

NOTICE TO CONTRACTORS

GRADING NOTES

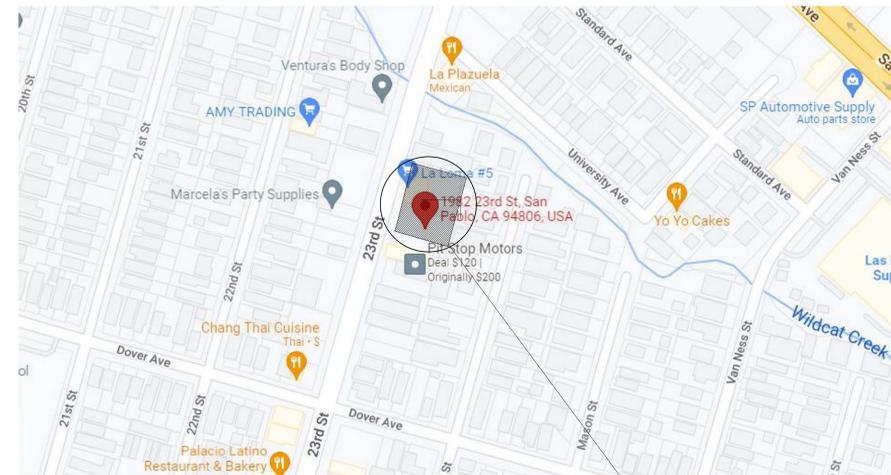
1. ALL RECOMMENDATIONS OF THE HEREIN MENTIONED SOILS REPORT AND ADDENDUMS SHALL BE MADE A PART OF THESE PLANS. SOILS ENGINEER AND/OR GEOLOGIST RESPONSIBLE FOR APPROVED REPORT.
2. THE CITY PLANNING LETTERS SHALL BE A PART OF THESE PLANS.
3. NO WORK SHALL COMMENCE UNTIL A GRADING PERMIT IS ISSUED BY THE DEPARTMENT OF BUILDING AND SAFETY.
4. A REGISTERED DEPUTY GRADING INSPECTOR IS REQUIRED ON ALL SHORING WORK INCLUDING SLOTS-CUTS. SEC 1701.5.
5. CONTINUOUS INSPECTION BY THE SOILS ENGINEER/GEOLOGIST IS REQUIRED FOR EXCAVATIONS, REMOVAL AND COMPACTION.
6. ALL CONCENTRATED DRAINAGE MUST BE CONDUCTED TO THE STREET IN APPROVED NON-EROSIVE DEVICES.
7. MATERIAL IN, OR ADJACENT TO, AREAS UNDER THE JURISDICTION OF THE BOARD OF PUBLIC WORKS, WHICH IN A NATURAL POSITION, IS UNSTABLE AND CONSTITUTES A POTENTIAL SLIDE, SHALL BE BROUGHT TO THE ATTENTION OF THE CITY OF LOS ANGELES CENTRAL ENGINEERING OFFICE.
8. ALL PROPOSED ELEVATIONS SHOWN ON THE ROUGH GRADING PLAN ARE TO FINISHED SURFACE. THE CONTRACTOR SHOULD DEDUCT THE THICKNESS OF THE PAVEMENT STRUCTURAL SECTION FOR TOP OF SUBGRADE ELEVATIONS.
9. WHERE THERE IS AN EXISTING STORM DRAIN IN THE STREET, DRAINAGE DEVICES FROM THE SLOPES SHALL BE CONNECTED TO THE STORM DRAIN.
10. IF AT ANY TIME DURING GRADING OPERATIONS, ANY UNFAVORABLE GEOLOGICAL CONDITIONS ARE ENCOUNTERED, GRADING IN THAT AREA WILL STOP UNTIL APPROVED CORRECTIVE MEASURES ARE OBTAINED FROM THE SOILS/GEOLOGY ENGINEER.
11. ALL GRADED SLOPES SHALL BE PLANTED AND INSTALLED WITH A SPRINKLER SYSTEM.
12. STRAIGHT GRADE SHALL BE MAINTAINED BETWEEN CONTOUR LINES AND SPOT ELEVATIONS UNLESS OTHERWISE SHOWN ON THE PLANS.
13. ALL FILL MATERIAL SHALL BE COMPACTED TO NOT LESS THAN 90% OF MAXIMUM DENSITY AS DETERMINED BY A.S.T.M. SOIL COMPACTION TEST D-1557-78.
14. ALL AREAS TO RECEIVE FILL SHALL BE INSPECTED BY THE SOILS ENGINEER PRIOR TO PLACING OF FILL MATERIALS.
15. THIS PLAN IS FOR GRADING PURPOSES ONLY, AND DOES NOT CONSTITUTE APPROVAL OF BUILDINGS, RETAINING WALLS OR OTHER STRUCTURES.
16. PRIOR TO CONSTRUCTION OF ANY IMPROVEMENTS THE PRIVATE ENGINEER MUST CERTIFY, IN WRITING, TO THE DISTRICT ENGINEER THAT GRADING IN AND ADJACENT TO THE STREET OR R/W IS ESSENTIALLY COMPLETE AND IN ACCORDANCE WITH THE APPROVED PLANS. CERTIFICATION MAY BE IN PHASES TO FACILITATE CONSTRUCTION PHASING.
17. THE CONTRACTOR IS REMINDED TO GIVE REASONABLE NOTICE TO ADJACENT OWNERS OR OCCUPANTS OF THE PROPOSED IMPROVEMENT FRONTING THEIR PROPERTY PER SECTION 7-10 OF THE STANDARD SPECIFICATIONS.
18. ALL WORK DETAILED ON THESE PLANS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 2000 EDITION AND THE MODIFIED STANDARD SPECIFICATION BY THE CITY OF LOS ANGELES.
19. THE SOILS ENGINEER IS TO APPROVE THE KEY OR BOTTOM AND LEAVE A CERTIFICATE ON THE SITE FOR THE GRADING INSPECTOR. THE GRADING INSPECTOR IS TO BE NOTIFIED BEFORE ANY GRADING BEGINS AND, FOR BOTTOM INSPECTION, BEFORE ANY FILL IS PLACED. FILL MAY NOT BE PLACED WITHOUT APPROVAL OF THE GRADING INSPECTOR.
20. GRADING DEPUTY INSPECTION REQUIRED.
21. ALL GRADING WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS AND RECOMMENDATIONS CONTAINED IN THE GEOTECHNICAL REPORT, "GEOLOGIC & SOILS EXPLORATION" BY IRVINE GEOTECHNICAL DATED DECEMBER 19, 2011, AND SUBSEQUENT ADDENDUMS.
22. ALL DRAWINGS ARE CONSIDERED TO BE A PART OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REVIEW AND COORDINATION OF ALL DRAWINGS AND SPECIFICATIONS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES THAT OCCUR SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO THE START OF CONSTRUCTION SO THAT A CLARIFICATION CAN BE ISSUED. ANY WORK PERFORMED IN CONFLICT WITH THE CONTRACT DOCUMENTS OR ANY CODE REQUIREMENTS SHALL BE CORRECTED BY THE CONTRACTOR AT THEIR OWN EXPENSE AND AT NO EXPENSE TO THE OWNER OR ARCHITECT.
23. 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 MUST BE APPROVED BY THE PREPARER OF THESE PLANS.
24. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE GIVEN, CONSTRUCTION SHALL BE AS SHOWN FOR SIMILAR WORK.
25. ALL DEBRIS AND FOREIGN MATERIAL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT APPROVED DISPOSAL SITES. THE CONTRACTOR SHALL OBTAIN NECESSARY PERMITS FOR THE TRANSPORTATION OF MATERIAL TO AND FROM THE SITE.
26. THE CONTRACTOR SHALL OBTAIN AN O.S.H.A. PERMIT FROM THE CALIFORNIA DIVISION OF INDUSTRIAL SAFETY PRIOR TO THE CONSTRUCTION OF TRENCHES OR EXCAVATIONS WHICH ARE FIVE FEET OR DEEPER.
27. DIMENSIONS TO PIPELINES ARE TO CENTERLINE UNLESS OTHERWISE NOTED.
28. THRUST BLOCKS SHALL BE INSTALLED AT WATERLINE HORIZONTAL AND VERTICAL BENDS, TEES, CAPPED ENDS AND REDUCERS ACCORDING TO THE DETAILS PROVIDED ON THESE PLANS.
29. CONSTRUCTION STAKING FOR IMPROVEMENTS SHOWN ON THESE PLANS SHALL BE PERFORMED BY A LICENSED LAND SURVEYOR.
30. THE CONTRACTOR SHALL REPLACE ALL EXISTING IMPROVEMENTS DAMAGED DURING THE CONSTRUCTION TO MATCH EXISTING, INCLUDING PERMANENT TRENCH RESURFACING.
31. ALL DIMENSIONS ARE IN FEET OR DECIMALS THEREOF.
32. ALL CURB DIMENSIONS AND RADII ARE TO PAVEMENT FACE OF CURB.
33. CONTRACTOR TO BE AWARE OF ALL OVERHEAD LINES AT ALL TIMES, SO AS NOT TO DISTURB THEM.
34. CONTRACTOR SHALL OBTAIN ANY NECESSARY PERMITS FROM THE CITY OF LONG ANGELES FOR ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY.
35. STORM DRAINAGE SYSTEMS SHOWN ON THESE PLANS HAVE BEEN DESIGNED FOR THE FINAL SITE CONDITION AT COMPLETION OF THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ADEQUATE DRAINAGE OF THE SITE, DURING INTERIM CONDITIONS OF CONSTRUCTION.
36. CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS, INCLUDING NPDES, FROM THE APPROPRIATE JURISDICTIONAL AGENCIES FOR DISCHARGE OF GROUNDWATER THAT MAY BE NECESSARY TO ACCOMPLISH EXCAVATIONS SHOWN ON THESE PLANS.
37. CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING ON THIS WORK AND CONSIDER THE EXISTING CONDITIONS FOR BID. CONTRACTOR SHALL BE IN THE POSSESSION OF AND FAMILIAR WITH THE CITY OF LOS ANGELES STANDARD DETAILS AS APPLICABLE.
38. CONTRACTOR SHALL DETERMINE EARTHWORK QUANTITIES BASED ON THE TOPOGRAPHIC SURVEY, OBSERVED EXISTING CONDITIONS, AND THE GEOTECHNICAL REPORT AND BASE THE BID ACCORDINGLY. THE CONTRACTOR SHALL VISIT THE SITE AND MAKE HIS OWN ASSESSMENT OF AMOUNT OF FILL/CUT REQUIRED. THE AMOUNT OF EARTHWORK QUANTITIES GIVEN ON THE PLAN IS FOR PERMIT ONLY.
39. IMPORT SOILS SHOULD MEET THE REQUIREMENTS OF THE SOILS REPORT.
40. DO NOT ADJUST GRADES ON THIS PLAN WITHOUT PRIOR WRITTEN APPROVAL OF THE ENGINEER.
41. ROUGH GRADE SPOT ELEVATIONS ARE TO FINISHED GRADE.
42. ROUGH GRADING TO BE WITHIN 0.1'.
43. CONTRACTOR SHALL OVER EXCAVATE AND RECOMPACT EXISTING UNDOCUMENTED FILL IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE SOILS REPORT.
44. ALL RECOMMENDATIONS OF THE SOIL APPROVAL LETTER FROM DEPARTMENT OF BUILDING AND SAFETY, GRADING DIVISION, DATED AUGUST 14, 2012, SHALL BE MADE PART OF THESE PLANS.

DEPT. OF PUBLIC WORKS NOTICE TO CONTRACTORS

1. ALL WORK SHALL CONFORM TO THE LATEST EDITION AND SUPPLEMENTS OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION ADOPTED BY THE BOARD OF PUBLIC WORKS OF THE CITY OF LOS ANGELES AS MODIFIED BY THE CORRESPONDING ISSUE OF STANDARD PLAN S-610.
2. THIS IMPROVEMENT CONSISTS OF WORK CALLED FOR ON THIS PLAN ONLY.
3. NOT USED.
4. INSPECTION: ALL WORK AND MATERIAL ARE SUBJECT TO INSPECTION PURSUANT TO SECTION 2-11 OF THE STANDARD SPECIFICATION.
5. TRAFFIC CONTROL: TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE WORK AREA TRAFFIC CONTROL HANDBOOK (WATCH) ADOPTED BY THE BOARD OF PUBLIC WORKS OF THE CITY OF LOS ANGELES.
6. THE CONTRACTOR, IN CONFORMANCE WITH THE LOS ANGELES CITY ORDINANCE NO.150,478, SHALL POTHOLE EXISTING SUBSURFACE INSTALLATIONS CARRYING UNSTABLE SUBSTANCES, OR OTHER SUBSURFACE INSTALLATIONS AS INDICATED ON THESE PLANS, TO DETERMINE THEIR LOCATIONS AND ELEVATIONS PRIOR TO COMMENCING EXCAVATION.
7. THE CONTRACTOR SHALL POST ADVANCE NOTICE CONSTRUCTION SIGNS IN ACCORDANCE WITH STANDARD PLAN S-791-1.
8. THE CONTRACTOR SHALL GIVE REASONABLE NOTICE TO ADJACENT PROPERTY OWNERS OR OCCUPANTS OF THE PROPERTY FRONTING THIS IMPROVEMENT PER SECTION 7-9 OF THE STANDARD SPECIFICATION.
9. ANY GRADING THAT IS DONE ON PRIVATE PROPERTY IN CONNECTION WITH THE REQUIRED IMPROVEMENTS SHALL BE PERFORMED EITHER WITHIN DEDICATED SLOPE EASEMENTS OR PURSUANT TO THE GRANTING OF SATISFACTORY RIGHTS-OF-ENTRY BY THE AFFECTED PROPERTY OWNERS.
10. REMOVALS:
 - A. REMOVE ALL EXISTING IMPROVEMENTS THAT INTERFERE WITH THE CONSTRUCTION OF THIS PROJECT, UNLESS OTHERWISE NOTED ON THE PLANS.
 - B. ALL EXISTING UTILITIES SHALL BE REMOVED OR RELOCATED UNLESS OTHERWISE INDICATED ON THE PLANS.
11. EXISTING UTILITIES: THE EXISTENCE, LOCATION, AND CHARACTERISTICS OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHOWN ON THESE PLANS HAVE BEEN OBTAINED FROM A REVIEW OF AVAILABLE RECORD DATA. NO REPRESENTATION IS MADE AS TO THE ACCURACY OR COMPLETENESS OF SAID UTILITY INFORMATION. THE CONTRACTOR SHALL TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE FACILITIES SHOWN AND ANY OTHER FACILITIES NOT OF RECORD OR NOT SHOWN ON THESE PLANS. CONTRACTOR SHALL CALL UNDERGROUND SERVICE ALERT (USA) AT 1-800-422-4133 TWO WORKING DAYS PRIOR TO DIGGING. PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL UNCOVER AND VERIFY THE LOCATION AND ELEVATION OF ALL EXISTING UTILITIES TO BE JOINED, CROSSED, OR PARALLELED. ANY CONFLICT OR DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONSTRUCTION. OTHERWISE, CONTRACTOR ASSUMES SOLE AND COMPLETE RESPONSIBILITY FOR ANY COSTS OF REPLACEMENT, RELOCATION, OR ADDITIONAL COSTS OF CONSTRUCTION.
12. SURVEY MONUMENT PRESERVATION IS REQUIRED AND SHALL INCLUDE SURVEY FIELD NOTES PER SECTION 2-9 OF THE STANDARD SPECIFICATIONS AS MODIFIED BY STD PLAN S-610.
13. THE TEMPORARY REMOVAL AND REINSTALLATION OF TRAFFIC SIGNAL EQUIPMENT NECESSITATED BY THE IMPROVEMENT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND THE ENTIRE COST THEREOF SHALL BE CONSIDERED AS INCLUDED IN THE OTHER WORK FOR WHICH BID ITEMS ARE ENTERED.
14. FOR ALL GRADING WITHIN DEDICATED OR PROPOSED PUBLIC STREETS, SEWER OR STORM DRAIN EASEMENTS OR WATER COURSES UNDER THE JURISDICTION OF THE BOARD OF PUBLIC WORKS, INCLUDING THE SLOPES ADJACENT THERETO, THE FOLLOWING SHALL BE ADHERED TO:
 - A. APPROVED HEREON IS THE WORK IN DEDICATED OR PROPOSED PUBLIC STREETS, EASEMENTS AND WATERCOURSES UNDER JURISDICTION OF THE BOARD OF PUBLIC WORKS AND SLOPES ADJACENT TO SUCH STREETS, NO EROSION CONTROL OR DRAINAGE SERVICES SHALL BE INSTALLED IN THE AREA, EXCEPT AS SHOWN HEREON, OR AS APPROVED BY THE BOARD OF PUBLIC WORKS.
 - B. ALL SLOPES, DIVERTER TERRACES AND DOWN DRAINS IN OR ADJACENT TO THE PUBLIC STREET SHALL BE IN ACCORDANCE WITH ORDINANCE NO. 123,970 UNLESS OTHERWISE APPROVED BY THE DISTRICT ENGINEER. ALL SLOPES SHALL BE GRADED NOT STEEPER THAN RECOMMENDATIONS OF THE SOILS ENGINEER.
 - C. PRIOR TO CONSTRUCTION OF ANY IMPROVEMENTS, THE PRIVATE ENGINEER MUST CERTIFY, IN WRITING, TO THE DISTRICT ENGINEER THAT GRADING IN AND ADJACENT TO THE STREET OR R/W IS ESSENTIALLY COMPLETE AND IN ACCORDANCE WITH THE APPROVED PLANS. CERTIFICATION MAY BE IN PHASES TO FACILITATE CONSTRUCTION PHASING.
15. DEPARTMENT OF PUBLIC WORKS, BUREAU OF ENGINEERING, GEOLOGY AND SOILS SECTION OF THE CONSTRUCTION DIVISION SHALL BE NOTIFIED PRIOR TO COMMENCING GRADING OPERATIONS. ALL FILLS SHALL BE COMPACTED TO 90% RELATIVE COMPACTION UNLESS OTHERWISE RECOMMENDED BY THE GEOLOGY AND SOILS CONSTRUCTION DIVISION AND SPECIFIED BY THE ENGINEER.

PRIVATE ENGINEER'S NOTICE TO SUBCONTRACTORS

1. PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL JOIN CONDITIONS FOR GRADING, DRAINAGE AND UNDERGROUND FACILITIES, INCLUDING LOCATION AND ELEVATION OF EXISTING UNDERGROUND FACILITIES AT CROSSINGS WITH PROPOSED UNDERGROUND FACILITIES. IF CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND SHALL NOT BEGIN CONSTRUCTION UNTIL THE CHANGED CONDITIONS HAVE BEEN EVALUATED.
2. THE EXISTENCE, LOCATION AND CHARACTERISTICS OF UNDERGROUND UTILITY INFORMATION SHOWN ON THESE PLANS HAS BEEN OBTAINED FROM A REVIEW OF AVAILABLE RECORD DATA. NO REPRESENTATION IS MADE AS TO THE ACCURACY OR COMPLETENESS OF SAID UTILITY INFORMATION. THE CONTRACTOR SHALL TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINES NOT ON RECORD OR NOT SHOWN ON THESE PLANS.
3. THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY, AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH PERFORMANCE OF WORK ON THIS PROJECT.
4. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE PLANS, THE SOILS AND/OR GEOLOGY REPORTS, AND THE SITE CONDITIONS PRIOR TO COMMENCING WORK.
5. SHOULD CONFLICTING INFORMATION BE FOUND ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AT OBANDO & ASSOCIATES, INC. BEFORE PROCEEDING WITH THE WORK IN QUESTION.



VICINITY MAP

NO SCALE

SITE
1982-88 23RD ST, SAN PABLO, CA 94806

LOT DESCRIPTION
LOTS 30, 31, 32, 33, 34, 35, AND PORTIONS OF 17 & 18 BLOCK 10

INDEX TO SHEETS

SHEET	DESCRIPTION
C-1	TITLE/NOTES SHEET
C-1.1	NOTES SHEET CONT'D
C-1.2	PROJECT SURVEY
C-2	GRADING & DRAINAGE PLAN
C-3	CROSS SECTIONS SHEET
C-4	EROSION CONTROL PLAN

PROJECT DIRECTORY

RESPONSIBLE AGENT	CIVIL ENGINEER
BREAKFORM DESIGN JACOB STRUBLE (310) 233-3700	OBANDO & ASSOCIATES, INC. GASPAR OBANDO (310) 821-7555
SOILS ENGINEER OTERRA GEOTECH GROUP, INC. REZA BARADARAN (925) 285-8275	OWNER CESAR MARTINEZ & SAMUEL MARTINEZ 1982-88 23RD ST SAN PABLO, CA 94806

STANDARD PLANS FOR THIS PROJECT:

STANDARD PLAN NO.	DESCRIPTION
S-430	JOINTS IN CONCRETE PAVEMENT
S-610	NOTICE TO CONTRACTORS-COMPREHENSIVE
S-791	ADVANCE CONSTRUCTION NOTICE SIGNS

IMPORTANT NOTICE:

CALL USA/SC FOR UNDERGROUND LOCATING 48 HOURS BEFORE YOU DIG.

SECTION 4216 / 4217 OF THE GOVERNMENT CODE REQUIRES A DIGALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID. FOR YOUR DIGALERT I.D. NUMBER, CALL UNDERGROUND SERVICE ALERT TOLL FREE TWO WORKING DAYS BEFORE YOU DIG.



1-800-422-4133

1. THE ESTIMATED QUANTITIES PROVIDED ABOVE ARE TO BE USED FOR PLAN CHECKING AND PERMITTING PURPOSES ONLY.
2. ESTIMATED EARTHWORK ABOVE IS BASED ON DESIGN FINISH GRADES TO EXISTING GRADES AND/OR CONTOURS AS PROVIDED ON THE SURVEY. THE ESTIMATED EARTHWORK DOES NOT ACCOUNT FOR THE THICKNESS OF PAVEMENT, FOUNDATIONS, CLEARING AND GRUBBING, AND CONSTRUCTIONS MEANS AND METHODS.
3. THE ESTIMATED EARTHWORK QUANTITIES DO NOT INCLUDE SHRINKAGE AND/OR EXPANSION FACTORS DUE TO COMPACTION OR OVER EXCAVATION QUANTITIES.
4. THE CONTRACTOR SHALL CALCULATE HIS OWN EARTHWORK QUANTITIES NECESSARY FOR HIS BID AND WORK.
5. ESTIMATED EARTHWORK QUANTITIES ABOVE ASSUME THAT ALL ONSITE MATERIALS ARE SUITABLE FOR BACKFILLING. HOWEVER, ACUTAL EXISTING ONSITE MATERIALS AND IMPORTED MATERIALS MUST FIRST BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO INSTALLATION, REMOVAL, OR REPLACEMENT.

SEE C-3 FOR CALCULATIONS



09 / 26 / 22

PLOT DATE		
CIVIL PLAN		
NO.	DATE	REVISION
1	-	-
2	-	-
3	-	-

FOR PERMIT ONLY

GEN.GRADING NOTES (CONT'D)

1. "GENERAL SPECIFICATIONS FOR ALL GRADING PLANS" - DEPT. OF BUILDING AND SAFETY FORM B-164 IS PART OF THE PLANS.
2. ALL GRADING SLOPES SHALL BE PLANTED AND SPRINKLERED. SEC 91.7012.1
3. STANDARD 12 INCH HIGH BERM IS REQUIRED AT TOP OF ALL GRADED SLOPES. SEC 91.7013.3
4. NO FILL SHALL BE PLACED, UNTIL THE CITY INSPECTOR HAS INSPECTED AND APPROVED THE BOTTOM EXCAVATION.
5. MAN-MADE FILL SHALL BE COMPACTED TO A MINIMUM RELATIVE COMPACTION OF 90%. COHESIONLESS SOILS WITH LESS THAN 15% FINER THAN 0.005 MM REQUIRE 95% COMPACTION. SEC. 91.7011.3
6. TEMPORARY EROSION CONTROL TO BE INSTALLED BETWEEN NOVEMBER 1 AND APRIL 15. OBTAIN GRADING INSPECTOR'S AND DEPARTMENT OF PUBLIC WORKS APPROVAL OF PROPOSED PROCEDURES. [>200 CY] SEC. 91.7007.1.
7. RETAINING WALLS LOCATED CLOSER TO THE PROPERTY LINE THAN THE HEIGHT OF THE WALL SHALL BE BACKFILLED NO LATER THAN 10 DAYS AFTER CONSTRUCTION OF THE WALL AND NECESSARY STRUCTURAL SUPPORTING MEMBERS UNLESS RECOMMENDED OTHERWISE BY RESPONSIBLE ENGINEER.
8. REGISTERED DEPUTY INSPECTOR IS REQUIRED ON GRADING AND FOUNDATION EARTHWORK WHERE (SITE EXCEEDS 60,000SF), (CUT OR FILL SLOPES EXCEED 2:1), (CUTS EXCEED 40 FT. IN HEIGHT AND WITHIN 20 FT. OF A PROPERTY LINE), (PROJECTS INVOLVE UNUSUAL HAZARDS), (SHORING WORK INCLUDING SLOT-CUTS), (1704)
9. THE AREAS TO RECEIVE COMPACTED FILL SHALL BE STRIPPED OF ALL VEGETATION, EXISTING FILL, AND SOFT OR DISTURBED SOILS. THE EXCAVATED AREA SHALL BE OBSERVED BY THE SOILS ENGINEER PRIOR TO PLACING CONTROLLED COMPACTED FILL.
10. THE PROPOSED BUILDING AREA SHALL BE EXCAVATED TO A MINIMUM DEPTH OF 5 FEET BELOW THE EXISTING GRADE. THE EXCAVATION SHALL ALSO EXTEND AT LEAST 3 FEET BEYOND THE EDGE OF FOUNDATIONS OR FOR A DISTANCE EQUAL TO THE DEPTH OF FILL BELOW THE FOUNDATIONS, WHICHEVER IS GREATER. THE EXCAVATED AREAS SHALL BE OBSERVED BY THE SOILS ENGINEER PRIOR TO PLACING COMPACTED FILL. THE EXPOSED GRADE SHALL THEN BE SCARIFIED TO A DEPTH OF SIX INCHES, MOISTENED TO OPTIMUM MOISTURE CONTENT, AND RECOMPACTED TO 90 PERCENT OF THE MAXIMUM DENSITY.
11. FILL, CONSISTING OF SOIL APPROVED BY THE SOILS ENGINEER, SHALL BE PLACED IN COMPACTED LAYERS WITH SUITABLE COMPACTION EQUIPMENT. THE EXCAVATED ONSITE MATERIALS ARE CONSIDERED SATISFACTORY FOR REUSE IN THE CONTROLLED FILLS. ANY IMPORTED FILL SHALL BE OBSERVED BY THE SOILS ENGINEER PRIOR TO USE IN FILL AREAS. ROCKS LARGER THAN SIX INCHES IN DIAMETER SHALL NOT BE USED IN THE FILL.
12. FIELD OBSERVATION AND TESTING SHALL BE PERFORMED BY THE SOILS ENGINEER DURING GRADING TO ASSIST THE CONTRACTOR IN OBTAINING THE REQUIRED DEGREE OF COMPACTION AND THE PROPER MOISTURE CONTENT. WHERE COMPACTION IS LESS THAN REQUIRED, ADDITIONAL, COMPACTIVE EFFORT SHALL BE MADE WITH ADJUSTMENT OF THE MOISTURE CONTENT, AS NECESSARY, UNTIL 90 PERCENT AND TESTED IN ACCORDANCE WITH ASTM D-1557.
13. UTILITY TRENCHES SHOULD BE PROPERLY BACKFILLED WITH CONTROLLED FILL. THE PIPE SHOULD BE BEDDED WITH CLEAN SANDS AT LEAST ONE FOOT OVER THE PIPE. THE REMAINDER OF THE BACKFILL MAY BE ONSITE SOIL COMPACTED TO 90 PERCENT AND TESTED IN ACCORDANCE WITH ASTM D-1557.
14. ANY VEGETATION OR ASSOCIATED ROOT SYSTEM LOCATED WITHIN THE FOOTPRINT OF THE PROPOSED STRUCTURES SHOULD BE REMOVED DURING GRADING. ANY EXISTING OR ABANDONED UTILITIES LOCATED WITHIN THE FOOTPRINT OF THE PROPOSED STRUCTURES SHOULD BE REMOVED OR RELOCATED. ALL FILL MATERIALS AND DISTURBED SOILS RESULTING FROM GRADING OPERATIONS SHOULD BE REMOVED AND PROPERLY RECOMPACTED PRIOR TO FOUNDATION EXCAVATION.

AIR QUALITY NOTES

1. DURING CONSTRUCTION, EXPOSED EARTH SURFACES SHALL BE SPRAYED WITH WATER AT LEAST TWICE A DAY BY THE PROPERTY OWNER/CONTRACTOR TO MINIMIZE DUST GENERATION OR TEMPORARY DUST COVERS SHALL BE USED THAT MEET SCAQMD DISTRICT RULE 403.
2. THE PROPERTY OWNER /CONTRACTOR SHALL KEEP THE CONSTRUCTION AREA SUFFICIENTLY DAMPED TO CONTROL DUST CAUSED BY GRADING AND HAULING, AND AT ALL TIMES PROVIDE REASONABLE CONTROL OF DUST CAUSED BY WIND.
3. HAULING AND GRADING EQUIPMENT SHALL BE KEPT IN GOOD OPERATING CONDITION AND MUFFLED AS REQUIRED BY LAW.
4. ALL LOADS SHALL BE SECURED BY TRIMMING, WATERING OR OTHER APPROPRIATE MEANS TO PREVENT SPILLAGE BY LAW.
5. ONE FLAG PERSON SHALL BE REQUIRED AT THE JOB SITE TO ASSIST TRUCKS UPON INGRESS AND EGRESS OF THE PROJECT SITE. THE FLAG PERSON(S) AND WARNING SIGNS SHALL BE IN COMPLIANCE WITH PART II OF THE 1985 EDITION OF "WORK AREA TRAFFIC CONTROL HANDBOOK."
6. ALL CLEARING, GRADING, EARTH MOVING OR EXCAVATION ACTIVITIES SHALL BE DISCONTINUED DURING PERIODS OF HIGH WIND (I.E., GREATER THAN 15 MPH) SO AS TO PREVENT EXCESSIVE AMOUNTS OF DUST.

DRAINAGE NOTES

1. ROOF DRAINAGE MUST BE DIVERTED FROM GRADED SLOPES.
2. PROVISIONS SHALL BE MADE FOR CONTRIBUTORY DRAINAGE AT ALL TIMES.
3. ALL CONSTRUCTION AND GRADING WITHIN A STORM DRAIN EASEMENT ARE TO BE DONE PER PRIVATE DRAIN PD NO. _____ OR MISCELLANEOUS TRANSFER DRAIN MTD NO. _____
4. ALL STORM DRAIN WORK IS TO BE DONE UNDER CONTINUOUS INSPECTION BY THE FIELD ENGINEER. STATUS REPORTS REQUIRED UNDER NOTE 18 AND SECTION J105.11 OF THE COUNTY OF LOS ANGELES BUILDING CODE SHALL INCLUDE INSPECTION INFORMATION AND REPORTS ON THE STORM DRAIN INSTALLATION.
5. ALL PRIVATE DRAINAGE WORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH BS 8301, BS 8005, BUILDING REGULATIONS AND THE SPECIFICATION.
6. ALL DRAINAGE WORKS WITHIN ADOPTABLE AREAS ARE TO COMPLY WITH THE REQUIREMENTS OF THE DEPARTMENT OF TRANSPORT AND WATER SERVICES ASSOC. PUBLICATION 'SEWERS FOR ADOPTION' (CURRENT EDITION).
7. ALL CONNECTIONS TO EXISTING PUBLIC SEWERS TO BE IN ACCORDANCE WITH AND TO THE SATISFACTION OF THE LOCAL AUTHORITY.
8. CONCRETE PROTECTION (BEDDING CLASS 'Z') TO PIPEWORK TO BE PROVIDED AS FOLLOWS:
 (I) ALL PIPEWORK WITHIN SOFT AREAS WITH A COVER OF LESS THAN 600MM.
 (II) ALL PIPEWORK BENEATH ROADS, CAR PARKS AND ALL OTHER TRAFFICKED HARDSTANDING AREAS WITH A COVER LESS THAN 1200MM.
9. ALL BUILDING DRAINAGE TO BE 150MM DIA. UNLESS STATED OTHERWISE.
10. COVER LEVELS FOR MANHOLES ARE PROVISIONAL AND HIGHWAY DESIGN WILL AFFECT THE FINAL LEVELS.

ATTACHMENT A

BEST MANAGEMENT PRACTICES FOR CONSTRUCTION ACTIVITIES*

STORM WATER POLLUTION CONTROL REQUIREMENT FOR CONSTRUCTION ACTIVITY MINIMUM WATER QUALITY PROTECTION REQUIREMENTS FOR ALL DEVELOPMENT CONSTRUCTION PROJECTS/CERTIFICATION STATEMENT.

THE FOLLOWING IS INTENDED AS MINIMUM NOTES OR AS AN ATTACHMENT FOR BUILDING AND GRADING PLANS AND REPRESENT THE MINIMUM STANDARDS OF GOOD HOUSEKEEPING THAT MUST BE IMPLEMENTED ON ALL CONSTRUCTION SITES REGARDLESS OF SIZE. (APPLIES TO ALL PERMITS)

1. ERODED SEDIMENTS AND OTHER POLLUTANTS MUST BE RETAINED ON SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES OR WIND.
2. STOCKPILES OF EARTH AND OTHER CONSTRUCTION RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER.
3. FUELS, OILS, SOLVENTS AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.
4. NON-STORM RUNOFF FROM EQUIPMENT AND VEHICLE WASHING AND ANY OTHER ACTIVITY SHALL BE CONTAINED AT THE PROJECT SITE.
5. EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON SITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE.
6. TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.
7. SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC WAY. ACCIDENTAL DEPOSITIONS MUST SWEEP UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
8. ANY SLOPES WITH DISTURBED SOILS OR DENUDED OF VEGETATION MUST BE STABILIZED SO AS TO INHIBIT EROSION BY WIND AND WATER.
9. EVERY EFFORT SHOULD BE MADE TO ELIMINATE THE DISCHARGE OF NON-STORMWATER FROM THE PROJECT SITE AT ALL TIMES.

OTHER: _____

AS THE PROJECT OWNER OR AUTHORIZED AGENT OF THE OWNER, I HAVE READ AND UNDERSTAND THE REQUIREMENTS LISTED ABOVE, NECESSARY TO CONTROL STORM WATER POLLUTION FROM SEDIMENTS, EROSION, AND CONSTRUCTION MATERIALS, AND I CERTIFY THAT I WILL COMPLY WITH THESE REQUIREMENTS.

PRINT NAME _____
 (OWNER OR AUTHORIZED AGENT OF THE OWNER)

SIGNATURE _____
 (OWNER OR AUTHORIZED AGENT OF THE OWNER)

DATE _____

* THE ABOVE BEST MANAGEMENT PRACTICES ARE DETAILED IN THE CALIFORNIA STORM WATER BEST MANAGEMENT PRACTICES HANDBOOK, JANUARY 2003
 WWW.CABMPHANDBOOKS.COM

DRAINAGE NOTES (CONT'D)

11. ALL PIPEWORK IN MANHOLES ARE TO BE LAID SOFFIT TO SOFFIT UNLESS NOTED OTHERWISE.
12. ALL INTERNAL DRAINAGE TO BE TO ARCHITECT'S DRAWINGS AND DETAILS.
13. THE POSITION AND INVERT LEVELS OF ALL EXISTING DRAINS TO BE CHECKED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF WORK AND ANY DISCREPANCIES REPORTED TO THE ENGINEER IMMEDIATELY.
14. ALL PIPES ARE TO HAVE A CLASS 'S' BED AND SURROUND UNLESS NOTED OTHERWISE (SEE NOTE 4 ABOVE).
15. ALL CONCRETE PIPES ARE TO BE HIGH STRENGTH.
16. REFER TO DRAWING NOS. WASXXXX/XX AND XX FOR DRAINAGE CONSTRUCTION DETAILS.
17. FOR THE EXACT LOCATION OF FOUL AND RAINWATER OUTLETS REFER TO THE ARCHITECT'S DRAWINGS.
18. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ENGINEER'S AND ARCHITECT'S DRAWINGS.
19. THE CONTRACTOR IS TO ALLOW FOR GREASE TRAPS IN THE KITCHEN AND OTHER APPROPRIATE AREAS.
20. DRAINAGE CHANNELS AND SILT PITS TO BE DESIGNED BY A SPECIALIST MANUFACTURER TO SUIT SITE CONDITIONS AND IN ACCORDANCE WITH LOAD CLASS REQUIREMENTS AS SHOWN ON THE PLAN.
21. ALL LEVELS AND MANHOLE COVER LEVELS SHOWN ON THIS DRAWING ARE INDICATIVE. FOR FINAL LEVELS REFER TO ARCHITECT'S DRAWINGS.
22. A CCTV DRAINAGE SURVEY IS TO BE CARRIED OUT AT THE COMPLETION OF THE CONTRACT TO PROVE THE INTEGRITY OF THE AS-BUILT DRAINAGE SYSTEM PRIOR TO THE ISSUE OF THE PRACTICAL COMPLETION CERTIFICATE.



09 / 26 / 22

PLOT DATE		
CIVIL PLAN		
NO.	DATE	REVISION
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PLOT DATE

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CIVIL PLAN

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LEGEND

	FLOWLINE
	DIRECTION OF FLOW
	FINISHED SURFACE
	TOP OF GRATE
	TOP OF STEP
	BOTTOM OF STEP
	FINISHED FLOOR
	INVERT ELEVATION
	RIDGE LINE
	GARAGE FLOOR
	GRADE BREAK
	FLOW LINE
	CATCH BASIN PER DET. 4/C-2
	SUMP PUMP BY OTHERS
	ROOF DOWNSPOUT. SEE DET. 1/C-2 FOR CONNECTION
	PVC PRESSURIZED PIPE FROM PUMP SEE DET. 2/C-2 FOR TRENCHING
	DRAINAGE PIPE- 6" PVC S=0.8% MIN. UNLESS OTHERWISE NOTED SEE DET. 2/C-2 FOR TRENCHING
	CAST IRON PIPE- 4" PVC S=2.0% MIN. UNLESS OTHERWISE NOTED SEE DET. 2/C-2 FOR TRENCHING
	ATRIUM DRAIN PER DET. 3/C-2

PATTERN LEGEND

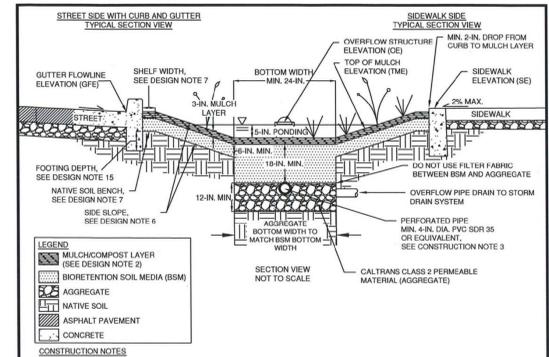
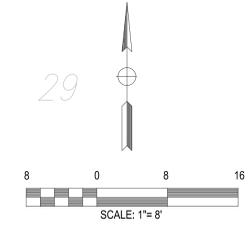
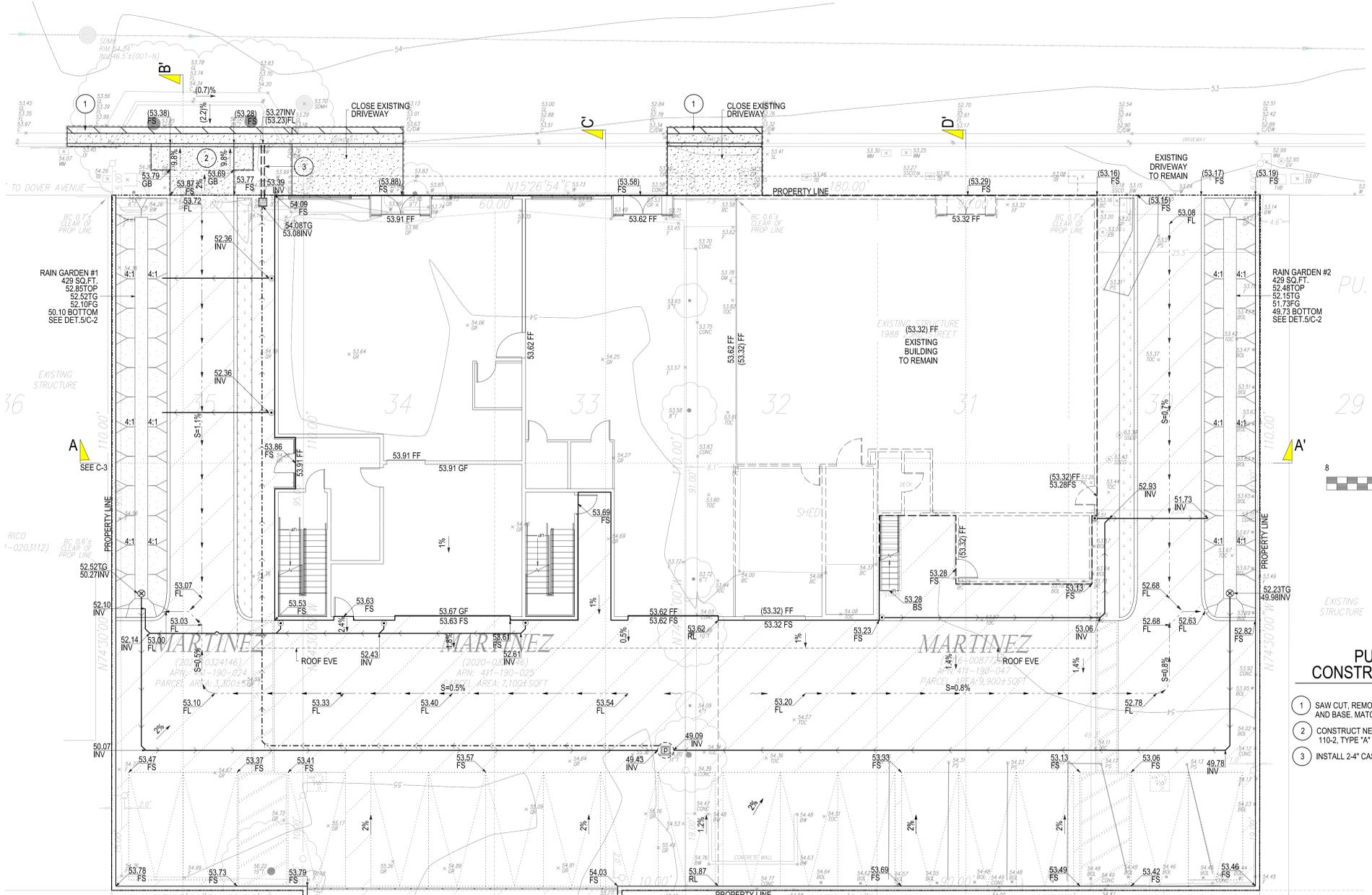
	POURED CONCRETE CEMENT FOR R/W
	HARDSCAPE PER ARCHITECT
	LANDSCAPE PER ARCHITECT
	RAIN GARDEN PER DET. 5/C-2

PLAN NOTES

- THIS PLAN ACCURATE FOR GRADING AND DRAINAGE, ONLY.
- DRAINAGE PIPES ARE 4" PVC PIPES, UNLESS OTHERWISE NOTED.
- ALL DRAINAGE PIPES SHALL BE INSTALLED AT 12" (MIN) BELOW FINISHED SURFACE PER MANUFACTURER'S SPECIFICATION UNLESS OTHERWISE NOTED ON PLANS.
- ALL DRAINAGE PIPES TO BE SLOPED 0.8% MINIMUM.
- CONNECT ALL ROOF DRAINS TO BELOW GROUND DRAINAGE SYSTEM PIPES. S=2% MIN.
- SURVEYOR MUST SET GRADE STAKES FOR ALL DRAINAGE DEVICES AND OBTAIN INSPECTION BEFORE POURING.
- ALL SLOPES TO BE VEGETATED.
- ANY CHANGES (TYPE, SIZE, LOCATION) TO APPROVED STORMWATER BEST MANAGEMENT PRACTICE (S) (BMPs) MUST OBTAIN WRITTEN APPROVAL FROM LOS ANGELES DEPARTMENT OF PUBLIC WORKS, BUREAU OF SANITATION PRIOR TO CONSTRUCTION OF BMP (S).
- ALL STORM WATER RUNOFF TO DRAIN TO BMP.

PUBLIC R/W CONSTRUCTION NOTES

- SAW CUT, REMOVE, AND REPLACE 1' WIDE STRIP OF A.C. PAVEMENT AND BASE. MATCH EXISTING PAVEMENT SURFACE.
- CONSTRUCT NEW DRIVEWAY APPROACH PER APWA STD, 110-2, TYPE 'A' (W=22.69', Y=10.04', F=8').
- INSTALL 2-4" CAST IRON CURB DRAIN PIPES PER APWA STD, 150-3



- LEGEND
- MULCH/COMPOST LAYER (SEE DESIGN NOTE 2)
 - BIORETENTION SOIL MEDIA (BSM)
 - AGGREGATE
 - NATIVE SOIL
 - ASPHALT PAVEMENT
 - CONCRETE
- CONSTRUCTION NOTES
- MAINTAIN UNDISTURBED NATIVE SOIL BENCH TO SUPPORT ADJACENT SIDEWALK AND STREET. SEQUENCE WORK TO CONSTRUCT CURBS BEFORE EXCAVATING BIORETENTION AREA FOR AGGREGATE AND BSM.
 - SCARIFY SUBGRADE A MINIMUM OF 6" IN, WITH BIORETENTION FACILITY BEFORE INSTALLING BIORETENTION AREA AGGREGATE AND BSM. DO NOT COMPACT SUBGRADE, AGGREGATE OR BSM.
 - INSTALL PERFORATED PIPE WITH HOLES FACING DOWN. SLOPE TO DRAIN TOWARD OVERFLOW STRUCTURE/PIPE.
 - DO NOT WORK WITHIN BIORETENTION AREA DURING RAIN OR UNDER WET CONDITIONS.
 - KEEP HEAVY MACHINERY AND CONSTRUCTION MATERIALS OUTSIDE BIORETENTION AREA LIMITS.
 - STORMWATER SHALL BE DIRECTED AWAY FROM BIORETENTION AREA UNTIL CONSTRUCTION IS COMPLETE.
 - AN APPROVED PRE-MIXED BSM SHALL BE INSTALLED. BSM MAY BE SUBJECT TO TESTING.
 - CITY INSPECTOR WRITTEN APPROVAL REQUIRED AT ALL KEY STAGES IDENTIFIED ON CITY STORMWATER TREATMENT FACILITIES INSPECTION CHECKLIST.
 - DRIP IRRIGATION RECOMMENDED. SPRAY HEAD IRRIGATION SYSTEM SHALL BE POSITIONED TO AVOID DIRECT SPRAY INTO OUTLET STRUCTURES OR CURB CUT INLETS.
 - NO FERTILIZER SHALL BE ADDED.

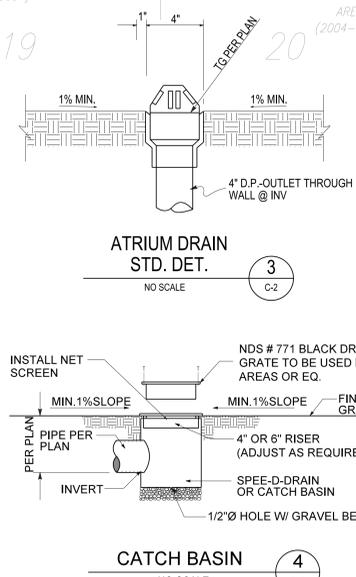
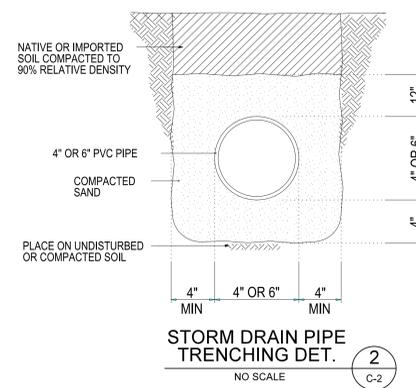
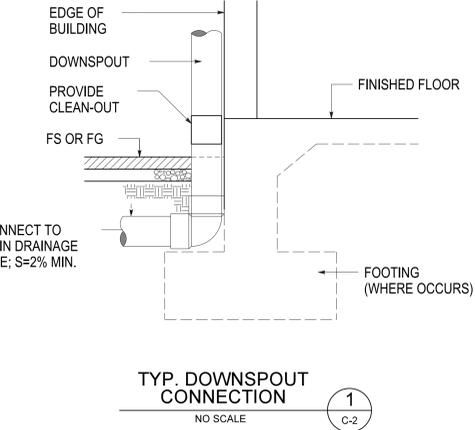
GREEN INFRASTRUCTURE STANDARD DETAILS ADAPTED FROM LEX CASDA PROPOSITION BY GRANT		CITY OF SAN PABLO PUBLIC WORKS DEPT. 1301 SAN PABLO AVE BUILDING 9 SAN PABLO, CA 94808 TEL: (510) 215-3030	
SLOPE-SIDED BIORETENTION FACILITY			
PREPARED BY: JIMMY ZHOU	VERSION: 5/20/21	APPROVED BY: Cesar & Samuel Martinez	DATE: 5/11/22
PUBLIC WORKS DIRECTOR / CITY ENGINEER		DATE	
GI-1		SHEET 1 OF 2	

LID CALCULATIONS

TOTAL LOT AREA = 20,300 SQ.FT.
ROOF = 9,663 SQ.FT.
PARKING AREA = 9,525 SQ.FT.
IMPERVIOUS AREA = 19,188 SQ.FT.
RAIN GARDEN (WITH LINER)
DESIGN AREA = 18,661 SQ.FT.
(18,661 * 0.04) = 746 SQ.FT.
PROVIDED TWO 529 SQ.FT. RAIN GARDENS

THIS PLAN HAS BEEN REVIEWED AND CONFORMS WITH THE RECOMMENDATIONS OF SOILS ENGINEER/GEOLOGIC REPORTS DATED _____

SIGNATURE _____ DATE _____



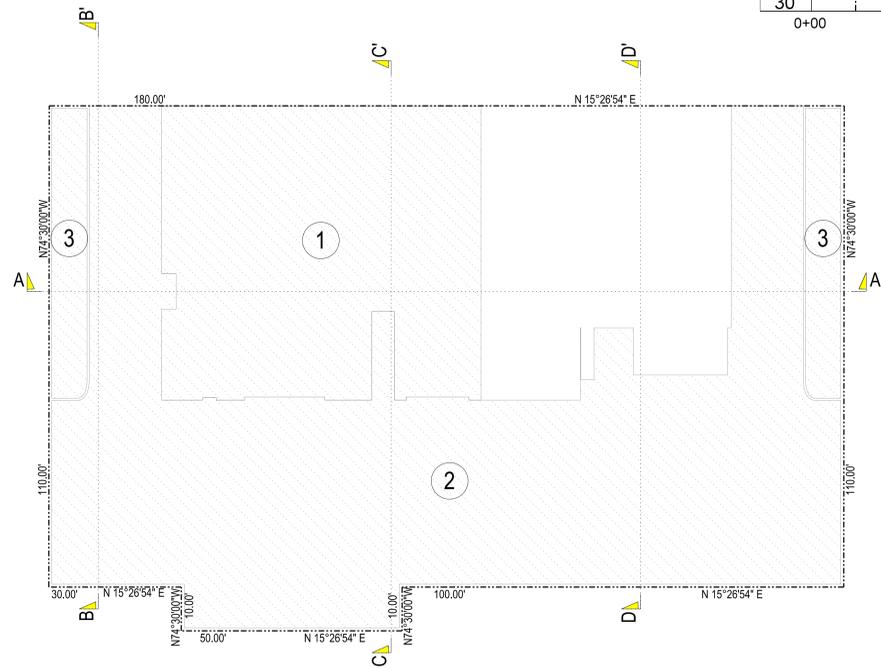
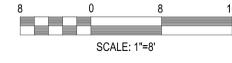
CUT & FILL CALCULATIONS

- NEW BUILDING AVG. CUT = 0.5'
GRADED AREA = 4702 SQ.FT.
(4702*0.5)/27 = 87 C.Y. CUT
- HARDSCAPE AVG. CUT = 0.9'
GRADED AREA = 10664 SQ.FT.
(10664*0.9)/27 = 355 C.Y. CUT
- RAIN GARDENS AVG. CUT = 1.7'
GRADED AREA = 1058 SQ.FT.
(1058*1.7)/27 = 67 C.Y. CUT

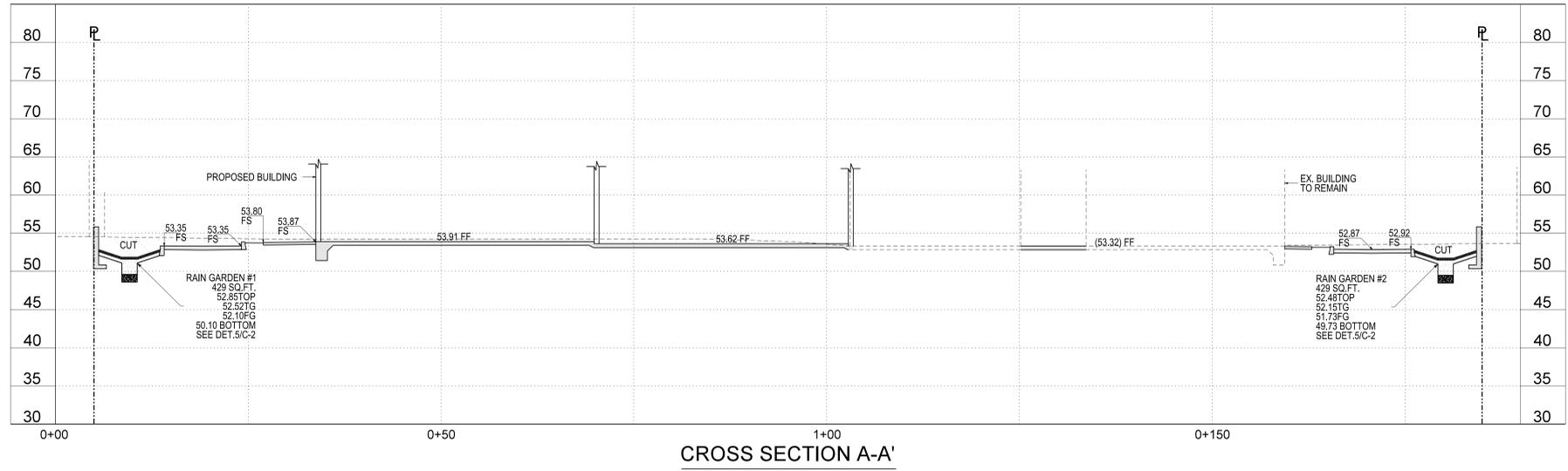
EARTHWORK QUANTITY TABLE	CUT (CY)	FILL (CY)
ROUGH GRADE	509	0
TEMPORARY EXCAVATION	0 C.Y.	
EXPORT	509 C.Y.	

PATTERN LEGEND

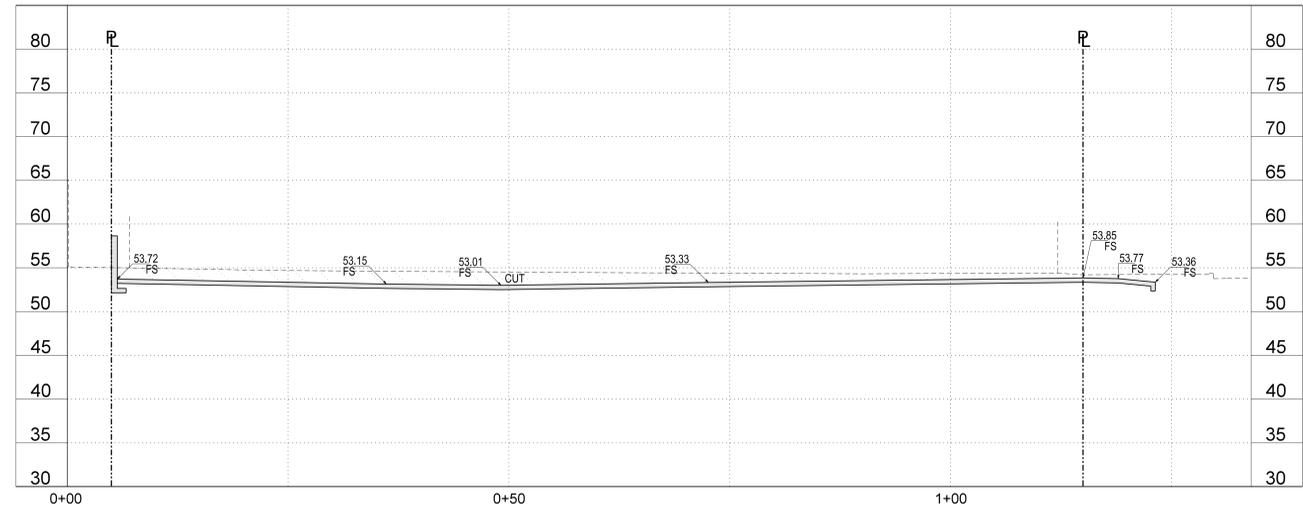
	CUT
	FILL
	TEMPORARY EXCAVATION



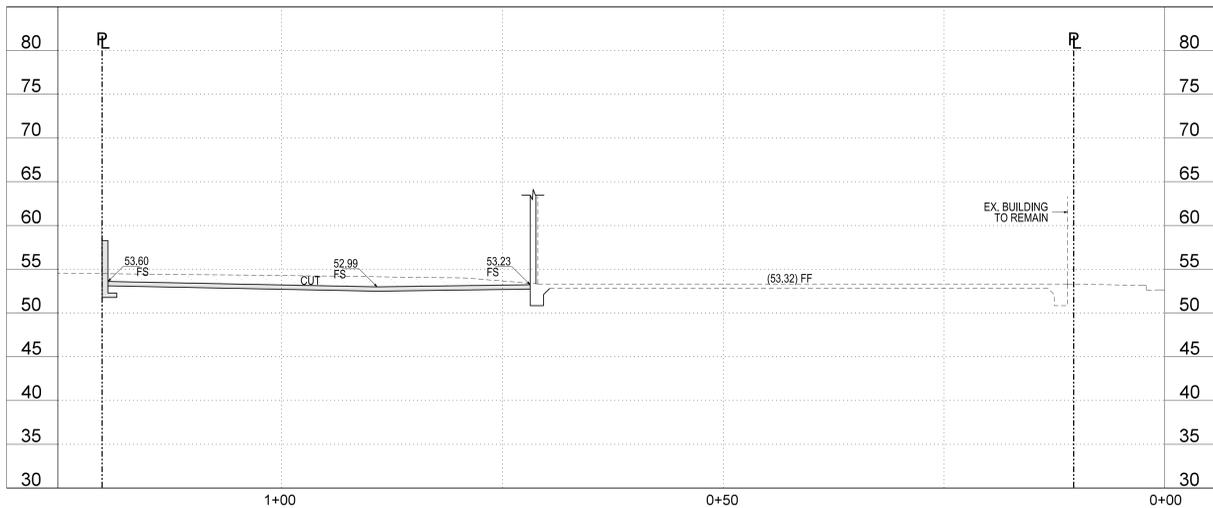
CUT & FILL DIAGRAM
NO SCALE



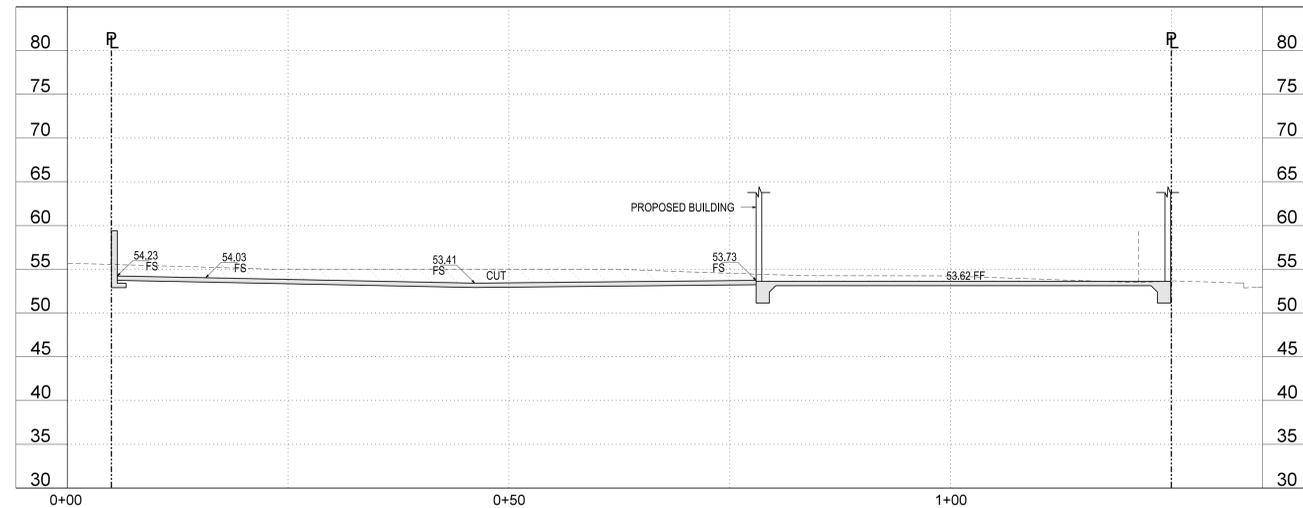
CROSS SECTION A-A'



CROSS SECTION B-B'



CROSS SECTION D-D'



CROSS SECTION C-C'



09 / 26 / 22

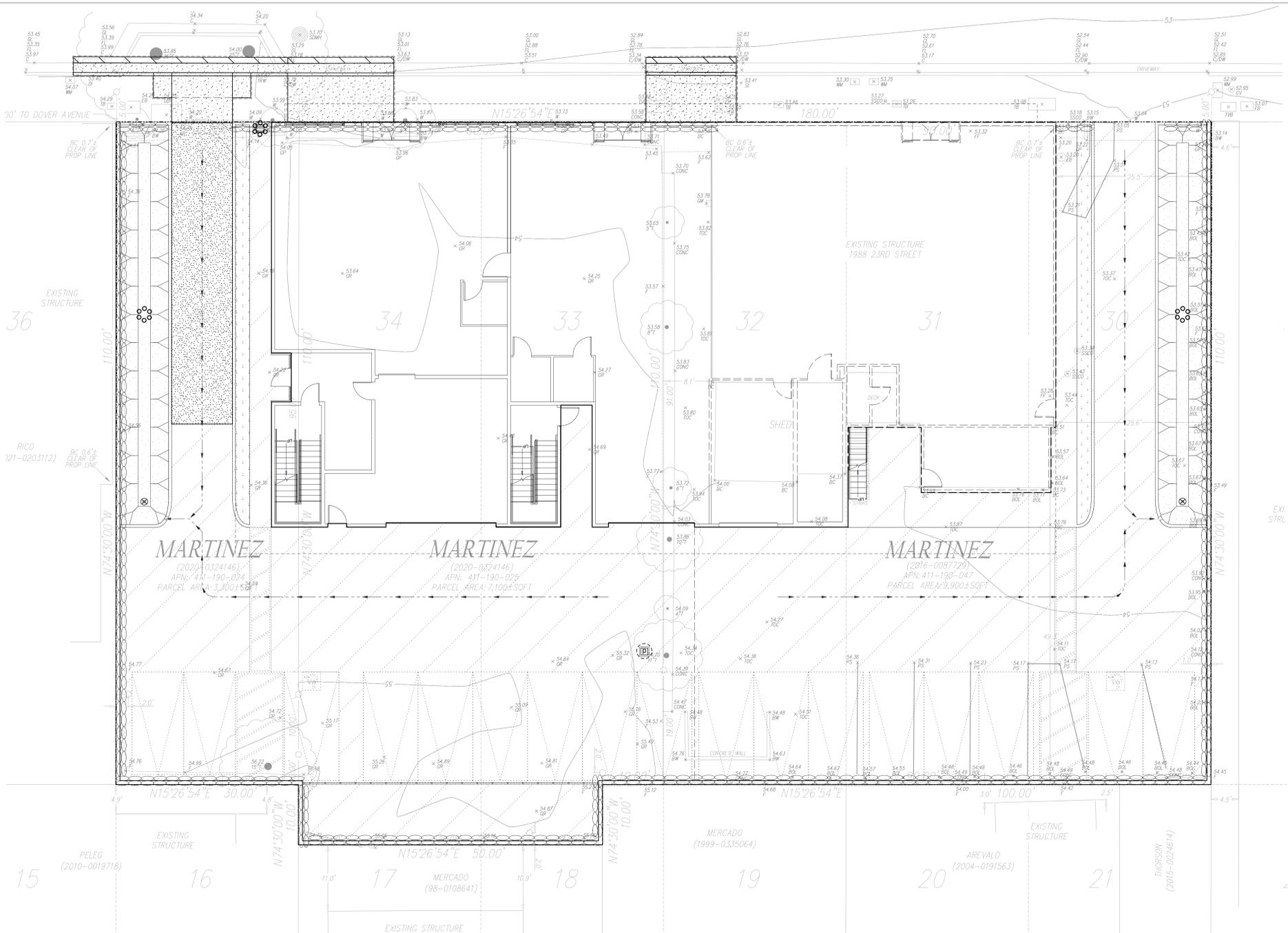
CROSS SECTIONS SHEET

PLOT DATE

CIVIL PLAN

NO.	DATE	REVISION
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ATTACHMENT B NOTES:
 THE FOLLOWING BMP'S AS OUTLINED IN, BUT NOT LIMITED TO, THE CALIFORNIA STORM WATER BEST MANAGEMENT PRACTICE HANDBOOK, JANUARY 2003, OR THE LATEST REVISED EDITION, MAY APPLY DURING THE CONSTRUCTION OF THIS PROJECT (ADDITIONAL MEASURES MAY BE REQUIRED IF DEEMED APPROPRIATE BY THE PROJECT ENGINEER OR BUILDING OFFICIAL);

- EROSION CONTROL**
- EC1 - SCHEDULING
 - EC2 - PRESERVATION OF EXISTING VEGETATION
 - EC3 - HYDRAULIC MULCH
 - EC4 - HYDROSEEDING
 - EC5 - SOIL BINDERS
 - EC6 - STRAW MULCH
 - EC7 - STABLE TILES & MATS
 - EC8 - WOOD MULCH
 - EC9 - EARTH DIKES AND DRAINAGE SWALES
 - EC10 - VELOCITY DISSIPATION DEVICES
 - EC11 - SLOPE DRAINS
 - EC12 - STREAM BANK STABILIZATION
 - EC13 - POLYACRYLAMIDE
- TEMPORARY SEDIMENT CONTROL**
- SE1 - SILT FENCE
 - SE2 - SEDIMENT BASIN
 - SE3 - SEDIMENT TRAP
 - SE4 - CHECK DAM
 - SE5 - FIBER ROLLS
 - SE6 - GRAVEL BAG BERM
 - SE7 - STREET SWEEPING AND VACUUMING
 - SE8 - SANDBAG BARRIER
 - SE10 - STORM DRAIN INLET PROTECTION
- WIND EROSION CONTROL**
- WE1 - WIND EROSION CONTROL
- EQUIPMENT TRACKING CONTROL**
- TC1 - STABILIZED CONSTRUCTION ENTRANCE EXIT
 - TC2 - STABILIZED CONSTRUCTION ROADWAY
 - TC3 - ENTRANCE/OUTLET TIRE WASH
- NON-STORMWATER MANAGEMENT**
- NS1 - WATER CONSERVATION PRACTICES
 - NS2 - DEWATERING OPERATIONS
 - NS3 - PAVING AND GRINDING OPERATIONS
 - NS4 - TEMPORARY STREAM CROSSING
 - NS5 - CLEAR WATER DIVERSION
 - NS6 - ILLICIT CONNECTION DISCHARGE
 - NS7 - POTABLE WATER IRRIGATION
 - NS8 - VEHICLE AND EQUIPMENT CLEANING
 - NS9 - VEHICLE AND EQUIPMENT FUELING
 - NS10 - VEHICLE AND EQUIPMENT MAINTENANCE
 - NS11 - PILE DRIVING OPERATIONS
 - NS12 - CONCRETE CURING
 - NS13 - CONCRETE FINISHING
 - NS14 - MATERIAL AND EQUIPMENT USE
 - NS15 - DEMOLITION ADJACENT TO WATER
 - NS16 - TEMPORARY BATCH PLANTS
- WASTE MANAGEMENT & MATERIAL POLLUTION CONTROL**
- WM1 - MATERIAL DELIVERY AND STORAGE
 - WM2 - MATERIAL USE
 - WM3 - STOCKPILE MANAGEMENT
 - WM4 - SPILL PREVENTION AND CONTROL
 - WM5 - SOLID WASTE MANAGEMENT
 - WM6 - HAZARDOUS WASTE MANAGEMENT
 - WM7 - CONTAMINATION SOIL MANAGEMENT
 - WM8 - CONCRETE WASTE MANAGEMENT
 - WM9 - SANITARY SEPTIC WASTE MANAGEMENT
 - WM10 - LIQUID WASTE MANAGEMENT

EROSION CONTROL NOTES

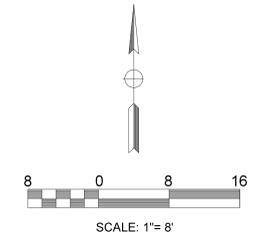
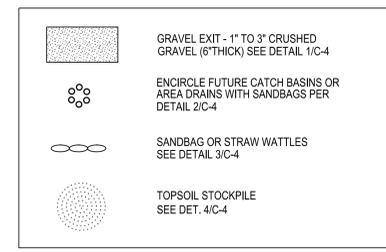
- TEMPORARY EROSION CONTROL DEVICES SHOWN ON THE GRADING PLAN WHICH INTERFERE WITH THE WORK SHALL BE RELOCATED OR MODIFIED AS AND WHEN THE INSPECTOR SO DIRECTS AS THE WORK PROGRESSES.
 - ALL LOOSE SOIL AND DEBRIS SHALL BE REMOVED FROM THE STREET AREAS UPON STARTING OPERATIONS AND PERIODICALLY THEREAFTER AS DIRECTED BY THE INSPECTOR.
 - WHEN THE INSPECTOR SO DIRECTS, A 12-INCH BERM SHALL BE MAINTAINED ALONG THE TOP OF THE SLOPE OF THOSE FILLS ON WHICH GRADING IS NOT IN PROGRESS.
 - A) VELOCITY CHECK DAMS SHALL BE PROVIDED ACROSS THE OUTLETS OF ALL LOTS DRAINING INTO THE STREET.
 B) ALL FILLS SHALL BE GRADED TO PROMOTE DRAINAGE AWAY FROM THE EDGE OF THE FILL.
 - STAND-BY CREWS SHALL BE ALERTED BY THE PERMITTEE OR CONTRACTOR FOR EMERGENCY WORK DURING RAINSTORMS.
 - ALL UTILITY TRENCHES SHALL BE BLOCKED AT THE PRESCRIBED INTERVALS FROM BOTTOM TO TOP WITH A DOUBLE ROW OF SANDBAGS PRIOR TO BACKFILL. SEWER TRENCHES SHALL BE BLOCKED AT THE PRESCRIBED INTERVAL WITH A DOUBLE ROW OF SANDBAGS EXTENDING DOWNWARD, TWO SANDBAGS FROM THE GRADED SURFACE OF THE STREET. SANDBAGS ARE TO BE PLACED WITH ALTERNATE HEADER AND STRETCHER COURSES. THE INTERVALS PRESCRIBED BETWEEN SANDBAG BLOCKING SHALL DEPEND ON THE SLOPE OF THE GROUND SURFACE, BUT SHALL NOT EXCEED THE FOLLOWING:
- | GRADE OF THE STREET | INTERVAL AS REQUIRED |
|---------------------|----------------------|
| LESS THAN 2% | 100 FEET |
| 2% TO 4% | 50 FEET |
| 4% TO 10% | 25 FEET |
| OVER 10% | 25 FEET |
- VELOCITY CHECK DAMS SHALL BE PROVIDED IN ALL UNPAVED STREET AREAS AT THE INTERVALS INDICATED ABOVE. VELOCITY CHECK DAMS MAY BE CONSTRUCTED OF SANDBAGS, TIMBER, OR OTHER EROSION-RESISTANT MATERIALS APPROVED BY THE INSPECTOR, AND SHALL EXTEND COMPLETELY ACROSS THE STREET OR CHANNEL AT RIGHT ANGLES TO THE CENTERLINE. EARTH DIKES MAY NOT BE USED AS VELOCITY CHECK DAMS.
 - VELOCITY CHECK DAMS SHALL BE PROVIDED IN ALL UNPAVED GRADED CHANNELS AT THE INTERVALS INDICATED BELOW:
- | GRADE OF CHANNEL | INTERVALS BETWEEN CHECK DAMS |
|------------------|------------------------------|
| LESS THAN 3% | 100 FEET |
| 3% TO 6% | 50 FEET |
| OVER 6% | 25 FEET |

- AFTER SEWER AND UTILITY TRENCHES ARE BACKFILLED AND COMPACTED, THE SURFACES OVER SUCH TRENCHES SHALL BE MOUNDED SLIGHTLY TO PREVENT CHANNELING OF WATER IN THE TRENCH AREA. CARE SHOULD BE EXERCISED TO PROVIDE FOR CROSS FLOW AT FREQUENT INTERVALS WHERE TRENCHES ARE NOT ON THE CENTERLINE OF A CROWNED STREET.
- EXCEPT WHEN THE INSPECTOR DIRECTS OTHERWISE, ALL DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN RAIN IS FORECAST, AND SHALL BE MAINTAINED DURING THE RAINY SEASON (OCTOBER 1 TO APRIL 15).
- ALL BASINS AND CHECK DAMS SHALL HAVE THE DEBRIS AND SILT REMOVED AFTER EACH STORM TO RESTORE THEIR CAPACITY.
- SANDBAGS SHALL BE IN STOCKPILED IN PARKWAY, READY TO BE PLACED IN POSITION WHEN RAIN IS FORECAST, OR WHEN THE INSPECTOR SO DIRECTS.
- BRUSH AND GROUND COVER MAY NOT BE REMOVED MORE THAN 10 FEET ABOVE FILLS BETWEEN OCTOBER 1 AND APRIL 15.
- IN CASE OF EMERGENCY CALL:

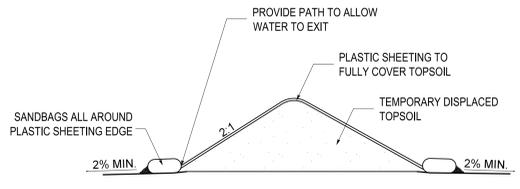
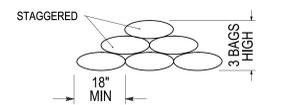
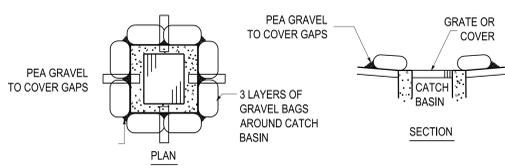
DUST CONTROL NOTES

- DUST SHALL BE CONTROLLED BY WATERING AND/OR APPLYING A DUST PALLIATIVE. THE DUST PALLIATIVE SHALL BE APPLIED IN THE AMOUNT AT THE LOCATIONS AS DIRECTED BY THE ENGINEER.
- WATER FOR DUST CONTROL SHALL BE APPLIED BY MEANS OF PRESSURE TYPE DISTRIBUTORS OR PIPE LINES EQUIPPED WITH A SPRAY SYSTEM OR HOSES WITH NOZZLES THAT WILL INSURE A UNIFORM APPLICATION OF WATER.
- UNLESS WATER IS APPLIED BY MEANS OF PIPE LINES, AT LEAST ONE MOBILE UNIT WITH A MINIMUM CAPACITY OF 100 GALLONS SHALL BE AVAILABLE FOR APPLYING WATER.
- ALL SOIL MATERIALS OR DEBRIS TRUCKED FROM THE SITE SHALL BE COVERED AND SPRINKLED PRIOR TO ENTERING PUBLIC STREETS.
- PROVIDE FOR WET SUPPRESSION OR CHEMICAL STABILIZING OF EXPOSED SOILS.
- PROVIDE FOR RAPID CLEAN-UP OF SEDIMENTS DEPOSITED ON THE PAVED ROADS.
- LIMIT THE AMOUNT OF AREAS DISTURBED BY CLEARING AND EARTH MOVING OPERATIONS BY SCHEDULING THESE ACTIVITIES IN PHASES.

LEGEND



- NOTES:**
- THE CONSTRUCTION ENTRANCE ROADWAYS SHALL BE STABILIZED SO AS TO PREVENT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC ROADS. DEPOSITIONS MUST BE SWEEPED UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS INTO THE STORM DRAIN SYSTEM.
 - STABILIZED CONSTRUCTION ENTRANCE SHALL BE:
 - LOCATED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE OR FROM A PUBLIC RIGHT OF WAY, STREET, ALLEY, AND SIDEWALK OR PARKING AREA.
 - SERIES OF STEEL PLATES WITH "RUMBLE STRIPS" AND/OR MIN 4" COARSE AGGREGATE WITH LENGTH, WIDTH AND THICKNESS AS NEEDED TO ADEQUATELY PREVENT ANY TRACKING ONTO PAVED SURFACE.
 - ADD A WASH RACK WITH SEDIMENT TRAP LARGE ENOUGH TO COLLECT ALL WASH WATER.
 - ALL VEHICLES ACCESSING THE CONSTRUCTION SITE SHALL UTILIZE THE STABILIZED CONSTRUCTION ENTRANCE SITES.
- STREET MAINTENANCE:**
- REMOVE ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS IMMEDIATELY.
 - SWEEP PAVED AREAS THAT RECEIVE CONSTRUCTION TRAFFIC WHENEVER SEDIMENT BECOMES VISIBLE.
 - PAVEMENT WASHING WITH WATER IS PROHIBITED IF IT RESULTS IN A DISCHARGE TO THE STORM DRAIN SYSTEM.



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CESAR & SAMUEL MARTINEZ
 1982-1988 23RD ST
 SAN PABLO, CA 94606



09 / 26 / 22

EROSION CONTROL PLAN

PLOT DATE

NO.	DATE	REVISION
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2	-	-
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CIVIL PLAN

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TOPSOIL STOCKPILE CALCS.

DISTURBED AREA = 6590 SQ.FT.
 EXISTING HOUSE/HARDSCAPE AREA = 9810 SQ.FT.
 TOPSOIL SQUARE FOOTAGE = 9810-6590 = 3220 SQ.FT.
 6" TOPSOIL x 3220 = 1610 CU.FT.
 6" TOPSOIL = 59.63 C.Y.

TOPSOIL STOCKPILE DIMENSION CALCULATION
 S = 2:1 MAX.
 D = 2' (CUB. RT. (6' V / 3.1416))
 D = 29.00'
 Hmax = 8.00'