

**GENEAL GRADING PLAN NOTES:**

- THIS PLAN ACCURATE FOR DRAINAGE PLAN ONLY.
- SECURE PERMISSION FROM CITY ENGINEER FOR CONSTRUCTION AND/OR DISCHARGE OF DRAINAGE WITHIN STREET RIGHT-OF-WAY.
- PROVISIONS SHALL BE MADE FOR CONTRIBUTORY DRAINAGE AT ALL TIMES.
- ENGINEER MUST SET GRADE STAKES FOR ALL DRAINAGE DEVICES AND OBTAIN INSPECTION BEFORE POURING.
- ELEVATIONS SHOWN ARE FOR FINISHED SURFACE. UNLESS OTHERWISE NOTED.
- FOR EXACT LOCATIONS OF ROOF DRAINS SEE ARCHITECTURE ROOF PLANS.
- STORM DRAIN LINES SHALL BE 6" PVC(S=2.70MIN). UNLESS OTHERWISE SHOWN.
- SEE MECH PLANS FOR PIPING INSIDE OF STRUCTURES.
- CONNECT ALL NEW ROOF DRAINS AND NEW SUBSURFACE DRAIN TO TRUNK LINES UNLESS OTHERWISE SHOWN.
- ALL SIDEWALK, CURB AND GUTTER ALONG 14TH STREET THAT NEEDS TO BE REPAIRED WILL BE RECONSTRUCTED PER CITY OF SANTA MONICA STANDARDS.
- TREE PROTECTION ZONE:

- COORDINATED ALL OFF-SITE IMPROVEMENTS WITHIN THE TPZ WITH THE COMMUNITY FORESTERS OFFICE.
- NO CONSTRUCTION MATERIALS OR ACTIVITIES ALLOWED IN THIS AREA.
- PRUNING OF CITY TREES TO PROVIDE CLEARANCE FOR CONSTRUCTION ACTIVITIES SHALL ONLY BE DONE BY CITY OF SANTA MONICA COMMUNITY FOREST OPERATIONS.
- AN AS-BUILT REPORT SHALL BE SUBMITTED TO THE CITY FOR REVIEW. THIS REPORT PREPARED BY THE GEOTECHNICAL CONSULTANT MUST INCLUDE DOCUMENTATION OF ANY FOUNDATION INSPECTIONS, THE RESULTS OF ALL COMPACTION TESTS AS WELL AS A MAP DEPICTING THE LIMITS OF FILL, LOCATIONS OF ALL DENSITY TESTS, OUTLINE AND ELEVATIONS OF ALL REMOVAL BOTTOMS, AND LOCATION AND ELEVATION OF ALL RETAINING WALL BACKDRAINS AND OUTLETS. GEOLOGIC CONDITIONS EXPOSED DURING GRADING MUST BE DEPICTED ON AN AS-BUILT GEOLOGIC MAP.
- EXCAVATIONS SHALL BE MADE IN COMPLIANCE WITH CAL/OSHA REGULATIONS.
- TESTS SHALL BE PERFORMED PRIOR TO POURING FOOTINGS AND SLABS TO DETERMINE THE EXPANSION INDEX OF THE SUPPORTING SOILS AND FOUNDATION AND SLAB PLANS SHOULD BE REVIEWED BY THE GEOTECHNICAL CONSULTANT AND REVISED, IF NECESSARY ACCORDINGLY.
- PRIOR TO BACKFILLING OR COVERING UP ANY URBAN RUNOFF MITIGATION RELATED TO EXCAVATIONS AND/OR STRUCTURES. CONTACT THE CITY URBAN RUNOFF COORDINATOR AT (310)458-8223 FOR INSPECTION.
- FENCE THE TPZ AS SHOWN WITH SUITABLE FENCING MATERIAL TO PREVENT WOUNDS OF THE TREE AND SOIL COMPACTION WITHIN THE ROOT ZONE. POST THE FENCE WITH A SIGN STATING "TREE PROTECTION ZONE - KEEP OUT".
- NEW PROPOSED IMPROVEMENTS SHALL NOT OBSTRUCT DRAINAGE OR DRAIN INTO NEIGHBORING PRIVATE PROPERTIES.
- WATER SHALL BE DRAINED AWAY FROM THE FOUNDATION AND SHALL BE MITIGATED FROM PERMEATING INTO FOUNDATION WALL AND FOOTING OF THE NEW PROPOSED IMPROVEMENTS.
- NO CONSTRUCTION DEBRIS SHALL BE SPILLED OR STORED ONTO PUBLIC RIGHT-OF-WAY.
- NO RUNOFF OF SEDIMENT OR WASTES IS ALLOWED IN WATER LEAVING THE SITE.

- ALL SITE UTILITIES SHALL BE CONSTRUCTED UNDERGROUND TO THE NEAREST OFFSITE UTILITY POLE. CONTRACTOR/DEVELOPER HAS MADE ARRANGEMENTS WITH THE UTILITY COMPANIES TO PLACE ALL OVERHEAD UTILITIES UNDERGROUND.
- APPLICANT IS STRONGLY URGED TO INSPECT THE EXISTING SEWER CONNECTION. IF THE CONNECTION IS DAMAGED OR OVER 30 YEARS OLD, THE CITY RECOMMENDS THAT THE APPLICANT SHOW ON THE PLANS THE CONSTRUCTION OF A NEW 6-INCH DIAMETER VCP SANITARY SEWER CONNECTION FROM PROPERTY LINE TO SANITARY SEWER MAIN IN ACCORDANCE WITH CITY OF SANTA MONICA STANDARDS. (SEWER PERMIT REQUIRED)
- ALL LABOR, EQUIPMENT AND MATERIAL REQUIRED FOR OFF-SITE IMPROVEMENTS ARE THE RESPONSIBILITY OF THE APPLICANT.
- IF FIRE SPRINKLERS ARE REQUIRED TO BE INSTALLED OR ALTERED BY BUILDING & SAFETY AND/OR FIRE DEPARTMENT, CONTRACTOR SHALL INSTALL A DOUBLE CHECK DETECTOR ASSEMBLY ON SITE AND ABOVE GROUND PER CITY STANDARDS, THE LOCATION OF WHICH SHALL BE READILY ACCESSIBLE TO ALL CITY AGENCIES. THE DCDA REQUIRES 3' X 8' CLEAR SPACE.
- OWNER/CONTRACTOR SHALL COMPLY WITH THE UTILITY DIVISION CROSS CONNECTION GUIDELINES.
- PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY, CROSS CONNECTION CONTROL INSPECTION MUST BE COMPLETED. CONTACT THE CITY WATER DIVISION AT (310) 458-8535.
- PRIOR TO COMMENCING ANY UNDERGROUND UTILITY WORK, OBTAIN SEPARATE UTILITY EXCAVATION PERMITS AND STREET USE PERMITS FOR UTILITY EXCAVATION. CONTACT EPWM ADMINISTRATIVE SERVICES, ROOM 113.
- THE SITE MUST COMPLY WITH SMMC CHAPTER 7.10.060 URBAN RUNOFF POLLUTION ORDINANCE FOR CONSTRUCTION ACTIVITIES AND TEMPORARY BMPS.

**DRAINAGE NOTES:**

- ALL IMMEDIATE GROUND AREAS AFFECTED BY NEW IMPROVEMENTS SHALL BE GRADED AWAY FROM WALL FOUNDATION AND ADJACENT PROPERTIES.
- ARCHITECT/CIVIL ENGINEER SHALL DESIGN SUCH THAT ALL UNDERGROUND PIPES FROM DOWNSPOUTS AND AREA DRAINS HAVE AN ACCEPTABLE SLOPE LEADING TO THE INFILTRATION PIT AND OVERFLOW TO STREET CURB.
- PRIOR TO INSTALLATION OF INFILTRATION PITS OVER FLOW PIPE TOWARDS STREET, OBTAIN A SEPARATE PERMIT AND INSPECTION FROM EPWM ADMIN. ROOM 113.
- ALL DOWNSPOUTS AT GUTTER LEVEL AND ALL HARDSCAPE AREA DRAINS THAT ARE CONNECTED TO THE INFILTRATION PIT, INFILTRATION AREA, OR ANY OTHER BMP SHALL BE NET SCREENED. (SHOW NET SCREENING DETAILS).
- CONTACT KIT DALLARTE (310) 458-8731 AND/OR NEAL SHAPIRO (310) 458-8223 FOR BMP INSPECTION, TWO WORKING DAYS PRIOR TO START CONSTRUCTION OF URBAN RUNOFF MITIGATION INFILTRATION PIT AND/OR INFILTRATION AREA.
- BASEMENT WATER SHALL BE DISCHARGED TO LAWN. (ONLY APPLIES TO DWELLINGS WITH BASEMENT).

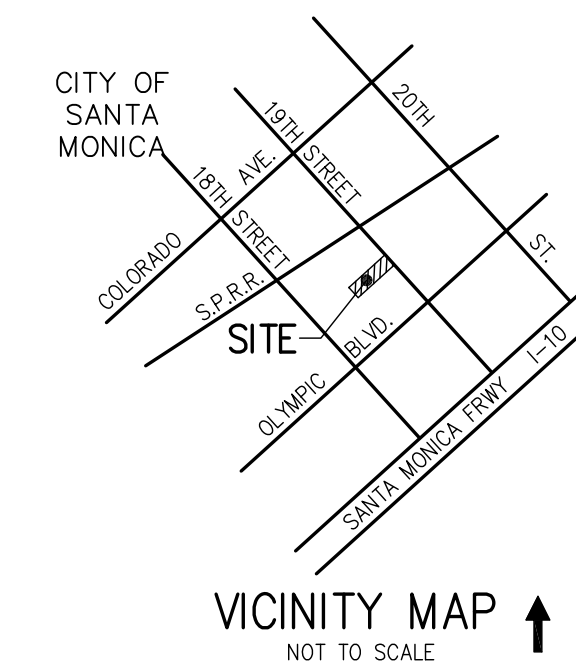
**PUBLIC WORKS STANDARD NOTES**

- ALL OFFSITE WORK SHALL BE DONE IN ACCORDANCE WITH STANDARD SPECIFICATIONS/DRAWINGS FOR PUBLIC WORKS CONSTRUCTION, CURRENT EDITION, AS AMENDED BY THE CITY OF SANTA MONICA AND CITY OF SANTA MONICA STANDARDS.
- ALL LABOR, EQUIPMENT, AND MATERIAL REQUIREMENTS FOR OFFSITE IMPROVEMENTS ARE THE RESPONSIBILITY OF THE OWNER.
- THE CITY RECOMMENDS REPLACEMENT OF DAMAGED OR OLDER SEWER LATERALS OVER THIRTY (30) YEARS OLD.
- ALL ABANDONED DRIVEWAY APRONS/APPROACH RESULTING FROM THE NEW DEVELOPMENT SHALL BE REMOVED AND REPLACED WITH SIDEWALK, PARKWAY AND CURB AND GUTTER.
- MODIFY EXISTING DRIVEWAYS (WIDEN TO 10 FEET MINIMUM. ETC.) BETWEEN CURB AND PROPERTY LINE PER CITY OF SANTA MONICA.
- NON-STORM WATER RUNOFF, SEDIMENT AND CONSTRUCTION WASTE FROM THE CONSTRUCTION SITE AND PARKING AREAS IS PROHIBITED FROM LEAVING THE SITE.
- ANY SEDIMENTS OR MATERIALS, WHICH ARE TRACKED OFF SITE, MUST BE REMOVED THE SAME DAY.
- EXCAVATED SOIL MUST BE LOCATED ON THE SITE AND SOIL PILES SHOULD BE COVERED AND OTHERWISE PROTECTED SO THAT SEDIMENTS DO NOT GO INTO THE STREET OR ADJOINING PROPERTIES
- WASHING OF CONSTRUCTION OR OTHER INDUSTRIAL EQUIPMENT ADJACENT TO CONSTRUCTION SITE IS PROHIBITED. WASH WATER IS NOT ALLOWED TO LEAVE THE CONSTRUCTION SITE.
- DRAINAGE CONTROLS MAY BE REQUIRED DEPENDING ON THE EXTENT OF GRADING AND THE TOPOGRAPHY OF THE SITE.
- OWNER IS RESPONSIBLE FOR REPAIR OF ALL DAMAGE TO OFFSITE IMPROVEMENTS CAUSED BY CONSTRUCTION. CALL PUBLIC WORKS INSPECTOR FOR INSPECTION OF OFFSITE IMPROVEMENTS AT SUBSTANTIAL COMPLETION OF ONSITE WORK AT (310) 458-8737.
- ALL EXISTING OVERHEAD UTILITIES SHALL BE PLACED UNDERGROUND PER SANTA MONICA MUNICIPAL CODE SECTION 7.04.820) FOR NEW CONSTRUCTION, OR RENOVATION AND REMODELING THAT EXCEEDS FIFTY PERCENT (50%) OF THE REPLACEMENT COST OF THE BUILDING OR STRUCTURE. OBTAIN UTILITY EXCAVATION PERMIT AND INSPECTION FROM PUBLIC WORKS WHEN UNDERGROUND UTILITIES. AND/OR REMOVING OR RELOCATING EXISTING UTILITY POLE.
- PROJECT MUST COMPLY WITH CROSS-CONNECTION CONTROL SURVEY INSPECTION (SANTA MONICA MUNICIPAL CODE 7.12.370) READ ATTACHED CROSS-CONNECTION CONTROL GUIDELINES FOR MORE INFORMATION FOR GO TO <http://www.lapublichealth.org/eh/progs/envirp/ehcross/htm>. FAILURE TO COMPLY WITH THE SANTA MONICA CODE SECTION 7.12.370 MAY RESULT IN DISCONTINUANCE OF WATER SERVICE. ANY QUESTIONS, PLEASE CONTACT CHRIS CAMACHO AT WATER DIVISION: (310)458-6535.
- PRIOR TO START OF CONSTRUCTION, WHEN INSTALLING NEW OR RELOCATING GAS AND WATER METERS. CONTACT THE GAS CO (310) 605-4183 AND THE WATER DIVISION (310) 458-8535 RESPECTIVELY, FOR VERIFICATION AND APPROVAL.
- CONTACT SR. PUBLIC WORKS INSPECTOR AT (310) 458-8737 FOR INSPECTION AND COORDINATION OF OFFSITE IMPROVEMENTS AT SUBSTANTIAL COMPLETION OF ONSITE WORK.
- NO WORK SHALL BE DONE WITHIN THE PUBLIC RIGHT-OF-WAY WITHOUT PRIOR APPROVAL AND PERMIT FROM THE PUBLIC WORKS MANAGEMENT DEPARTMENT-ADMINISTRATIVE SERVICES, ROOM 113.

**INSPECTIONS:**

THE PERMITTEE OR HIS AGENT SHALL NOTIFY THE BUILDING OFFICIAL 24 HOURS BEFORE THE GRADING OPERATION IS READY FOR EACH OF THE INSPECTIONS:

- INITIAL INSPECTION: WHEN THE PERMITTEE IS READY TO BEGIN WORK AND BEFORE ANY GRADING OR BRUSHING IS STARTED.
- TOE INSPECTION: AFTER THE NATURAL GROUND IS EXPOSED AND PREPARED TO RECEIVE FILL AND BEFORE ANY FILL IS PLACED.
- EXCAVATION INSPECTION: AFTER THE EXCAVATION IS STARTED AND BEFORE THE DEPTH OF EXCAVATION EXCEEDS 10 FEET
- FILL INSPECTION: AFTER THE FILL REPLACEMENT IS STARTED AND BEFORE THE VERTICAL HEIGHT OF THE LIFTS EXCEEDS 10 FEET.
- DRAINAGE DEVICE INSPECTION: AFTER FORMS AND PIPE ARE IN PLACE AND BEFORE ANY CONCRETE IS POURED.
- ROUGH GRADING: WHEN ALL ROUGH GRADING HAS BEEN COMPLETED AND ALL STORM WATER CONTROL MEASURES ARE IN PLACE PER CITY OF SANTA MONICA, ORDINANCES.
- FINAL INSPECTION: WHEN ALL WORK, INCLUDING INSTALLATION OF ALL DRAINAGE STRUCTURES, LANDSCAPE MATERIALS FOR EROSION CONTROL, AND OTHER PROTECTIVE DEVICES, HAS BEEN COMPLETED AND THE AS-GRADED PLAN AND REQUIRED REPORTS HAVE BEEN SUBMITTED. THE PERMITTEE NEED NOT WAIT FOR THE INSPECTOR TO ARRIVE BEFORE PROCEEDING WITH THE WORK.



**SHEET INDEX:**

SHEET	NUMBER
COVER SHEET C-1	1
DRAINAGE PLAN C-2	2
DETAIL SHEET C-3	3
UTILITY PLAN C-4	4

**IMPORTANT NOTICE:**

SECTION 4216/4217 OF THE GOVERNMENT CODE REQUIRES A DIG ALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID. FOR YOUR DIG ALERT I.D. NUMBER CALL UNDERGROUND SERVICE ALERT TOLL FREE 1-800-422-4133 TWO WORKING DAYS BEFORE YOU DIG.

**PRIVATE ENGINEER'S NOTICE TO CONTRACTORS:**

- THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES SHOWN AND ANY OTHER LINES OR STRUCTURES NOT SHOWN ON THESE PLANS.
- ALL CONTRACTORS AND SUBCONTRACTORS PERFORMING WORK SHOWN ON OR RELATED TO THESE PLANS SHALL CONDUCT THEIR OPERATIONS SO THAT ALL EMPLOYEES ARE PROVIDED A SAFE PLACE TO WORK AND THE PUBLIC IS PROTECTED. ALL CONTRACTORS AND SUBCONTRACTORS SHALL COMPLY WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATIONS" OF THE U.S. DEPARTMENT OF LABOR AND THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS' "CONSTRUCTION SAFETY ORDERS."
- THE CIVIL ENGINEER SHALL NOT BE RESPONSIBLE IN ANY WAY FOR THE CONTRACTORS' AND SUBCONTRACTORS' COMPLIANCE WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATIONS" OF THE U.S. DEPARTMENT OF LABOR OR WITH THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS' "CONSTRUCTION SAFETY ORDERS."
- CONTRACTOR FURTHER AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER, THE CITY, AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
- THE CONTRACTOR IS TO VERIFY PRIOR TO CONSTRUCTION THE VERTICAL AND HORIZONTAL ALIGNMENT OF THE ENTIRE LENGTH OF ALL PROPOSED UNDERGROUND UTILITIES. IN ADDITION PRIOR TO CONSTRUCTION THE CONTRACTOR IS TO VERIFY ALL CROSSING AND JOIN ELEVATIONS OF THE PROPOSED UNDERGROUND UTILITIES AND IMMEDIATELY NOTIFY THE CIVIL ENGINEER OF ANY CONDITIONS THAT WOULD REQUIRE MODIFICATIONS TO THE APPROVED PLANS.

**UNAUTHORIZED CHANGES AND USES:**

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.

THE CONTRACTOR SHALL BE RESPONSIBLE TO REPORT DISCREPANCIES IN PLANS AND/OR FIELD CONDITIONS IMMEDIATELY TO THE DESIGN ENGINEER FOR RESOLUTION PRIOR TO CONSTRUCTION AND SHALL BE RESPONSIBLE FOR DISCREPANCIES NOT SO REPORTED AND RESOLVED.

**BENCH MARK:**

CITY OF SANTA MONICA FIELDBOOK NO. 494.21  
 ELEVATION = 131.510 CITY OF SANTA MONICA DATUM  
 P.K. NAIL IN LEAD IN SOUTHEAST CURB OF OLYMPIC BOULEVARD 19.7 NORTHEAST OF NORTHEAST CURB OF 19TH STREET.

PREPARED BY:

**DAVID R. GRAY, INC.**

3211 CORTE MALPASO, SUITE 401  
 CAMARILLO, CA 93012  
 805-987-3945 FAX: 805-987-1655  
 JOB NO. 0915 JUNE 2009 LA 671-G1  
 DATE OF SURVEY: 06-24-09

SOILS ENGINEER:

**FOR CONSTRUCTION 06-09-11**

**COVER SHEET**  
 1654 19TH STREET, SANTA MONICA  
 LOT 9, BLOCK 12, ERKENBRECHER SYNDICATE, M.B. 6-26/27  
 IN THE CITY OF SANTA MONICA, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

REVIEWED BY:	DATE	<b>C-1</b>
DRAWN BY:	DATE	
CHECKED BY:	DATE	

JOB NO. 0930  
 RELEASE DATE: JUNE 2010

**Underground Service Alert**  
  
 Call: TOLL FREE  
**1-800-227-2600**  
 TWO WORKING DAYS BEFORE YOU DIG

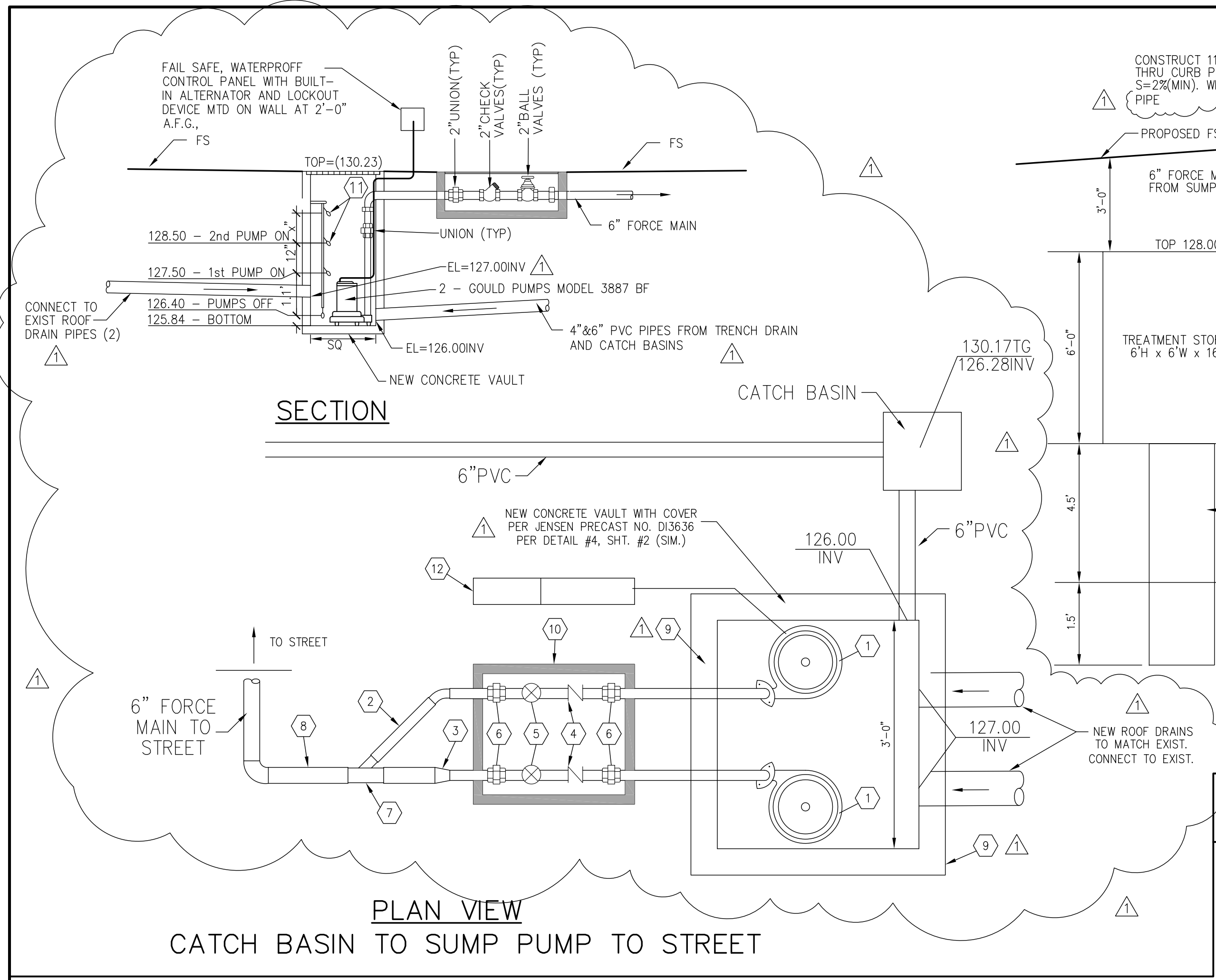
NO.	DATE	DESCRIPTION OF REVISION

PREPARED FOR:  
**CITY OF SANTA MONICA**  
 1685 MAIN ST.  
 SANTA MONICA, CA 90401  
 (310) 458-8411

PREPARED BY:  
  
 165 EAST HIGH STREET, SUITE 203  
 MOORPARK, CA 93021  
 PHONE: (805) 523-0010 FAX: (805) 553-0626

CIVIL ENGINEER:  
  
 MARK ROGERS R.C.E. NO. 06-09-11  
 DATE





**PUMP STATION - GENERAL NOTES**

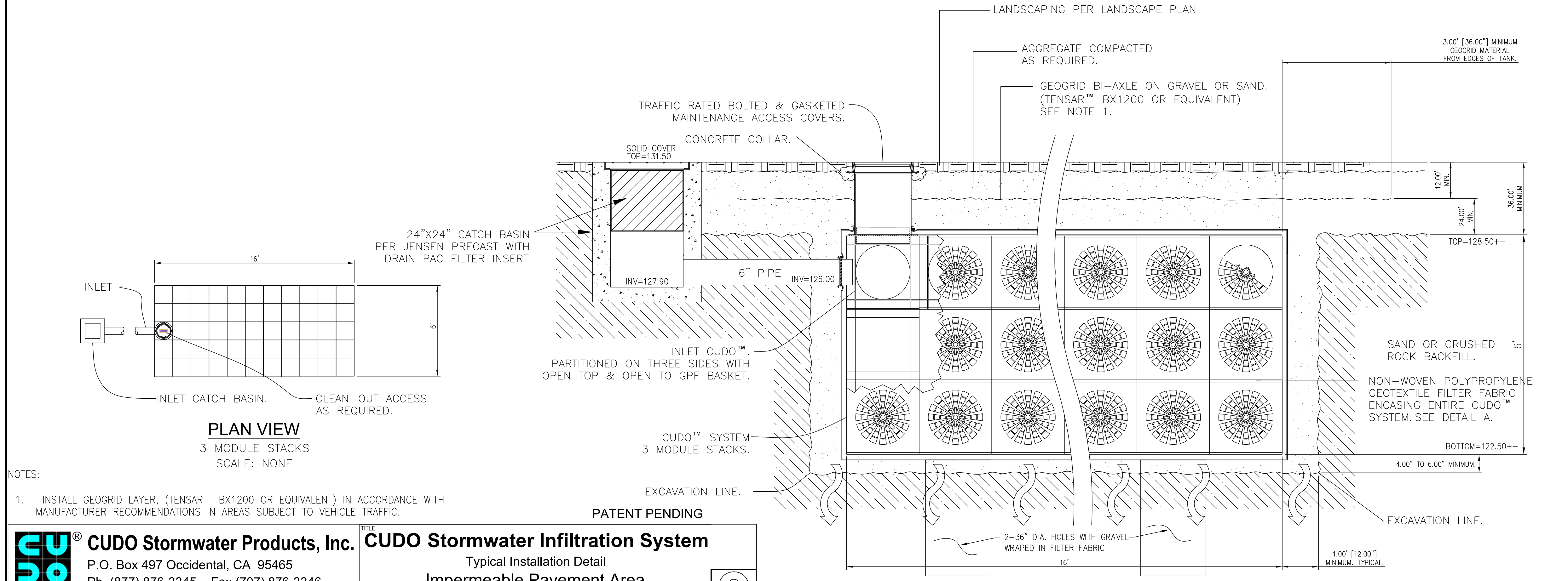
- THE CONTRACTOR SHALL FURNISH AND INSTALL A DUPLEX SUBMERSIBLE NON-CLOG PUMP SYSTEM. THE CONTRACTOR SHALL FURNISH ALL PIPING, CHECK VALVES, INLET FACILITIES, LEVEL SENSORS AND MOTOR CONTROLS NECESSARY TO PROVIDE A FULLY OPERATIONAL PUMPING SYSTEM. ALL OF THE COMPONENTS OF THE PUMPING SYSTEM SHALL BE U.L. LISTED AND SUITABLE FOR OPERATION IN THIS PROPOSED INSTALLATION.
- PUMP CHARACTERISTICS: DESIGN FLOW RATE = 150 GPM, DESIGN TDH = 16 FT., MINIMUM SOLIDS SIZE = 2 INCHES, SHUTOFF HEAD = 36 FT., MOTOR HORSEPOWER = 1.0 HP, MOTOR SPEED = 1750 RPM
- THE PUMPS SHALL HAVE CAST IRON, VORTEX OR SEMI-OPEN, IMPELLER DESIGNED FOR NON-CLOG OPERATION. THE PUMP MOTORS SHALL OPERATE ON SINGLE PHASE POWER, UNLESS VERIFICATION OF ALTERNATIVE POWER IS AVAILABLE. THE MOTORS SHALL BE PROVIDED WITH THERMAL OVERLOAD PROTECTION WITH AUTOMATIC RESET AND SHALL BE DESIGNED FOR CONTINUOUS OPERATION AND CAPABLE OF RUNNING DRY WITHOUT DAMAGE TO COMPONENTS. THE PUMPS SHALL BE GOULD PUMPS - MODEL 3887 (W5106F) OR APPROVED EQUAL.
- THE 2 INCH DIAMETER DISCHARGE PIPING INSIDE THE WET WELL SHALL BE GALVANIZED IRON, STEEL, DUCTILE IRON PIPE. THE DISCHARGE PIPING OUTSIDE OF THE WET WELL AND VALVE VAULT SHALL BE DUCTILE IRON OR PVC (SCHEDULE 40 OR ANKA C-900) PRESSURE PIPE WITH THE APPROPRIATE JOINTS TO MATCH THE JOINING PIPES PUMPS AND VALVES. THE FORCE MAIN CONSTRUCTED UNDER THE BUILDING SHALL COMPLY WITH PLUMBING CODE REQUIREMENTS.
- THE PUMP STATION SHALL BE INSTALLED IN THE EXISTING CONCRETE VAULT WHICH WILL BE USED AS THE PUMP WET WELL. THE WET WELL SHALL BE PROVIDED WITH A TRAFFIC RATED SOLID COVER. THE NEW VALVE VAULT SHALL BE A PRECAST OR POURED IN PLACE CONCRETE VAULT WITH REMOVABLE TRAFFIC COVERS.
- THE ELECTRICAL POWER SERVICE AVAILABLE TO THE SITE SHALL BE VERIFIED PRIOR TO ORDERING THE PUMPS. THE ELECTRICAL CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH ALL APPLICABLE CODES. THE ELECTRICAL POWER TO THE PUMP LOCATION, SHALL BE PROVIDED BY OTHERS.
- THE OPERATION OF EACH PUMP SHALL BE CONTROLLED BY FLOAT SWITCHES TO AUTOMATICALLY START AND STOP THE PUMPS AT THE LEVELS SHOWN. THE PUMP STATION SHALL BE PROVIDED WITH A DUPLEX WEATHER PROOF CONTROL PANEL WITH A TWO PUMP ALTERNATOR FOR CONTROLLING THE LEAD AND LAG PUMPS.
- THE CONTRACTOR MAY SELECT AN ALTERNATIVE MANUFACTURER AND MODEL FOR THE PUMP, CHECK VALVE, FLOAT SWITCHED, AND OTHER ACCESSORIES. ALL OF THE PRODUCTS SHALL MEET THE CRITERIA AND REQUIREMENTS SPECIFIED ABOVE. DOCUMENTATION FROM THE MANUFACTURERS SHALL BE PROVIDED TO INDICATE THE MAKE AND MODEL OF THE PRODUCT IS SUITABLE FOR THIS INTENDED USE.

**MATERIAL LIST:**

- |                                    |                                       |
|------------------------------------|---------------------------------------|
| 1 SUBMERSIBLE NON-CLOG PUMP        | 7 6" X 6" X 2" WYE                    |
| 2 2" DISCHARGE PIPING              | 8 6" FORCE MAIN TO 19 ST.             |
| 3 6" X 4" X 2" REDUCER             | 9 PUMP BOX PER JENSEN PRECAST #D13636 |
| 4 2" CHECK VALVES                  | 10 VALVE VAULT BOX                    |
| 5 2" GLOBE VALVES (OR GATE VALVES) | 11 LIQUID LEVEL SENSORS               |
| 6 2" UNION (OR VICTAULOC COUPLING) | 12 CONTROL PANEL                      |

**SUMP PUMP GENERAL NOTES**

1  
N.T.S.



**CU Stormwater Products, Inc. CUDO Stormwater Infiltration System**  
 P.O. Box 497 Occidental, CA 95465  
 Ph. (877) 876-3345 Fax (707) 876-3346

**Typical Installation Detail**  
**Impermeable Pavement Area**

DO NOT SCALE DRAWING NONE SCALE: NONE  
 DRAWN: JPR DATE: 7/21/08  
 EDD: 0001 JPR 10/22/08 DRAWING NO: CUDO-IN-0001 REV: A SHEET 1 OF 1  
 N.T.S.

**Underground Service Alert**  
 Call: TOLL FREE 1-800-227-2600  
 TWO WORKING DAYS BEFORE YOU DIG

NO.	DATE	DESCRIPTION OF REVISION
1	06-03-11	REVISED DRAINAGE & PUMP PER FIELD CONDITION

PREPARED FOR:  
**CITY OF SANTA MONICA**  
 1685 MAIN ST.  
 SANTA MONICA, CA 90401  
 (310) 458-8411

PREPARED BY:  
**THE G4 GROUP INC.**  
 Consulting Engineers  
 165 EAST HIGH STREET, SUITE 203  
 MOORPARK, CA 93021  
 PHONE: (805) 523-0010 FAX: (805) 553-0626

CIVIL ENGINEER:  
 Mark Rogers  
 No. 42848 Exp. 03/10  
 CIVIL ENGINEER  
 STATE OF CALIFORNIA

**DETAIL SHEET**  
 1654 19TH STREET, SANTA MONICA  
 LOT 9, BLOCK 12, ERKENBRECHER SYNDICATE, M.B. 6-26/27  
 IN THE CITY OF SANTA MONICA, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

**Urban Runoff Mitigation Plan: Worksheet & Summary**

1. TYPE OF NEW DEVELOPMENT - Check the Appropriate Line Below  
 Check which threshold used: 514 cu. ft. Project Address: 1654 19TH STREET

2. CALCULATE TOTAL RUNOFF MITIGATION REQUIRED TO ACHIEVE 0.75 inch RAIN EVENT REDUCTION GOAL BY STORAGE VOLUME OR TREATMENT FLOW (WHICHEVER IS APPROPRIATE)

STORAGE VOLUME OPTION	0.0625 ft. x 2.5 (rock)	1225
7840	X OR	Planned Mitigation cu. ft. (rock)
Impervious Area sq. ft.*	0.0625 ft. x 1.05 (plastic)	514
0	X	Planned Mitigation cu. ft. (plastic)
Permeous Area sq. ft.	0.0625 ft.	Permeous Retention cu. ft.
(0.0625 ft. x 0.25 in. x 0.0833 ft./in.)		

TREATMENT FLOW OPTION

514	X	38
Planned Mitigation Volume cu. ft.	Treatment Flow Coefficient	Treatment Flow (gallons per minute)**

3. REQUIRED FIGURES FOR SUBMISSION WITH PLAN (These specific figures are kept confidential)

a. INCLUDE AREA OF PERMEABLE PAVING USED AS BMP (where applicable) N/A sq

b. INCLUDE TOTAL COST OR ESTIMATE OF BMP(S) (labor and materials) \$ 10,000

c. INCLUDE TOTAL PROJECT COSTS 1.4 Million

Runoff from all landscapes must be directed to the BMP.

4. LIST NAME(S) OF PROPOSED MITIGATION MEASURES OR BEST MANAGEMENT PRACTICES (BMP) TO BE USED (add attached sheets or drawings if necessary, examples include infiltration pit or drywell, Depression Basin, French Drain, Buffer or Landscapes see inset List of Approved BMPs or City water site under Engineering, Design page): Installation of a new drainage system, United Storm Water filter inserts in catch basins and CUDO's underground infiltration system.

5. EXPLAIN THE MAINTENANCE PLAN (searches, BMPs shall be inspected before and after rainy seasons, checking roof downspouts, visually checking overflow pipes, checking debris from gutters and downspouts, checking overflow curb openings of BMPs, maintaining the depressed areas, maintaining landscape above and around an infiltration pit, where applicable, Filter inserts & CUDO system are to be inspected and cleaned per manufacturer's recommendations but not less than once a month during the rainy season.

6. PROJECT PLAN INFORMATION

a. PROJECT ADDRESS IN SANTA MONICA: 1654 19TH STREET

b. PROPERTY OWNER NAME/ADDRESS/PHONE (if different than a): The City of Santa Monica

c. ALTERNATE ADDRESS DURING CONSTRUCTION (if different than a): N/A

d. CONTRACTOR NAME/ADDRESS/PHONE/FAX/E-MAIL NUMBERS: Not chosen at this time.

Anticipated Start Date: 10/2009 Estimated Project Completion Date: 10/2010  
 Report Prepared by: The G4 Group Inc. Date: 08/30/09  
 Architect or Engineer Name/Address/Phone/Fax/E-Mail Numbers: The G4 Group Inc., 165 E. High Street, #203 Moorpark CA. 93021

I hereby agree that I will complete all runoff mitigation measures described herein and/or in the approved plans prior to completion of the project. The City of Santa Monica has no responsibility or liability for any urban runoff mitigation measures, i.e. BMP, installed to comply with the urban runoff requirements at this project address. I agree that I have consulted with appropriate professionals regarding the size and suitability of the BMP that I have selected for the specific conditions present at my site. I further agree to maintain any BMP(s) on my property for as long as I own this property.

Property Owner or Authorized Representative  
 Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
 Print Name/Title: President  
 City Reviewer: \_\_\_\_\_ Date: \_\_\_\_\_ PC# \_\_\_\_\_

You need to call the City's Urban Runoff Management Coordinator before completion of your BMP so that the BMP can be inspected for approval. You will NOT receive a Certificate of Occupancy without this approval. For this and for more information about the Santa Monica Urban Runoff Ordinance, call (310) 458-8223. For engineering questions, call (310) 458-8721.

**Urban Runoff Mitigation Plan: Worksheet & Summary continued**

3. REQUIRED FIGURES FOR SUBMISSION WITH PLAN (These specific figures are kept confidential)

(attach drawings if available)

a. INCLUDE AREA OF PERMEABLE PAVING USED AS BMP (where applicable) N/A sq

b. INCLUDE TOTAL COST OR ESTIMATE OF BMP(S) (labor and materials) \$ 10,000

c. INCLUDE TOTAL PROJECT COSTS 1.4 Million

Runoff from all landscapes must be directed to the BMP.

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5. EXPLAIN THE MAINTENANCE PLAN (searches, BMPs shall be inspected before and after rainy seasons, checking roof downspouts, visually checking overflow pipes, checking debris from gutters and downspouts, checking overflow curb openings of BMPs, maintaining the depressed areas, maintaining landscape above and around an infiltration pit, where applicable, Filter inserts & CUDO system are to be inspected and cleaned per manufacturer's recommendations but not less than once a month during the rainy season.

6. PROJECT PLAN INFORMATION

a. PROJECT ADDRESS IN SANTA MONICA: 1654 19TH STREET

b. PROPERTY OWNER NAME/ADDRESS/PHONE (if different than a): The City of Santa Monica

c. ALTERNATE ADDRESS DURING CONSTRUCTION (if different than a): N/A

d. CONTRACTOR NAME/ADDRESS/PHONE/FAX/E-MAIL NUMBERS: Not chosen at this time.

Anticipated Start Date: 10/2009 Estimated Project Completion Date: 10/2010  
 Report Prepared by: The G4 Group Inc. Date: 08/30/09  
 Architect or Engineer Name/Address/Phone/Fax/E-Mail Numbers: The G4 Group Inc., 165 E. High Street, #203 Moorpark CA. 93021

I hereby agree that I will complete all runoff mitigation measures described herein and/or in the approved plans prior to completion of the project. The City of Santa Monica has no responsibility or liability for any urban runoff mitigation measures, i.e. BMP, installed to comply with the urban runoff requirements at this project address. I agree that I have consulted with appropriate professionals regarding the size and suitability of the BMP that I have selected for the specific conditions present at my site. I further agree to maintain any BMP(s) on my property for as long as I own this property.

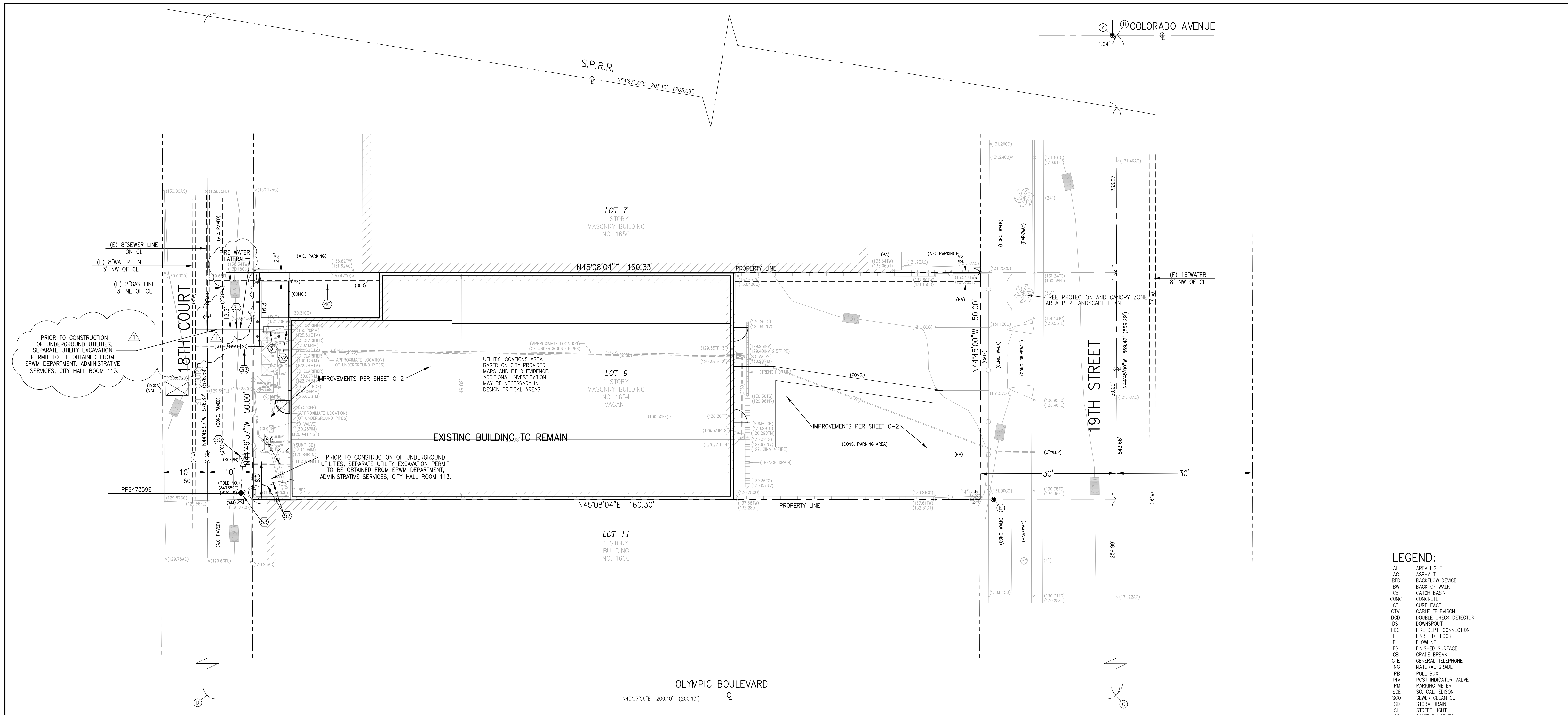
Property Owner or Authorized Representative  
 Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
 Print Name/Title: President  
 City Reviewer: \_\_\_\_\_ Date: \_\_\_\_\_ PC# \_\_\_\_\_

You need to call the City's Urban Runoff Management Coordinator before completion of your BMP so that the BMP can be inspected for approval. You will NOT receive a Certificate of Occupancy without this approval. For this and for more information about the Santa Monica Urban Runoff Ordinance, call (310) 458-8223. For engineering questions, call (310) 458-8721.

**URBAN RUNOFF WORKSHEET**

REVIEWED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 DRAWN BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

**C-3**  
 JOB NO. 0930  
 RELEASE DATE: JUNE 2010



PRIOR TO CONSTRUCTION OF UNDERGROUND UTILITIES, SEPARATE UTILITY EXCAVATION PERMIT TO BE OBTAINED FROM EPWM DEPARTMENT, ADMINISTRATIVE SERVICES, CITY HALL ROOM 113.

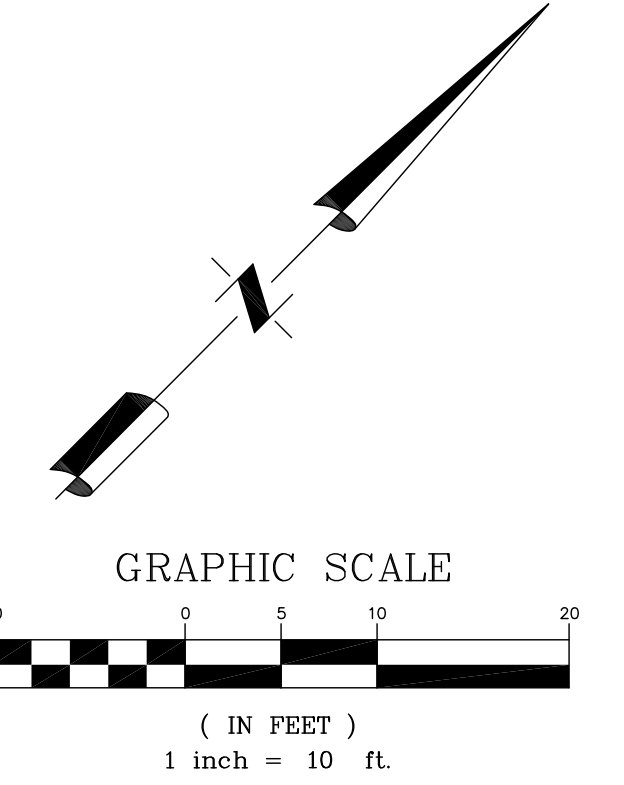
PRIOR TO CONSTRUCTION OF UNDERGROUND UTILITIES, SEPARATE UTILITY EXCAVATION PERMIT TO BE OBTAINED FROM EPWM DEPARTMENT, ADMINISTRATIVE SERVICES, CITY HALL ROOM 113.

UTILITY LOCATIONS AREA BASED ON CITY PROVIDED MAPS AND FIELD EVIDENCE. ADDITIONAL INVESTIGATION MAY BE NECESSARY IN DESIGN CRITICAL AREAS.

EXISTING BUILDING TO REMAIN

IMPROVEMENTS PER SHEET C-2

- LEGEND:**
- AL AREA LIGHT
  - AC ASPHALT
  - BFD BACKFLOW DEVICE
  - BW BACK OF WALK
  - CB CATCH BASIN
  - CONC CONCRETE
  - CF CURB FACE
  - CTV CABLE TELEVISION
  - DDO DOUBLE CHECK DETECTOR
  - DS DOWNSPOUT
  - FDC FIRE DEPT. CONNECTION
  - FF FINISHED FLOOR
  - FL FLOWLINE
  - FS FINISHED SURFACE
  - GB GRADE BREAK
  - GTG GENERAL TELEPHONE
  - NG NATURAL GRADE
  - PB PULL BOX
  - PV POST INDICATOR VALVE
  - PM PARKING METER
  - SCE SO. CAL. EDISON
  - SCO SEWER CLEAN OUT
  - SD STORM DRAIN
  - SL STREET LIGHT
  - SS SANITARY SEWER
  - TC TOP OF CURB
  - TS TRAFFIC SIGNAL
  - TW TOP OF WALL
  - WM WATER METER
  - WV WATER VALVE
  - YMR ELECTRIC TRANSFORMER
  - HYR FIRE HYDRANT
  - STR STREET SIGN
  - CONC. WHEEL STOP
  - CONC. BLOCK WALL
  - FOUND MONUMENT PER P.M. 89-185
  - (X) EXISTING
  - (X) EXISTING CONTOUR
  - X PROPOSED CONTOUR
  - X% → DIRECTION & RATE OF FLOW
  - PROPOSED ST. LIGHT PER CITY STD.
  - DIRECTION & RATE OF FLOW
  - PARKING LOT LIGHT PER ARCHITECT'S PLAN
  - EXISTING
  - (E) LIGHT DELINEATION SHOWN HEREON INDICATES EXISTING
  - BOLD DELINEATION SHOWN HEREON INDICATES PROPOSED CONST.
  - DETECTABLE WARNINGS PER ARCHITECT'S PLAN
  - T TRANSFORMER



- CONSTRUCTION NOTES: WATER**
- 50- CONSTRUCT FIRELINE IN RIGHT OF WAY PER WATER DEPT
  - 51- CONSTRUCT FDC AND DETECTOR CHECK PER SEPARATE FIRELINE PLANS AND PERMIT
  - 52- FIRE LINE LOCATION PER ARCHITECT AND FIRELINE CONSULTANT
  - 53- EXISTING WATER METER
- CONSTRUCTION NOTES: SEWER**
- 40- EXISTING SEWER LINE TO REMAIN
- CONSTRUCTION NOTES: ELECTRICAL**
- 50- EXISTING SCE PULL BOX TO REMAIN
  - 51- CONSTRUCT 2-4" DIA. CONDUITS FOR SCE ELECTRICAL SERVICE
  - 52- CONSTRUCT 2-4" CONDUITS ONE EACH FOR TIME WARNER AND VERIZON.
  - 53- PULLS TO COME OFF OF SCE POLE
  - 53- EXISTING SCE POWER POLE TO REMAIN

**CONTRACTOR NOTE:**  
GENERAL CONTRACTOR TO COORDINATE WITH THE CITY OF SANTA MONICA INFORMATION SYSTEMS DEPARTMENT FOR CITIES FIBER OPTIC CABLE LOCATION. PENETRATION OF FIBER OPTIC CABLE AT WEST FACING SIDE OF STRUCTURE. GENERAL CONTRACTOR SHALL PROVIDE CORING OF CMU WHERE FIBER OPTIC ENTERS STRUCTURE.

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**Underground Service Alert**

Call: TOLL FREE  
1-800-227-2600

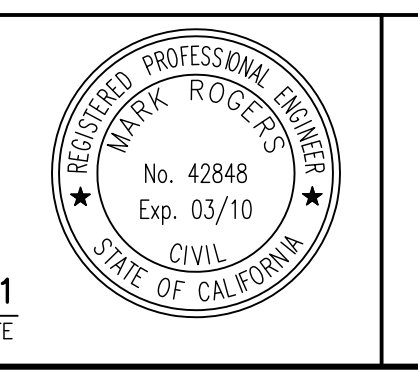
TWO WORKING DAYS BEFORE YOU DIG

NO.	DATE	DESCRIPTION OF REVISION
1	06-03-11	REVISED FIRE LINE PER FIELD CONDITION

PREPARED FOR:  
CITY OF SANTA MONICA  
1685 MAIN ST.  
SANTA MONICA, CA 90401  
(310) 458-8411

PREPARED BY:  
**THE G4 GROUP INC.**  
Consulting Engineers  
165 EAST HIGH STREET, SUITE 203  
MOORPARK, CA 93021  
PHONE: (805) 523-0010 FAX: (805) 553-0626

CIVIL ENGINEER:  
*Mark Rogers*  
MARK ROGERS No. 42848 Exp. 03/10  
R.C.E. NO. DATE



**UTILITY PLAN**  
1654 19TH STREET, SANTA MONICA  
LOT 9, BLOCK 12, ERKENBRECHER SYNDICATE, M.B. 6-26/27  
IN THE CITY OF SANTA MONICA, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

REVIEWED BY: DATE  
DRAWN BY: DATE  
CHECKED BY: DATE

**C-4**  
JOB NO. 0930  
RELEASE DATE: JUNE 2011

**FOR CONSTRUCTION 06-09-11**