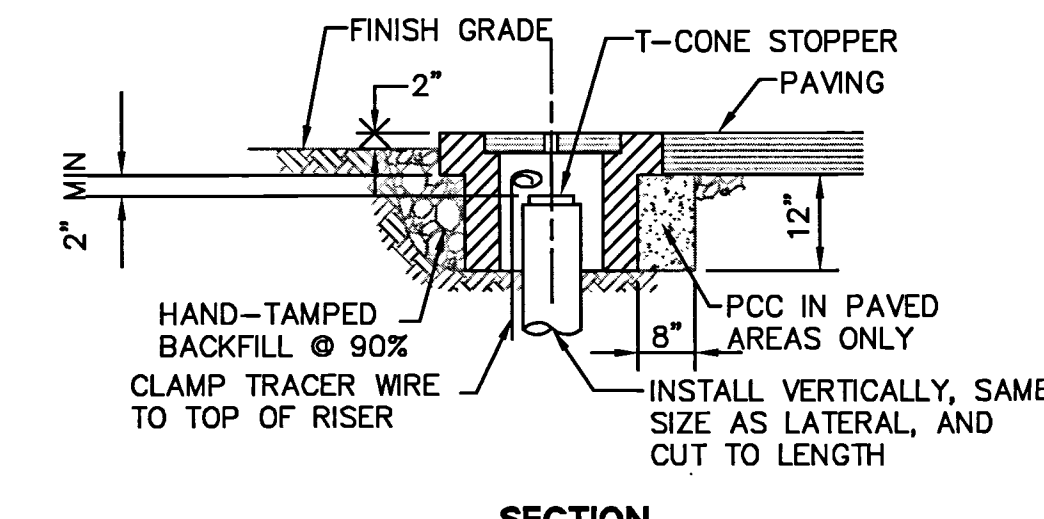
C-16

DRAWING NAME: J:\eng95\950168\dwg\CD\011-Site for Lots 5 - 11\06\_30-HECDDT.dwg PLOTTED BY: trat PLOT DATE: 04-28-16

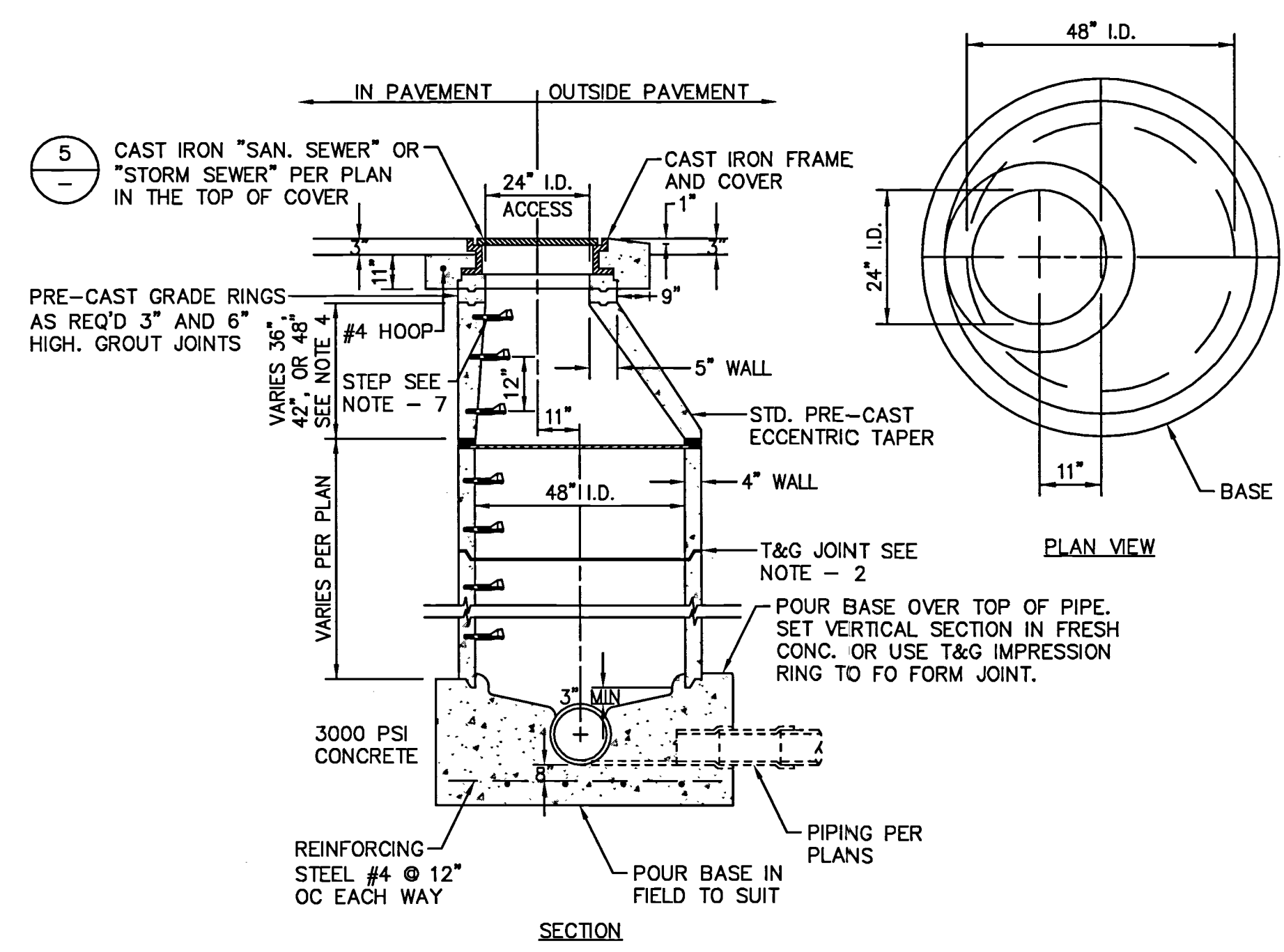
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 PLOT DATE: 04-28-16 PLOTTED BY: trat



**6**  
**STORM DRAIN CLEANOUT**  
 NTS

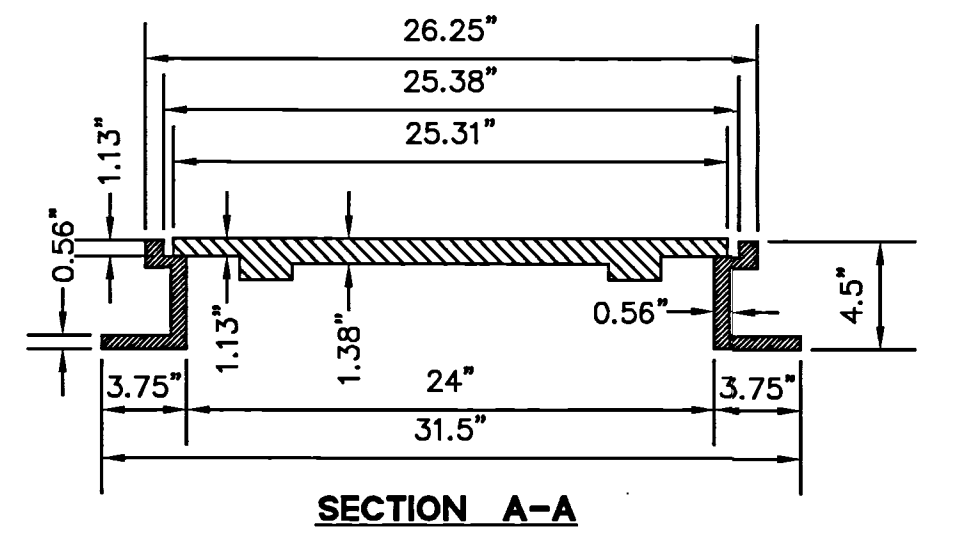
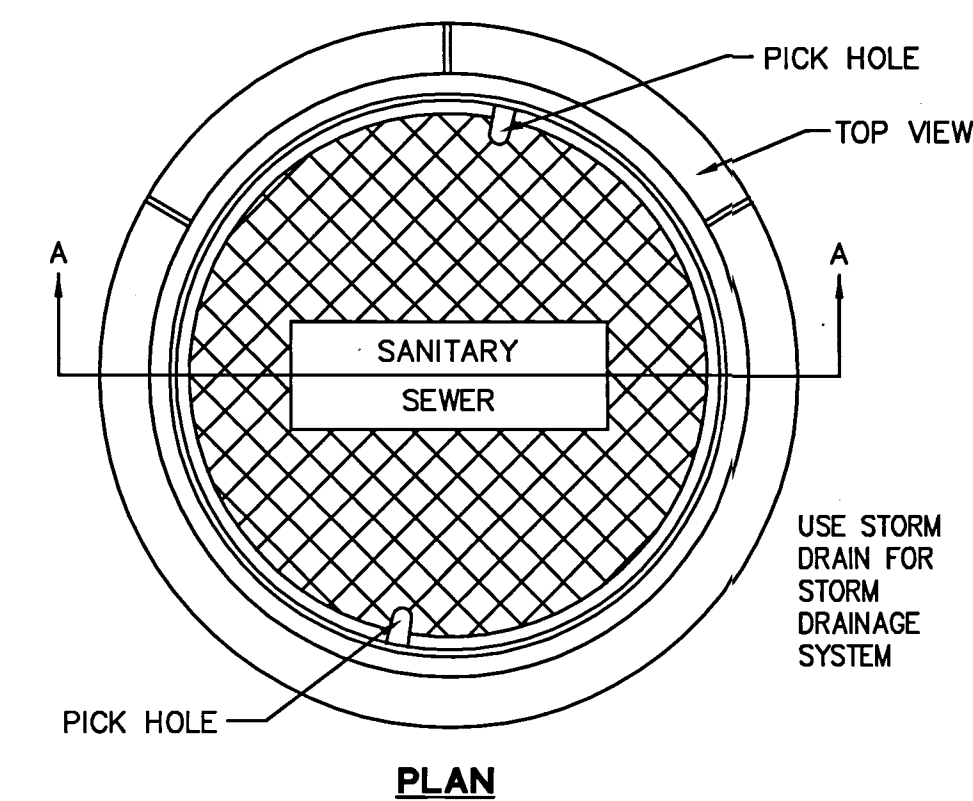


**7**  
**CLEANOUT BOX**  
 NTS



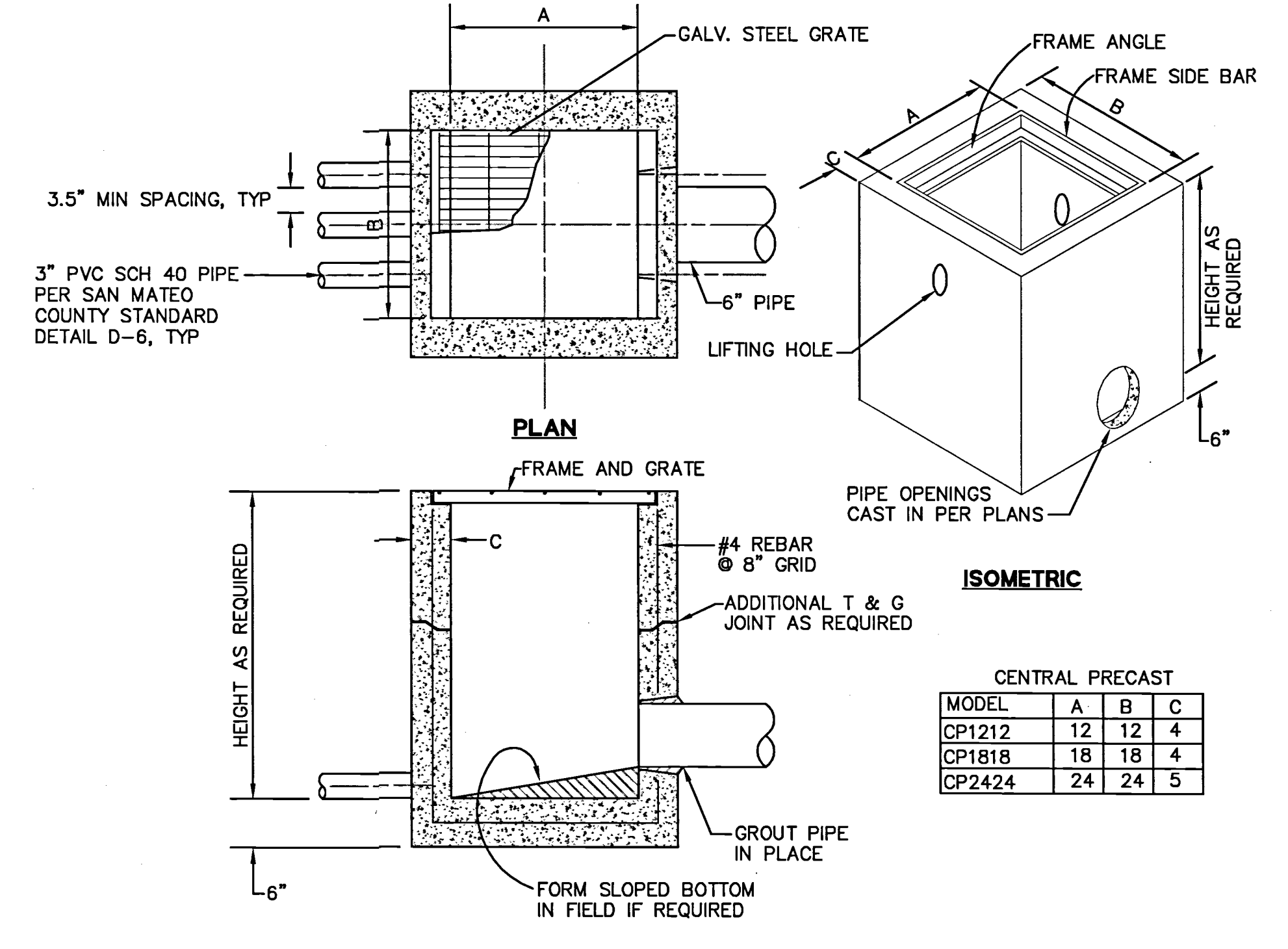
- NOTES:**
1. PRE-CAST MANHOLE MATERIAL SHALL BE MANUFACTURED TO ASTM SPECIFICATION C478.
  2. GROUT JOINTS WITH 1:3 MORTAR MIX OR USE RAM-NEK JOINT COMPOUND.
  3. A 36" TAPER MAY BE COMBINED WITH A 12" VERTICAL TO FORM A 48" TAPER SECTION.
  4. ALL CONCRETE JOINTS SHALL BE LEANED, WETTED, AND MORTARED PRIOR TO SETTING THE NEXT SECTION. THE JOINTS SHALL BE PACKED, TOWELED AND BRUSHED WHILE THE MORTAR IS PLASTIC.
  5. MANHOLE SHALL BE SET TO GRADE SUBSEQUENT TO PLACING AC OR RCC.
  6. XYPEX CONCENTRATE/CRYSTALLINE COATING ON INTERIOR CONCRETE SURFACES.
  7. STEPS NOT REQUIRED IN MANHOLES 3.5 FEET OR LESS IN DEPTH.

**4**  
**MANHOLE (PIPES 6" TO 21")**  
 NTS



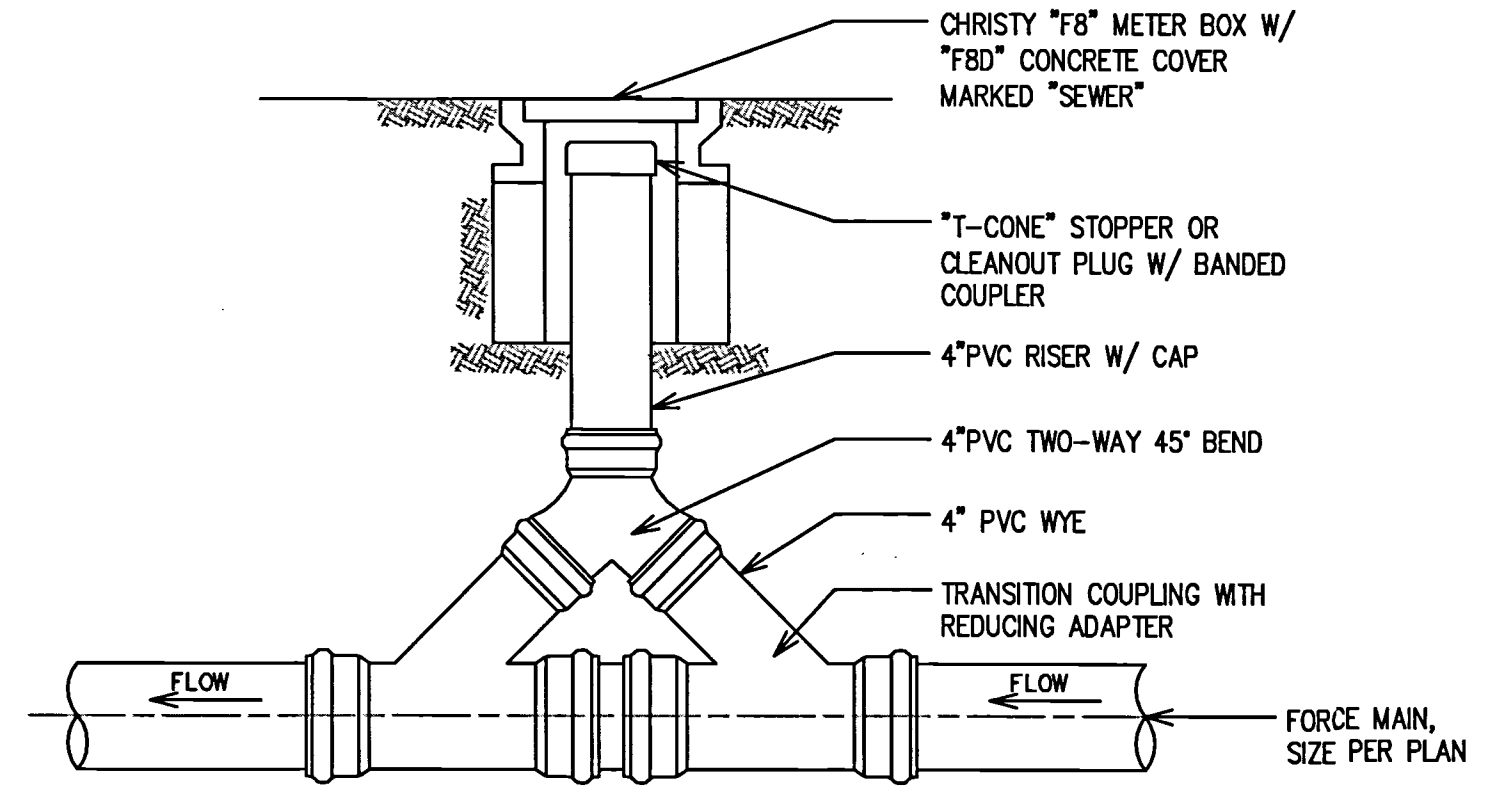
- NOTES:**
1. ALL MATERIAL USED IN MANUFACTURING SHALL CONFORM TO A.S.T.M. A48, CLASS 30.
  2. ALL CASTINGS TO BE COMPLETELY CLEANED AND PAINTED WITH ASPHALTIC VARNISH, AFTER MANUFACTURE.
  3. USE PHOENIX P-1090, D&L SUPPLY A-1024, OR EQUAL.

**5**  
**MANHOLE FRAME AND COVER**  
 NTS

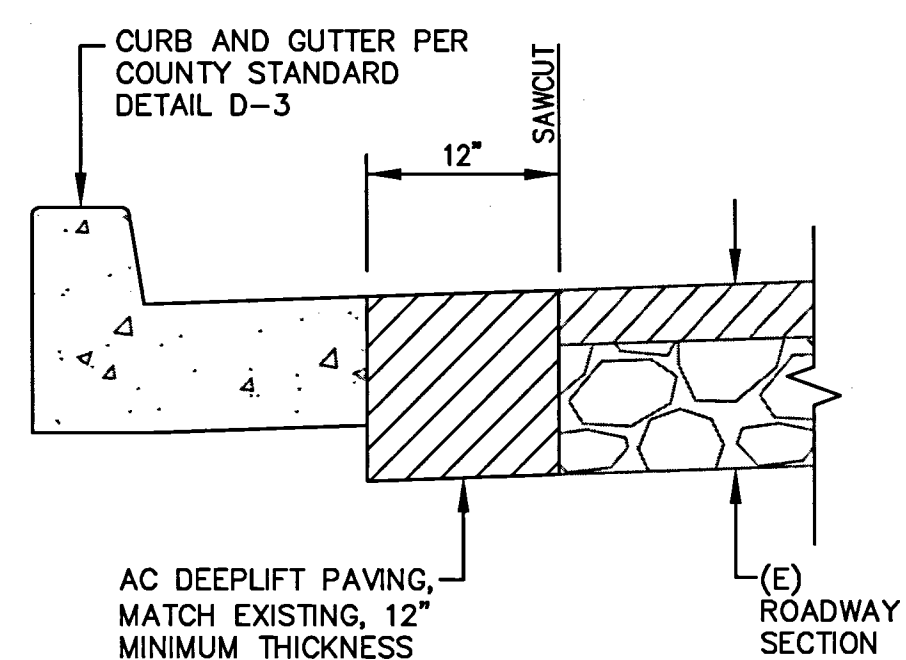


- NOTES:**
1. DROP INLETS SHALL BE CENTRAL PRECAST OR APPROVED EQUAL.
  2. AN ENGINEERED PRECAST DROP INLET UNIT CAN BE USED AS AN ALTERNATE.
  3. SEE PLAN FOR DROP INLET SIZE AND LOCATION.

**1**  
**DROP INLET DETAIL**  
 NTS

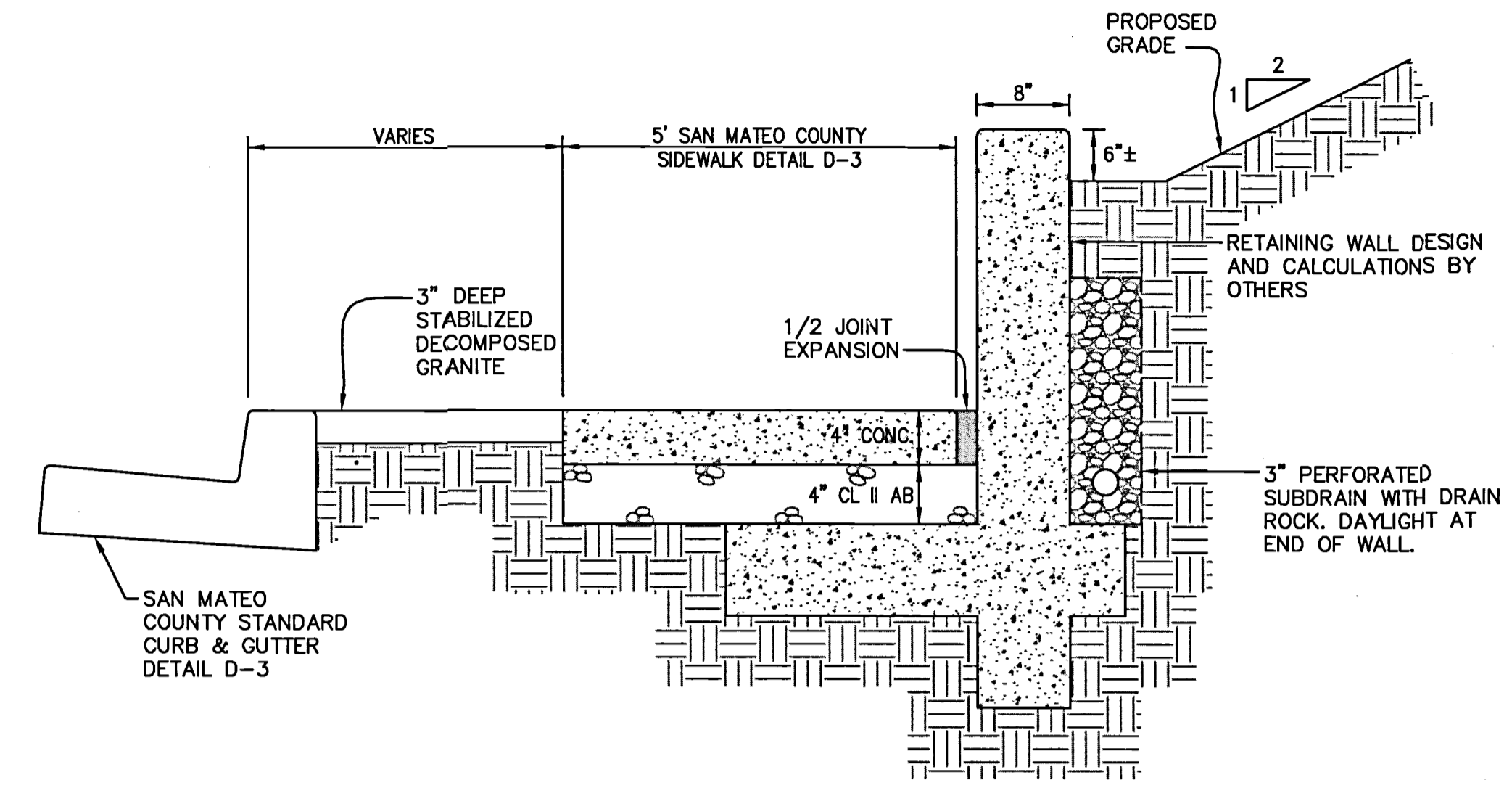


**2**  
**SANITARY SEWER FORCE MAIN CLEANOUT DETAIL**  
 NTS



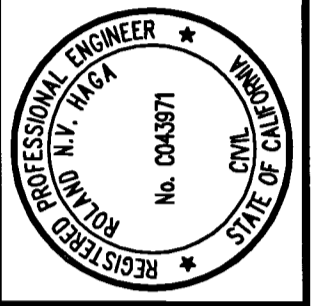
**3**  
**SAWCUT AND AC DEEPLIFT DETAIL**  
 NTS

DRAWING NAME: J:\Eng95\950188\dwg\CD\01-Site for Lots 5 - 11\c6.50-HECDDT.dwg  
 PLOT DATE: 04-28-16 PLOTTED BY: trat



1  
 -  
 SIDEWALK RETAINING WALL  
 NTS

255 SHORELINE DRIVE, SUITE 200  
 REDWOOD CITY, CA 94065  
 PHONE: (650) 482-6300  
 FAX: (650) 482-6399



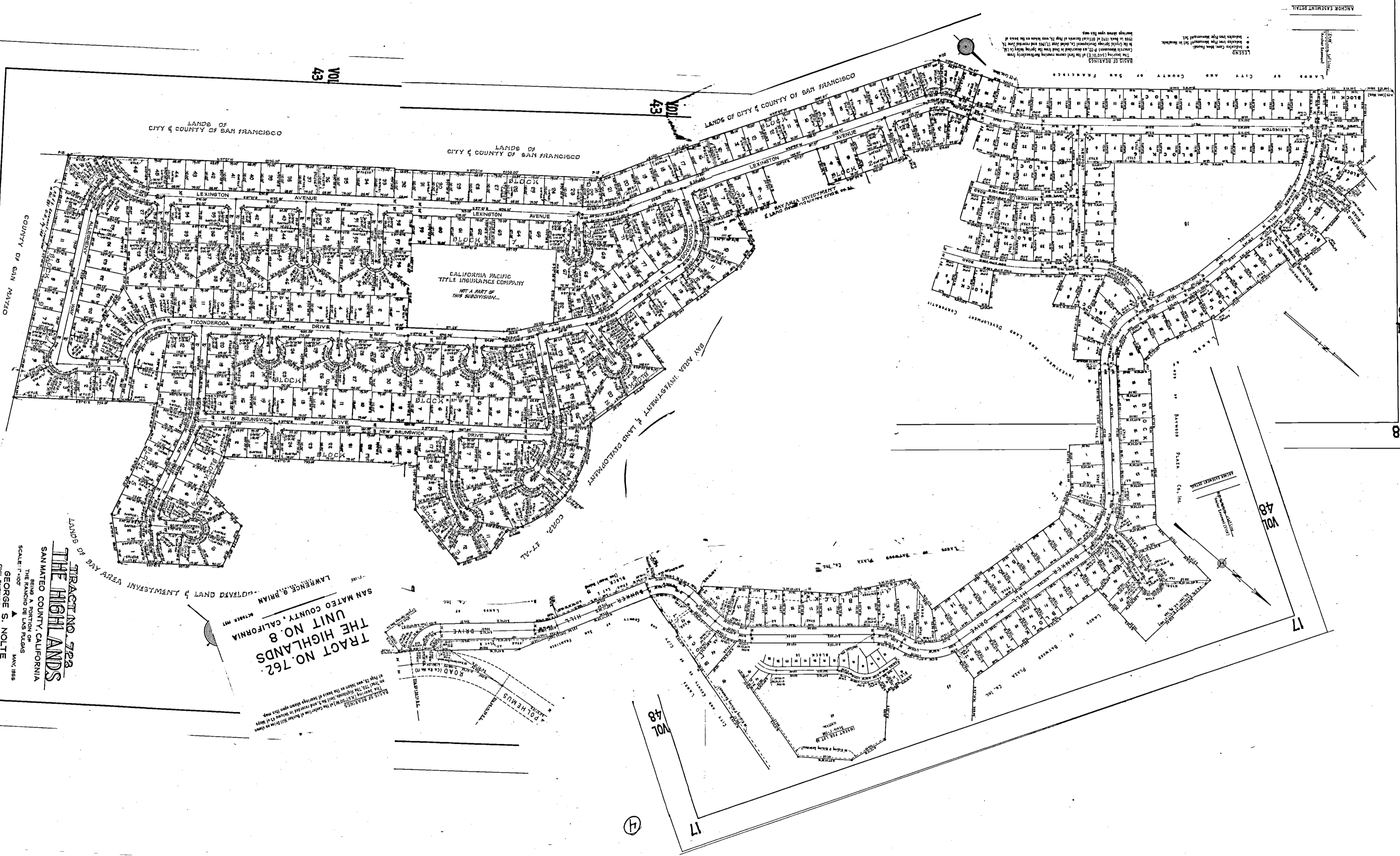
HIGHLAND ESTATES - STREET IMPROVEMENT PLANS  
 TICONDEROGA DRIVE, COBBLEHILL PLACE & COMPENS WAY  
 CONSTRUCTION DETAILS  
 CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

Date	04/27/16	No.	Revisions
Scale	AS SHOWN		
Design	JT		
Drawn	AG		
Approved	RH		
Job No	950188-20		

Sheet Number:  
**C6.50**  
 OF

**LEGEND**

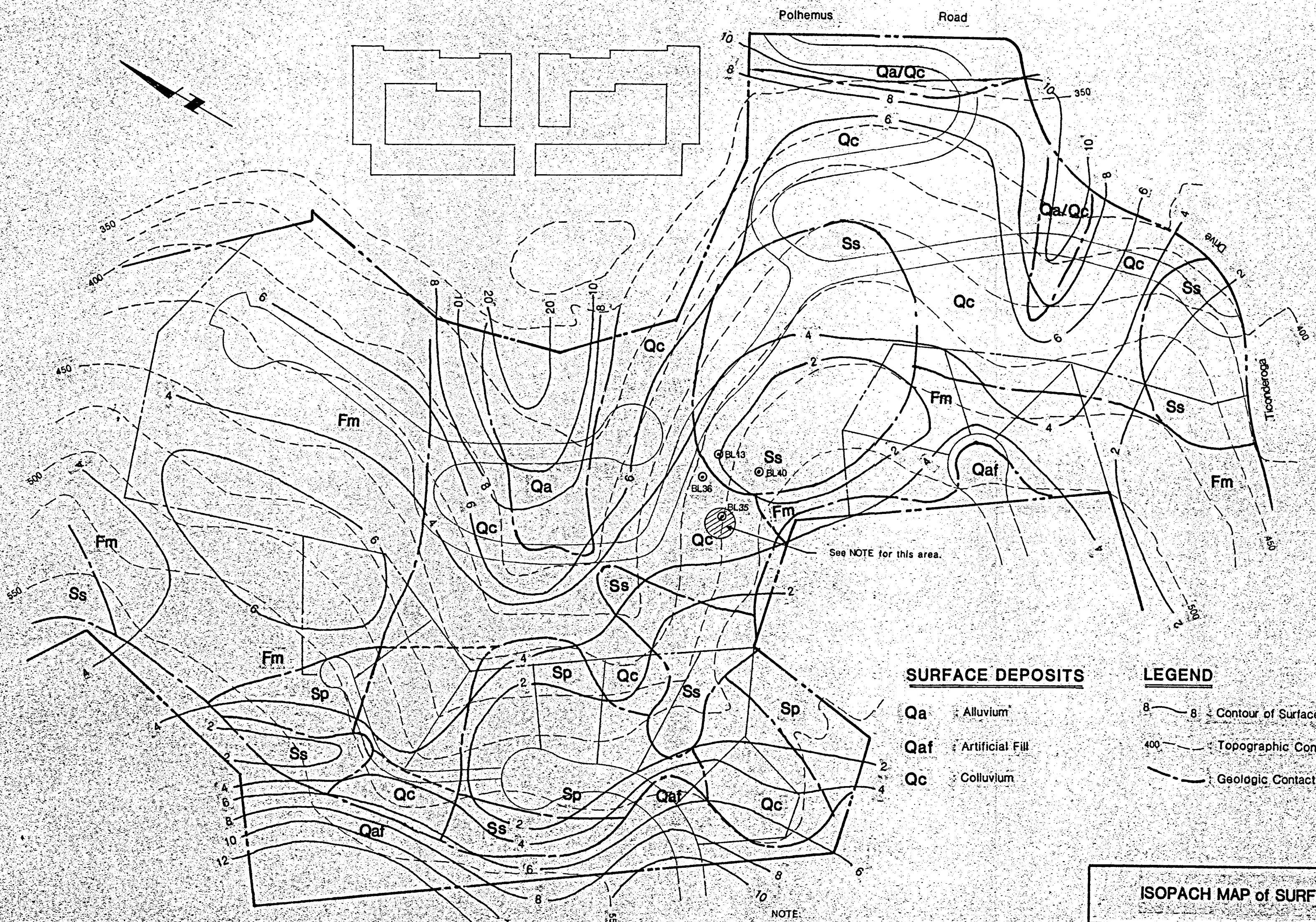
- Indicates the proposed lot lines.
- Indicates the proposed street lines.
- Indicates the proposed easement lines.
- Indicates the proposed utility lines.
- Indicates the proposed drainage lines.
- Indicates the proposed boundary lines.
- Indicates the proposed survey lines.
- Indicates the proposed subdivision lines.
- Indicates the proposed block lines.
- Indicates the proposed tract lines.
- Indicates the proposed unit lines.
- Indicates the proposed parcel lines.
- Indicates the proposed acreage lines.
- Indicates the proposed area lines.
- Indicates the proposed volume lines.
- Indicates the proposed weight lines.
- Indicates the proposed height lines.
- Indicates the proposed length lines.
- Indicates the proposed width lines.
- Indicates the proposed depth lines.
- Indicates the proposed surface lines.
- Indicates the proposed volume lines.
- Indicates the proposed weight lines.
- Indicates the proposed height lines.
- Indicates the proposed length lines.
- Indicates the proposed width lines.
- Indicates the proposed depth lines.
- Indicates the proposed surface lines.



**TRACT NO. 762**  
**THE HIGHLANDS**  
 SAN MATEO COUNTY, CALIFORNIA  
 LAWRENCE G. BRIAN  
 REGISTERED PLATTEER

**TRACT NO. 728**  
**THE HIGHLANDS**  
 SAN MATEO COUNTY, CALIFORNIA  
 BEING A PORTION OF  
 THE RANCHO DE LAS PALMAS  
 GEORGE S. NOLTE  
 CIVIL ENGINEER  
 PALO ALTO  
 SAN MATEO COUNTY, CALIFORNIA

**TRACT NO. 762**  
 THE HIGHLANDS  
 SAN MATEO COUNTY, CALIFORNIA  
 LAWRENCE G. BRIAN  
 REGISTERED PLATTEER



See NOTE for this area.

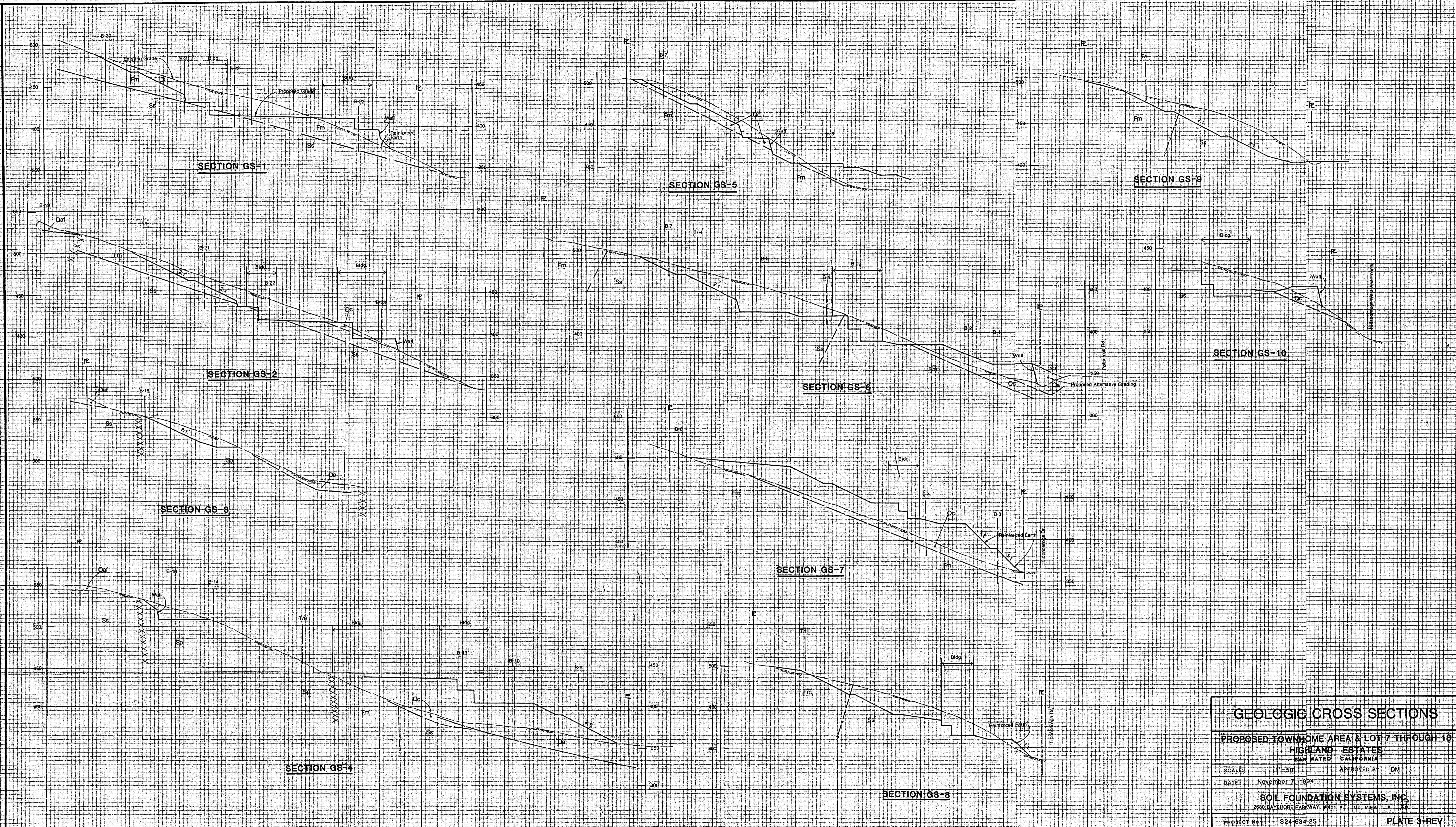
- SURFACE DEPOSITS**
- Qa : Alluvium
  - Qaf : Artificial Fill
  - Qc : Colluvium

- LEGEND**
- 8 - Contour of Surface Deposit Thickness, feet
  - 400 - Topographic Contour, feet
  - - - - Geologic Contact

**NOTE:**  
 Berlogar-Long (1980) logged their trench BL35 as terminated at a depth of 18.5' in talus deposits. Their logs of the nearby trenches show the bedrock depth to be 1.5' in BL40, 2.0' in BL13 and 6.5' in BL36. BL35 may represent a bedrock hollow.

ISOPACH MAP of SURFACE DEPOSITS	
<b>HIGHLAND ESTATES</b> SAN MATEO COUNTY, CALIFORNIA	
Project No.: S24-634-S2	Approved by:
Date: November 7, 1994	Scale: 1" = 100'
SOIL FOUNDATION SYSTEMS, INC. 2680 BAYSHORE PARKWAY, #411 - MT. VIEW - CA	<b>PLATE 4</b>

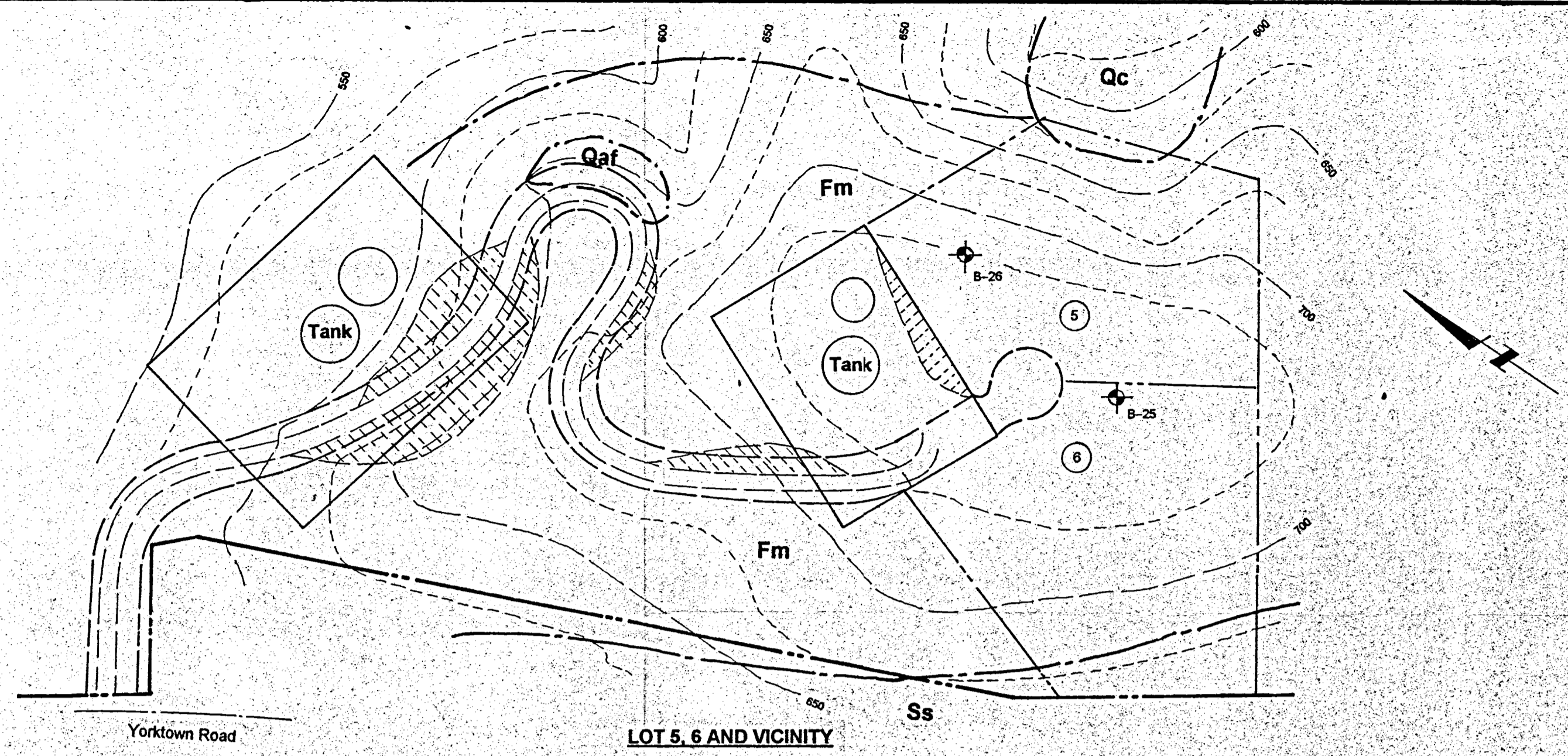
11/7/94  
 Plate 4



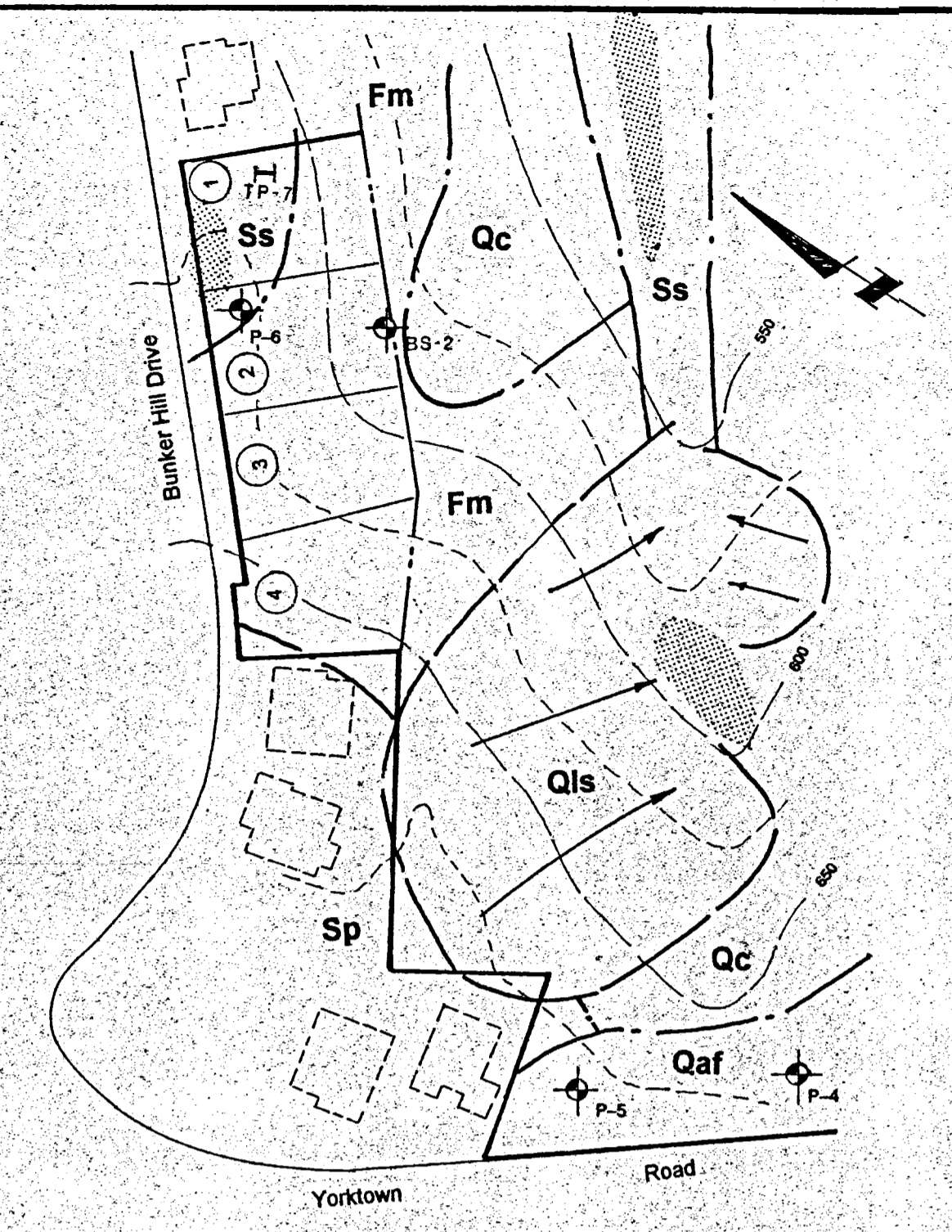
GEOLOGIC CROSS SECTIONS	
PROPOSED TOWNHOME AREA & LOT 7 THROUGH 18 HIGHLAND ESTATES SAN MATEO CALIFORNIA	
SCALE: 1"=50'	APPROVED BY: JOM
DATE: November 7, 1984	
SOIL FOUNDATION SYSTEMS, INC. 2880 BAYSHORE PARKWAY, FALLEN MEADOWS, CALIF. 94024	
PROJECT NO.: S24-634-25	PLATE 3-REV

11/7/84  
 Plate 3

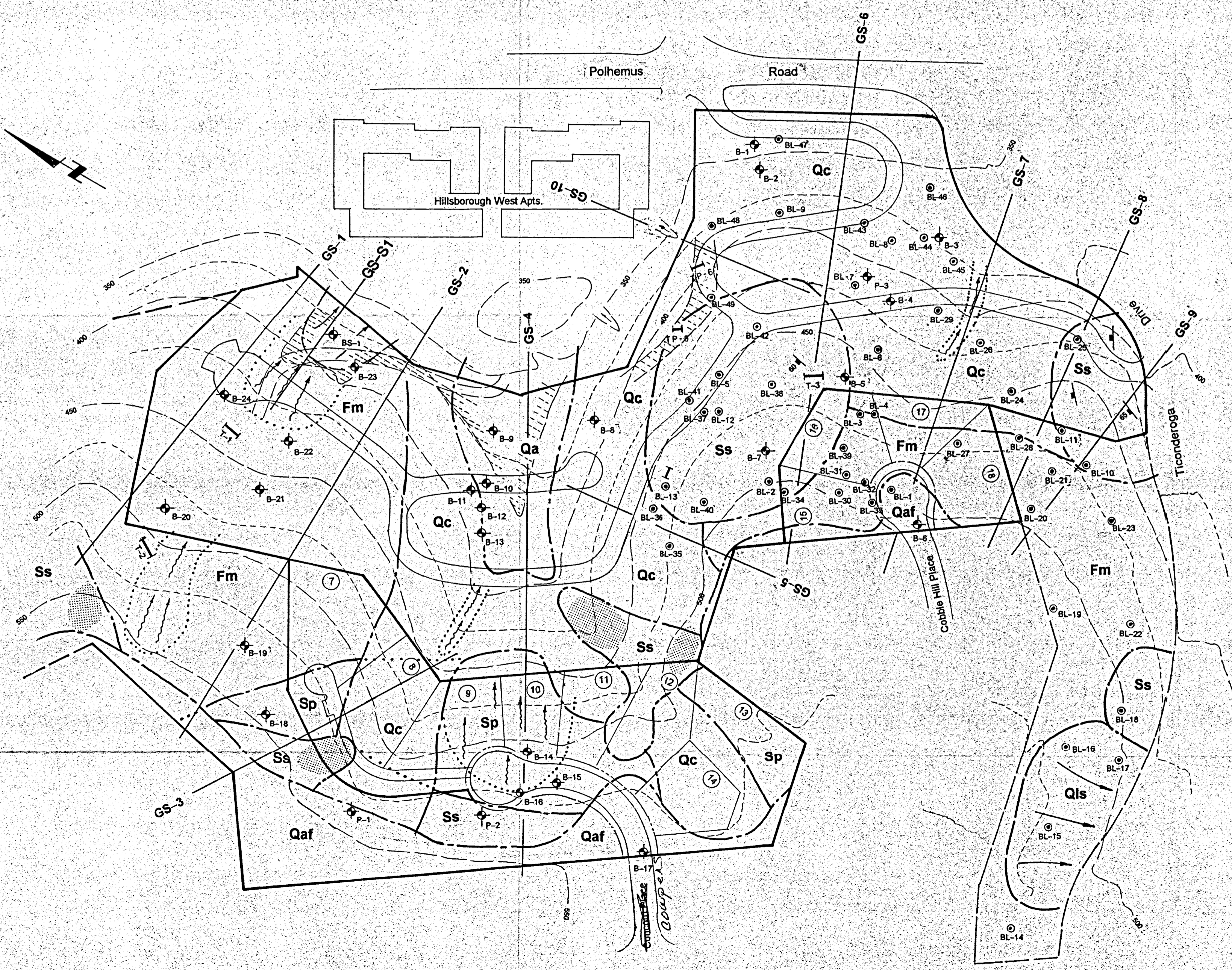




LOT 5, 6 AND VICINITY



LOT 1 THROUGH 4 AND VICINITY



TOWNHOME AREA, LOT 7 THROUGH 18 AND VICINITY

**EXPLANATION**

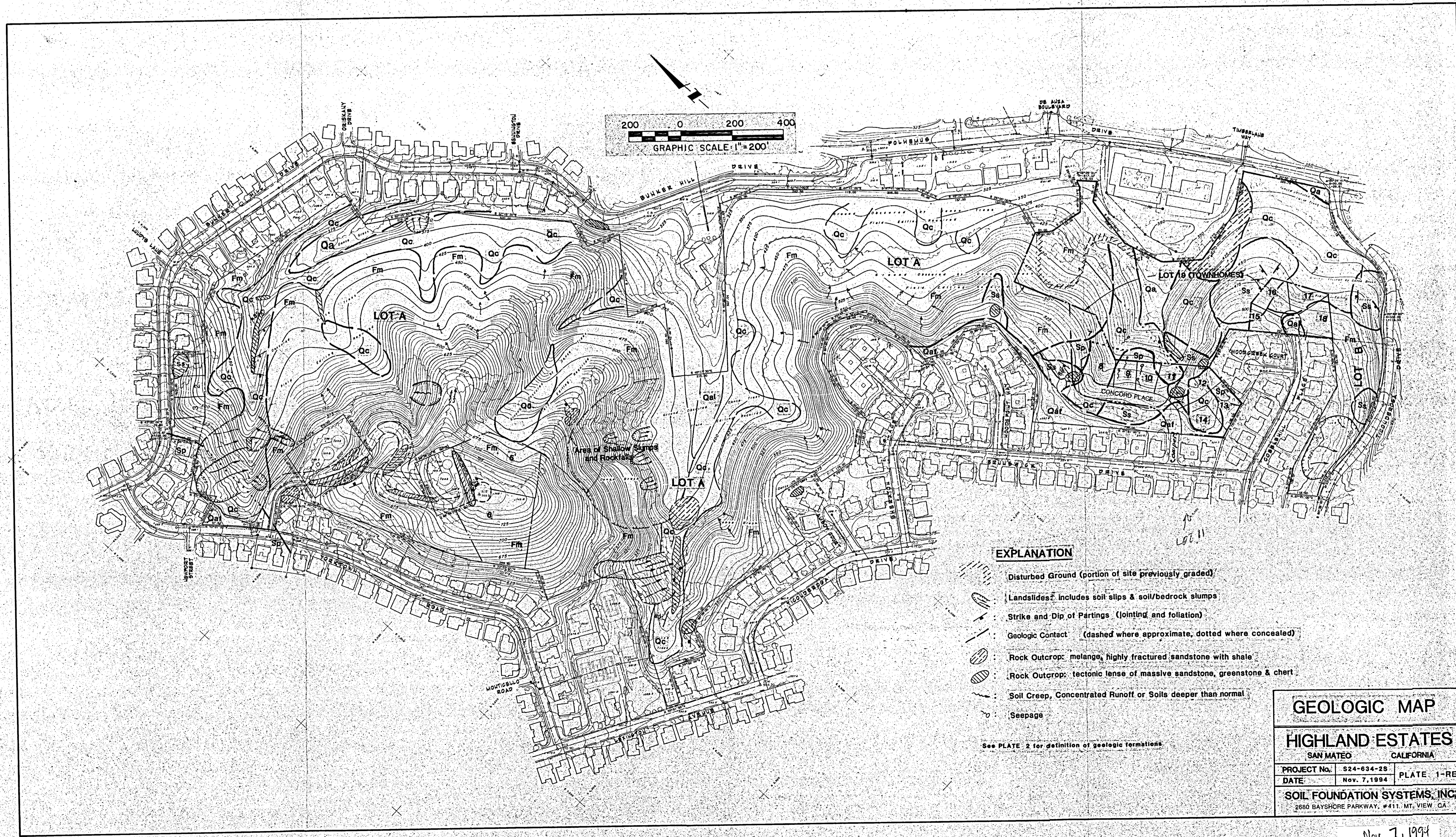
- Qaf :** Artificial Fill. Deposits of rock and soil placed by man upon the natural surfaces. Most fill on the perimeter of the site, above the proposed townhome area, and appears to have been placed for engineering purposes associated with grading for the adjacent neighborhood. Boulders (chiefly graywacke and serpentine) that were too large to incorporate in the fill were dumped on the Highland Estates site.
- Within the interior of the project site, there is evidence of land disturbance that includes placement of sliver fills and construction of rough-graded roads and small pads. This work was done at the time of site grading for the Hillsborough West Apartments project in the early 1960's.
- Qa :** Alluvium. Unconsolidated stream channel deposits, which occur on the floor of the main drainage swale on-site.
- Qc :** Colluvium. Unconsolidated and unsorted soil material and weathered rock fragments accumulated on or at the base of slopes by natural gravitational or slope wash processes. Derived by weathering and decomposition of materials underlying the slopes. Covers most of the slopes, but mapped only where inferred thickness is five feet or greater. These deposits include the "talus" mapped by Berlogar, Long and Associates (1980). Subject to active mass wasting (soil creep and sloughing).
- Qls :** Landslide Deposits.
- Fm :** Franciscan Melange. A tectonic mixture consisting of small to large masses of resistant rock types, principally graywacke sandstone, greenstone, chert and serpentine, embedded in a matrix of pervasively sheared or pulverized rock material. The melange represents the products of one or more immense collisions of two major plates of the earth's crust, which occurred during late Mesozoic time. The various rock types along the subduction zone were sheared, crushed and mixed in such a way that fragments of harder rocks were detached, disoriented and brought into chaotic juxtaposition. It is these resistant masses or fragments that can be seen as outcrops on the Highland Estates site. Two lithological units of large masses within the sheared melange matrix are identified separately by lithological symbols as Ss and Sp. The symbol Fm is used on the geologic map to represent the masses consisting of rock types other than Ss or Sp.
- Ss :** Sandstone. Mainly fine- to medium-grained graywacke sandstone which is very hard and massive. Also includes some masses of a more arkosic sandstone that weathers to a yellowish brown color and appears to have tiny flakes.
- Sp :** Serpentine. Pale green to dark green, fine-grained metamorphic rocks composed almost entirely of magnesium silicate materials, derived by metamorphism and alteration of peridotite and other basic igneous rocks. In this area the serpentine is highly fractured. It occurs as tiny to large lenses and irregularly-shaped, sheet-like masses.

**LEGEND:**

- BS-1 : Test borings performed in 1993 (locations shown are approximate.)
- B-22 : Test borings performed in 1992 (location established by field survey on August 10, 1992.)
- P-5 : Test borings performed in 1990 (locations are approximate.)
- TP-6 : Exploratory trenches performed in 1993 (locations are approximate.)
- T-3 : Exploratory trenches performed in 1992 (location established by field survey on August 10, 1992.)
- : Geologic contact (dashed where approximate; dotted where concealed.)
- : Strike and dip of dominant jointing
- : Bedrock outcrop (hard, tectonic lens within Franciscan melange.)
- : Area affected by previous documented and undocumented grading, consists of cuts/fills.
- : Seepage, deep soil erosion
- : Landslide (inferred depth is less than 15 feet.)
- GS-7 : Line of section for geologic cross-section
- BL-10 : Exploratory trenches performed by Berlogar, Long & Associates in 1980 (locations shown are approximate.)

11/7/94  
Plate 2

<b>SITE GEOLOGIC MAP</b>	
<b>PROPOSED DEVELOPMENT AREAS HIGHLAND ESTATES SAN MATEO COUNTY, CALIFORNIA</b>	
SCALE: 1" = 100'	APPROVED BY: DM
DATE: November 7, 1994	
<b>SOIL FOUNDATION SYSTEMS, INC.</b> 6800 SANDHOGG ROADWAY, SUITE 400, NEWCASTLE, CA 94565	



200 0 200 400  
 GRAPHIC SCALE 1"=200'

**EXPLANATION**

- Disturbed Ground (portion of site previously graded)
- Landslides: includes soil slips & soil/bedrock slumps
- Strike and Dip of Partings (jointing and foliation)
- Geologic Contact (dashed where approximate, dotted where concealed)
- Rock Outcrop: metange, highly fractured sandstone with shale
- Rock Outcrop: tectonic lens of massive sandstone, greenstone & chert
- Soil Creep, Concentrated Runoff or Soils deeper than normal
- Seepage

See PLATE 2 for definition of geologic formations.

**GEOLOGIC MAP**  
**HIGHLAND ESTATES**  
 SAN MATEO CALIFORNIA

PROJECT No.	S24-634-2S	PLATE 1-REV
DATE	Nov. 7, 1994	

**SOIL FOUNDATION SYSTEMS, INC.**  
 2680 BAYSHORE PARKWAY, #411, MT. VIEW, CA

Nov. 7, 1994  
 Geologic Map  
 Plate 1  
 Soil Foundation

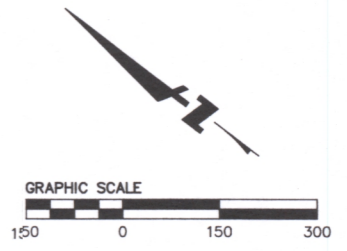
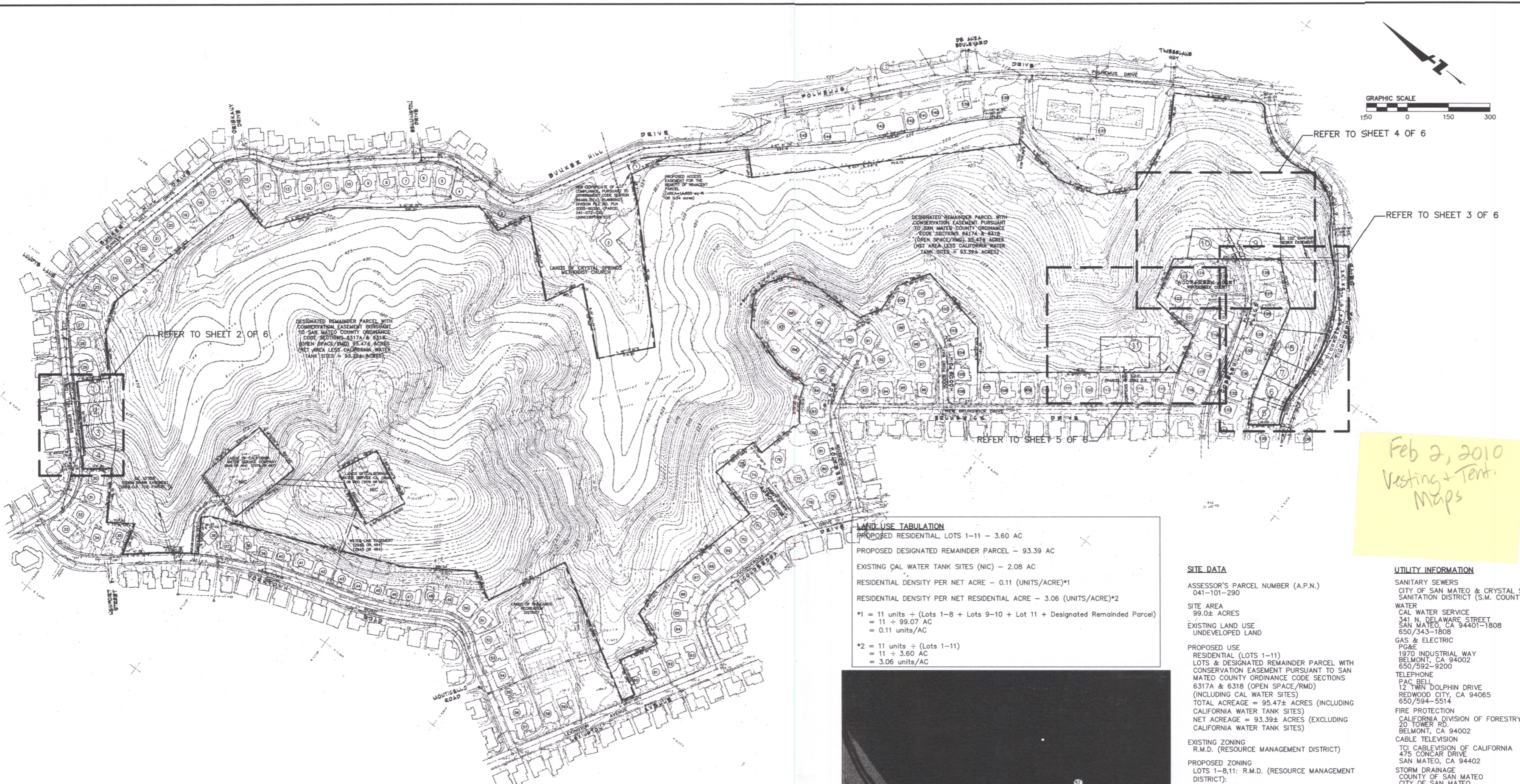
255 SHORELINE DRIVE, SUITE 200  
REDWOOD CITY, CA 94065  
(650) 482-6300 PHONE  
(650) 482-6399 FAX



CALIFORNIA

HIGHLAND ESTATES  
VESTING TENTATIVE MAP  
OVERALL SITE/TITLE SHEET  
SAN MATEO COUNTY

CITY OF SAN MATEO



REFER TO SHEET 4 OF 6

REFER TO SHEET 3 OF 6

REFER TO SHEET 2 OF 6

REFER TO SHEET 5 OF 6

Feb 2, 2010  
Vesting + Tent.  
Maps

**LAND USE TABULATION**

PROPOSED RESIDENTIAL, LOTS 1-11 - 3.60 AC

PROPOSED DESIGNATED REMAINDER PARCEL - 93.39 AC

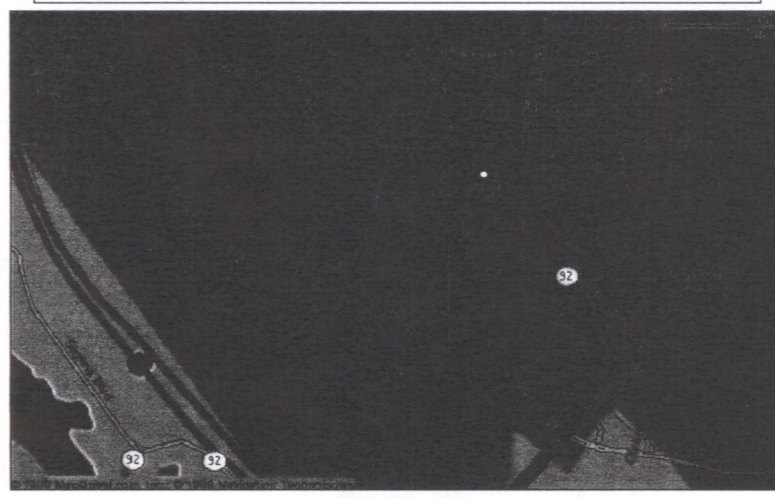
EXISTING CAL WATER TANK SITES (NIC) - 2.08 AC

RESIDENTIAL DENSITY PER NET ACRE - 0.11 (UNITS/ACRE)\*1

RESIDENTIAL DENSITY PER NET RESIDENTIAL ACRE - 3.06 (UNITS/ACRE)\*2

\*1 = 11 units ÷ (Lots 1-8 + Lots 9-10 + Lot 11 + Designated Remainder Parcel)  
= 11 ÷ 99.07 AC  
= 0.11 units/AC

\*2 = 11 units ÷ (Lots 1-11)  
= 11 ÷ 3.60 AC  
= 3.06 units/AC



**VICINITY MAP**  
N.T.S.

TABLE OF REVISED EARTHWORK QUANTITIES  
BASED ON THE VESTING TENTATIVE MAP DATED NOVEMBER 10, 2009

AREA	CUT (CY)	FILL (CY)	TOTAL (CY)
LOT 1	300	0	300
LOT 2	0	600	600
LOT 3	0	1300	1300
LOT 4	200	300	500
LOTS 1-4 SUBTOTAL CUT (CY)	500	0	500
LOTS 1-4 SUBTOTAL FILL (CY)	0	2,900	2,900
LOT 5	1100	0	1100
LOT 6	1400	0	1400
LOT 7	1400	200	1600
LOT 8	800	300	1100
LOTS 5-8 SUBTOTAL CUT (CY)	4700	0	4700
LOTS 5-8 SUBTOTAL FILL (CY)	0	500	500
LOT 9	0	2600	2600
LOT 10	0	300	300
LOTS 9-10 SUBTOTAL CUT (CY)	0	2900	2900
LOTS 9-10 SUBTOTAL FILL (CY)	0	2,900	2,900
LOT 11	1200	1300	2500
TOTALS ALL LOTS	6,700	7,400	14,100
LOTS 1-11 SUBTOTAL CUT (CY)	6,700	0	6,700
LOTS 1-11 SUBTOTAL FILL (CY)	0	6,700	6,700
NET SURFACE (CY)	700	700	0
TOTALS	6,700	7,400	14,100
IMPORT	700	0	700

**SITE DATA**

ASSESSOR'S PARCEL NUMBER (A.P.N.)  
041-101-290

SITE AREA  
99.0± ACRES

EXISTING LAND USE  
UNDEVELOPED LAND

PROPOSED USE  
RESIDENTIAL (LOTS 1-11)  
LOTS & DESIGNATED REMAINDER PARCEL WITH  
CONSERVATION EASEMENT PURSUANT TO SAN  
MATEO COUNTY ORDINANCE CODE SECTIONS  
6317A & 6318 (OPEN SPACE/RMD)  
(INCLUDING CAL WATER SITES)  
TOTAL ACREAGE = 95.47± ACRES (INCLUDING  
CALIFORNIA WATER TANK SITES)  
NET ACREAGE = 93.39± ACRES (EXCLUDING  
CALIFORNIA WATER TANK SITES)

EXISTING ZONING  
R.M.D. (RESOURCE MANAGEMENT DISTRICT)

PROPOSED ZONING  
LOTS 1-8,11: R.M.D. (RESOURCE MANAGEMENT  
DISTRICT)  
LOTS 9,10: R1, S-9  
REMAINDER PARCEL: TO REMAIN RMD & OPEN SPACE

**OWNERS**

TICOMDEROGA PARTNERS,  
A CALIFORNIA LIMITED LIABILITY CORPORATION

C/O THE CHAMBERLAIN GROUP  
655 Skyway, Suite 230  
San Carlos CA 94070  
ATTN: Jack Chamberlain

**DEVELOPER**

THE CHAMBERLAIN GROUP  
655 SKY WAY, SUITE 230  
SAN CARLOS, CA 94070  
(650) 595-5592  
ATTN: JACK CHAMBERLAIN

**LEGAL DESCRIPTION**

BEING A PORTION OF THE LANDS DESCRIBED IN THAT  
CERTAIN QUITCLAIM DEED TO MARY MARGARET  
O'HALLORAN, TRUSTEE UNDER THE MARY MARGARET  
O'HALLORAN 1990 TRUST WHICH DEED WAS RECORDED  
NOVEMBER 6, 1990 AT SERIES NO. 9014679 IN THE  
OFFICIAL RECORDS OF SAN MATEO COUNTY, STATE OF  
CALIFORNIA. FOR ADDITIONAL INFORMATION REFER TO  
TITLE REPORTS.

**ENGINEER'S STATEMENT**

THIS VESTING TENTATIVE MAP HAS BEEN PREPARED BY ME OR UNDER  
MY DIRECTION IN ACCORDANCE WITH STANDARD ENGINEERING PRACTICE.

*Roland N.V. Haga* 02/02/2010  
ROLAND N.V. HAGA DATE  
R.O.E. NO. 43971 EXP. 06/30/11  
BKF ENGINEERS



**LANDOWNERS ADJACENT TO PROJECT**

- |  |   |  |
|--|---|--|
| 1. BARTHOLMEY ASSOCIATES                       | 31. TONG, ROBERT / WONG, SUSAN                  | 101. FULLER, S & ANET                          |
| 2. CRYSTAL SPRINGS UNITED METH CH              | 32. JARVIS, KURT & KATHLEEN                     | 102. MERRICKS, PAMELA                          |
| 3. CRYSTAL SPRINGS UNITED METH CH              | 33. OEN, VINCENT & BETTY K                      | 103. FITZGERALD, SHIRLEY J                     |
| 4. JUNG, HENRY & JANE                          | 34. CHANDRASEKHARAN SURESH / SURESH, SHREELATA  | 104. BOOKSPUR, ANNELO & C.A.                   |
| 5. DE BARRADA, JOHN / CAMBER, CARMEL ANN       | 35. LEONARDO, FRED C. & JOAN M                  | 105. SANDOZ, PETER C. / LANDOWSKI, ELIZABETH A |
| 6. SOLOMON, DANIEL A                           | 36. HAMMED, DOUGLAS D & GAIL SUSAN              | 106. CHAN, WALLACE & ROSALIND                  |
| 7. FAGUN, RAYMOND & NATALYA                    | 37. FISHER, DONALD P & GINA M                   | 107. BEER, ROLF R & FLORENCE                   |
| 8. KOWAL, ANTHONY & JUDY TRIST                 | 38. LEVIN, JOHN A & JONES H                     | 108. PAGES, MARCO / PAGES, FAMILY TRUST        |
| 9. HEWITT, SANDRA L & PAUL H                   | 39. BUE, LAUREN E & RICKI D                     | 109. MAC DONALD, TEDDY & MARILYN V             |
| 10. BRADY, DELORES A                           | 40. GUTIERREZ, BOB J / MATTERS, PEARLY          | 110. HASHIZUME, LEONARD K / OSHIMA, SAI T      |
| 11. SICALLO WILLIAM D & PAULA L                | 41. GREENE, DOROTHY R                           | 111. MERRICKS, PAMELA                          |
| 12. CRYSTAL SPRINGS UNITED                     | 42. DOWNALL, MARY M & SARA J                    | 112. NAFER, SAM C & KAREN H                    |
| 13. CHILDS, ROBERT D & JORNA A                 | 43. BULLOCK, GEORGE W / FRISBERG, ANNE K        | 113. FINE, THOMAS S / TAY CHRISTINE            |
| 14. MIZUHARA, ALBERT & SACHIO                  | 44. LIEBES, ENES C                              | 114. CHEUNG, DANIEL H                          |
| 15. HOLAK, JAMES A & BETSY D                   | 45. WU, CHRISTINA                               | 115. NISHIHARA, MASAKI MIKE & RUTH WOOD        |
| 16. BURCH, CLYDE C JR & DOLLA                  | 46. FISHER, PAUL & DONNA E                      | 116. WHELAN, ROBERT / WHELAN, JEANETTE E       |
| 17. GRIEVEL, BERNARD J                         | 47. BELLOK, LAUREN E & FLORENCE D               | 117. WONG, STEPHANIE / WONG, CHECHELL          |
| 18. MORRISON, TRACY F                          | 48. FITZ MARY CARWART / CARWART, CATHERINE A    | 118. WOODS, STEVEN H & NANCY J                 |
| 19. MULLANE, CORINNE M                         | 49. PAD, KACHING / SHIN, YINBING                | 119. GOODMAN, JAMES J / CHAN, JENNIFER         |
| 20. HGA & SHINE, MICHAEL TRUST                 | 50. SWANER, ELAINE K                            | 120. MARTIN, FRED S & THERY F                  |
| 21. TSANG, PONG H & JOANNE                     | 51. CHESTER, S & JUNG, SONG TRUST               | 121. BROWN, DAVID C                            |
| 22. ZAHH, FARHAD / TAN, JENNIFER DEE           | 52. SPENCER, STEVEN A                           | 122. EMERALD, PAMELA J                         |
| 23. TOM, CURTIS P / MANGANG, CHRISTOPHER D     | 53. STANTON, GARY R / HAYES, ORLA C             | 123. LOWE, RANDALL G & BARBARA C               |
| 24. LAWTHOR, PATRICK & LAURIE E                | 54. JOHNSON, FRANCIS P                          | 124. BARTLE, SARAHAN JENNIFER                  |
| 25. KEVIN & CHO S MOGOWAN TRUST                | 55. ALDERMAN, ELMOR R                           | 125. ALDERMAN, ELMOR R                         |
| 26. BELL, ALLAN / GRAVELAND, MARLENE           | 56. KARC, JOSEPH A & LUCY                       | 126. HUNTER, JOHANNES / SEVILLA, MARIE         |
| 27. COYNE, LEONORE J                           | 57. ROBERTSON TRUST                             | 127. HULLER, JONAS B / STOKER, JENNY R         |
| 28. TROCHEN, CARL C                            | 58. HULLER, JONAS B / STOKER, JENNY R           | 128. ADONIS, A / CRISP, P & ELISABETH P        |
| 29. SCHAEFFEL, LESLIE R / BOZZINI, GARY J      | 59. BELL, KATHLEEN L / SMEDLEY, MARVELYN M      | 129. LANGE, RONALD M & YAN D                   |
| 30. TSE, LOUIE K / LEUNG, FLORENCE S           | 60. SHRYAN, MARK L & DALE Y                     | 130. HAYLING, ROSEMARY TRUST                   |
| 31. KORN, DONALD C / JOE H J                   | 61. HANCOCK, ANTONIO J & ANTONIO M              | 131. HANCOCK, ANTONIO J & ANTONIO M            |
| 32. MAU, KENNETH F & EILEEN Y                  | 62. PANDS, CHARLES D JR & SUSAN E               | 132. SHIN, DON G & WOO, SOUNG                  |
| 33. MAH SAM GIR, WING & SAM & DEANNA           | 63. DOMESTIC, MORTAZA                           | 133. TOMLIN, FREDA MARIE                       |
| 34. DOTTER, JEANETTE W                         | 64. HARA, YUKIO                                 | 134. HAZEN, TIMOTHY A & PATRINA                |
| 35. ROMAN, MATT S                              | 65. WORTON, JONATHAN A / ADLERSTEIN, BERNHARD D | 135. HAZEN, ROBERT / FRIEDLAND, LYDIE          |
| 36. WOOTLI, MARK H & GAIL M                    | 66. HORTON, JONATHAN C & LINDA M                | 136. PACHETTI, THEODORE A & MARGERY            |
| 37. WALLACE, DONALD L & MARY E                 | 67. DEVELING, CORNELIA                          | 137. HULLERBROUGH WEST ASSOCIATES              |
| 38. PRESTON, PAUL / OSBORNE & HARRIS BUE       | 68. CARLEN, ROBERT E / SHANLEY, LISA            | 138. HULLERBROUGH WEST ASSOCIATES              |
| 39. WONG, ROSALIND YOUNG                       | 69. MAC CUSKER, JAMES T & HEERUN A              | 139. MORSEHEAD, ELAINE B                       |
| 40. ROSEMAN, MAHAZ & JAVAD                     | 70. NABUCCI, JOANN L                            | 140. HAMPTON, GREGORY J                        |
| 41. KAPUR, VIJAY & GITANJALI                   | 71. EVANS, KENNETH R                            | 141. HAMPTON, GREGORY J                        |
| 42. SANDSTROM, DONALD C                        | 72. MINER, MICHAEL / BUCHHEIT, LISA             | 142. O'HALLORAN, MARGARET J                    |
| 43. GOROUR, TIMOTHY P / AMBRICO, G             | 73. CARSON, BONNIE L & JEFF R                   | 143. BARTHOLMEY ASSOCIATES                     |
| 44. GEORGE, ELIAS A AMBA                       | 74. GOBLE, JOHN L & JOHN H                      | 144. WERTONGER, TONY PHILIP                    |
| 45. MAI, MARIONA & ROBT L                      | 75. MC CONRAD, ROBERT R & J H                   | 145. MORSEHEAD, ELAINE BRANCO                  |
| 46. CHAMFORD, ZELLE J / BELL CHAMFORD, CURIE D | 76. VICENTE, EDUARDO H                          |  |
| 47. HWANG, HERBERT V / THOMP, SHARON           | 77. DONATI, HARRIET LAUREL                      |  |
| 48. CROSBY, ROBERT K & MARTHA ANN              | 78. FORSTER, EDUARDO E & SPENDRA R              |  |
| 49. GALLAGHER, JAMES C                         | 79. REEA, KADU                                  |  |
| 50. SHIELDS, GREGORY D & M                     | 80. MILLER, LYNDAL                              |  |

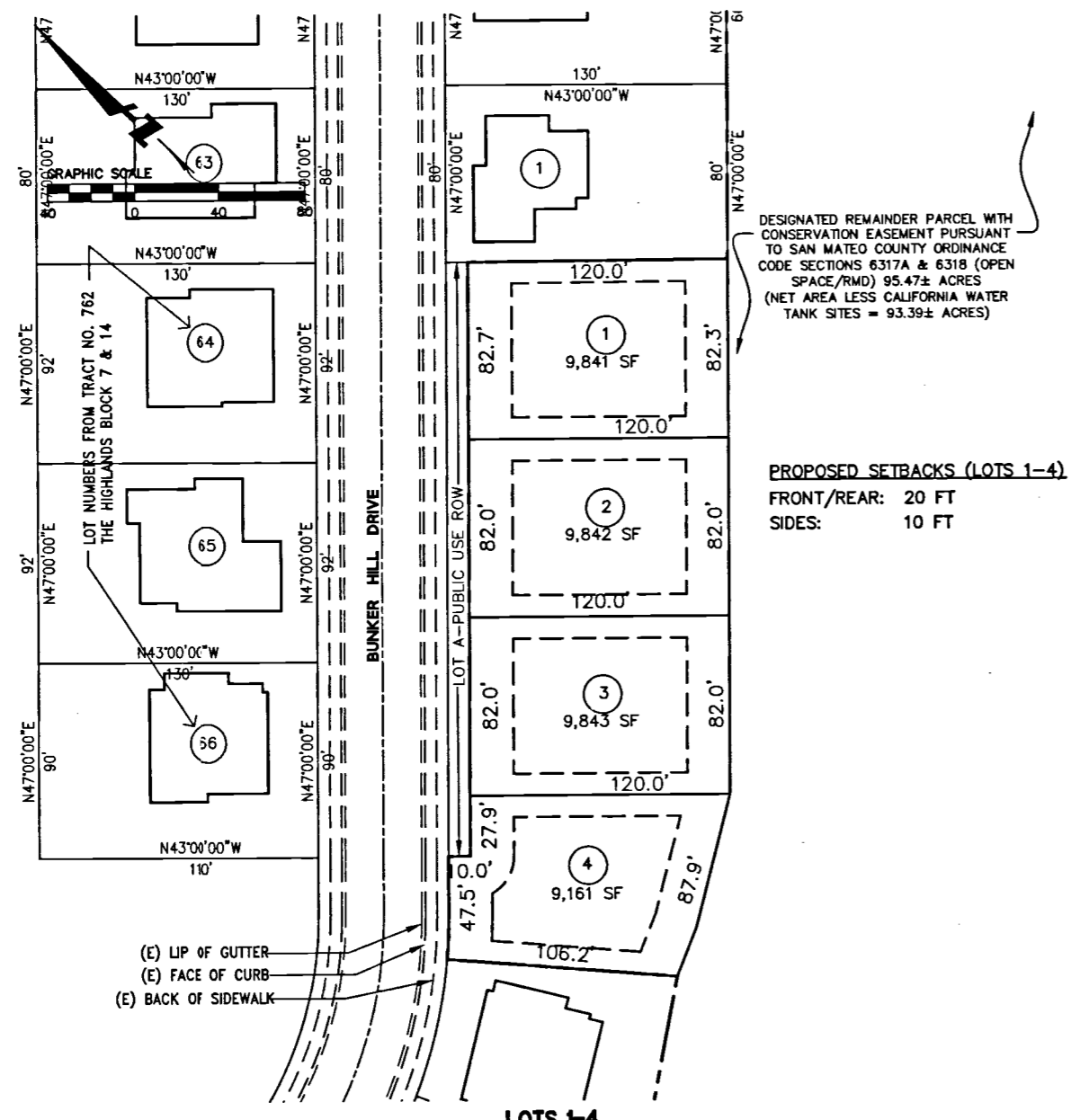
- LEGEND**
- EXISTING**
- EXISTING PROPERTY LINE BOUNDARY
  - EXISTING SANITARY SEWER W/ MANHOLE
  - EXISTING STORM DRAIN DRAIN W/ MANHOLE
  - EXISTING WATER LINE
  - EXISTING CATCH BASIN
  - EXISTING GAS LINE
  - ALL UTILITIES ARE APPROXIMATELY LOCATED

- PROPOSED**
- PROPOSED PROPERTY LINE BOUNDARY
  - SANITARY SEWER W/ MANHOLE
  - STORM DRAIN W/ MANHOLE & CATCH BASIN
  - WATER LINE W/ FIRE HYDRANT
  - GAS MAIN
  - UNDERGROUND ELECTRIC, TELEPHONE, & C.A.T.V.
  - STORM DRAIN EASEMENT
  - SANITARY SEWER EASEMENT
  - EXISTING TREE & ELEVATION (TREE NO. REFERS TO TREE IDENTIFICATION TAG PER TREE REPORT PREPARED BY HABITAT RESTORATION GROUP)
  - INDICATES TREE TO BE REMOVED
  - LEATHERWOOD BUSH
  - EUCALYPTUS TREE
  - POINT OF CONNECTION
  - FIRE DEFENSE ZONE
  - BIO-RETENTION/TREATMENT PLANTER PROPOSED FOR TREATMENT OF ROOF AND DRIVEWAY STORM WATER RUNOFF.

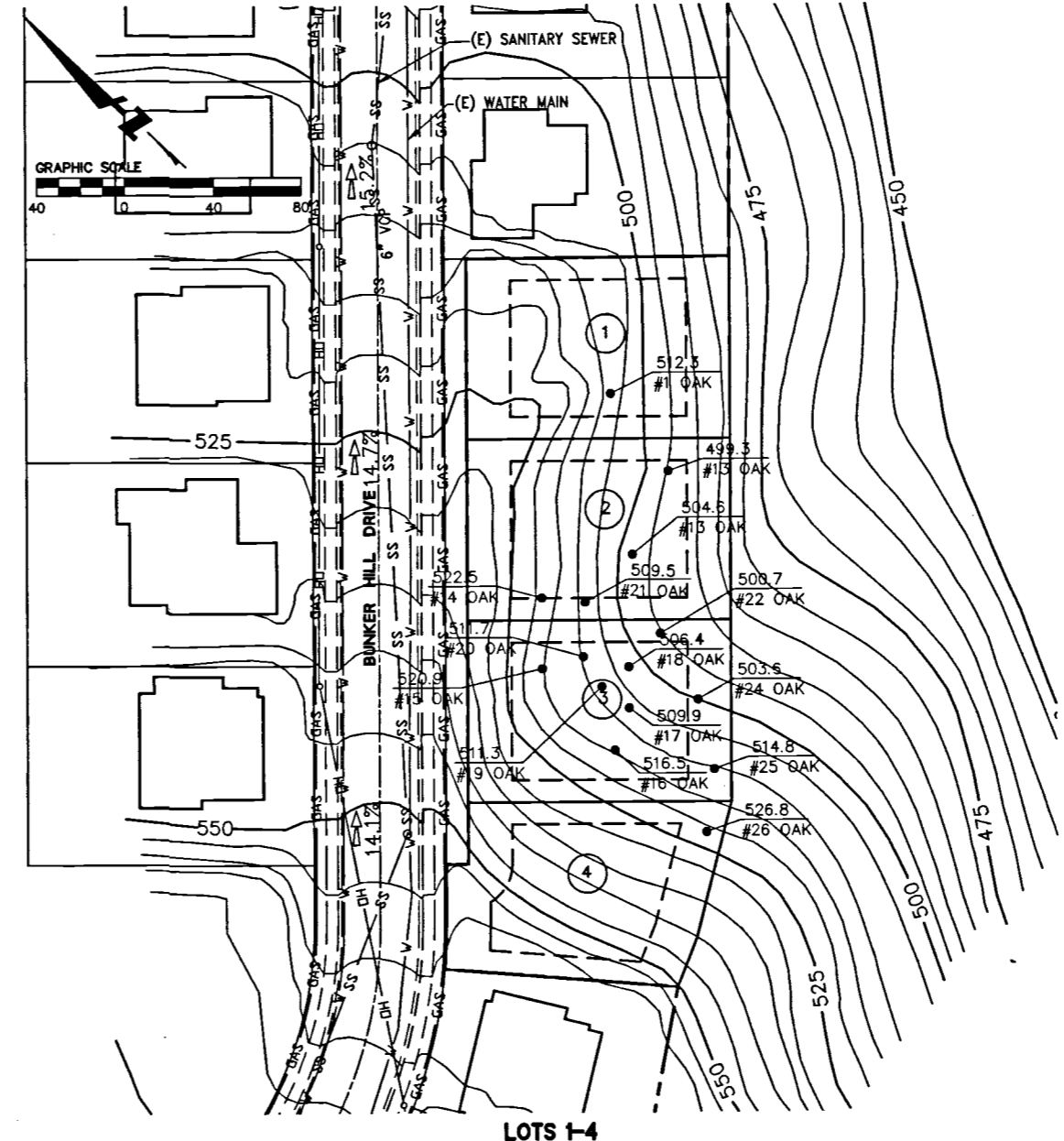
VERIFY SCALES: BAR SHOWN IS ONE INCH ON ORIGINAL DRAWING.  
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FEBRUARY 2, 2010

Revisions	No.	Date	By	Check	Job No.
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	2				
	3				
	4				
	5				
	6				

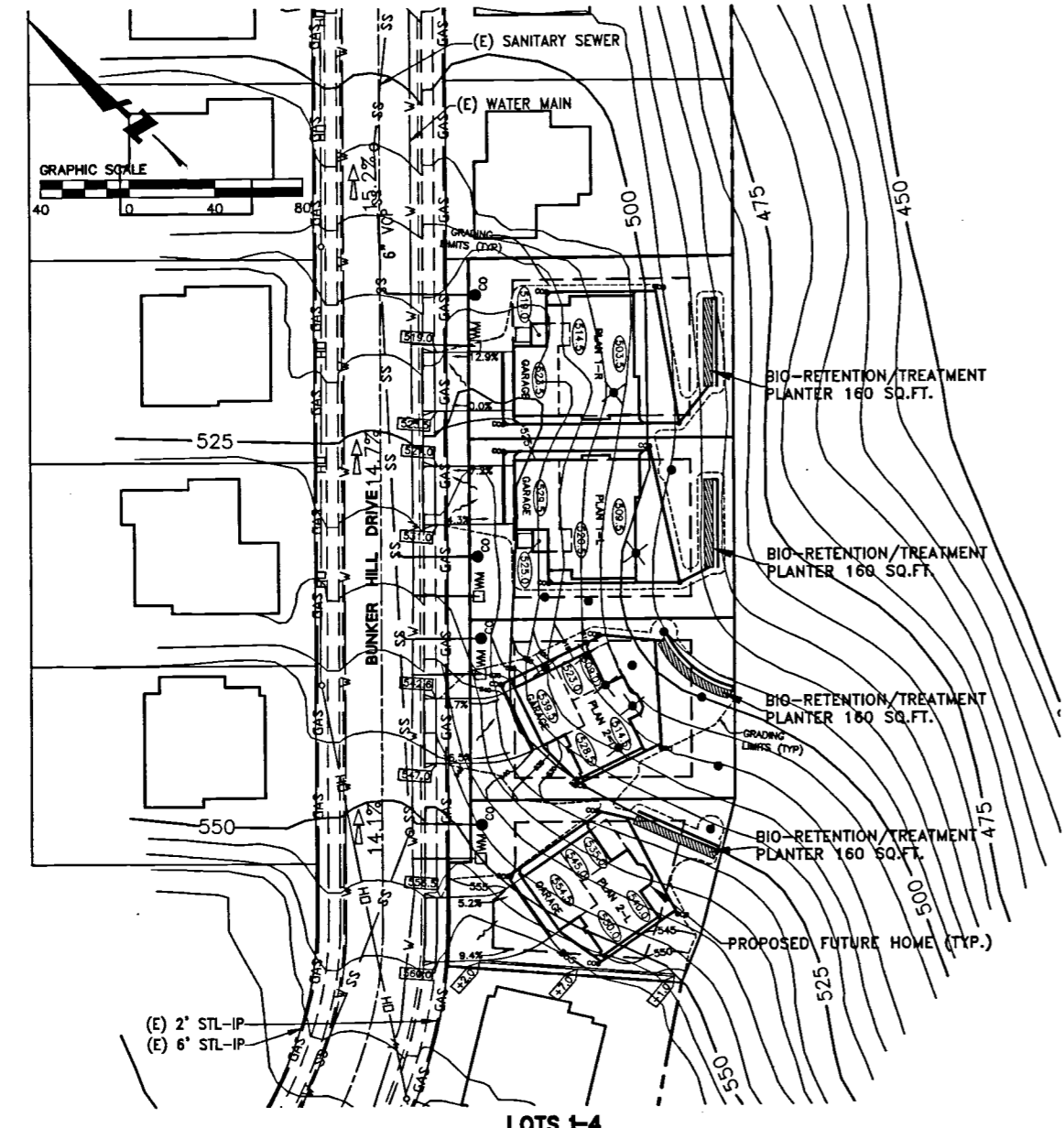


**LOTS 1-4  
PROPOSED LOTTING PLAN**  
SCALE: 1"=40'

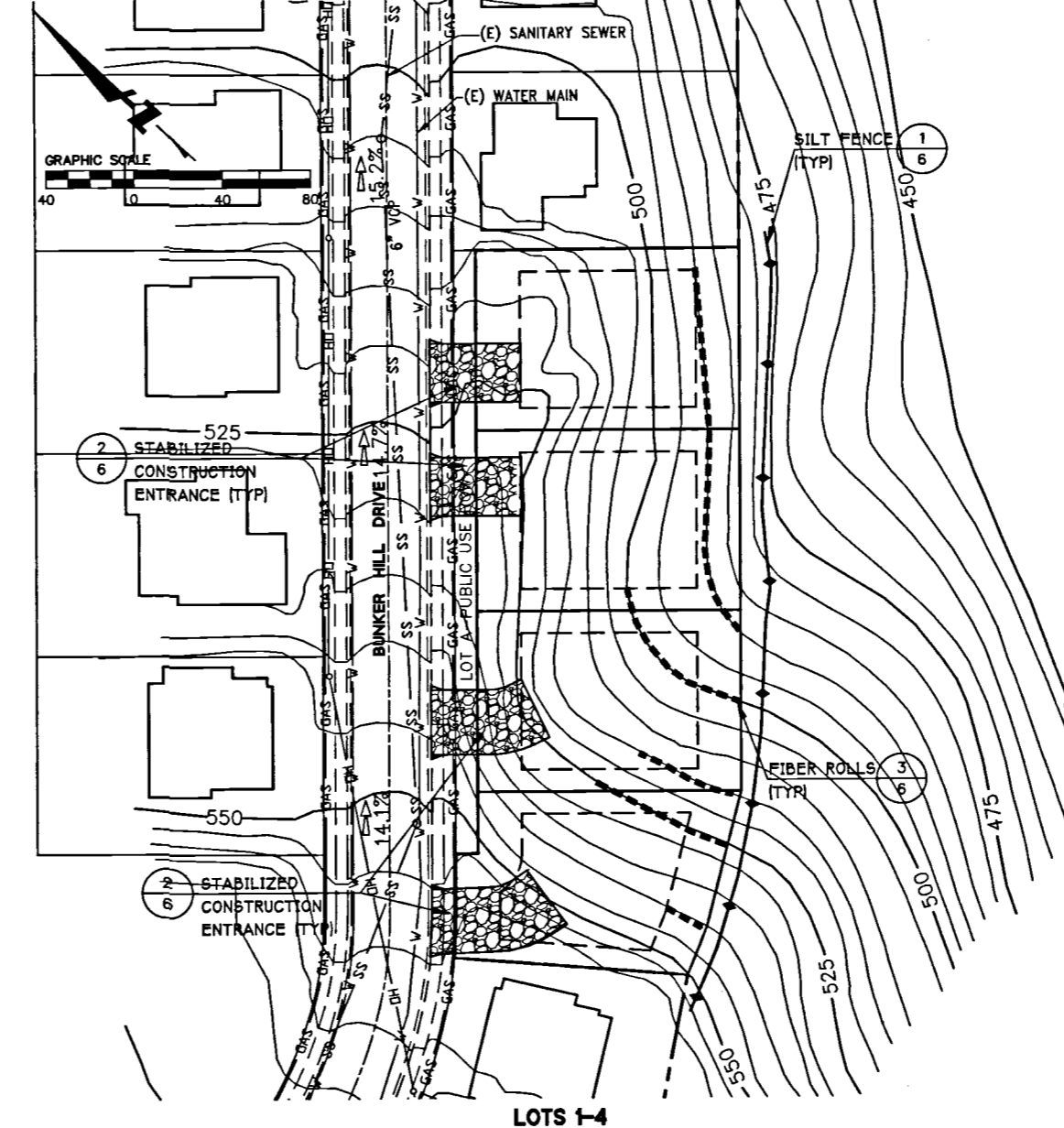


**LEGEND**

<b>EXISTING</b>	---	EXISTING PROPERTY LINE BOUNDARY
—○—	EXISTING SANITARY SEWER W/ MANHOLE	
—○—	EXISTING STORM DRAIN DRAIN W/ MANHOLE	
—○—	EXISTING WATERLINE	
—○—	EXISTING CATCH BASIN	
—○—	EXISTING GAS LINE	
---	ALL UTILITIES ARE APPROXIMATELY LOCATED	
<b>PROPOSED</b>	---	PROPOSED PROPERTY LINE BOUNDARY
—○—	SANITARY SEWER W/ MANHOLE	
—○—	STORM DRAIN W/ MANHOLE & CATCH BASIN	
—○—	WATER LINE W/ FIRE HYDRANT	
—○—	GAS MAIN	
---	UNDERGROUND ELECTRIC, TELEPHONE, & C.A.T.V.	
---	STORM DRAIN EASEMENT	
---	SANITARY SEWER EASEMENT	
○	EXISTING TREE & ELEVATION (TREE NO. REFERS TO TREE IDENTIFICATION TAG PER TREE REPORT PREPARED BY HABITAT RESTORATION GROUP)	
×	INDICATES TREE TO BE REMOVED	
L.W.	LEATHERWOOD BUSH	
EUC.	EUCALYPTUS TREE	
P.O.C.	POINT OF CONNECTION	
FDZ	FIRE DEFENSE ZONE	
▨	BIO-RETENTION/TREATMENT PLANTER, PROPOSED FOR TREATMENT OF ROOF AND DRIVEWAY STORM WATER RUNOFF.	



**LOTS 1-4  
PRELIMINARY GRADING & UTILITY PLAN**  
SCALE: 1"=40'



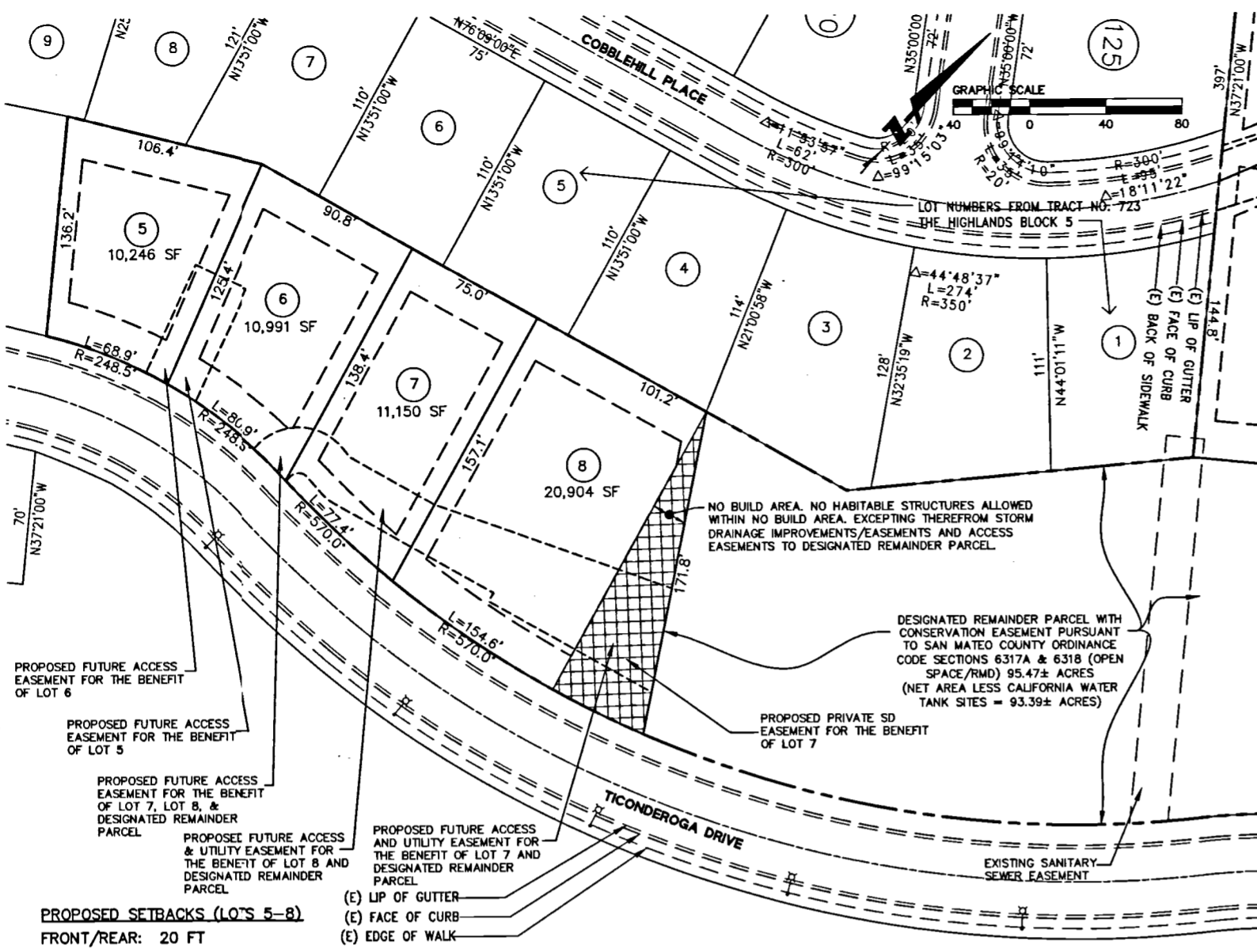
**LOTS 1-4  
PRELIMINARY EROSION CONTROL PLAN**  
SCALE: 1"=40'

DRAWING NAME: 1:\N\PROJECTS\HIGHLANDS\HIGHLANDS.TM.PLOT DATE: 02-22-10 PLOTTED BY: b18

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FEBRUARY 2, 2010

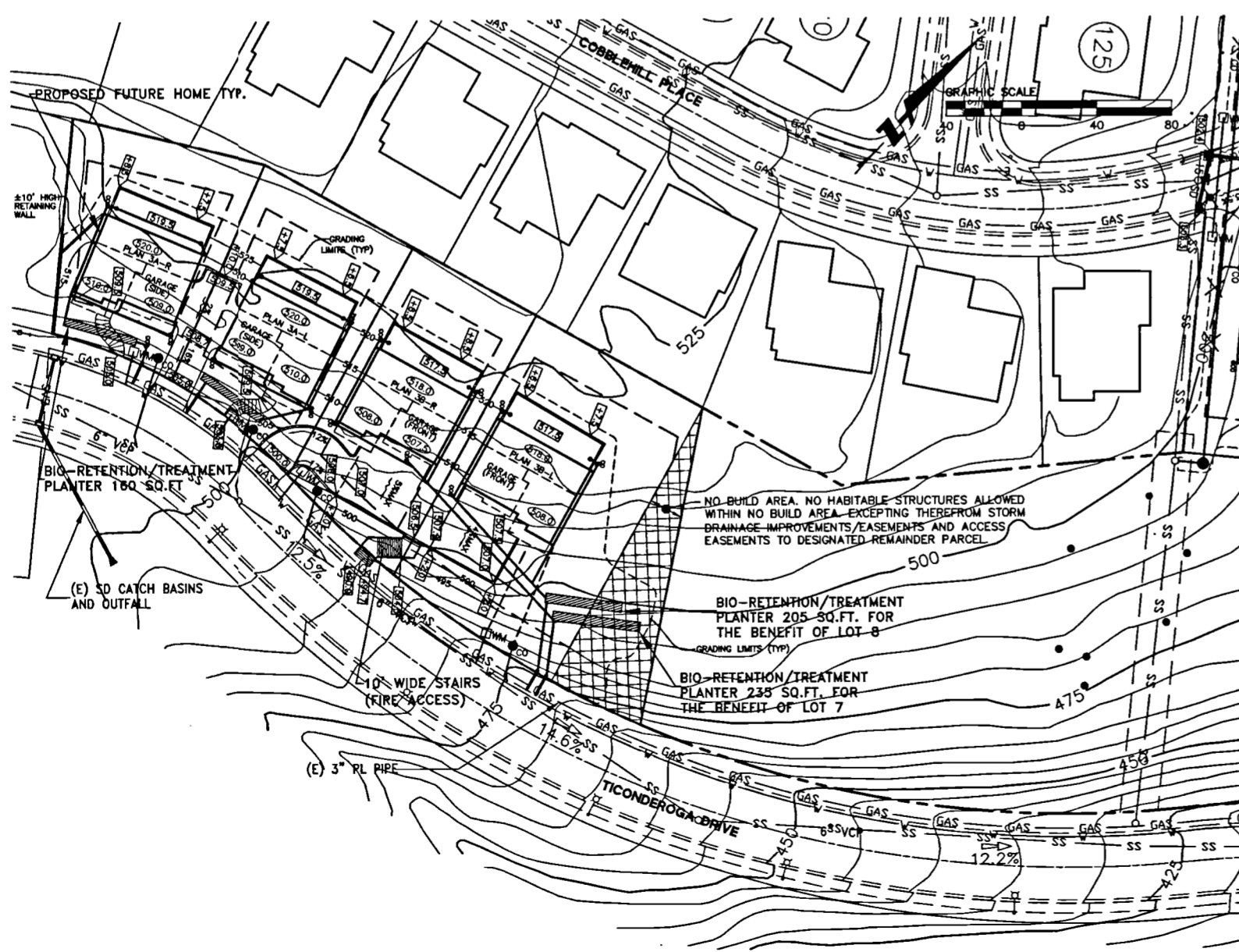
Revisions	No.	Date	By	Check



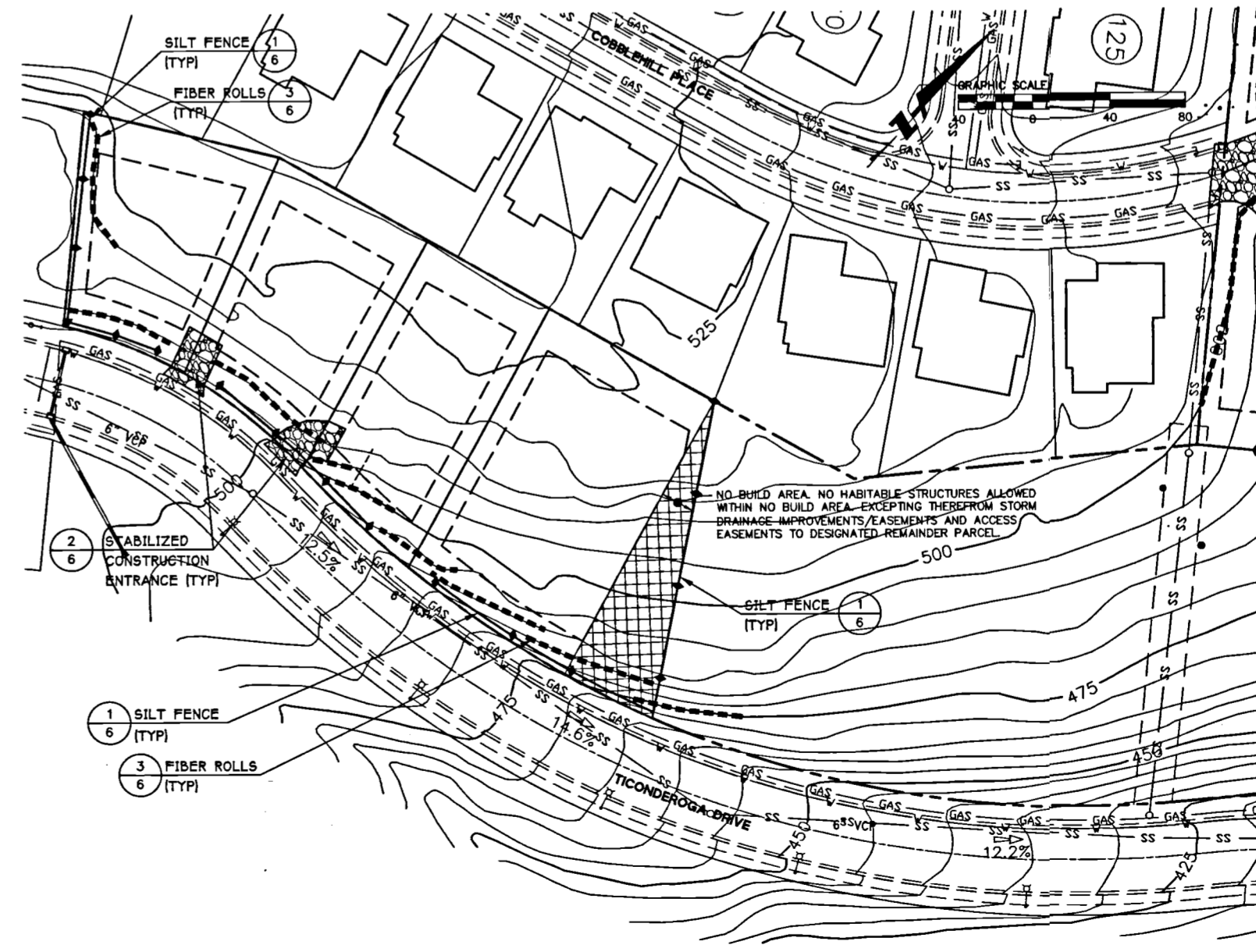
**LOTS 5-8  
PROPOSED LOTTING PLAN**  
SCALE: 1"=40'



**LOTS 5-8  
EXISTING TOPOGRAPHY AND UTILITIES**  
SCALE: 1"=40'



**LOTS 5-8  
PRELIMINARY GRADING & UTILITY PLAN**  
SCALE: 1"=40'



**LOTS 5-8  
PRELIMINARY EROSION CONTROL PLAN**  
SCALE: 1"=40'

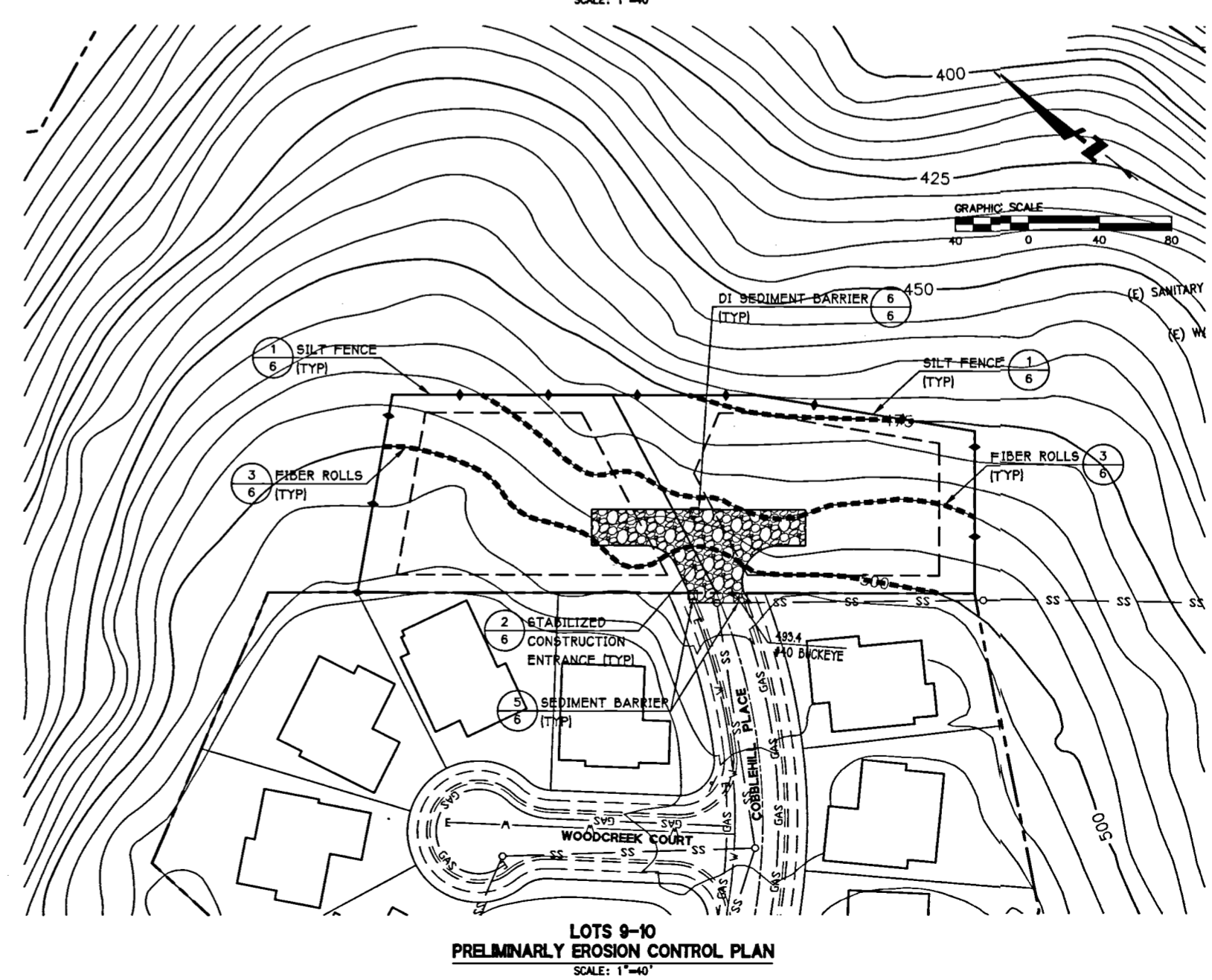
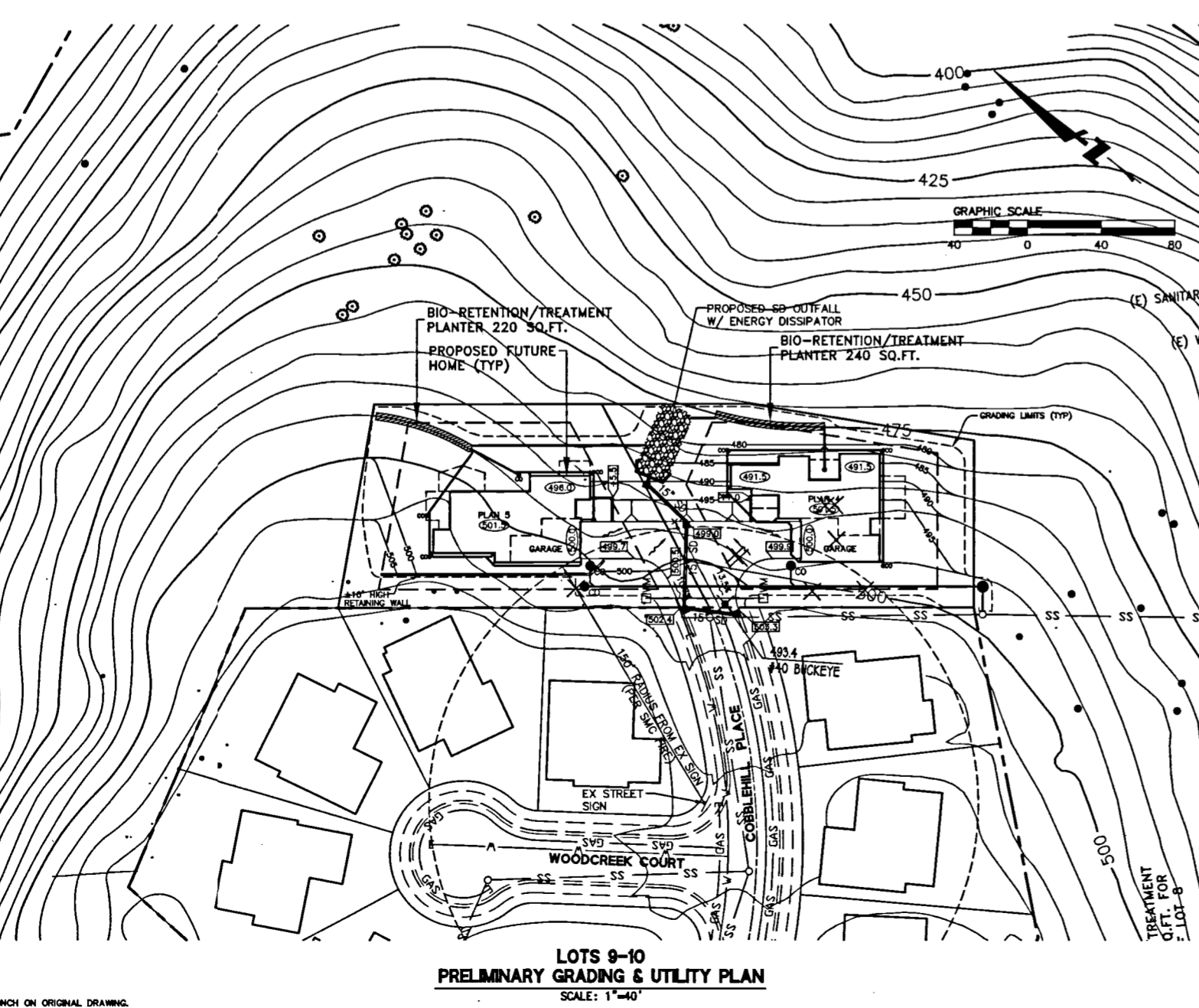
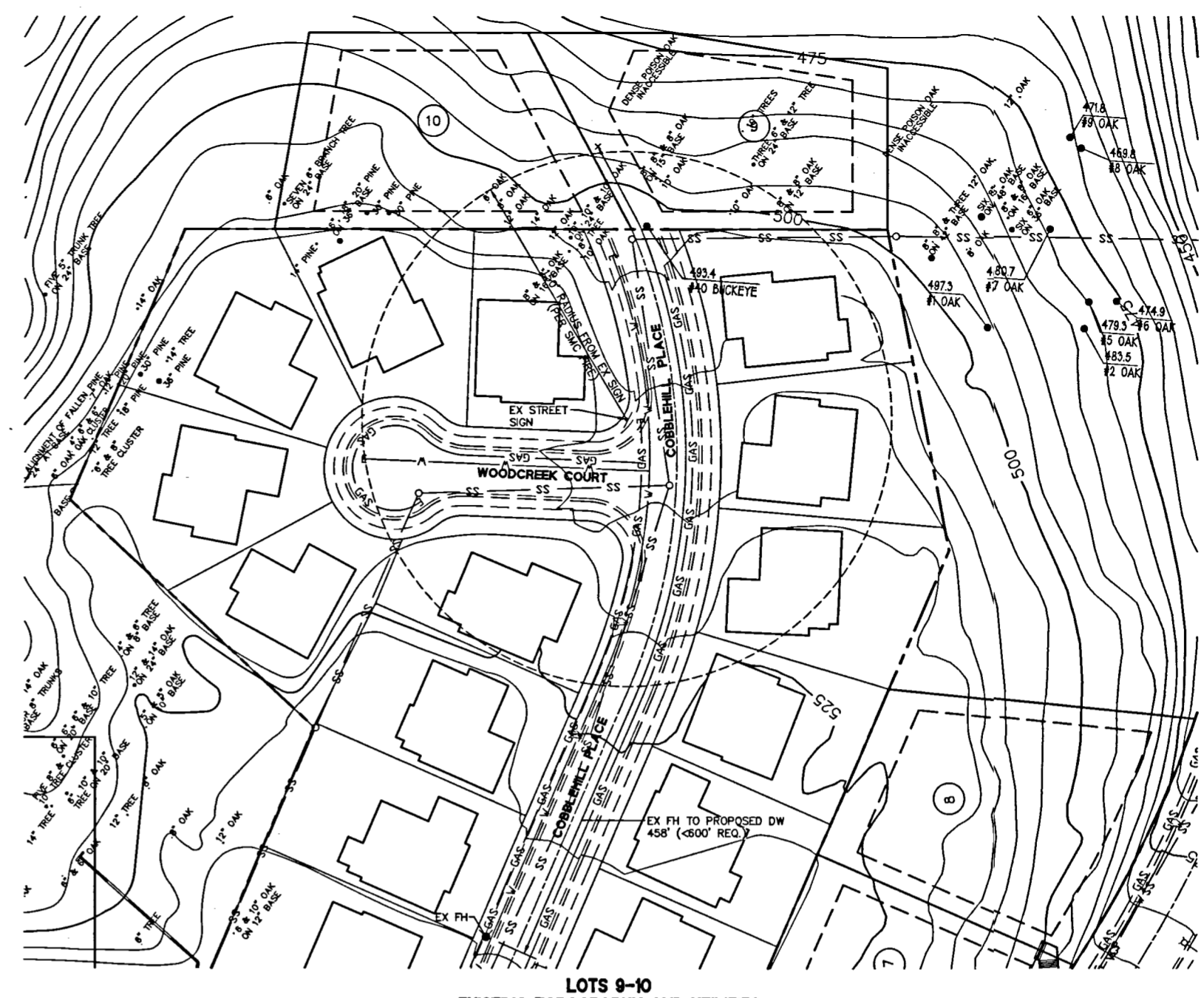
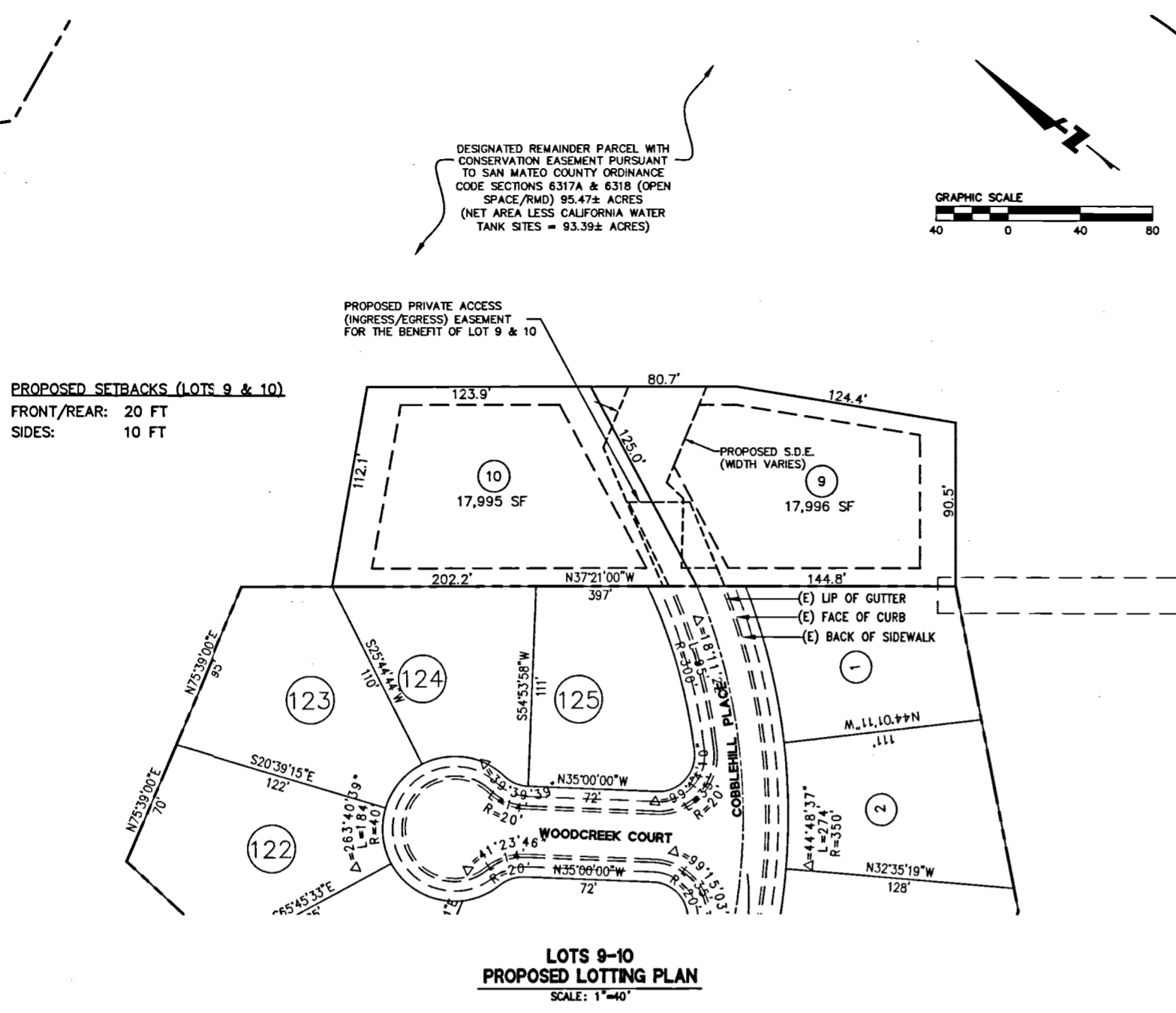
FEBRUARY 2, 2010

DESIGNER: J. KANGAS  
DATE: 02-02-10  
DRAWN BY: J. KANGAS

VERIFY SCALES: BAR SHOWN IS ONE INCH ON ORIGINAL DRAWING.  
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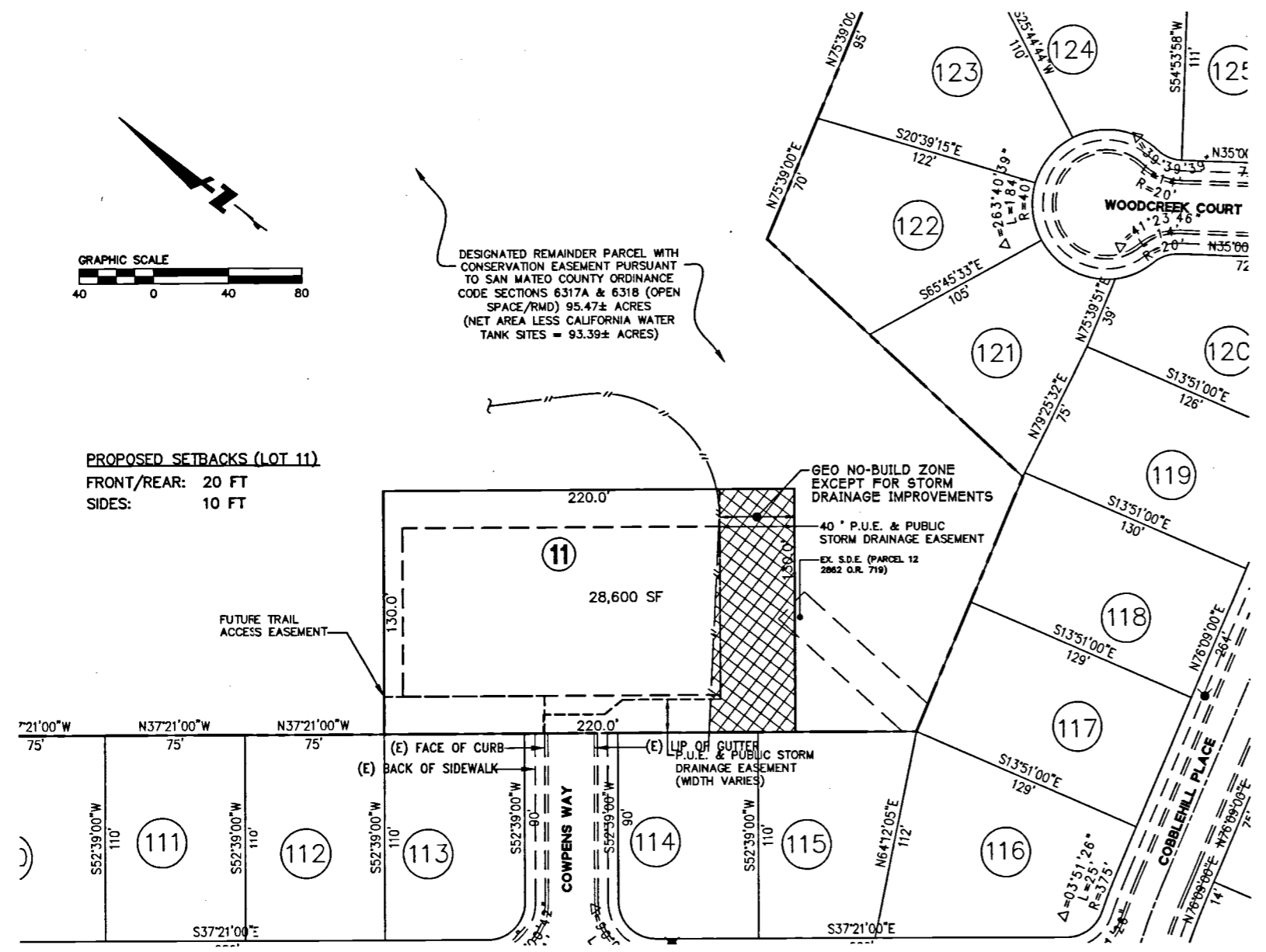
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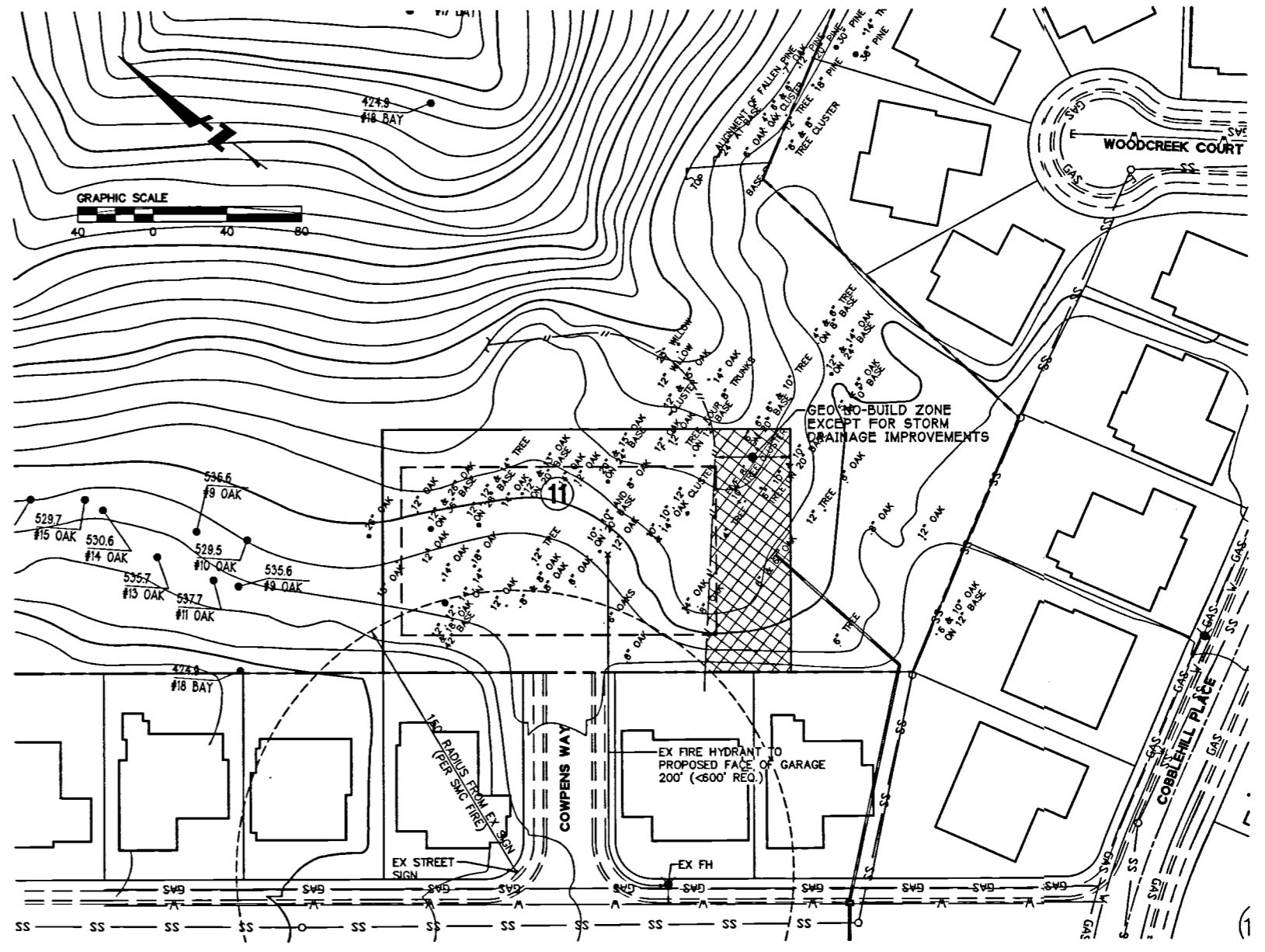
DRAWING NAME: J:\Projects\2010\Highland\Map\TMAP.dwg  
 PLOT DATE: 02-02-10 PLOTTED BY: dsl

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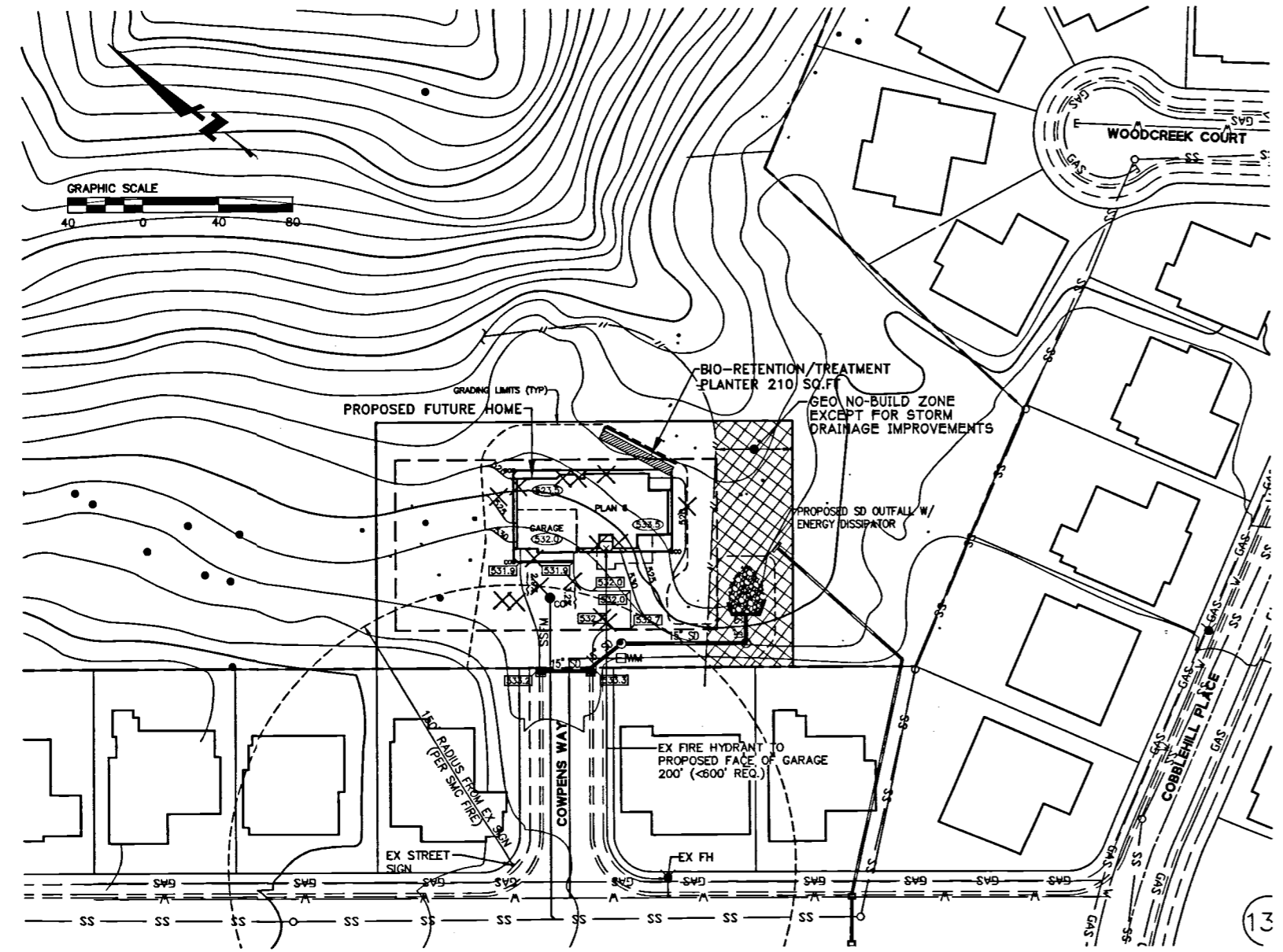
Rev. No.	Date	Description
1	02/25/10	Issue
2	02/25/10	Scale 1"=40'
3	02/25/10	Revised
4	02/25/10	Revised
5	02/25/10	Revised
6	02/25/10	Revised
7	02/25/10	Revised
8	02/25/10	Revised
9	02/25/10	Revised
10	02/25/10	Revised



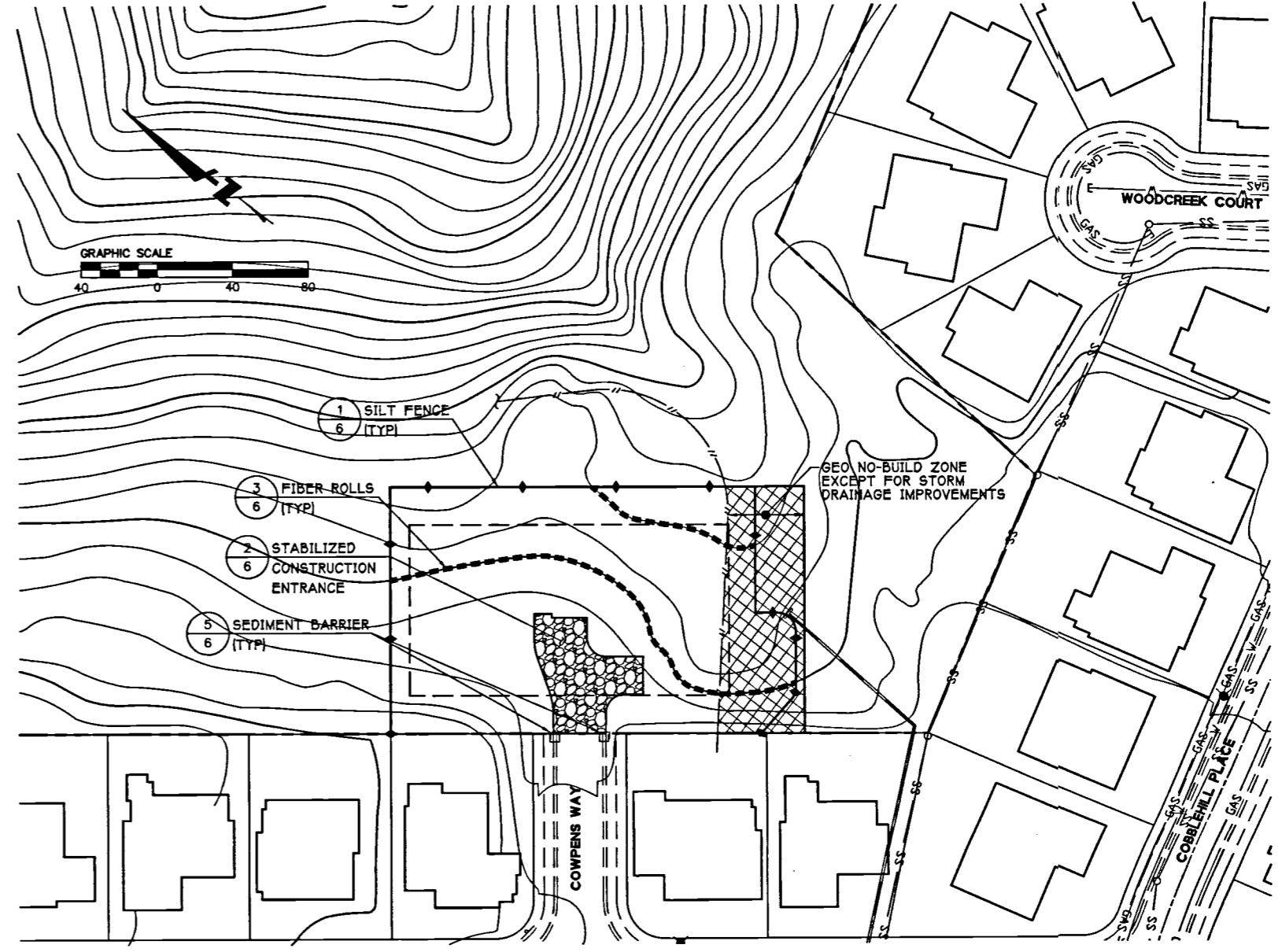
**LOT 11  
PROPOSED LOTTING PLAN**  
SCALE: 1"=40'



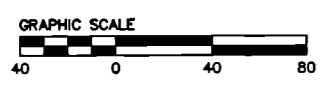
**LOT 11  
EXISTING TOPOGRAPHY AND UTILITIES**  
SCALE: 1"=40'



**LOT 11  
PRELIMINARY GRADING & UTILITY PLAN**  
SCALE: 1"=40'



**LOT 11  
PRELIMINARY EROSION CONTROL PLAN**  
SCALE: 1"=40'

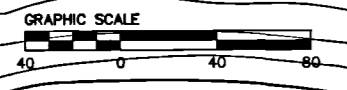


**PROPOSED SETBACKS (LOT 11)**  
FRONT/REAR: 20 FT  
SIDES: 10 FT

721'00"W 75'  
N37'21'00"W 75'  
N37'21'00"W 75'  
S52'39'00"W 110'  
S52'39'00"W 110'  
S52'39'00"W 110'  
S37'21'00"E

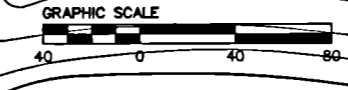
(E) FACE OF CURB  
(E) BACK OF SIDEWALK  
(E) L.P.U.E. & PUBLIC STORM DRAINAGE EASEMENT (WIDTH VARIES)

220.0'  
130.0'  
28,600 SF  
FUTURE TRAIL ACCESS EASEMENT  
GEO NO-BUILD ZONE EXCEPT FOR STORM DRAINAGE IMPROVEMENTS  
40' P.U.E. & PUBLIC STORM DRAINAGE EASEMENT  
EX S.D.E. (PARCEL 12 2862 Q.R. 714)WOODCREEK COURT  
COBBLEHILL PLACE  
COMPENS WAY  
EX STREET SIGN  
EX F.H.  
EX FIRE HYDRANT TO PROPOSED FACE OF GARAGE 200' (<600' REQ.)



WOODCREEK COURT  
COBBLEHILL PLACE  
COMPENS WAY  
EX STREET SIGN  
EX F.H.  
EX FIRE HYDRANT TO PROPOSED FACE OF GARAGE 200' (<600' REQ.)

BIO-RETENTION/TREATMENT PLANTER 210' SQ. FT.  
GEO NO-BUILD ZONE EXCEPT FOR STORM DRAINAGE IMPROVEMENTS  
PROPOSED SD OUTFALL W/ ENERGY DISSIPATOR  
GRADING LIMITS (TYP.)  
PROPOSED FUTURE HOME  
WOODCREEK COURT  
COBBLEHILL PLACE  
COMPENS WAY  
EX STREET SIGN  
EX F.H.  
EX FIRE HYDRANT TO PROPOSED FACE OF GARAGE 200' (<600' REQ.)



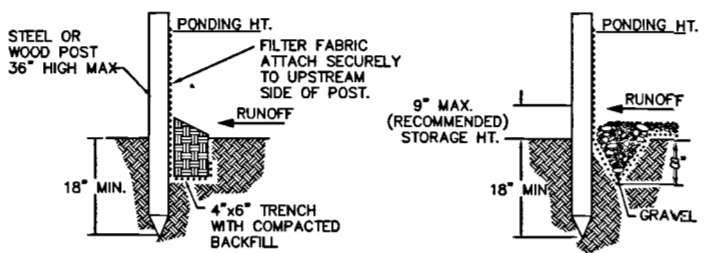
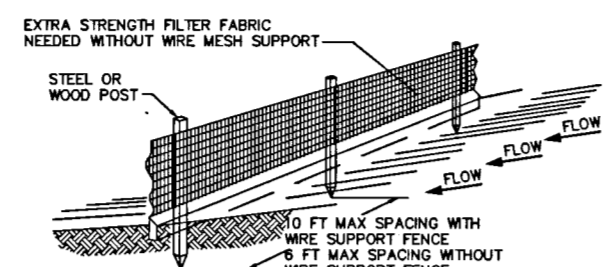
WOODCREEK COURT  
COBBLEHILL PLACE  
COMPENS WAY  
EX STREET SIGN  
EX F.H.  
EX FIRE HYDRANT TO PROPOSED FACE OF GARAGE 200' (<600' REQ.)

1 SILT FENCE (6' TYP.)  
2 FIBER ROLLS (6' TYP.)  
3 STABILIZED CONSTRUCTION ENTRANCE (6' TYP.)  
4 SEDIMENT BARRIER (6' TYP.)  
GEO NO-BUILD ZONE EXCEPT FOR STORM DRAINAGE IMPROVEMENTS  
WOODCREEK COURT  
COBBLEHILL PLACE  
COMPENS WAY  
EX STREET SIGN  
EX F.H.  
EX FIRE HYDRANT TO PROPOSED FACE OF GARAGE 200' (<600' REQ.)

VERIFY SCALES: BAR SHOWN IS ONE INCH ON ORIGINAL DRAWING.  
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**EROSION CONTROL NOTES**

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND PROJECT STORM WATER POLLUTION PREVENTION PLAN (SWPPP).
- ALTHOUGH SPECIFIC LOCATIONS FOR SEDIMENT CONTROL FACILITIES ARE SHOWN ON THESE PLANS, IT IS INTENDED THIS EROSION CONTROL PLAN BE MODIFIED WHEN NECESSARY TO MEET FIELD CONDITIONS. BASIN AND TRAP SIZES AND ELEVATIONS MAY BE ADJUSTED AS LONG AS THE MINIMUM AREAS AND DEPTHS FOR SEDIMENT SETTLING AND STORAGE ARE NOT REDUCED.
- THE INTENT OF THESE PLANS IS TO PROVIDE THE INITIAL CONCEPT FOR INTERIM EROSION CONTROL. THE CONTRACTOR SHALL UPDATE THE PLANS TO REFLECT CHANGING SITE CONDITIONS. PLAN UPDATES SHALL BE BASED UPON GENERAL SURVEY DATA. EROSION CONTROL EFFECTIVENESS SHALL ALSO BE MONITORED AND THE PLANS UPGRADED AS REQUIRED TO PREVENT SIGNIFICANT QUANTITIES OF SEDIMENT FROM ENTERING THE DOWNSTREAM DRAINAGE SYSTEM.
- THIS PLAN MAY NOT COVER ALL THE SITUATIONS THAT ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. IN GENERAL, THE CONTRACTOR IS RESPONSIBLE FOR KEEPING THE STORM RUN OFF FROM LEAVING THE SITE. FIBER ROLLS, SAND BAGS, AND SILT FENCES SHALL BE USED BY THE CONTRACTOR ON AN AS NEEDED BASIS TO INHIBIT SILT FROM LEAVING THE SITE AND ENTERING THE STORM DRAIN SYSTEM. ALL EXISTING, TEMPORARY, OR PERMANENT CATCH BASINS SHALL USE ONE OF THE SEDIMENT BARRIERS SHOWN.
- THE CONTRACTOR WILL BE LIABLE FOR ANY AND ALL DAMAGES TO PUBLIC AND/OR PRIVATE OWNED AND MAINTAINED ROAD CAUSED BY THE CONTRACTOR'S GRADING ACTIVITIES, AND WILL BE RESPONSIBLE FOR THE CLEANUP OF ANY MATERIAL SPILLED ON ANY PUBLIC ROAD ON THE HAUL ROUTE. ADJACENT PUBLIC ROADS SHALL BE CLEANED AT THE END OF EACH WORKING DAY.
- BEST MANAGEMENT PRACTICES IS DEFINED IN THE SWPPP SHALL BE OPERABLE YEAR AROUND.
- DURING THE RAINY SEASON, ALL PAVED AREAS ARE TO BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE IS TO BE MAINTAINED SO AS TO MINIMIZE SEDIMENT-LADEN RUNOFF TO ANY STORM DRAIN SYSTEM.
- ALL EROSION CONTROL FACILITIES MUST BE INSPECTED AND REPAIRED DAILY DURING THE RAINY SEASON. ALL SLOPES SHALL BE REPAIRED AS SOON AS POSSIBLE WHEN DAMAGED.
- BORROW AND TEMPORARY STOCKPILES SHALL BE PROTECTED WITH APPROPRIATE EROSION CONTROL MEASURES (TARPS, FIBER ROLLS, SILT FENCES, ETC.) OR COVERED WITH WISQUEEN TO ENSURE SILT DOES NOT LEAVE THE SITE OR ENTER THE STORM DRAIN SYSTEM.
- ALL TRUCK TIRES SHALL BE CLEANED PRIOR TO EXITING THE PROPERTY.
- DURING PERIODS WHEN STORMS ARE FORECAST - (BETWEEN OCT 15 - APR 15)
  - EXCAVATED SOILS SHOULD NOT BE PLACED IN STREETS OR ON PAVED AREAS.
  - ANY EXCAVATED SOILS SHOULD BE REMOVED FROM THE SITE BY THE END OF THE DAY.
  - WHERE STOCKPILING IS NECESSARY, USE A TARPULIN OR SURROUND THE STOCKPILED MATERIAL WITH STRAW BALES, SILT FENCE, OR OTHER RUNOFF CONTROLS.
  - USE INLET CONTROLS (E.G. FILTER MAT) FOR STORM DRAINS ADJACENT TO THE STOCKPILED SOIL.
  - THOROUGHLY SWEEP ALL PAVED AREAS EXPOSED TO SOIL EXCAVATION AND PLACEMENT.
- IF NO WORK HAS PROCEEDED FOR A PERIOD OF 6-WEEKS, FINAL DRAINAGE AND EROSION CONTROL IMPROVEMENTS SHALL BE INSTALLED IN ACCORDANCE WITH AN APPROVED WINTERIZATION PLAN.
- EROSION CONTROL IMPROVEMENTS SHALL BE INSPECTED AFTER EACH STORM AND REPAIRED AND/OR UPGRADED AS REQUIRED BY THE SAN MATEO COUNTY INSPECTORS. SEDIMENT AND DEBRIS SHALL BE REMOVED FROM TEMPORARY BASINS AND DRAIN INLETS AFTER EACH STORM.
- PADS SHALL BE GRADED TO MINIMIZE STANDING WATER. SPECIFIC LOCATIONS REQUIRING SUPPLEMENTAL GRADING TO ACHIEVE ACCEPTABLE DRAINAGE SHALL BE DETERMINED BY THE CONSTRUCTION MANAGER. ALL SPOILS AND SOIL STOCKPILES REMAINING ON SITE SHALL BE ENCIRCLED BY SILT FENCES/FIBER ROLLS.
- STUBBED OUT ENDS OF PARTIALLY COMPLETED SUBDRAINS SHALL BE WRAPPED WITH AN APPROVED FABRIC TO PREVENT SOIL AND DEBRIS FROM ENTERING THE PIPE.
- HAUL ROADS ARE CURRENTLY NOT SHOWN ON THE PLANS. EROSION CONTROL MEASURES SHALL BE TAKEN TO MINIMIZE EROSION RELATED TO HAUL ROADS.
- DISPOSAL AREAS FOR SEDIMENT TO BE DETERMINED IN FIELD. WHEN MATERIAL IS STOCKPILED, IT SHALL BE SURROUNDED BY A SILT FENCE/FIBER ROLLS.
- TEMPORARY AND PERMANENT SLOPES GREATER THAN 3 FEET SHALL BE SEEDED UNLESS ALTERNATIVE MEASURES ARE USED.
- THE EROSION CONTROL PLAN IS FOR CONSTRUCTION BETWEEN OCTOBER 15 AND APRIL 15. OPEN SPACE AREAS ARE TO BE PLANTED BY SEPTEMBER 15. IF THESE CONDITIONS ARE NOT MET, THE CONTRACTOR SHALL SUBMIT AN EROSION CONTROL PLAN TO SAN MATEO COUNTY PUBLIC WORKS FOR REVIEW AND APPROVAL. SHOULD THE PROPOSED ONSITE STORM DRAIN SYSTEM NOT BE INSTALLED BY OCTOBER 15, TEMPORARY SEDIMENT BASINS SHALL BE INSTALLED AROUND THE OPENINGS OF ANY EXISTING STORM PIPES WHICH DRAIN IN THE SITE. TEMPORARY SEDIMENT BASINS SHALL BE SIZED TO ACCOMMODATE ANTICIPATED RUNOFF FROM ALL UNPAVED PORTIONS OF THE SITE.
- GRADING SCHEDULE SHALL BE SUBMITTED FOR APPROVAL TO SAN MATEO COUNTY PUBLIC WORKS BY AUGUST 15.
- SEED MIX FOR REVEGETATION AND HYDROSEEDING:  
NORTHERN CALIFORNIA COVER MIX BY ACBRIGHT OR EQUAL  
30% BLUE WILDRYE  
30% MEADOW BARLEY  
20% TORO FESCUE  
10% PURPLE NEEDLE GRASS  
10% CALIFORNIA NATIVE WILDFLOWERS  
APPLY AT 40 POUNDS PER ACRE MINIMUM
- THE NAME, ADDRESS, AND 24 HOUR TELEPHONE NUMBER OF THE PERSON RESPONSIBLE FOR IMPLEMENTATION OF EROSION AND SEDIMENTATION CONTROL PLAN SHALL BE PROVIDED TO THE CITY.
- SHOULD IT APPEAR THAT THE EROSION CONTROL PLAN, OR ANY OTHER MATTER THERETO, IS NOT SUFFICIENTLY DETAILED OR EXPLAINED ON THESE PLANS, THE CONTRACTOR SHALL CONTACT THE BKF PROJECT ENGINEER AT (650) 482-6300 FOR SUCH FURTHER EXPLANATIONS AS MAY BE NECESSARY.

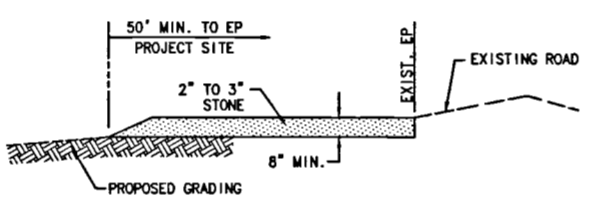


**STANDARD DETAIL**  
TRENCH WITH NATIVE BACKFILL

**ALTERNATE DETAIL**  
TRENCH WITH GRAVEL

- NOTES:**
- INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
  - REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
  - SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.

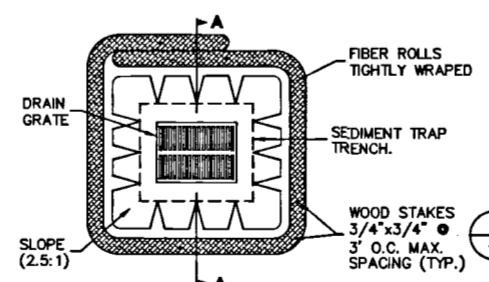
**1 SILT FENCE**  
N.T.S.



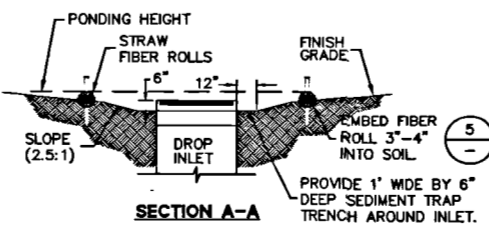
**STABILIZED CONSTRUCTION ENTRANCE**

- NOTES:**
- THE LOCATIONS SHOWN ARE FOR INFORMATION ONLY. ALL CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USE TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY SHALL BE REMOVED IMMEDIATELY.
  - WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE THROUGH USE OF INLET PROTECTION (E.G. SAND BAGS OR OTHER APPROVED METHODS).
  - THE MATERIAL FOR CONSTRUCTION OF THE PAD SHALL BE 2" TO 3" STONE.
  - THE THICKNESS OF THE PAD SHALL NOT BE LESS THAN 8".
  - THE WIDTH OF THE PAD SHALL NOT BE LESS THAN THE FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
  - THE LENGTH OF THE PAD SHALL BE AS REQUIRED, BUT NOT LESS THAN 50'.

**2 STABILIZED CONSTRUCTION ENTRANCE**  
N.T.S.

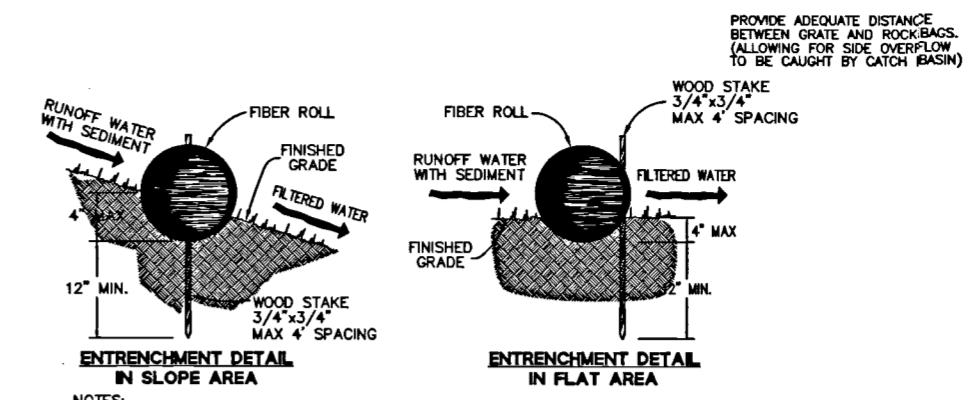


**PLAN VIEW**



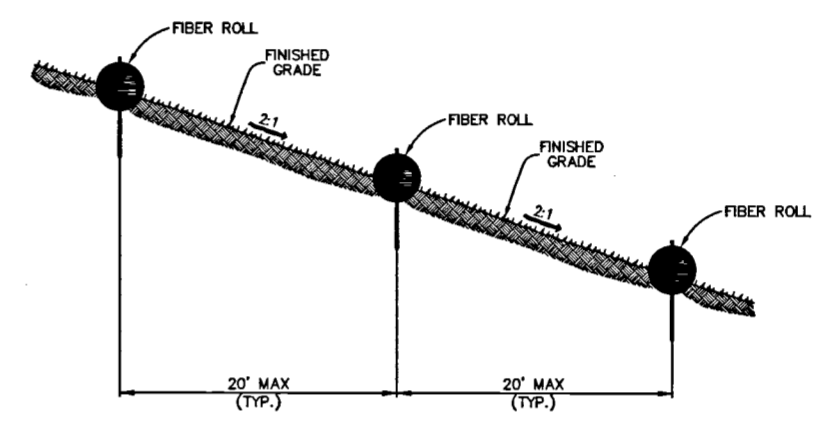
**SECTION A-A**

**6 DROP INLET FIBER ROLLS SEDIMENT BARRIER**  
(TIME FRAME: AREA DRAINS - BETWEEN AREA DRAIN INSTALLATION AND PROJECT COMPLETION  
CURB INLETS - BETWEEN CURB INLET INSTALLATION AND FINAL PAVING OPERATIONS)  
N.T.S.

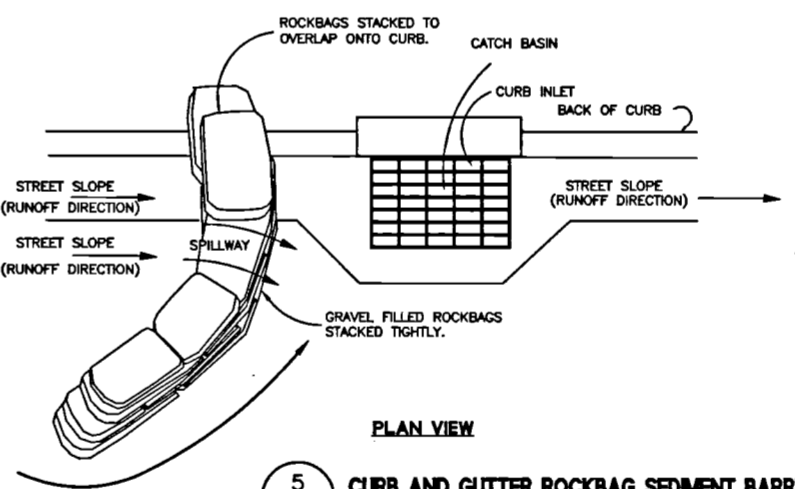


- NOTES:**
- FIBER ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3" - 4" DEEP, DUG ON CONTOUR.
  - ADJACENT ROLLS SHALL TIGHTLY ABUT.
  - RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND FIBER ROLL.

**3 FIBER ROLL DETAIL**  
N.T.S.



**4 FIBER ROLL INSTALLATION ON SLOPE**  
(TIME FRAME: BETWEEN FINAL PAVING OPERATIONS AND PROJECT COMPLETION)  
N.T.S.



**PLAN VIEW**

- NOTES:**
- PLACE CURB TYPE SEDIMENT BARRIERS ON GENTLY SLOPING STREETS, WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
  - ROCKBAGS OF EITHER BURLAP OR WOVEN GEOTEXTILE FABRIC, ARE FILLED WITH GRAVEL, LAYERED AND PACKED TIGHTLY.
  - LEAVE ONE ROCKBAG GAP IN THE TOP ROW TO PROVIDE A SPILLWAY OVERFLOW. TOP OF SPILLWAY SHALL BE LOWER THAN TOP OF CURB.
  - INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT, SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.

**5 CURB AND GUTTER ROCKBAG SEDIMENT BARRIER ON SLOPE**  
(TIME FRAME: BETWEEN FINAL PAVING OPERATIONS AND PROJECT COMPLETION)  
N.T.S.

- NOTES:**
- PLACE FIBER ROLLS AROUND THE INLET CONSISTENT WITH BASIN SEDIMENT BARRIER DETAIL ON THIS SHEET. (FIBER ROLLS ARE TUBES MADE FROM STRAW BOUND W/ PLASTIC NETTING. THEY ARE APPROX. 8" DIA. AND 20 - 30 FT. LONG.)
  - FIBER ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE FIBER ROLL IN A TRENCH, 3" - 4" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND FIBER ROLL.
  - THE TOP OF THE STRUCTURE (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BY-PASSING THE INLET. EXCAVATION OF A BASIN ADJACENT TO THE DROP INLET OR A TEMPORARY DIKE ON THE DOWNSLOPE OF THE STRUCTURE MAY BE NECESSARY.

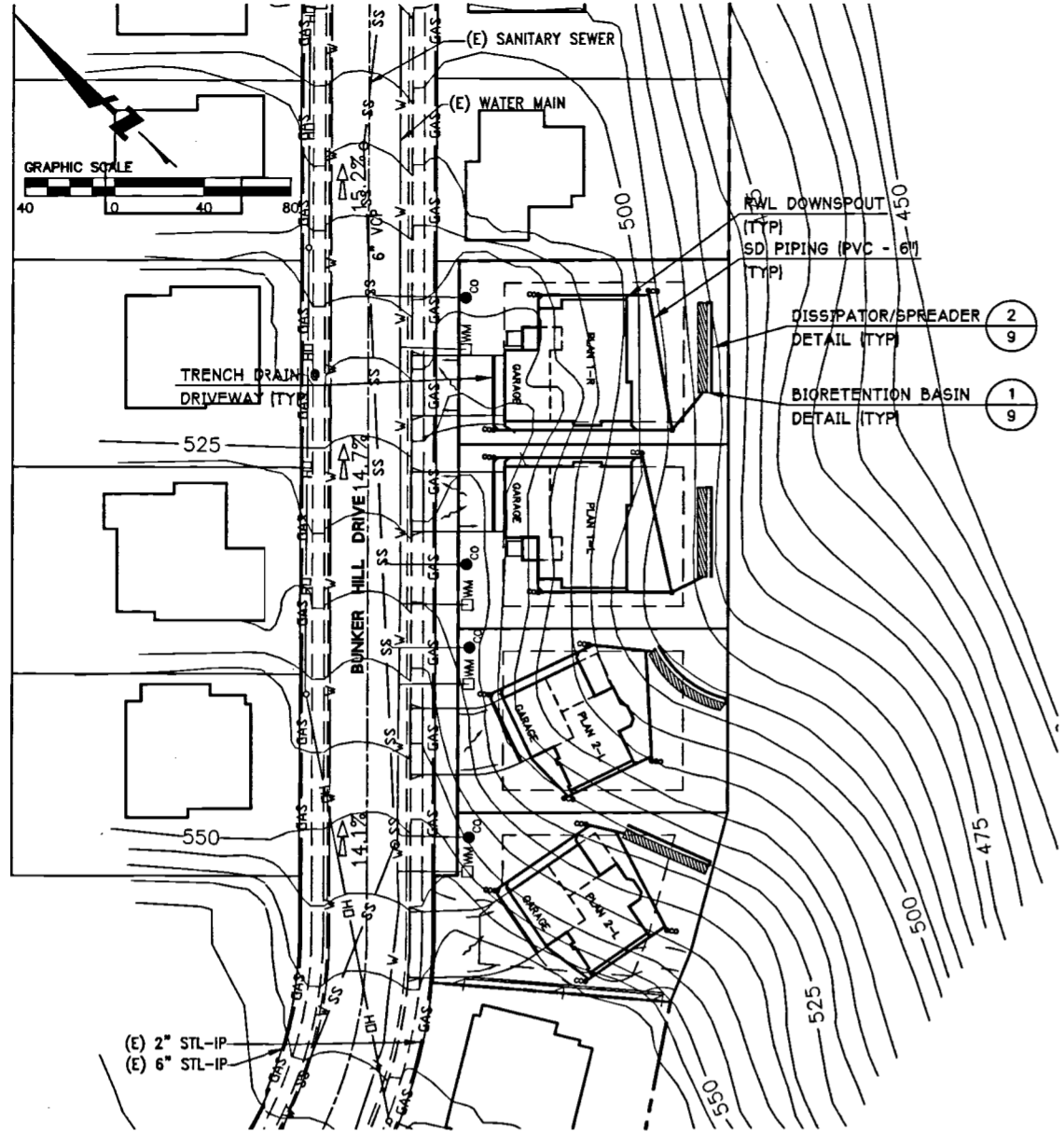
ALL EROSION CONTROL MEASURES SHALL BE IN PLACE BY OCTOBER 15 AND MAINTAINED DURING ALL PHASES OF CONSTRUCTION.



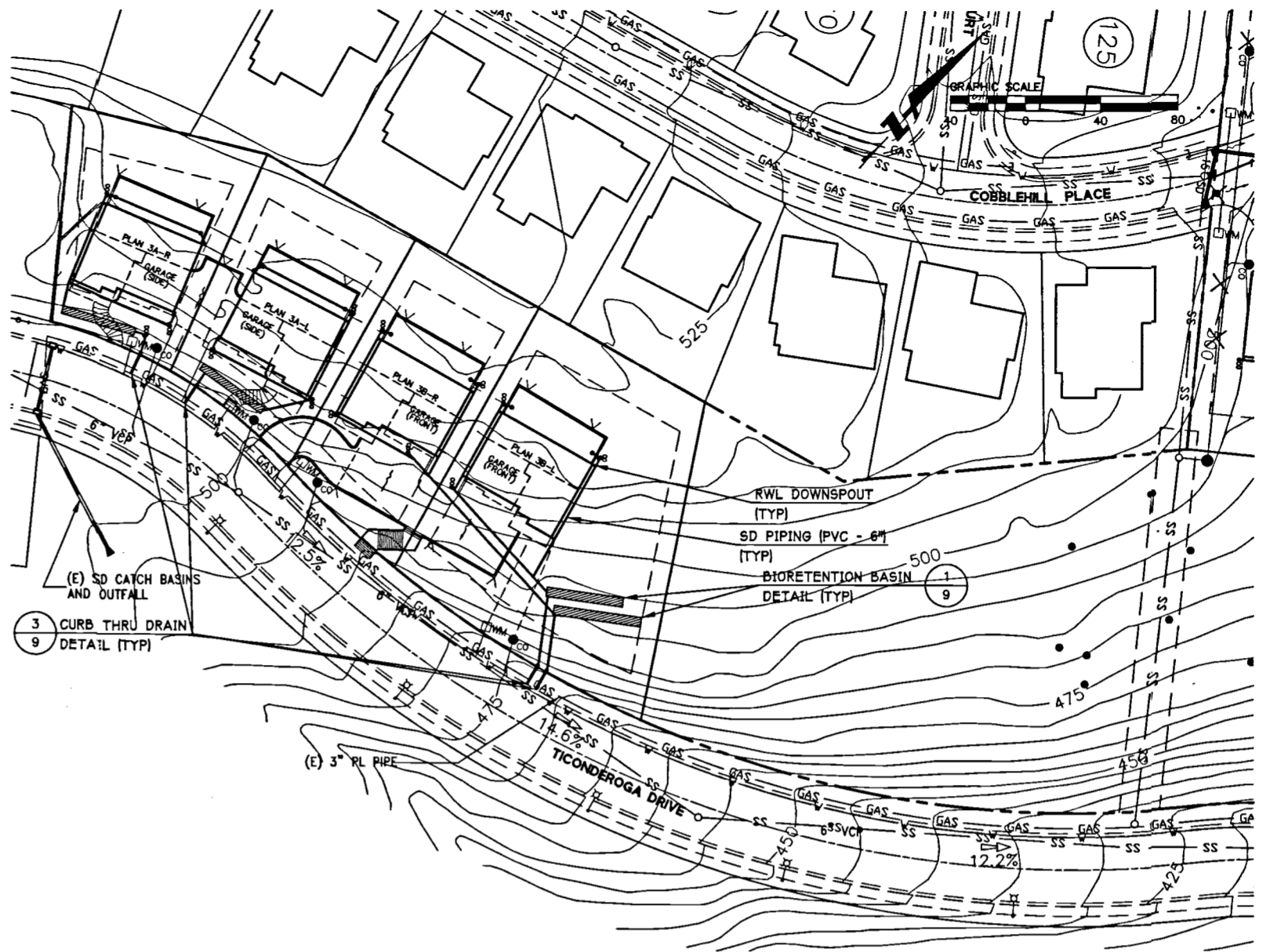




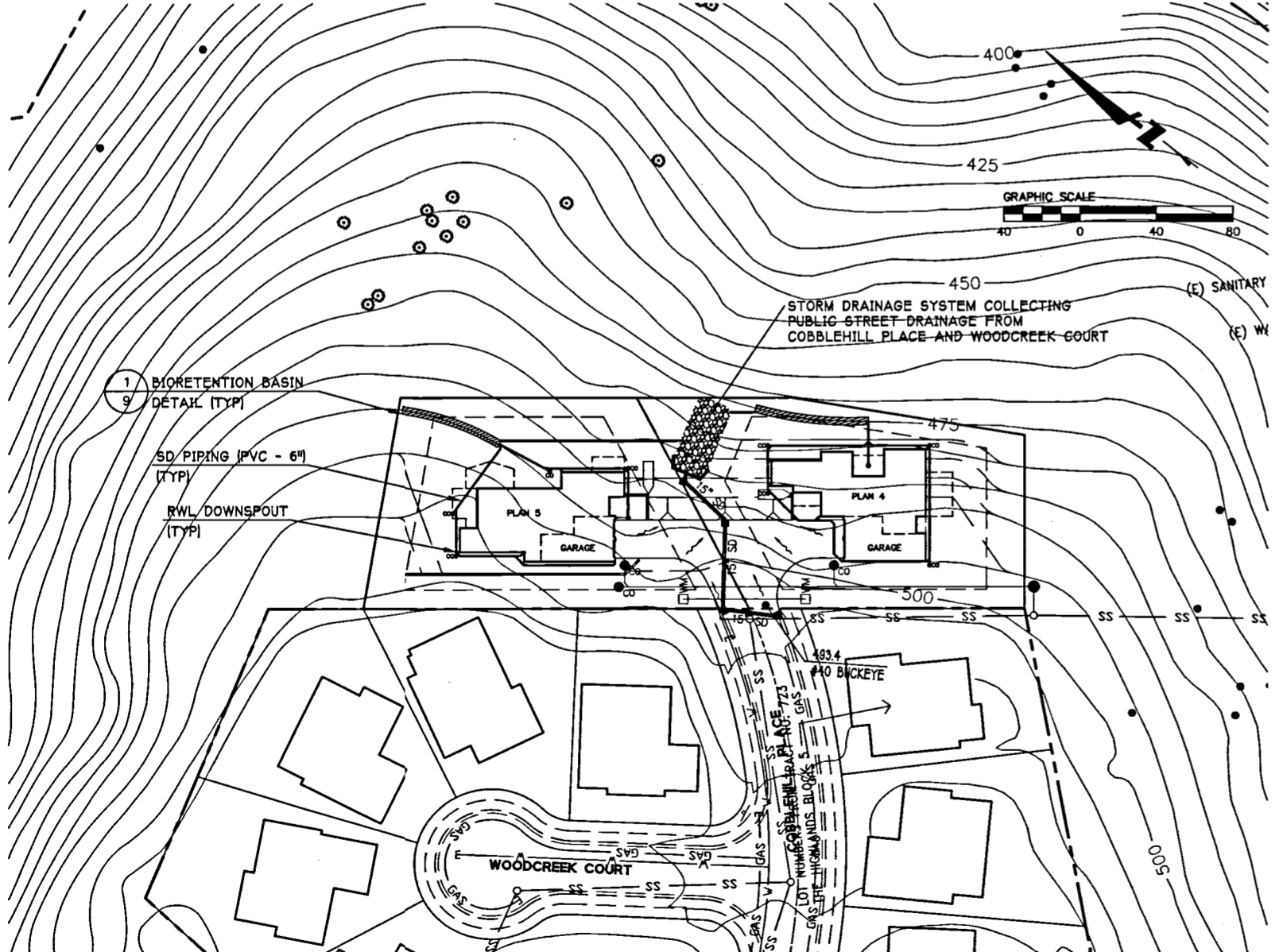
Rev. No.	Date	Revisions
1	02/25/10	Final
2		
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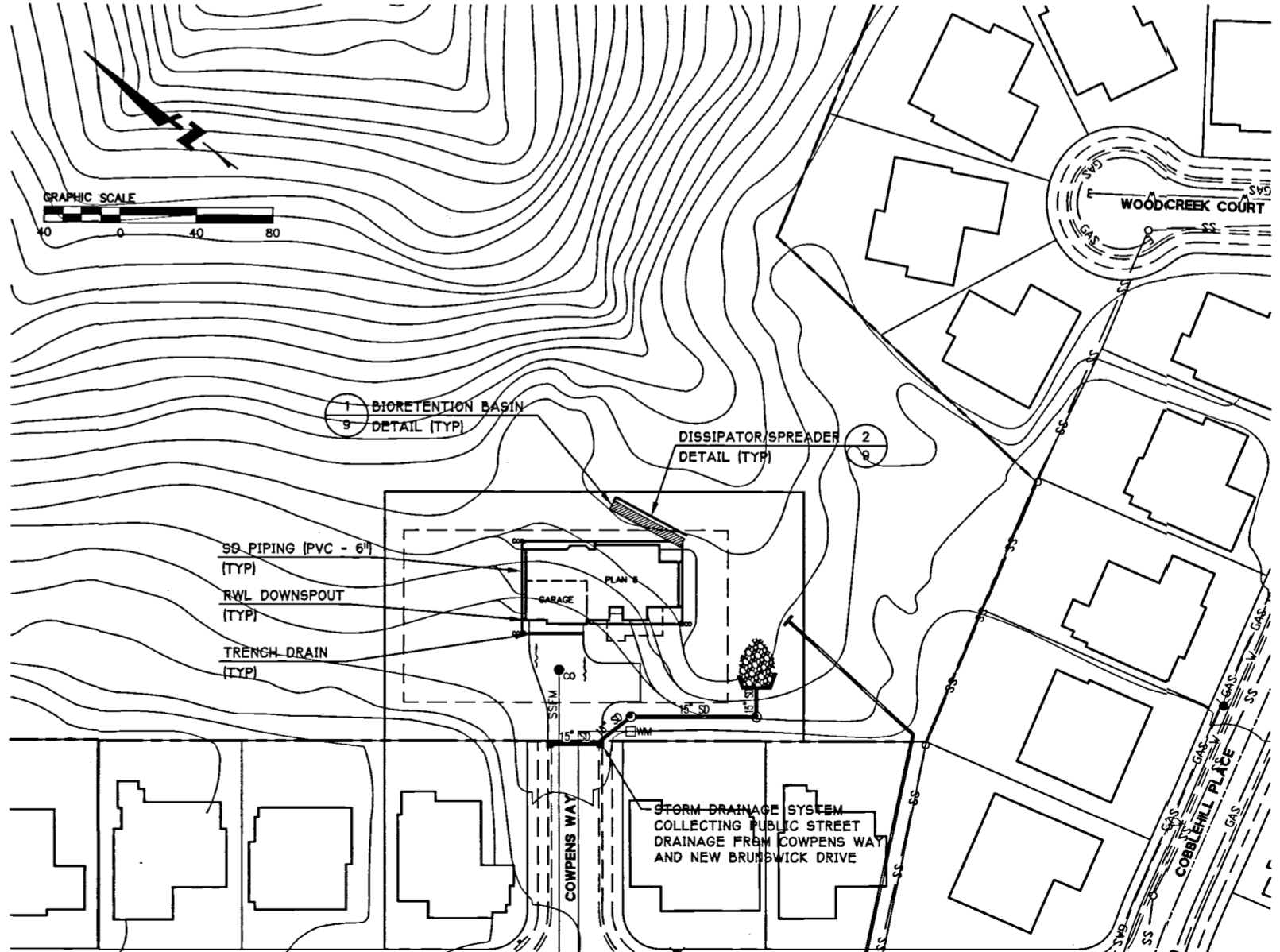
**LOTS 1-4  
STORM DRAINAGE PLAN**  
SCALE: 1"=40'



**LOTS 5-8  
STORM DRAINAGE PLAN**  
SCALE: 1"=40'



**LOTS 9-10  
STORM DRAINAGE PLAN**  
SCALE: 1"=40'



**LOT 11  
STORM DRAINAGE PLAN**  
SCALE: 1"=40'

DRAWING NAME: J:\ENR\550168\550168\VTM\GHETMLP-SD.dwg  
PLOT DATE: 02-02-10 PLOTTED BY: 4618

VERIFY SCALES: BAR SHOWN IS ONE INCH ON ORIGINAL DRAWING.  
0 1"  
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.



**OWNER'S STATEMENT**

WE HEREBY STATE THAT WE ARE THE OWNERS OF OR HAVE SOME RIGHT, TITLE, OR INTEREST IN AND TO THE REAL PROPERTY INCLUDED WITHIN THE SUBDIVISION SHOWN UPON THE HEREIN MAP; THAT WE ARE THE ONLY PERSONS WHOSE CONSENT IS NECESSARY TO PASS CLEAR TITLE TO SAID REAL PROPERTY; AND THAT WE CONSENT TO THE PREPARATION AND RECORDATION OF SAID MAP AND SUBDIVISION AS SHOWN WITHIN THE DISTINCTIVE BORDER LINE.

**AS OWNERS:**

TICONDEROGA PARTNERS LLC, A CALIFORNIA LIMITED LIABILITY COMPANY

BY: \_\_\_\_\_  
NAME TITLE

**AS TRUSTEE:**

FIRST AMERICAN TITLE COMPANY

BY: \_\_\_\_\_  
NAME TITLE

**AS TRUSTEE:**

FIRST AMERICAN TITLE INSURANCE COMPANY, A CALIFORNIA CORPORATION

BY: \_\_\_\_\_  
NAME TITLE

**OWNER'S ACKNOWLEDGMENT**

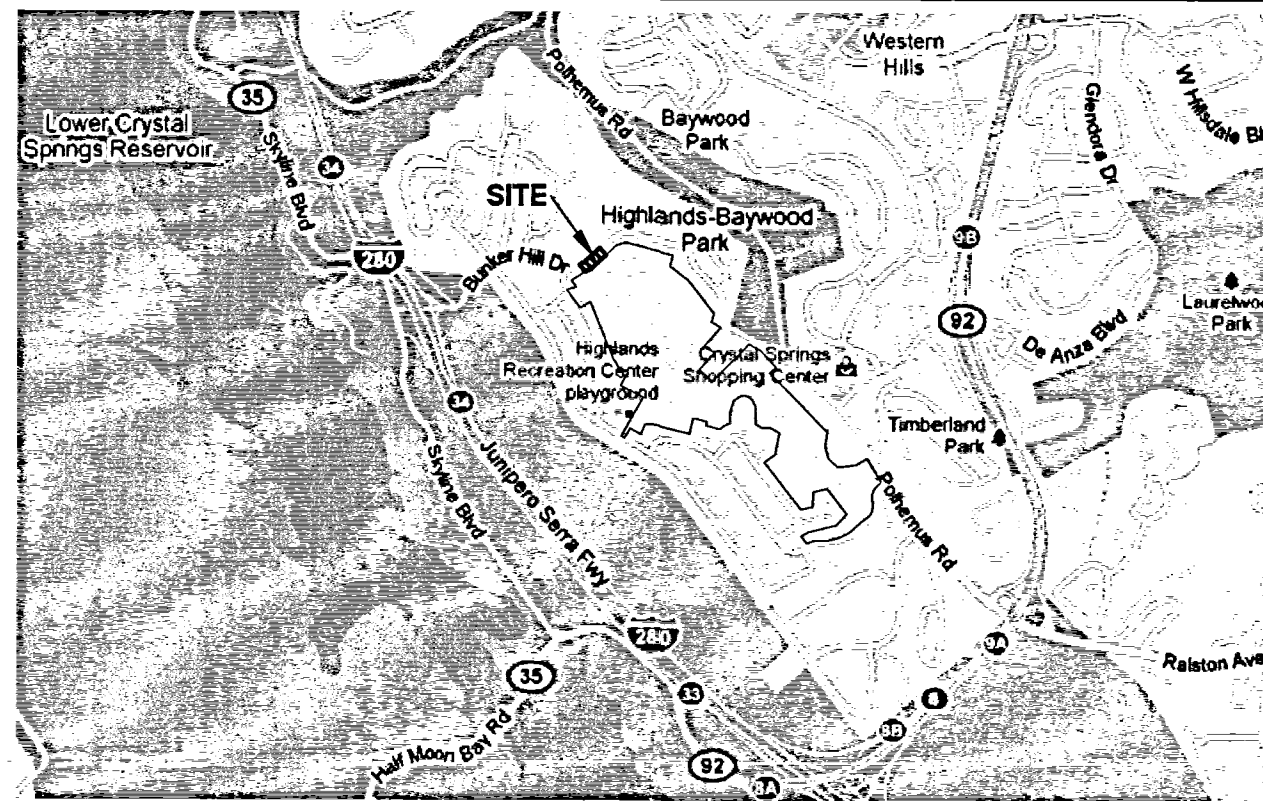
STATE OF CALIFORNIA  
COUNTY OF \_\_\_\_\_

ON \_\_\_\_\_ BEFORE ME, \_\_\_\_\_ A NOTARY PUBLIC, PERSONALLY APPEARED \_\_\_\_\_ WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE /THEY EXECUTED THE SAME IN HIS/HER/THEIR AUTHORIZED CAPACITY(IES) AND BY HIS/HER/THEIR SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S), OR THE ENTITY UPON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT.

WITNESS MY HAND:  
SIGNATURE \_\_\_\_\_

NAME (TYPED OR PRINTED), NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE.  
PRINCIPAL COUNTY OF BUSINESS: \_\_\_\_\_  
COMMISSION EXPIRES: \_\_\_\_\_  
COMMISSION # OF NOTARY: \_\_\_\_\_



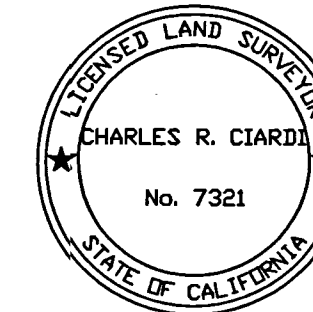
**VICINITY MAP**

NOT TO SCALE

**SURVEYOR'S STATEMENT**

THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECTION AND IS BASED UPON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCE AT THE REQUEST OF TICONDEROGA PARTNERS LLC IN APRIL 2011. I HEREBY STATE THAT THIS PARCEL MAP SUBSTANTIALLY CONFORMS TO THE APPROVED OR CONDITIONALLY APPROVED TENTATIVE MAP, IF ANY, AND THAT ALL MONUMENTS ARE OF THE CHARACTER AND OCCUPY THE POSITIONS INDICATED, OR THAT THEY WILL BE SET IN THOSE POSITIONS BEFORE SEPTEMBER 2013, AND THAT THE MONUMENTS ARE, OR WILL BE, SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED.

DATE: \_\_\_\_\_



CHARLES R. CIARDI, P.L.S. 7321

**COUNTY SURVEYOR'S STATEMENT**

I HEREBY STATE THAT I HAVE EXAMINED THIS MAP AND THAT THE SUBDIVISION AS SHOWN HEREON IS SUBSTANTIALLY THE SAME AS IT APPEARED ON THE TENTATIVE MAP, IF REQUIRED, AND ANY APPROVED ALTERATIONS THEREOF; THAT ALL THE PROVISIONS OF THE CALIFORNIA "SUBDIVISION MAP ACT" AND OF THE "SAN MATEO COUNTY ORDINANCE" APPLICABLE AT THE TIME OF APPROVAL OF THE TENTATIVE MAP, IF REQUIRED, HAVE BEEN COMPLIED WITH; AND THAT I AM SATISFIED THAT THE MAP IS TECHNICALLY CORRECT.

DATE: \_\_\_\_\_

BY: \_\_\_\_\_  
BRIAN C. LEE,  
DEPUTY DIRECTOR OF PUBLIC WORKS  
R.C.E. #26573

**CLERK OF THE BOARD STATEMENT**

I HEREBY STATE THAT THE BOARD OF SUPERVISORS OF SAN MATEO COUNTY, STATE OF CALIFORNIA, DO HEREBY CERTIFY THAT CERTIFICATES HAVE BEEN FILED AND DEPOSITS HAVE BEEN MADE IN CONFORMANCE WITH THE REQUIREMENTS OF SECTIONS 66492 AND 66493 OF THE GOVERNMENT CODE OF THE STATE OF CALIFORNIA.

DATED: \_\_\_\_\_

BY: \_\_\_\_\_  
CLERK OF THE BOARD OF SUPERVISORS  
SAN MATEO COUNTY, STATE OF CALIFORNIA

BY: \_\_\_\_\_  
DEPUTY

**COUNTY RECORDER'S STATEMENT**

FILED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_, AT \_\_\_\_\_ M. IN  
BOOK \_\_\_\_\_ OF PARCEL MAPS AT PAGES \_\_\_\_\_ AND \_\_\_\_\_, AT THE REQUEST  
OF BKF ENGINEERS.

WARREN SLOCUM, SAN MATEO COUNTY RECORDER

FILE NO. \_\_\_\_\_

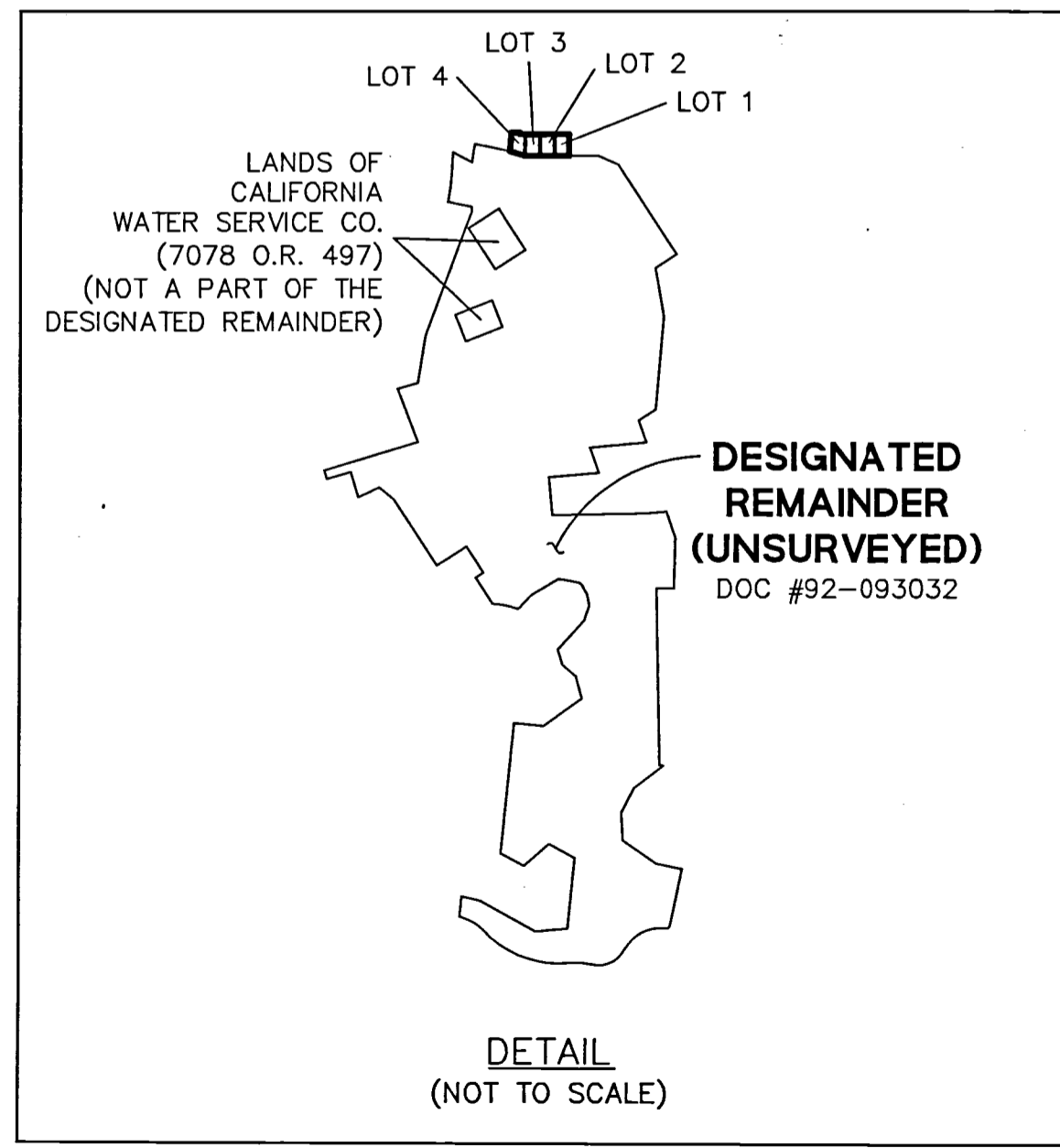
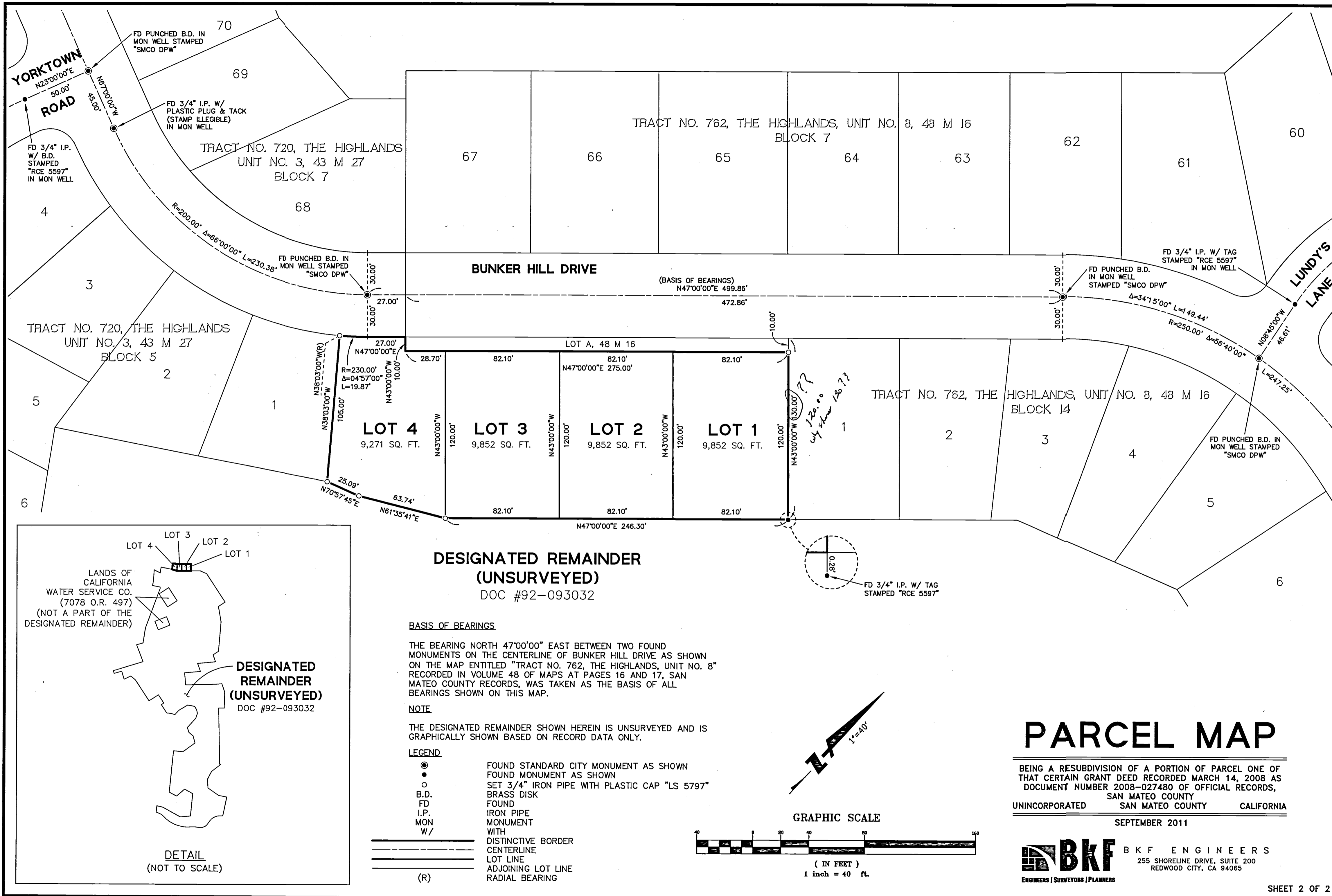
BY: \_\_\_\_\_  
DEPUTY RECORDER

FEE: \_\_\_\_\_

**PARCEL MAP**

BEING A RESUBDIVISION OF A PORTION OF PARCEL ONE OF THAT CERTAIN GRANT DEED RECORDED MARCH 14, 2008 AS DOCUMENT NUMBER 2008-027480 OF OFFICIAL RECORDS,  
SAN MATEO COUNTY  
UNINCORPORATED SAN MATEO COUNTY CALIFORNIA  
SEPTEMBER 2011





**DESIGNATED REMAINDER (UNSURVEYED)**  
DOC #92-093032

**BASIS OF BEARINGS**

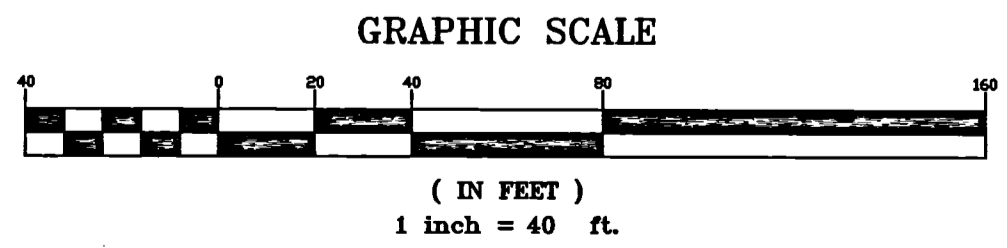
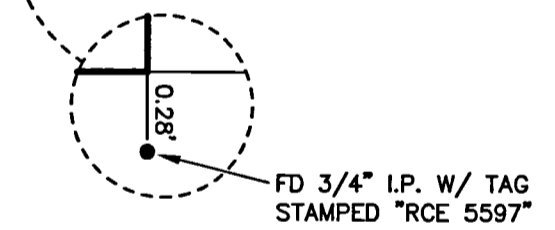
THE BEARING NORTH 47°00'00" EAST BETWEEN TWO FOUND MONUMENTS ON THE CENTERLINE OF BUNKER HILL DRIVE AS SHOWN ON THE MAP ENTITLED "TRACT NO. 762, THE HIGHLANDS, UNIT NO. 8" RECORDED IN VOLUME 48 OF MAPS AT PAGES 16 AND 17, SAN MATEO COUNTY RECORDS, WAS TAKEN AS THE BASIS OF ALL BEARINGS SHOWN ON THIS MAP.

**NOTE**

THE DESIGNATED REMAINDER SHOWN HEREIN IS UNSURVEYED AND IS GRAPHICALLY SHOWN BASED ON RECORD DATA ONLY.

**LEGEND**

- FOUND STANDARD CITY MONUMENT AS SHOWN
- FOUND MONUMENT AS SHOWN
- SET 3/4" IRON PIPE WITH PLASTIC CAP "LS 5797"
- B.D. BRASS DISK
- FD FOUND
- I.P. IRON PIPE MONUMENT
- MON MONUMENT
- W/ WITH
- DISTINCTIVE BORDER
- - - CENTERLINE
- LOT LINE
- ADJOINING LOT LINE
- (R) RADIAL BEARING



**PARCEL MAP**

BEING A RESUBDIVISION OF A PORTION OF PARCEL ONE OF THAT CERTAIN GRANT DEED RECORDED MARCH 14, 2008 AS DOCUMENT NUMBER 2008-027480 OF OFFICIAL RECORDS, SAN MATEO COUNTY UNINCORPORATED SAN MATEO COUNTY CALIFORNIA

SEPTEMBER 2011

**BKF ENGINEERS**  
255 SHORELINE DRIVE, SUITE 200  
REDWOOD CITY, CA 94065  
ENGINEERS | SURVEYORS | PLANNERS

# IMPROVEMENT PLANS FOR HIGHLAND ESTATES - LOT 5 TICONDEROGA DRIVE

## COUNTY OF SAN MATEO, CALIFORNIA

255 SHORELINE DRIVE, SUITE 200  
REDWOOD CITY, CA 94065  
PHONE: (650) 482-6300  
FAX: (650) 482-6399



CALIFORNIA

HIGHLAND ESTATES  
LOT 5 IMPROVEMENT PLANS  
TITLE SHEET  
SAN MATEO COUNTY  
CITY OF SAN MATEO

### SHEET INDEX

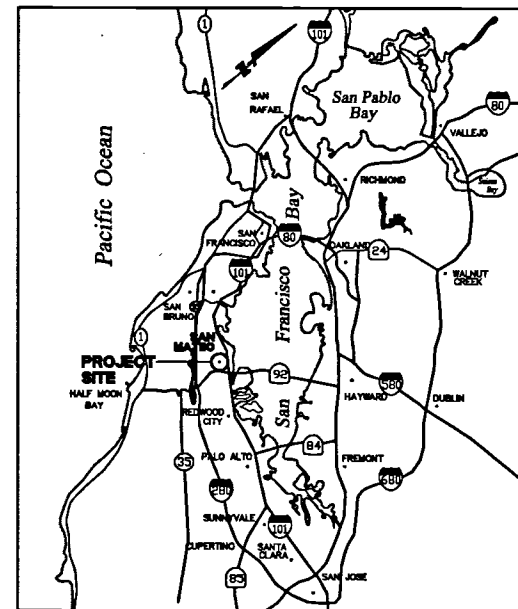
SHEET NO	DESCRIPTION
C5.10	TITLE SHEET
C5.20	GENERAL NOTES, LEGEND AND ABBREVIATIONS
C5.30	SITE AND CLEARING, CONSTRUCTION AND GRADING PLANS
C5.40	UTILITY PLAN AND CROSS SECTION
C5.50	EROSION CONTROL PLANS
C5.60	EROSION CONTROL DETAILS AND NOTES
C5.70	CONSTRUCTION DETAILS
C5.71	CONSTRUCTION DETAILS
C5.80	LOGISTICS PLAN
C5.90	CASCA STANDARD DETAILS

### EARTHWORK

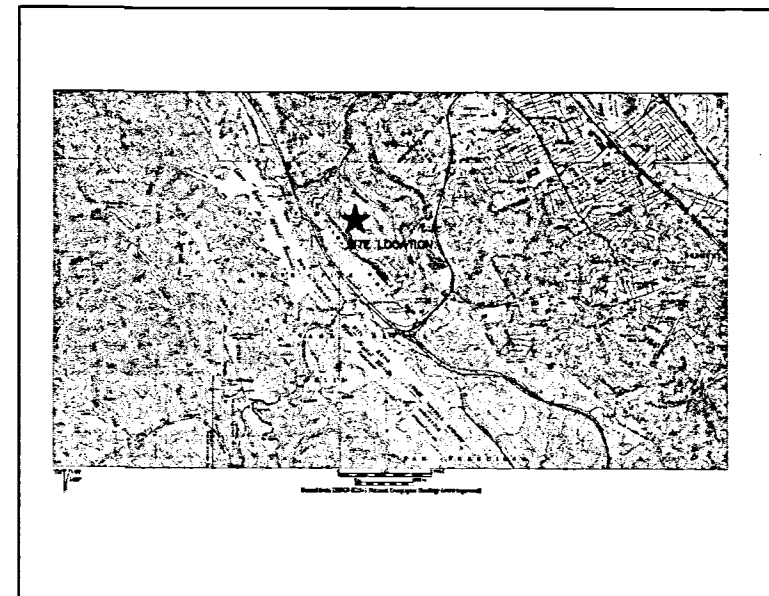
CUT	1,100 CY
FILL	0 CY
NET	1,100 CY CUT

#### EARTHWORK NOTES:

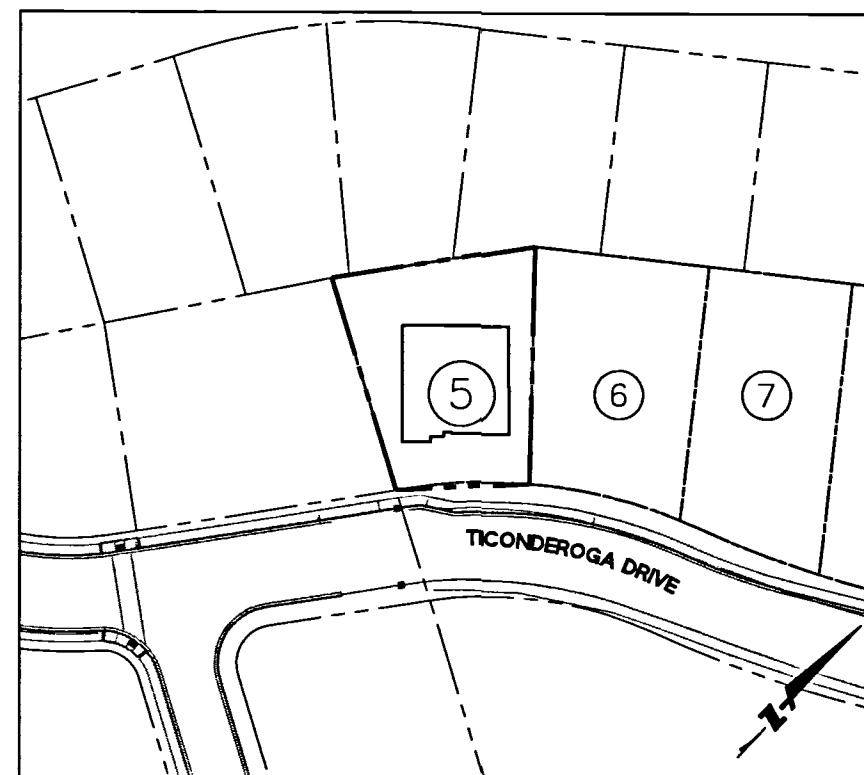
- THE QUANTITIES SHOWN ABOVE EXCLUDE EARTHWORK FROM GEOTECHNICAL SLOPE REMEDIATION ACTIVITIES PER CONDITION OF APPROVAL ITEM NO. 4.M, INCLUDING EARTHWORK SWELLING AND SHRINKAGE FACTORS ASSOCIATED WITH GEOTECHNICAL SLOPE REMEDIATION MITIGATION.
- THE EARTHWORK QUANTITIES SHOWN ABOVE ARE IN-PLACE QUANTITIES AND HAVE BEEN ESTIMATED BY THE ENGINEER WITH THE FOLLOWING ASSUMPTIONS:
  - EARTHWORK QUANTITIES DO NOT ACCOUNT FOR SITE STRIPINGS.
  - THE UNIT PAD SECTION IS ASSUMED TO BE A 12" THICK CONCRETE SECTION.
  - EARTHWORK QUANTITIES DO NOT ACCOUNT FOR FILL SHRINKAGE FACTORS.
  - EARTHWORK QUANTITIES DO NOT ACCOUNT FOR UTILITY TRENCHING AND SPOILS.
  - EARTHWORK QUANTITIES DO NOT ACCOUNT FOR SOIL STABILIZATION FACTORS AND LANDSCAPING PLANTING SOILS.
  - EARTHWORK QUANTITIES DO NOT ACCOUNT FOR RETAINING WALLS AND BUILDING FOOTINGS AND BACKFILL.
- ACTUAL QUANTITIES MAY VARY DUE TO FIELD CONDITIONS OR CONSTRUCTION TECHNIQUES. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES BASED UPON APPROVED PLANS AND INDEPENDENT CALCULATIONS.



**VICINITY MAP**  
NTS



**LOCATION MAP**  
NTS



**SITE PLAN**  
SCALE: 1" = 50'

### PROJECT DATA

<b>LOT AREA:</b>	10,191 SF
<b>EXISTING LAND USE:</b>	UNDEVELOPED LAND
<b>PROPOSED USE:</b>	RESIDENTIAL (LOT 5)
<b>EXISTING ZONE:</b>	RMD - RESOURCE MANAGEMENT DISTRICT
<b>PROPOSED ZONE:</b>	R-1
<b>PROPOSED USE:</b>	1 RESIDENTIAL LOT
<b>OWNER:</b>	TICONDEROGA PARTNERS, A CALIFORNIA LIMITED LIABILITY CORPORATION C/O THE CHAMBERLAIN GROUP 655 SKYWAY, SUITE 230 SAN CARLOS, CA 94070 (650) 595-5582 ATTN: JACK CHAMBERLAIN
<b>DEVELOPER:</b>	THE CHAMBERLAIN GROUP 655 SKYWAY, SUITE 230 SAN CARLOS, CA 94070 (650) 595-5582 ATTN: JACK CHAMBERLAIN
<b>CIVIL ENGINEER:</b>	BKF ENGINEERS 255 SHORELINE DRIVE, SUITE 200 REDWOOD CITY, CA 94065 (650) 482-6300
<b>GEOTECHNICAL ENGINEER:</b>	CORNERSTONE EARTH GROUP 1259 OAKMEAD PARKWAY SUNNYVALE, CA 94085 (408) 245-4600
<b>WATER SUPPLY:</b>	CAL WATER SERVICE 341 N. DELAWARE STREET SAN MATEO, CA 94401-1808 (650) 343-1808
<b>SEWAGE DISPOSAL:</b>	CITY OF SAN MATEO & CRYSTAL SPRINGS COUNTY SANITATION DISTRICT
<b>GAS &amp; ELECTRIC TELEPHONE:</b>	PG&E AT&T
<b>FIRE PROTECTION:</b>	CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION
<b>CABLE:</b>	COMCAST
<b>STORM DRAINAGE:</b>	COUNTY OF SAN MATEO CITY OF SAN MATEO
<b>TOPOGRAPHIC BASE MAP:</b>	AERO-GEODIC COROP. JOB NO. 950168 DATE OF PHOTOGRAPHY 9/18/87
<b>EROSION CONTROL POINT OF CONTACT:</b>	NOEL CHAMBERLAIN, NEXGEN BUILDERS INC. 225 DEMETER STREET EAST PALO ALTO, CA 94303 PHONE #: (650) 322-5800 CELL #: (650) 444-3089 EMAIL: noel@nexgenbuilders.com

### ENGINEER'S STATEMENT

THESE IMPROVEMENT PLANS HAVE BEEN PREPARED BY ME OR UNDER MY DIRECTION IN ACCORDANCE WITH STANDARD ENGINEERING PRACTICE.

ROLAND N.V. HAGA  
R.C.E. NO. 43971  
BKF ENGINEERS

DATE



Revisions

No.

Date

Scale

Design

Drawn

Approved

Job No.

Sheet Number:

**C5.10**  
OF

DRAWING NAME: J:\Projects\950168\950168.dwg  
PLOT DATE: 08-02-18  
PLOT BY: lrat

NOTES:

I. GENERAL NOTES

- 1. WORK SHALL CONFORM TO THE COUNTY OF SAN MATEO PUBLIC WORKS STANDARD DRAWINGS FOR PUBLIC IMPROVEMENTS, REVISED SEPTEMBER 2007 AND THE SAN MATEO COUNTY SEWER AND SANITATION DISTRICTS STANDARD SPECIFICATIONS, DATED JUNE 1995.
2. PERFORM WORK IN CONFORMANCE WITH THE RECOMMENDATION OF THE PROJECT GEOTECHNICAL ENGINEERING REPORT TITLED "UPDATED GEOTECHNICAL INVESTIGATION, HIGHLAND ESTATES LOTS 5 THROUGH 11, TICONDEROGA DRIVE/COBBLEHILL PLACE/COMPENS WAY, SAN MATEO COUNTY, CALIFORNIA" PREPARED BY CORNERSTONE EARTH GROUP, DATED OCTOBER 30, 2015. GRADING WORK WILL BE SUBJECT TO APPROVAL OF GEOTECHNICAL ENGINEER.
3. ARRANGE FOR REQUIRED INSPECTIONS BY COUNTY ENGINEER. NO DELAY OF WORK CLAIM WILL BE ALLOWED DUE TO CONTRACTOR'S FAILURE TO ARRANGE FOR REQUIRED COUNTY INSPECTIONS IN ADVANCE. PROVIDE NOTICE TO COUNTY ENGINEER A MINIMUM OF 2 WORKING DAYS IN ADVANCE OF REQUIRED INSPECTIONS.
4. REVISIONS TO THESE PLANS MUST BE REVIEWED AND APPROVED IN WRITING BY ENGINEER. NO WILL OBTAIN APPROVAL FROM COUNTY ENGINEER PRIOR TO CONSTRUCTION OF AFFECTED ITEMS. REVISIONS SHALL BE ACCURATELY SHOWN ON REVISED PLANS, WHICH SHALL BE REVIEWED AND APPROVED BY THE ENGINEER AND COUNTY ENGINEER PRIOR TO INSTALLATION OF THE IMPROVEMENTS.
5. REPLACE OR REPAIR EXISTING UTILITIES, IMPROVEMENTS OR FEATURES DAMAGED, REMOVED, OR DISTURBED BY CONSTRUCTION TO THEIR ORIGINAL CONDITION, WHETHER SHOWN ON PLANS OR NOT.
6. REPLACE STREET MONUMENTS, LOT CORNERS PIPES AND OTHER PERMANENT MONUMENTS DISTURBED DURING CONSTRUCTION. MONUMENTS SHALL BE SET BY A SURVEYOR REGISTERED IN THE STATE OF CALIFORNIA.
7. PREPARE TRAFFIC CONTROL PLAN AND OBTAIN APPROVAL FROM COUNTY ENGINEER BEFORE COMMENCING WORK. PROVIDE FLAG MEN, CONES, BARRICADES AND OTHER TRAFFIC CONTROL MEASURES NECESSARY TO PROVIDE SAFE LANE CLOSURE IN CONFORMANCE WITH CALTRANS STANDARDS AND AS APPROVED BY COUNTY ENGINEER.
8. PEDESTRIAN TRAFFIC CONTROL TO BE PROVIDED WHEN EXISTING SIDEWALKS CANNOT BE MAINTAINED DURING CONSTRUCTION.
9. DO NOT LEAVE TRENCHES OPEN OVERNIGHT IN EXISTING STREET AREAS. BACKFILL OR COVER OPEN TRENCHES AT THE END OF WORK EVERY WORK DAY.
10. PREPARE SHORING PLAN AND SUBMIT TO THE COUNTY ENGINEER FOR REVIEW AND APPROVAL. ADEQUATELY SHORE EXCAVATIONS TO PREVENT EARTH FROM SLIDING OR SETTLING AND TO PROTECT EXISTING ADJACENT IMPROVEMENTS FROM DAMAGE. DAMAGE RESULTING FROM A LACK OF ADEQUATE SHORING SHALL BE THE CONTRACTOR'S RESPONSIBILITY. PROVIDE SHORING IN CONFORMANCE WITH APPLICABLE CONSTRUCTION SAFETY ORDERS OF THE CALIFORNIA DIVISION OF INDUSTRIAL SAFETY AND OSHA WHERE EXCAVATIONS ARE 5 FEET OR MORE IN DEPTH.
11. IMPLEMENT CONSTRUCTION DUST CONTROL MEASURES TO REDUCE PARTICULATE GENERATION TO A LESS THAN SIGNIFICANT LEVEL. PROVIDE DUST CONTROL IN CONFORMANCE WITH BAY AREA AIR QUALITY MANAGEMENT DISTRICT MINIMUM REQUIREMENTS. IMPLEMENT THE FOLLOWING CONSTRUCTION PRACTICES EXCEPT WHEN IT IS RAINING.
11.A. WATER ACTIVE EXTERIOR SOIL AREAS AT LEAST TWICE DAILY.
11.B. COVER TRUCKS HAULING SOIL, SAND AND OTHER LOOSE MATERIAL OR PROVIDE 2 FEET OF FRIEBOARD.
11.C. PAVE, APPLY WATER THREE TIMES DAILY OR APPLY NON-TOXIC SOIL STABILIZER ON UNPAVED ACCESS ROADS, PARKING AREAS AND STAGING AREAS.
11.D. SWEEP PAVED ACCESS ROADS, PARKING AREAS AND STAGING AREAS DAILY.
11.E. APPLY HYDROSEED OR NON-TOXIC SOIL STABILIZER TO INACTIVE CONSTRUCTION AREAS.
11.F. ENCLOSE, COVER, WATER TWICE DAILY OR APPLY NON-TOXIC SOIL STABILIZER TO EXPOSED SOIL STOCKPILES.
11.G. INSTALL SANDBAGS AND OTHER EROSION CONTROL MEASURES TO PREVENT SILT RUNOFF TO PUBLIC ROADWAYS.
11.H. LIMIT TRAFFIC SPEED ON UNPAVED ROADS TO 15 MPH.
11.I. REPLANT VEGETATION IN DISTURBED AREAS AS QUICKLY AS POSSIBLE.
12. KEEP STREETS CLEAN OF DIRT, MUD AND OTHER CONSTRUCTION DEBRIS. CLEAN AND SWEEP STREETS ON A DAILY BASIS DURING THE WORK WEEK.
13. SHOULD IT APPEAR THAT THE WORK IS NOT SUFFICIENTLY DETAILED OR SPECIFIED IN CONSTRUCTION DOCUMENTS, NOTIFY ENGINEER AND OBTAIN CLARIFICATION BEFORE PROCEEDING WITH WORK IN QUESTION.
14. CONSTRUCTION STAKING SHALL BE DONE BY A CIVIL ENGINEER OR LAND SURVEYOR REGISTERED IN THE STATE OF CALIFORNIA.
15. IF BKF ENGINEERS IS RETAINED TO PROVIDE CONSTRUCTION STAKING SERVICES, CONTRACTOR WILL BE PROVIDED WITH ONE SET OF SURVEY STAKES FOR LAYOUT PURPOSES. PRESERVE AND PROTECT THESE STAKES UNTIL THEY ARE NO LONGER NEEDED. RE-STAKING SHALL BE AT CONTRACTOR'S EXPENSE.
16. MATCH EXISTING PAVEMENT, CURB AND GUTTER, SIDEWALK, ADJACENT LANDSCAPE AND OTHER IMPROVEMENTS WITH SMOOTH TRANSITION TO AVOID ABRUPT OR APPARENT CHANGES IN GRADES, CROSS SLOPES, LOW SPOTS OR HAZARDOUS CONDITIONS.
17. VISIT SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND OVERALL PROJECT REQUIREMENT PRIOR TO BIDDING PROJECT.
18. OBTAIN AND PAY FOR PERMITS AND LICENSES AS REQUIRED TO PERFORM WORK WITHIN THE COUNTY OF SAN MATEO PRIOR TO START OF WORK. PERMITS MAY INCLUDE ENCROACHMENT PERMIT FOR WORK WITHIN COUNTY RIGHT-OF-WAY AND GRADING/UTILITY PERMIT.
19. CONTRACTOR IS RESPONSIBLE FOR TRAFFIC AND PEDESTRIAN CONTROL DURING CONSTRUCTION.
20. OBTAIN APPROVAL OF IMPORT SOIL MATERIAL FROM GEOTECHNICAL ENGINEER PRIOR TO DISTRIBUTING MATERIAL OVER SITE.
21. PROTECT ADJOINING PREMISES, TREES, LANDSCAPING, UTILITIES, SIDEWALKS, STREETS AND OTHER FEATURES FROM DAMAGE BY CONTRACTOR'S OPERATIONS. REPAIR, REPLACE OR CLEAN ADJOINING PREMISES, TREES, LANDSCAPING, UTILITIES, SIDEWALKS, STREETS AND OTHER FEATURES TO SATISFACTION OF OWNER.
22. MAINTAIN AND MANAGE CONSTRUCTION MATERIALS, EQUIPMENT AND VEHICLES AT THE CONSTRUCTION SITE.
23. NOTIFY COUNTY ENGINEER A MINIMUM OF 24 HOURS PRIOR TO STARTING WORK ON OFF-SITE DRAINAGE AND SEWER FACILITIES, GRADING, PAVING, OR WORK IN THE COUNTY RIGHT-OF-WAY.
24. MAKE EFFORTS TO MINIMIZE CONSTRUCTION NOISE.

- 24.A. MAINTAIN EQUIPMENT USED ON SITE IN GOOD MECHANICAL CONDITION TO MINIMIZE NOISE CREATED BY FAULTY OR POORLY MAINTAINED ENGINE, DRIVE-TRAIN AND OTHER COMPONENTS.
24.B. EQUIPMENT EXCEEDING 110 DBA MEASURED 25 FEET FROM THE PIECE OF EQUIPMENT WILL NOT BE ALLOWED ON SITE.
24.C. SELECT APPROPRIATE EQUIPMENT TO MINIMIZE NOISE GENERATION. USE THE FOLLOWING TECHNIQUES TO MINIMIZE NOISE GENERATION SUBJECT TO EQUIPMENT AVAILABILITY AND COST CONSIDERATIONS. USE SCRAPERS AS MUCH AS POSSIBLE FOR EARTH REMOVAL, RATHER THAN NOISIER LOADERS AND HAUL TRUCKS. USE BACKHOES FOR BACKFILLING AS IT IS QUIETER THAN DOZERS OR LOADERS. USE MOTOR GRADERS RATHER THAN BULLDOZERS FOR FINAL GRADING.

II. EXISTING CONDITIONS

- 1. EXISTING TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS IS BASED UPON A FIELD TOPOGRAPHIC SURVEY OF THE PROJECT SITE BY BKF ENGINEERS, DATED JUNE 2009. ACTUAL CONDITIONS ENCOUNTERED ON SITE MAY VARY FROM THOSE SHOWN ON THE PLANS. CONTRACTOR SHALL REVIEW CONSTRUCTION DOCUMENTS AND CONDUCT THEIR OWN INVESTIGATIONS TO UNDERSTAND AND VERIFY EXISTING CONDITIONS AT THE SITE.
2. EXISTING SUBSURFACE IMPROVEMENTS AND UTILITIES SHOWN ON THESE PLANS WERE TAKEN FROM RECORD INFORMATION KNOWN TO THE ENGINEER AND FIELD SURVEY OF ABOVE GRADE FEATURES. THESE PLANS ARE NOT MEANT TO BE A FULL CATALOG OF EXISTING SUBSURFACE CONDITIONS. CONDUCT FIELD INVESTIGATION TO VERIFY THE LOCATIONS AND ELEVATIONS OF EXISTING SUBSURFACE IMPROVEMENTS AND UTILITIES, WHETHER SHOWN ON PLANS OR NOT, PRIOR TO START OF EXCAVATION. IF DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THESE PLANS ARE DISCOVERED, NOTIFY ENGINEER IMMEDIATELY AND REQUEST DISCREPANCY BE RESOLVED.
3. VERIFY LOCATION AND ELEVATION OF EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION AFFECTING UTILITIES. POTHOLES WHERE NEEDED TO VERIFY LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES.
4. CONTACT USA (UNDERGROUND SERVICES ALERT) AT 1-800-227-2600, AND AFFECTED UTILITY COMPANIES A MINIMUM OF 2 WORKING DAYS PRIOR TO STARTING WORK TO REQUEST UTILITIES BE MARKED.

III. DEMOLITION

- 1. REMOVE FROM SITE AND DISPOSE OF IN LAWFUL MANNER EXISTING STRUCTURES, UTILITIES, AND OTHER FEATURES NOT REMOVED DURING DEMOLITION OR ROUGH GRADING AND ENCOUNTERED DURING WORK ON SITE.
1.A. REMOVE WOOD OR CONCRETE STRUCTURES, SLABS, FOOTINGS, GRADE BEAMS, DECKS, DOCKS, AND OTHER SIMILAR STRUCTURES.
1.B. REMOVE LANDSCAPING, UTILITIES AND IRRIGATION LINES AS SPECIFIED BY GEOTECHNICAL ENGINEER.
1.C. REMOVE ABANDONED IN-GROUND STRUCTURES, SUCH AS CULVERTS, UTILITY VAULTS, AND FOUNDATIONS AS SPECIFIED BY GEOTECHNICAL ENGINEER.

IV. DEWATERING

- 1. DEWATER AREAS COVERED WITH STANDING WATER PRIOR TO PLACEMENT OF FILL.
2. DISPOSE OF WATER FROM DEWATERING OPERATION IN CONFORMANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

V. UTILITIES

- 1. DO NOT OPERATE WATER VALVES OR OTHER WATER DISTRICT FACILITIES. REQUIRED OPERATION WILL BE PERFORMED BY UTILITY DISTRICT PERSONNEL ONLY. NOTIFY UTILITY DISTRICT 2 WORKING DAYS PRIOR TO REQUIRED FACILITY OPERATION.
2. PROVIDE MINIMUM 12 INCH VERTICAL CLEARANCE BETWEEN ADJACENT UTILITY PIPES AT UTILITY CROSSINGS UNLESS OTHERWISE NOTED.
3. COMPLETE ELECTRIC, GAS, TELEPHONE, CABLE AND OTHER JOINT TRENCH WORK IN CONFORMANCE WITH THE REQUIREMENTS OF THE RESPECTIVE UTILITY PROVIDER. NOTIFY UTILITY PROVIDER MINIMUM 2 WORKING DAYS PRIOR TO COMMENCING WORK. IF EXISTING WATER, SEWER, GAS OR OTHER UTILITY SERVICES ARE DISTURBED OR DAMAGED DURING CONSTRUCTION, NOTIFY UTILITY OWNER IMMEDIATELY.
4. PROTECT UTILITIES FROM DAMAGE CAUSED BY CONTRACTOR'S WORK.
5. PROVIDE UTILITY STRUCTURES IN PAVED AREAS SUITABLE FOR H-20 LOADING.
6. PIPE LENGTHS SHOWN ON PLANS ARE FOR ENGINEERING CALCULATIONS ONLY AND ARE NOT INTENDED AS BID QUANTITIES OR FOR ORDERING MATERIALS.
7. CONSTRUCT GRAVITY FLOW UTILITIES FROM DOWNSTREAM CONNECTION POINT TO UPSTREAM TERMINUS.
8. COORDINATE WITH COUNTY OF SAN MATEO AND CRYSTAL SPRINGS SANITATION DISTRICT FOR INSPECTION OF WORK ON DISTRICT FACILITIES.
9. ALL WATER LATERALS AND SERVICES SHALL BE INSTALLED TO THE STANDARDS OF THE CALIFORNIA WATER SERVICE COMPANY. EXISTING WATER MAINS OR LATERALS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED AND TESTED TO THE SATISFACTION OF THE WATER COMPANY.

VI. EARTHWORK AND GRADING

- 1. OFF-SITE IMPORT FILL MATERIAL SHALL CONFORM TO THE SPECIFICATIONS AND THE REQUIREMENTS OF THE GEOTECHNICAL REPORT.
2. TOPSOIL, ROOTS, VEGETABLE MATTER, TRASH AND DEBRIS WILL NOT BE CONSIDERED ACCEPTABLE FILL MATERIAL.
3. REMOVE DEBRIS FROM AREAS OF EARTHWORK PRIOR TO PLACING FILL OR STARTING GRADING OPERATIONS.
4. PLACE AND COMPACT FILL MATERIAL AS RECOMMENDED IN GEOTECHNICAL REPORT. PLACE FILL MATERIAL IN MAXIMUM 8 INCH UNCOMPACTED THICKNESS. COMPACTION BY FLOODING, PONDING OR JETTING WILL NOT BE PERMITTED.

VII. RECORD DRAWINGS

- 1. KEEP ACCURATE RECORD OF THE FINAL LOCATION, ELEVATION AND DESCRIPTION OF WORK ON A COPY OF THE FINAL APPROVED CONSTRUCTION DOCUMENTS. NOTE THE LOCATIONS AND ELEVATIONS OF EXISTING IMPROVEMENTS ENCOUNTERED THAT VARY FROM THE LOCATIONS SHOWN ON THE IMPROVEMENT PLANS. PROVIDE COPY OF RECORD INFORMATION TO OWNER AT COMPLETION OF PROJECT AND WHEN REQUESTED.

VIII. 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 BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD BOTH DESIGN PROFESSIONAL AND THE COUNTY OF SAN MATEO HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF EITHER THE DESIGN PROFESSIONAL OR THE COUNTY OF SAN MATEO, RESPECTIVELY.

IX. 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 COUNTY ENGINEER AND THE PREPARER OF THESE PLANS.

X. DRAWING LANGUAGE

- 1. NOTES AND CALLOUTS ON DRAWINGS MAY USE IMPERATIVE LANGUAGE. REQUIREMENTS EXPRESSED IMPERATIVELY ARE TO BE PERFORMED BY THE CONTRACTOR UNLESS NOTED OTHERWISE.

CONDITIONS OF APPROVAL NOTES

CONSTRUCTION NOTES

- 1. THE FIRST PHASE OF CONSTRUCTION SHALL REQUIRE 30 PERCENT OF CONSTRUCTION EQUIPMENT TO MEET TIER 1 EPA CERTIFICATION STANDARDS FOR CLEAN TECHNOLOGY. THE REMAINDER OF CONSTRUCTION EQUIPMENT (70 PERCENT), WHICH WOULD CONSIST OF OLDER TECHNOLOGIES, SHALL BE REQUIRED TO USE EMULSIFIED FUELS.
2. THE SECOND PHASE OF CONSTRUCTION SHALL REQUIRE 30 PERCENT OF CONSTRUCTION EQUIPMENT TO MEET TIER 2 EPA CERTIFICATION STANDARDS FOR CLEAN TECHNOLOGY AND 50 PERCENT TO MEET TIER 1 EPA CERTIFICATION STANDARDS. THE REMAINING 20 PERCENT OF CONSTRUCTION EQUIPMENT, WHICH WOULD CONSIST OF OLDER TECHNOLOGIES, SHALL USE EMULSIFIED FUELS.
3. FOR ALL LARGER VEHICLES, INCLUDING CEMENT MIXERS OR OTHER DEVICES THAT MUST BE DELIVERED BY LARGE TRUCKS, VEHICLES SHALL BE EQUIPPED WITH CARB LEVEL THREE VERIFIED CONTROL DEVICES.
4. WATER ALL ACTIVE CONSTRUCTION AREAS AT LEAST TWICE DAILY.
5. COVER ALL TRUCKS HAULING SOIL, SAND, AND OTHER LOOSE MATERIALS OR REQUIRE ALL TRUCKS TO MAINTAIN AT LEAST TWO FEET OF FREEBOARD.
6. PAVE, APPLY WATER THREE TIMES DAILY, OR APPLY NON-TOXIC SOIL STABILIZERS ON ALL UNPAVED ACCESS ROADS, PARKING AREAS, AND STAGING AREAS AT THE CONSTRUCTION SITES.
7. SWEEP DAILY (WITH WATER SWEEPERS) ALL PAVED ACCESS ROADS, PARKING AREAS, AND STAGING AREAS AT THE CONSTRUCTION SITES.
8. SWEEP PUBLIC STREETS ADJACENT TO CONSTRUCTION SITES DAILY (WITH WATER SWEEPERS) IF VISIBLE SOIL MATERIAL IS CARRIED ONTO THE STREETS.
9. HYDROSEED OR APPLY NON-TOXIC SOIL STABILIZERS TO INACTIVE CONSTRUCTION AREAS (PREVIOUSLY GRADED AREAS INACTIVE FOR TEN DAYS OR MORE).
10. ENCLOSE, COVER, WATER TWICE DAILY, OR APPLY NON-TOXIC SOIL BINDER TO EXPOSED STOCKPILES (DIRT, SAND, ETC.). LIMIT TRAFFIC SPEEDS ON UNPAVED ROADS TO 15 MILES PER HOUR.
11. LIMIT TRAFFIC SPEEDS ON UNPAVED ROADS TO 15 MILES PER HOUR.
12. INSTALL SANDBAGS OR OTHER EROSION CONTROL MEASURES TO PREVENT SILT RUNOFF TO PUBLIC ROADWAYS.
13. REPLANT VEGETATION IN DISTURBED AREAS AS SOON AS POSSIBLE.
14. INSTALL WHEEL WASHERS FOR ALL EXITING TRUCKS OR WASH OFF THE TIRES OR TRACKS OF ALL TRUCKS AND EQUIPMENT LEAVING THE CONSTRUCTION SITE.
15. INSTALL WIND BREAKS AT THE WINDWARD SIDES OF THE CONSTRUCTION AREAS.
16. SUSPEND EXCAVATION AND GRADING ACTIVITIES WHEN WIND (AS INSTANTANEOUS GUSTS) EXCEEDS 25 MILES PER HOUR.

NOISE NOTES

- 1. EQUIPMENT AND TRUCKS USED FOR PROJECT GRADING AND CONSTRUCTION WOULD UTILIZE THE BEST AVAILABLE NOISE CONTROL TECHNIQUES (E.G., IMPROVED EXHAUST MUFFLERS, EQUIPMENT REDESIGN, USE OF INTAKE SILENCERS, DUCTS, ENGINE ENCLOSURES, AND ACOUSTICALLY-ATTENUATING SHIELDS OR SHROUDS) IN ORDER TO MINIMIZE CONSTRUCTION NOISE IMPACTS.
2. EQUIPMENT USED FOR PROJECT GRADING AND CONSTRUCTION WOULD BE HYDRAULICALLY OR ELECTRICALLY POWERED IMPACT TOOLS (E.G., JACK HAMMERS AND PAVEMENT BREAKERS) WHEREVER POSSIBLE TO AVOID NOISE ASSOCIATED WITH COMPRESSED AIR EXHAUST FROM PNEUMATICALLY-POWERED TOOLS. COMPRESSED AIR EXHAUST SILENCERS WOULD BE USED ON OTHER EQUIPMENT. OTHER QUIETER PROCEDURES WOULD BE USED SUCH AS DRILLING RATHER THAN IMPACT EQUIPMENT WHENEVER FEASIBLE.
3. THE GRADING AND CONSTRUCTION ACTIVITY WOULD BE KEPT TO THE HOURS OF 7:00 AM TO 7:00 PM, MONDAY THROUGH FRIDAY, SATURDAY HOURS (8:00 AM TO 5:00 PM) ARE PERMITTED UPON THE DISCRETION OF COUNTY APPROVAL BASED ON INPUT FROM NEARBY RESIDENTS AND BUSINESSES. SATURDAY CONSTRUCTION (8:00 AM TO 5:00 PM) WOULD BE ALLOWED ONCE THE BUILDINGS ARE FULLY ENCLOSED, NOISE GENERATING GRADING AND CONSTRUCTION ACTIVITIES SHALL NOT OCCUR AT ANY TIME ON SUNDAYS, THANKSGIVING AND CHRISTMAS.
4. RESIDENTIAL PROPERTY OWNERS WITHIN 200 FEET OF PLANNED CONSTRUCTION AREAS SHALL BE NOTIFIED OF THE CONSTRUCTION SCHEDULE IN WRITING, PRIOR TO CONSTRUCTION; THE PROJECT SPONSOR SHALL DESIGNATE A "DISTURBANCE COORDINATOR" WHO SHALL BE RESPONSIBLE FOR RESPONDING TO ANY LOCAL COMPLAINTS REGARDING CONSTRUCTION NOISE; THE COORDINATOR (WHO MAY BE AN EMPLOYEE OF THE DEVELOPER OR GENERAL CONTRACTOR) SHALL DETERMINE THE CAUSE OF THE COMPLAINT AND SHALL REQUIRE THAT REASONABLE MEASURES WARRANTED TO CORRECT THE PROBLEM BE IMPLEMENTED; A TELEPHONE NUMBER OF THE NOISE DISTURBANCE COORDINATOR SHALL BE CONSPICUOUSLY POSTED AT THE CONSTRUCTION SITE FENCE AND ON THE NOTIFICATION SENT TO NEIGHBORS ADJACENT TO THE SITE.

ASBESTOS NOTES

- 1. IF NATURALLY OCCURRING ASBESTOS IS IDENTIFIED AT THE SITE, A SITE HEALTH AND SAFETY (H&S) PLAN INCLUDING METHODS FOR CONTROL OF AIRBORNE DUST SHALL BE PREPARED. THIS PLAN SHALL BE REVIEWED AND APPROVED BY THE COUNTY OF SAN MATEO PRIOR TO GRADING IN AREAS UNDERLAIN BY SERPENTINE-BEARING SOILS OR BEDROCK AND NATURALLY OCCURRING ASBESTOS. THE HAS PLAN SHALL STRICTLY CONTROL DUST-GENERATING EXCAVATION AND COMPACTION OF MATERIAL CONTAINING NATURALLY OCCURRING ASBESTOS. THE PLAN SHALL ALSO IDENTIFY SITE-MONITORING ACTIVITIES DEEMED NECESSARY DURING CONSTRUCTION (E.G., AIR MONITORING). WORKER MONITORING SHALL ALSO BE PERFORMED AS APPROPRIATE. THE PLAN SHALL DEFINE PERSONAL PROTECTION METHODS TO BE USED BY CONSTRUCTION WORKERS. ALL WORKER PROTECTION AND MONITORING SHALL COMPLY WITH PROVISIONS OF THE MINING SAFETY AND HEALTH ADMINISTRATION (MSHA) GUIDELINES, CALIFORNIA DIVISION OF OCCUPATIONAL SAFETY AND HEALTH (DOOSH), AND THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).
2. IF NATURALLY OCCURRING ASBESTOS IS FOUND AT THE SITE, A SOIL MANAGEMENT PLAN SHALL BE DEVELOPED AND APPROVED BY THE COUNTY PLANNING DEPARTMENT TO PROVIDE DETAILED DESCRIPTIONS OF THE CONTROL AND DISPOSITION OF SOILS CONTAINING NATURALLY OCCURRING ASBESTOS. SERPENTINE MATERIAL PLACED AS FILL SHALL BE SUFFICIENTLY BURIED IN ORDER TO PREVENT EROSION BY WIND OR SURFACE WATER RUNOFF, OR EXPOSURE TO FUTURE HUMAN ACTIVITIES, SUCH AS LANDSCAPING OR SHALLOW TRENCHES. ADDITIONALLY, THE BAANDM SHALL BE NOTIFIED PRIOR TO THE START OF ANY EXCAVATION IN AREAS CONTAINING NATURALLY OCCURRING ASBESTOS.

GRADING NOTES

- 1. NO GRADING SHALL BE ALLOWED DURING THE WINTER SEASON (OCTOBER 15 TO APRIL 30) TO AVOID POTENTIAL SOIL EROSION UNLESS APPROVED, IN WRITING, BY THE COMMUNITY DEVELOPMENT DIRECTOR. THE PROPERTY OWNERS SHALL SUBMIT A LETTER TO THE CURRENT PLANNING SECTION, AT LEAST TWO WEEKS PRIOR TO COMMENCEMENT OF GRADING, STATING THE DATE WHEN GRADING WILL BEGIN.

TREE PROTECTION NOTES

- 1. THE APPLICANT SHALL ESTABLISH AND MAINTAIN TREE PROTECTION ZONES THROUGHOUT THE ENTIRE LENGTH OF THE PROJECT. TREE PROTECTION ZONES SHALL BE DELINEATED USING 4-FOOT TALL ORANGE PLASTIC FENCING SUPPORTED BY POLES POUNDED INTO THE GROUND, LOCATED AS CLOSE TO THE DRIPLINES AS POSSIBLE WHILE STILL ALLOWING ROOM FOR CONSTRUCTION/GRADING TO SAFELY CONTINUE. THE APPLICANT SHALL MAINTAIN TREE PROTECTION ZONES FREE OF EQUIPMENT AND MATERIALS STORAGE AND SHALL NOT CLEAN ANY EQUIPMENT WITHIN THESE AREAS. SHOULD ANY LARGE ROOTS OR LARGE MASSES OF ROOTS NEED TO BE CUT, THE ROOTS SHALL BE INSPECTED BY A CERTIFIED ARBORIST OR REGISTERED FORESTER PRIOR TO CUTTING. ANY ROOT CUTTING SHALL BE MONITORED BY AN ARBORIST OR FORESTER AND DOCUMENTED. ROOTS TO BE CUT SHOULD BE SEVERED CLEANLY WITH A SAW OR TOPPERS. NORMAL IRRIGATION SHALL BE MAINTAINED, BUT OAKS SHOULD NOT NEED SUMMER IRRIGATION. THE ABOVE INFORMATION SHALL BE ON-SITE AT ALL TIMES.

VEGETATION REMOVAL/REPLACEMENT NOTES

- 1. VEGETATION REMOVED IN AREAS OUTSIDE OF BUILDING FOOTPRINTS, DRIVEWAYS, AND CONSTRUCTION ACCESS AREAS SHALL BE REPLACED WITH DROUGHT-TOLERANT, NON-INVASIVE PLANTS, IMMEDIATELY AFTER GRADING IS COMPLETE IN THAT AREA. PRIOR TO THE ISSUANCE OF ANY BUILDING PERMITS, THE APPLICANT SHALL SUBMIT PHOTOGRAPHS DEMONSTRATING COMPLIANCE WITH THIS CONDITION, SUBJECT TO REVIEW AND APPROVAL BY THE COMMUNITY DEVELOPMENT DIRECTOR.
2. THE APPLICANT SHALL REPLACE ALL VEGETATION REMOVED IN ALL AREAS NOT COVERED BY CONSTRUCTION WITH DROUGHT-TOLERANT, NON-INVASIVE PLANTS. ONCE CONSTRUCTION IS COMPLETED, PRIOR TO THE CURRENT PLANNING SECTION'S FINAL APPROVAL OF ANY BUILDING PERMIT, THE APPLICANT SHALL SUBMIT PHOTOGRAPHS DEMONSTRATING COMPLIANCE WITH THIS CONDITION, SUBJECT TO REVIEW AND APPROVAL BY THE COMMUNITY DEVELOPMENT DIRECTOR.

DUST CONTROL NOTES

- 1. ALL GRADED SURFACES AND MATERIALS, WHETHER FILLED, EXCAVATED, TRANSPORTED OR STOCKPILED, SHALL BE WETTED, PROTECTED OR CONTAINED IN SUCH A MANNER AS TO PREVENT ANY SIGNIFICANT NUISANCE FROM DUST, OR SPILLAGE UPON ADJOINING WATER BODY, PROPERTY, OR STREETS. EQUIPMENT AND MATERIALS ON THE SITE SHALL BE USED IN SUCH A MANNER AS TO AVOID EXCESSIVE DUST. A DUST CONTROL PLAN MAY BE REQUIRED AT ANYTIME DURING THE COURSE OF THE PROJECT.
2. A DUST PALLIATIVE SHALL BE APPLIED TO THE SITE WHEN REQUIRED BY THE COUNTY. THE TYPE AND RATE OF APPLICATION SHALL BE RECOMMENDED BY THE SOILS ENGINEER AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS, THE PLANNING AND BUILDING DEPARTMENT'S GEOTECHNICAL SECTION, AND THE REGIONAL WATER QUALITY CONTROL BOARD.

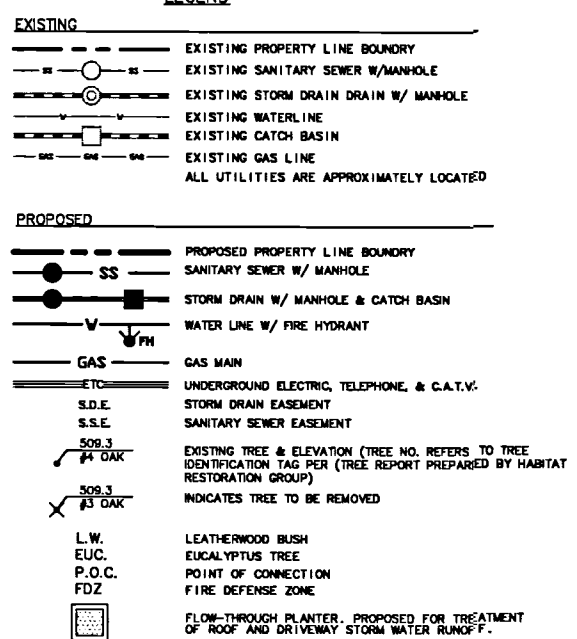
DISCOVERY OF HUMAN REMAINS NOTES

- 1. THE APPLICANT AND CONTRACTORS MUST BE PREPARED TO CARRY OUT THE REQUIREMENTS OF CALIFORNIA STATE LAW WITH REGARD TO THE DISCOVERY OF HUMAN REMAINS DURING CONSTRUCTION, WHETHER HISTORIC OR PREHISTORIC. IN THE EVENT THAT ANY HUMAN REMAINS ARE ENCOUNTERED DURING SITE DISTURBANCE, ALL GROUND-DISTURBING WORK SHALL CEASE IMMEDIATELY AND THE COUNTY CORONER SHALL BE NOTIFIED IMMEDIATELY. IF THE CORONER DETERMINES THE REMAINS TO BE NATIVE AMERICAN, THE NATIVE AMERICAN HERITAGE COMMISSION SHALL BE CONTACTED WITHIN 24 HOURS. A QUALIFIED ARCHAEOLOGIST, IN CONSULTATION WITH THE NATIVE AMERICAN HERITAGE COMMISSION, SHALL RECOMMEND SUBSEQUENT MEASURES FOR DISPOSITION OF THE REMAINS.

GEOTECHNICAL INSPECTION NOTES

- 1. PRIOR TO ISSUANCE OF BUILDING PERMITS, THE PROJECT GEOTECHNICAL CONSULTANT SHALL FIELD INSPECT (AND INVESTIGATE, AS NEEDED) ALL PROPOSED DRAINAGE DISCHARGE LOCATIONS AND VERIFY THAT PROPOSED DRAINAGE DESIGNS ARE ACCEPTABLE FROM A SLOPE STABILITY/EROSION PERSPECTIVE OR RECOMMEND APPROPRIATE MODIFICATIONS.

LEGEND



ABBREVIATIONS

Table with two columns: Abbreviation and Description. Includes entries for AC (Asphaltic Concrete), LF (Linear Feet), LG (Lip of Gutter), N/C (Not in Contract), OAK (Oak Tree), P (Pepper Tree), PD (Planned Development), etc.

BENCHMARK:

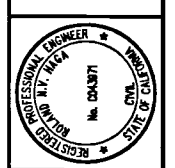
THE PROJECT BENCHMARK IS THE TOP OF AN IRON PIPE, ELEVATION OF 538.23, LOCATED WITHIN A MONUMENT BOX AT THE INTERSECTION OF THE CENTERLINES OF COBBLEHILL PLACE AND NEW BRUNSWICK DRIVE IN SAN MATEO, CALIFORNIA. THE ELEVATION SHOWN IS BASED UPON A SURVEY BY BKF ENGINEERS IN MARCH OF 2011 AND IS BASED UPON AN ASSUMED ELEVATION.

BASIS OF BEARINGS:

THE BEARING NORTH 76° 09' 00" EAST OF THE CENTERLINE OF COBBLE HILL PLACE AS SHOWN ON TRACT MAP NO. 723, THE HIGHLANDS, RECORDED ON AUGUST 26TH, 1955, IN VOLUME 43 OF MAPS AT PAGES 23-25, SAN MATEO COUNTY RECORDS.

DRAWING NAME: J:\eng\950168\dwg\CO\Lot\_5\CS\_20-HECDNT.dwg
PLOT DATE: 07-28-18
PLOTTED BY: tlet

255 SHORELINE DRIVE, SUITE 200
REDWOOD CITY, CA 94065
PHONE: (650) 482-6300
FAX: (650) 482-6399



HIGHLAND ESTATES
LOT 5 IMPROVEMENT PLANS
GENERAL NOTES, LEGEND AND ABBREVIATIONS
SAN MATEO COUNTY
CITY OF SAN MATEO
CALIFORNIA

Table with columns: No., Date, Scale, Design, Drawn, Approved, Job No. Includes entry for Scale NTS, Design JT, Drawn LE, Approved RH, Job No. 8508-20.



Know what's below. Call before you dig.

Sheet Number: C5.20 OF

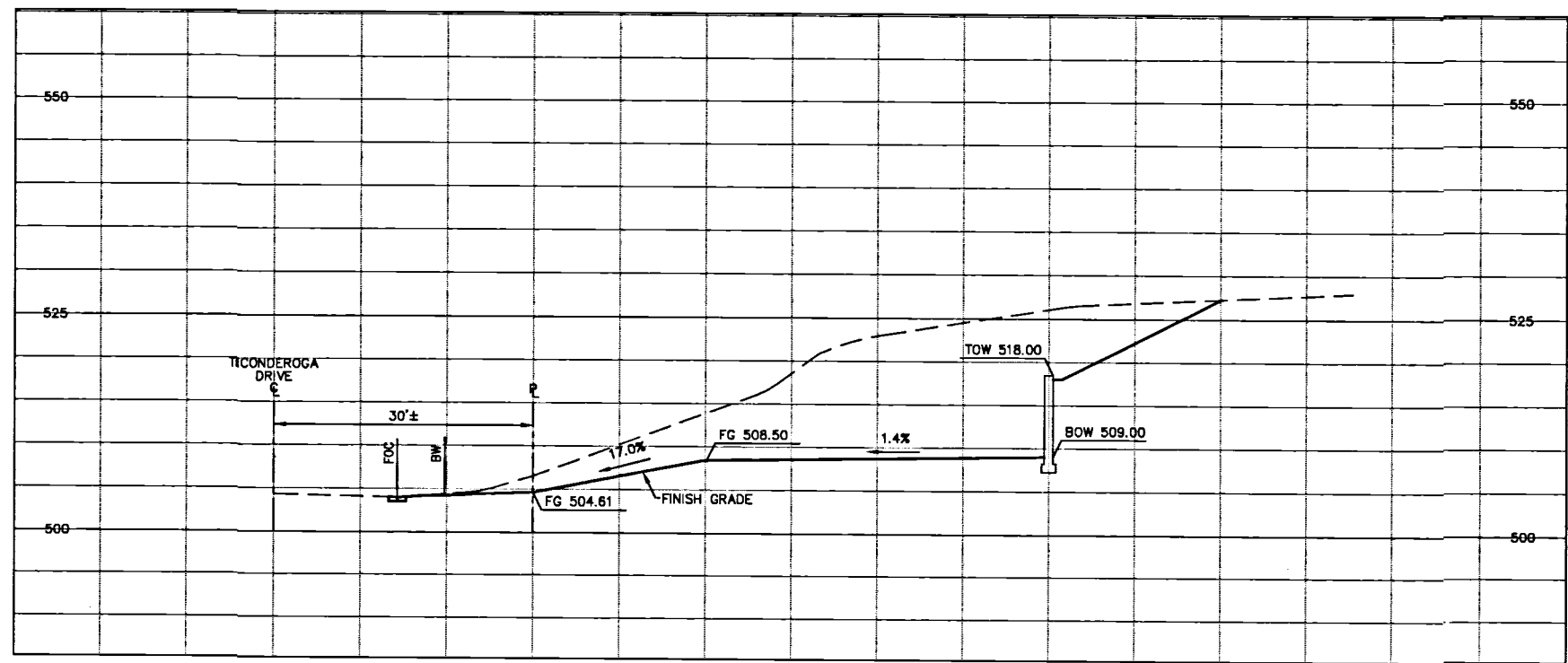
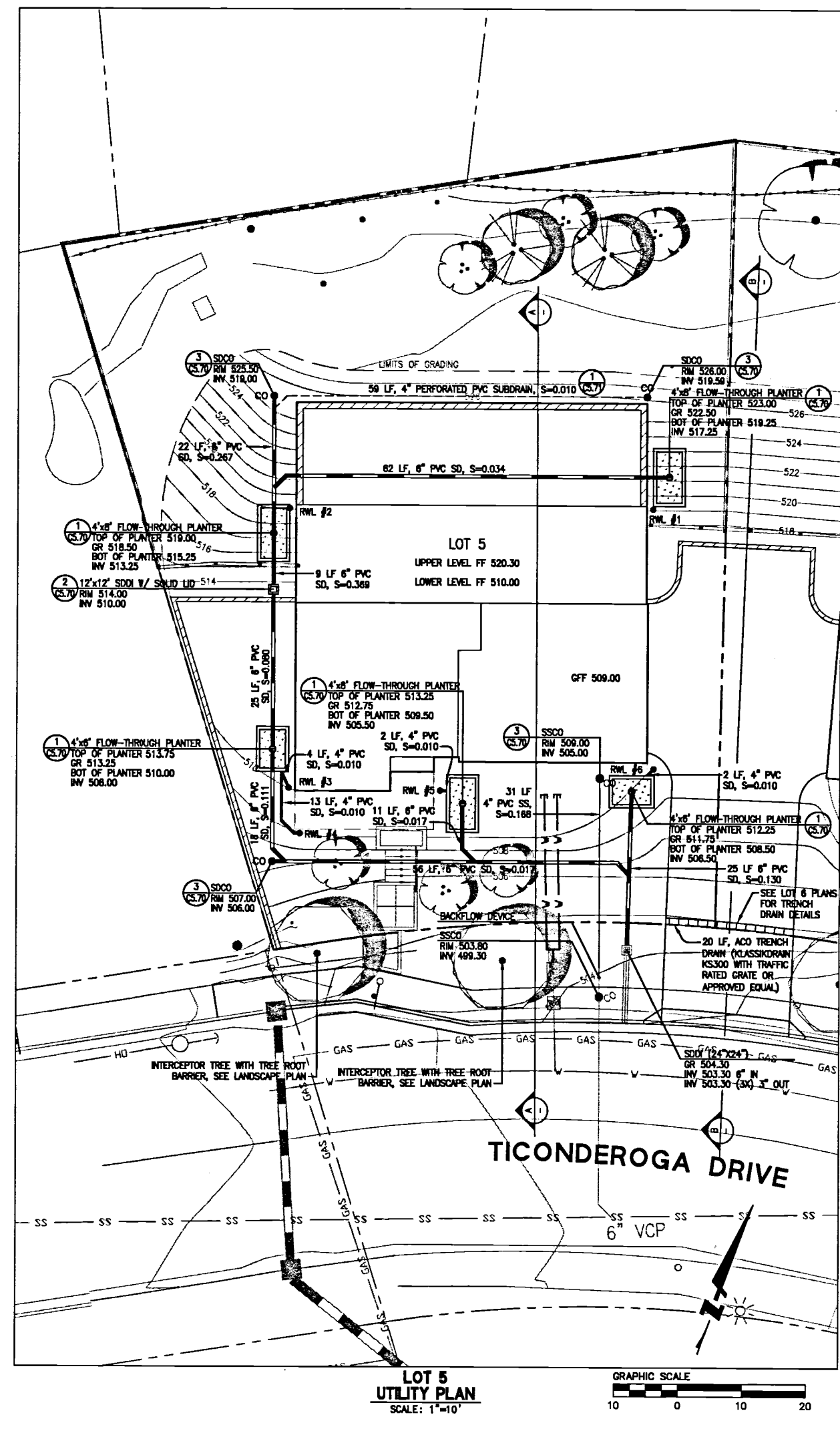




Revisions	
No.	Description

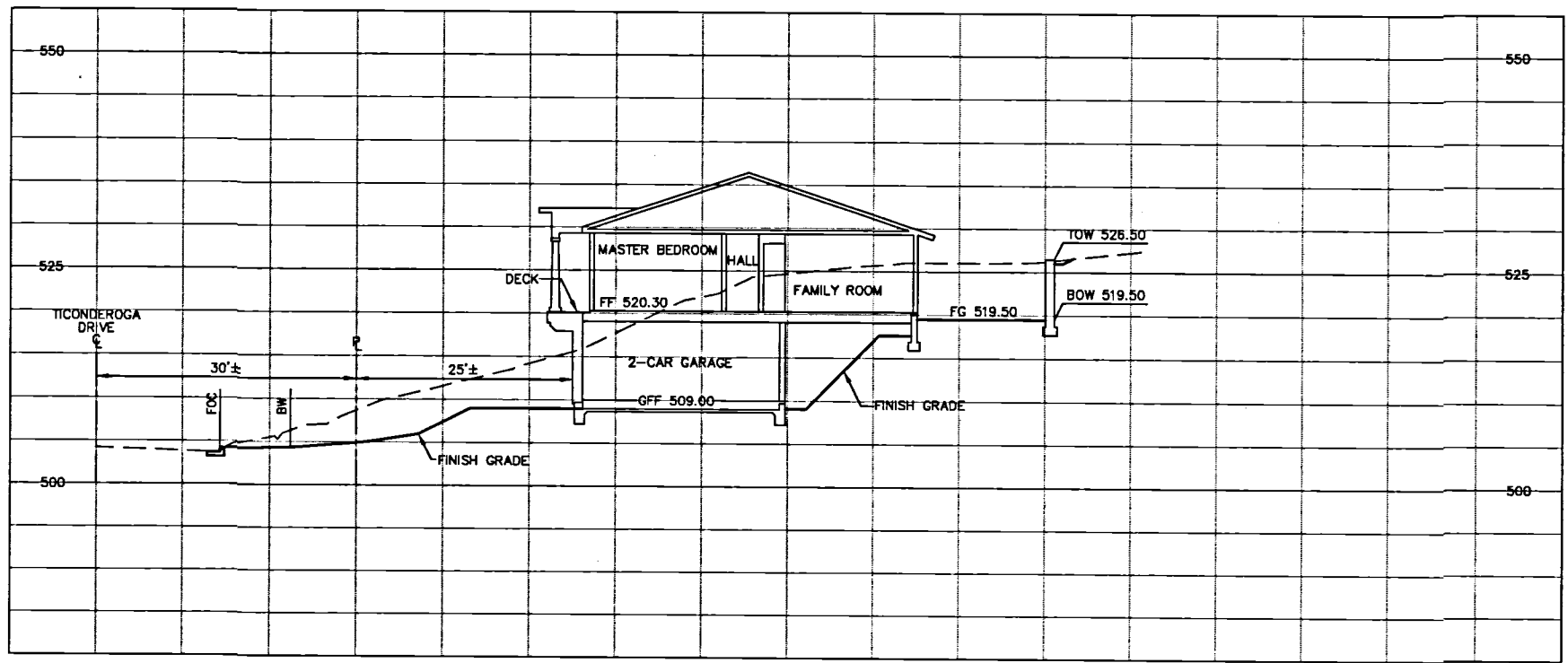
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**LOT 5  
 CROSS SECTION B-B**  
 SCALE: 1"=10'

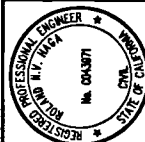
**NOTES:**

- PER THE GEOTECHNICAL REPORT, UNDOCUMENTED FILL WAS MAPPED AT LOT 5 AND IF THIS FILL IS TO BE LEFT IN PLACE DURING HOUSE AND DRIVEWAY GRADING, IT SHOULD BE REMOVED AND REPLACED AS PROPERLY COMPACTED ENGINEERED FILL.
- PER THE GEOTECHNICAL REPORT, ALL EXISTING FILLS SHOULD BE COMPLETELY REMOVED FROM WITHIN PROPOSED HOUSE FOOTPRINT AND DRIVEWAY AREAS AND TO A LATERAL DISTANCE OF AT LEAST 2 FEET BEYOND THE EDGE OF THE IMPROVEMENTS. ANY EXCESS MATERIAL SHALL BE DISPOSED OF OFF-SITE IN A LAWFUL MANNER.
- PER THE GEOTECHNICAL REPORT, ALL BUILDING AND RETAINING WALLS SHOULD BE SUPPORTED ON DRILLED PIERS. THE FOUNDATION SHOWN ON THIS PLAN ARE SCHEMATIC. REFER TO THE PROJECT STRUCTURAL PLANS FOR DETAILS ON THE DRILLED PIERS.



**LOT 5  
 CROSS SECTION A-A**  
 SCALE: 1"=10'

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 PLOT DATE: 08-03-16  
 PLOTTED BY: t.r.t



CALIFORNIA

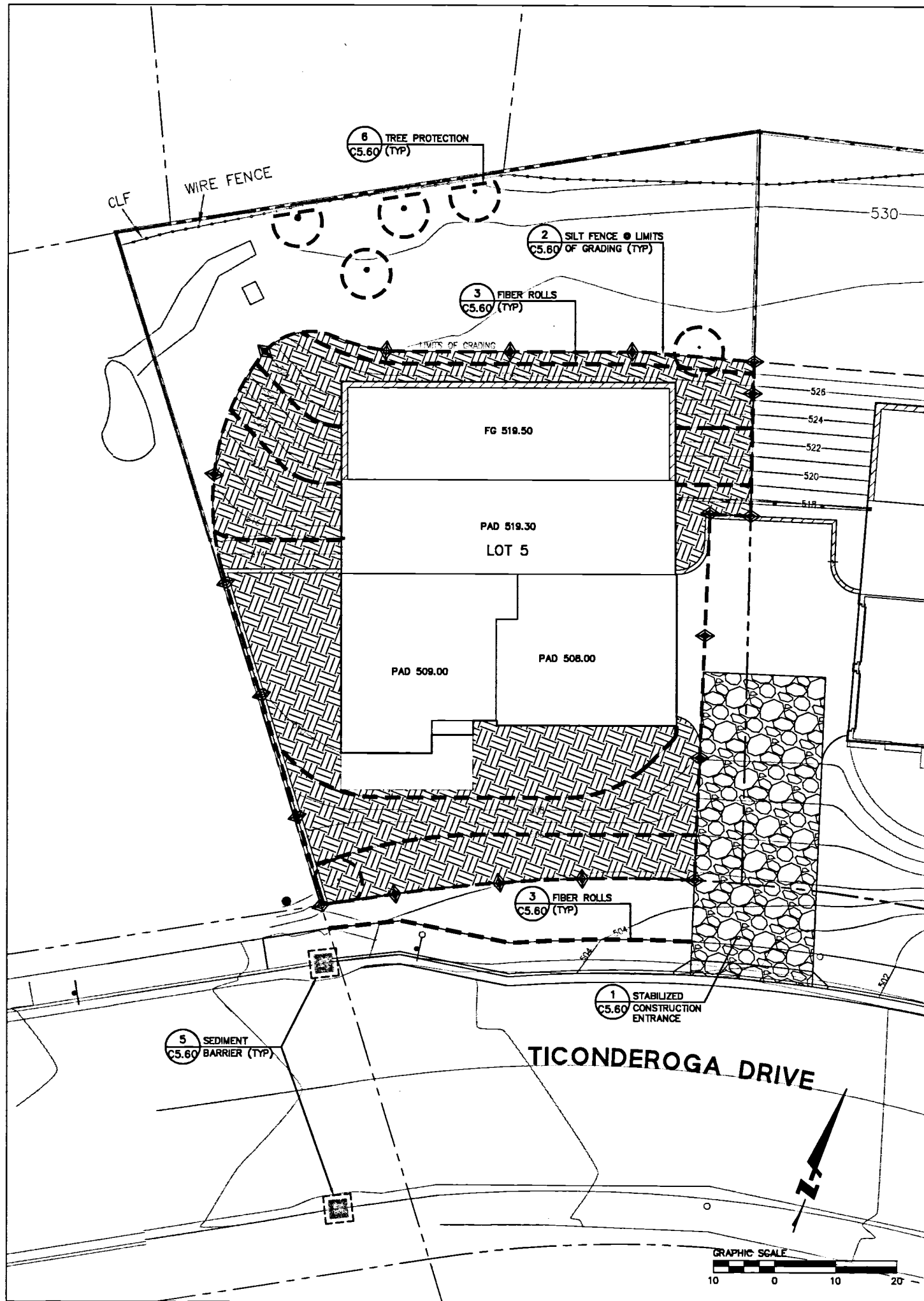
HIGHLAND ESTATES  
 LOT 5 IMPROVEMENT PLANS  
 EROSION CONTROL PLANS

CITY OF SAN MATEO  
 SAN MATEO COUNTY

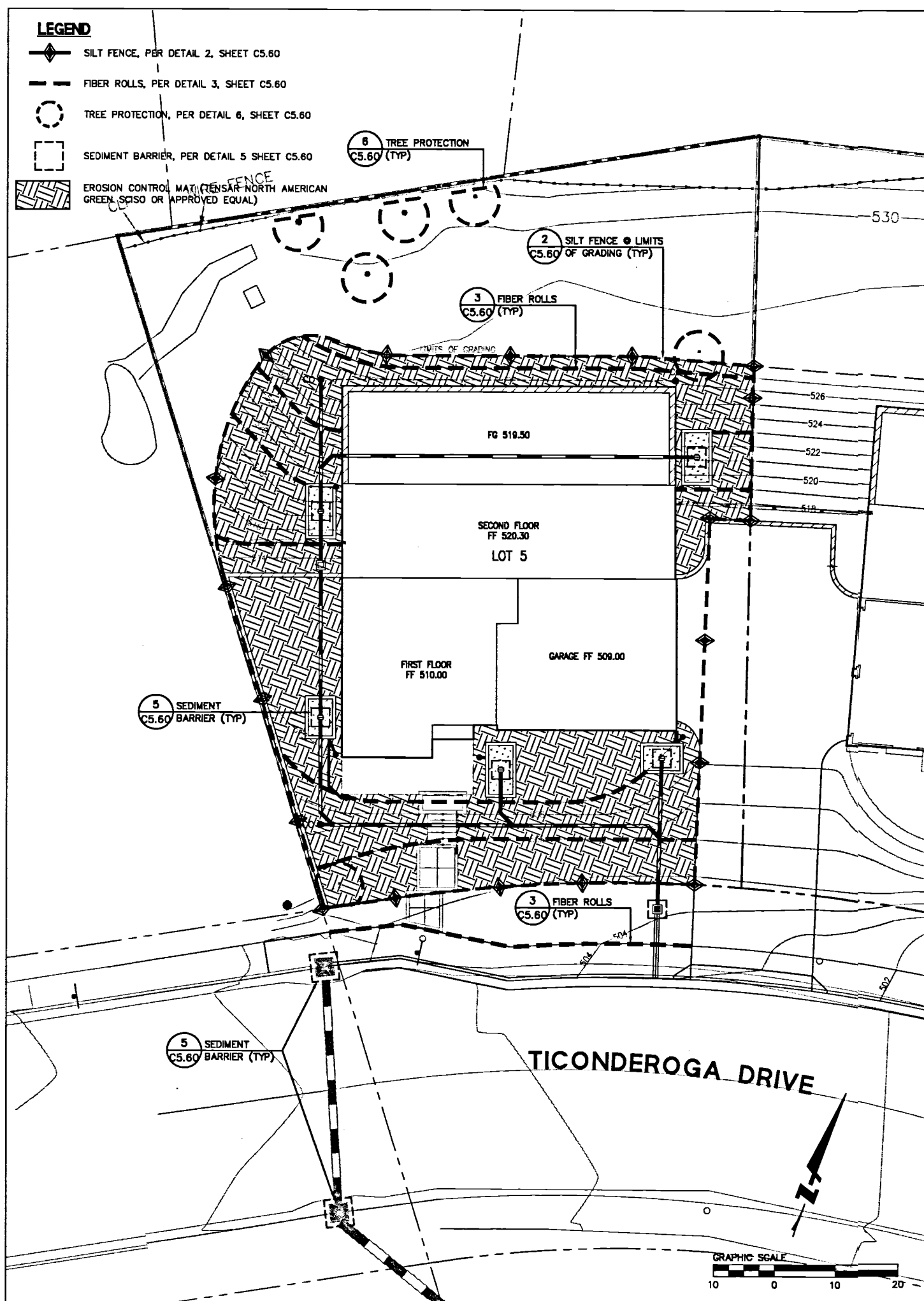
Revisions

No.	Date	By	Check
1	08/05/2016	JT	LF
2		LF	RH

Scale: AS SHOWN  
 Design: JT  
 Drawn: LF  
 Approved: RH  
 Job No. 85018-20  
 Sheet Number:  
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**LOT 5  
 GRADING AND RETAINING WALL EROSION CONTROL PLAN**  
 SCALE: 1"=10'



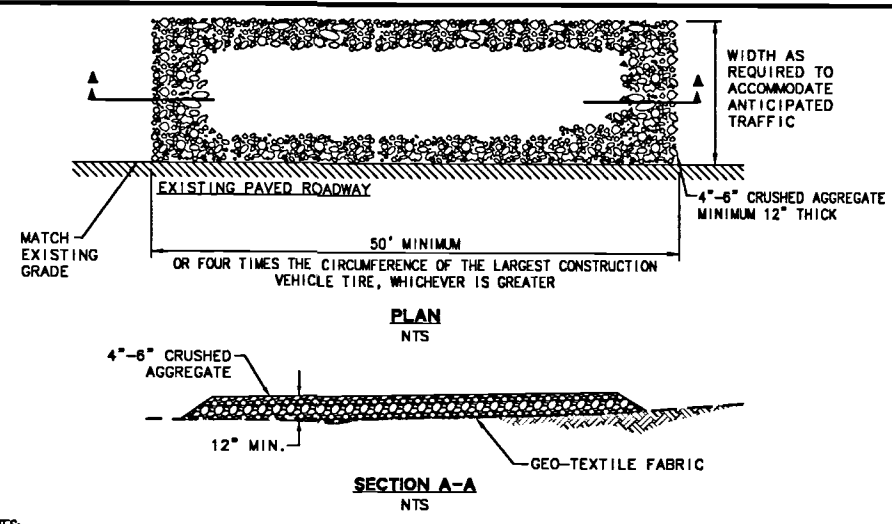
**LOT 5  
 FOUNDATION AND CONSTRUCTION EROSION CONTROL PLAN**  
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 PLOTTED BY: trel

**EROSION CONTROL NOTES**

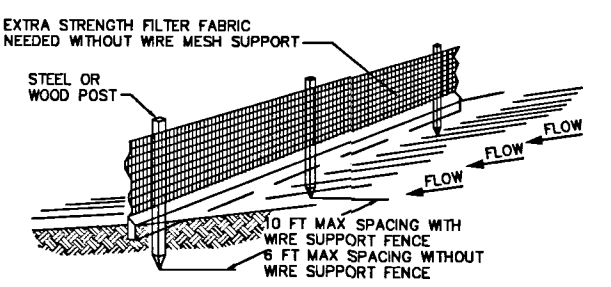
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
- ALTHOUGH SPECIFIC LOCATIONS FOR SEDIMENT CONTROL FACILITIES ARE SHOWN ON THESE PLANS, IT IS INTENDED THIS EROSION CONTROL PLAN BE MODIFIED WHEN NECESSARY TO MEET FIELD CONDITIONS. BASIN AND TRAP SIZES AND ELEVATIONS MAY BE ADJUSTED AS LONG AS THE MINIMUM AREAS AND DEPTHS FOR SEDIMENT SETTLING AND STORAGE ARE NOT REDUCED.
- THE INTENT OF THESE PLANS IS TO PROVIDE THE INITIAL CONCEPT FOR INTERIM EROSION CONTROL. THE CONTRACTOR SHALL UPDATE THE PLANS TO REFLECT CHANGING SITE CONDITIONS. PLAN UPDATES SHALL BE BASED UPON GENERAL SURVEY DATA. EROSION CONTROL EFFECTIVENESS SHALL ALSO BE MONITORED AND THE PLANS UPGRADDED AS REQUIRED TO PREVENT SIGNIFICANT QUANTITIES OF SEDIMENT FROM ENTERING THE DOWNSTREAM DRAINAGE SYSTEM.
- THIS PLAN MAY NOT COVER ALL THE SITUATIONS THAT ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. IN GENERAL, THE CONTRACTOR IS RESPONSIBLE FOR KEEPING THE STORM RUN OFF FROM LEAVING THE SITE. FIBER ROLLS, SAND BAGS, AND SILT FENCES SHALL BE USED BY THE CONTRACTOR ON AN AS NEEDED BASIS TO INHIBIT SILT FROM LEAVING THE SITE AND ENTERING THE STORM MAIN SYSTEM. ALL EXISTING, TEMPORARY, OR PERMANENT CATCH BASINS SHALL USE ONE OF THE SEDIMENT BARRIERS SHOWN.
- THE CONTRACTOR WILL BE LIABLE FOR ANY AND ALL DAMAGES TO PUBLIC AND/OR PRIVATE OWNED AND MAINTAINED ROAD CAUSED BY THE CONTRACTOR'S GRADING ACTIVITIES, AND WILL BE RESPONSIBLE FOR THE CLEANUP OF ANY MATERIAL SPILLED ON ANY PUBLIC ROAD ON THE HAUL ROUTE. ADJACENT PUBLIC ROADS SHALL BE CLEANED AT THE END OF EACH WORKING DAY.
- BEST MANAGEMENT PRACTICES SHALL BE OPERABLE YEAR AROUND.
- DURING THE RAINY SEASON, ALL PAVED AREAS ARE TO BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE IS TO BE MAINTAINED SO AS TO MINIMIZE SEDIMENT-LADEN RUNOFF TO ANY STORM DRAIN SYSTEM.
- ALL EROSION CONTROL FACILITIES MUST BE INSPECTED AND REPAIRED DAILY DURING THE RAINY SEASON. ALL SLOPES SHALL BE REPAIRED AS SOON AS POSSIBLE WHEN DAMAGED.
- THE FIRST PHASE OF CONSTRUCTION SHALL REQUIRE 30 PERCENT OF CONSTRUCTION EQUIPMENT TO MEET TIER 1 EPA CERTIFICATION STANDARDS FOR CLEAN TECHNOLOGY. THE REMAINDER OF CONSTRUCTION EQUIPMENT (70 PERCENT), WHICH WOULD CONSIST OF OLDER TECHNOLOGIES, SHALL BE REQUIRED TO USE EMULSIFIED FUELS.
- THE SECOND PHASE OF CONSTRUCTION SHALL REQUIRE 30 PERCENT OF CONSTRUCTION EQUIPMENT TO MEET TIER 2 EPA CERTIFICATION STANDARDS FOR CLEAN TECHNOLOGY AND 50 PERCENT TO MEET TIER 1 EPA CERTIFICATION STANDARDS. THE REMAINING 20 PERCENT OF CONSTRUCTION EQUIPMENT, WHICH WOULD CONSIST OF OLDER TECHNOLOGIES, SHALL USE EMULSIFIED FUELS.
- FOR ALL LARGER VEHICLES, INCLUDING CEMENT MIXERS OR OTHER DEVICES THAT MUST BE DELIVERED BY LARGE TRUCKS, VEHICLES SHALL BE EQUIPPED WITH CARB LEVEL THREE VERIFIED CONTROL DEVICES.
- WATER ALL ACTIVE CONSTRUCTION AREAS AT LEAST TWICE DAILY.
- COVER ALL TRUCKS HAULING SOIL, SAND, AND OTHER LOOSE MATERIALS OR REQUIRE ALL TRUCKS TO MAINTAIN AT LEAST TWO FEET OF FREEBOARD.
- PAVE, APPLY WATER THREE TIMES DAILY, OR APPLY NON-TOXIC SOIL STABILIZERS ON ALL UNPAVED ACCESS ROADS, PARKING AREAS, AND STAGING AREAS AT THE CONSTRUCTION SITES.
- SWEEP DAILY (WITH WATER SWEEPERS) ALL PAVED ACCESS ROADS, PARKING AREAS, AND STAGING AREAS AT THE CONSTRUCTION SITES.
- SWEEP PUBLIC STREETS ADJACENT TO CONSTRUCTION SITES DAILY (WITH WATER SWEEPERS) IF VISIBLE SOIL MATERIAL IS CARRIED ONTO THE STREETS.
- HYDROSEED OR APPLY NON-TOXIC SOIL STABILIZERS TO INACTIVE CONSTRUCTION AREAS (PREVIOUSLY GRADED AREAS INACTIVE FOR TEN DAYS OR MORE).
- TEMPORARY AND PERMANENT SLOPES GREATER THAN 3 FEET SHALL BE SEEDED UNLESS ALTERNATIVE MEASURES ARE USED.
- SEED MIX FOR REVEGETATION AND HYDROSEEDING:  
NORTHERN CALIFORNIA COVER MIX BY ACRBRIGHT OR EQUAL  
30% BLUE WILDRIE  
30% MEADOW BARLEY  
20% ZORRO FESCUE  
10% PURPLE NEEDLE GRASS  
10% CALIFORNIA NATIVE WIDFLOWERS  
APPLY AT 40 POUNDS PER ACRE MINIMUM
- ENCLOSE, COVER, WATER TWICE DAILY, OR APPLY NON-TOXIC SOIL BINDERS TO EXPOSED STOCKPILES (DIRT, SAND, ETC.). LIMIT TRAFFIC SPEEDS ON UNPAVED ROADS TO 15 MILES PER HOUR.
- DISPOSAL AREAS FOR SEDIMENT TO BE DETERMINED IN FIELD. WHEN MATERIAL IS STOCKPILED, IT SHALL BE SURROUNDED BY A SILT FENCE/FIBER ROLLS.
- LIMIT TRAFFIC SPEEDS ON UNPAVED ROADS TO 15 MILES PER HOUR.
- INSTALL SANDBAGS OR OTHER EROSION CONTROL MEASURES TO PREVENT SILT RUNOFF TO PUBLIC ROADWAYS.
- REPLANT VEGETATION IN DISBURSED AREAS AS SOON AS POSSIBLE.
- INSTALL WHEEL WASHERS FOR ALL EXITING TRUCKS OR WASH OFF THE TIRES OR TRACKS OF ALL TRUCKS AND EQUIPMENT LEAVING THE CONSTRUCTION SITE.
- INSTALL WIND BREAKS AT THE WINDWARD SIDES OF THE CONSTRUCTION AREAS.
- SUSPEND EXCAVATION AND GRADING ACTIVITIES WHEN WIND (AS INSTANTANEOUS GUSTS) EXCEEDS 25 MILES PER HOUR.
- NO GRADING SHALL BE ALLOWED DURING THE WINTER SEASON (OCTOBER 15 TO APRIL 30) TO AVOID POTENTIAL SOIL EROSION UNLESS APPROVED, IN WRITING, BY THE COMMUNITY DEVELOPMENT DIRECTOR. THE PROPERTY OWNERS SHALL SUBMIT A LETTER TO THE CURRENT PLANNING SECTION, AT LEAST TWO WEEKS PRIOR TO COMMENCEMENT OF GRADING STATING THE DATE WHEN GRADING WILL BEGIN.
- STABILIZE ALL DENUDED AREAS AND MAINTAIN EROSION CONTROL MEASURES CONTINUOUSLY BETWEEN OCTOBER 15 AND APRIL 30. STABILIZING SHALL INCLUDE BOTH PROTECTIVE MEASURES, SUCH AS THE PLACEMENT OF STRAW BALES OR COIR NETTING, AND PASSIVE MEASURES, SUCH AS MINIMIZING VEGETATION REMOVAL AND REVEGETATING DISTURBED AREAS WITH VEGETATION THAT IS COMPATIBLE WITH THE SURROUNDING ENVIRONMENT.
- STORE, HANDLE, AND DISPOSE OF CONSTRUCTION MATERIALS AND WASTES PROPERLY, SO AS TO PREVENT THEIR CONTACT WITH STORMWATER.

- CONTROL AND PREVENT THE DISCHARGE OF ALL POTENTIAL POLLUTANTS, INCLUDING PAVEMENT CUTTING WASTES, PAINTS, CONCRETE, PETROLEUM PRODUCTS, CHEMICALS, WASH WATER OR SEDIMENTS, AND NON-STORMWATER DISCHARGES TO STORM DRAINS AND WATERCOURSES.
- USE SEDIMENT CONTROLS OR FILTRATION TO REMOVE SEDIMENT WHEN DEWATERING SITE AND OBTAINING ALL NECESSARY PERMITS.
- AVOID CLEANING, FUELING, OR MAINTAINING VEHICLES ON-SITE, EXCEPT IN A DESIGNATED AREA WHERE WASH WATER IS CONTAINED AND TREATED.
- DELINEATE WITH FIELD MARKERS CLEARING LIMITS, SETBACKS, AND DRAINAGE COURSES.
- PROTECT ADJACENT PROPERTIES AND UNOBTURBED AREAS FROM CONSTRUCTION IMPACTS USING VEGETATIVE BUFFER STRIPS, SEDIMENT BARRIERS OR FILTERS, DIKES, MULCHING, OR OTHER MEASURES AS APPROPRIATE.
- PERFORM CLEARING AND EARTH-MOVING ACTIVITIES ONLY DURING DRY WEATHER.
- LIMIT AND TIME APPLICATIONS OF PESTICIDES AND FERTILIZERS TO PREVENT POLLUTED RUNOFF.
- LIMIT CONSTRUCTION ACCESS ROUTES AND STABILIZE DESIGNATED ACCESS POINTS.
- ALL GRADED SURFACES AND MATERIALS, WHETHER FILLED, EXCAVATED, TRANSPORTED OR STOCKPILED, SHALL BE WETTED, PROTECTED OR CONTAINED IN SUCH A MANNER AS TO PREVENT ANY SIGNIFICANT NUISANCE FROM DUST, OR SPILLAGE UPON ADJOINING WATER BODY, PROPERTY, OR STREETS. EQUIPMENT AND MATERIALS ON THE SITE SHALL BE USED IN SUCH A MANNER AS TO AVOID EXCESSIVE DUST. A DUST CONTROL PLAN MAY BE REQUIRED AT ANYTIME DURING THE COURSE OF THE PROJECT.
- A DUST PALLIATIVE SHALL BE APPLIED TO THE SITE WHEN REQUIRED BY THE COUNTY. THE TYPE AND RATE OF APPLICATION SHALL BE RECOMMENDED BY THE SOILS ENGINEER AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS, THE PLANNING AND BUILDING DEPARTMENT'S GEOTECHNICAL SECTION, AND THE REGIONAL WATER QUALITY CONTROL BOARD.
- IF NO WORK HAS PROCEEDED FOR A PERIOD OF 6-WEEKS, FINAL DRAINAGE AND EROSION CONTROL IMPROVEMENTS SHALL BE INSTALLED IN ACCORDANCE WITH AN APPROVED WINTERIZATION PLAN.
- PADS SHALL BE GRADED TO MINIMIZE STANDING WATER. SPECIFIC LOCATIONS REQUIRING SUPPLEMENTAL GRADING TO ACHIEVE ACCEPTABLE DRAINAGE SHALL BE DETERMINED BY THE CONSTRUCTION MANAGER. ALL SPILLS AND SOIL STOCKPILES REMAINING ON SITE SHALL BE ENCLOSED BY SILT FENCES/FIBER ROLLS.
- STUBBED OUT ENDS OF PARTIALLY COMPLETED SUBDRAINS SHALL BE WRAPPED WITH AN APPROVED FABRIC TO PREVENT SOIL AND DEBRIS FROM ENTERING THE PIPE.
- HAUL ROADS ARE CURRENTLY NOT SHOWN ON THE PLANS. EROSION CONTROL MEASURES SHALL BE TAKEN TO MINIMIZE EROSION RELATED TO HAUL ROADS.
- GRADING SCHEDULE SHALL BE SUBMITTED FOR APPROVAL TO SAN MATEO COUNTY PUBLIC WORKS BY AUGUST 15.
- EROSION CONTROL POINT OF CONTACT:  
NOEL CHAMBERLAIN, HEXGEN BUILDERS INC.  
225 DEMETER STREET  
EAST PALO ALTO, CA 94303  
PHONE #: 650-322-5800  
CELL #: 650-444-3089  
EMAIL: noel@hexgenbuilders.com
- SHOULD IT APPEAR THAT THE EROSION CONTROL PLAN, OR ANY OTHER MATTER THERETO, IS NOT SUFFICIENTLY DETAILED OR EXPLAINED ON THESE PLANS, THE CONTRACTOR SHALL CONTACT THE BKF PROJECT ENGINEER AT (650) 482-8300 FOR SUCH FURTHER EXPLANATIONS AS MAY BE NECESSARY.
- AREAS DELINEATED ON PLANS FOR PARKING, CLEARING & GRUBBING, STORAGE, ETC. SHALL NOT BE ENLARGED OR "RUN OVER."
- CONSTRUCTION SITES ARE REQUIRED TO HAVE EROSION CONTROL MATERIALS ON-SITE DURING THE "OFF-SEASON."
- DUST CONTROL IS REQUIRED YEAR-ROUND.
- EROSION CONTROL MATERIALS SHALL BE STORED ON-SITE.
- USE OF PLASTIC SHEETING BETWEEN OCTOBER 1ST AND APRIL 30TH IS NOT ACCEPTABLE, UNLESS FOR USE ON STOCKPILES WHERE THE STOCKPILE IS ALSO PROTECTED WITH FIBER ROLLS CONTACTING THE BASE OF THE STOCKPILE.
- TREE PROTECTION SHALL BE IN PLACE BEFORE ANY GRADING, EXCAVATING OR GRUBBING IS STARTED.

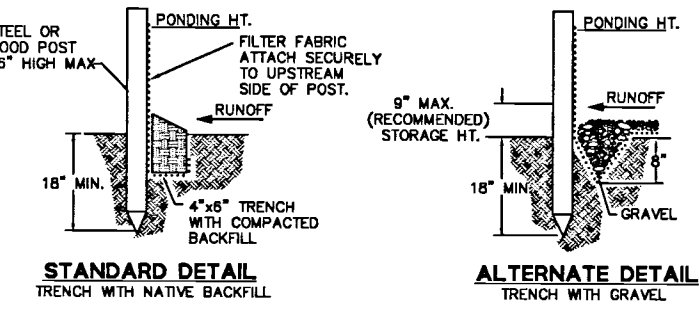


- NOTES:**
- ALL CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAYS SHALL BE REMOVED IMMEDIATELY.
  - WHEELS SHALL BE CLEAN PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAYS. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE THROUGH USE OF INLET PROTECTION (E.G. SAND BAGS OR OTHER APPROVED METHODS).
  - THE MATERIAL FOR CONSTRUCTION OF THE PAD SHALL BE 4" TO 6" STONE.
  - THE THICKNESS OF THE PAD SHALL NOT BE LESS THAN 12".
  - THE WIDTH OF THE PAD SHALL NOT BE LESS THAN THE FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
  - THE LENGTH OF THE PAD SHALL NOT BE LESS THAN 50'.

**1 STABILIZED CONSTRUCTION ENTRANCE**  
NTS



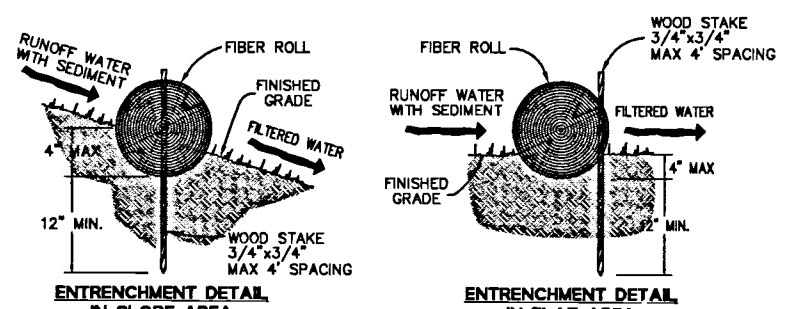
- NOTES:**
- INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
  - REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
  - SILT FENCE SHALL BE PLACED ON SLOPE TO MAXIMIZE PONDING EFFICIENCY.



**STANDARD DETAIL**  
TRENCH WITH NATIVE BACKFILL

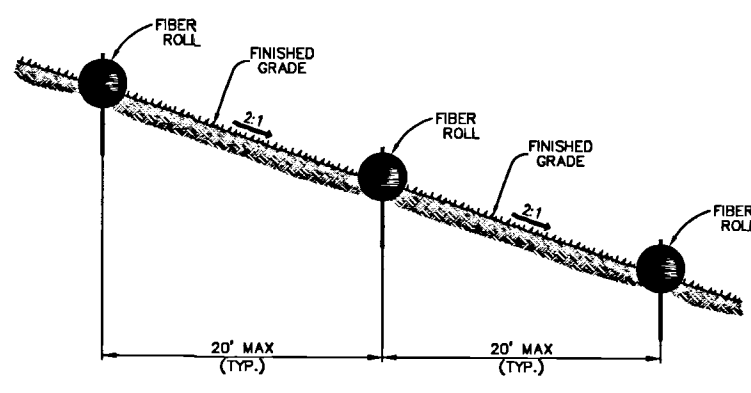
**ALTERNATE DETAIL**  
TRENCH WITH GRAVEL

**2 SILT FENCE**  
NTS

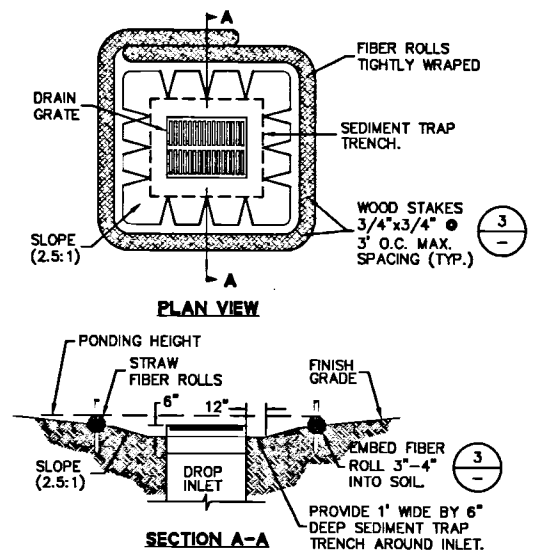


- NOTES:**
- FIBER ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3" TO 4" DEEP, DUG ON CONTOUR.
  - ADJACENT ROLLS SHALL TIGHTLY ADJUT.
  - RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND FIBER ROLL.

**3 FIBER ROLL**  
NTS

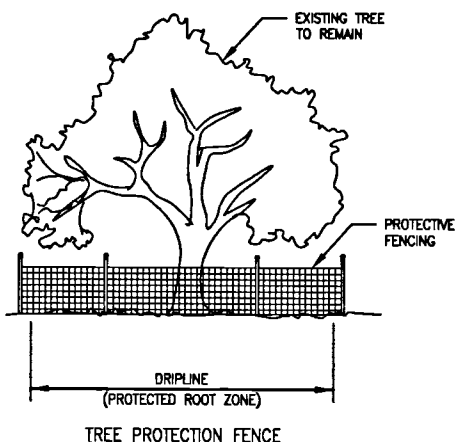


**4 FIBER ROLL INSTALLATION ON SLOPE**  
(TIME FRAME: BETWEEN FINAL PAVING OPERATIONS AND PROJECT COMPLETION)  
NTS



- NOTES:**
- PLACE FIBER ROLLS AROUND THE INLET CONSISTENT WITH BASIN SEDIMENT BARRIER DETAIL ON THIS SHEET. (FIBER ROLLS ARE TUBES MADE FROM STRAW BOUND W/ PLASTIC NETTING. THEY ARE APPROX. 8" DIA. AND 20 - 30 FT. LONG.)
  - FIBER ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE FIBER ROLL IN A TRENCH, 3" - 4" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND FIBER ROLL.
  - THE TOP OF THE STRUCTURE (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BY-PASSING THE INLET. EXCAVATION OF A BASIN ADJACENT TO THE DROP INLET OR A TEMPORARY DIKE ON THE DOWNSLOPE OF THE STRUCTURE MAY BE NECESSARY.

**5 SEDIMENT BARRIER**  
(TIME FRAME: AREA DRAINS - BETWEEN AREA DRAIN INSTALLATION AND PROJECT COMPLETION  
CURB INLETS - BETWEEN CURB INLET INSTALLATION AND FINAL PAVING OPERATIONS)  
NTS



- NOTES:**
- THE APPLICANT SHALL ESTABLISH AND MAINTAIN TREE PROTECTION ZONES THROUGHOUT THE ENTIRE LENGTH OF THE PROJECT.
  - TREE PROTECTION ZONES SHALL BE DELINEATED USING 4-FOOT TALL ORANGE PLASTIC FENCING SUPPORTED BY POLES POUNDED INTO THE GROUND, LOCATED AS CLOSE TO THE DRIP LINES AS POSSIBLE WHILE STILL ALLOWING ROOM FOR CONSTRUCTION/GRADING TO SAFELY CONTINUE.
  - THE APPLICANT SHALL MAINTAIN TREE PROTECTION ZONES FREE OF EQUIPMENT AND MATERIALS STORAGE AND SHALL NOT CLEAN ANY EQUIPMENT WITHIN THESE AREAS.
  - SHOULD ANY LARGE ROOTS OR LARGE MASSES OF ROOTS NEED TO BE CUT, THE ROOTS SHALL BE INSPECTED BY A CERTIFIED ARBORIST OR REGISTERED FORESTER PRIOR TO CUTTING. ANY ROOT CUTTING SHALL BE MONITORED BY AN ARBORIST OR FORESTER AND DOCUMENTED.
  - ROOTS TO BE CUT SHOULD BE SEVERED CLEANLY WITH A SAW OR TOPPERS.
  - NORMAL IRRIGATION SHALL BE MAINTAINED, BUT OAKS SHOULD NOT NEED SUMMER IRRIGATION.
  - THE ABOVE INFORMATION SHALL BE ON-SITE AT ALL TIMES.

**6 TREE PROTECTION FENCE**  
NTS

**CALIFORNIA STORMWATER QUALITY ASSOCIATION (CASQA) STANDARD DETAIL REFERENCES**  
(CALIFORNIA STORMWATER BMP HANDBOOK CONSTRUCTION, DATED NOVEMBER 2009)

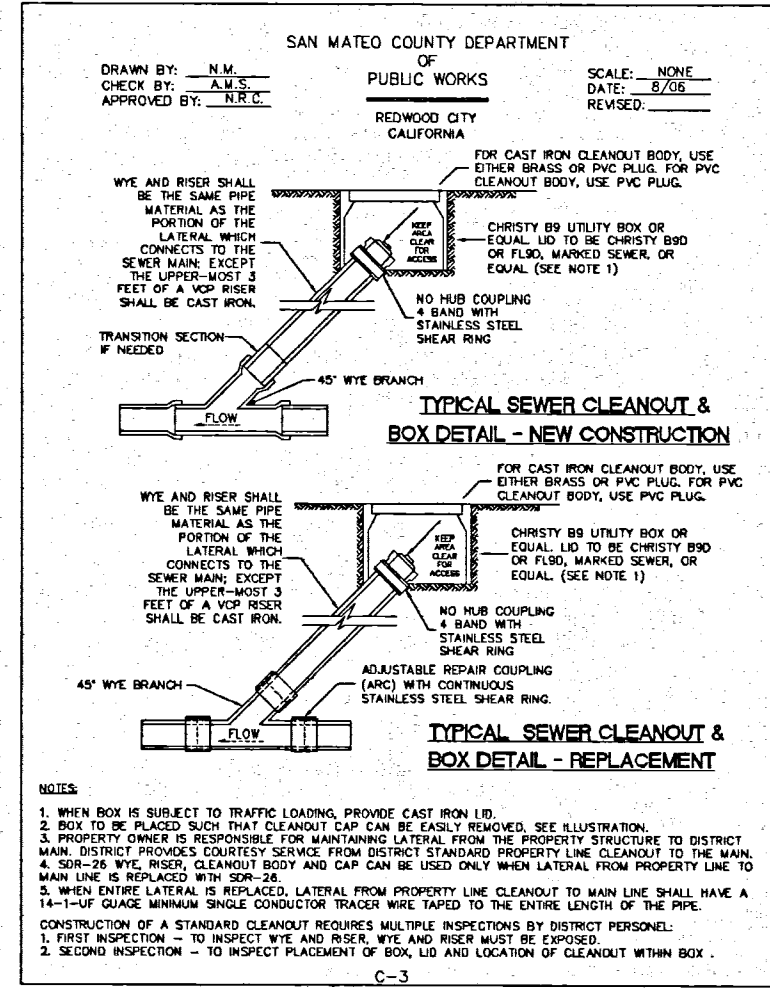
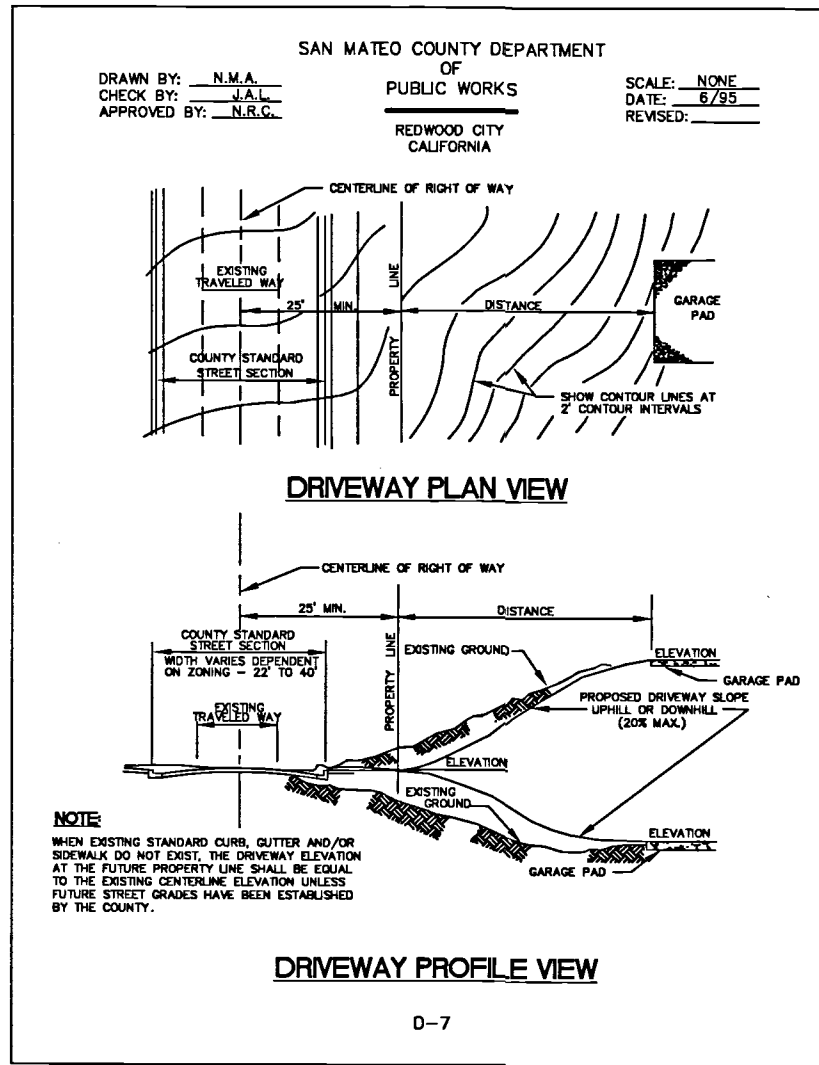
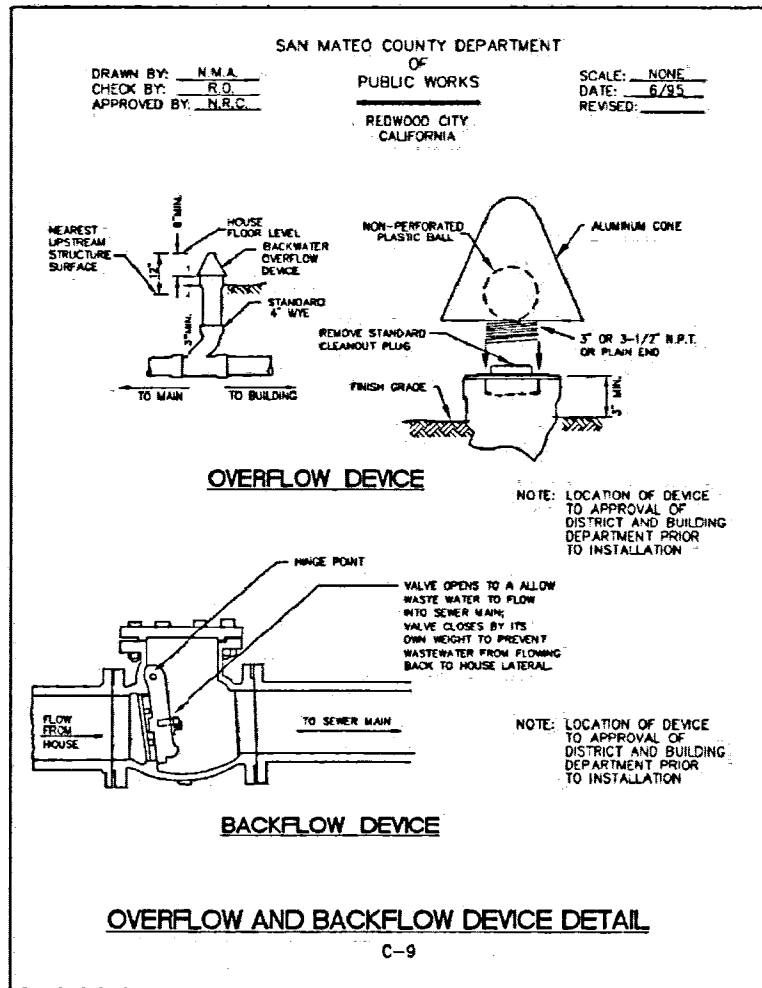
NOTE: ALTHOUGH SPECIFIC LOCATIONS FOR SPECIFIC BMPs ARE SHOWN ON THESE PLANS, IT IS INTENDED FOR THE CONTRACTOR TO APPLY APPROPRIATE BMPs WHEN NECESSARY TO MEET FIELD CONDITIONS.

EROSION CONTROL BMPs:	TEMPORARY TRACKING CONTROL BMPs:
EC-1 SCHEDULING	TC-1 STABILIZED CONSTRUCTION ENTRANCE/EXIT
EC-2 PRESERVATION OF EXISTING VEGETATION	TC-2 STABILIZED CONSTRUCTION ROADWAY
EC-3 HYDRAULIC MULCH	TC-3 ENTRANCE/OUTLET TIRE WASH
EC-4 HYDROSEEDING	
EC-5 SOIL BINDERS	
EC-6 STRAW MULCH	
EC-7 GEOTEXTILES & MATS	
EC-8 WOOD MULCHING	
EC-9 EARTH DIKES AND DRAINAGE SWALES	
EC-10 VELOCITY DISSIPATION DEVICES	
EC-11 SLOPE DRAINS	
EC-12 STREAMBANK STABILIZATION	
EC-14 COMPOST BLANKETS	
EC-15 SOIL PREPARATION/ROUGHENING	
EC-16 NON-VEGETATIVE STABILIZATION	
TEMPORARY SEDIMENT CONTROL BMPs:	NON-STORMWATER MANAGEMENT BMPs:
SE-1 SILT FENCE	NS-1 WATER CONSERVATION PRACTICES
SE-2 SEDIMENT BASIN	NS-2 DEWATERING OPERATIONS
SE-3 SEDIMENT TRAP	NS-3 PAVING AND GRINDING OPERATIONS
SE-4 CHECK DAM	NS-4 TEMPORARY STREAM CROSSING
SE-5 FIBER ROLLS	NS-5 CLEAR WATER DIVERSION
SE-6 GRAVEL BAG BERM	NS-6 ILLICIT CONNECTION/DISCHARGE
SE-7 STREET SWEEPING AND VACUUMING	NS-7 POTABLE WATER/IRRIGATION
SE-8 SANDBAG BARRIER	NS-8 VEHICLE AND EQUIPMENT CLEANING
SE-9 STRAW BALE BARRIER	NS-9 VEHICLE AND EQUIPMENT FUELING
SE-10 STORM DRAIN INLET PROTECTION	NS-10 VEHICLE AND EQUIPMENT MAINTENANCE
SE-11 ACTIVE TREATMENT SYSTEMS	NS-11 PILE DRIVING OPERATIONS
SE-12 TEMPORARY SILT DIKE	NS-12 CONCRETE CURING
SE-13 COMPOST SOCKS AND BERMS	NS-13 CONCRETE FINISHING
SE-14 BIOFILTER BAGS	NS-14 MATERIAL AND EQUIPMENT USE
WIND EROSION CONTROL BMPs:	WASTE MANAGEMENT & MATERIALS POLLUTION CONTROL BMPs:
WE-1 WIND EROSION CONTROL	WM-1 MATERIAL DELIVERY AND STORAGE
	WM-2 MATERIAL USE
	WM-3 STOCKPILE MANAGEMENT
	WM-4 SPILL PREVENTION AND CONTROL
	WM-5 SOLID WASTE MANAGEMENT
	WM-6 HAZARDOUS WASTE MANAGEMENT
	WM-7 CONTAMINATED SOIL MANAGEMENT
	WM-8 CONCRETE WASTE MANAGEMENT
	WM-9 SANITARY/SEPTIC WASTE MANAGEMENT
	WM-10 LIQUID WASTE MANAGEMENT

ALL EROSION CONTROL MEASURES SHALL BE IN PLACE BY OCTOBER 15 AND MAINTAINED DURING ALL PHASES OF CONSTRUCTION.

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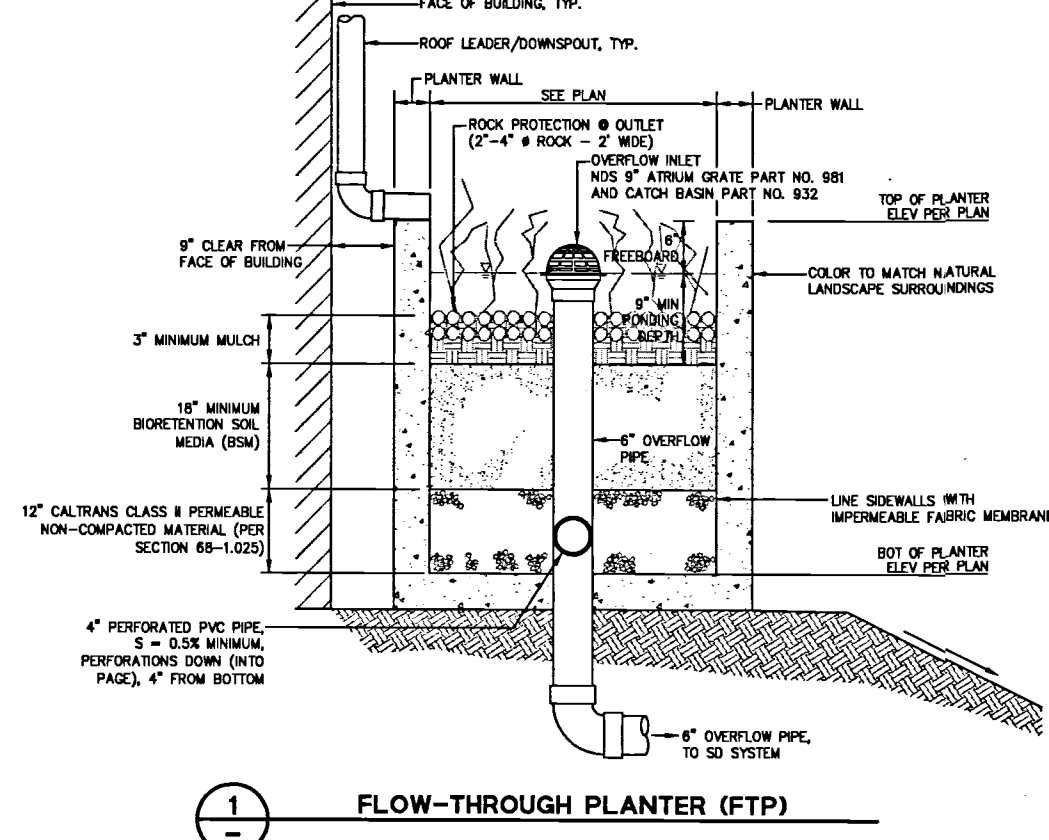
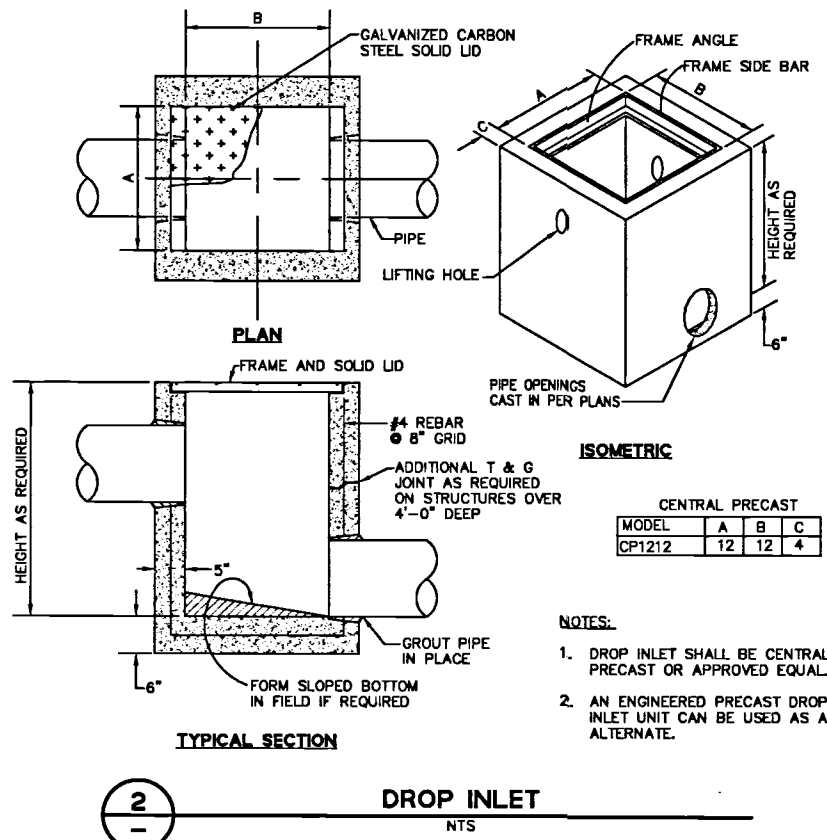
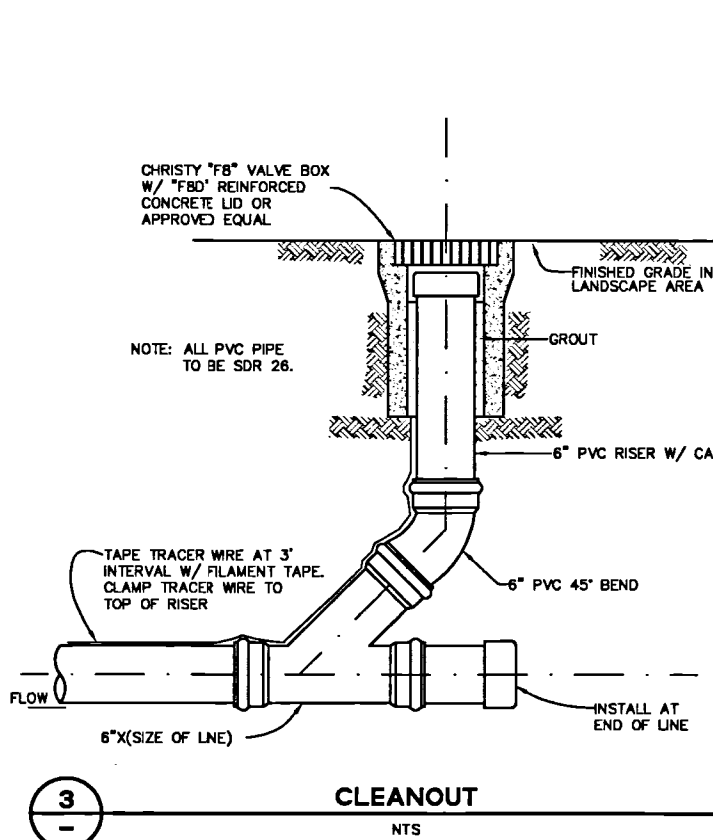
265 SHORELINE DRIVE, SUITE 200  
 REDWOOD CITY, CA 94065  
 PHONE: (650) 482-8300  
 FAX: (650) 482-6399  
**BKF**  
 ENGINEERS / SURVEYORS / PLANNERS  
 REGISTERED PROFESSIONAL ENGINEER  
 STATE OF CALIFORNIA  
 No. 00071  
 HIGHLAND ESTATES  
 LOT 5 IMPROVEMENT PLANS  
 EROSION CONTROL DETAILS AND NOTES  
 SAN MATEO COUNTY  
 CALIFORNIA  
 CITY OF SAN MATEO  
 Date: 08/05/2016  
 Scale: AS SHOWN  
 Design: JTW  
 Drawn: LE  
 Checked: Rtr  
 Approved: [Signature]  
 Job No: 00006-20  
 Sheet Number:  
**C5.60**  
 OF



6 SAN MATEO COUNTY OVERFLOW AND BACKFLOW DEVICE DETAIL NTS

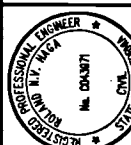
5 SAN MATEO COUNTY DRIVEWAY PLAN AND PROFILE VIEWS NTS

4 SAN MATEO COUNTY TYPICAL SEWER CLEANOUT & BOX DETAIL NTS



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PLOT DATE: 07-28-18  
PLOTTED BY: lrat

255 SHORELINE DRIVE, SUITE 200  
REDWOOD CITY, CA 94065  
PHONE: (650) 482-6300  
FAX: (650) 482-6399



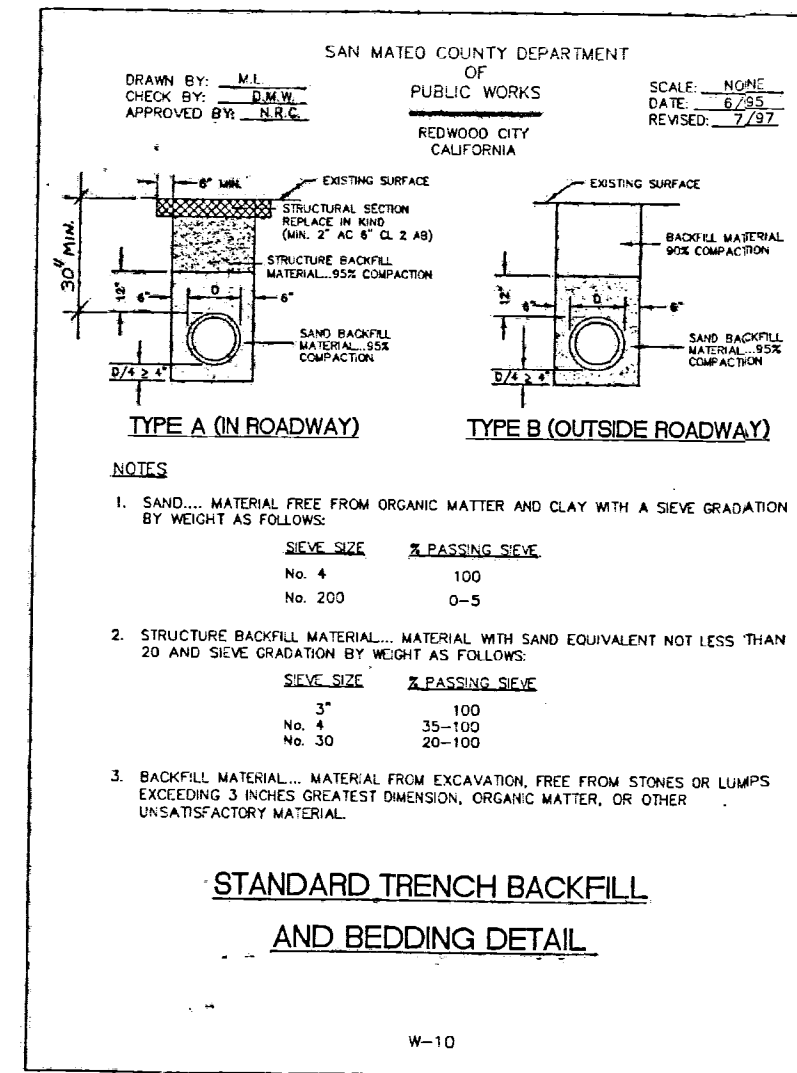
CALIFORNIA

HIGHLAND ESTATES  
LOT 5 IMPROVEMENT PLANS  
CONSTRUCTION DETAILS  
SAN MATEO COUNTY  
CITY OF SAN MATEO

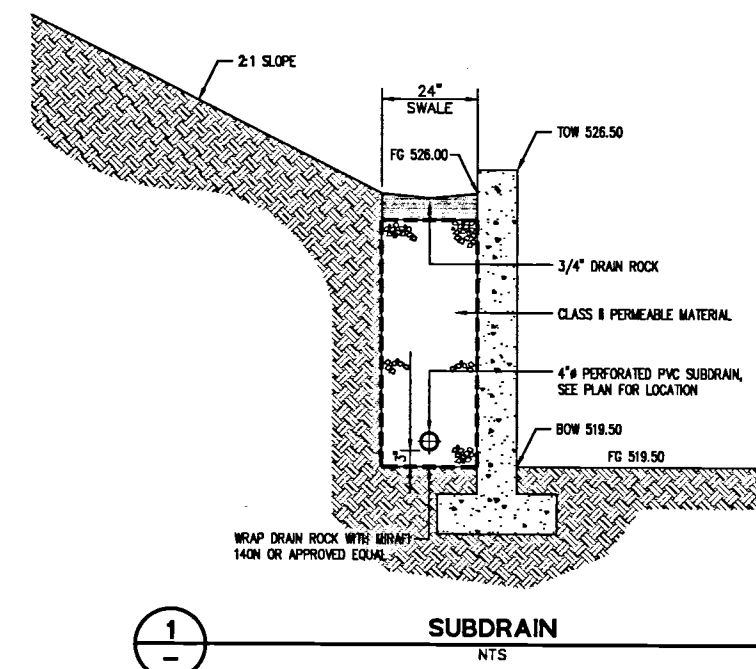
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		07/27/2016			JT	LE	RH		950188-20
Sheet Number: <b>C5.70</b>									

Revisions	
No.	Description

Date 08/05/2016  
 Scale AS SHOWN  
 Design JT  
 Drawn LE  
 Approved RH  
 Job No. 83008-20  
 Sheet Number:  
**C5.71**



**2** SAN MATEO COUNTY  
**STANDARD TRENCH BACKFILL & BEDDING DETAIL**  
 NTS



255 SHORELINE DRIVE, SUITE 200  
REDWOOD CITY, CA 94065  
PHONE: (650) 482-8300  
FAX: (650) 482-6399



CALIFORNIA

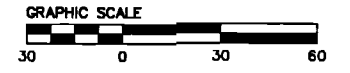
HIGHLAND ESTATES  
LOT 5 IMPROVEMENT PLANS  
LOGISTICS PLAN  
SAN MATEO COUNTY  
CITY OF SAN MATEO

Revisions	
No.	Date
	08/05/2016
	Scale 1"=30'
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	Drawn LE
	Approved RH
	Job No. 85088-20

Sheet Number:  
**C5.80**  
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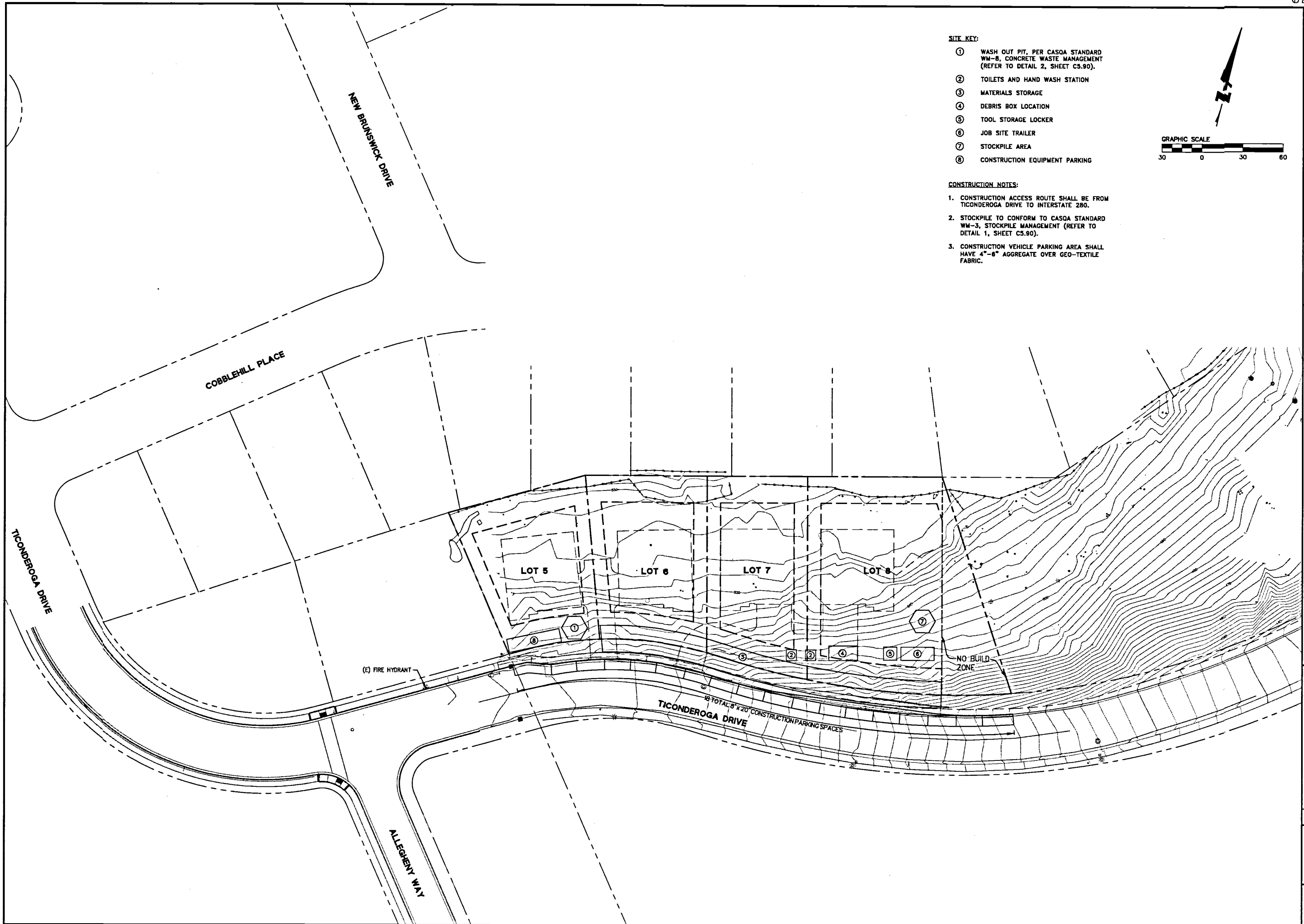
SITE KEY:

- ① WASH OUT PIT, PER CASQA STANDARD WM-8, CONCRETE WASTE MANAGEMENT (REFER TO DETAIL 2, SHEET C5.90).
- ② TOILETS AND HAND WASH STATION
- ③ MATERIALS STORAGE
- ④ DEBRIS BOX LOCATION
- ⑤ TOOL STORAGE LOCKER
- ⑥ JOB SITE TRAILER
- ⑦ STOCKPILE AREA
- ⑧ CONSTRUCTION EQUIPMENT PARKING



CONSTRUCTION NOTES:

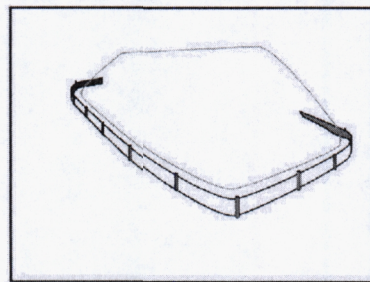
1. CONSTRUCTION ACCESS ROUTE SHALL BE FROM TICONDEROGA DRIVE TO INTERSTATE 280.
2. STOCKPILE TO CONFORM TO CASQA STANDARD WM-3, STOCKPILE MANAGEMENT (REFER TO DETAIL 1, SHEET C5.90).
3. CONSTRUCTION VEHICLE PARKING AREA SHALL HAVE 4"-6" AGGREGATE OVER GEO-TEXTILE FABRIC.



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Approved RH	Job No 80106-20
Sheet Number:	
<b>C5.90</b>	
OF	

### Stockpile Management WM-3



**Categories**

EC Erosion Control	
SE Sediment Control	<input checked="" type="checkbox"/>
TC Tracking Control	
WE Wind Erosion Control	
NS Non Stormwater Management Control	<input checked="" type="checkbox"/>
WM Waste Management and Materials Pollution Control	<input checked="" type="checkbox"/>

**Legend:**  
 Primary Category  
 Secondary Category

**Description and Purpose:**  
Stockpile management procedures and practices are designed to reduce or eliminate air and stormwater pollution from stockpiles of soil, soil amendments, sand, paving materials such as portland cement concrete (PCC) rubble, asphalt concrete (AC), asphalt concrete rubble, aggregate base, aggregate sub base or pre-mixed aggregate, asphalt binder (so called "cold mix" asphalt), and pressure treated wood.

**Suitable Applications:**  
Implement in all projects that stockpile soil and other loose materials.

- Limitations**
- Plastic sheeting as a stockpile protection is temporary and hard to manage in windy conditions. Where plastic is used, consider use of plastic tarps with nylon reinforcement which may be more durable than standard sheeting.
  - Plastic sheeting can increase runoff volume due to lack of infiltration and potentially cause perimeter control failure.
  - Plastic sheeting breaks down faster in sunlight.
  - The use of plastic materials should be avoided when feasible and photodegradable plastics should not be used.

**Implementation:**  
Protection of stockpiles is a year-round requirement. To properly manage stockpiles:

**Targeted Constituents**

Sediment	<input checked="" type="checkbox"/>
Nutrients	<input checked="" type="checkbox"/>
Trash	<input checked="" type="checkbox"/>
Metals	<input checked="" type="checkbox"/>
Business	<input checked="" type="checkbox"/>
Oil and Grease	<input checked="" type="checkbox"/>
Organics	<input checked="" type="checkbox"/>

**Potential Alternatives:**  
None



### Stockpile Management WM-3

- On larger sites, a minimum of 50 ft separation from concentrated flows of stormwater, drainage courses, and inlets is recommended.
- All stockpiles are required to be protected immediately if they are not scheduled to be used within 14 days.
- Protect all stockpiles from stormwater run-on using temporary perimeter sediment barriers such as compost berms (SE-13), temporary silt dike (SE-10), filter rolls (SE-6), silt fences (SE-1), sandbags (SE-8), gravel bags (SE-5), or biolifier bags (SE-14). Refer to the individual fact sheet for each of these controls for installation information.

- Implement wind erosion control practices as appropriate on all stockpiled material. For specific information, see WE-3, Wind Erosion Control.
- Manage stockpiles of contaminated soil in accordance with WM-7, Contaminated Soil Management.
- Place bagged materials on pallets and under cover.
- Ensure that stockpile coverings are installed securely to protect from wind and rain.
- Some plastic covers withstand weather and sunlight better than others. Select cover materials or methods based on anticipated duration of use.

#### Protection of Non-Active Stockpiles

- Non-active stockpiles of the identified materials should be protected further as follows:
- Soil stockpiles**
- Cover and protect soil stockpiles with soil stabilization measures and a temporary perimeter sediment barrier at all times.
  - Consider temporary vegetation for topsoil piles that will be stockpiled for extended periods.
- Stockpiles of Portland cement concrete rubble, asphalt concrete, asphalt concrete rubble, aggregate base, or aggregate sub base**
- Provide covers and protect these stockpiles with a temporary perimeter sediment barrier at all times.
- Stockpiles of "cold mix"**
- Cover cold mix stockpiles and place them on plastic sheeting (or comparable material) and surround the stockpiles with a berm all times.
- Stockpiles of fly ash, stucco, hydrated lime**
- Cover stockpiles of materials that may raise the pH of runoff (i.e., basic materials) with plastic and surround the stockpiles with a berm at all times.

### WM-3 - STOCKPILE MANAGEMENT NTS

### Stockpile Management WM-3

**Stockpiles/Storage of wood (Pressure treated with chromated copper arsenate or ammoniacal copper zinc arsenate)**

- Cover treated wood with plastic sheeting (or comparable material) and surround with a berm at all times.

#### Protection of Active Stockpiles

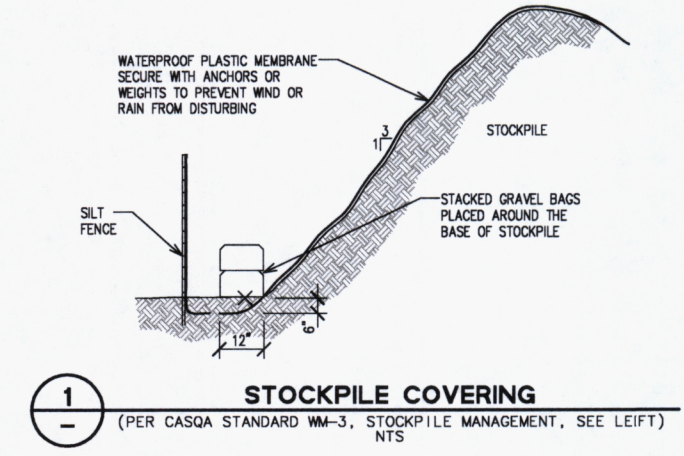
- Active stockpiles of the identified materials should be protected as follows:
- All stockpiles should be covered and protected with a temporary linear sediment barrier prior to the onset of precipitation.
  - Stockpiles of "cold mix" and treated wood, and basic materials should be placed on and covered with plastic sheeting or comparable material and surrounded by a berm prior to the onset of precipitation.
  - The downstream perimeter of an active stockpile should be protected with a linear sediment barrier or berm and runoff should be diverted around or away from the stockpile on the upstream perimeter.

**Costs:**  
For cost information associated with stockpile protection refer to the individual erosion or sediment control BMP fact sheet considered for implementation (For example, refer to SE-1 Silt Fence for installation of silt fence around the perimeter of a stockpile.)

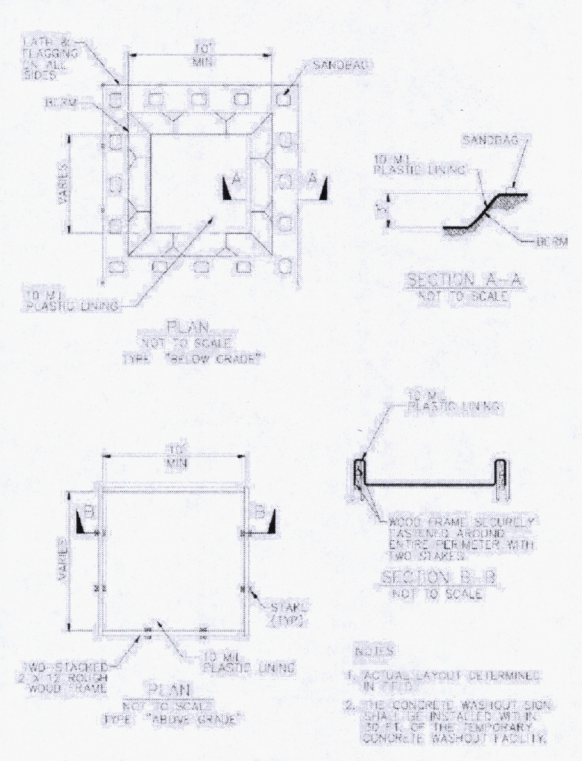
#### Inspection and Maintenance

- Stockpiles must be inspected in accordance with General Permit requirements for the associated project type and risk level. It is recommended that at a minimum, BMPs be inspected weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events.
- It may be necessary to inspect stockpiles covered with plastic sheeting more frequently during certain conditions (for example, high winds or extreme heat).
- Repair and/or replace perimeter controls and covers as needed to keep them functioning properly.
- Sediment shall be removed when it reaches one-third of the barrier height.

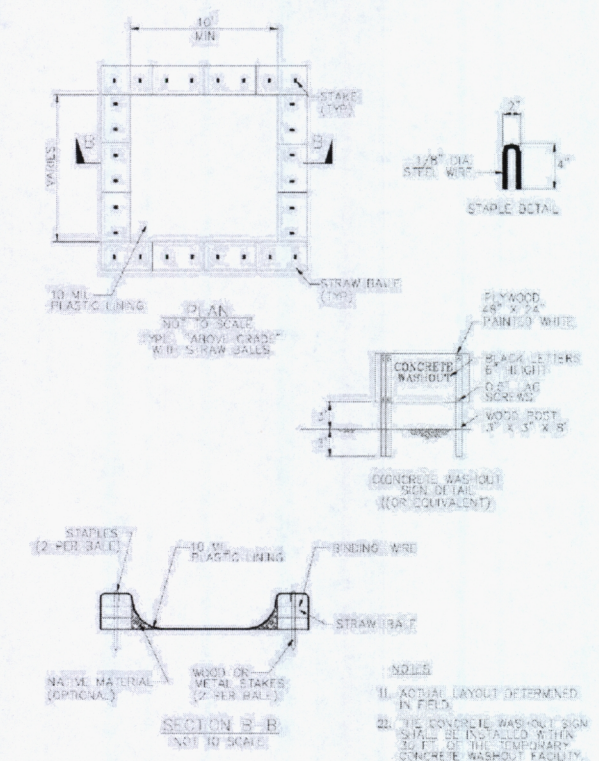
**References:**  
Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), March 2003.



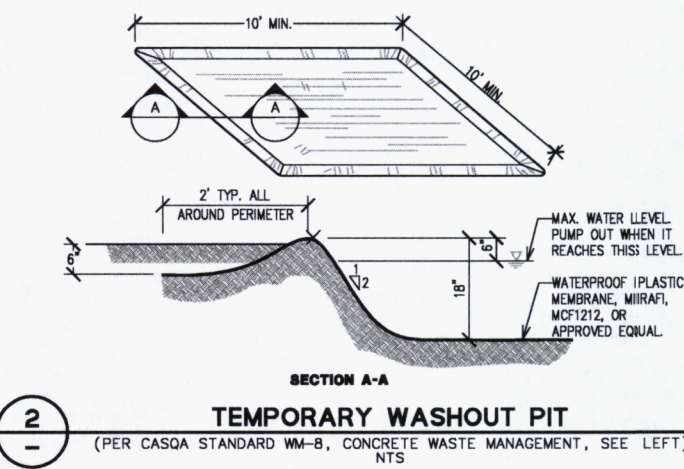
### Concrete Waste Management WM-8



### Concrete Waste Management WM-8



### WM-8 - CONCRETE WASTE MANAGEMENT NTS



# IMPROVEMENT PLANS FOR HIGHLAND ESTATES - LOT 6 TICONDEROGA DRIVE COUNTY OF SAN MATEO, CALIFORNIA

255 SHORELINE DRIVE, SUITE 200  
REDWOOD CITY, CA 94065  
PHONE: (650) 482-6300  
FAX: (650) 482-6399



CALIFORNIA

HIGHLAND ESTATES  
LOT 6 IMPROVEMENT PLANS  
TITLE SHEET

CITY OF SAN MATEO  
SAN MATEO COUNTY

### SHEET INDEX

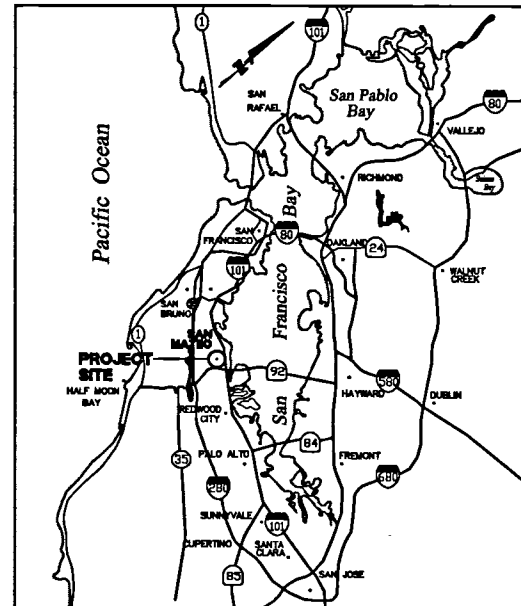
SHEET NO	DESCRIPTION
C6.10	TITLE SHEET
C6.20	GENERAL NOTES, LEGEND AND ABBREVIATIONS
C6.30	SITE AND CLEARING, CONSTRUCTION AND GRADING PLANS
C6.40	UTILITY PLAN AND CROSS SECTION
C6.50	EROSION CONTROL PLANS
C6.60	EROSION CONTROL DETAILS AND NOTES
C6.70	CONSTRUCTION DETAILS
C6.71	CONSTRUCTION DETAILS
C6.80	LOGISTICS PLAN
C6.90	CASQA STANDARD DETAILS

### EARTHWORK

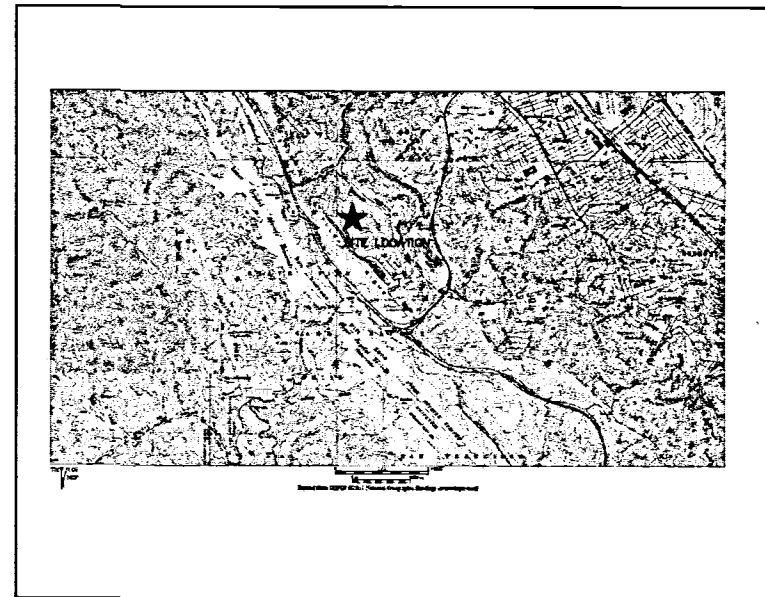
CUT	1,400 CY
FILL	0 CY
NET	1,400 CY CUT

#### EARTHWORK NOTES:

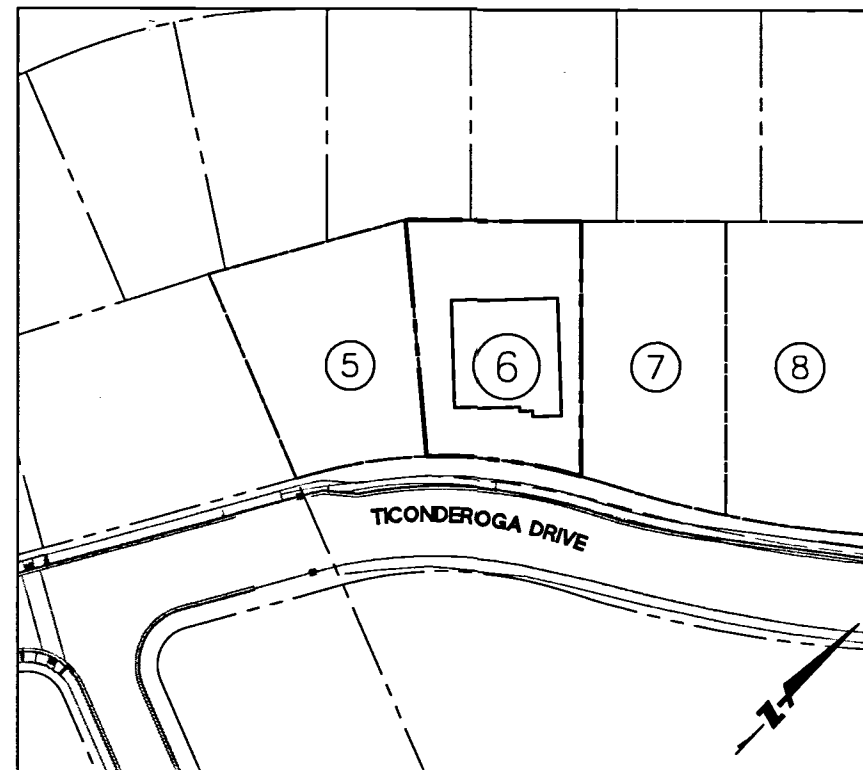
- THE QUANTITIES SHOWN ABOVE EXCLUDE EARTHWORK FROM GEOTECHNICAL SLOPE REMEDIATION ACTIVITIES PER CONDITION OF APPROVAL ITEM NO. 4.M, INCLUDING EARTHWORK SWELLING AND SHRINKAGE FACTORS ASSOCIATED WITH GEOTECHNICAL SLOPE REMEDIATION MITIGATION.
- THE EARTHWORK QUANTITIES SHOWN ABOVE ARE IN-PLACE QUANTITIES AND HAVE BEEN ESTIMATED BY THE ENGINEER WITH THE FOLLOWING ASSUMPTIONS:
  - EARTHWORK QUANTITIES DO NOT ACCOUNT FOR SITE STRIPINGS.
  - THE UNIT FAD SECTION IS ASSUMED TO BE A 12" THICK CONCRETE SECTION.
  - EARTHWORK QUANTITIES DO NOT ACCOUNT FOR FILL SHRINKAGE FACTORS.
  - EARTHWORK QUANTITIES DO NOT ACCOUNT FOR UTILITY TRENCHING AND SPOILS.
  - EARTHWORK QUANTITIES DO NOT ACCOUNT FOR SOIL STABILIZATION FACTORS AND LANDSCAPING PLANTING SOILS.
  - EARTHWORK QUANTITIES DO NOT ACCOUNT FOR RETAINING WALLS AND BUILDING FOOTINGS AND BACKFILL.
- ACTUAL QUANTITIES MAY VARY DUE TO FIELD CONDITIONS OR CONSTRUCTION TECHNIQUES. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES BASED UPON APPROVED PLANS AND INDEPENDENT CALCULATIONS.



VICINITY MAP  
NTS



LOCATION MAP  
NTS



SITE PLAN  
SCALE: 1" = 50'

### PROJECT DATA

<b>LOT AREA:</b>	10,648 SF
<b>EXISTING LAND USE:</b>	UNDEVELOPED LAND
<b>PROPOSED USE:</b>	RESIDENTIAL (LOT 6)
<b>EXISTING ZONE:</b>	RMD -- RESOURCE MANAGEMENT DISTRICT
<b>PROPOSED ZONE:</b>	R-1
<b>PROPOSED USE:</b>	1 RESIDENTIAL LOT
<b>OWNER:</b>	TICONDEROGA PARTNERS, A CALIFORNIA LIMITED LIABILITY CORPORATION C/O THE CHAMBERLAIN GROUP 655 SKYWAY, SUITE 230 SAN CARLOS, CA 94070 (650) 595-5582 ATTN: JACK CHAMBERLAIN
<b>DEVELOPER:</b>	THE CHAMBERLAIN GROUP 655 SKYWAY, SUITE 230 SAN CARLOS, CA 94070 (650) 595-5582 ATTN: JACK CHAMBERLAIN
<b>CIVIL ENGINEER:</b>	BKF ENGINEERS 255 SHORELINE DRIVE, SUITE 200 REDWOOD CITY, CA 94065 (650) 482-6300
<b>GEOTECHNICAL ENGINEER:</b>	CORNERSTONE EARTH GROUP 1259 OAKMEAD PARKWAY SUNNYVALE, CA 94085 (408) 245-4600
<b>WATER SUPPLY:</b>	CAL WATER SERVICE 341 N. DELAWARE STREET SAN MATEO, CA 94401-1808 (650) 343-1808
<b>SEWAGE DISPOSAL:</b>	CITY OF SAN MATEO & CRYSTAL SPRINGS COUNTY SANITATION DISTRICT
<b>GAS &amp; ELECTRIC TELEPHONE:</b>	PG&E AT&T
<b>FIRE PROTECTION:</b>	CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION
<b>CABLE:</b>	COMCAST
<b>STORM DRAINAGE:</b>	COUNTY OF SAN MATEO CITY OF SAN MATEO
<b>TOPOGRAPHIC BASE MAP:</b>	AERO-GEODIC CORP. JOB NO. 950168 DATE OF PHOTOGRAPHY 9/18/87
<b>EROSION CONTROL POINT OF CONTACT:</b>	NOEL CHAMBERLAIN, NEXGEN BUILDERS INC. 225 DEMETER STREET EAST PALO ALTO, CA 94303 PHONE #: (650) 322-5800 CELL #: (650) 444-3089 EMAIL: noel@nexgenbuilders.com

### ENGINEER'S STATEMENT

THESE IMPROVEMENT PLANS HAVE BEEN PREPARED BY ME OR UNDER MY DIRECTION IN ACCORDANCE WITH STANDARD ENGINEERING PRACTICE.

ROLAND N.V. HAGA  
R.C.E. NO. 43971  
BKF ENGINEERS

DATE



Revisions	
No.	Description

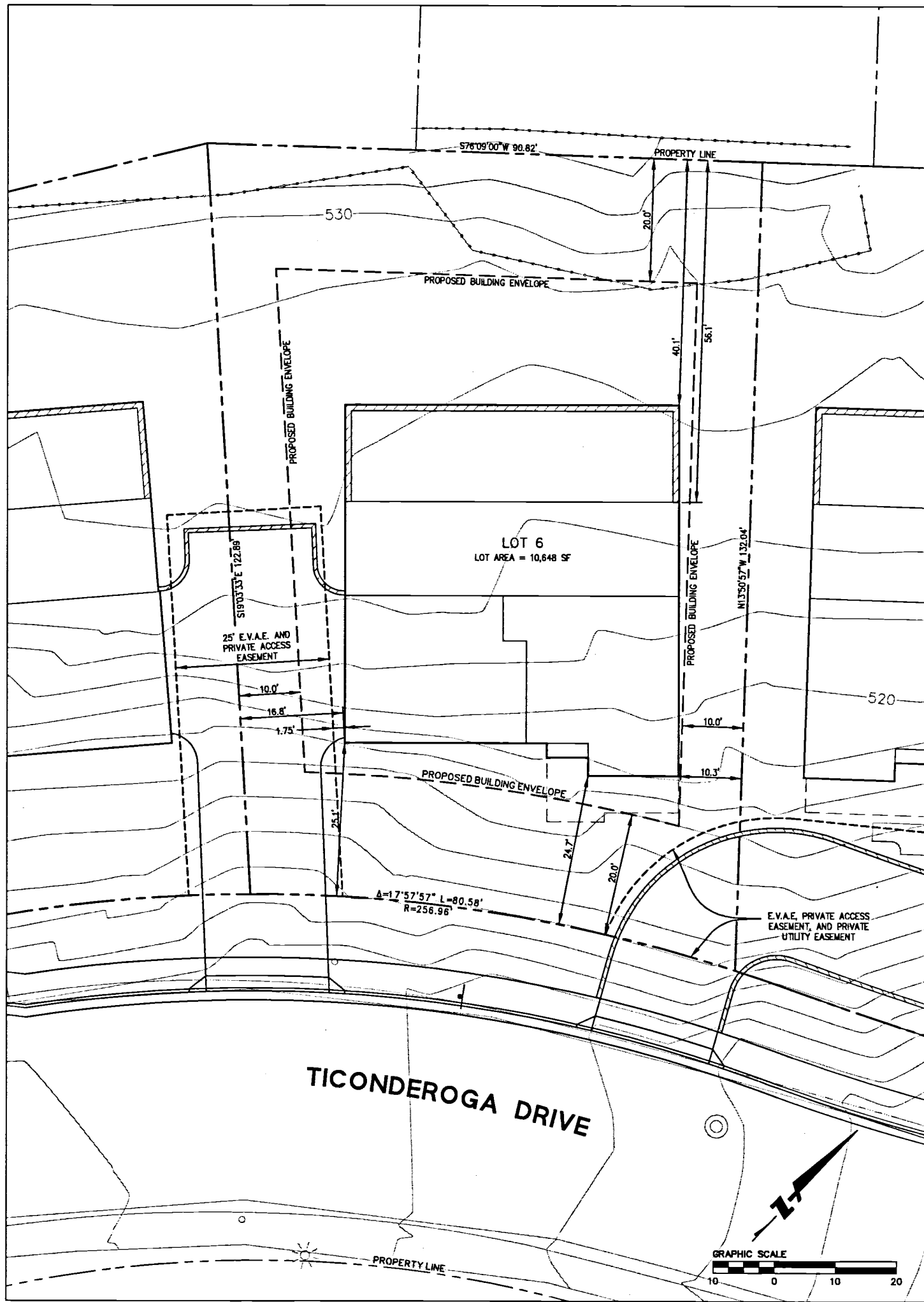
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Design: JT  
Drawn: LE  
Approved: RH  
Job No: 850108-28  
Sheet Number:  
**C6.10**  
OF

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PLOT DATE: 08-02-16  
PLOTTED BY: lrc

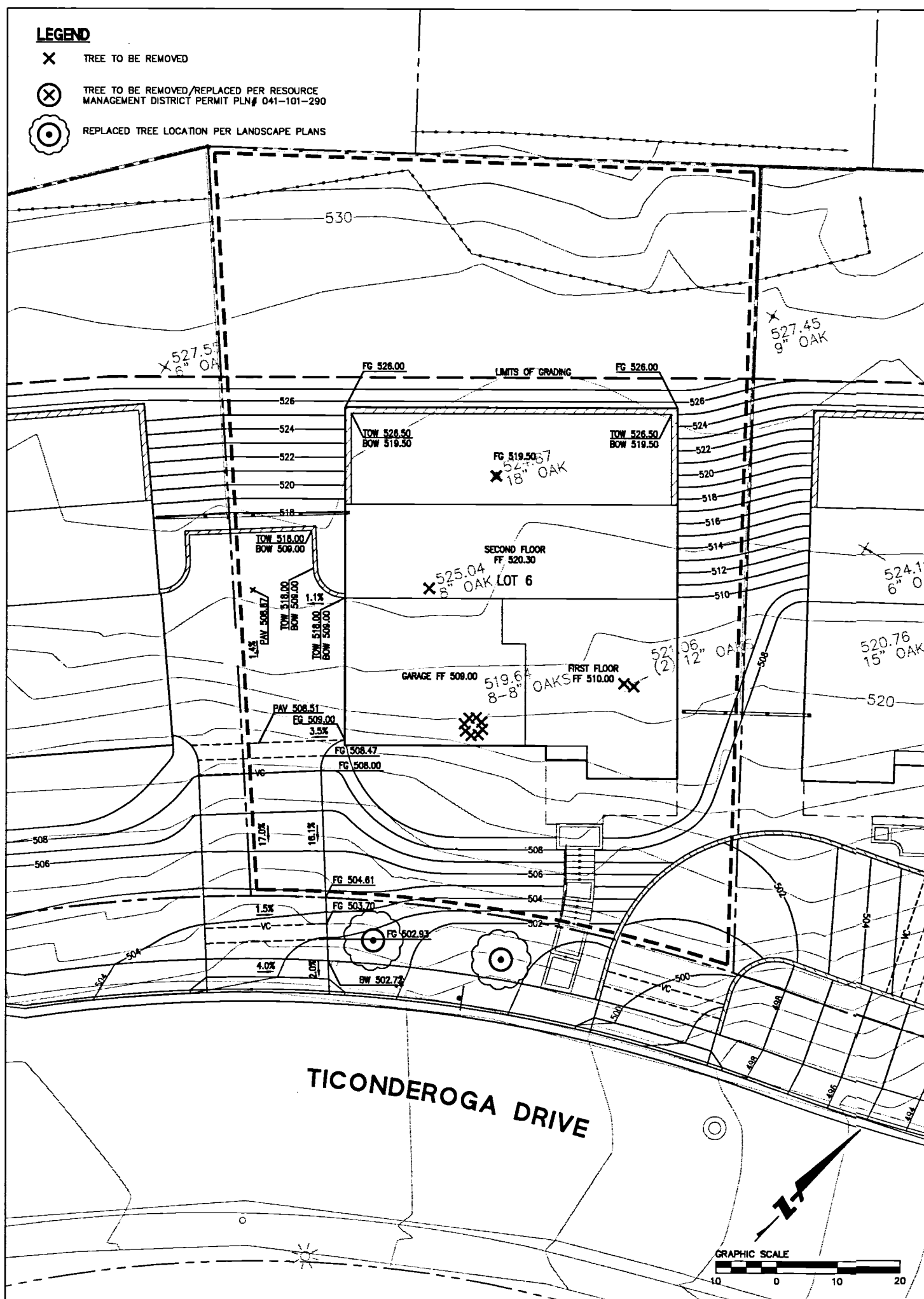




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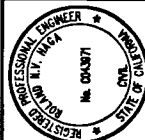


**LOT 6**  
**SITE PLAN**  
 SCALE: 1"=10'



**LOT 6**  
**CLEARING, CONSTRUCTION, AND GRADING PLAN**  
 SCALE: 1"=10'

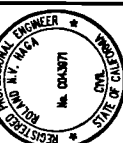
255 SHORELINE DRIVE, SUITE 200  
 REDWOOD CITY, CA 94063  
 PHONE: (650) 482-6300  
 FAX: (650) 482-6389



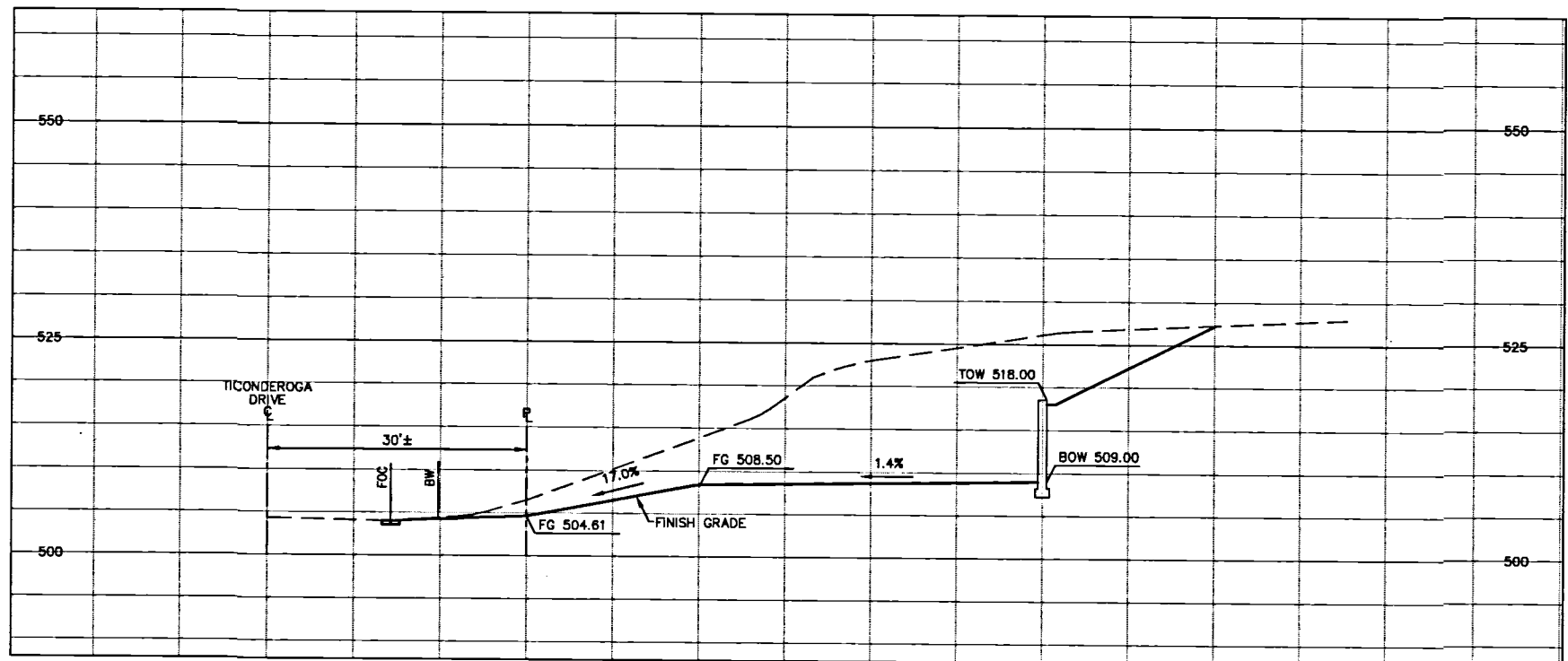
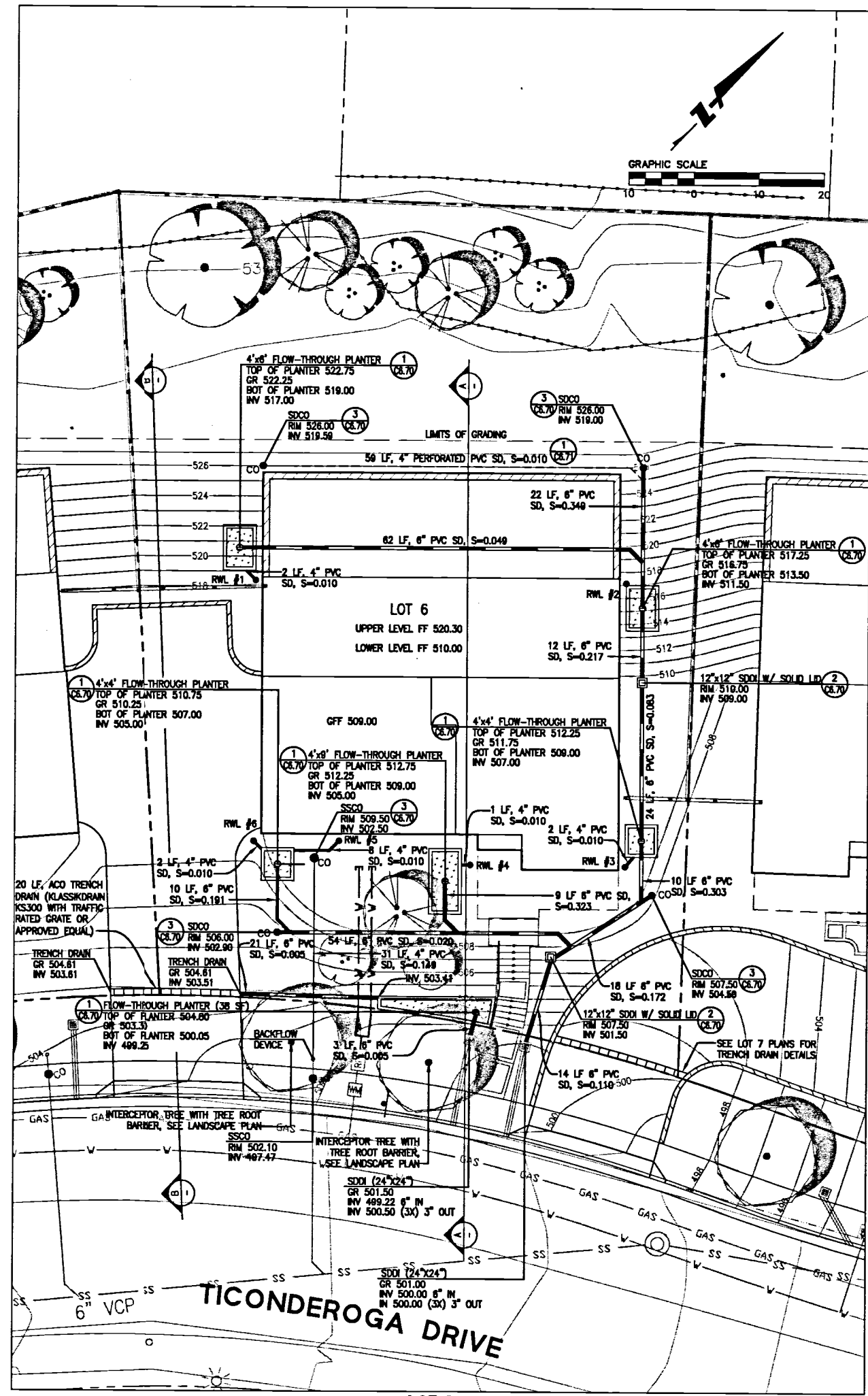
HIGHLAND ESTATES  
**LOT 6 IMPROVEMENT PLANS**  
 SITE & CLEARING, CONSTRUCTION AND GRADING PLANS  
 CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

Revisions	No.	Date	By	Check

Sheet Number:  
**C6.30**  
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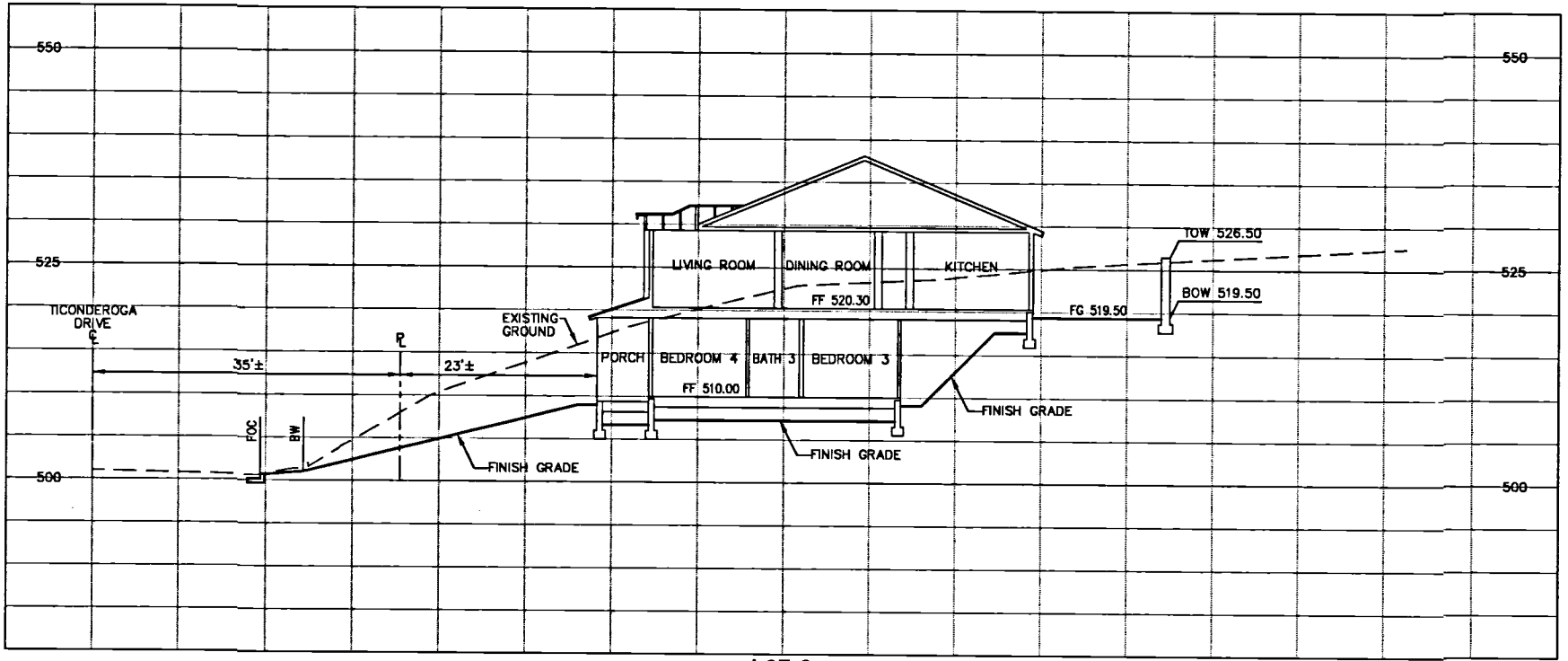


HIGHLAND ESTATES  
 LOT 6 IMPROVEMENT PLANS  
 UTILITY PLAN AND CROSS SECTION  
 CITY OF SAN MATEO SAN MATEO COUNTY



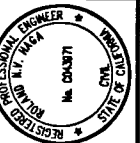
**NOTES:**

- PER THE GEOTECHNICAL REPORT, UNDOCUMENTED FILL WAS MAPPED AT LOT 6 AND IF THIS FILL IS TO BE LEFT IN PLACE DURING HOUSE AND DRIVEWAY GRADING, IT SHOULD BE REMOVED AND REPLACED AS PROPERLY COMPACTED ENGINEERED FILL.
- PER THE GEOTECHNICAL REPORT, ALL EXISTING FILLS SHOULD BE COMPLETELY REMOVED FROM WITHIN PROPOSED HOUSE FOOTPRINT AND DRIVEWAY AREAS AND TO A LATERAL DISTANCE OF AT LEAST 2 FEET BEYOND THE EDGE OF THE IMPROVEMENTS. ANY EXCESS MATERIAL SHALL BE DISPOSED OF OFF-SITE IN A LAWFUL MANNER.
- PER THE GEOTECHNICAL REPORT, ALL BUILDING AND RETAINING WALLS SHOULD BE SUPPORTED ON DRILLED PIERS. THE FOUNDATION SHOWN ON THIS PLAN ARE SCHEMATIC. REFER TO THE PROJECT STRUCTURAL PLANS FOR DETAILS ON THE DRILLED PIERS.



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 PLOT DATE: 08-02-18  
 PLOTTED BY: tret

Date	Revisions	No.
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	Design JT	
	Drawn MD	
	Approved RH	
	Job No. 80068-20	

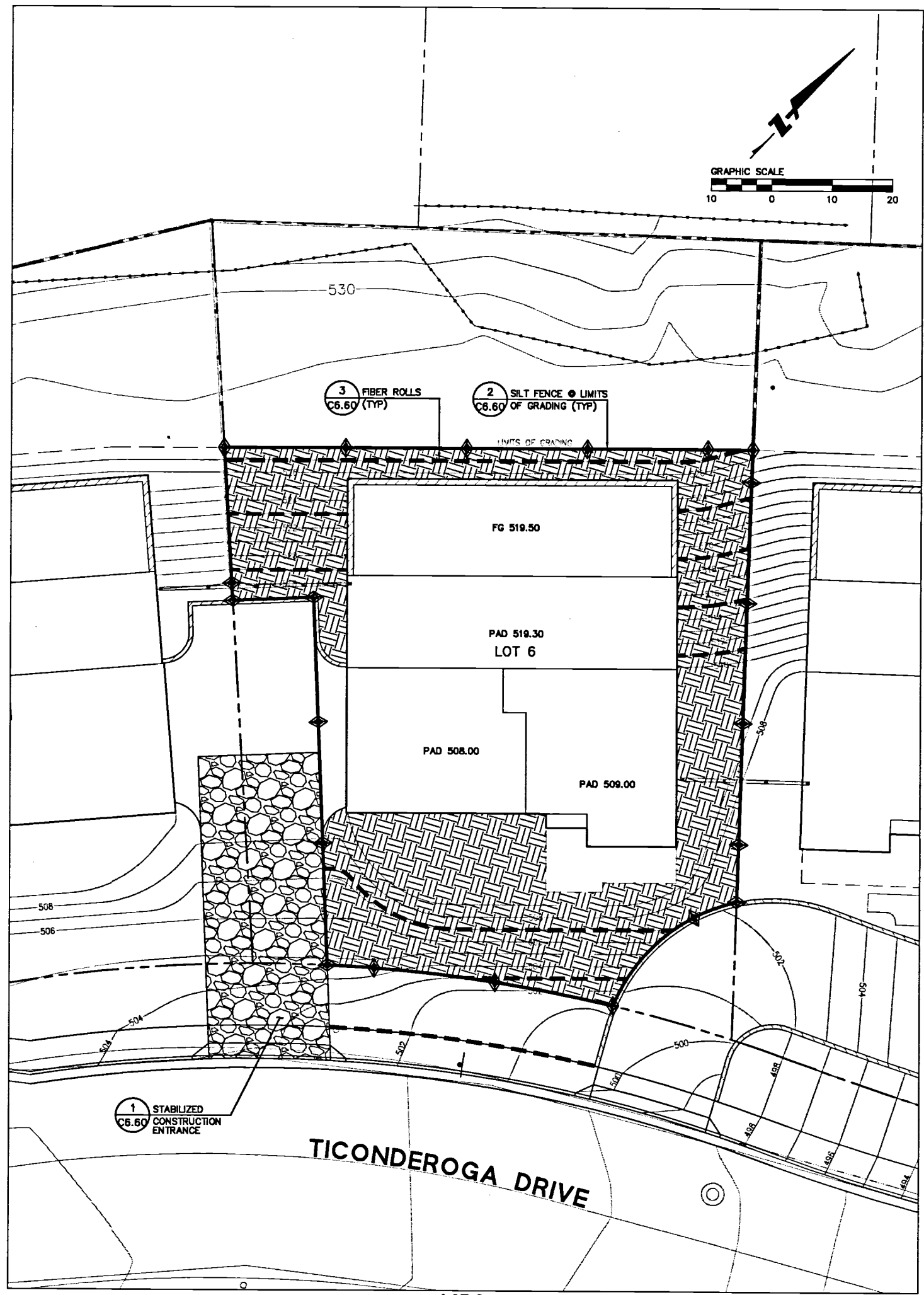


CITY OF SAN MATEO  
 SAN MATEO COUNTY  
 CALIFORNIA

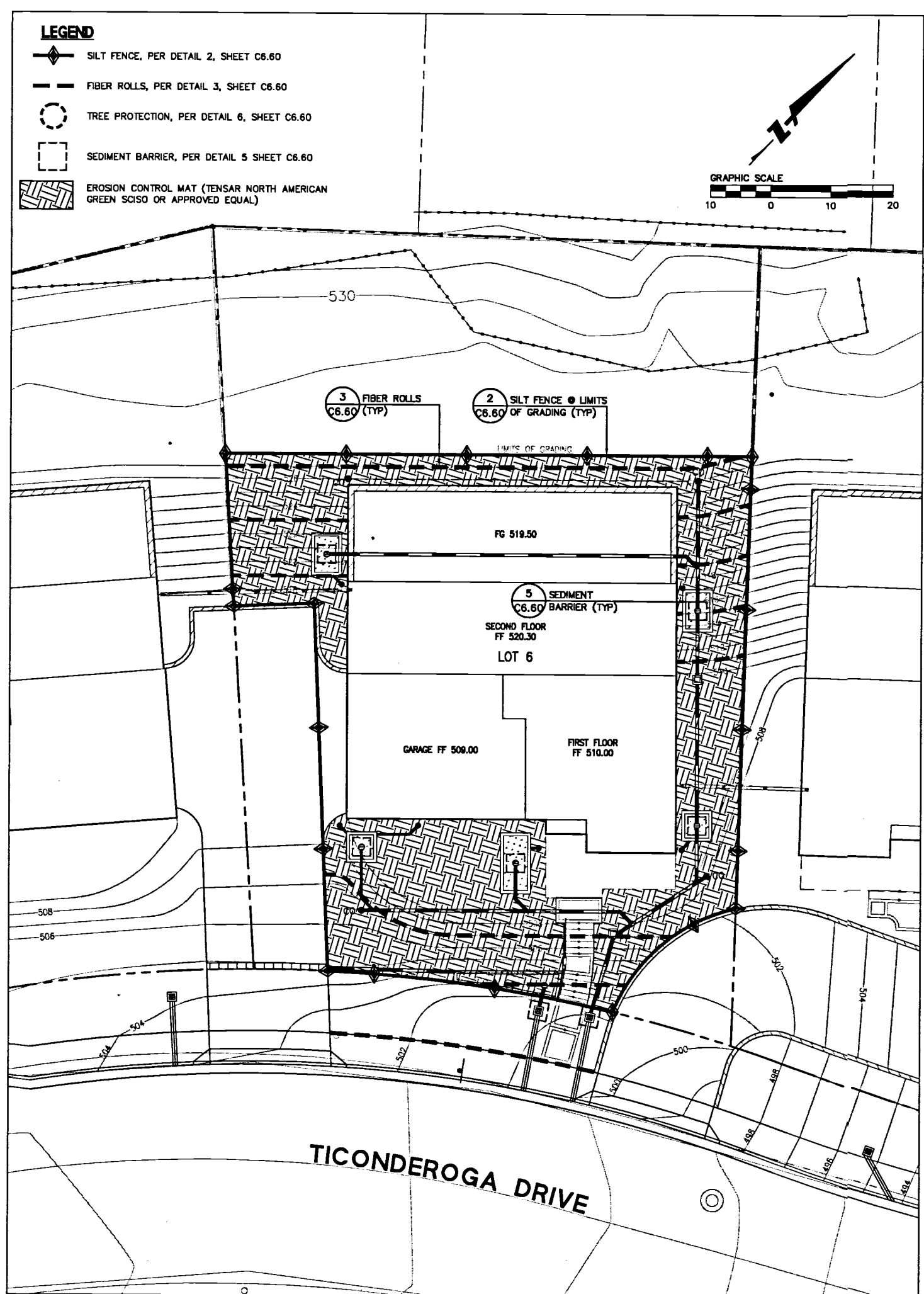
HIGHLAND ESTATES  
 LOT 6 IMPROVEMENT PLANS  
 EROSION CONTROL PLANS

Date	No.	Revisions
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	2	Design JT
	3	Drawn MD
	4	Approved RH
	5	Job No. 880188-20

Sheet Number:  
**C6.50**  
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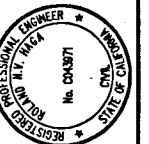
**LOT 6  
 GRADING AND RETAINING WALL EROSION CONTROL PLAN**  
 SCALE: 1"=10'



**LOT 6  
 FOUNDATION AND CONSTRUCTION EROSION CONTROL PLAN**  
 SCALE: 1"=10'

DRAWING NAME: J:\E\081950188.dwg  
 PLOT DATE: 06-03-16  
 PLOTTED BY: tfd

255 SHORELINE DRIVE, SUITE 200  
DUBLIN, CA 94568  
PHONE: (650) 482-2600  
FAX: (650) 482-6399

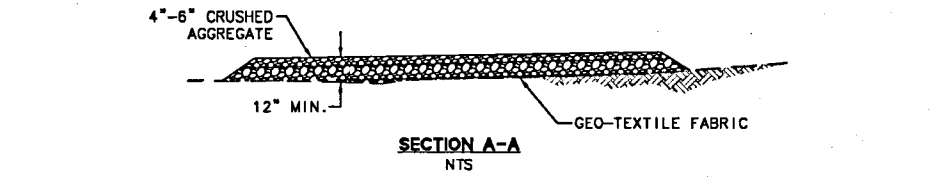
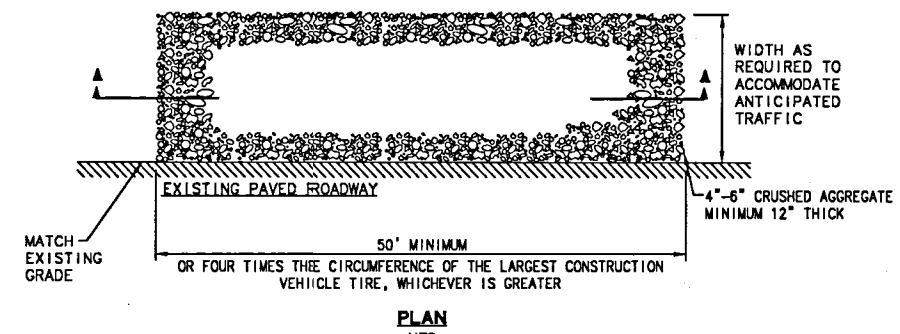


HIGHLAND ESTATES  
LOT 6 IMPROVEMENT PLANS  
EROSION CONTROL DETAILS AND NOTES  
SAN MATEO COUNTY  
CITY OF SAN MATEO  
CALIFORNIA

**EROSION CONTROL NOTES**

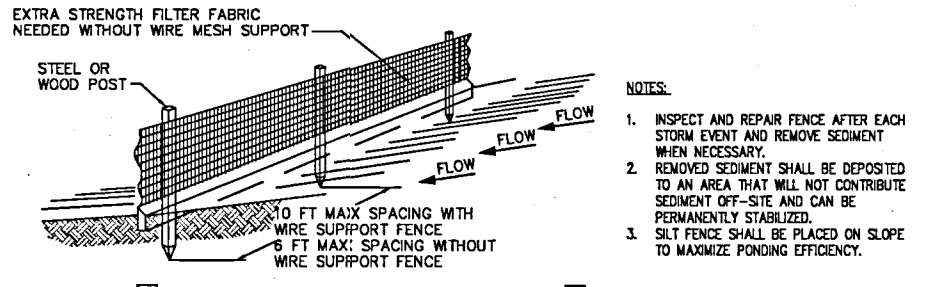
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
- ALTHOUGH SPECIFIC LOCATIONS FOR SEDIMENT CONTROL FACILITIES ARE SHOWN ON THESE PLANS, IT IS INTENDED THIS EROSION CONTROL PLAN BE MODIFIED WHEN NECESSARY TO MEET FIELD CONDITIONS. BASIN AND TRAP SIZES AND ELEVATIONS MAY BE ADJUSTED AS LONG AS THE MINIMUM AREAS AND DEPTHS FOR SEDIMENT SETTLING AND STORAGE ARE NOT REDUCED.
- THE INTENT OF THESE PLANS IS TO PROVIDE THE INITIAL CONCEPT FOR INTERIM EROSION CONTROL. THE CONTRACTOR SHALL UPDATE THE PLANS TO REFLECT CHANGING SITE CONDITIONS. PLAN UPDATES SHALL BE BASED UPON GENERAL SURVEY DATA. EROSION CONTROL EFFECTIVENESS SHALL ALSO BE MONITORED AND THE PLANS UPDATED AS REQUIRED TO PREVENT SIGNIFICANT QUANTITIES OF SEDIMENT FROM ENTERING THE DOWNSTREAM DRAINAGE SYSTEM.
- THIS PLAN MAY NOT COVER ALL THE SITUATIONS THAT ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. IN GENERAL, THE CONTRACTOR IS RESPONSIBLE FOR KEEPING THE STORM RUN OFF FROM LEAVING THE SITE. FIBER ROLLS, SAND BAGS, AND SILT FENCES SHALL BE USED BY THE CONTRACTOR ON AN AS NEEDED BASIS TO INHIBIT SILT FROM LEAVING THE SITE AND ENTERING THE STORM DRAIN SYSTEM. ALL EXISTING, TEMPORARY, OR PERMANENT CATCH BASINS; SHALL USE ONE OF THE SEDIMENT BARRIERS SHOWN.
- THE CONTRACTOR WILL BE LIABLE FOR ANY AND ALL DAMAGES TO PUBLIC AND/OR PRIVATE OWNED AND MAINTAINED ROAD CAUSED BY THE CONTRACTOR'S GRADING ACTIVITIES, AND WILL BE RESPONSIBLE FOR THE CLEANUP OF ANY MATERIAL SPILLED ON ANY PUBLIC ROAD ON THE HAIL ROUTE. ADJACENT PUBLIC ROADS SHALL BE CLEANED AT THE END OF EACH WORKING DAY.
- BEST MANAGEMENT PRACTICES SHALL BE OPERABLE YEAR AROUND.
- DURING THE RAINY SEASON, ALL PAVED AREAS ARE TO BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THIS SITE IS TO BE MAINTAINED SO AS TO MINIMIZE SEDIMENT-LOADED RUNOFF TO ANY STORM DRAIN SYSTEM.
- ALL EROSION CONTROL FACILITIES MUST BE INSPECTED AND REPAIRED DAILY DURING THE RAINY SEASON. ALL SLOPES SHALL BE REPAIRED AS SOON AS POSSIBLE WHEN DAMAGED.
- THE FIRST PHASE OF CONSTRUCTION SHALL REQUIRE 30 PERCENT OF CONSTRUCTION EQUIPMENT TO MEET TIER 1 EPA CERTIFICATION STANDARDS FOR CLEAN TECHNOLOGY. THE REMAINDER OF CONSTRUCTION EQUIPMENT (70 PERCENT), WHICH WOULD CONSIST OF OLDER TECHNOLOGIES, SHALL BE REQUIRED TO USE EMULSIFIED FUELS.
- THE SECOND PHASE OF CONSTRUCTION SHALL REQUIRE 30 PERCENT OF CONSTRUCTION EQUIPMENT TO MEET TIER 2 EPA CERTIFICATION STANDARDS FOR CLEAN TECHNOLOGY AND 500 PERCENT TO MEET TIER 1 EPA CERTIFICATION STANDARDS. THE REMAINING 20 PERCENT OF CONSTRUCTION EQUIPMENT, WHICH WOULD CONSIST OF OLDER TECHNOLOGIES, SHALL USE EMULSIFIED FUELS.
- FOR ALL LARGER VEHICLES, INCLUDING CEMENT MIXERS OR OTHER DEVICES THAT MUST BE DELIVERED BY LARGE TRUCKS, VEHICLES SHALL BE EQUIPPED WITH CARB LEVEL THREE VERIFIED CONTROL DEVICES.
- WATER ALL ACTIVE CONSTRUCTION AREAS AT LEAST TWICE DAILY.
- COVER ALL TRUCKS HAULING SOIL, SAND, AND OTHER LOOSE MATERIALS OR REQUIRE ALL TRUCKS TO MAINTAIN AT LEAST TWO FEET OF FREEBOARD.
- PAVE, APPLY WATER THREE TIMES DAILY, OR APPLY NON-TOXIC SOIL STABILIZERS ON ALL UNPAVED ACCESS ROADS, PARKING AREAS, AND STAGING AREAS AT THE CONSTRUCTION SITES.
- SWEEP DAILY (WITH WATER SWEEPERS) ALL PAVED ACCESS ROADS, PARKING AREAS, AND STAGING AREAS AT THE CONSTRUCTION SITES.
- SWEEP PUBLIC STREETS ADJACENT TO CONSTRUCTION SITES DAILY (WITH WATER SWEEPERS) IF VISIBLE SOIL MATERIAL IS CARRIED ONTO THE STREETS.
- HYDROSEED OR APPLY NON-TOXIC SOIL STABILIZERS TO INACTIVE CONSTRUCTION AREAS (PREVIOUSLY GRADED AREAS INACTIVE FOR TEN DAYS OR MORE).
- TEMPORARY AND PERMANENT SLOPES GREATER THAN 3 FEET SHALL BE SEEDED UNLESS ALTERNATIVE MEASURES ARE USED.
- SEED MIX FOR REVEGETATION AND HYDROSEEDING:  
NORTHERN CALIFORNIA COVER MIX BY AGRIBRIGHT OR EQUAL  
30% BLUE WILD RYE  
30% MEADOW BARLEY  
20% ZORRO FESCUE  
10% PURPLE NEEDLE GRASS  
10% CALIFORNIA NATIVE WILDFLOWERS  
APPLY AT 40 POUNDS PER ACRE MINIMUM
- ENCLOSE, COVER, WATER TWICE DAILY, OR APPLY NON-TOXIC SOIL BINDERS TO EXPOSED STOCKPILES (DIRT, SAND, ETC.). LIMIT TRAFFIC SPEEDS ON UNPAVED ROADS TO 15 MILES PER HOUR.
- DISPOSAL AREAS FOR SEDIMENT TO BE DETERMINED IN FIELD. WHEN MATERIAL IS STOCKPILED, IT SHALL BE SURROUNDED BY A SILT FENCE/FIBER ROLLS.
- LIMIT TRAFFIC SPEEDS ON UNPAVED ROADS TO 15 MILES PER HOUR.
- INSTALL SANDBAGS OR OTHER EROSION CONTROL MEASURES TO PREVENT SILT RUNOFF TO PUBLIC ROADWAYS.
- REPLANT VEGETATION IN DISTURBED AREAS AS SOON AS POSSIBLE.
- INSTALL WHEEL WASHERS FOR ALL EXITING TRUCKS OR WASH OFF THE TIRES OR TRACKS OF ALL TRUCKS AND EQUIPMENT LEAVING THE CONSTRUCTION SITE.
- INSTALL WIND BREAKS AT THE WINDWARD SIDES OF THE CONSTRUCTION AREAS.
- SUSPEND EXCAVATION AND GRADING ACTIVITIES WHEN WIND (AS INSTANTANEOUS GUSTS) EXCEEDS 25 MILES PER HOUR.
- NO GRADING SHALL BE ALLOWED DURING THE WINTER SEASON (OCTOBER 15 TO APRIL 30) TO AVOID POTENTIAL SOIL EROSION UNLESS APPROVED, IN WRITING, BY THE COMMUNITY DEVELOPMENT DIRECTOR. THE PROPERTY OWNERS SHALL SUBMIT A LETTER TO THE CURRENT PLANNING SECTION, AT LEAST TWO WEEKS PRIOR TO COMMENCEMENT OF GRADING, STATING THE DATE WHEN GRADING WILL BEGIN.
- STABILIZE ALL DENuded AREAS AND MAINTAIN EROSION CONTROL MEASURES CONTINUOUSLY BETWEEN OCTOBER 15 AND APRIL 30. STABILIZING SHALL INCLUDE BOTH PROACTIVE MEASURES, SUCH AS THE PLACEMENT OF STRAW BALES OR COIR NETTING, AND PASSIVE MEASURES, SUCH AS MINIMIZING VEGETATION REMOVAL AND REVEGETATING DISTURBED AREAS WITH VEGETATION THAT IS COMPATIBLE WITH THE SURROUNDING ENVIRONMENT.
- STORE, HANDLE, AND DISPOSE OF CONSTRUCTION MATERIALS AND WASTES PROPERLY, SO AS TO PREVENT THEIR CONTACT WITH STORMWATER.

- CONTROL AND PREVENT THE DISCHARGE OF ALL POTENTIAL POLLUTANTS, INCLUDING PAVEMENT CUTTING WASTES, PAINTS, CONCRETE, PETROLEUM PRODUCTS, CHEMICALS, WASH WATER OR SEDIMENTS, AND NON-STORMWATER DISCHARGES TO STORM DRAINS AND WATERCOURSES.
- USE SEDIMENT CONTROLS OR FILTRATION TO REMOVE SEDIMENT WHEN DEWATERING SITE AND OBTAINING ALL NECESSARY PERMITS.
- AVOID CLEANING, FUELING, OR MAINTAINING VEHICLES ON-SITE, EXCEPT IN A DESIGNATED AREA WHERE WASH WATER IS CONTAINED AND TREATED.
- DELINEATE WITH FIELD MARKERS CLEARING LIMITS, SETBACKS, AND DRAINAGE COURSES.
- PROTECT ADJACENT PROPERTIES AND UNDISTURBED AREAS FROM CONSTRUCTION IMPACTS USING VEGETATIVE BUFFER STRIPS, SEDIMENT BARRIERS OR FILTERS, DIKES, MULCHING, OR OTHER MEASURES AS APPROPRIATE.
- PERFORM CLEARING AND EARTH-MOVING ACTIVITIES ONLY DURING DRY WEATHER.
- LIMIT AND TIME APPLICATIONS OF PESTICIDES AND FERTILIZERS TO PREVENT POLLUTED RUNOFF.
- LIMIT CONSTRUCTION ACCESS ROUTES AND STABILIZE DESIGNATED ACCESS POINTS.
- ALL GRADED SURFACES AND MATERIALS, WHETHER FILLED, EXCAVATED, TRANSPORTED OR STOCKPILED, SHALL BE WETTED, PROTECTED OR CONTAINED IN SUCH A MANNER AS TO PREVENT ANY SIGNIFICANT NUISANCE FROM DUST, OR SPILLAGE UPON ADJOINING WATER BODY, PROPERTY, OR STREETS. EQUIPMENT AND MATERIALS ON THE SITE SHALL BE USED IN SUCH A MANNER AS TO AVOID EXCESSIVE DUST. A DUST CONTROL PLAN MAY BE REQUIRED AT ANYTIME DURING THE COURSE OF THE PROJECT.
- A DUST PALLIATIVE SHALL BE APPLIED TO THE SITE WHEN REQUIRED BY THE COUNTY. THE TYPE AND RATE OF APPLICATION SHALL BE RECOMMENDED BY THE SOILS ENGINEER AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS, THE PLANNING AND BUILDING DEPARTMENT'S GEOTECHNICAL SECTION, AND THE REGIONAL WATER QUALITY CONTROL BOARD.
- IF NO WORK HAS PROCEEDED FOR A PERIOD OF 6-WEEKS, FINAL DRAINAGE AND EROSION CONTROL IMPROVEMENTS SHALL BE INSTALLED IN ACCORDANCE WITH AN APPROVED WINTERIZATION PLAN.
- PADS SHALL BE GRADED TO MINIMIZE STANDING WATER. SPECIFIC LOCATIONS REQUIRING SUPPLEMENTAL GRADING TO ACHIEVE ACCEPTABLE DRAINAGE SHALL BE DETERMINED BY THE CONSTRUCTION MANAGER. ALL SPILLS AND SOIL STOCKPILES REMAINING ON SITE SHALL BE ENCLOSED BY SILT FENCES/FIBER ROLLS.
- STUBBED OUT PARTS OF PARTIALLY COMPLETED SUBDRAINS SHALL BE WRAPPED WITH AN APPROVED FABRIC TO PREVENT SOIL AND DEBRIS FROM ENTERING THE PIPE.
- HAUL ROADS ARE CURRENTLY NOT SHOWN ON THE PLANS. EROSION CONTROL MEASURES SHALL BE TAKEN TO MINIMIZE EROSION RELATED TO HAUL ROADS.
- GRADING SCHEDULE SHALL BE SUBMITTED FOR APPROVAL TO SAN MATEO COUNTY PUBLIC WORKS BY AUGUST 15.
- EROSION CONTROL POINT OF CONTACT:  
NOEL CHAMBERLAIN, NEXGEN BUILDERS INC.  
225 DEMETER STREET  
EAST PALO ALTO, CA 94303  
PHONE #: 650-322-5800  
CELL #: 650-444-3089  
EMAIL: noel@negenbuilders.com
- SHOULD IT APPEAR THAT THE EROSION CONTROL PLAN, OR ANY OTHER MATTER THEREOF, IS NOT SUFFICIENTLY DETAILED OR EXPLAINED ON THESE PLANS, THE CONTRACTOR SHALL CONTACT THE BKF PROJECT ENGINEER AT (650) 482-6300 FOR SUCH FURTHER EXPLANATIONS AS MAY BE NECESSARY.
- AREAS DELINEATED ON PLANS FOR PARKING, CLEARING & GRUBBING, STORAGE, ETC. SHALL NOT BE ENLARGED OR "RUN OVER."
- CONSTRUCTION SITES ARE REQUIRED TO HAVE EROSION CONTROL MATERIALS ON-SITE DURING THE "OFF-SEASON."
- DUST CONTROL IS REQUIRED YEAR-ROUND.
- EROSION CONTROL MATERIALS SHALL BE STORED ON-SITE.
- USE OF PLASTIC SHEETING BETWEEN OCTOBER 1ST AND APRIL 30TH IS NOT ACCEPTABLE, UNLESS FOR USE ON STOCKPILES WHERE THE STOCKPILE IS ALSO PROTECTED WITH FIBER ROLLS CONTAINING THE BASE OF THE STOCKPILE.
- TREE PROTECTION SHALL BE IN PLACE BEFORE ANY GRADING, EXCAVATING OR GRUBBING IS STARTED.



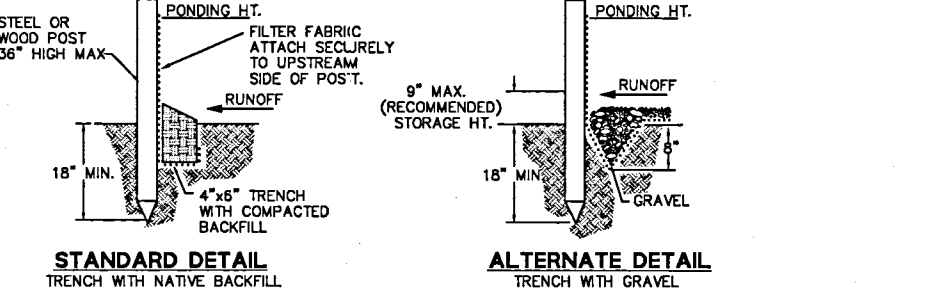
- NOTES:**
- ALL CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USE TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAYS SHALL BE REMOVED IMMEDIATELY.
  - WHEELS SHALL BE CLEAN PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAYS. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE THROUGH USE OF INLET PROTECTION (E.G. SAND BAGS OR OTHER APPROVED METHODS).
  - THE MATERIAL FOR CONSTRUCTION OF THE PAD SHALL BE 4" TO 6" STONE.
  - THE THICKNESS OF THE PAD SHALL NOT BE LESS THAN 12".
  - THE WIDTH OF THE PAD SHALL NOT BE LESS THAN THE FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
  - THE LENGTH OF THE PAD SHALL NOT BE LESS THAN 50'.

**1 STABILIZED CONSTRUCTION ENTRANCE**  
NTS

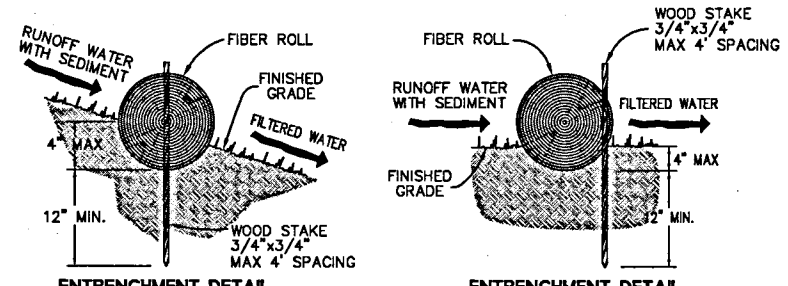


- NOTES:**
- THE APPLICANT SHALL ESTABLISH AND MAINTAIN TREE PROTECTION ZONES THROUGHOUT THE ENTIRE LENGTH OF THE PROJECT.
  - TREE PROTECTION ZONES SHALL BE DELINEATED USING 4-FOOT TALL ORANGE PLASTIC FENCING SUPPORTED BY POLES POUNDED INTO THE GROUND, LOCATED AS CLOSE TO THE DRIPLINES AS POSSIBLE WHILE STILL ALLOWING ROOM FOR CONSTRUCTION/GRADING TO SAFELY CONTINUE.
  - THE APPLICANT SHALL MAINTAIN TREE PROTECTION ZONES FREE OF EQUIPMENT AND MATERIALS STORAGE AND SHALL NOT CLEAN ANY EQUIPMENT WITHIN THESE AREAS.
  - SHOULD ANY LARGE ROOTS OR LARGE MASSES OF ROOTS NEED TO BE CUT, THE ROOTS SHALL BE INSPECTED BY A CERTIFIED ARBORIST OR REGISTERED FORESTER PRIOR TO CUTTING. ANY ROOT CUTTING SHALL BE MONITORED BY AN ARBORIST OR FORESTER AND DOCUMENTED.
  - ROOTS TO BE CUT SHOULD BE SEVERED CLEANLY WITH A SAW OR TOPPERS.
  - NORMAL IRRIGATION SHALL BE MAINTAINED, BUT OAKS SHOULD NOT NEED SUMMER IRRIGATION.
  - THE ABOVE INFORMATION SHALL BE ON-SITE AT ALL TIMES.

**6 TREE PROTECTION FENCE**  
NTS

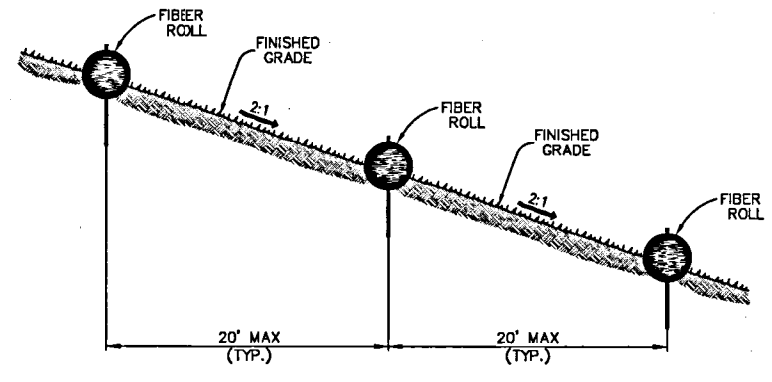


**2 SILT FENCE**  
NTS



- NOTES:**
- FIBER ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3" TO 4" DEEP, DUG ON CONTOUR.
  - ADJACENT ROLLS SHALL TIGHTLY ABUT.
  - RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND FIBER ROLL.

**3 FIBER ROLL**  
NTS



**4 FIBER ROLL INSTALLATION ON SLOPE**  
(TIME FRAME: BETWEEN FINAL PAVING OPERATIONS AND PROJECT COMPLETION)  
NTS

**CALIFORNIA STORMWATER QUALITY ASSOCIATION (CASQA) STANDARD DETAIL REFERENCES**

(CALIFORNIA STORMWATER BMP HANDBOOK CONSTRUCTION, DATED NOVEMBER 2009)  
NOTE: ALTHOUGH SPECIFIC LOCATIONS FOR SPECIFIC BMPs ARE SHOWN ON THESE PLANS, IT IS INTENDED FOR THE CONTRACTOR TO APPLY APPROPRIATE BMPs WHEN NECESSARY TO MEET FIELD CONDITIONS.

EROSION CONTROL BMPs:	TEMPORARY TRACKING CONTROL BMPs:
EC-1 SCHEDULING	TC-1 STABILIZED CONSTRUCTION ENTRANCE/EXIT
EC-2 PRESERVATION OF EXISTING VEGETATION	TC-2 STABILIZED CONSTRUCTION ROADWAY
EC-3 HYDRAULIC MULCH	TC-3 ENTRANCE/OUTLET TIRE WASH
EC-4 HYDROSEEDING	
EC-5 SOIL BINDERS	<b>NON-STORMWATER MANAGEMENT BMPs:</b>
EC-6 STRAW MULCH	NS-1 WATER CONSERVATION PRACTICES
EC-7 GEOTEXTILES & MATS	NS-2 DEWATERING OPERATIONS
EC-8 WOOD MULCHING	NS-3 PAVING AND GRINDING OPERATIONS
EC-9 EARTH DIKES AND DRAINAGE SWALES	NS-4 TEMPORARY STREAM CROSSING
EC-10 VELOCITY DISSIPATION DEVICES	NS-5 CLEAR WATER DIVERSION
EC-11 SLOPE DRAINS	NS-6 ILLICIT CONNECTION/DISCHARGE
EC-12 STREAMBANK STABILIZATION	NS-7 POTABLE WATER IRRIGATION
EC-14 COMPOST BLANKETS	NS-8 VEHICLE AND EQUIPMENT CLEANING
EC-15 SOIL PREPARATION/ROUGHENING	NS-9 VEHICLE AND EQUIPMENT FUELING
EC-16 NON-VEGETATIVE STABILIZATION	NS-10 VEHICLE AND EQUIPMENT MAINTENANCE
	NS-11 PILE DRIVING OPERATIONS
<b>TEMPORARY SEDIMENT CONTROL BMPs:</b>	NS-12 CONCRETE CURING
SE-1 SILT FENCE	NS-13 CONCRETE FINISHING
SE-2 SEDIMENT BASIN	NS-14 MATERIAL AND EQUIPMENT USE
SE-3 SEDIMENT TRAP	NS-15 DEMOLITION ADJACENT TO WATER
SE-4 CHECK DAM	NS-16 TEMPORARY BATCH PLANTS
SE-5 FIBER ROLLS	
SE-6 GRAVEL BAG BERM	<b>WASTE MANAGEMENT &amp; MATERIALS POLLUTION CONTROL BMPs:</b>
SE-7 STREET SWEEPING AND VACUUMING	WM-1 MATERIAL DELIVERY AND STORAGE
SE-8 SANDBAG BARRIER	WM-2 MATERIAL USE
SE-9 STRAW BALE BARRIER	WM-3 STOCKPILE MANAGEMENT
SE-10 STORM DRAIN INLET PROTECTION	WM-4 SPILL PREVENTION AND CONTROL
SE-11 ACTIVE TREATMENT SYSTEMS	WM-5 SOLID WASTE MANAGEMENT
SE-12 TEMPORARY SILT DIKE	WM-6 HAZARDOUS WASTE MANAGEMENT
SE-13 COMPOST SOCKS AND BERMS	WM-7 CONTAMINATED SOIL MANAGEMENT
SE-14 BIOFILTER BAGS	WM-8 CONCRETE WASTE MANAGEMENT
<b>WIND EROSION CONTROL BMPs:</b>	WM-9 SANITARY/SEPTIC WASTE MANAGEMENT
WE-1 WIND EROSION CONTROL	WM-10 LIQUID WASTE MANAGEMENT

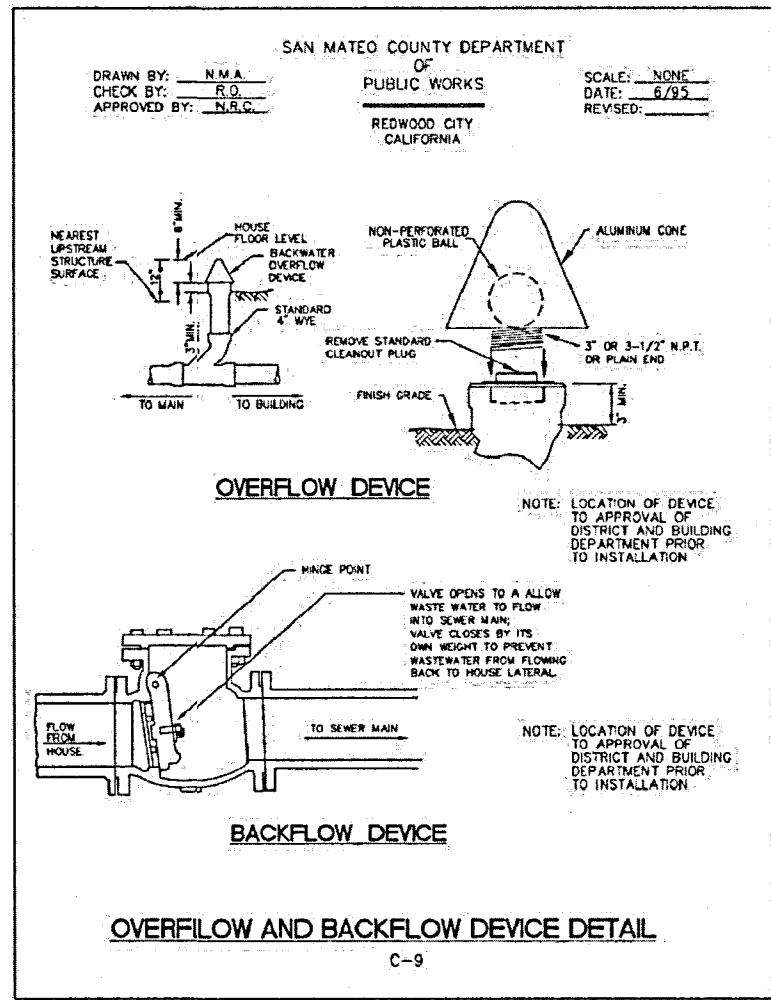
ALL EROSION CONTROL MEASURES SHALL BE IN PLACE BY OCTOBER 15 AND MAINTAINED DURING ALL PHASES OF CONSTRUCTION.

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PLOT DATE: 07-28-16

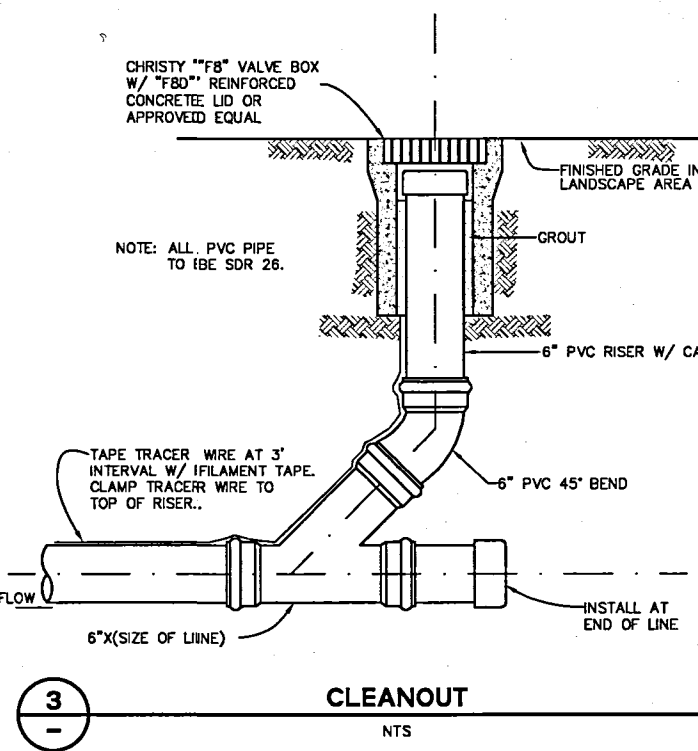
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09/05/2016	AS SHOWN	JT	JD	RH	60188-20

Sheet Number: **C6.60**  
OF

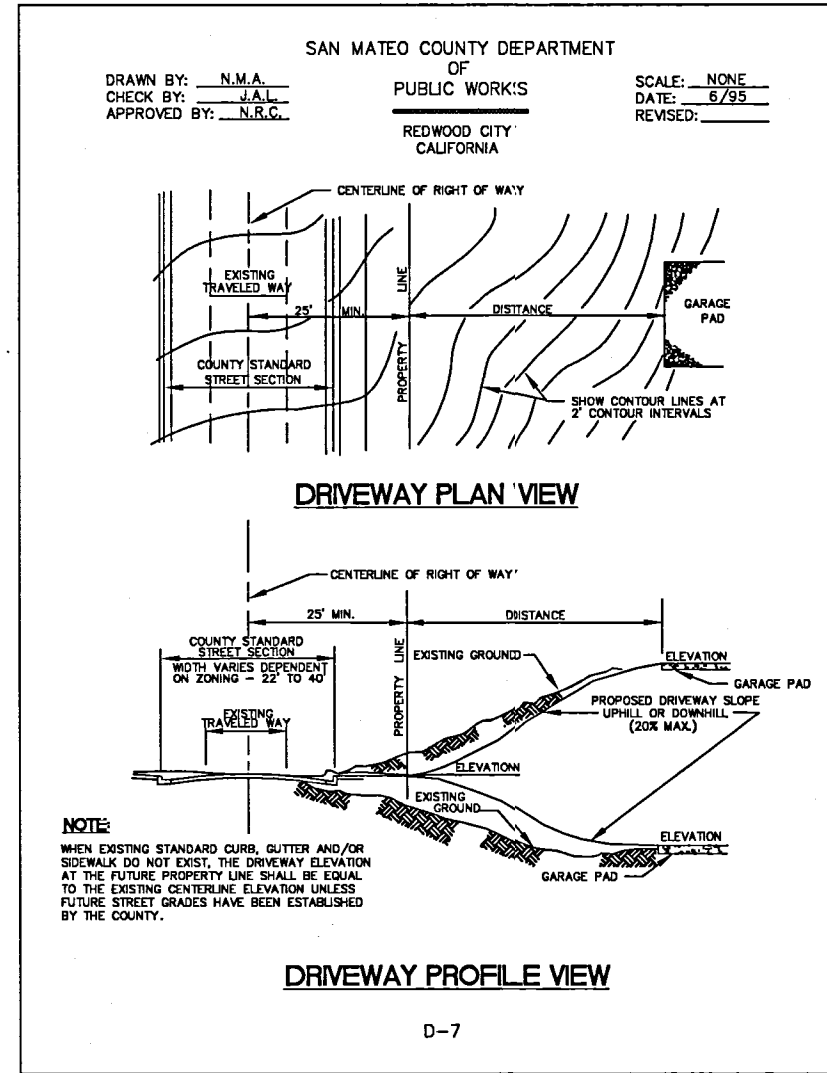
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	2		Design	JT	
	3		Drawn	MD	
	4		Approved	Rit	
	5		Job No.		60808-20



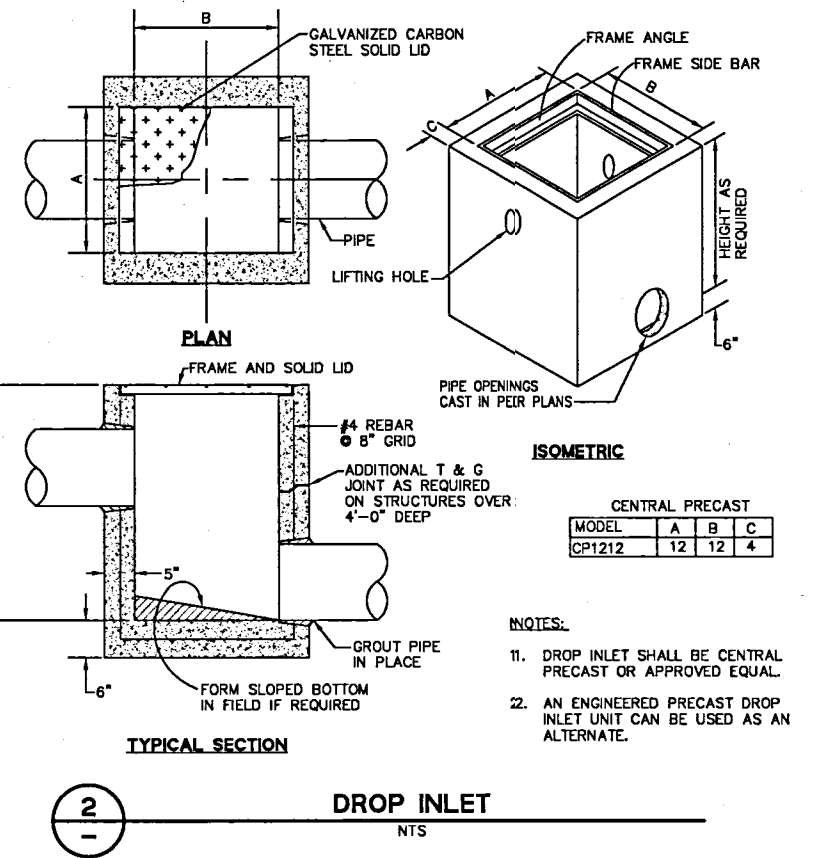
**6** SAN MATEO COUNTY OVERFLOW AND BACKFLOW DEVICE DETAIL  
 NTS



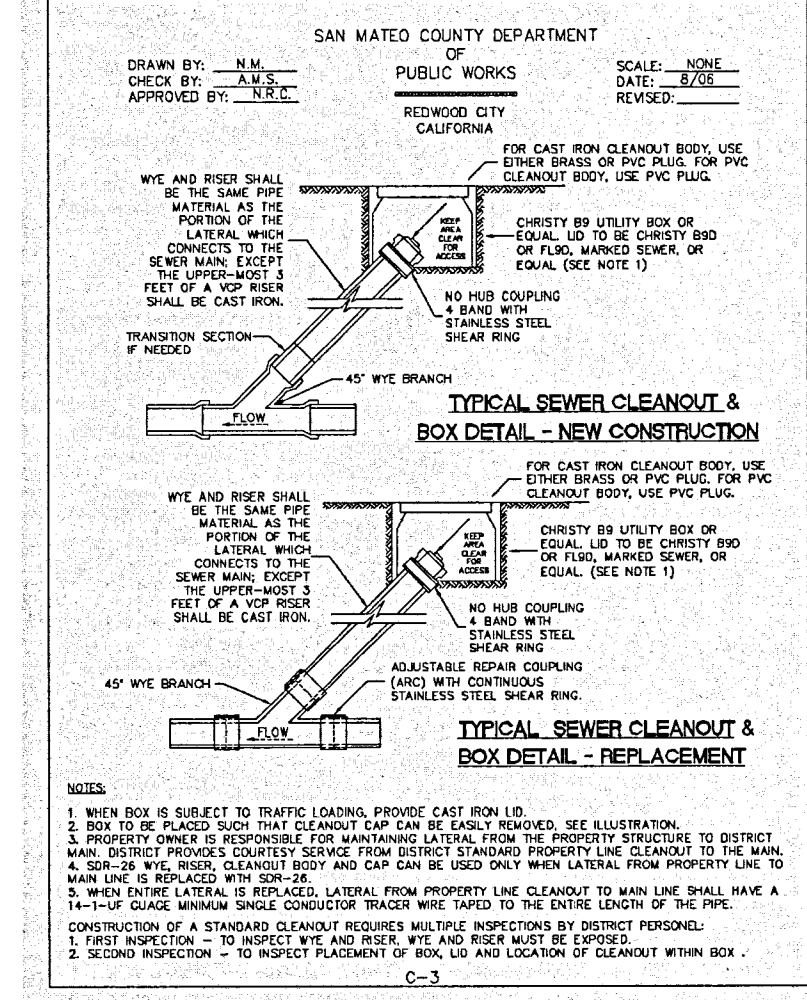
**3** SAN MATEO COUNTY CLEANOUT  
 NTS



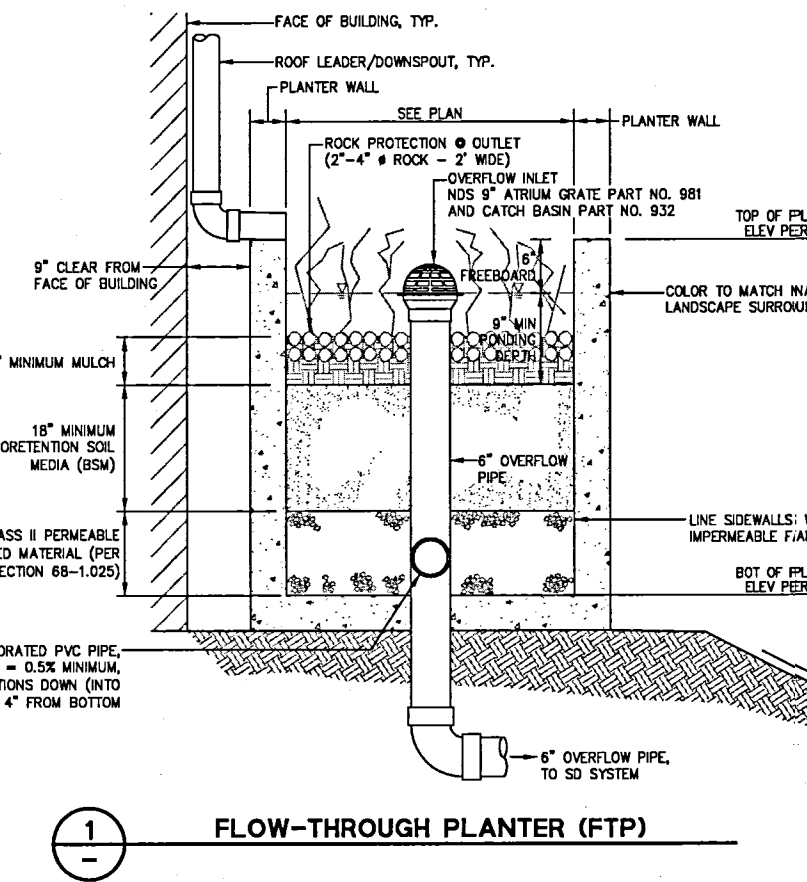
**5** SAN MATEO COUNTY DRIVEWAY PLAN AND PROFILE VIEWS  
 NTS



**2** SAN MATEO COUNTY DROP INLET  
 NTS



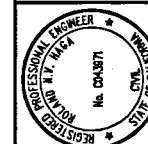
**4** SAN MATEO COUNTY TYPICAL SEWER CLEANOUT & BOX DETAIL  
 NTS



**1** SAN MATEO COUNTY FLOW-THROUGH PLANTER (FTP)  
 NTS

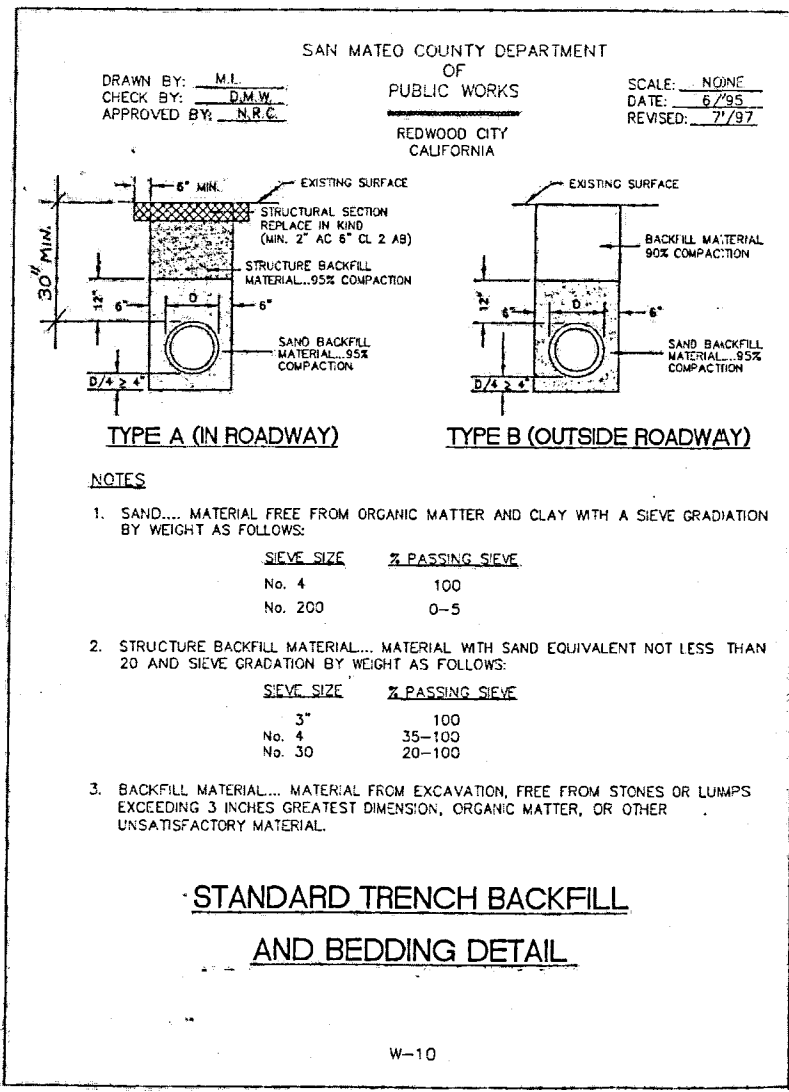
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 PLOT DATE: 07-28-16 PLOTTED BY: trt

255 SHORELINE DRIVE, SUITE 200  
 REDWOOD CITY, CA 94065  
 PHONE: (650) 482-6300  
 FAX: (650) 482-6399

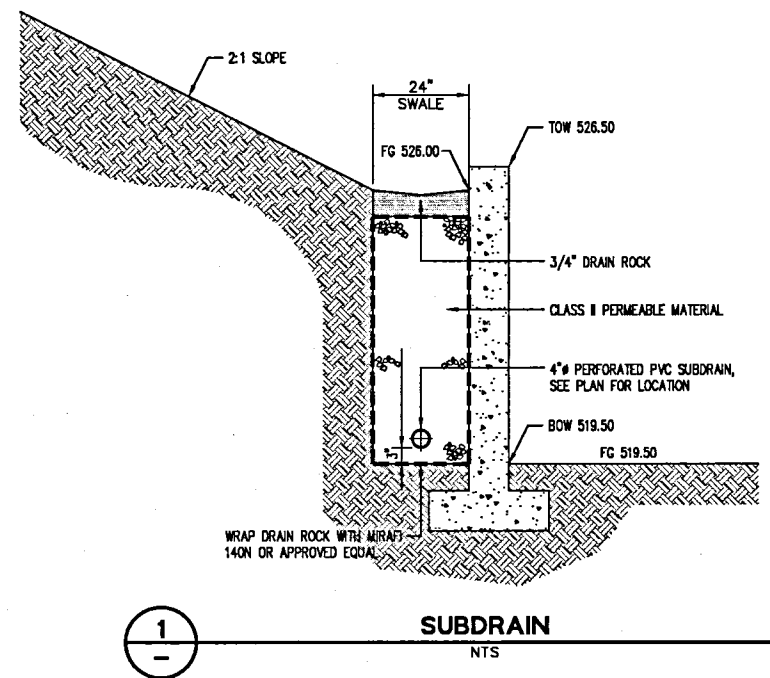


CALIFORNIA  
 CITY OF SAN MATEO  
 SAN MATEO COUNTY  
 CONSTRUCTION DETAILS  
 LOT 6 IMPROVEMENT PLANS  
 HIGHLAND ESTATES

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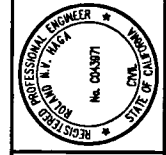


2 STANDARD TRENCH BACKFILL & BEDDING DETAIL  
NTS



1  
-  
-

255 SHORELINE DRIVE, SUITE 200  
REDWOOD CITY, CA 94065  
PHONE: (850) 482-6300  
FAX: (850) 482-6399



CALIFORNIA  
SAN MATEO COUNTY

### HIGHLAND ESTATES LOT 6 IMPROVEMENT PLANS LOGISTICS PLAN

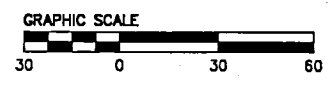
CITY OF SAN MATEO

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	1"=30'
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	RH
	Job No. 85088-20

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of

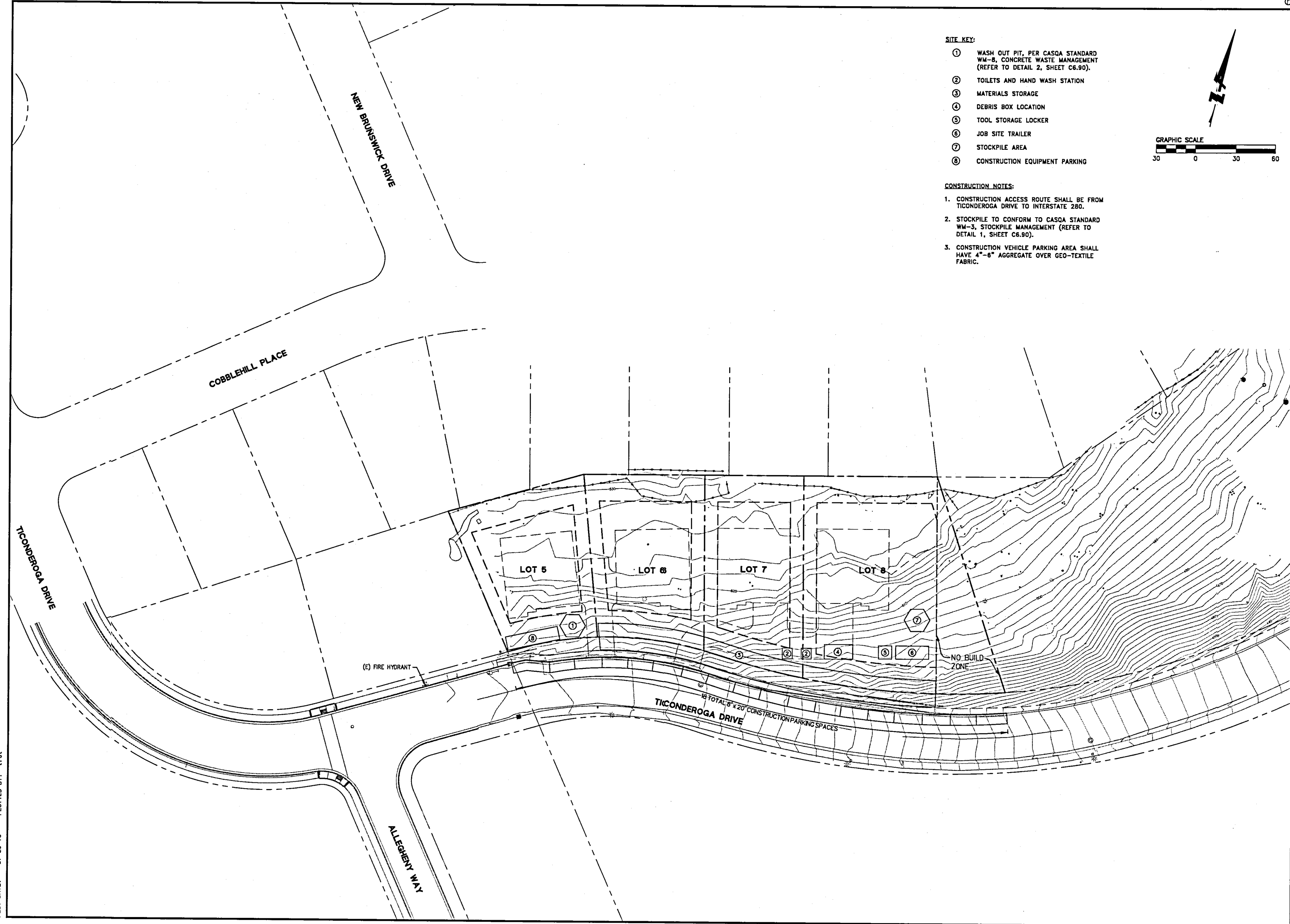
**SITE KEY:**

- ① WASH OUT PIT, PER CASQA STANDARD WM-8, CONCRETE WASTE MANAGEMENT (REFER TO DETAIL 2, SHEET C6.90).
- ② TOILETS AND HAND WASH STATION
- ③ MATERIALS STORAGE
- ④ DEBRIS BOX LOCATION
- ⑤ TOOL STORAGE LOCKER
- ⑥ JOB SITE TRAILER
- ⑦ STOCKPILE AREA
- ⑧ CONSTRUCTION EQUIPMENT PARKING



**CONSTRUCTION NOTES:**

1. CONSTRUCTION ACCESS ROUTE SHALL BE FROM TICONDEROGA DRIVE TO INTERSTATE 280.
2. STOCKPILE TO CONFORM TO CASQA STANDARD WM-3, STOCKPILE MANAGEMENT (REFER TO DETAIL 1, SHEET C6.90).
3. CONSTRUCTION VEHICLE PARKING AREA SHALL HAVE 4"-8" AGGREGATE OVER GEO-TEXTILE FABRIC.



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PLOT DATE: 07-29-16  
PLOTTED BY: trot



