

BUREAU OF ENGINEERING  
DEPARTMENT OF PUBLIC WORKS  
CITY OF LOS ANGELES

GRANADA HILLS POOL AND BATHHOUSE REPLACEMENT PROJECT

THE CITY OF LOS ANGELES OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.



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CONTACT: NICK WANG  
(818) 840-0280

PLUMBING ENGINEER:

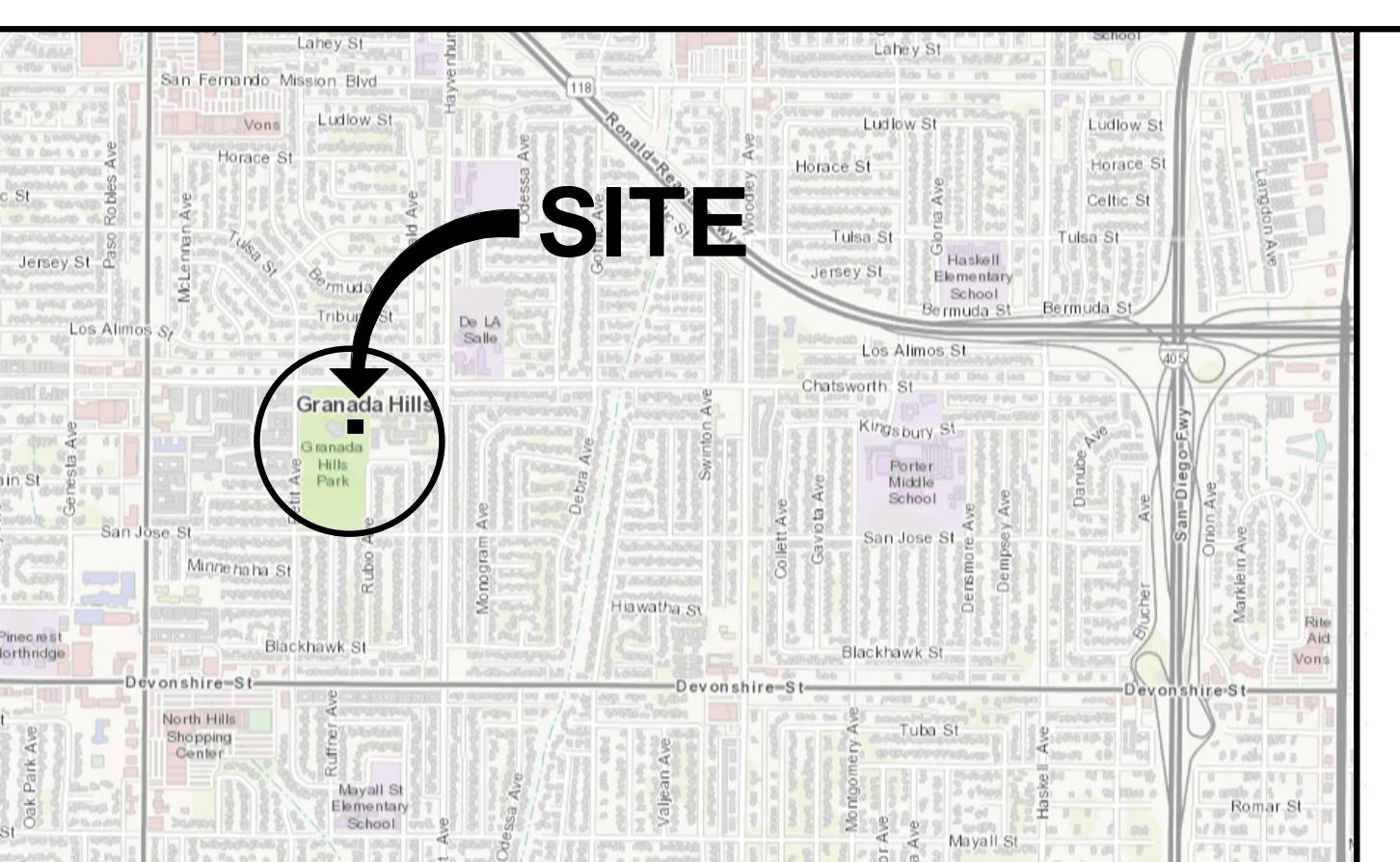
**MAROKO & SHWE, INC.**  
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CARLSBAD, CA 92008  
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**SITE**

**PROJECT ISSUE DATE: 06/22/21**  
**CITY OF LOS ANGELES**  
HORIZONTAL CONTROL:  
VERTICAL CONTROL:  
SHEET TITLE: COVER SHEET  
PROJECT: GRANADA HILLS POOL AND BATHHOUSE  
ADDRESS: 16730 CHATSWORTH STREET  
GRANADA HILLS, CA 91344  
WORK ORDER NO.: #E170517  
PLAN FILE NO.: #308  
DRAWING NO.: G0.10  
SHEET NO. TO SHEETS  
NOT TO SCALE  
PLOTTED 8/18/2020 1:25:32 PM

BUREAU OF ENGINEERING	
DATE BY	
PROFESSIONAL ENGINEER	
REGISTERED PROFESSIONAL ENGINEER No. C-3446	*
GRADE LINE NO.:	
WORK ACCEPTED: ----	SERIAL NO. ----
INDEX NO.	BUILDING NO. ----
RP-300118	

DEPARTMENT OF PUBLIC WORKS	
CITY ENGINEER	REVISION DESCRIPTION
GARY LEE MOORE, PE, ENV SP	
ACCEPTED BY:	
JULIA H. F.	Engineering Supervisor by phone. Werneke
DEPT. CITY ENGINEER/PROGRAM MANAGER	9/13/2021
GARY LEE MOORE	Engineering Manager 2006
CITY ENGINEER	09/14/2021

CITY OF LOS ANGELES	
PROJECT: GRANADA HILLS POOL AND BATHHOUSE	COVER SHEET
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## SCOPE OF WORK

- BATHHOUSE BUILDING RENOVATION-PERMIT # 18014-10001-06569
  - DEMOLITION OF EXISTING INTERIOR WALLS, ELECTRICAL DEVICES, FIXTURES, AND JUNCTION BOXES, WITH ASSOCIATED CONDUIT AND CONDUCTORS, PLUMBING FIXTURES WITH ASSOCIATED LINES AND VALVES, CONCRETE FLOOR, AND CEILINGS AS DESCRIBED WITHIN THE ATTACHED DOCUMENTS.
  - DEMOLITION OF EXISTING FOOR DECK AND SHINGLES.
  - NEW CONSTRUCTION AS DESCRIBED WITHIN THE ATTACHED DOCUMENTS.
- SWIMMING POOL AND DECKING REPLACEMENT
  - DEMOLITION OF EXISTING POOL, CONCRETE DECKING, STORMDRAIN CATCHBASINS AND ASSOCIATED LINES UNDERNEATH INCLUDING ELECTRICAL CONDUIT AND CONDUCTORS UNDERNEATH DECK AS DESCRIBED WITHIN THE ATTACHED DOCUMENTS.
  - NEW SWIMMING POOL AND SPLASH PAD-UNDER SUPPLEMENTAL PERMIT TO # 18014-10001-06569
  - NEW CONSTRUCTION AS DESCRIBED WITHIN THE ATTACHED DOCUMENTS.
- POOL EQUIPMENT BUILDING REPLACEMENT
  - DEMOLITION OF EXISTING POOL EQUIPMENT BUILDING IN ITS ENTIRETY, INCLUDING FOOTINGS AND FOUNDATIONS- UNDER SEPARATE PERMIT# 19019-10000-00213.
  - STRUCTURAL BACK FILL FOR NEW CONSTRUCTION AS DESCRIBED WITHIN THE ATTACHED DOCUMENTS
  - NEW CONSTRUCTION- UNDER PERMIT# 18010-10000-05541- AS DESCRIBED WITHIN THE ATTACHED DOCUMENTS.
- PROVIDE NEW, PROPERLY DRAINING FLOOR FOR POOL DECK AND WITHIN BUILDINGS.
- NEW SHADE CANOPY STRUCTURES- UNDER PERMIT# 18010-10000-05542
- MECHANICAL, PLUMBING AND ELECTRICAL UNDER SEPARATE PERMITS.

## GENERAL NOTES

- ALL WORK SHALL CONFORM TO & BE IN FULL & COMPLETE COMPLIANCE WITH CITY OF LOS ANGELES STANDARDS, REGULATIONS, ORDINANCES, AND ADOPED CODES.
- THE CONTRACTOR SHALL VERIFY DIMENSIONS AND EXISTING CONDITIONS AT THE PROJECT SITE PRIOR TO BID SUBMITTAL AND START OF CONSTRUCTION. CONTRACTOR SHALL NOTIFY SPARANO + MOONEY ARCHITECTURE OF ANY DISCREPANCIES FOR CLARIFICATIONS.
- CONTRACTOR IS TO NOTIFY SPARANO + MOONEY ARCHITECTURE IF IT IS DETERMINED THAT THERE ARE CONFLICTS THAT PREVENT THE EXECUTION OF THE CONSTRUCTION DOCUMENTS AS DRAWN.
- IF CONTRADICTIONS ARE FOUND WITHIN THE DESIGN, THE CONTRACTOR SHALL BID THE MORE EXPENSIVE OPTION AND SUBMIT THIS FINDING TO THE ARCHITECT AS PART OF THE BID FOR REVIEW.
- THE CONTRACTOR SHALL IDENTIFY CRITICAL DUE DATES FOR OWNER SELECTIONS TO BE PURCHASED AND INSTALLED BY THE CONTRACTOR.
- CONTRACTOR SHALL PROVIDE PROTECTION DURING CONSTRUCTION INCLUDING WITHOUT LIMITATION IN ACCORDANCE WITH THE CODES & REGULATIONS OF GOVERNING AGENCY.
- CONTRACTOR SHALL NOT SCALE THE DRAWINGS. DIMENSIONS OF THE FLOOR PLANS ARE SHOWN TO FACE OF STUD AND OUTSIDE OF FOUNDATION SILL UNLESS NOTED OTHERWISE.
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS & COMPLY WITH SAMPLE SUBMITTAL REQUIREMENTS AS REQUIRED BY SPECIFICATIONS.
- CONTRACTORS SHALL BE RESPONSIBLE FOR CORRECTION OF WORK AT THEIR OWN EXPENSE FOR WORK INSTALLED IN CONFLICT WITH THE CONSTRUCTION DOCUMENTS.
- CONTRACTOR SHALL CHECK & VERIFY SIZE & LOCATION OF DUCT OPENINGS & PLUMBING RUNS WITH MECHANICAL CONTRACTOR BEFORE POURING CONCRETE SLAB OR FRAMING SAID OPENINGS. DUCT OPENINGS IN FIRE RATED WALLS SHALL HAVE FIRE DAMPERS. SEAL BETWEEN DUCTS & PARTITION WHERE REQUIRED.
- CONTRACTOR SHALL PROVIDE AND LOCATE ACCESS PANELS AS REQUIRED AFTER INSTALLATION OF MECHANICAL DUCTS, PLUMBING AND ELECTRICAL WORK. SPARANO + MOONEY ARCHITECTURE SHALL APPROVE LOCATION PRIOR TO INSTALLATION.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY BLOCKING, STIFFENERS, BRACING, FRAMING, HANGERS, OR OTHER SUPPORT FOR ALL FIXTURES, EQUIPMENT, CABINETRY, FURNISHINGS AN ALL OTHER ITEM REQUIRING THE SAME.
- CONTRACTOR SHALL COORDINATE THE INSTALLATION OF OWNER PURCHASED APPLIANCES AND EQUIPMENT WITH ADJACENT ASSOCIATED WORK SUCH AS BUT NOT LIMITED TO CABINETRY, FRAMING, LIGHTING, AND WASTE AND DRAINAGE PIPING.
- FIRE RESISTANT CONSTRUCTION REQUIREMENTS SHALL BE ADHERED TO. OCCUPANCY SEPARATIONS & OPENINGS IN SEPARATION SHALL CONFORM TO APPLICABLE CODES (SEE COVER SHEET).
- GLAZED OPENINGS WITHIN 40" OF THE DOOR LOCK WHEN THE DOOR IS IN THE CLOSED POSITION SHALL BE FULLY TEMPERED.
- Glass doors, adjacent panels and all glazed panels within 18" of the floor, shall be tempered glass or other building code accepted safety glass.
- Provide flashing and counter flashing at all exterior openings that are exposed to the weather and all valley's ridges, and jucitons between exposed horizontal and vertical surfaces.
- All wood in direct contact with concrete shall be pressure treated with an approved preservative.
- All excavation and grading work shall comply with the building code.
- Swinging doors and windows to the exterior or to unconditioned spaces shall be fully weatherstripped, or otherwise treated to limit air infiltration.
- Contractor shall coordinate size and location of light fixtures before framing ceilings.
- Provide shop drawings as required by specifications on this sheet.
- Clean up jobsite, remove debris & trash on daily basis.
- Maintain an orderly, clean, safe and efficient jobsite at all times.
- At completion of job, contractor shall provide final cleaning for all new and any existing surfaces prior to re-opening in addition to providing jobsite security fencing.

## LADBS GENERAL REQUIREMENTS

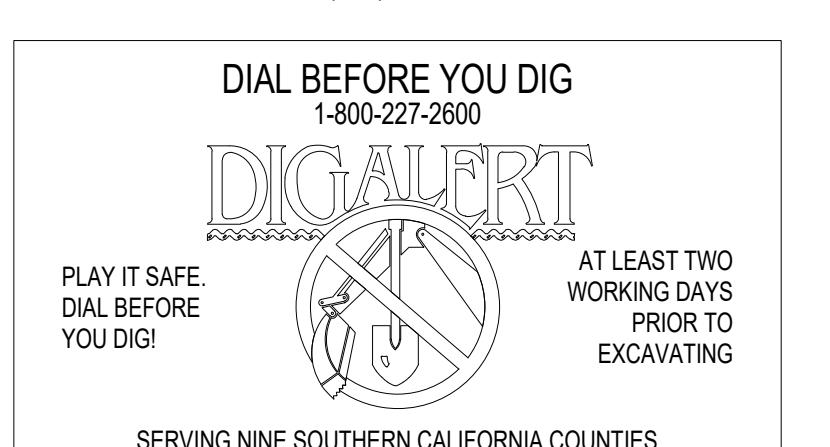
- SKYLIGHTS SHALL COMPLY WITH AN APPROVED ICC EVALUATION REPORT OR LOS ANGELES CITY RESEARCH REPORT. UNIT SKYLIGHTS SHALL BE LABELED BY AN LA CITY APPROVED LABELING AGENCY. SUCH LABEL SHALL STATE THE APPROVED LABELING AGENCY NAME, PRODUCT DESIGNATION AND PERFORMANCE GRADE RATING (SEEREACH REPORT NOT REQUIRED) 2405.5
- THE CONSTRUCTION SHALL NOT RESTRICT A FIVE-FOOT CLEAR AND UNOBSTRUCTED ACCESS TO ANY WATER OR POWER DISTRIBUTION FACILITIES (POWER POLES, PULL BOXES, TRANSFORMERS, VAULTS, PUMPS, VALVES, METERS, APPURTENANCES, ETC.) OR TO THE LOCATION OF THE HOOK-UP. THE CONSTRUCTION SHALL NOT BE WITHIN TEN FEET OF ANY POWER POLES, PULL BOXES, TRANSFORMERS, VAULTS, PUMPS, VALVES, METERS, APPURTENANCES, ETC. THAT ARE LOCATED ON THE PROPERTY. FAILURE TO COMPLY MAY CAUSE CONSTRUCTION DELAYS AND/OR ADDITIONAL EXPENSES.
- AN APPROVED SEISMIC GAS SHUTOFF VALVE WILL BE INSTALLED ON THE FUEL GAS LINE ON THE DOWNSTREAM SIDE OF THE UTILITY METER AND BE RIDIGLY CONNECTED TO THE EXTERIOR OF THE BUILDING OR STRUCTURE CONTAINING THE FUEL GAS PIPING. (PER ORDINANCE 170,158) (INCLUDES COMMERCIAL ADDITIONS AND TI WORK OVER \$10,000) SEPARATE PERMIT IS REQUIRED.
- PROVIDE ULTRA-LLOW FLUSH WATER CLOSETS FOR ALL NEW CONSTRUCTION. EXISTING SHOWER HEADS AND TOILETS MUST BE ADAPTED FOR LOW WATER CONSUMPTION.
- A COPY OF THE EVALUATION REPORT AND/OR CONDITIONS OF LISTING SHALL BE MADE AVAILABLE ON THE JOB SITE.

## LADBS MEANS OF EGREES

- EXIT SIGNS SHALL BE INTERNALLY OR EXTERNALLY ILLUMINATED.
- EXIT SIGNS ILLUMINATED BY AN EXTERNAL SOURCE SHALL HAVE AN INTENSITY OF NOT LESS THAN 5 FOOT CANDLES (54 LUX).
- INTERNALLY ILLUMINATED SIGNS SHALL BE LISTED AND LABELED AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND SECTION 2702.
- EXIT SIGNS SHALL BE ILLUMINATED AT ALL TIMES.(1013.3)
- EXIT SIGNS SHALL BE CONNECTED TO AN EMERGENCY POWER SYSTEM THAT WILL PROVIDE ILLUMINATION OF NOT LESS THAN 90 MINUTES OF PRIMARY POWER LOSS (1013.6.3)
- EGRES DOORS SHALL BE READILY OPENABLE FROM THE EGRES SIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT. SEE 1013.9.3 FOR EXCEPTIONS.
- DOOR HANDLES, LOCK AND OTHER OPERATING DEVICES SHALL BE INSTALLED AT MIN. 34" AND A MAX. 48" ABOVE THE FINISHED FLOOR.
- THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED.
- ALL EGRES DOOR OPERATION SHALL ALSO COMPLY WITH SECTION 1010.1.9 AND 1010.9.12.
- THE MEANS OF EGRES, INCLUDING THE EXIT DISCHARGE, SHALL BE ILLUMINATED AT ALL TIMES THE BUILDING SPACE SERVED BY THE MEANS OF EGRES IS OCCUPIED.
- THE MEANS OF EGRES ILLUMINATION LEVEL SHALL NOT BE LESS THAN 1 FOOT-CANDLE AT THE WALKING SURFACE.
- THE POWER SUPPLY FOR MEANS OF EGRES ILLUMINATION SHALL NORMALLY BE PROVIDED BY THE PREMISES/ELECTRICAL SUPPLY. IN THE EVENT OF POWER SUPPLY FAILURE, AN EMERGENCY ELECTRICAL SYSTEM SHALL AUTOMATICALLY ILLUMINATE THE FOLLOWING AREAS:
  - ANGLES AND UNENCLOSED EGRES STAIRWAYS IN ROOMS AND SPACES THAT REQUIRE TWO OR MORE MEANS OF EGRES.
  - CORRIDORS, EXIT ENCLOSURES AND EXIT PASSAGeways IN BUILDINGS REQUIRED TO HAVE TWO OR MORE EXITS.
  - INTERIOR EXIT DISCHARGE ELEMENTS, AS PERMITTED IN SECTION 1028.1, IN BUILDINGS REQUIRED TO HAVE TWO OR MORE EXITS.
  - EXTERIOR LANDINGS, AS REQUIRED BY SECTION 1010.1.6, FOR EXIT DISCHARGE DOORWAYS IN BUILDINGS REQUIRED TO HAVE TWO OR MORE EXITS.
- THE EMERGENCY POWER SYSTEM SHALL PROVIDE POWER FOR A DURATION OF NOT LESS THAN 90 MINUTES AND SHALL CONSIST OF STORAGE BATTERIES, UNIT EQUIPMENT OR AN ON-SITE GENERATOR. THE INSTALLATION OF THE EMERGENCY POWER SYSTEM SHALL BE IN ACCORDANCE WITH SECTION 2702.
- IF THE EMERGENCY POWER SYSTEM IS NOT PROVIDED, THE CONTRACTOR SHALL PROVIDE INITIAL ILLUMINATION THAT IS AT LEAST AN AVERAGE OF 1 FOOT-CANDLE (11 LUX) AND A MINIMUM AT ANY POINT OF 0.1 FOOT CANDLE (.1 LUX) MEASURED ALONG THE PATH OF EGRES AT FLOOR LEVEL. ILLUMINATION LEVELS SHALL BE PERMITTED TO DECLINE TO 0.6 FOOT-CANDLE (.6 LUX) AVERAGE AND A MINIMUM AT ANY POINT OF 0.06 FOOT-CANDLE (.06 LUX) AT THE END OF THE EMERGENCY LIGHTING TIME DURATION. A MAXIMUM-TO-MINIMUM ILLUMINATION UNIFORMITY RATIO OF 40 TO 1 SHALL NOT BE EXCEEDED.

## BUILDING NOTES

- NO HAZARDOUS MATERIALS TO BE STORED AND/ OR USED WITHIN THE BUILDING
- CALL DIG ALERT BEFORE ANY TRENCHING (800) 227-2600



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- S0.03 GENERAL NOTES

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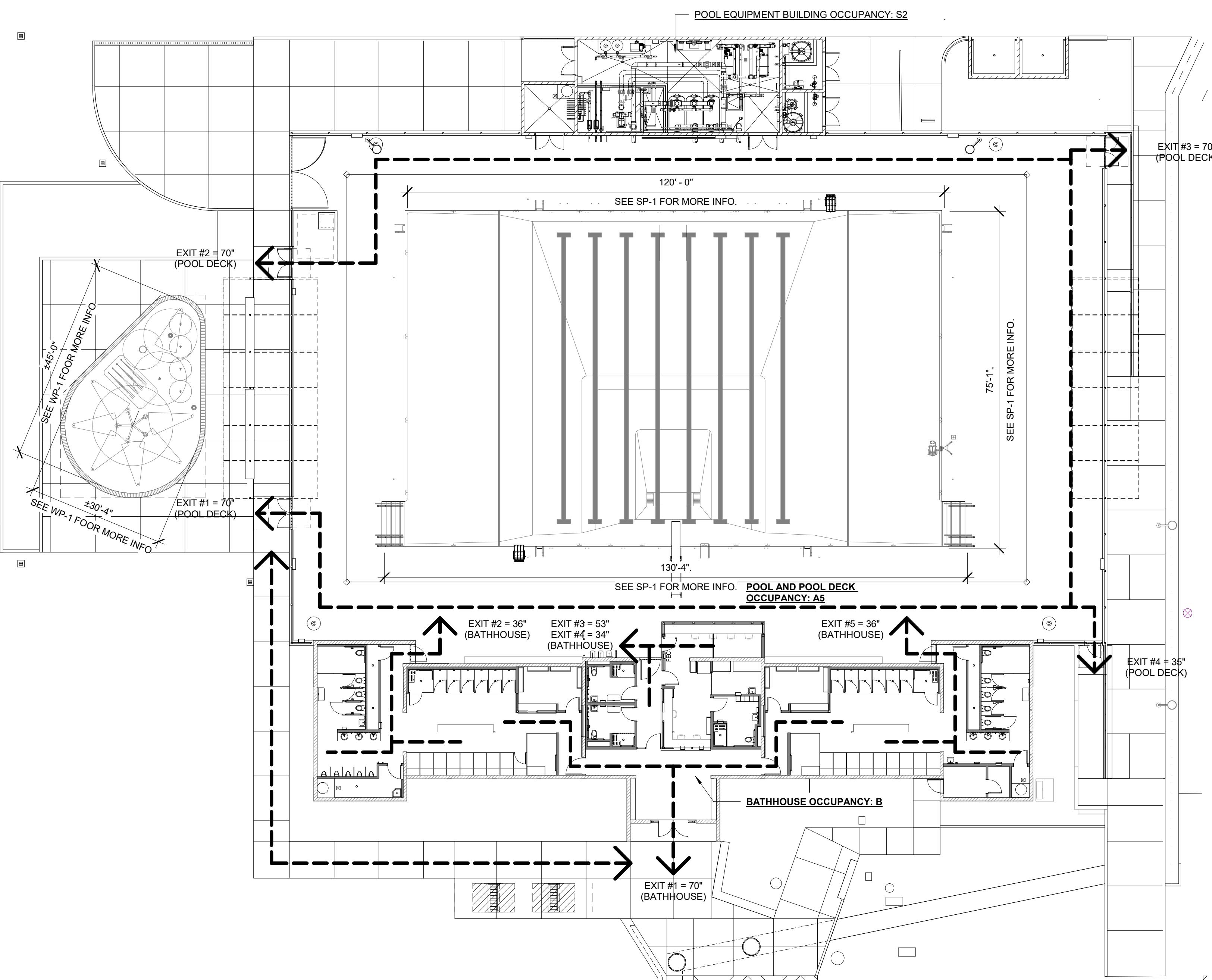
- S1.02 TYPICAL DETAILS

- S1.03 TYPICAL DETAILS

- ELECTRICAL MUSCO LIGHTING

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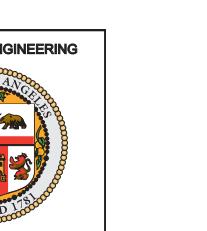
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**FACILITY FLOOR PLAN-EGRESS**  
**1/16" = 1'-0"**

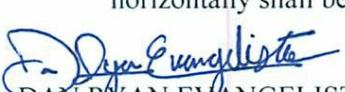
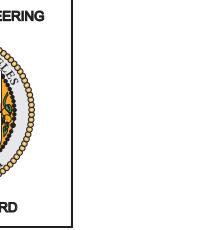
# MEANS OF EGRESS NOTES

- EXIT SIGNS SHALL BE INTERNALLY OR EXTERNALLY ILLUMINATED..  
EXIT SIGNS ILLUMINATED BY AN EXTERNAL SOURCE SHALL HAVE AN INTENSITY OF NOT LESS THAN 5 FOOT CANDLES (54 lux).  
INTERNALLY ILLUMINATED SIGNS SHALL BE LISTED AND LABELED AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND SECTION 2702.  
EXIT SIGNS SHALL BE ILLUMINATED AT ALL TIMES. (1013.3)  
EXIT SIGNS SHALL BE CONNECTED TO AN EMERGENCY POWER SYSTEM THAT WILL PROVIDE AN ILLUMINATION OF NOT LESS THAN 90 MIN. IN CASE OF PRIMARY POWER LOSS (1013.6.3)  
EGRESS DOORS SHALL BE READILY OPENABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT. SEE 1010.1.9.3 FOR EXCEPTIONS.  
DOOR HANDLES, LOCK AND OTHER OPERATING DEVICES SHALL BE INSTALLED AT A MIN. 34" AND A MAX. 48" ABOVE THE FINISHED FLOOR.  
THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED.  
ALL EGRESS DOOR OPERATIONS SHALL ALSO COMPLY WITH SECTION 1010.1.9.9- 1010.1.9.12.  
THE MEANS OF EGRESS, INCLUDING THE EXIT DISCHARGE, SHALL BE ILLUMINATED AT ALL TIMES THE BUILDING SPACE SERVED BY THE MEANS OF EGRESS IS OCCUPIED.  
THE MEANS OF EGRESS ILLUMINATION LEVEL SHALL NOT BE LESS THAN 1 FOOT-CANDLE AT THE WALKING SURFACE.  
THE POWER SUPPLY FOR MEANS OF EGRESS ILLUMINATION SHALL NORMALLY BE PROVIDED BY THE PREMISES' ELECTRICAL SUPPLY. IN THE EVENT OF POWER SUPPLY FAILURE, AN EMERGENCY ELECTRICAL SYSTEM SHALL AUTOMATICALLY ILLUMINATE THE FOLLOWING AREAS:  
A. ISLES AND UNENCLOSED EGRESS STAIRWAYS IN ROOMS AND SPACES THAT REQUIRE TWO OR MORE MEANS OF EGRESS AND SPACES THAT REQUIRE TWO OR MORE MEANS OF EGRESS. B. CORRIDORS, EXIT ENCLOSURES AND EXIT PASSAGEWAYS IN BUILDING REQUIRED TO HAVE TWO OR MORE EXITS; C. EXTERIOR EGRESS COMPONENTS AT OTHER THAN THE LEVEL OF EXIT DISCHARGE UNTIL EXIT DISCHARGE IS ACCOMPLISHED FOR BUILDINGS REQUIRED TO HAVE TWO OR MORE EXITS. D. INTERIOR EXIT DISCHARGE ELEMENTS, AS PERMITTED IN SECTION 1028.1, IN BUILDINGS REQUIRED TO HAVE TWO OR MORE EXITS. E. EXTERIOR LANDINGS, AS REQUIRED BY SECTION 1010.1.6, FOR EXIT DISCHARGE DOORWAYS IN BUILDINGS REQUIRED TO HAVE TWO OR MORE EXITS.  
THE EMERGENCY POWER SYSTEM SHALL PROVIDE POWER FOR A DURATION OF NOT LESS THAN 90 MINUTES AND SHALL CONSIST OF STORAGE BATTERIES, UNIT EQUIPMENT OR AN ON-SITE GENERATOR. THE INSTALLATION OF THE EMERGENCY POWER SYSTEM SHALL BE IN ACCORDANCE WITH SECTION 2702.  
EMERGENCY LIGHTING FACILITIES SHALL BE ARRANGED TO PROVIDE INITIAL ILLUMINATION THAT IS AT LEAST AN AVERAGE OF 1 FOOT-CANDLE (11 lux) AND A MINIMUM AT ANY POINT OF 0.1 FOOT CANDLE ( 1 lux) MEASURED ALONG THE PATH OF EGRESS AT FLOOR LEVEL. ILLUMINATION LEVELS SHALL BE PERMITTED TO DECLINE TO 0.6 FOOT-CANDLE (6 lux) AVERAGE AND A ,IMI,U, AT ANY POINT OF 0.6 FOOT-CANDLE (0.6 lux) AT THE END OF THE EMERGENCY LIGHTING TIME DURATION. a MAXIMUM-TO-MINIMUM ILLUMINATION UNIFORMITY RATIO OF 40 TO 1 SHALL NOT BE EXCEEDED.



<b>PROJECT ISSUE DATE:</b> 06/22/21		<b>CITY OFF LOS ANG</b>	<b>VERTICAL CONTH</b>	<b>HORIZONTAL CO</b>	<b>SHEET TITLE: C</b>	<b>PROJECT: GI</b>	<b>RH</b>	<b>ADDRESS: 16</b>
WORK ORDER NO. <b>#E170517</b>								
PLAN FILE NO. <b>#308</b>								
DRAWING NO.								
<b>G0.21</b>								
<b>SHEET</b>			<b>F O</b>			<b>SHEET</b>		

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M	L	K	J	I	H	G	F	E	D	C	B	A	Z	Y	X	
<b>CITY OF LOS ANGELES</b> <b>CALIFORNIA</b>  <b>BOARD OF BUILDING AND SAFETY COMMISSIONERS</b> VAN AMBATELOS, President E. FELICIA BRANNON, Vice President JOSELYN GEAGA-ROSENTHAL, GEORGE HOVAGUIMAN, JAVIER NUNEZ  <b>DEPARTMENT OF BUILDING AND SAFETY</b> 201 NORTH FIGUEROA STREET LOS ANGELES, CA 90012  FRANK M. BUSH, General Manager SUPERINTENDENT OF BUILDING  ERIC GARCETTI, Mayor OSAMA YOUNAN, P.E., Executive Officer  <b>SOILS REPORT APPROVAL LETTER</b> November 9, 2017 LOG # 100428 SOILS/GEOLOGY FILE - 2 Department of Recreation and Parks 1149 S. Broadway, 8th floor Los Angeles, Ca 90015 TRACT: SUBDIVISION NO. 1 OF THE PROPERTY OF THE PORTER LAND AND WATER COMPANY (M R 31-3/6) LOT(S): 2 SEC 18 T2N R15W LOCATION: 16730 W CHATSWORTH ST CURRENT REFERENCE REPORT DATE(S) OF DOCUMENT PREPARED BY REPORT/LETTER(S) No. 08/22/2017 City of LA-GEO Soils Report 17-074 Geocon West, Inc. Laboratory Test Report A8950-06-12 07/31/2017 The Grading Division of the Department of Building and Safety has reviewed the referenced report that provide recommendations for the proposed swimming pool and shade structure. The proposed swimming pool is to replace an existing pool. The earth materials at the subsurface exploration locations consist of up to 6 feet of uncertified fill underlain by clay, sandy silt, and silt. The consultants recommend to support the proposed structure(s) on conventional foundation bearing on a blanket of compacted fill. The shade structure may be supported on conventional foundation and/or drilled-pile foundations bearing on native undisturbed. Engineering analyses provided by City of LA-GEO is based on field and laboratory testing performed by Geocor West, Inc. City of LA-GEO is accepting responsibility for use of the data in accordance to Code section 91.7008.5 of LABC. The referenced reports are acceptable, provided the following conditions are complied with during site development: (Note: Numbers in parenthesis () refer to applicable sections of the 2017 City of LA Building Code. P/BC numbers refer to the applicable Information Bulletin. Information Bulletins can be accessed on the internet at LADBS.ORG.) 1. The soils engineer shall review and approve the detailed plans prior to issuance of any permit. This approval shall be by signature on the plans that clearly indicates the soils engineer has reviewed the plans prepared by the design engineer and that the plans included the recommendations contained in his report. (7006.1)  LADBS G-5 (Rev.11/23/2016) AN EQUAL EMPLOYMENT OPPORTUNITY - AFFIRMATIVE ACTION EMPLOYER  Page 2 16730 W CHATSWORTH ST 2. All recommendations of the report(s) that are in addition to or more restrictive than the conditions contained herein shall be incorporated into the plans. 3. An on-site storm water infiltration system at the subject site shall not be implemented, as recommended. 4. A copy of the subject and appropriate referenced reports and this approval letter shall be attached to the District Office and field set of plans. Submit one copy of the above reports to the Building Department Plan Checker prior to issuance of the permit. (7006.1) 5. A grading permit shall be obtained for all structural fill and retaining wall backfill. (106.1.2) 6. All man-made fill shall be compacted to a minimum 90 percent of the maximum dry density of the fill material per the latest version of ASTM D 1557. Where cohesionless soil having less than 15 percent finer than 0.005 millimeters is used for fill, it shall be compacted to a minimum of 95 percent relative compaction based on maximum dry density (D1556). Placement of gravel in lieu of compacted fill is allowed only if complying with Section 91.7011.3 of the Code. (7011.3) 7. If import soils are used, no footings shall be poured until the soils engineer has submitted a compaction report containing in-place shear test data and settlement data to the Grading Division of the Department, and obtained approval. (7008.2) 8. Compacted fill shall extend beyond the footings a minimum distance equal to the depth of the fill below the bottom of footings or a minimum of two feet whichever is greater, except at locations where lateral over excavation is not possible (i.e., foundations adjacent to property lines or structures), in which case the foundations may be deepened to bear in native soils, as recommended (7011.3). 9. Existing uncertified fill shall not be used for support of footings, concrete slabs or new fill. (1809.2, 7011.3) 10. Drainage in conformance with the provisions of the Code shall be maintained during and subsequent to construction. (7013.12) 11. All loose foundation excavation material shall be removed prior to commencement of framing. Slopes disturbed by construction activities shall be restored. (7005.3) 12. The applicant is advised that the approval of this report does not waive the requirements for excavations contained in the State Construction Safety Orders enforced by the State Division of Industrial Safety. (3301.1) 13. Prior to the issuance of the permits, the soils engineer and/or the structural designer shall evaluate the surcharge loads used in the report calculations for the design of the retaining walls and shoring. If the surcharge loads used in the calculations do not conform to the actual surcharge loads, the soil engineer shall submit a supplementary report with revised recommendations to the Department for approval. 14. Uncharged temporary excavation may be cut vertical up to 5 feet. Excavations over 5 up to 10 feet shall be trimmed back at a uniform gradient not exceeding 1:1 (horizontal to vertical), from top to bottom of excavation, and excavations greater than 10 feet shall be trimmed back at a uniform gradient of 1.5:1, as recommended. 15. Footings supported on approved compacted fill or expansive soil shall be reinforced with a minimum of four (4) 1/2-inch diameter (#4) deformed reinforcing bars. Two (2) bars shall be placed near the bottom and two (2) bars placed near the top.  DRE/dre Log No. 100428 213-482-0480 cc: City of LA-GEO, Project Consultant Geocor West, Inc., Project Consultant VN District Office  DAN RYAN EVANGELISTA Structural Engineering Associate I  Page 3 16730 W CHATSWORTH ST 16. The foundation/slab design shall satisfy all requirements of the Information Bulletin P/BC 2014-116 "Foundation Design for Expansive Soils" (1803.5.3). 17. Pile caisson and/or isolated foundation ties are required by Code Sections 1809.13 and/or 1810.3.13. Exceptions and modification to this requirement are provided in Information Bulletin P/BC 2014-030. 18. When water is present in drilled pile holes, concrete shall be tremied from the bottom up to ensure minimum segregation of the mix and negligible turbulence of the water (1808.8.3) 19. Existing uncertified fill shall not be used for lateral support of deep foundation. (1810.2.1) 20. Slabs placed on approved compacted fill shall be at least 3 1/2 inches thick and shall be reinforced with 1/2-inch diameter (#4) reinforcing bars spaced maximum of 16 inches on center each way. 21. Concrete floor slabs placed on expansive soil shall be placed on a 4-inch fill of coarse aggregate or on a moisture barrier membrane. The slabs shall be at least 3 1/2 inches thick and shall be reinforced with 1/2-inch diameter (#4) reinforcing bars spaced maximum of 16 inches on center each way. 22. The seismic design shall be based on a Site Class D as recommended. All other seismic design parameters shall be reviewed by LADBS building plan check. 23. All retaining walls shall be provided with a standard surface backdrain system and all drainage shall be conducted to the street in an acceptable manner and in a non-erosive device. (7013.11) 24. With the exception of retaining walls designed for hydrostatic pressure, all retaining walls shall be provided with a subdrain system to prevent possible hydrostatic pressure behind the wall. Prior to issuance of any permit, the retaining wall subdrain system recommended in the soil report shall be incorporated into the foundation plan which shall be reviewed and approved by the soils engineer of record. (1805.4) 25. Installation of the subdrain system shall be inspected and approved by the soils engineer of record and the City grading/building inspector. (108.9) 26. Basement walls and floors shall be waterproofed/damp-proofed with an L.A. City approved "Below-grade" waterproofing/damp-proofing material with a research report number. (104.2.6) 27. Prefabricated drainage composites (Miradrain) (Geotextiles) may be only used in addition to traditionally accepted methods of draining retained earth. 28. The pool shall be designed for expansive soil conditions in accordance with Information Bulletin P/BC 2014-014. 29. The proposed swimming pool shall be designed for a freestanding condition. (1808.7.3) 30. Pool deck drainage shall be collected and conducted to an approved location via a non-erosive device. (7013.10) 31. All deck drainage shall be collected and conducted to an approved location in a non-erosive device. (7013.10) 32. All roof and pad drainage shall be conducted to the street in an acceptable manner. (7013.10) 33. All concentrated drainage shall be conducted in an approved device and disposed of in a manner approved by the LADBS. (7013.10)  DAN RYAN EVANGELISTA Structural Engineering Associate II  DRE/dre Log No. 105775 213-482-0480 cc: City of LA-GEO, Project Consultant VN District Office  Page 4 16730 W CHATSWORTH ST 34. The soils engineer shall inspect all excavations to determine that conditions anticipated in the report have been encountered and to provide recommendations for the correction of hazards found during grading. (7008 & 1705.6) 35. All friction pile or caisson drilling and installation shall be performed under the inspection and approval of the geologist and soils engineer. The geologist shall indicate the distance that friction piles or caissons penetrate into competent material in a written field memorandum. (1803.5.5, 1704.9) 36. Prior to the pouring of concrete, a representative of the consulting soils engineer shall inspect and approve the footing excavations. He/She shall post a notice on the job site for the LADBS Building Inspector and the Contractor stating that the work so inspected meets the conditions of the report, but that no concrete shall be poured until the City Building Inspector has also inspected and approved the footing excavations. A written certification to this effect shall be filed with the Grading Division of the Department upon completion of the work. (108.9 & 7008.2) 37. Prior to excavation, an initial inspection shall be called with LADBS Inspector at which time sequence of construction, pile installation, protection fences and dust and traffic control will be scheduled. (108.9.1) 38. Installation of shoring, underpinning, slot cutting excavations and/or pile installation shall be performed under the inspection and approval of the soils engineer and deputy grading inspector. (1705.6) 39. Prior to the placing of compacted fill, a representative of the soils engineer shall inspect and approve the bottom excavations. He/She shall post a notice on the job site for the City Grading Inspector and the Contractor stating that the soil inspected meets the conditions of the report, but that no fill shall be placed until the LADBS Grading Inspector has also inspected and approved the bottom excavations. A written certification to this effect shall be included in the final compaction report filed with the Grading Division of the Department. All fill shall be placed under the inspection and approval of the soils engineer. A compaction report together with the approved soil report and Department approval letter shall be submitted to the Grading Division of the Department upon completion of the compaction. In addition, an Engineer's Certificate of Compliance with the legal description as indicated in the grading permit and the permit number shall be included. (7011.3) 40. No footing/stab shall be poured until the compaction report is submitted and approved by the Grading Division of the Department.  DAN RYAN EVANGELISTA Structural Engineering Associate II  DRE/dre Log No. 105775 213-482-0480 cc: City of LA-GEO, Project Consultant VN District Office  Page 2 16730 W CHATSWORTH ST 3. Prior to the issuance of the permits, the soils engineer and/or the structural designer shall evaluate the surcharge loads used in the report calculations for the design of the retaining walls and shoring. If the surcharge loads used in the calculations do not conform to the actual surcharge loads, the soil engineer shall submit a supplementary report with revised recommendations to the Department for approval. 4. Temporary excavations that remove lateral support to the public way, adjacent property, or adjacent structures shall be supported by shoring or constructed using ABC slot cuts. Note: Lateral support shall be considered to be removed when the excavation extends below a plane projected downward at an angle of 45 degrees from the bottom of a footing of an existing structure, from the edge of the public way or an adjacent property. (3307.3) 5. Prior to the issuance of any permit that authorizes an excavation where the excavation is to be of a greater depth than are the walls or foundation of any adjoining building or structure and located closer to the property line than the depth of the excavation, the owner of the subject site shall provide the Department with evidence that the adjacent property owner has been given a 30-day written notice of such intent to make an excavation (3307.1). 6. The soils engineer shall review and approve the shoring plans prior to issuance of the permit (3307.3.2). 7. Shoring shall be designed for the lateral earth pressures specified in the section titled "Temporary Shoring" starting on page 2 of the 10/25/2018 report; all surcharge loads shall be included into the design. 8. Shoring shall be designed for a maximum lateral deflection of 1/2 inches, as recommended. 9. A shoring monitoring program shall be implemented to the satisfaction of the soils engineer. 10. Installation of shoring, slot cutting and/or pile excavations shall be performed under the inspection and approval of the soils engineer and deputy grading inspector (1705.6, 1705.8). 11. Retaining walls shall be designed for the lateral earth pressures specified in the section titled "Retaining Walls" starting on page 4 of the 10/25/2018 report. Note: All surcharge loads shall be included into the design. 12. Retaining walls higher than 6 feet shall be designed for lateral earth pressure due to earthquake motions as specified on page 10 of the 08/22/2017 report (1803.5.12).  DAN RYAN EVANGELISTA Structural Engineering Associate II  DRE/dre Log No. 105775 213-482-0480 cc: City of LA-GEO, Project Consultant VN District Office  Page 3 16730 W CHATSWORTH ST 3. An on-site storm water infiltration system at the subject site shall not be implemented, as recommended. 4. A copy of the subject and appropriate referenced reports and this approval letter shall be attached to the District Office and field set of plans. Submit one copy of the above reports to the Building Department Plan Checker prior to issuance of the permit. (7006.1) 5. A grading permit shall be obtained for all structural fill and retaining wall backfill. (106.1.2) 6. All man-made fill shall be compacted to a minimum 90 percent of the maximum dry density of the fill material per the latest version of ASTM D 1557. 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The Grading Division of the Department of Building and Safety has reviewed the referenced report that provide recommendations for the proposed infiltration system and exterior slab. The Department previously conditionally approved the above referenced reports dated 08/22/2017 and 10/25/2018 for the proposed swimming pool, shade structure, pool equipment building, concrete ramp, a lifeguard room addition, PV panels and security light poles in a letter dated 11/14/2018, Log #105775. Foundation recommendations are provided on page 2 of the 10/25/2018 report.																																															
The referenced reports are acceptable, provided the following conditions are complied with during site development:																																															
(Note: Numbers in parenthesis () refer to applicable sections of the 2020 City of LA Building Code. P/BC numbers refer to the applicable Information Bulletin. Information Bulletins can be accessed on the internet at LADBS.ORG.)																																															
<ol style="list-style-type: none"> <li>All conditions of the above referenced Department approval letter(s) shall apply except as specifically modified herein.</li> <li>Slabs placed on approved compacted fill shall be at least 3½ inches thick and shall be reinforced with ½-inch diameter (#4) reinforcing bars spaced a maximum of 16 inches on center each way.</li> </ol>																																															
LADBS G-5 (Rev. 12/17/2019) AN EQUAL OPPORTUNITY EMPLOYER - AFFIRMATIVE ACTION EMPLOYER																																															
<p>Page 2 16730 W CHATSWORTH ST</p> <p>3. Concrete floor slabs placed on expansive soil shall be placed on a 4-inch fill of coarse aggregate or on a moisture barrier membrane. The slabs shall be at least 3½ inches thick and shall be reinforced with ½-inch diameter (#4) reinforcing bars spaced a maximum of 16 inches on center each way.</p> <p>4. The infiltration facility design and construction shall comply with the minimum requirements specified in the Information Bulletin P/BC 2014-118.</p> <p>5. The infiltration system shall be constructed at the location shown on the drawing attached to the current report.</p> <p>6. The construction of the infiltration system shall be provided under the inspection and approval of the soils engineer.</p> <p>7. An overflow outlet shall be provided to conduct water to the street in the event that the infiltration system capacity is exceeded. (P/BC 2014-118)</p> <p>8. Approval for the proposed infiltration system from the Bureau of Sanitation, Department of Public Works shall be secured.</p> <p>9. A minimum distance of 10 feet (in any direction) shall be provided from adjacent proposed/existing footings to the discharge of the proposed infiltration system. A minimum distance of 10 feet horizontally shall be provided from private property lines to the proposed infiltration system.</p> <p> DAN RYAN EVANGELISTA Structural Engineering Associate III</p> <p>Log No. 112389 213-482-0480</p> <p>cc: City of LA-GEO, Project Consultant VN District Office</p>																																															
<p><b>BUREAU OF ENGINEERING</b>    OFFICIAL RECORD</p> <p><b>PROJECT ISSUE DATE: 06/22/21</b></p> <p><b>PROJECT: GRANADA HILLS POOL AND BATHHOUSE REPLACEMENT PROJECT</b></p> <p><b>ADDRESS: 16730 CHATSWORTH STREET, GRANADA HILLS, CA 91344</b></p> <p><b>WORK ORDER NO: #E170517</b></p> <p><b>PLAN FILE NO.</b></p> <p><b>DRAWING NO. G0.23</b></p> <p><b>SHEET P.O. SHEETS</b></p>																																															

# ARCHITECTURAL ABBREVIATIONS

A.B.	ANCHOR BOLT	E.O.C.	EMERGENCY OPERATIONS CENTER	M.B.	MACHINE BOLT	SL	SLOPE
ABV	ABOVE	EQ	EQUAL	MAT'L	MATERIAL	S.L.D.	SEE LANDSCAPE DRAWINGS
A.C.	ASPHALTIC CONCRETE	EQUIP	EQUIPMENT	MAX	MAXIMUM	S.M.	sheet metal
ACOUS	ACOUSTICAL	ETC	ET CETERA	MDL	MODEL	S.M.D.	SEE MECHANICAL DRAWINGS
ACT	ACOUSTICAL CEILING TILE	E.W.C.	ELECTRIC WATER COOLER	MECH	MECHANICAL	SPEC	SPECIFICATIONS
ADJ	ADJUSTABLE, ADJACENT	EXH	EXHAUST	MED	MEDIUM	S.P.D.	SEE PLUMBING DRAWINGS
A.F.	ACCESS FLOORING	EXP'D	EXPOSED	MFR	MANUFACTURER	SQ	SQUARE
AFF	ABOVE FINISH FLOOR	EXT	EXTERIOR	MFRD	MANUFACTURED	S.R.F.	sheet rubber flooring
ALUM	ALUMINUM	FD	FLOOR DRAIN	MIN	MINIMUM	S.S.	stainless steel
ANOD	ANODIZED	F.E.	FIRE EXTINGUISHER	MOUNT	MOUNTED	S.S.D.	see structural drawings
A.P.	ACCESS PANEL	FEC	FIRE EXTINGUISHER CABINET	M.R.G.B.	MOISTURE RESISTANT GYP BD	ST	STONE
ARCH	ARCHITECTURAL	FF	FINISH FLOOR	M.S.	MAGNETIC SWITCH	STD	STANDARD
ASPH	ASPHALT	F.G.	FINISH GRADE	MTL	METAL	S.T.D.	see theatrical drawings
ASSOCD	ASSOCIATED	F.H.C.	FIRE HOSE CABINET	NEC.	NECESSARY	STL	STEEL
A.W.P.	ACOUSTICAL WALL PANEL	FIN	FINISH	N.	NORTH	STN	STAIN
BD	BOARD	FIXT	Fixture	N/A	NOT APPLICABLE	STRUCT	STRUCTURAL
BLDG	BUILDING	FL	FLOOR	N.I.C.	NOT IN CONTRACT	SUSP	SUSPENDED
BLK	BLOCK, BLOCKING	FLG	FLOORING	N-R	NON-RATED	SW	SWITCH
BM	BEAM	F.O.	FACE OF	O/	OVER	T	TREAD
BRKT	BRACKET	F.O.C.	FACE OF CONCRETE	OC	ON CENTER	T & B	TOP AND BOTTOM
B.U.R.	BUILT UP ROOF	F.O.S.	FACE OF STUD	OCCUP	OCCUPANCY	T.C.	TOP OF CURB
BOT	BOTTOM	FRAM'G	FRAMING	O.D.	OUTSIDE DIAMETER	TEL	TELEPHONE
C	CARPET	F.S.	FINISH SURFACE	OPP	OPPOSITE	TEMP	TEMPERED
CAB	CABINET	FT	FOOT, FEET	O.T.S.	OPEN TO STRUCTURE	T&G	TONGUE AND GROOVE
C.B.	CATCH BASIN	FTG	FOOTING	PL	PLATE	T.G.	TREE GRATE
CBC	CALIFORNIA BUILDING CODE	FURR	FUrring	PL CEM	PLASTER CEMENT	THK	THICK
CEM	CEMENT, CEMENTITIOUS	G.	GAS LINE	P LAM	PLASTIC LAMINATE	TJI	TRUSS JOIST
C.I.	CAST IRON	GA	GAUGE	PLAS	PLASTIC	T.O.	TOP OF
C.I.P.	CAST IN PLACE	GALV	GALvanized	PLYWD.	PLYWOOD	TOC	TOP OF CONCRETE
CJ	CONTROL JOINT	GC	GENERAL CONTRACTOR	P.P.	POWER POLE	T.O.P.	TOP OF PARAPET
C.L.	CHAIN LINK	G.I.	GALvanized IRON	PR	PAIR	T.O.PL.	TOP OF PLATE
CLG	CEILING	GL	GLASS	PRE	FACTORY PREFINISHED	T.P.	TOILET PARTITION
CLR	CLEAR	GLZ	GLAZING	PROJ	PROJECTION	T.W.	TOP OF WALL
CLOS	CLOSET	GYP	GYPSUM WALLBOARD	PT	PAINT	TYp	TYPICAL
CMU	CONCRETE MASONRY UNIT	GWb	GYPSUM WALLBOARD	PTD	PAINTED	TS	TUBE STEEL
COL	COLUMN			PVMT	PAVEMENT	UBC	UNIFORM BUILDING CODE
COMM	COMMUNICATION	H	HIGH			UNO	UNLESS NOTED OTHERWISE
COMPTR	COMPUTER	HC	HOLLOW CORE, HANDICAPPED	R	RADIUS	UOC	UNLESS OTHERWISE CALLED
CONC	CONCRETE	HD	SURFACE HARDENER	R.A.	RETURN AIR	UON	UNLESS OTHERWISE NOTED
CONT	CONTINUOUS, CONTROL	H.D.G.	HOT DIPPED GALVANIZED	R.B.	RUBBER BASE	VCT	VINYL COMPOSITION TILE
CORR	CORRIDOR	HDR	HEADER	RCP	REFLECTED CEILING PLAN	VCP	VITRIFIED CLAY PIPE
C.P.	CONTROL POINT	HDWD	HARDWOOD	RE:	REFER TO	VERT	VERTICAL
C.T.	CERAMIC TILE	HDWR	HARDWARE	REF	REFRIGERATOR	VEST	VESTIBULE
C.T.B.	CERAMIC TILE BASE	HM	HOLLOW METAL	REING	REINFORCING	V.P.	VEneer plastic
DEPT	DEPARTMENT	H.P.	HIGH POINT	REQ'D	REQUIRED		
DET	DETAIL	HR	HOUR	REV	REVISION	W.	WEST
D.F.	DRINKING FOUNTAIN	HT	HEIGHT	RI	RISER	WAINS	WAInscot
DIA	DIAMETER	HTR	HEATER	RM	ROOM	WC	WATER CLOSET
DIAG	DIAGONAL	HYDR	HYDRAULT	R.R.	RUBBER FLG W/ PROFILE RINGS	WD	WOOD
DIM	DIMENSION			R.T.	RUBBER TREAD/RISER	W/H	WATER HEATER
DIV	DIVISION(S)	IBC	INTERNATIONAL BUILDING CODE			WDW	WINDOW
DN	DOWN	IN	INCH, INCHES	S.	SOUTH	WM	WIRE MESH
DR	DOOR	INSUL	INSULATION	S.A.	SUPPLY AIR	WP	WEATHERPROOF
DS	DOWNSPOUT	INT	INTERIOR	S.AQ.D.	SEE AQUATIC DRAWINGS	W/	WITH
DWGS	DRAWINGS	INT'L	INTERNATIONAL	S.C.	SOLID CORE	WR	WATER RESISTANT
EA	EACH	JAN	JANITOR	S.C.D.	SEE CIVIL DRAWINGS	WRGB	WATER RESISTANT GYP BD
E.	EAST	JST	JOINT	SCHED	SCHEDULE	WWF	WELDED WIRE FABRIC
(E)	EXISTING	KITCH	KITCHEN	SEAL	SEALER (CONCRETE OR STONE)	WWM	WELDED WIRE MESH
EXIST	EXISTING			SECT	SECTION		
EXT'G	EXISTING	L.A.	LANDSCAPE AREA	S.E.D.	SEE ELECTRICAL DRAWINGS	Ø	DIAMETER
EJ	EXPANSION JOINT	LAM	LAMINATED	SERV	SERVER	#	POUND OR NUMBER
EL	ELEVATION	LAV	LAVATORY	SF	SQUARE FEET		CENTER LINE
ELEC	ELECTRICAL	LBS	POUNDS	SGL	SINGLE	&	AND
ELEV	ELEVATION	LIB	LIBRARY	SHTG.	SHEATHING	@	AT
		L.P.	LOW POINT	SHLV	SHELVING	°	DEGREES
		LTG	LIGHTING	SHT	SHEET		
				SIM	SIMILAR		

# DIMENSION GRAPHIC NOTES

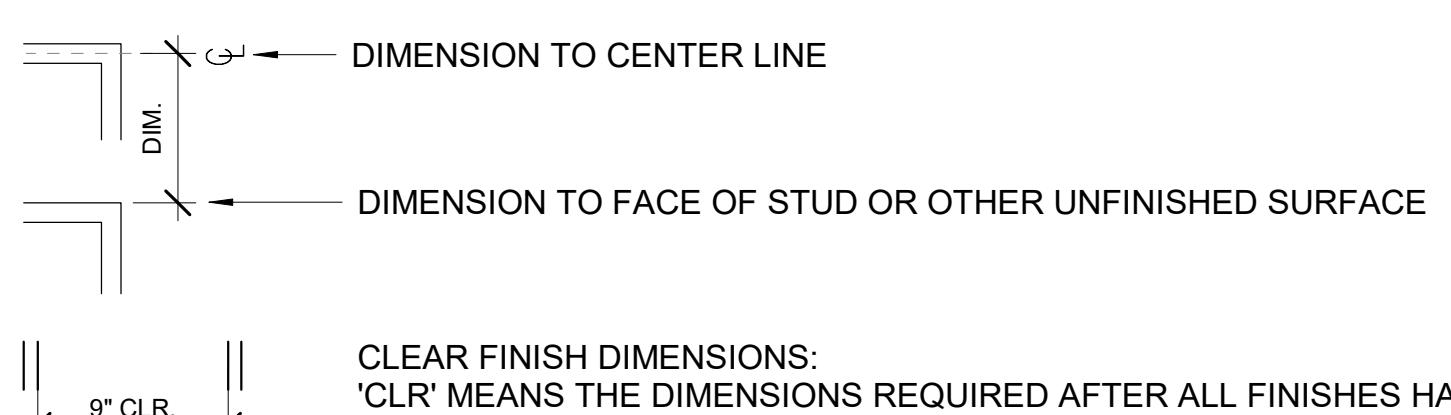
## **DIMENSIONS:**

NOTE: GENERAL CONTRACTOR RESPONSIBILITIES FOR DIMENSIONS PROVIDED WITHIN THESE DRAWINGS ARE OUTLINED BELOW:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL ARCHITECTURAL DIMENSIONS TO ASSURE PROPER PLACEMENT OF ALL PARTS AND MATERIALS IN CONJUNCTION WITH ALL OTHER DISCIPLINES REPRESENTED IN THESE DOCUMENTS, PRIOR TO COMMENCING WORK.
  2. VERIFY ALL DIMENSIONS INCLUDING SITE CONDITIONS, BEFORE STARTING WORK.
  3. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE.

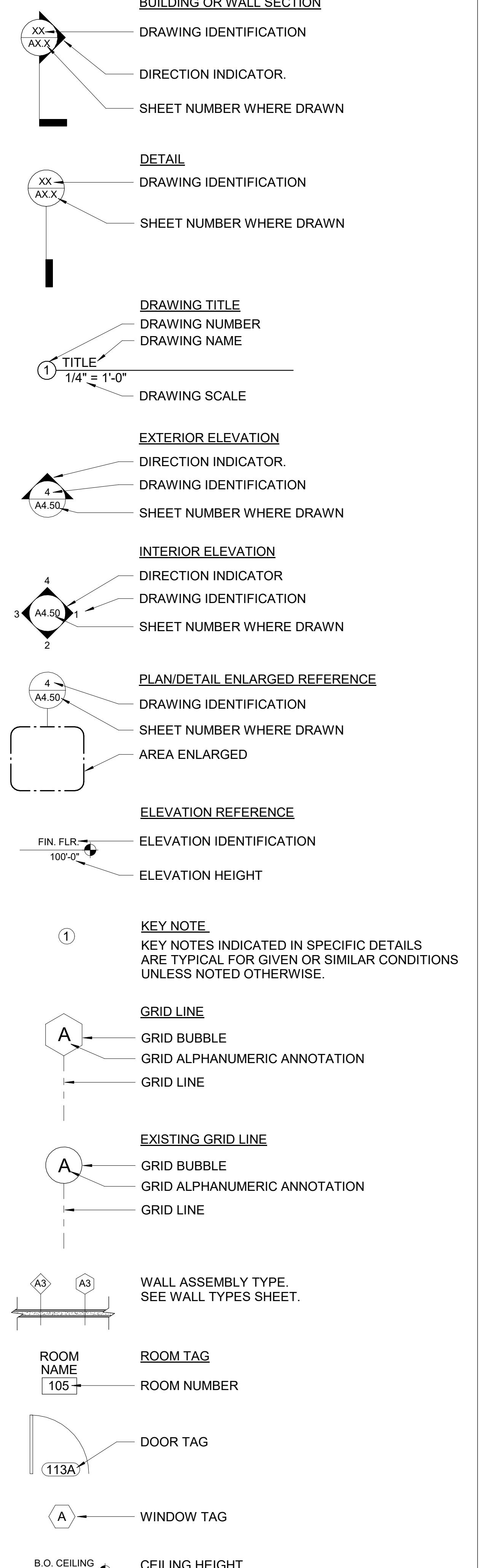
NOTE: UNLESS NOTED OTHERWISE, DIMENSIONS IN THESE DRAWINGS ARE GENERALLY PLACED AS INDICATED BELOW:

1. MASONRY: TO UNFINISHED FACE (NOTE @ SPLITE FACE CONDITION THESE DRAWINGS ASSUME STANDARD 8" OR 12" WIDE BLOCK)
  2. CONCRETE: TO UNFINISHED FACE
  3. STRUCTURAL: TO STEEL OR TUBING FACE, OR CENTER LINE
  4. COLUMNS: CENTER LINE
  5. NONBEARING PARTITIONS: TO FACE OF STUD. SEE NOTE 6 BELOW:
  6. DIMENSION GRAPHICS

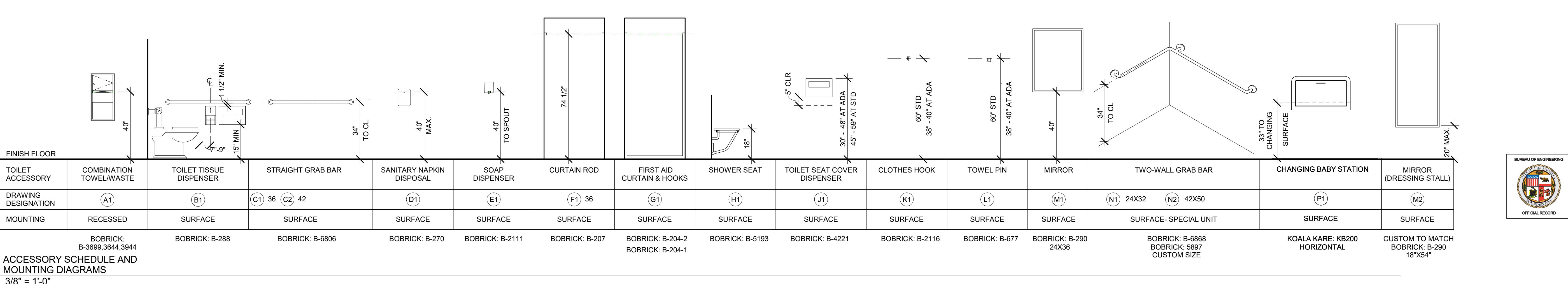
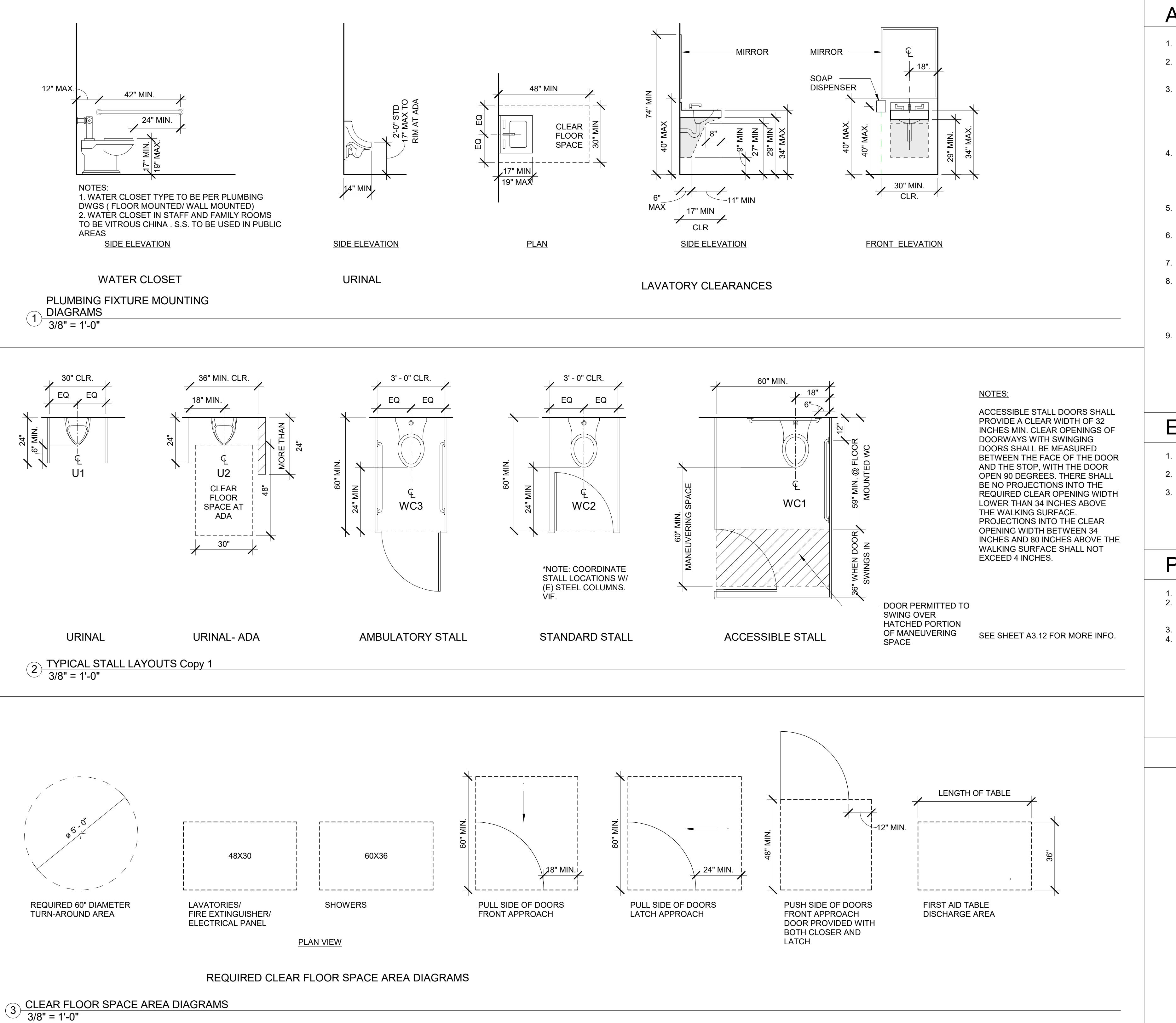


**CLEAR FINISH DIMENSIONS:**  
**'CLR' MEANS THE DIMENSIONS REQUIRED AFTER ALL FINISHES HAVE BEEN APPLIED TO THE SUBJECT SURFACES.**

# DRAWING SYMBOLS



<u>GRAPHIC SYMBOLS</u>	<u>DESCRIPTION</u>
	CONCRETE OR OTHER CEMENTITIOUS MATERIAL
	MASONRY: (CMU, STONE, OR BRICK, AS INDICATED IN ASSEMBLY DETAILS)
	EARTH/SOIL
	GRAVEL OR SAND
	PLYWOOD
	CEMENT PLASTER
	STEEL
	ALUMINUM
	FIBER BOARD RIGID INSULATION
	BITUMINOUS SHEATHING OR OTHER MEMBRANE SUBSTRATE PER ASSEMBLY DETAIL
	CERAMIC OR VCT TILE PER SCHEDULES
	INSULATION: THERMAL OR SOUND AS REQUIRED BY ASSEMBLY DETAIL
	GYPSUM WALLBOARD
	CONTINUOUS WOOD MEMBER
	WOOD MEMBER INTERRUPTED AT SHORT INTERVALS OR BLOCKING
	SECTION TRACK STEEL STUD
	PLAN TRACK STEEL STUD STEEL STUDS (DRAWINGS AT LARGER SCALES)
	 BUREAU OF ENGINEERING CITY OF LOS ANGELES FOUNDED 1781 OFFICIAL RECORD



# ACCESSIBILITY NOTES

- N. 80" HEADROOM IS TO BE PROVIDED FROM ALL WALKWAY SURFACES TO OBSTRUCTIONS.

RE IS TO BE A LEVEL FLOOR OR LANDING AREA ON EACH SIDE OF ALL RS. THE FLOOR OR LANDING IS NOT TO BE LOWER THAN 1/2" BELOW RWAY THRESHOLD.

HAND-ACTIVATED DOOR OPENING HARDWARE MEETS THE FOLLOWING UIREMENTS:

S TO BE CENTERED A MIN. 30" AND MAX. OF 44" A.F.F.

LATCHING OR LOCKING DOORS IN A PATH OF TRAVEL ARE OPERATED W/ A SINGLE EFFORT BY LEVER-TYPE HARDWARE, PANIC NBARS, PUSH-PULL ACTIVATING BARS OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT THE REQUIREMENT TO GRASP THE HARDWARE.

LOWER 10" OF ALL DOORS SHALL BE CONSTRUCTED AS FOLLOWS:  
TO BE SMOOTH AND UNINTERRUPTED, TO ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION.

NARROW FRAME DOORS MAY USE A 10" H. SMOOTH PANEL ON THE PUSH SIDE OF THE DOOR.

NDARD TOILET COMPARTMENT DOORS WILL BE PROVIDED AS FOLLOWS:  
MIN. 9" CLEARANCE FOR FOOT RESTS UNDERNEATH.  
A SELF-CLOSING DEVICE.

HERE PERMANENT IDENTIFICATION IS PROVIDED FOR ROOMS AND SPACES,  
-GLARE RAISED LETTERS SHALL ALSO BE PROVIDED AND SHALL BE OMPAINED BY BRAILLE.

APPLICABLE ACCESSIBILITY REQUIREMENTS FOR SIGNAGE OF CBC SECTION 703 SHALL BE SATISFIED.

BUILDING ENTRANCES THAT ARE ACCESSIBLE TO AND USABLE BY PERSONS WITH DISABILITIES AND AT EVERY MAJOR JUNCTION ALONG OR LEADING TO AN ESSIBLE ROUTE OF TRAVEL SHALL BE IDENTIFIED WITH A SIGN DISPLAYING INTERNATIONAL SYMBOL OF ACCESSIBILITY AND WITH ADDITIONAL ECTIONAL SIGNS, AS REQUIRED, TO BE VISIBLE TO PERSONS ALONG PROACHING PEDESTRIAN WAYS PER CBC SECTION 1117A.2

ILITIES REQUIRED TO BE ACCESSIBLE SHALL COMPLY WITH CBC SECTION .1

# CONTROLS & OPR. MECHANISMS

- CONTROLS AND OPERATING MECHANISMS SHALL COMPLY WITH ACCESSIBILITY CODE.  
THE HIGHEST OPERABLE PART OF ALL CONTROLS, DISPENSERS, RECEPTACLES, AND OTHER OPERABLE EQUIPMENT SHALL BE PLACED WITHIN 48" OF THE FLOOR BUT NOT LOWER THAN 15" IF FORWARD APPROACH AND WITHIN 54" BUT NOT LOWER THAN 9" IF SIDE APPROACHED.  
CONTROLS AND OPERATING MECHANISMS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 POUNDS.

# ACCESSIBLE ROUTE OF TRAVEL

- GRADING SHALL BE COMPLETED TO PROVIDE HANDICAP ACCESS IN ACCORDANCE WITH THE 2017 LOS ANGELES CITY BUILDING CODE.

WALKS AND SIDEWALKS SHALL HAVE A CONTINUOUS COMMON SURFACE, NOT INTERRUPTED BY STEPS OR ABRUPT CHANGES IN LEVEL EXCEEDING 1/4". WHEN ABRUPT CHANGES IN LEVEL NOT EXCEEDING 1/2" OCCUR, THEY SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1:2, EXCEPT THAT LEVEL CHANGES NOT EXCEEDING 1/4" MAY BE VERTICAL.

WALK AND SIDEWALK SURFACE SLOPES SHALL NOT EXCEED 2%.

WALKS SHALL BE PROVIDED WITH A LEVEL AREA NOT LESS THAN 60" BY 60" AT DOOR OR GATE THAT SWINGS TOWARD THE WALK, AND NOT LESS THAN 48" WIDE BY 44" DEEP AT DOOR OR GATE THAT SWINGS AWAY FROM THE WALK.

WALK AND SIDEWALK SURFACES SHALL BE SLIP-RESISTANT AS FOLLOWS:

  - A. SURFACES WITH A SLOPE OF LESS THAN 6% GRADIENT SHALL BE AT LEAST AS SLIP-RESISTANT AS THAT DESCRIBED AS A MEDIUM FLOOR FINISH.
  - B. SURFACES WITH SLOPE OF 6% GRADIENT SHALL BE SLIP-RESISTANT.
  - C. (3) DIFFERENT 1'X4' MOCK UPS WITH (3) DIFFERENT CONCRETE FINISHES WILL BE MADE AT THE BEGINNING OF THE PROJECT FOR CLIENT APPROVAL. MOCK UP TO REMAIN UNTIL COMPLETION OF CONCRETE WORK.

RAMPS ON ACCESSIBLE ROUTES SHALL COMPLY WITH CBC SECTION 11B-405.

RAMP RUNS SHALL HAVE A RUNNING SLOPE NOT STEEPER THAN 1:12 OR 8.33% CROSS SLOPE OF RAMP RUNS SHALL NOT BE STEEPER THAN 1:48 OR 2% FLOOR OR GROUND SURFACES OF RAMP RUNS SHALL COMPLY WITH CBC SECTION 11B-302. CHANGES IN LEVEL OTHER THAN THE RUNNING SLOPE AND CROSS SLOPE ARE NOT PERMITTED ON RAMP RUNS.

THE CLEAR WIDTH OF A RAMP RUN SHALL BE 48 INCHES MINIMUM.

THE RISE OF ANY RAMP SHALL BE 30 INCHES MAXIMUM.

RAMPS SHALL HAVE LANDINGS AT THE TOP AND BOTTOM OF EACH RAMP RUN. LANDINGS SHALL COMPLY WITH CBC SECTION 11B-405.7.

(SLOPE) LANDINGS SHALL COMPLY WITH CBC SECTION 11B-302/ THE LANDING CLEAR WIDTH SHALL BE AT LEAST AS WIDE AS THE WIDEST RAMP RUN LEADING TO THE LANDING.

TOP LANDINGS SHALL BE 60" WIDE MIN. AND LANDING CLEAR LENGTH SHALL BE 60" LONG MIN. BOTTOM LANDING SHALL EXTEND 72" MIN. IN THE DIRECTION OF RAMP RUN.

RAMPS THAT CHANGE DIRECTION BETWEEN RUNS AT LANDINGS SHALL HAVE A CLEAR LANDING 60" MIN. BY 72" MIN. IN THE DIRECTION OF THE DOWNWARD TRAVEL FROM THE UPPER RAMP RUN.

WHERE DOORWAYS ARE LOCATED ADJACENT TO A RAMP LANDING , MANEUVERING CLEARANCES REQUIRED BY SECTIONS 11B-404.2.4 AND 11B-404.3.2 SHALL BE PERMITTED TO OVERLAP THE REQUIRED LANDING AREA.

RAMP RUNS SHALL HAVE HANDRAILS COMPLYING WITH SECTION 11B-505.

EDGE PROTECTION COMPLYING WITH SECTION 11B-405.9.2 SHALL BE PROVIDED ON EACH SIDE OF RAMP RUN AND AT EACH RAMP LANDINGS.

LANDINGS SUBJECT TO WET CONDITIONS SHALL BE DESIGNED TO PREVENT THE ACCUMULATION OF WATER.

# DA LAVATORY NOTES

- ADA LAVATORIES SHALL COMPLY WITH CBC SECTION 11B-606.  
A CLEAR FLOOR SPACE 30" WIDE X 48" LONG SHALL BE PROVIDED IN FRONT OF  
A LAVATORY TO ALLOW FORWARD APPROACH. SUCH CLEAR FLOOR SPACE  
SHALL ADJOIN OR OVERLAP AN ACCESSIBLE ROUTE AND SHALL EXTEND INTO  
KNEE AND TOE SPACE UNDERNEATH THE LAVATORY.  
LAVATORIES SHALL BE MOUNTED WITH A CLEARANCE OF AT LEAST 29" FROM

# ADA SHOWER STALL

- 2 FIXED SHOWER HEADS PROVIDED IN EXEMPTION TO SECTION 11B-60836 IN PUBLIC SHOWERS. EACH SHOWER HEAD SHALL BE INSTALLED SO IT CAN BE OPERATED INDEPENDENTLY OF THE OTHER AND SHALL HAVE SWIVE ANGLE ADJUSTMENTS, BOTH VERTICALLY AND HORIZONTALLY. ONE SHOWER HEAD SHALL BE LOCATED AT HEIGHT OF 48" MAX. ABOVE FINISH FLOOR.

WATER CONTROLS SHALL BE OF A SINGLE LEVER DESIGN, OPERABLE WITH ONE HAND, AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE CENTERLINE OF THE CONTROLS SHALL BE LOCATED AT 39"-41" ABOVE THE SHOWER FLOOR. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 LBS.

CONTROLS SHALL COMPLY WITH CBC SECTION 11B-309-A

SHOWER PUMPING FIXTURES

A. SHOWER HEADS TYPE:

  - a. FREE-FLOW SHOWER HEAD-SYMMONS MODEL # 4-282F @ 76" A.F.F. AND @ 48" A.F.F. RESPECTIVELY

B. SHOWER CONTROLS:

  - a. CONCEALED VOLUME CONTROL VALVE-SYMMONS MODEL #022 @40" +- 1" A.F.F.
  - b. LEVELTROL LEVER DIVERTER WITH VOLUME CONTROL-SYMMONS MODEL #4-458 @ 40" +- A.F.F.

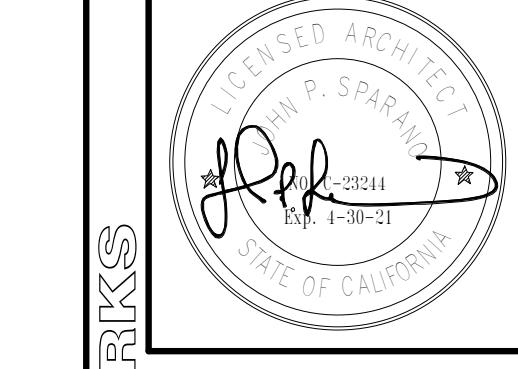
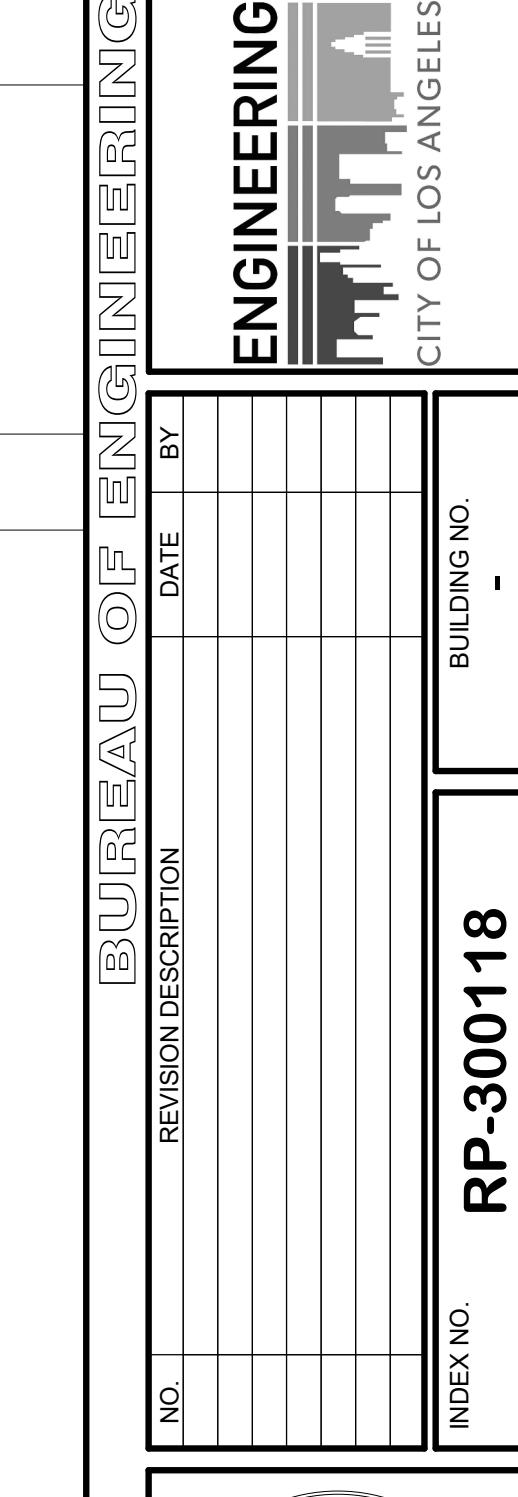
STAFF SHOWERS TO RECEIVE FLEXIBLE SHOWER SPRAY HOSE- 60" LONG MIN.

GRAB BARS TO COMPLY WITH CBC SECTIONS 11B-608.2.3 AND 11B-610

SHOWER SEAT TO COMPLY WITH CBC SECTION 11B-610

# ACCESSIBLE URINAL NOTES

- ACCESSIBLE URINAL SHALL COMPLY WITH CBC SECTION 11B-605 WHERE URINALS ARE PROVIDED, AT LEAST ONE SHALL HAVE A CLEAR SPACE 30" WIDE X 48" LONG IN FRONT OF THE URINAL. WHERE URINALS ARE PROVIDED, AT LEAST ONE WITH A RIM PROJECTING A MIN. OF 14" FROM THE WALL AND A MAX. OF 17" ABOVE THE FLOOR SHALL BE PROVIDED. URINALS SHALL BE WALL HUNG TYPE WITH THE RIM 17"MAX. ABOVE FINISH FLOOR OR GROUND. URINALS SHALL BE 13 1/2" DEEP MIN. MEASURED FROM THE OUTER FACE OF THE URINAL RIM TO THE BACK OF THE FIXTURE PER CBC SECTION 11B-605.2. FLUSH CONTROLS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST AND SHALL BE MOUNTED NO MORE THAN 44" ABOVE THE FLOOR. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 LBS.



A vertical column of 15 empty rectangular boxes, likely for signatures or initials.

CITY OF LOS ANGELES		A D D C A
VERTICAL CONTROL: HORIZONTAL CONTROL:		
SHEET TITLE: ACCESSIBILITY NOTES		
PROJECT: GRANADA HILLS POOL AND BATHHOUSE REPLACEMENT PROJECT		
ADDRESS: 16730 CHATSWORTH STREET GRANADA HILLS, CA 91344		
WORK ORDER NO. <b>#E170517</b>		
PLAN FILE NO. <b>#308</b>		
DRAWING NO.		
<b>G0.40</b>		
SHEET NO	O	SHEETS

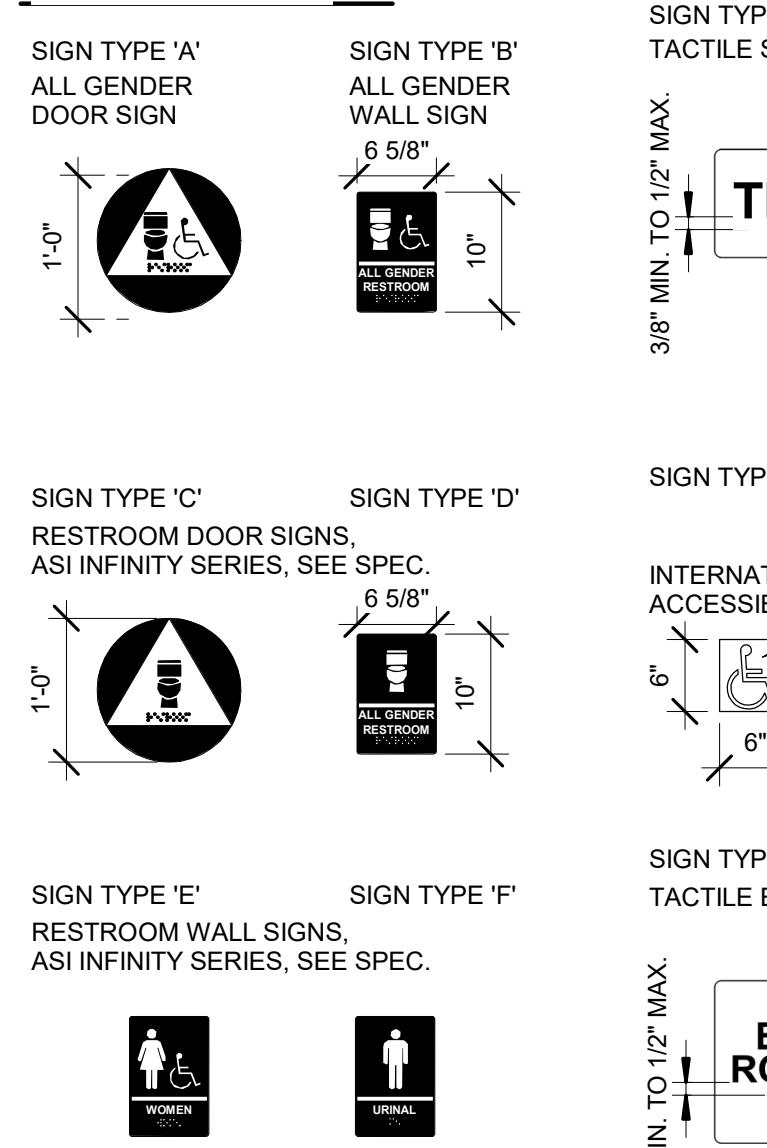
## SIGNAGE NOTES:

- ASI SIGNAGE INNOVATIONS - INFINITY SERIES IS SIGHTED IN THIS DRAWINGS. OBTAIN ALL PRODUCT UNDER SINGLE MANUFACTURER.
- SIGNS MUST COMPLY WITH THE TITLE 24, DISABLED ACCESS REQUIREMENTS AND LATEST EDITION OF THE LABC.
- SUBMIT SHOP DRAWINGS OF SIGNAGE AND OBTAIN APPROVAL FROM THE ARCHITECT PRIOR TO ANY FABRICATION.
- ALL TEXT SHALL BE IN UPPER CASE LETTERS.
- RESTROOM DOOR SIGNAGE SHALL BE MOUNTED CENTERED TO THE WIDTH OF THE DOOR AND THE MOUNTING HEIGHT MEASURED FROM THE FINISH FLOOR TO THE CENTER OF THE SIGNAGE.
- RESTROOM WALL SIGNAGE MOUNTING HEIGHT SHALL BE MEASURED FROM THE FINISH FLOOR TO THE CENTER OF THE SIGNAGE.
- ROOM IDENTIFICATION SIGNAGE MOUNTING HEIGHT SHALL BE MEASURED FROM THE FINISH FLOOR TO THE TOP OF THE SIGNAGE. SIGNS SHALL BE PLACED ON THE STRIKE SIDE OF THE DOOR.
- ROOM IDENTIFICATION SIGNAGE ON DOORS SHALL BE CENTERED TO THE WIDTH OF THE DOOR.
- ALL SIGNAGE SHALL BE ACRYLIC PLASTIC MATERIAL WITH RAISED CHARACTERS AND SYMBOLS, U.N.C.
- SIGNS WITH RAISED CHARACTERS AND BRAILLE SHALL BE LOCATED 48 INCHES (1220 mm) MINIMUM ABOVE THE FINISH FLOOR OR GROUND SURFACE MEASURED FROM THE BASELINE OF THE LOWEST LINE OF BRAILLE AND 60 INCHES (1525 mm) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND SURFACE, MEASURED FROM THE BASELINE OF THE HIGHEST LINE OF RAISED CHARACTERS. MOUNTING LOCATION SHALL BE DETERMINED SO THAT A PERSON MAY APPROACH WITHIN 3 INCHES (76 mm) OF SIGNAGE WITHOUT ENCOUNTERING PROTRUDING OBJECTS OR STANDING WITHIN THE SWING OF A DOOR.

## ① SIGNAGE

3/4" = 1'-0"

## SIGN TYPES



MESSAGE PER SCHEDULE  
TEXT

3/8" MIN. TO 1/2" MAX.

48" MIN. 60" MAX.

17" MIN. 22" MAX.

8" 8" 8"

1'-0" 1'-0" 1'-0"

80" NTS 80" NTS 80" NTS

SECTION 11298.4

17" MIN. 22" MAX.

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**STORM WATER POLLUTION CONTROL**  
(2017 Los Angeles Green Building Code)

**FORM  
GRN 1**

Storm Water Pollution Control Requirements for Construction Activities  
Minimum Water Quality Protection Requirements for All Construction Projects

The following notes shall be incorporated in the approved set of construction/grading plans and represents the minimum standards of good housekeeping which must be implemented on all construction projects.

Construction means constructing, clearing, grading or excavation that result in soil disturbance. Construction includes structure teardown (demolition). It does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of facility; emergency construction activities required to immediately protect public health and safety; interior remodeling with no outside exposure of construction material or construction waste to storm water; mechanical permit work; or sign permit work. (Order No. 01-182, NPDES Permit No. CAS004001 – Part 5. Definitions)

- Eroded sediments and pollutants shall be retained on site and shall not be transported from the site via sheet flow, swales, area drains, natural drainage or wind.
- Stockpiles of earth and other construction-related materials shall be covered and/or protected from being transported from the site by wind or water.
- Fuels, oils, solvents and other toxic materials must be stored in accordance with their listing and shall not contaminate the soil nor the surface waters. All approved toxic storage containers are to be protected from the weather. Spills must be cleaned up immediately and disposed of properly and shall not be washed into the drainage system.
- Non-storm water runoff from equipment and vehicle washing and any other activity shall be contained on the project site.
- Excess or waste concrete may not be washed into the public way or any drainage system. Provisions shall be made to retain concrete waste on-site until it can be appropriately disposed of or recycled.
- Trash and construction-related solid wastes must be deposited into a covered receptacle to prevent contamination of storm water and dispersal by wind.
- Sediments and other materials shall 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 street/public ways. Accidental depositions must be swept up immediately and may not be washed down by rain or by any other means.
- Retention basins of sufficient size shall be provided to retain storm water runoff on-site and shall be properly located to collect all tributary site runoff.
- Where retention of storm water runoff on-site is not feasible due to site constraints, runoff may be conveyed to the street and the storm drain system provided that an approved filtering system is installed and maintained on-site during the construction duration.

As a covered entity under Title II of the Americans with Disabilities Act, the City of Los Angeles does not discriminate on the basis of disability and, upon request, will provide reasonable accommodation to ensure equal access to its programs, services and activities.

(Rev. 01/17/17)

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2017 Los Angeles Green Building Code

**FORM  
GRN 5**



2017 Los Angeles Green Building Code  
**MANDATORY REQUIREMENTS CHECKLIST**  
**NEWLY CONSTRUCTED NON-RESIDENTIAL BUILDINGS**  
(COMPLETE AND INCORPORATE THIS FORM INTO THE PLANS)

**FORM  
GRN 5**

Permit # \_\_\_\_\_ Date: \_\_\_\_\_

ITEM #	CODE SECTION	REQUIREMENT	REFERENCE SHEET (Sheet # or N/A)	COMMENTS (e.g. note #, detail # or reason for N/A)
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PLANNING AND DESIGN				
1	5.106.1	Storm water pollution prevention	C600	EROSION CTRL NOTES 16-24
2	5.106.4.1.1	Short-term bicycle parking	G0.50	KEYNOTE #9
3	5.106.4.1.2	Long-term bicycle parking	N/A	
4	5.106.5.2	Designated parking	N/A	NO NEW PARKING
5	5.106.5.3	Electric vehicle charging	N/A	NOT IN SCOPE
6	5.106.8	Light pollution reduction	E1.0, A1.10	SITE LIGHTING NOTES
7	5.106.10	Grading and paving	C300,C301&C302	GRADING
8	5.106.11	Hardscape alternatives	A1.10	KEYNOTE #14
ENERGY EFFICIENCY				
9	5.211.1	Solar ready buildings	E1.0, E3.1	LOCATION OF PV PANELS AND INVERTERS
WATER EFFICIENCY & CONSERVATION				
10	5.303.1.1	New buildings in excess of 50,000 sqft	N/A	BLDG. AREA IS LESS
11	5.303.1.2	Excess consumption	N/A	NOT ACHIEVABLE
12	5.303.2	Water reduction	N/A	NOT ACHIEVABLE
13	5.303.3	Water conserving plumbing fixtures and fittings	P0.12	GRN17
14	5.303.3.3	Showerheads	P0.12	GRN15 #4
15	5.304.1	Outdoor water use in landscape areas	IRR. PLAN L1.00-L1.05	IMPACTED VALVES OF (E) SYSTEM TO BE MODIFIED (E) CONDUIT TO BE REMOVED TO REMAIN
16	5.304.3	Irrigation controller and sensor application	IRR. PLAN L1.00-L1.05	SURVEY AND IRR. AS-BUILTS
17	5.304.4	Outdoor water use meters	N/A	STATEWIDE IRRIGATION WATER METER
18	5.304.5	Exterior faucets	G0.46	GRN18 #6
19	5.305.1	Graywater ready	N/A	POOL EQUIPMENT ROOM
20	5.305.2	Recycled water supply to fixtures	N/A	(E) PLUMBING
21	5.305.3	Cooling towers	N/A	NO COOLING TOWERS
22	5.305.4	Groundwater discharge	N/A	NO DISCHARGE
MATERIAL CONSERVATION & RESOURCE EFFICIENCY				
23	5.407.1	Weather protection	A7.00	#1
24	5.407.2.1	Sprinklers	G0.46	GRN15 #6
25	5.407.2.2.1	Nonabsorbent floor and wall finishes	N/A	A8.50 FINISH SCHEDULE
26	5.407.2.2.2	Exterior door protection	A2.10,A2.11	POOL EQUIPMENT ROOM
27	5.407.2.2.2	Flashing	A8.11	#5, #9
28	5.408.1	Construction waste diversion	G0.46	GREEN CODE NOTES
29	5.408.3	Excavated soil and land clearing debris	C300,C001	AMOUNT OF EXPORT

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2017 Los Angeles Green Building Code

**FORM  
GRN 5**

ITEM #	CODE SECTION	REQUIREMENT	REFERENCE SHEET (Sheet # or N/A)	COMMENTS (e.g. note #, detail # or reason for N/A)
30	5.410.1	Recycling by occupants	A1.10,A7.13	IN TRASH ENCLOSURE
31	5.410.2	Commissioning (> 10,000 sq ft.)	N/A	LESS THAN 10,000 SF
32	5.410.2.1	- Owner's Project Requirements (OPR)		
33	5.410.2.2	- Basis of Design (BOD)		
34	5.410.2.3	- Commissioning plan		
35	5.410.2.4	- Functional performance testing		
36	5.410.2.5.1	- Systems manual		
37	5.410.2.5.2	- Systems operations training		
38	5.410.2.6	- Commissioning report		
39	5.410.4	Testing and adjusting (< 10,000 sq ft)	DIV. 26 SPECS FOR ELEC. ONLY BASIS OF DESIGN FOR MECHANICAL ONLY	
40	5.410.4.2	- Systems	SPEC 014525 L1.00-10.00 S.F.	
41	5.410.4.3	- Procedures		
42	5.410.4.3.1	- HVAC balancing	N/A	PROVIDE IN CONSTRUCTION PHASE
43	5.410.4.4	- Reporting	N/A	PROVIDE IN CONSTRUCTION PHASE
44	5.410.4.5	- Operation and maintenance manual	N/A	PROVIDE IN CONSTRUCTION PHASE
45	5.410.4.5.1	- Inspections and reports	N/A	PROVIDE IN CONSTRUCTION PHASE
ENVIRONMENTAL QUALITY				
46	5.503.1	Fireplace and Woodstoves	N/A	NOT IN PROJECT
47	5.504.1.3	Temporary ventilation	G0.46	GRN15 #17
48	5.504.3	Covering of duct openings and protection of mechanical equipment during construction	G0.46	GRN15 #18
49	5.504.4	Finish material pollutant control		
50	5.504.4.1	- Adhesives, sealants, and caulk	GRN11	#19
51	5.504.4.3	- Paints and coatings		
52	5.504.4.3.1	- Aerosol paints and coatings		
53	5.504.4.3.2	- Verification	G0.46	GRN15 #20
54	5.504.4.4	Carpet systems	N/A	A8.50 FINISH SCHEDULE
55	5.504.4.4.1	Carpet cushion	N/A	A8.50 FINISH SCHEDULE
56	5.504.4.5	Composite wood products	N/A	A8.50 FINISH SCHEDULE
57	5.504.4.6	Resilient flooring systems	N/A	A8.50 FINISH SCHEDULE
58	5.504.5.3	Filters	G0.46	GRN15 #26
59	5.504.7	Environmental tobacco smoke (ETS) control	N/A	GRN15 #27
60	5.505.1	Indoor moisture control	G0.46	GRN15 #28
61	5.506.2	Carbon dioxide (CO <sub>2</sub> ) monitoring	N/A	NOT IN DIV. 26 SCOPE
62	5.507.4.1	Exterior noise transmission prescriptive method	N/A	POOL EQUIPMENT ROOM FOR POOL
63	5.507.4.1	- Exterior noise transmission for roof	N/A	POOL EQUIPMENT ROOM FOR POOL
64	5.507.4.2	- Exterior noise transmission for walls	N/A	POOL EQUIPMENT ROOM FOR POOL
65	5.507.4.2	- Exterior noise transmission for windows	N/A	POOL EQUIPMENT ROOM FOR POOL
66	5.507.4.2	Exterior noise transmission performance method	N/A	POOL EQUIPMENT ROOM FOR POOL

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2017 Los Angeles Green Building Code

**FORM  
GRN 10**

ITEM #	CODE SECTION	REQUIREMENT	REFERENCE SHEET (Sheet # or N/A)	COMMENTS (e.g. note #, detail # or reason for N/A)
25	5.410.1	Recycling by occupants (additions that are > 30% of existing floor area)	G0.50,A7.13 A2.10	TRASH AND RECYCLE ENCLOSURE
26	5.410.4	Testing, adjusting and balancing	DIV. 26 SPECS FOR ELEC. ONLY BASIS OF DESIGN FOR MECHANICAL ONLY	
27	5.410.4.2	- Systems	N/A	
28	5.410.4.3	- Procedures	N/A	PROVIDE IN CONSTRUCTION PHASE
29	5.410.4.3.1	- HVAC balancing	N/A	PROVIDE IN CONSTRUCTION PHASE
30	5.410.4.4	- Reporting	N/A	PROVIDE IN CONSTRUCTION PHASE
31	5.410.4.5	- Operation and maintenance manual	N/A	PROVIDE IN CONSTRUCTION PHASE
32	5.410.4.5.1	- Inspections and reports	N/A	PROVIDE IN CONSTRUCTION PHASE
ENVIRONMENTAL QUALITY				
33	5.503.1	Fireplace and Woodstoves	N/A	NOT IN PROJECT
34	5.504.1.3	Temporary ventilation	G0.46	GRN15 # 17
35	5.504.3	Covering of duct openings and protection of mechanical equipment during construction	G0.46	GRN15 # 18
36	5.504.4	Finish		



## VOC AND FORMALDEHYDE LIMITS 2017 Los Angeles Green Building Code (Incorporate this form into the plans)

The tables below are taken from the 2017 Los Angeles Green Building Code  
Tables 4.504.1, 4.504.2, 4.504.3, 5.504.4.1, 5.504.4.2, 5.504.4.3, 5.504.4.5

### VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS<sup>12</sup>

Grams of VOC per Liter of Coating,  
Less Water and Less Exempt Compounds

COATING CATEGORY <sup>13</sup>	CURRENT LIMIT <sup>14</sup>
Flat coatings	50
Nonflat coatings	100
Water and less coatings	150
<b>Specialty Coatings</b>	
Aluminum roof coatings	400
Basement specialty coatings	400
Bituminous roof coatings	50
Bonding agents	350
Concrete curing compounds	350
Concretemasonry sealers	100
Driveover sealers	50
Dry top coatings	150
Fire resistance coatings	350
Floor coatings	100
Form-release compounds	250
Graphic arts coatings (sign paints)	500
High temperature coatings	420
Industrial maintenance coatings	250
Low-solids coatings <sup>15</sup>	120
Magnesite cement coatings	450
Matte texture coatings	100
Metallic pigmented coatings	500
Modifying agents	250
Painted metal primers	420
Primers, sealers, and undercoatings	100
Reactive sealing sealers	350
Recycled coatings	250
Roof coatings	50
Rust preventer coatings	250
Shellex	
Clear	730
Opaque	550
<b>Specialty primers, sealers and undercoatings</b>	
Shells	350
Stone consolidants	450
Swimming pool coatings	340
Traffic marking coatings	100
<b>Tub and tile refractory coatings</b>	
Water-based membranes	250
Wood coatings	275
Wood preservatives	340
Zinc-rich primers	340

\* Grade of paint or primer, water-based or alkyd, except for clear or opaque.

<sup>12</sup> This table is derived from those specified by the California Air Resources Board in its Control of Regulated Hazardous Materials, February 1, 2008. More information is available from the ARB website at [www.arb.ca.gov/ard/sc/cu/ctrlmat/fb08.pdf](http://www.arb.ca.gov/ard/sc/cu/ctrlmat/fb08.pdf).

<sup>13</sup> Grade of paint or primer, water-based or alkyd, except for clear or opaque.

<sup>14</sup> As of the time of publication, the current limit is 100 g/L VOC content.

<sup>15</sup> Low-solids coatings are defined as having a VOC content of 100 g/L or less.

<sup>16</sup> As of the time of publication, the current limit is 100 g/L VOC content.

<sup>17</sup> As of the time of publication, the current limit is 100 g/L VOC content.

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## DEPARTMENT OF TOXIC SUBSTANCES CONTROL

*Our mission is to provide the highest level of safety, and to protect public health and the environment from toxic harm.*

Fact Sheet, January 2010

### Universal Waste Fact Sheet

California's Universal Waste Rule allows individuals and businesses to transport, handle and recycle certain common hazardous wastes, termed universal wastes, in a manner that differs from the requirements for most hazardous wastes. The more relaxed requirements for managing universal wastes were adopted to ensure that they are managed safely and are not disposed of in the trash.

#### What are Universal Wastes?

Universal wastes are hazardous wastes that are widely produced by households and many different types of businesses. Universal wastes include televisions, computers and other electronic devices as well as batteries, fluorescent lamps, mercury thermostats, and other mercury containing equipment, among others.

The hazardous waste regulations (Cal. Code Regs, tit. 22, div. 4.5, ch. 11 section 66261.9) identify seven categories of hazardous wastes that can be managed as universal wastes. Any unwanted item that falls within one of these waste streams can be handled, transported and recycled following the simple requirements set forth in the universal waste regulations (UWR) (Cal. Code Regs, tit. 22, div. 4.5, ch. 23).

#### Universal wastes are:

1. **Electronic devices:** Includes any electronic device that is a hazardous waste with or without a Cathode Ray Tube (CRT), including televisions, computer monitors, cell phones, VCRs, computer CPUs and portable DVD players.
2. **Batteries:** Most household-type batteries, including rechargeable nickel-cadmium batteries, silver button batteries, mercury batteries, alkaline batteries and other batteries that exhibit a characteristic of a hazardous waste.
3. **Electric lamps:** Fluorescent tubes and bulbs, high intensity discharge lamps, sodium vapor lamps and electric lamps that contain added mercury, as well as any other lamp that exhibits a characteristic of a hazardous waste. (e.g., lead).
4. **Mercury-containing equipment:** Thermostats, mercury switches, mercury thermometers, pressure or vacuum gauges, dilators and weighted tubing, mercury rubber flooring, mercury gas flow regulators, dental amalgams, counterweights, dampers and mercury added novelties such as jewelry, ornaments and footwear.
5. **CRTs:** The glass picture tubes removed from devices such as televisions and computer monitors.
6. **CRT glass:** A cathode ray tube that has been accidentally broken or processed for recycling.
7. **Non-empty aerosol cans**

*Universal Wastes may not be disposed of in the trash!*



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## DEPARTMENT OF TOXIC SUBSTANCES CONTROL

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### Households and Conditionally Exempt Small Quantity Universal Waste Generators (CESQUWG)

Two categories of universal waste handlers—households and CESQUWGs—are exempt from most of the requirements of the universal waste regulations provided they comply with certain conditions. Handlers who qualify for these exemptions are not required:

- To obtain an EPA ID number or otherwise notify DTSC;
- To keep records of shipments or provide annual reports to DTSC; or
- To label their universal waste.

A household is defined to include a single detached residence (e.g., a house) or a single unit of a multiple residence unit (e.g., an apartment or condominium). Households that generate hazardous wastes other than universal wastes (e.g., paints and motor oil) can visit DTSC's household hazardous waste Web page (<http://www.dtsc.ca.gov/HazardousWaste/UniversalWaste/HHW.cfm>) for information on how to properly dispose of them.

A Conditionally Exempt Small Quantity Universal Waste Generator (CESQUWG) is a universal waste generator who produces less than 100 kilograms (220 pounds) of RCRA hazardous waste, including universal waste that is RCRA universal waste and less than 1 kilogram of acutely hazardous waste in a calendar month. (RCRA hazardous waste is hazardous waste that is regulated under the hazardous waste regulations adopted by the U.S. Environmental Protection Agency.)

Pursuant to section 66273.8 of title 22 of the California Code of Regulations, a generator who meets the definition of a household or a CESQUWG is exempt from universal waste handler requirements provided he or she:

- 1) Does not dispose of universal waste;
- 2) Relinquishes universal waste only to another universal waste handler, a universal waste transporter, a destination facility, or a curbside household hazardous waste collection program; and
- 3) Does not conduct treatment of universal waste, except for limited activities enumerated in the regulations (e.g., removing batteries, light bulbs, or mercury switches). This exemption applies only to universal waste generated by the household (e.g. light bulbs, computers, televisions, thermostats, cell phones, etc.), not to universal waste accepted from other people.

#### Where can I send universal wastes?

A handler may not send universal waste to a municipal solid waste (garbage) landfill or a non-hazardous waste recycling center. All handlers of universal waste must relinquish their universal waste to one of the following:



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## DEPARTMENT OF TOXIC SUBSTANCES CONTROL

*Our mission is to provide the highest level of safety, and to protect public health and the environment from toxic harm.*

### Regulatory Standards for Universal Waste

The UWR has separate requirements for each of the three types of regulated entities:

1. Universal waste handlers
2. Universal waste transporters
3. Destination Facilities

#### Universal Waste Handlers

A universal waste handler is a generator of universal waste or the owner or operator of a facility that receives universal waste from another universal waste handler, accumulates universal waste, and sends universal waste to another universal waste handler, a facility that accepts hazardous waste, or a foreign country.

A universal waste handler may be:

1. A person (e.g., a household or business) who generates universal waste but does not accept universal waste from others
2. A person who accepts and accumulates universal waste generated by others at his or her facility
3. A person who accepts universal waste generated by others and conducts certain treatment and recycling activities allowed by the universal waste handler regulations

*Management Requirements for Universal Waste Handlers (Cal. Code Regs, tit. 22, sections 66273.30-66273.39; additional requirements for handlers who conduct authorized treatment, Cal. Code Regs, tit. 22, sections 66273.70-77)*

- Do not dispose of universal waste or treat universal waste except as provided for in the regulations
- Notify DTSC and/or obtain an EPA identification number
- Use proper containment—non-leaking, compatible containers
- Segregate universal waste in distinct areas
- Determine if materials generated when handling/recycling are hazardous wastes
- Comply with applicable requirements for hazardous waste
- If applicable, comply with zoning requirements when storing universal wastes
- Have spill kits readily available to deal with accidental spills (mercury-containing devices)
- Use proper labeling and markings
- Accumulate universal waste no longer than one year

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## DEPARTMENT OF TOXIC SUBSTANCES CONTROL

*Our mission is to provide the highest level of safety, and to protect public health and the environment from toxic harm.*

- Provide personnel training to personnel who manage universal waste, or who supervise personnel who manage universal waste and keep training records
- Respond to releases of universal waste or its contents; determine if spill residuals are hazardous waste
- Track shipments by keeping records of what was received and shipped (name, address, quantities) for three years

#### Universal Waste Transporters

A universal waste transporter is a person engaged in the offsite transportation of universal waste by air, rail, highway or water. A universal waste transporter may be:

1. Universal waste handler carrying universal waste in his or her own vehicle
2. A package shipping service (e.g., US Postal Service; FedEx, UPS)
3. A commercial carrier (e.g., a trucking company, a hauler specializing in universal waste, or the operator of a destination facility that offers a universal waste pick-up service)
  - If you do not own or operate a facility that accepts, generates, accumulates, or stores universal waste, but you pick up and transport universal waste (e.g., electronic devices from office complexes) to a recycling or collection facility, you are a universal waste transporter. **Universal waste transporters do not need to notify DTSC or submit annual reports for their transportation activities.**
  - Universal waste transporters may store universal waste at a transfer facility for up to 10 days (depending on local zoning). A universal waste transporter who exceeds this limit is considered a universal waste handler and is subject to the handler requirements summarized above.

#### Destination Facilities

A destination facility is a fully-regulated hazardous waste facility that treats, disposes of, or recycles a specific type of universal waste. Examples of destination facilities are hazardous waste recycling facilities and hazardous waste landfills. A destination facility shall manage the universal waste in accordance with the requirements and conditions in its hazardous waste facility permit, unless authorized by section 66273.60 of title 22 of the California Code of Regulations to manage it pursuant the reduced requirements applicable to universal waste handlers. A destination facility is required to follow certain rules for shipping universal wastes off-site and for rejecting shipments that contain universal waste and is required to keep records of all shipments received for three years. A facility that only accepts and accumulates universal waste is not a destination facility. Such a facility is regulated as a universal waste handler.

STATE OF CALIFORNIA

## GREEN CODE NOTES (2017 LAGBC)

### WATER EFFICIENCY AND CONSERVATION

1. FOR PROJECTS THAT INCLUDE LANDSCAPE WORK, THE LANDSCAPE CERTIFICATION FORM GRN 12, SHALL BE COMPLETED PRIOR TO FINAL INSPECTION APPROVAL. (STATE ASSEMBLY BILL NO. 1881,5.3041).

### LANDSCAPE DESIGN PLAN

1. RECIRCULATING WATER SYSTEMS SHALL BE USED FOR WATER FEATURES.
2. A MINIMUM 3-INCH LAYER OF MULCH SHALL BE APPLIED ON ALL EXPOSED SOIL SURFACES OF PLANTING AREAS EXCEPT TURF AREAS, CREEPING OR ROOTING GROUNDCOVERS, OR DIRECT SEEDING APPLICATIONS WHERE MULCH IS CONTRAINDICATED.
3. FOR SOILS LESS THAN 6% ORGANIC MATTER IN THE TOP 6 INCHES OF SOIL, COMPOST AT A RATE OF A MINIMUM OF FOUR CUBIC YARDS PER 1,000 SQUARE FEET OF PERMEABLE AREA SHALL BE INCORPORATED TO A DEPTH OF SIX INCHES INTO THE SOIL.

### IRRIGATION DESIGN PLAN

1. PRESSURE REGULATING DEVICES ARE REQUIRED IF WATER PRESSURE IS BELOW OR EXCEEDS THE RECOMMENDED PRESSURE OF THE SPECIFIED IRRIGATION DEVICES.
2. CHECK VALVES OR ANTI-DRAIN VALVES ARE REQUIRED ON ALL SPRINKLER HEADS WHERE LOW POINT DRAINAGE COULD OCCUR.

### REQUIRED STATEMENTS AND CERTIFICATION

1. A DIAGRAM OF THE IRRIGATION PLAN SHOWING HYDROZONES SHALL BE KEPT WITH THE IRRIGATION CONTROLLER FOR SUBSEQUENT MANAGEMENT PURPOSES.
2. A CERTIFICATE OF COMPLETION SHALL BE FILLED OUT AND CERTIFIED BY EITHER THE SIGNER OF THE LANDSCAPE PLANS, THE SIGNER OF THE IRRIGATION PLANS, OR THE LICENSED LANDSCAPE CONTRACTOR FOR THE PROJECT.
3. AN IRRIGATION AUDIT REPORT SHALL BE COMPLETED AT THE TIME OF FINAL INSPECTION.

### MATERIAL CONSERVATION AND RESOURCE EFFICIENCY

1. CONSTRUCTION WASTE SHALL BE REDUCED BY 65%. CONSTRUCTION WASTE SHALL BE HANDLED BY A CITY OF LOS ANGELES CERTIFIED HAULER.
2. NON-RESIDENTIAL ADDITION AND ALTERATIONS SHALL REQUIRE VERIFICATION THAT CALIFORNIA PROHIBITED UNIVERSAL WASTE MATERIALS ARE DISPOSED OF PROPERLY AND DIVERTED FROM LANDFILLS.

### ENVIRONMENTAL QUALITY

1. THE BUILDING IS NOT EXPOSED TO A NOISE LEVEL OF 65dB L<sub>eq</sub> 1-HR DURING ANY HOUR OF OPERATION.

### PLANNING AND DESIGN

1. AT LEAST 25% OF THE TOTAL Hardscape SHALL CONSIST OF UNCOLORED CONCRETE

NO.	REVISION DESCRIPTION
03/03/20	03/03/20
03/03/20	03/03/20
03/03/20	03/03/20
03/03/20	03/03/20

INDEX NO.	RP-300118
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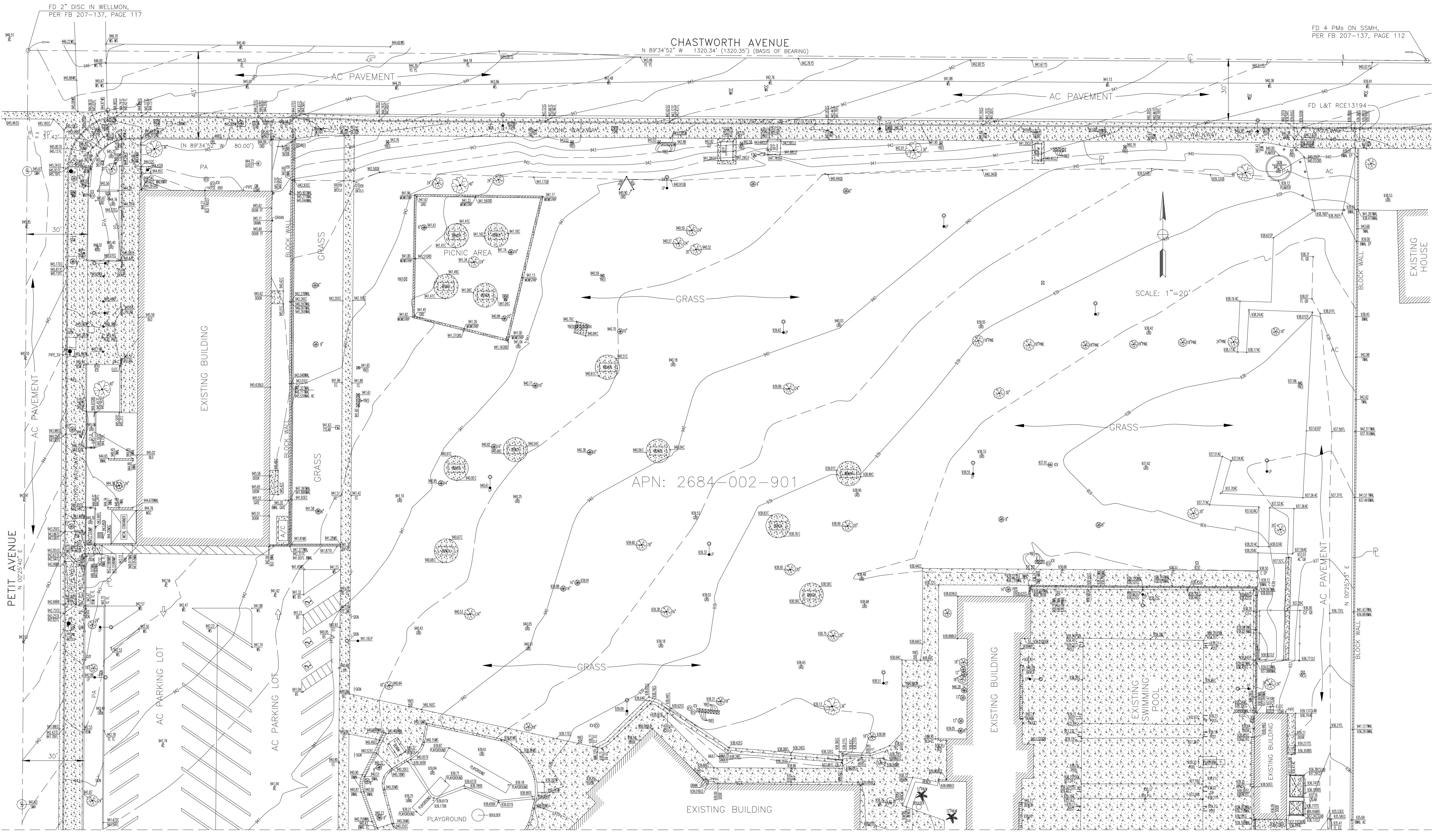
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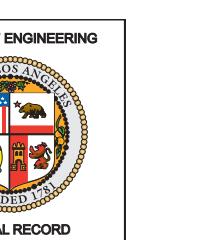


ENTRIES SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.



MATCH SEE SHEET 2 LINE

$$1'' = 25'$$





## GENERAL NOTES:

1. ALL WORK PERFORMED IN THIS CONTRACT SHALL CONFORM TO:
    - A. THE PROJECT SPECIFICATIONS AND ALL SAFETY REGULATION; CODES AND REQUIREMENTS PERTINENT TO THE PROJECT CONSTRUCTION.
    - B. ALL SHALL CONFORM TO THE LATEST EDITION AND SUPPLEMENTS OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC) AND AMERICAN PUBLIC WORKS ASSOCIATION (APWA).
    - C. CITY OF LOS ANGELES STANDARD PLANS AND SPECIFICATIONS.
    - D. PROJECT GEOTECHNICAL REPORT.
  2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BE KNOWLEDGEABLE TO INTERPRET AND APPLY THE ABOVE CODES AND SPECIFICATIONS.
  3. ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE WORK SPECIFIED ON THE DRAWINGS, SPECIFICATIONS AND WITHIN THE VARIOUS NOTES SHOWN HEREIN.
  4. THE EXISTING CONDITIONS SHOWN DIAGRAMMATICALLY ON THE PLANS ORIGINATED FROM AS BUILT DRAWINGS AND FIELD SURVEY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VISIT THE JOB SITE AND VERIFY THE EXACT EXISTING CONDITIONS BEFORE SUBMITTING HIS/HER BID. ANY DISCREPANCY SHALL BE REPORTED IMMEDIATELY TO THE CITY ENGINEER FOR PROPER ACTION.
  5. THE CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES IN THE AREA OF WORK WHICH ARE NOT INCLUDED IN THIS CONSTRUCTION. ANY DAMAGE RESULTING FROM THIS WORK SHALL BE REPAIRED AND/OR REPLACED AT NO ADDITIONAL COST TO THE CITY.
  6. UNCLOG, CLEAN AND FLUSH THE ENTIRE SITE DRAINAGE SYSTEM AFTER PAVING AND IMMEDIATELY BEFORE A RAIN FORECAST.
  7. ALL EXISTING STREET IMPROVEMENTS, UNLESS OTHERWISE INDICATED HEREIN TO BE REMOVED, SHALL BE PROTECT IN PLACE. THESE ITEMS INCLUDE LIGHT POLES, POWER POLES, SIGNAL POLES AND APPURTENANCES.
  8. CONTRACTOR SHALL NOTIFY ALL UTILITY OWNERS BOTH IN PRIVATE PROPERTY AND IN PUBLIC RIGHT OF WAY FOR EXISTING LATERALS TO BE REMOVED OR CAPPED.
  9. UTILITIES TO BE VERIFIED IN FIELD TO ENSURE EXISTING UTILITY TO REMAIN. CONTRACTOR IS RESPONSIBLE FOR THE RELOCATION IF REQUIRED. ALL EXISTING/RELOCATED UTILITIES PER NEW SITE LAYOUT WILL BE PROTECTED IN PLACE.
  10. BEFORE COMMENCING ANY EXCAVATION ON-SITE AND OFF-SITE, THE CONTRACTOR SHALL OBTAIN AN UNDERGROUND SERVICE ALERT INQUIRY I.D. NUMBER BY CALLING 1-800-422-4133. TWO WORKING DAYS SHALL BE ALLOWED AFTER THE I.D. NUMBER IS OBTAINED AND BEFORE THE EXCAVATION WORK IS STARTED THAT UTILITY COMPANIES CAN BE NOTIFIED.
  11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF PUBLIC AND PRIVATE PROPERTY ADJACENT TO THE WORK PER SECTION 7-9 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
  12. EXISTING STRUCTURES AND SUBSTRUCTURES WHICH ARE INDICATED TO BE REMOVED IN THIS CONSTRUCTION DOCUMENTS SHALL BE TOTALLY REMOVED AND DISPOSED OF OFFSITE, UNLESS OTHERWISE INDICATED. EXISTING FACILITIES WHICH ARE DISCOVERED DURING CONSTRUCTION (INCLUDING WALLS, FOOTINGS, AND FOUNDATIONS) SHALL BE REPORTED TO AND COORDINATED WITH THE GEOTECHNICAL ENGINEER OF RECORD AS TO THEIR REMOVAL.
  13. FOLLOWING DEMOLITION, THE CONSTRUCTION AREA SHOULD BE CLEARED OF ANY VEGETATION AND STRIPPED OF MISCELLANEOUS DEBRIS AND OTHER DELETERIOUS MATERIAL. VEGETATION AND ORGANIC MATTER SHOULD NOT BE INCORPORATED INTO THE COMPACTED FILL.
  14. ALL SITE PREPARATION AS INDICATED SHALL BE MADE UNDER THE CONTINUOUS INSPECTION OF THE GEOTECHNICAL ENGINEER. SECURE THE REQUIRED PERMITS FROM THE CALIFORNIA DIVISION OF INDUSTRIAL SAFETY FOR THE CONSTRUCTION OF TRENCHES, SHORING OR EXCAVATIONS WHICH ARE 5 FEET OR DEEPER OR WORK THAT MAY JEOPARDIZE THE SAFETY OF WORKERS. SHORING CALCULATIONS SHALL BE PROVIDED BY THE CONTRACTOR AT HIS EXPENSE AS REQUIRED FOR APPROVAL AND PERMITTING.
  15. THE CONTRACTOR SHALL KEEP THE CONSTRUCTION AREA SUFFICIENTLY DAMPENED TO CONTROL DUST CAUSED BY WORK ACTIVITIES AS REQUIRED BY THE CITY ENGINEER. THE CONTRACTOR SHALL PROVIDE 6' HIGH TEMPORARY FENCING WITH VISUAL BARRIER AROUND THE PROJECT LIMITS AND A TEMPORARY CONSTRUCTION ACCESS ON-SITE.
  16. ALL WORK IN THE PUBLIC RIGHT OF WAY REQUIRES APPROVAL BY THE CITY OF LOS ANGELES DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS BEFORE CONSTRUCTION BEGINS. CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS INCLUDING UTILITY CONNECTIONS REQUIRED PRIOR TO CONSTRUCTION.
  17. VOIDS RESULTING FROM REMOVAL OF STRUCTURES SHALL BE FILLED WITH SUITABLE MATERIALS APPROVED BY THE CITY INSPECTOR AND COMPACTED TO 95% MINIMUM DENSITY PER ASTM D-1557 AND THE RECOMMENDATIONS WITHIN THE SOILS ENGINEERING EXPLORATION REPORT.
  18. UPON COMPLETION OF PROJECT, CONTRACTOR SHALL REMOVE EXISTING CONSTRUCTION FENCING, APPURTENANCES AND OFFICE TRAILERS FROM THE SITE. PAVEMENT SHALL BE PATCHED AND REPAIRED TO MATCH ADJACENT PAVEMENT AND APPROVED BY THE CITY ENGINEER AS APPLICABLE.
  19. ANY ADDITIONAL SURVEYS OR TESTING AS A RESULT OF CONTRACTOR ERROR OR MISINFORMATION WILL BE CHARGED TO THE CONTRACTOR.
  20. THE CONSTRUCTION SHALL NOT RESTRICT A FIVE FOOT CLEAR AND UNOBSTRUCTED ACCESS TO ANY WATER OR POWER DISTRIBUTION FACILITIES (POWER POLES, PULL-BOXES, TRANSFORMERS, VAULTS, PUMPS, VALVES, METERS, APPURTENANCES, ETC.) OR TO THE LOCATION OF THE HOOK UP, THE CONSTRUCTION SHALL NOT BE WITHIN TEN FEET OF ANY POWER LINES WHETHER OR NOT THE LINES ARE LOCATED ON THE PROPERTY. FAILURE TO COMPLY MAY CAUSE CONSTRUCTION DELAYS AND/OR ADDITIONAL EXPENSES.
  21. TRIM TREE ROOTS AS NECESSARY OR GRADED ON AREAS TO BE PAVED. TRIM ROOTS UNDER THE DIRECTION OF A CERTIFIED CITY APPROVED ARBORIST. NOTIFY THE CITY ENGINEER PRIOR TO TRIMMING OF TREES.

## GENERAL NOTES:

1. JUST TO GRADE EXISTING MANHOLE RIMS, VALVE BOXES AND ELECTRICAL VAULT LIDS TO DESIGN GRADES  
WITHIN THE IMPROVEMENT AREA, UNLESS NOTED OTHERWISE. CONTRACTOR TO VERIFY LOCATION AND NUMBER  
MANHOLE RIMS, VALVE BOXES AND ELECTRICAL VAULT LIDS IN THE FIELD PRIOR TO BIDDING.

2. EXISTING UTILITIES ARE EXPOSED OR DETERMINED TO EXIST UNDER THE ROUGH GRADING SITE,  
CONTRACTOR SHALL PROVIDE A FLAGGED STAKE THAT INDICATE THEIR LOCATION, TYPE OF UTILITY, SIZE,  
MATERIAL, AND DEPTH. STAKES SHALL BE INSTALLED NO LESS THAN 50' ON CENTER ON STRAIGHT  
LINES AND AT BENDS.

3. PROPERTY BOUNDARIES, EASEMENTS, DRAINAGE DEVICES AND RESTRICTED USE AREAS SHALL BE LOCATED PER  
INSTRUCTION STAKING BY A LICENSED SURVEYOR PAID FOR BY THE CONTRACTOR. PRIOR TO GRADING, AS  
REQUESTED BY THE CITY ENGINEER, ALL PROPERTY LINES, EASEMENTS, AND RESTRICTED USE AREAS SHALL  
BE STAKED.

4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE THE CITY ENGINEER WITH A COMPLETE SET OF  
PRODUCIBLE & RED MARKED PRINT "AS-BUILT" DRAWINGS OF ALL WORK PERFORMED UNDER THIS  
CONTRACT, AS SHOWN WITHIN THESE CONSTRUCTION DRAWINGS. ALL FIELD CHANGES SHALL BE SHOWN IN  
DETAIL ON THE "AS-BUILT" DRAWINGS AND SHALL INCORPORATE AS A MINIMUM, NEW ELEVATIONS, GRADES  
AND ALIGNMENT OF UNDERGROUND FACILITIES WITH DIMENSIONAL TIES TO BUILDING OR OTHER VISIBLE  
IMPROVEMENTS.

5. CONTRACTOR IS RESPONSIBLE FOR THE RESTORATION TO THEIR EXISTING CONDITION OF THE FACILITIES WHICH  
ARE INTENDED TO REMAIN IN PLACE. AND ALL REPAIRS TO ANY DAMAGED MATERIALS OR FACILITIES SHALL  
BE MADE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CITY.

6. INSTRUCT OFFSITE WORK TO COMPLY WITH THE REQUIREMENTS OF THE LOCAL GOVERNING AGENCY. SECURE  
AND PAY FOR REQUIRED CONSTRUCTION PERMITS.

## GENERAL GEOTECHNICAL NOTES:

- WORK MUST BE IN COMPLIANCE WITH THE RECOMMENDATIONS INCLUDED IN THE GEOTECHNICAL CONSULTANT'S REPORT(S) AND THE APPROVED GRADING PLANS AND SPECIFICATIONS.

THE GEOTECHNICAL INVESTIGATION WAS PREPARED BY GEOTECHNICAL ENGINEERING DIVISION W.O. #E170517A, FILE #17-074 DATED AUGUST 22, 2017, ENTITLED "GEOTECHNICAL ENGINEERING REPORT GRANADA HILLS POOL REPLACEMENT PROJECT WITH ADDRESS 16730 CHATSWORTH STREET TRACT: SUBDIVISION NO.1 OF THE PROPERTY OF THE PORTER LAND AND WATER COMPANY BLOCK: NONE, LOT: 2 SEC 18 T2N R15W LOS ANGELES, CALIFORNIA. RECOMMENDATIONS OF THE SOILS REPORT AND SUPPLEMENTS / ADDENDUMS ARE PART OF THIS NOTE AND SHALL BE PERFORMED BY THE CONTRACTOR AS APPLICABLE. IF DISCREPANCIES OCCUR THE GEOTECHNICAL REPORT SHALL GOVERN.

EARTH WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE GEOTECHNICAL RECOMMENDATIONS IN GEOTECHNICAL REPORT AND THE LADBS GRADING DIVISION REQUIREMENTS. ALL EARTHWORK SHOULD BE PERFORMED UNDER THE OBSERVATION AND TESTING OF A QUALIFIED GEOTECHNICAL ENGINEER.

THE SOIL BENEATH NEW PAVEMENTS, POOL DECK, AND SPLASH PAD SHALL BE OVER-EXCAVATED TO A DEPTH OF 24 INCHES BELOW EXISTING GRADING OR 24 INCHES BELOW THE FINISHED GRADE, WHICHEVER IS GREATER AND SHALL RESULT IN 24" OF COMPACTED FILL. THE EXCAVATION SHALL EXTEND LATERALLY AT LEAST 2 FEET BEYOND THE EDGE OF THE PAVEMENT OR TO THE PROPERTY BOUNDARY, WHICHEVER IS LESS.

THE SOIL BENEATH THE POOL SHALL BE EXCAVATED TO THE DESIGN SUBGRADE OR TO THE NATIVE SOIL, WHICHEVER IS GREATER. AS ADDITIONAL 12" SHALL BE EXCAVATED SO THAT THE POOL IS UNDERLAIN BY 12" OF FILL.

THE SOIL BENEATH SECONDARY (I.E. NON-STRUCTURAL) STRUCTURES SHALL BE OVER-EXCAVATED TO A DEPTH THAT SHALL RESULT IN AT LEAST 24 INCHES OF COMPACTED FILL BENEATH THE FOOTING. THIS 24 INCHES INCLUDES SUBGRADE PREPARATION. THE EXCAVATION SHALL EXTEND LATERALLY AT LEAST 2 FEET BEYOND THE EDGE OF THE FOOTING OR TO THE PROPERTY BOUNDARY, WHICHEVER IS LESS.

THE SOIL BENEATH SHALLOW FOUNDATIONS SHALL BE OVER-EXCAVATED TO A DEPTH THAT SHALL RESULT IN AT LEAST 30 INCHES OF COMPACTED FILL BENEATH THE FOOTING. THIS 30 INCHES INCLUDES SUBGRADE PREPARATION. THE EXCAVATION SHALL EXTEND LATERALLY AT LEAST 2 FEET BEYOND THE EDGE OF THE FOOTING OR TO THE PROPERTY BOUNDARY, WHICHEVER IS LESS.

EXCAVATION BOTTOMS SHALL BE SCARIFIED TO A DEPTH OF 6 INCHES, MOISTURE CONDITIONED TO WITHIN 3 PERCENT ABOVE THE OPTIMUM MOISTURE CONTENT, AND COMPACTED TO AT LEAST 95 PERCENT. ALL EXCAVATION BOTTOMS MUST BE APPROVED BY A REPRESENTATIVE OF GEO AND BY THE LADBS GRADING INSPECTOR PRIOR TO BACK FILL.

SURCHARGED, TEMPORARY VERTICAL EXCAVATIONS SHALL NOT EXCEED 5 FEET. UNSURCHARGED EXCAVATIONS GREATER THAN 5 FEET AND TO A MAXIMUM OF 10 FEET SHALL BE SLOPED AT A 1.5:1 (H:V) FLATTER INCLINATION FROM THE GROUND SURFACE TO THE BOTTOM OF THE EXCAVATION. IF DEEPER EXCAVATIONS ARE PROPOSED, THEY SHALL BE REVIEWED BY GEO AND SUPPLEMENTAL RECOMMENDATION MAY BE REQUIRED.

FOR EXCAVATION, IT IS RECOMMENDED THAT WALLS, STRUCTURES, OR PORTIONS OF STRUCTURES WITHIN HORIZONTAL DISTANCE OF  $1\frac{1}{2}$  TIMES THE DEPTH OF THE EXCAVATION BE INSPECTED TO DETERMINE THEIR PRESENT CONDITION.

PHOTOGRAPHS SHOULD BE TAKEN OF PRECONSTRUCTION CONDITIONS AND LEVEL SURVEYS SHOULD BE PERFORMED.

THE CONTRACTOR SHALL NOT POUR FOOTINGS UNTIL AN APPROVAL LETTER IS ISSUED BY THE DEPARTMENT OF BUILDING AND SAFETY, GRADING DIVISION FOR THE COMPACTION CERTIFICATION. THE CONTRACTOR MAY EXCAVATE IN COMPACTED FILL FOR FOUNDATION ELEMENTS BEFORE THE FILL CERTIFICATION APPROVAL LETTER IS ISSUED, BUT DOES SO AT HIS/HER OWN RISK.

THE GEOTECHNICAL ENGINEER IS TO APPROVE THE KEY OR BOTTOM OF EXCAVATION AND LEAVE A CERTIFICATE ON THE SITE FOR THE CITY INSPECTOR. THE CITY INSPECTOR IS TO BE NOTIFIED BEFORE ANY GRADING BEGINS AND FOR BOTTOM INSPECTION BEFORE FILL IS PLACED. FILL MAY NOT BE PLACED WITHOUT THE APPROVAL OF THE CITY INSPECTOR.

THE GEOTECHNICAL ENGINEER SHALL PROVIDE SUFFICIENT INSPECTIONS DURING THE PREPARATION OF THE NATURAL GROUND AND THE PLACEMENT AND COMPACTION OF THE FILL TO BE SATISFIED THAT THE WORK IS BEING PERFORMED IN ACCORDANCE WITH THE PLAN AND APPLICABLE CODE REQUIREMENTS.

FOUNDATION AND WALL EXCAVATIONS MUST BE INSPECTED AND APPROVED BY THE GEOTECHNICAL ENGINEER, PRIOR TO THE PLACING OF STEEL OR CONCRETE.

WHERE FOUNDATIONS ARE DESIGNED TO DERIVE SUPPORT IN ENGINEERED FILL, AS A MINIMUM, FOOTINGS SHALL BE FOUNDED ON AT LEAST 30 INCHES OF PROPERLY COMPACTED FILL MATERIAL AND SHALL BE JUNKED AT LEAST 24 INCHES BELOW THE LOWEST ADJACENT GRADE.

THE DITCH EXCAVATIONS FOR UTILITY PIPES MAY BE BACKFILLED WITH ONSITE SOILS UNDER THE OBSERVATION OF A REPRESENTATIVE OF GEO. AFTER UTILITY PIPES HAVE BEEN LAID, PROPERLY BEDDED, AND COVERED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, THEY SHALL BE BACK FILLED TO THE GROUND SURFACE OR DESIGN SUBGRADE WITH CONTROLLED BACKFILL. CONTROLLED BACKFILL SHALL BE MOISTURE CONDITIONED, PLACED AND COMPACTED IN ACCORDANCE WITH THE RECOMMENDATIONS PRESENTED ABOVE. DENSIFICATION BY BODING OR JETTING IS NOT ALLOWED.

## ALL NOTES:

- ALL SHALL NOT BE PLACED UNTIL STRIPPING OF VEGETATION, REMOVAL OF UNSUITABLE SOILS, AND INSTALLATION OF SUBDRAIN (IF ANY) HAVE BEEN INSPECTED AND APPROVED BY THE SOIL ENGINEER. THE CITY ENGINEER MAY REQUIRE A "STANDARD TEST METHOD FOR MOISTURE, ASH, ORGANIC MATTER, PEAT OR OTHER ORGANIC SOILS" ASTM D-2974-87 ON ANY SUSPECT MATERIAL. DETRIMENTAL AMOUNTS OF ORGANIC MATERIAL SHALL NOT BE PERMITTED IN FILLS. SOIL CONTAINING SMALL AMOUNTS OF ROOTS MAY BE ALLOWED PROVIDED THAT THE ROOTS ARE IN A QUANTITY AND DISTRIBUTED IN A MANNER THAT WILL NOT BE DETRIMENTAL TO THE FUTURE USE OF THE SITE AND THE GEOTECHNICAL ENGINEER APPROVED THE USE OF SUCH MATERIAL.

NO FILL TO BE PLACED, UNTIL THE GEOTECHNICAL ENGINEER OR CITY ENGINEER HAS INSPECTED AND APPROVED THE BOTTOM OF EXCAVATION. FILL MATERIAL INCLUDING BASE MATERIAL SHALL BE OBTAINED FROM A DESIGNATED ON-SITE STOCKPILE AREAS, AS DIRECTED BY THE OAR. ANY ADDITIONAL IMPORT FILL MATERIAL SHALL HAVE AN EXPANSION INDEX OF LESS THAN "20". IN NO CASE SHALL ON-SITE CLAY SOILS BE PLACED IN THE UPPER 24 INCHES BENEATH CONCRETE SLABS AND WALKS AND BEHIND RETAINING WALLS AS DIRECTED IN THE GEOTECHNICAL INVESTIGATION REPORT.

FOR ONSITE OR NATIVE SOILS; THE GEOTECHNICAL ENGINEER SHOULD BE PRESENT TO REVIEW THE TYPES OF MATERIALS ENCOUNTERED IN THE EXCAVATIONS IN ORDER TO CONFIRM THEIR RE-USABILITY.

THE EXISTING PEA GRAVEL FILL BY ITSELF IS NOT ACCEPTABLE FOR REUSE AS BACK FILL, BUT IT MAY BE BLENDED WITH THE NATIVE SOIL. FILL MATERIALS SHALL CONSIST OF THE NATIVE SOIL OR APPROVED IMPORT SOIL. IMPORT SOIL AND ONSITE BLENDED NATIVE SOIL/PEA GRAVEL SHALL BE PREDOMINANTLY GRANULAR, MINIMUM 80% PASSING THE NO. 4 SIEVE AND BETWEEN 10% AND 35% PASSING THE NO. 200 SIEVE, NON-EXPENSIVE (EI LESS THAN 20). ALL FILL SHALL BE FREE OF ORGANIC OR INORGANIC DEBRIS, CONTAMINATION AND MATERIALS WITH ANY DIMENSION LARGER THAN 3 INCHES. PROPOSED IMPORT SOIL SHALL BE REVIEWED BY GEO FOR APPROVAL PRIOR TO DELIVERY TO THE JOB SITE. GEO SHALL BE NOTIFIED MINIMUM OF THREE WORKING DAYS PRIOR TO SCHEDULED DELIVER TO THE SITE.

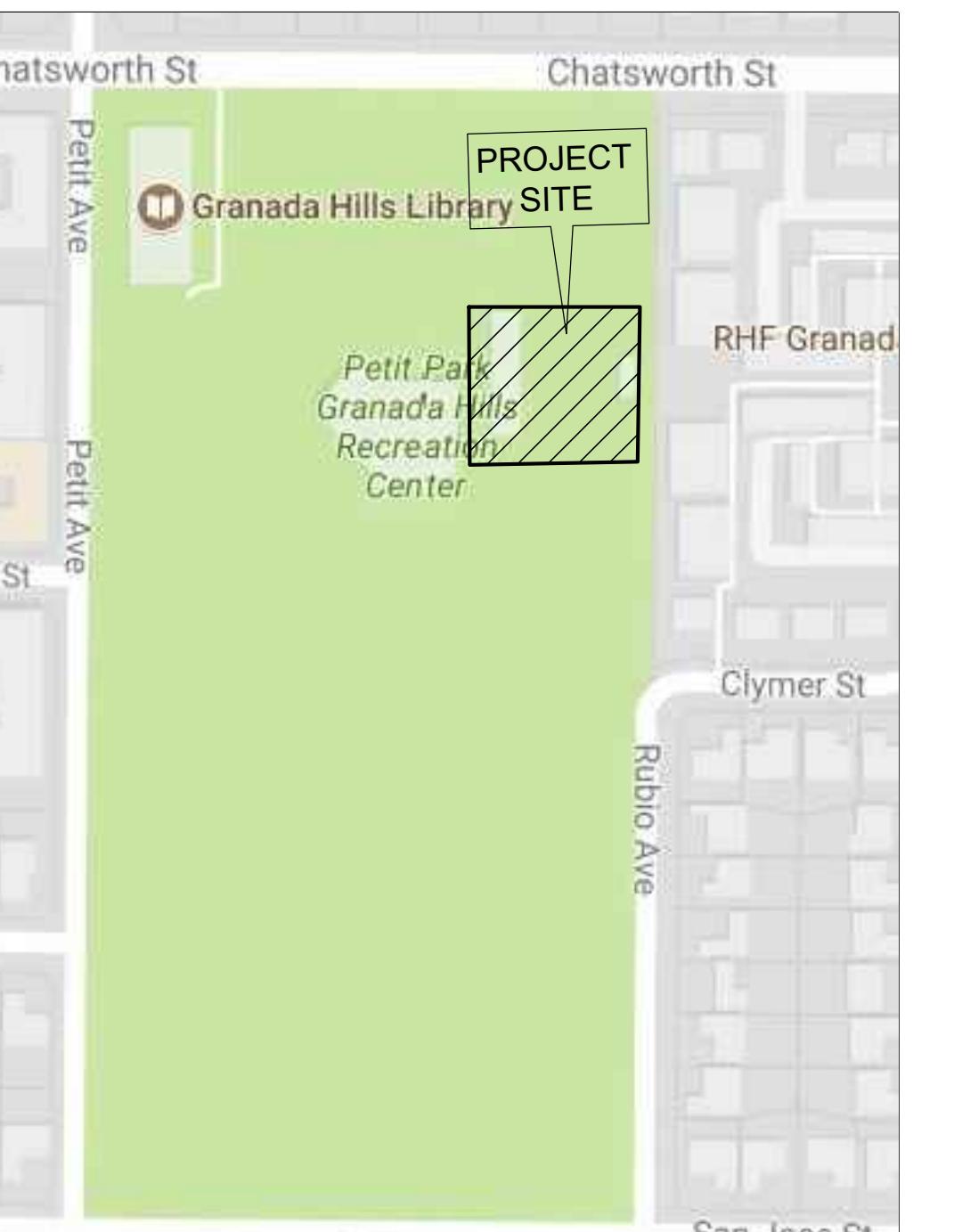
ALL MATERIAL SHALL BE PLACED IN LOOSE LIFTS NOT EXCEEDING 8 INCHES IN THICKNESS, MOISTURE-CONDITIONED TO WITHIN 3 PERCENT ABOVE THE OPTIMUM MOISTURE CONTENT AND MECHANICALLY COMPACTED. CLAYEY SOILS (I.E. THOSE WITH 15% OR MORE FINER THAN 0.005 MM SIEVE) ARE NOT ANTICIPATED AT THIS TIME. PRIMARY STRUCTURAL FILL AND THE UPPER 1-FOOT OF SUBGRADE BENEATH PAVEMENTS SHALL BE COMPACTED TO A MINIMUM OF 95 PERCENT RC. ANY AGGREGATE BASE SHOULD BE MOISTURE CONDITIONED TO WITHIN 3 PERCENT ABOVE OPTIMUM AND COMPACTED TO A MINIMUM OF 95 PERCENT RC.

ALL PLACEMENT AND COMPACTION SHALL BE OBSERVED AND TESTED BY A CERTIFIED COMPACTION TESTING AGENCY WORKING UNDER THE DIRECT SUPERVISION OF GEO. COMPACTED FILL SOILS SHALL BE KEPT MOIST, BUT NOT SLIGHTLY ABOVE THE SPECIFIED MOISTURE CONTENT AT THE TIME OF COMPACTION) BUT NOT FLOODED, UNTIL COVERED WITH SUBSEQUENT CONSTRUCTION. IF COMPACTED FILL SOILS BECOME SOFTENED OR DISTURBED, THEY SHALL BE REPLACED OR RECOMPACTED AT THE DIRECTION OF GEOTECHNICAL ENGINEER BEFORE ADDITIONAL FILL OR CONSTRUCTION IS PLACED. CERTIFICATION AND INSPECTION APPROVALS FOR COMPROMISED SOILS ARE VOID AND INVALID.

# SEET INDEX

/IL:

- 0 GENERAL NOTES, LEGENDS & ABBREVIATIONS
- 0 GENERAL NOTES, LEGENDS & ABBREVIATIONS
- 01 DEMOLITION PLAN
- 0 SITE CONTROL PLAN
- 0 SITE GRADING PLAN
- 1 ENLARGED GRADING PLAN
- 2 ENLARGED GRADING PLAN
- 3 GRADING SECTIONS
- 0 SITE UTILITY PLAN
- 1 SITE LID PLAN
- 0 MISCELLANEOUS DETAILS
- 1 MISCELLANEOUS DETAILS
- 2 MISCELLANEOUS DETAILS
- 3 MISCELLANEOUS DETAILS
- 4 MISCELLANEOUS DETAILS
- 5 MISCELLANEOUS DETAILS
- 6 MISCELLANEOUS DETAILS
- 0 EROSION CONTROL PLAN
- 1 EROSION CONTROL DETAILS



# VICINITY MAP

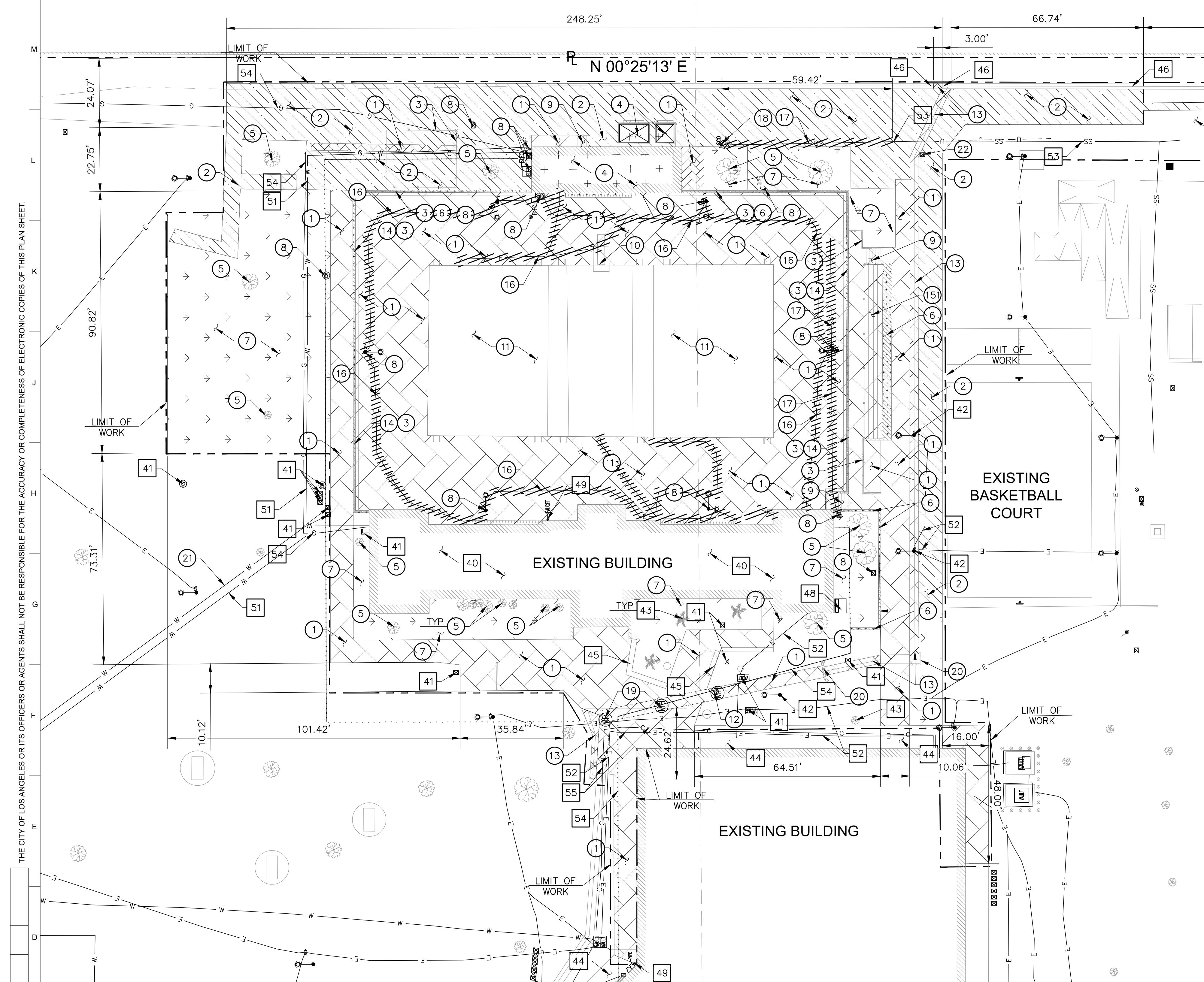
NOT TO SCALE

A circular registration stamp. The outer ring contains the words "REGISTERED PROFESSIONAL ENGINEER" at the top and "STATE OF CALIFORNIA" at the bottom. The inner circle contains "VIRGILIO C. AOANJAN" in the center, flanked by two five-pointed stars. Below the name is a horizontal line with "No. C36079" written on it. At the bottom of the inner circle is another horizontal line with "Exp. 6/30/20" written on it.

DEPARTMENT OF PUBLIC WORKS	
<b>GARY LEE MOORE, PE, ENV SP</b>	
ARCHITECTURAL DIVISION	CITY ENGINEER
DATE:	03/03/2020
DESIGNED BY:	VIRGILIO AOANAN
DRAWN BY:	AUTUMN WAGGONER
CHECKED BY:	VIRGILIO AOANAN
APPROVED BY:	VIRGILIO AOANAN

CITY OF LOS ANGELES		SHEET TITLE: GENERAL NOTES, LEGEND, AND ABBREVIATIONS	
		PROJECT: GRANADA HILLS POOL AND BATHHOUSE REPLACEMENT PROJECT	
		ADDRESS: 16730 CHATSWORTH STREET GRANADA HILL S CA 91344	
WORK ORDER NO. <b>#E170517</b>		PLAN FILE NO. <b>#308</b>	
DRAWING NO. <b>C100</b>		SHEET NO. 1 OF 19 SHEETS	
SHEET <b>1</b>	TO		





#### SHEET NOTES:

- ALL EXISTING STREET IMPROVEMENTS, UNLESS OTHERWISE INDICATED HEREIN TO BE REMOVED, SHALL BE PROTECTED IN PLACE. THESE ITEMS INCLUDE SIDEWALK, DRIVEWAYS, CURB AND GUTTER, LIGHT POLES, POWER POLES, SIGNAL POLES AND APPURTENANCES.
- CONTRACTOR SHALL NOTIFY ALL UTILITY OWNERS BOTH IN PRIVATE PROPERTY AND IN PUBLIC RIGHT OF WAY FOR EXISTING LATERALS TO BE REMOVED OR CAPPED.
- VERIFY IN FIELD AND POTHOLE TO REMOVE ALL EXISTING ON-SITE SEWER LINES, CLEANOUTS, MANHOLES, UNLESS OTHERWISE INDICATED. CUT PIPE AND CAP PIPE ENDS. COORDINATE WITH PLUMBING DRAWINGS. IN CASE OF CONFLICT, PLUMBING WILL GOVERN.
- VERIFY IN FIELD AND POTHOLE TO REMOVE EXISTING ON-SITE WATER LINES, UNLESS OTHERWISE INDICATED. TURN OFF WATER AT SOURCE, CUT AND CAP PIPE AT LIMIT OF WORK LINE. REMOVE WATER LINE WITHIN WORK LIMITS. COORDINATE WITH PLUMBING DRAWINGS. IN CASE OF CONFLICT, PLUMBING WILL GOVERN.
- VERIFY IN FIELD AND POTHOLE TO REMOVE EXISTING ON-SITE STORM DRAIN LINES, CLEANOUTS, MANHOLES, UNLESS OTHERWISE INDICATED. CUT PIPE AND CAP PIPE ENDS. COORDINATE WITH PLUMBING. IN CASE OF CONFLICT, PLUMBING WILL GOVERN.
- ABANDON IN PLACE UNNEEDED EXISTING ON-SITE IRRIGATION LINES. COORDINATE WITH LANDSCAPE DRAWINGS. IN CASE OF CONFLICT, LANDSCAPE WILL GOVERN.
- VERIFY IN FIELD AND POTHOLE TO REMOVE ALL EXISTING ELECTRICAL, POWER, TELEPHONE, AND COMMUNICATIONS SYSTEMS ON SITE, UNLESS OTHERWISE INDICATED ON ELECTRICAL DRAWINGS. COORDINATE WITH UTILITY OWNERS FOR REQUIREMENTS.
- VERIFY IN FIELD AND POTHOLE TO REMOVE ALL EXISTING ON-SITE GAS SYSTEM, UNLESS OTHERWISE INDICATED ON PLUMBING/MECHANICAL DRAWINGS. COORDINATE WITH GAS COMPANY FOR REQUIREMENTS.
- COORDINATE WITH LANDSCAPING FOR TREE REMOVAL. IN CASE OF CONFLICT, LANDSCAPE WILL GOVERN.
- CONTRACTOR SHOULD VISUALLY VERIFY IN FIELD ALL EXISTING FEATURE TO BE REMOVED WITHIN LIMIT OF WORK BEFORE BIDDING. ALL SURFACE AND UNDERGROUND FEATURES WITH LIMIT OF WORK ARE A PART OF DEMOLITION PLAN UNLESS OTHERWISE INDICATED TO PROTECT.
- REMOVE EXISTING ABANDONED UTILITIES FOUND WITHIN THE EXCAVATION FOR THE POOL AND POOL DECK.

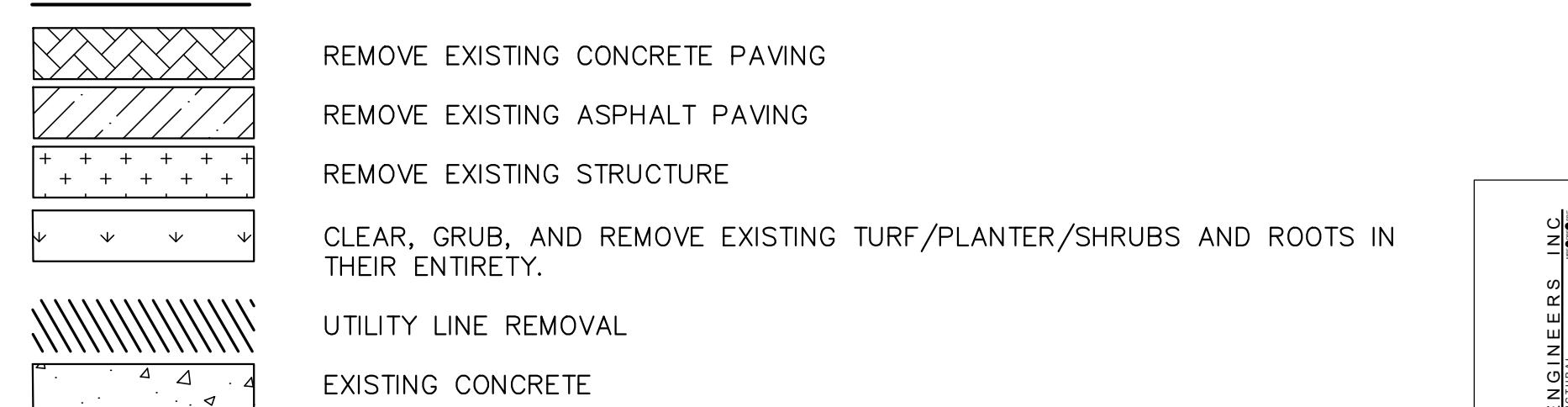
#### CONSTRUCTION NOTES:

- REMOVE EXISTING CONCRETE PAVING AND BASE COURSE, FULL DEPTH.
- REMOVE EXISTING ASPHALT CONCRETE PAVING AND BASE COURSE, FULL DEPTH.
- REMOVE EXISTING FENCE/GATE INCLUDING FOOTING AND APPURTENANCES.
- REMOVE EXISTING BUILDING INCLUDING FOOTINGS AND APPURTENANCES, COORDINATE WITH ARCHITECTURAL PLAN.
- REMOVE EXISTING TREE, COORDINATE WITH LANDSCAPE DRAWINGS FOR EXTENT OF REMOVAL.
- REMOVE EXISTING WALL INCLUDING FOOTINGS AND APPURTENANCES.
- CLEAR, GRUB, AND REMOVE EXISTING TURF/PLANTER/SHRUBS AND ROOTS IN THEIR ENTIRETY.
- REMOVE EXISTING UTILITY/UTILITY BOX/UTILITY METER, COORDINATE WITH MEP PLANS.
- REMOVE EXISTING STAIRS INCLUDING FOOTING AND APPURTENANCES.
- REMOVE EXISTING POOL PLATFORM.
- REMOVE EXISTING POOL, COORDINATE WITH ARCHITECTURAL PLAN.
- REMOVE EXISTING MANHOLE.
- REMOVE PORTION OF EXISTING V-GUTTER.
- REMOVE EXISTING FENCE CURB, FULL DEPTH.
- REMOVE EXISTING CONCRETE BLEACHERS AND FOOTINGS AND APPURTENANCES.
- REMOVE EXISTING ELECTRICAL LINE AND ASSOCIATED PULLBOXES PER MEP DRAWINGS.
- REMOVE EXISTING SEWER LINE.
- REMOVE EXISTING RAINWATER DIVERTER. ABANDON STORM DRAIN LINE AND PERFORATED PIPE IN PLACE.
- REMOVE EXISTING PARKWAY DRAIN AND PARKWAY DRAIN MANHOLES. REPLACE IN KIND PER NEW PAVEMENT ELEVATIONS ON SHEET C302.
- REMOVE EXISTING GUTTER WALL.
- REMOVE AND REPLACE EXISTING WATER LINE PER SHEET C400 CONSTRUCTION NOTE 7.
- REMOVE AND RELOCATE EXISTING YARDBOX AND ASSOCIATED VALVING/WIRING/PIPING OUTSIDE OF NEW V-GUTTER.

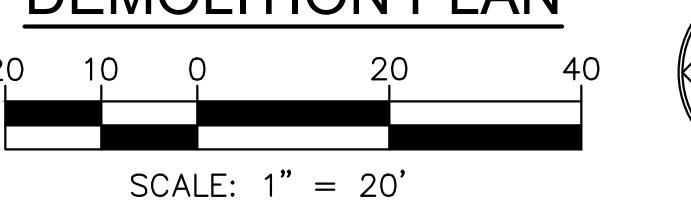
#### PROTECT-IN-PLACE NOTES:

- PROTECT IN PLACE EXISTING BUILDING PER ARCHITECTURAL PLAN.
- PROTECT IN PLACE EXISTING UTILITY, ADJUST TO GRADE.
- PROTECT IN PLACE EXISTING LIGHT POLE.
- PROTECT IN PLACE EXISTING TREE, REFER TO LANDSCAPE DRAWINGS FOR TREE PROTECTION REQUIREMENTS.
- PROTECT IN PLACE EXISTING CONCRETE.
- PROTECT IN PLACE EXISTING CONCRETE V GUTTER.
- PROTECT IN PLACE EXISTING CURB WALL.
- PROTECT IN PLACE EXISTING IRRIGATION CONTROLLER ENCLOSURE AND PAD.
- PROTECT IN PLACE EXISTING ABOVE GROUND UTILITY.
- PROTECT IN PLACE EXISTING ASPHALT PAVEMENT.
- PROTECT IN PLACE EXISTING WATER LINE.
- PROTECT IN PLACE EXISTING ELECTRICAL LINE.
- PROTECT IN PLACE EXISTING SEWER LINE.
- PROTECT IN PLACE EXISTING GAS LINE.
- PROTECT IN PLACE EXISTING COMMUNICATION LINE.

#### LEGEND:



#### DEMOLITION PLAN



BID SET  
CITY OF LOS ANGELES  
PROJECT ISSUE DATE: 06/22/21

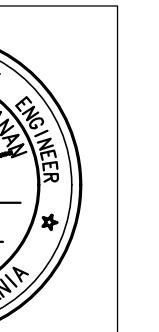
CITY OF LOS ANGELES  
DEMOLITION PLAN

PROJECT: GRANADA HILLS POOL AND BATHHOUSE  
ADDRESS: 16730 CHATSWORTH STREET  
GRANADA HILLS, CA 91344

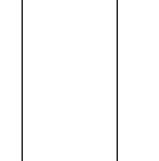
WORK ORDER NO. #E170517  
PLAN FILE NO. #308

DRAWING NO. CD101  
SHEET 3 OF SHEETS 18

BUREAU OF ENGINEERING	
DATE BY	
REVISION DESCRIPTION	
INDEX NO.	
RP-300118	



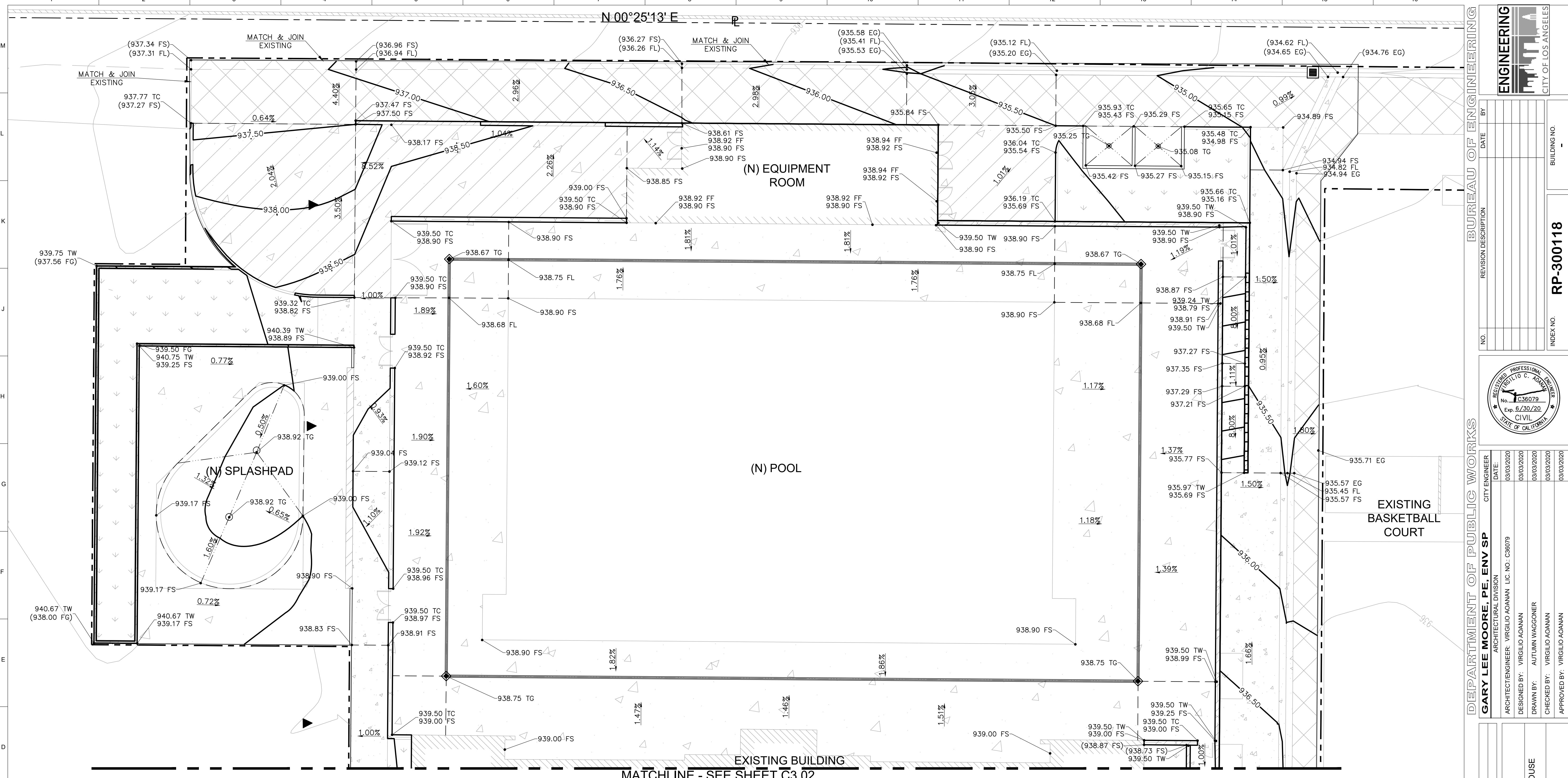
CITY ENGINEER	ARCHITECTURAL DIVISION	PE, ENV SP
GARY LEE MOORE		
DESIGNED BY: VIRGILIO OAOANAN	LIC. NO. C36079	03/03/2020
DRAWN BY: AUTUMN WAGGONER		03/03/2020
CHECKED BY: VIRGILIO OAOANAN		03/03/2020
APPROVED BY: VIRGILIO OAOANAN		03/03/2020



PLOTTED 09/08/2019 10:00 PM







## **SHEET NOTES:**

1. FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS, SEE SHEETS C1.00 AND C1.01.
  2. SEE ARCHITECTURAL AND LANDSCAPE DRAWINGS FOR OTHER SITE RELATIVE DIMENSIONS NOT SHOWN ON THIS DRAWING.
  3. FOR FINAL GRADING PLAN NOTES, SEE THIS SHEET.
  4. FOR ELEVATION SHOWN ON THIS PLAN SUCH AS TOP OF GRATE, CLEAN OUT, MANHOLE COVER, TOP OF DRAINAGE GRATES, TOP OF RIM CONTRACTOR TO COORDINATE ELEVATION SHOWN ON UTILITY PLANS. REPORT/NOTIFY ENGINEER FOR ANY CONFLICT/DISCREPANCY IN ELEVATION PRIOR TO COMMENCEMENT OF WORK.
  5. CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND SHALL REPORT ANY DISCREPANCIES TO THE CPM OR IOR PRIOR TO THE COMMENCEMENT OF ANY WORK.
  6. CONTRACTOR SHALL VERIFY JOINING OF NEW IMPROVEMENT TO ADJACENT FEATURES, EXISTING/ MATCH TO EXISTING FEATURES WITH SURVEY INFORMATION, CURRENT SITE CONDITION AND WITH THE DESIGN GRADE & ELEVATIONS AND SHALL REPORT ANY DISCREPANCIES TO THE CPM OR IOR PRIOR TO THE COMMENCEMENT OF WORK.



# ENLARGED GRADING PLAN

A scale bar marked from 0 to 20 feet. The first 5 feet are black, followed by a white gap, then another black segment from 10 to 20 feet. Below the bar, the text "SCALE: 1" is followed by a short horizontal line and "10'".



<b>CITY OF LOS ANGELES</b>		<b>PROJECT ISSUE DATE:</b> <b>06/22/21</b>
		<b>VERTICAL CONTROL</b>
		<b>HORIZONTAL CONTROL</b>
		<b>SHEET TITLE:</b> EN
		<b>PROJECT:</b> GFR <b>RE:</b>
		<b>ADDRESS:</b> 16 GFR
<b>WORK ORDER NO.</b> <b>#E170517</b>		
<b>PLAN FILE NO.</b> <b>#308</b>		
<b>DRAWING NO.</b>		
<b>C301</b>		
<b>SHEET</b> <b>6</b>	<b>O</b>	<b>SHEETS</b> <b>19</b>

	VERTICAL CONTROL:
	HORIZONTAL CONTROL:
WORK	
PLAN	
DRAW	
SHEET	

CRITICAL CONTROL:  
HORIZONTAL CONTROL:

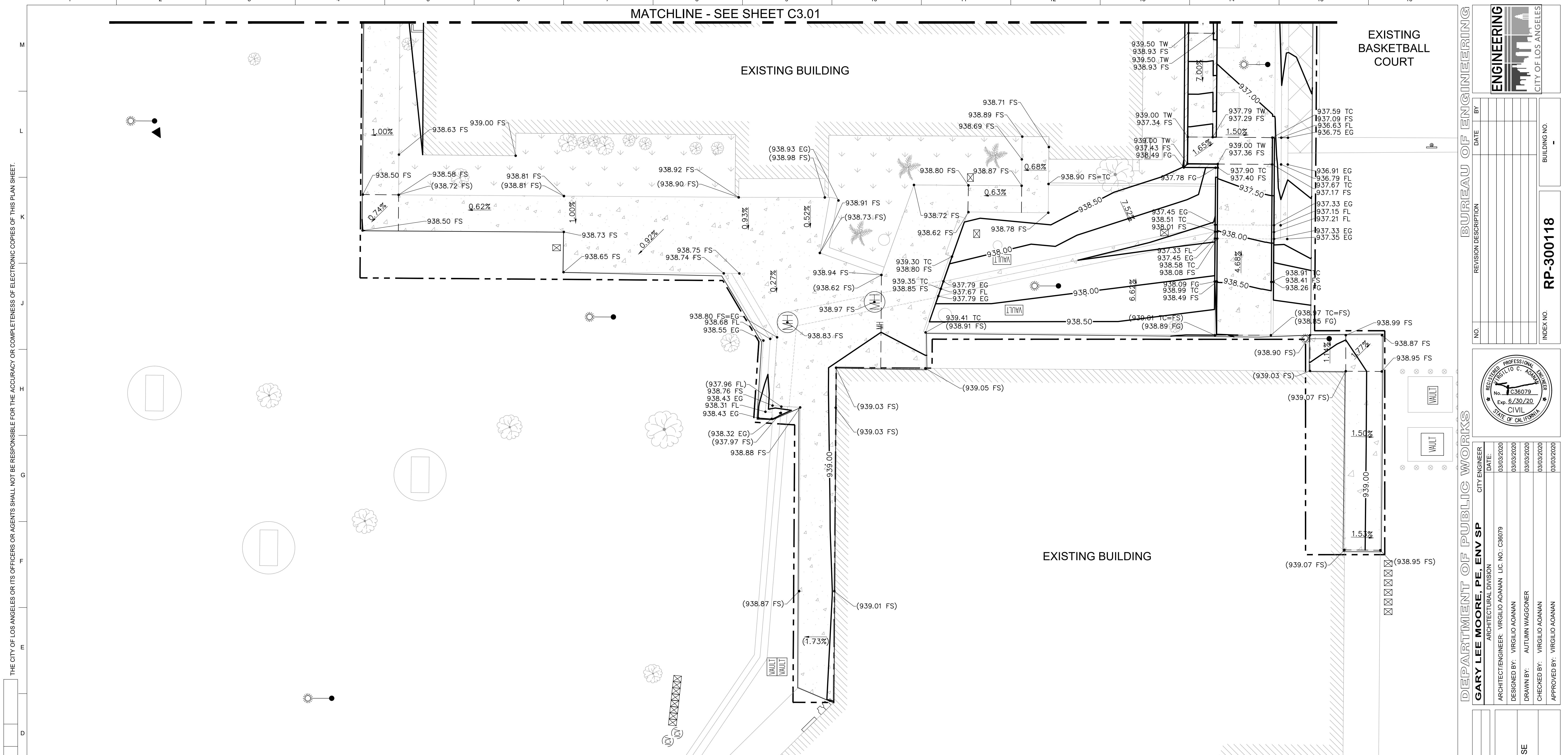
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**GARY LEE MOORE, PE, ENV SP**  
ARCHITECTURAL DIVISION

DESCRIPTION	DATE

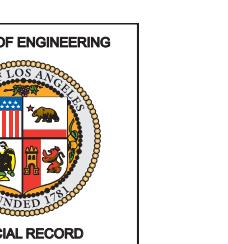
卷之三

A stylized black silhouette of the Los Angeles city skyline, featuring recognizable buildings like the Bank Tower and the US Bank Tower.



## SHEET NOTES:

1. FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS, SEE SHEETS C1.00 AND C1.01.
  2. SEE ARCHITECTURAL AND LANDSCAPE DRAWINGS FOR OTHER SITE RELATIVE DIMENSIONS NOT SHOWN ON THIS DRAWING.
  3. FOR FINAL GRADING PLAN NOTES, SEE THIS SHEET.
  4. FOR ELEVATION SHOWN ON THIS PLAN SUCH AS TOP OF GRATE, CLEAN OUT, MANHOLE COVER, TOP OF DRAINAGE GRATES, TOP OF RIM CONTRACTOR TO COORDINATE ELEVATION SHOWN ON UTILITY PLANS. REPORT/NOTIFY ENGINEER FOR ANY CONFLICT/DISCREPANCY IN ELEVATION PRIOR TO COMMENCEMENT OF WORK.
  5. CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND SHALL REPORT ANY DISCREPANCIES TO THE CPM OR IOR PRIOR TO THE COMMENCEMENT OF ANY WORK.
  6. CONTRACTOR SHALL VERIFY JOINING OF NEW IMPROVEMENT TO ADJACENT FEATURES, EXISTING/ MATCH TO EXISTING FEATURES WITH SURVEY INFORMATION, CURRENT SITE CONDITION AND WITH THE DESIGN GRADE & ELEVATIONS AND SHALL REPORT ANY DISCREPANCIES TO THE CPM OR IOR PRIOR TO THE COMMENCEMENT OF WORK.

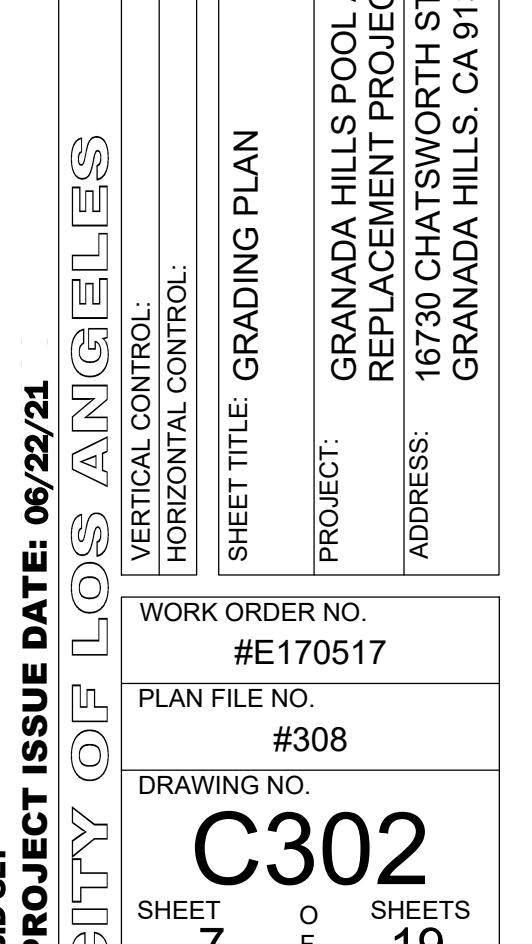


# ENLARGED GRADING PLAN

A horizontal scale bar with tick marks at 0, 10, and 20. The distance between 0 and 10 is divided into two 5' segments. The segments are labeled 10, 5, 0, 10, 20. Below the scale bar is the text "SCALE: 1" = 10'.

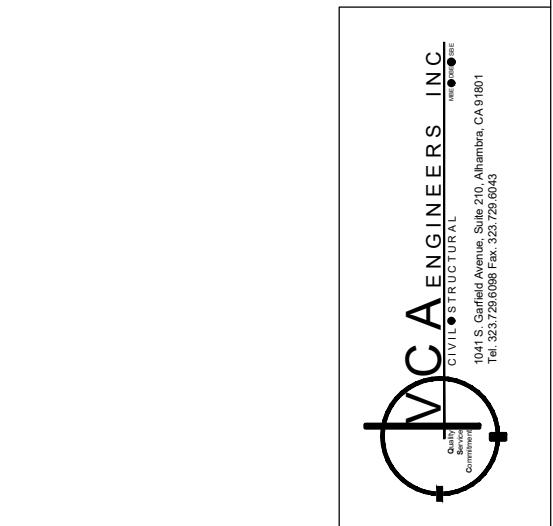
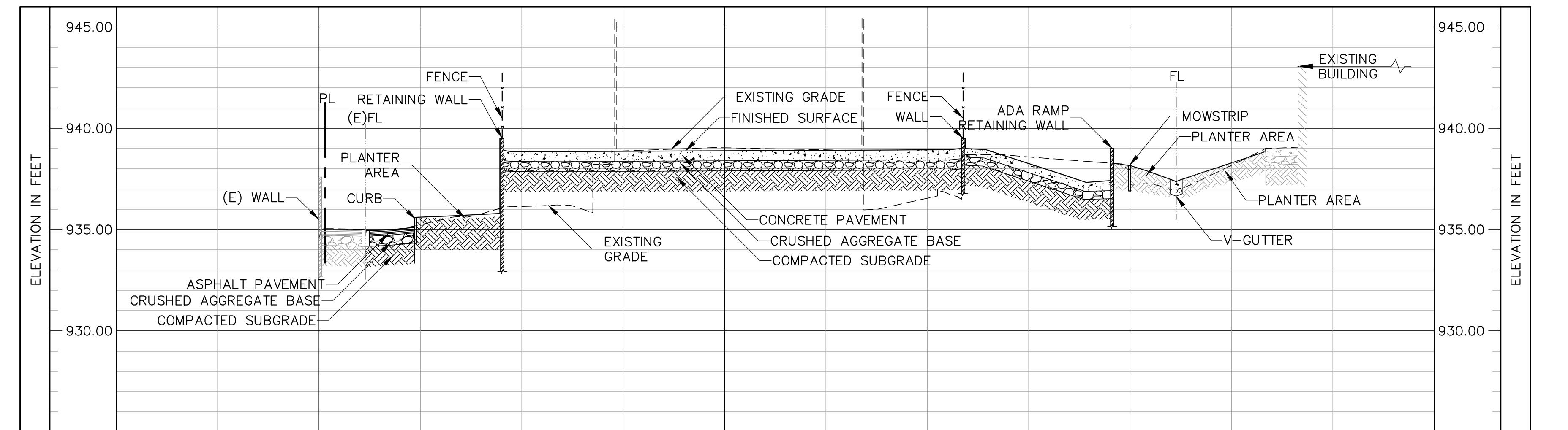
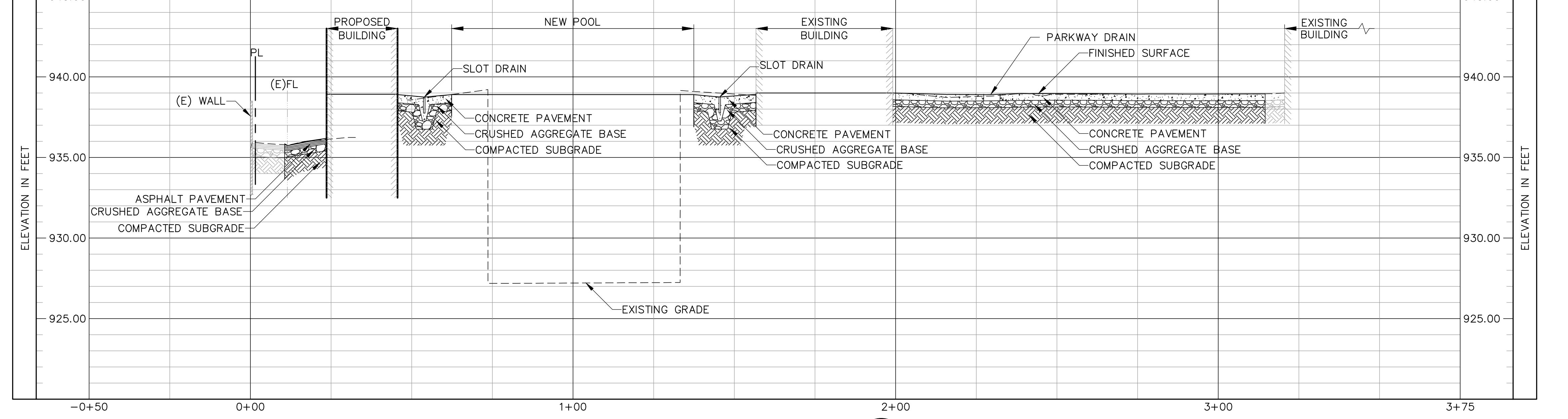
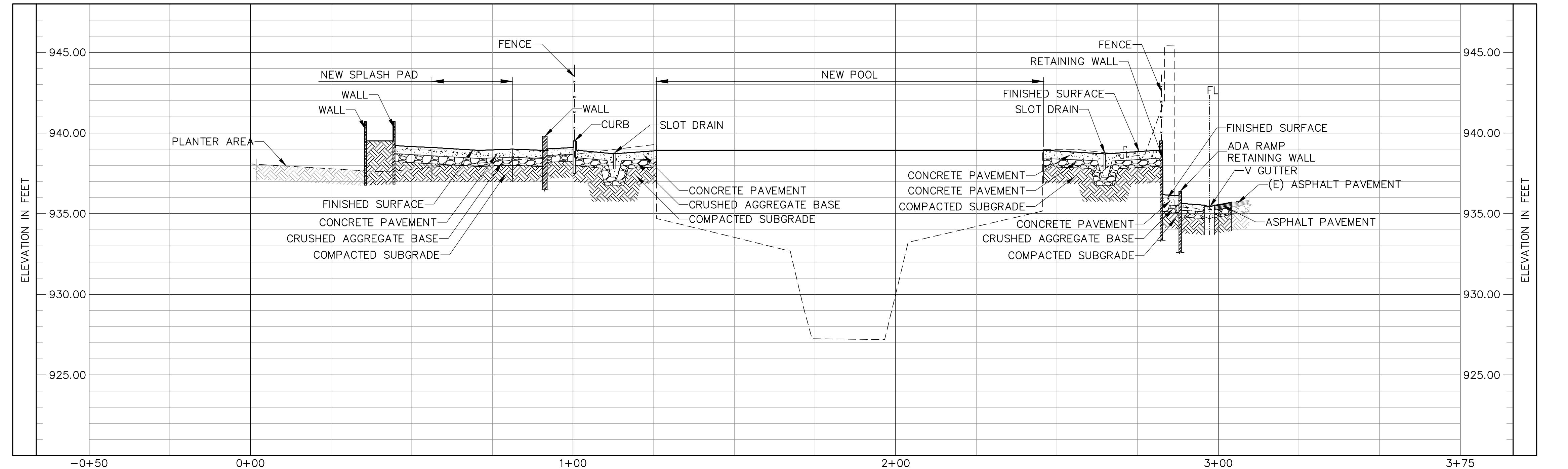


<b>PROJECT ISSUE DATE:</b> 06/22/21		<b>SHEET TITLE:</b> GI
		<b>PROJECT:</b>
		<b>ADDRESS:</b>
WORK ORDER NO.		
#E170517		
PLAN FILE NO.		
#308		
DRAWING NO.		
<b>C302</b>		
<b>SHEET</b>	O	<b>SHEETS</b>
1	0	10
VERTICAL CONSTRUCTION HORIZONTAL CONSTRUCTION		



THE CITY OF LOS ANGELES OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

M  
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D  
C  
B  
A



BID SET  
PROJECT ISSUE DATE: 06/22/21

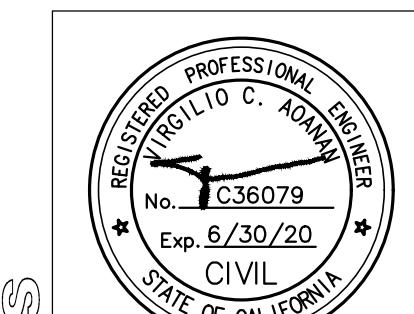
CITY OF LOS ANGELES

SHEET F OF SHEETS 19

BUREAU OF ENGINEERING	
INDEX NO.	BUILDING NO.
RP-300118	

ENGINEERING

CITY OF LOS ANGELES



DEPARTMENT OF PUBLIC WORKS

GARY LEE MOORE, PE, ENV SP

CITY ENGINEER  
ARCHITECTURAL DIVISION

ARCHITECT/ENGINEER: VIRGILIO AOANAN LIC. NO.: C36079  
DESIGNED BY: VIRGILIO AOANAN  
DRAWN BY: AUTUMN WAGGONER  
CHECKED BY: VIRGILIO AOANAN  
APPROVED BY: VIRGILIO AOANAN

WORK ORDER NO. #E170517	PLAN FILE NO. #308	DRAWING NO. C303
BUREAU OF ENGINEERING OFFICIAL RECORD		

PROJECT: GRANDA HILLS POOL AND BATHHOUSE  
REPLACEMENT PROJECT  
ADDRESS: 16730 CHATSWORTH STREET  
GRANDA HILLS, CA 91344

BID SET  
PROJECT ISSUE DATE: 06/22/21

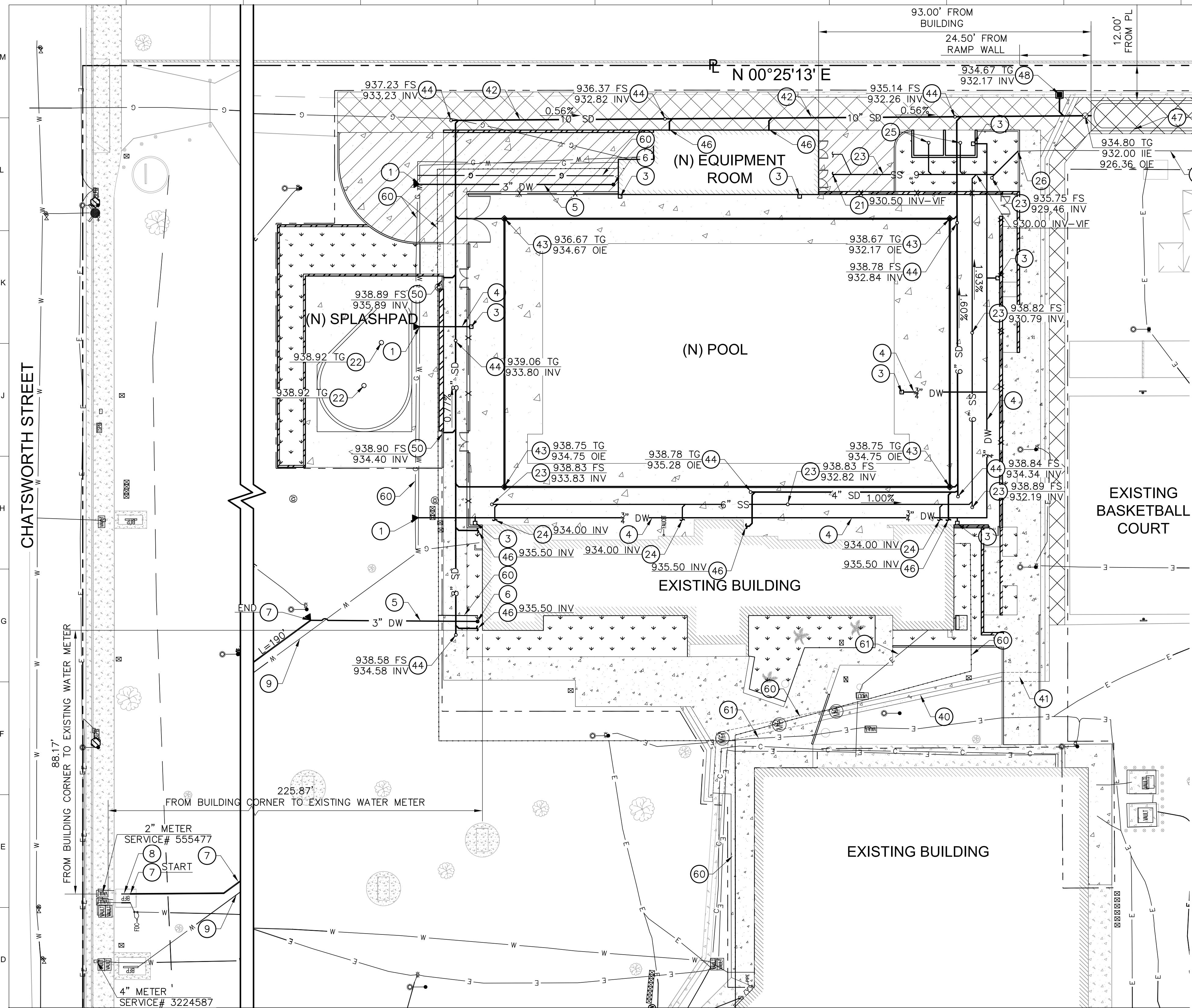
CITY OF LOS ANGELES

SHEET F OF SHEETS 19

ENGINEERING

CITY OF LOS ANGELES

PLOTTED: 09/18/2019 10:00 PM



#### SHEET NOTES:

- FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS, SEE SHEET C100.
- FOR UTILITY NOTES, SEE SHEET C101.
- SEE ARCHITECTURAL DRAWINGS FOR OTHER SITE RELATIVE DIMENSIONS NOT SHOWN ON THIS DRAWING.
- FOR TOP OF GRATE, CLEAN OUT, MANHOLE COVER, TOP OF DRAINAGE GRATES, TOP OF RIM COORDINATE WITH GRADING PLANS. CONTRACTOR TO REPORT/NOTIFY THE CITY ENGINEER FOR ANY CONFLICT IN ELEVATION AND LOCATION PRIOR TO COMMENCEMENT OF WORK.
- PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL VERIFY IN FIELD INVERT ELEVATIONS AND UTILITY CROSSINGS AND REPORT UNKNOWN CONDITIONS, FEATURES TO THE CITY ENGINEER.
- CONTRACTOR TO VERIFY POINT OF CONNECTION BETWEEN SEWER LATERAL AND BUILDING PLUMBING SEWER LAYOUT.
- CONTRACTOR SHALL FIELD VERIFY EXISTING SEWER LINE CONNECTION, SHALL USE AND PAY FOR CCTV TO VERIFY PIPE SIZE, INVERT ELEVATION AND IDENTIFY IF THE EXISTING PIPE IS DAMAGED. IF DAMAGED THE EXISTING PIPE SHALL BE REPLACED BASED ON THE FINDINGS. IF NEW LATERAL IS REQUIRED, CONTRACTOR TO INSTALL 6"Ø SEWER LATERAL AT 1% MINIMUM SLOPE.

#### CONSTRUCTION NOTES:

##### WATER NOTES:

- CONNECT TO EXISTING 4" DOMESTIC WATER LINE. PROVIDE THRUST BLOCKS PER DETAIL 2 ON SHEET C505.
- CONNECT TO NEW BUILDING. PROVIDE REDUCED FITTINGS IF REQUIRED. COORDINATE WITH MEP PLANS AND PROVIDE REDUCER FITTINGS IF NECESSARY.
- INSTALL HOSE BIBB AND HOSE BIBB CONNECTION PER MEP DRAWINGS.
- INSTALL 3"Ø DOMESTIC WATER LINE COPPER TUBING TYPE L HARD BEDDING PER DETAIL 1 ON SHEET C503.
- INSTALL 3"Ø PVC DOMESTIC WATER LINE, AWWA C900 PRESSURE CLASS 200(DR14). BEDDING PER DETAIL 1 ON SHEET C503. PROVIDE THRUST BLOCKS PER DETAIL 2 ON SHEET C505.
- PROVIDE SHUT OFF VALVE WITH YARD BOX. PROVIDE CONCRETE TRAFFIC RATED BOX FOR VALVES IN DRIVEWAYS AND DRIVE AISLES.
- REPLACE EXISTING 2"Ø DOMESTIC WATER LINE WITH 3"Ø PVC DOMESTIC WATER PIPE, AWWA C900 PRESSURE CLASS 200(DR14). PROVIDE BEDDING PER DETAIL 1 ON SHEET C503 AND THRUST BLOCKS PER DETAIL 2 ON SHEET C505. REPLACE PIPE LINE UP TO BACKFLOW PREVENTER (APX 190 LF). VERIFY LOCATION IN FIELD.
- REPLACE EXISTING BACKFLOW PREVENTER WITH 3" WATTS PVS-1000 RP BACKFLOW AND PRESSURE REGULATOR VALVE STATION OR APPROVED EQUAL. COORDINATE WITH FOR APPROVED DEVICE WATER PURVEYOR PRIOR TO ORDERING.
- EXISTING 3" WATER LINE CONNECTION TO POOL MECHANICAL ROOM.

##### SANITARY SEWER NOTES:

- EXISTING 6"Ø SANITARY SEWER LINE, VERIFY IN FIELD.
- CONNECT TO BUILDING, COORDINATE WITH PLUMBING PLANS AND PROVIDE REDUCER FITTINGS AS REQUIRED.
- INSTALL SPLASH PAD DRAINS AND CONNECTION TO POOL SYSTEM PER AQUATIC DRAWINGS.
- INSTALL CLEANOUT PER DETAIL 2 ON SHEET C501.
- INSTALL 6" SEWER LINE PVC SCH 80. USE CAST IRON FOR PIPE WHERE COVER IS LESS THAN ONE FOOT. BEDDING PER DETAIL 1 ON SHEET C504.
- INSTALL FLOOR DRAIN, ZURN Z507 MEDIUM DUTY OR EQUAL.
- CONNECT TO EXISTING SEWER LINE.

##### STORM DRAIN NOTES:

- CONCRETE V GUTTER PER DETAIL 4 ON SHEET C502.
- CONCRETE PARKWAY DRAIN PER APWA 151-2.
- INSTALL STORM DRAIN LINE PVC SCH 80, SIZE PER PLAN. USE CAST IRON FOR PIPE WHERE COVER IS LESS THAN ONE FOOT. BEDDING PER DETAIL 1 ON SHEET C503.
- INSTALL SLOT DRAIN PER DETAILS 1 & 2 ON SHEET C500.
- INSTALL CLEANOUT PER DETAIL 2 ON SHEET C501.
- INSTALL BUBBLER CATCH BASIN PER DETAIL 5 ON SHEET C502. PROVIDE "NO DUMPING" STENCIL PER DETAIL 3 ON SHEET C502.
- CONNECT TO BUILDING DOWNSPOUT. PROVIDE REDUCER FITTINGS AS REQUIRED.
- ADS STORMTECH INFILTRATION SYSTEM PER DETAILS ON SHEETS C504 AND C505.
- INSTALL CATCH BASIN PER DETAIL 5 ON SHEET C502. PROVIDE "NO DUMPING" STENCIL PER DETAIL 3 ON SHEET C502.

##### MISCELLANEOUS UTILITY NOTES:

- GAS LINE AND CONNECTIONS PER MEP DRAWINGS.
- ELECTRICAL LINE AND CONNECTIONS PER MEP DRAWINGS.



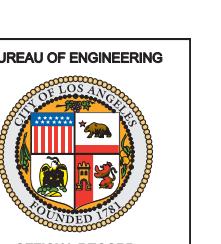
This set of plans and specifications must be at the jobsite during construction

Stormwater Observation Report (SOR) is required prior to issuance of Certificate of Occupancy or final sign off.

Total Pages \_\_\_\_\_

Restamped\*

Digitally Signed By: A. Eltawil Date: 08/06/2020  
Department of Public Works - Bureau of Sanitation  
Watershed Protection Division



BID SET PROJECT ISSUE DATE: 06/22/21

CITY OF LOS ANGELES VERTICAL CONTROL: HORIZONTAL CONTROL:

SHEET TITLE: UTILITY PLAN

PROJECT: GRANADA HILLS POOL AND BATHHOUSE

ADDRESS: 16730 CHATSWORTH STREET

GRANADA HILLS, CA 91344

BUREAU OF ENGINEERING

DATE BY

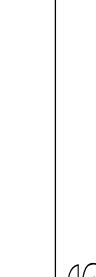
BUILDING NO.

RP-300118

INDEX NO.

NO. REVISION DESCRIPTION

DATE



REG'D PROFESSIONAL ENGR TO C. ADAMIAN

No. C36079

Exp. 6/30/20

DEPARTMENT OF PUBLIC WORKS

CITY ENGINEER

ARCHITECTURAL DIVISION

DATE:

GARY LEE MOORE, PE, ENV SP

DESIGNED BY: VIRGILIO AOANAN

DRAWN BY: AUTUMN WAGNER

CHECKED BY: VIRGILIO AOANAN

APPROVED BY: VIRGILIO AOANAN

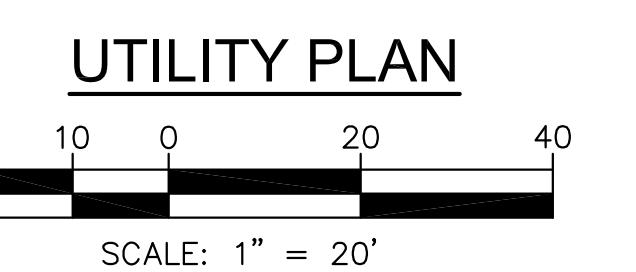
WORK ORDER NO. #E170517

PLAN FILE NO. #308

DRAWING NO. C400

SHETS 18

PLOTTED: 08/18/2019 10:00 PM

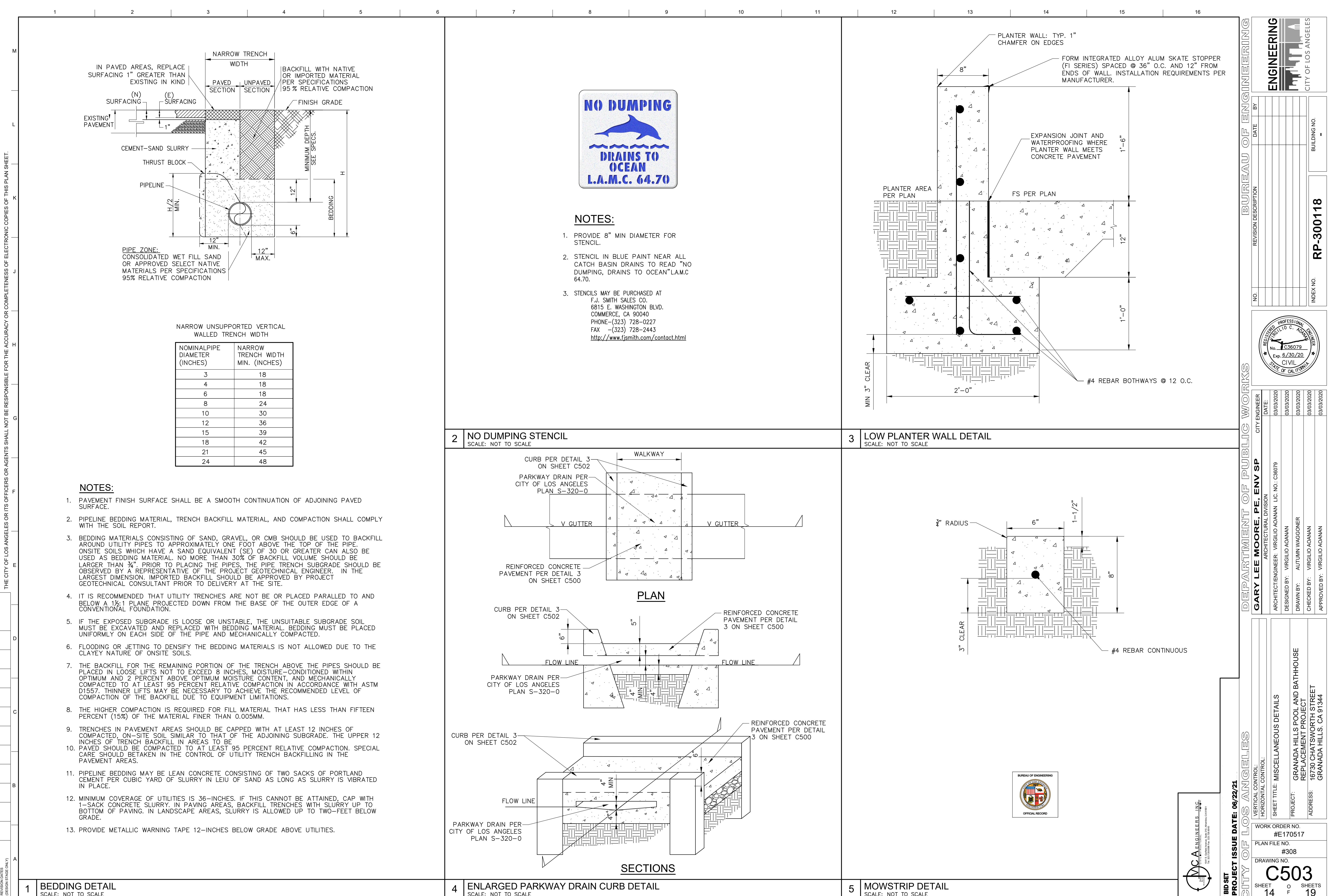




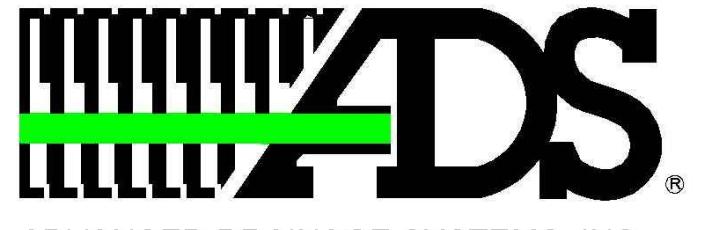








PROJECT INFORMATION	
DESIGNED BY:	ADS PIPE
PRODUCT:	629-425-2724
PRODUCT MANAGER:	TERENCE.ZHAO@ADS-PIPE.COM
ADS SALES REP:	ROHIT CHANDER 951-203-2201 ROHIT.CHANDER@ADS-PIPE.COM
PROJECT NO.:	S167523



ADVANCED DRAINAGE SYSTEMS, INC.

**SiteASSIST**  
FOR STORMTECH  
INSTRUCTIONS,  
DOWNLOAD THE  
INSTALLATION APP

PROPOSED LAYOUT	
13	STORMTECH MC-4500 CHAMBERS
2	STORMTECH MC-4500 END CAPS
12	STONE ABOVE (in) STONE BELOW (in)
40	4" STONE VOLUME
2547	INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED)
618	SYSTEM AREA (ft <sup>2</sup> )
140	SYSTEM PERIMETER (ft)

**NOTES**

- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECHNICAL NOTE 632 FOR MANIFOLD SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
- THIS DESIGN IS FOR BID REVIEW/ELEVATION, AND IF NECESSARY ADJUSTS ACCORDING TO ENVIROMENTAL REQUIREMENTS ARE MADE.
- THIS CHAMBER SYSTEM WAS DESIGNED WITHOUT SITE-SPECIFIC INFORMATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY OF THE SOIL AND PROVIDING THE BEARING CAPACITY OF THE IN-SITU SOILS. THE BASE STONE DEPTH MAY BE INCREASED OR DECREASED ONCE THIS INFORMATION IS PROVIDED.

## GRANADA HILLS POOL AND BATHHOUSE REPLACEMENT

LOS ANGELES, CA

### MC-4500 STORMTECH CHAMBER SPECIFICATIONS

- CHAMBERS SHALL BE STORMTECH MC-4500.
- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 60x101.
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESSIONES.
- CHAMBERS SHALL BE DESIGNED FOR ALL ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, STORMTECH PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS. LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
  - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
  - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
  - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 500 LBS/IN/N. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT Elevated TEMPERATURES (ABOVE 73° F / 22° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
  - THE CONTRACTOR MUST PROVIDE A REGISTERED PROFESSIONAL ENGINEER.
  - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD. THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THE DESIGN OF THE CHAMBERS.
  - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

### IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-4500 CHAMBER SYSTEM

- STORMTECH MC-4500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH MC-4500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR EXCAVATOR SITUATED OVER THE CHAMBER.
  - STORMTECH RECOMMENDS 3 BACKFILL METHODS:
    - BACKFILL FROM INSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
    - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
- THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTION PRIOR TO PLACING CHAMBERS.
- JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEALED PRIOR TO PLACING STONE.
- Maintain MINIMUM 9" (230 mm) SPACING BETWEEN THE CHAMBER ROWS.
- INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
- STONE SHALL BE BROUGHT UP EVENLY AROUND CHAMBERS SO AS NOT TO DISTORT THE CHAMBER SHAPE. STONE DEPTHS SHOULD NEVER DIFFER BY MORE THAN 12" (300 mm) BETWEEN ADJACENT CHAMBER ROWS.
- STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
- THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIAL BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
- ADS RECOMMENDS THE USE OF "FLEXIFORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

### NOTES FOR CONSTRUCTION EQUIPMENT

- STORMTECH MC-4500 CHAMBER SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- THE USE OF EQUIPMENT OVER MC-4500 CHAMBERS IS LIMITED:
  - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
  - NO EQUIPMENT IS ALLOWED ON THE FOUNDATION STONE OR SUBGRADE.
  - NO EQUIPMENT IS ALLOWED ON THE FOUNDATION STONE OR SUBGRADE.
  - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

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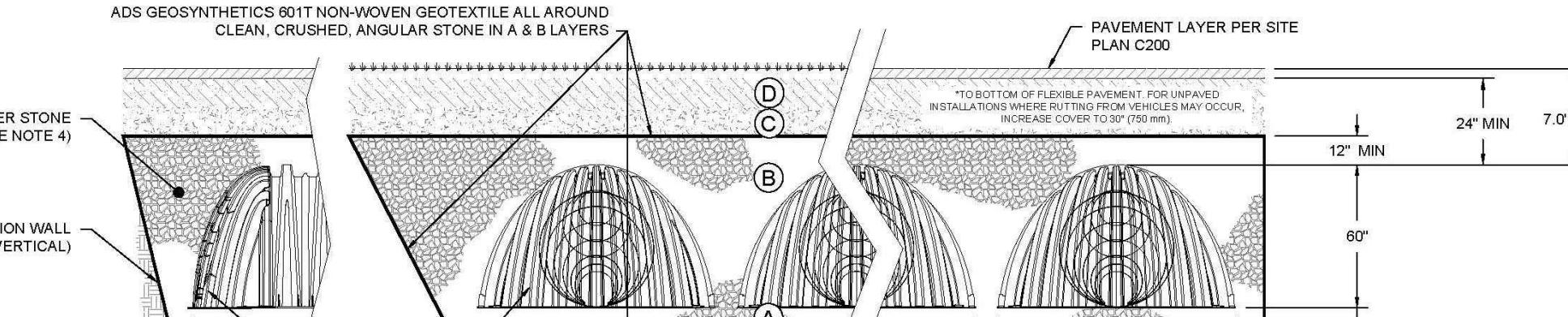
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### ACCEPTABLE FILL MATERIALS: STORMTECH MC-4500 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF THE 'B' LAYER. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PAVING MATERIALS. CHECK FLAG FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145 <sup>1</sup> A-1, A-2-A, A-3 OR AASHTO M43 <sup>2</sup> 3, 35, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 <sup>3</sup> 3, 4
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 <sup>3</sup> 3, 4

PLEASE NOTE:

- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
- STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) MAX LIFTS USING TWO FULL COVERS WITH A VIBRATORY COMPACTOR.
- WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
- ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



### NOTES:

- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 60x101.
- MC-4500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
  - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
  - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
  - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 500 LBS/IN/N. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT Elevated TEMPERATURES (ABOVE 73° F / 22° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

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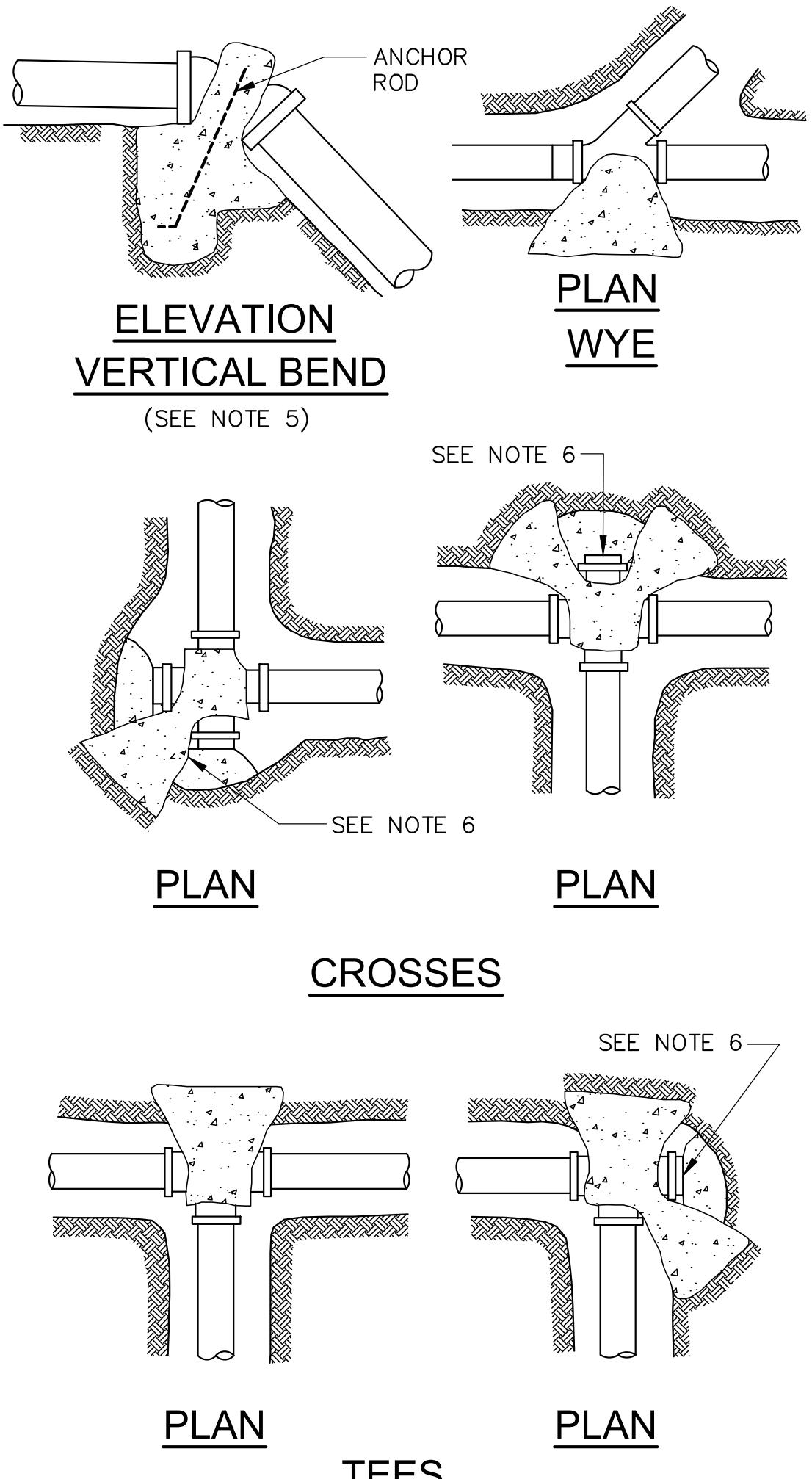
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THE CITY OF LOS ANGELES OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACC

**1 ADS STORMTECH INFILTRATION SYSTEM**  
SCALE: NOT TO SCALE

CITY OF LOS ANGELES



## NOTES

1. ALL ANCHOR AND THRUST BLOCKS SHALL BEAR AGAINST UNDISTURBED SOIL.
  2. MINIMUM ALLOWABLE WATER PRESSURE FOR DESIGN OF THRUST BLOCKS IS 150 PSI. BEARING AREA INCREASE IN PRESSURE.
  3. ALL CONCRETE USED IN THRUST BLOCKS SHALL ATTAIN 2000 PSI STRENGTH.
  4. ALL ANCHOR RODS SHALL BE REINFORCING STEEL AND A MINIMUM OF 1/2-INCH IN DIAMETER.
  5. USE ANCHOR BLOCKS AT VERTICAL BENDS WHEN PIPE IS ABOVE OR BELOW GROUND. SIZE OF BLOCK AND ROD SHALL BE AS SHOWN ON THE PLANS OR AS DETERMINED BY THE ENGINEER IN THE FIELD.
  6. USE 30 POUND FELT TO INSURE COLD JOINT.
  7. CONCRETE SHALL NOT COME INTO DIRECT WITH ASBESTOS CEMENT PIPE.
  8. FOR PIPE 14" IN DIAMETER OR LARGER, ENGINEER IS TO SUBMIT CALCULATIONS

## TABLE 1

MINIMUM BEARING AREAS IN SQ.FT.				
MAIN SIZE	TEE	90° BEND	45° BEND	22 1/2° BEND
6"	4	4	4	3
8"	5	7	4	3
10"	9	12	6	4
12"	12	16	9	6

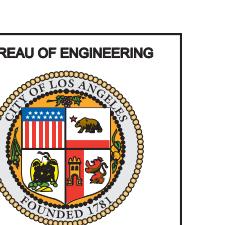
SED ON 150 PSI W.W.R. PRESSURE  
SOIL BEARING LOADS OF 2000 PSF  
E RATIO OF WIDTH TO HEIGHT  
ALL NOT EXCEED 1 1/2 TO 1

#### **ES PLUGS CAPS & HYDRANTS**

## TABLE II

SOIL TYPE	MAX. ALLOWABLE SOIL BEARING VALUES	FACTORS FOR INCREASING AREAS IN TABLE 1
LOOSE SAND	500 PSF	4
SOFT SANDY CLAY	1000 PSF	2
ADOBE	1000 PSF	2
COMPACT FINE SAND	2000 PSF	1
COMPACT COARSE SAND	2000 PSF	1
MEDIUM STIFF CLAY	2000 PSF	1

THE CONTRACTOR SHALL FOLLOW THE RECOMMENDATIONS OF GEOTECHNICAL REPORT FOR DETERMINING THE SAFE SOIL BEARING VALUES AND SIZE OF SHEARING AREAS.  
BASED ON 2 FEET MINIMUM DEPTH OF COVER OVER THE PIPE



**MC-SERIES END CAP INSERTION DETAIL**  
NTS

The diagram illustrates the installation of a **STORMTECH END CAP** onto a **MANIFOLD HEADER**. A **MANIFOLD STUB** is shown being inserted into the end cap opening. Key dimensions are indicated: **12" (300 mm) MIN SEPARATION** between the manifold stub and the header, and **12" (300 mm) MIN INSERTION** for the manifold stub into the end cap. The end cap is designed to fit over the header and the inserted manifold stub.

NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.

**MC-4500 TECHNICAL SPECIFICATION**

NTS

**NOMINAL CHAMBER SPECIFICATIONS**

SIZE (W X H X INSTALLED LENGTH)	100.0" X 60.0" X 48.3"	(2540 mm X 1524 mm X 1227 mm)
CHAMBER STORAGE	106.5 CUBIC FEET	(3.01 m <sup>3</sup> )
MINIMUM INSTALLED STORAGE*	162.6 CUBIC FEET	(4.60 m <sup>3</sup> )
WEIGHT (NOMINAL)	125.0 lbs.	(56.7 kg)

**NOMINAL END CAP SPECIFICATIONS**

SIZE (W X H X INSTALLED LENGTH)	90.0" X 61.0" X 32.8"	(2286 mm X 1549 mm X 833 mm)
END CAP STORAGE	39.5 CUBIC FEET	(1.12 m <sup>3</sup> )
MINIMUM INSTALLED STORAGE*	115.3 CUBIC FEET	(3.26 m <sup>3</sup> )
WEIGHT (NOMINAL)	90 lbs.	(40.8 kg)

\*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION AND BETWEEN CHAMBERS, 12" (305 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY.

PARTIAL CUT HOLES AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"  
 PARTIAL CUT HOLES AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"  
 END CAPS WITH A PREFABRICATED WELDED STUB END WITH "W"

PART #	STUB	B	C
MC4500IEPP06T	6" (150 mm)	42.54" (1081 mm)	---
MC4500IEPP06B		---	0.86" (22 mm)
MC4500IEPP08T	8" (200 mm)	40.50" (1029 mm)	---
MC4500IEPP08B		---	1.01" (26 mm)
MC4500IEPP10T	10" (250 mm)	38.37" (975 mm)	---
MC4500IEPP10B		---	1.33" (34 mm)
MC4500IEPP12T	12" (300 mm)	35.69" (907 mm)	---
MC4500IEPP12B		---	1.55" (39 mm)
MC4500IEPP15T	15" (375 mm)	32.72" (831 mm)	---
MC4500IEPP15B		---	1.70" (43 mm)
MC4500IEPP18T		29.36" (746 mm)	---
MC4500IEPP18TW	18" (450 mm)	---	1.97" (50 mm)
MC4500IEPP18B		---	2.26" (57 mm)
MC4500IEPP18BW		---	2.55" (64 mm)
MC4500IEPP24T		23.05" (585 mm)	---
MC4500IEPP24TW	24" (600 mm)	---	2.84" (722 mm)
MC4500IEPP24B		---	3.13" (794 mm)
MC4500IEPP24BW		---	3.42" (868 mm)
MC4500IEPP30BW	30" (750 mm)	---	3.71" (943 mm)
MC4500IEPP36BW	36" (900 mm)	---	4.00" (1016 mm)
MC4500IEPP42BW	42" (1050 mm)	---	4.29" (1085 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL

GRANADA HILLS POOL AND BATHHOUSE REPLACEMENT  
LOS ANGELES, CA  
DATE: 02/04/20 DRAWN: AVM  
PROJECT #: S167523 CHECKED: WCM

StormTech®  
Dedicated to water quality  
70 INWOOD ROAD, SUITE 3 | ROCKY HILL, CT 06067  
860-529-8168 | 888-892-2634 | WWW.STORMTECH.COM

THIS DRAWING HAS BEEN PREPARED BASED ON THE DIRECTION OF THE SITE DESIGN ENGINEER OR OTHER PROJECT REPRESENTATIVE. IT IS THE ULTIMATE RESPONSIBILITY OF THE SITE DESIGN ENGINEER TO ENSURE THAT THE PRODUCTS/DETAILED DRAWINGS MEET ALL APPLICABLE LAWS, REGULATIONS, AND PROJECT REQUIREMENTS.

ADVANCED DRAINAGE SYSTEMS, INC.  
4640 TRUEMAN BLVD  
HILLIARD, OH 43026

SHEET 5 OF 6

**NYLOPLAST DRAIN BASIN**  
NTS

GRANADA HILLS POOL AND BATHHOUSE REPLACEMENT  
LOS ANGELES, CA

DATE:	02/04/20	DRAWN:	AVM
PROJECT #:	S167523	CHECKED:	WCM
DATE:		DESCRIPTION	
DRWN CHKD			
DATE			

**NOTES**

1. 8-30" (200-750 mm) GRATES/SOLID COVERS SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
2. 12-30" (300-750 mm) FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
3. DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS
4. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS & HANCOR DUAL WALL) & SDR 35 PVC
5. FOR COMPLETE DESIGN AND PRODUCT INFORMATION: [WWW.NYLOPLAST-US.COM](http://WWW.NYLOPLAST-US.COM)
6. TO ORDER CALL: 800-821-6710

A	PART #	GRATE/SOLID COVER OPTIONS		
8" (200 mm)	2808AG	PEDESTRIAN LIGHT DUTY	STANDARD LIGHT DUTY	SOLID LIGHT DUTY
10" (250 mm)	2810AG	PEDESTRIAN LIGHT DUTY	STANDARD LIGHT DUTY	SOLID LIGHT DUTY
12" (300 mm)	2812AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
15" (375 mm)	2815AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
18" (450 mm)	2818AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
24" (600 mm)	2824AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
30" (750 mm)	2830AG	PEDESTRIAN AASHTO H-20	STANDARD AASHTO H-20	SOLID AASHTO H-20

ADVANCED DRAINAGE SYSTEMS, INC.  
4640 TRUEMAN BLVD  
HILLIARD, OH 43026

**Nyloplast**®

6 SHEET OF 6

<b>DEPARTMENT OF PU</b>	
<b>GARY LEE MOORE, PE, ENV SP</b>	
ARCHITECTURAL DIVISION	
ARCHITECT/ENGINEER: VIRGILIO AOANAN LIC. NO.: C36079	DESIGNED BY: VIRGILIO AOANAN
DRAWN BY: AUTUMN WAGGONER	CHECKED BY: VIRGILIO AOANAN
APPROVED BY: VIRGILIO AOANAN	

**PROJECT ISSUE DATE: 06/22/21**

EDIT

THE CITY OF LOS ANGELES OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

SHEET ISSUE DATE: 01 January 2000 FILE PATH:

LID COMPLIANCE DATE: 01/01/2010

REVISION DATES DESIGN STAGE ONLY

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

**ULARA**  
UPPER LOS ANGELES RIVER AREA WATERMASTER  
Richard C. Slade - Watermaster

Autumn Waggoner  
VCA Engineers, Inc.  
(Sent via email: [Autumn.waggoner@vcaeng.com](mailto:Autumn.waggoner@vcaeng.com))

Re: Potential Stormwater Infiltration Project  
Proposed Public Property Redevelopment  
16730 Chatsworth Street  
Granada Hills, California 91344

Dear Ms. Waggoner:  
  
Provided herein is a brief discussion of the information and reports that you have provided our office regarding your plans for the possible infiltration of stormwater that is to be collected and incorporated into the Low Impact Development (LID) improvements for the proposed public property redevelopment project, located within the City of Los Angeles (City), at the address 16730 Chatsworth Street, in the Granada Hills area of the San Fernando Valley. We understand the project, which has an area of ±29,000 square feet, is situated at the southeastern corner of the intersection of Petit Avenue and Chatsworth Street. As such, this redevelopment overlies a portion of the San Fernando Groundwater Basin, the largest of the four groundwater basins in the Superior Court-adjudicated Upper Los Angeles River Area (ULARA). Also provided herein, as ULARA Watermaster, is my opinion regarding the potential impact to local groundwater quality that might result from the proposed infiltration of stormwater that is to be captured by the Low Impact Development (LID) improvements that you have recommended for your project.  
  
In regard to stormwater infiltration, the California Regional Water Quality Control Board – Los Angeles Region (LARWQCB) promulgated its National Pollutant Discharge Elimination System (NPDES) permit in 1990 to help minimize the impacts of stormwater and urban runoff on the receiving water bodies in its sphere of influence (i.e., the Los Angeles River and the Pacific Ocean). The goal of their NPDES process was to minimize the impacts on the river, and ultimately to the ocean, by reducing the volume and improving the quality of surface water runoff from storm events. Because your proposed redevelopment is located within the ULARA watershed boundary, all local rainfall and surface water runoff from this site would normally drain into the Los Angeles River and eventually to the ocean.

Several years after the implementation of the NPDES process, the City of Los Angeles, Department of Public Works, Bureau of Sanitation – Watershed Protection Division (LAWPD), promulgated a series of guidelines intended to increase the capture and onsite infiltration of stormwater at all proposed developments and redevelopments throughout the City. These guidelines established the requirements and limitations for utilizing onsite stormwater infiltration and also specified an order of preference (via a set of Best Management Practices—BMPs) for providing LID improvements at each development and/or redevelopment site in the City.

The specific order of the BMP preference list was established by the LAWPD to collect and provide basic "treatment" of onsite stormwater runoff, and to help increase the amount of infiltration (i.e., deep percolation) from the initial ¼-inch of rainfall from each storm event at all new development and redevelopment sites in the City. The end result is intended to reduce the volumes of contaminated stormwater runoff that enter the storm drain system (from each new storm event) and simultaneously help reduce the volume and enhance the quality of the runoff that enters the Los Angeles River and ultimately the Pacific Ocean. Turbidity and potential urban-derived contaminants in the captured runoff could be reduced by the "treatment" effects of the various stormwater infiltration systems proposed via the BMPs. From a hydrogeologic perspective, and in the opinion of this Watermaster, whenever and wherever (with certain exceptions) deep percolation (infiltration) of stormwater can be appropriately enhanced, then recharge to the underlying groundwater reservoir (in this case, the San Fernando Groundwater Basin) can be beneficially increased.

For this proposed redevelopment, you sent the following for Watermaster review:

- An email, received by the Watermaster's office on February 20, 2020, in response to the Watermaster's Data Request Memorandum. Your email and attachments provided responses to most of the items identified in the Watermaster's Memorandum. Note that a copy of that Data Request Memorandum is being routinely provided by LAWPD personnel to LID applicants upon their initial visit to the LAWPD office in downtown Los Angeles.
- A set of CAD-type drawings, prepared by VCA Engineers, Inc. (VCA), which contained: a site plan; a grading plan; and a LID plan. The LID plan shows the proposed locations of a couple of catch basins, several slot drains, and an infiltration basin within the boundaries of the project. We understand that these proposed facilities are to be components of your stormwater infiltration system.

ularamaster.com  
14051 Burbank Blvd, Suite 300  
Sherman Oaks, CA 91401  
818-506-0418 PHONE  
818-506-1343 FAX

March 10, 2020

Job No. 500-LAS04

Potential Stormwater Infiltration Project  
Proposed Public Property Redevelopment  
16730 Chatsworth Street  
Granada Hills, CA 91344

watershed boundary, all local rainfall and surface water runoff from this site would normally drain into the Los Angeles River and eventually to the ocean.

Potential Stormwater Infiltration Project  
Proposed Public Property Redevelopment  
16730 Chatsworth Street  
Granada Hills, CA 91344

c. A soils report, Geotechnical Engineering Report: Granada Hills Pool Replacement Project, prepared by the City of Los Angeles, Department of Public Works, Bureau of Engineering, Geotechnical Engineering Group (LAGEO) and dated August 22, 2017. In addition, two supplemental soils reports were also provided, Supplemental Geotechnical Report: Granada Hills Pool Replacement Project, and Supplemental Geotechnical Report No. 2: Granada Hills Pool Replacement Project. Both of these were prepared by LAGEO and are dated October 25, 2018 and February 18, 2020, respectively. The reports described the earth materials encountered beneath the subject site in six soil borings that were drilled and sampled to a maximum depth of approximately 31.5 feet below ground surface (bgs). It should be noted that groundwater was not encountered during the drilling of these soil borings in June 2017. Infiltration rates for the onsite earth materials were tested to a depth of approximately 10.5 feet bgs in the soil borings drilled for the infiltration test.

Please note that no one from my office conducted a site visit to the subject LID property and that the information presented in this review was provided by the applicant and/or obtained from a cursory review of a few regulatory agency websites and basic sources of referenced information. Among the key items noted during our review of the available documents are the following:

- The subject property development is situated at the southeastern corner of the intersection of Petit Avenue and Chatsworth Street. A Google Earth Pro® satellite image dated November 19, 2018 shows the subject property was developed with a public park and recreational facilities at that time.
- The subject property is bordered by residential properties to the east and south, by Petit Avenue to the west, and by Chatsworth Street to the north.
- A check of the online Geotracker database maintained by the California State Water Resources Control Board (SWRCB) shows that within 1,000 feet of the subject LID project, there are: no "open" leaking underground storage tank (LUST) sites; no "open" California Department of Toxic Substances Control (DTSC) sites; no "open" military cleanup sites; or, no "open" cleanup program sites.
- As shown in the CAD-type drawings provided by VCA, stormwater will be collected from rainfall that flows as sheet flow across non-permeable paved areas at the property, and from rain that falls directly onto the roof of the proposed redevelopments. The collected stormwater is to be directed to one of several slot drains and/or the catch basins, and thereafter, it will be directed to the infiltration basin (i.e., the infiltration system). Stormwater directed to the infiltration system would reportedly be able to infiltrate into the subsurface (i.e., made available for deep percolation). The proposed infiltration system is to be constructed in the eastern portion of the proposed redevelopment.

Potential Stormwater Infiltration Project  
Proposed Public Property Redevelopment  
16730 Chatsworth Street  
Granada Hills, CA 91344

It should be noted that the purpose of this LID stormwater infiltration review letter from the Watermaster's office is not in any way to evaluate and/or opine on the technical feasibility of the infiltration of stormwater at the site, but rather only to assess the concept of infiltration (and recharge) at the site strictly in regard to its potential impact on local groundwater quality. Thus, the Watermaster has no opinion regarding the potential for, or the technical feasibility of, the collected stormwater to be infiltrated into the earth materials beneath the subject property.

Further, your eventual LID permit from the LAWPD will require the property owner (and all successors) to provide for ongoing operation and maintenance in perpetuity for all of the onsite LID facilities. The Watermaster considers this issue of ongoing maintenance of your proposed LID facilities to be critical to the long-term protection of the groundwater quality in the San Fernando Basin.

Based on our review of your documents, and assuming that the final stormwater collection system and infiltration systems are constructed as proposed and properly maintained in the future, then the Watermaster has no objection to the infiltration component of your current LID, in relation to the local groundwater quality. If the project and/or your LID and/or your infiltration system is revised in the future and differs from that which has been generally characterized herein, the Watermaster would then need to review those revised plans.

Respectfully submitted,



Richard C. Slade  
ULARA Watermaster

**1 ULARA APPROVAL**

SCALE: NOT TO SCALE

CITY OF LOS ANGELES CALIFORNIA	DEPARTMENT OF BUILDING AND SAFETY COMMISSIONERS	DEPARTMENT OF BUILDING AND SAFETY 201 NORTH FIGUEROA STREET LOS ANGELES, CA 90012
VAN AMBATIELOS PRESIDENT	FRANK M. BUSH GENERAL MANAGER SUPERINTENDENT OF BUILDING	ERIC GARCETTI MAYOR
JAVIER NUNEZ VICE PRESIDENT	OSAMA YOUNAN, P.E. EXECUTIVE OFFICER	
JOSELYN GEACA-ROSENTHAL GEORGE HOVAGIMIAN ELVIN W. MOON		

**SOILS REPORT APPROVAL LETTER**

March 23, 2020

LOG # 112389  
SOILS/GEOLOGY FILE - 2

Department of Recreation and Parks  
1149 S. Broadway, 8th floor  
Los Angeles, Ca 90015

TRACT: SUBDIVISION NO. 1 OF THE PROPERTY OF THE PORTER LAND AND WATER COMPANY (M R 31-3/6)  
LOT(S): 2 SEC 18 T2N R15W  
LOCATION: 16730 W CHATSWORTH ST

CURRENT REFERENCE REPORT/LETTER(S)	REPORT No.	DATE OF DOCUMENT	PREPARED BY
Addendum Report	17-074	02/18/2020	City of LA-GEO

PREVIOUS REFERENCE REPORT/LETTER(S)	REPORT No.	DATE OF DOCUMENT	PREPARED BY
Dept. Approval Letter	105775	11/1/2018	LADBS
Addendum Report	17-074	10/25/2018	City of LA-GEO
Dept. Approval Letter	100428	11/09/2017	LADBS
Soils Report	17-074	08/22/2017	City of LA-GEO
Laboratory Test Report	A8950-06-12	07/31/2017	Geocon West, Inc.

The Grading Division of the Department of Building and Safety has reviewed the referenced report that provide recommendations for the proposed infiltration system and exterior slab. The Department previously conditionally approved the above referenced reports dated 08/22/2017 and 10/25/2018 for the proposed swimming pool, shade structure, pool equipment building, concrete ramp, a lifeguard room addition, PV panels and security light poles in a letter dated 11/14/2018, Log #105775. Foundation recommendations are provided on page 2 of the 10/25/2018 report.

The referenced reports are acceptable, provided the following conditions are complied with during site development:

(Note: Numbers in parenthesis () refer to applicable sections of the 2020 City of LA Building Code. P/BC numbers refer to the applicable Information Bulletin. Information Bulletins can be accessed on the internet at LADBS.ORG.)

- All conditions of the above referenced Department approval letter(s) shall apply except as specifically modified herein.
- Slabs placed on approved compacted fill shall be at least 3½ inches thick and shall be reinforced with ½-inch diameter (#4) reinforcing bars spaced a maximum of 16 inches on center each way.

LADBS G-5 (Rev. 12/17/2019) AN EQUAL EMPLOYMENT OPPORTUNITY - AFFIRMATIVE ACTION EMPLOYER

**2 SOILS APPROVAL LETTER**

SCALE: NOT TO SCALE

GARY LEE MOORE, PE, ENV SP	CITY ENGINEER
ARCHITECTURAL DIVISION	DATE:
DESIGNED BY: VIRGILIO AOANAN	03/03/2020
DRAWN BY: AUTUMN WAGGONER	03/03/2020
CHECKED BY: VIRGILIO AOANAN	03/03/2020
APPROVED BY: VIRGILIO AOANAN	03/03/2020

**BID SET PROJECT ISSUE DATE: 06/22/21**

**CITY OF LOS ANGELES**

**DEPARTMENT OF PUBLIC WORKS**

**GARY LEE MOORE, PE, ENV SP**

**PROJECT: GRANADA HILLS POOL AND BATHHOUSE**

**ADDRESS: 16730 CHATSWORTH STREET**

**GRANADA HILLS, CA 91344**

**BUREAU OF ENGINEERING**

**OFFICIAL RECORD**

**WORK ORDER NO. #E170517**

**PLAN FILE NO. #308**

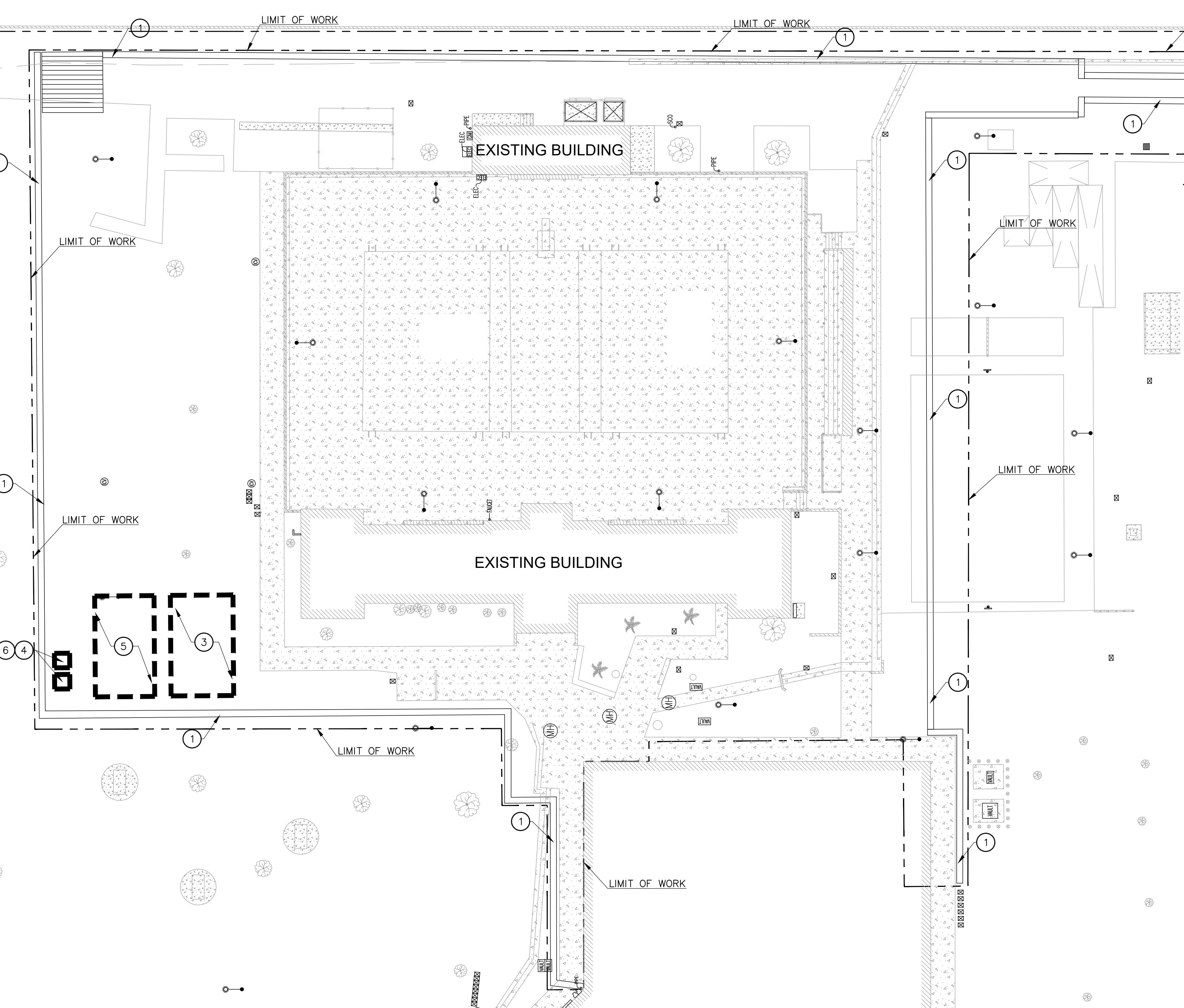
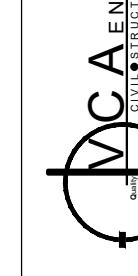
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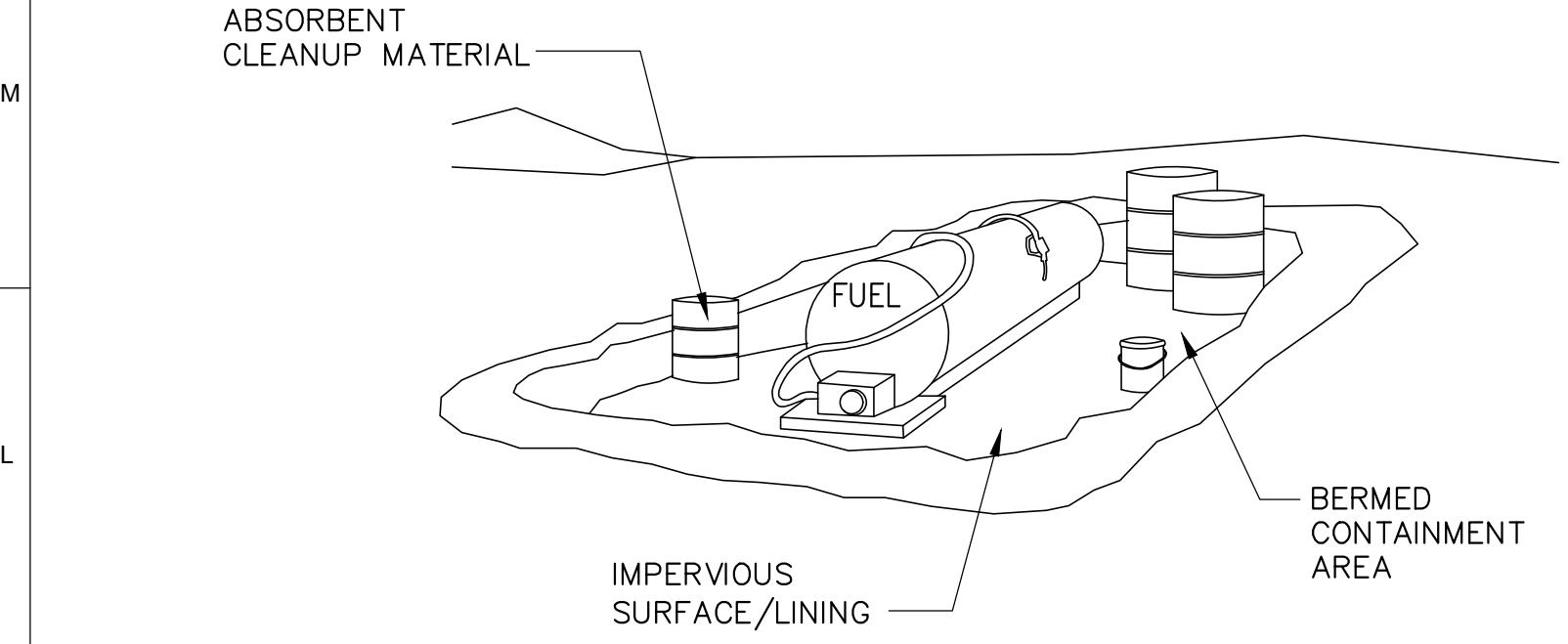
**SHEET NO. 17 OF 19**

**REVISION DATES DESIGN STAGE ONLY**

**FILE PATH: 00000000000000000000000000000000**

**PLOTTED: 09/18/2019 10:00:00 PM**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	M	L	K	J	I	H	G	F	E	D	C	B	A	Z	Y	X
THE CITY OF LOS ANGELES OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.																
																
<b>CONSTRUCTION NOTES:</b>																
<ol style="list-style-type: none"> <li>1. INSTALL FIBER ROLLS PER DETAIL 4 ON SHEET C601.</li> <li>2. INSTALL TEMPORARY STABILIZED CONSTRUCTION ENTRANCE PER DETAIL 6 ON SHEET C601.</li> <li>3. PROPOSED AREA FOR EQUIPMENT STAGING. CONTRACTOR TO VERIFY EXACT LOCATION AND COORDINATE WITH THE CITY ENGINEER.</li> <li>4. PROPOSED TRAILER AREA.</li> <li>5. PROPOSED AREA FOR LOADING. CONTRACTOR TO VERIFY EXACT LOCATION AND COORDINATE WITH THE CITY ENGINEER.</li> <li>6. PROPOSED AREA FOR PORTABLE TOILETS. CONTRACTOR TO VERIFY EXACT LOCATION AND COORDINATE WITH THE CITY ENGINEER.</li> </ol>																
<b>OWNER STATEMENT OF UNDERSTANDING:</b>																
<p>AS THE ENGINEER/QSD OF RECORD, I HAVE SELECTED APPROPRIATE BMPs TO EFFECTIVELY MINIMIZE THE NEGATIVE IMPACTS OF THIS PROJECT'S CONSTRUCTION ACTIVITIES ON STORM WATER QUALITY. THE PROJECT OWNER AND CONTRACTOR ARE AWARE THAT THE SELECTED BMPs MUST BE INSTALLED, MONITORED, AND MAINTAINED TO ENSURE THEIR EFFECTIVENESS.</p>																
CIVIL ENGINEER/QSD SIGNATURE _____ DATE _____																
<p>AS THE PROJECT OWNER OR AUTHORIZED AGENT OF THE OWNER, "I CERTIFY THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH THE SYSTEM DESIGNED TO ENSURE THAT A QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED, BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE INFORMATION SUBMITTED IS TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT SUBMITTING FALSE AND/OR INACCURATE INFORMATION, FAILING TO UPDATE THE ESCP TO REFLECT THE CURRENT CONDITIONS, OR FAILING TO PROPERLY AND/OR ADEQUATELY IMPLEMENT THE ESCP MAY RESULT IN REVOCATION OF GRADING AND/OR OTHER PERMITS OR OTHER SANCTIONS PROVIDED BY LAW."</p>																
OWNER OR AUTHORIZED REPRESENTATIVE (PERMITTEE) _____ DATE _____																
<b>EROSION CONTROL NOTES:</b>																
<ol style="list-style-type: none"> <li>1. IN CASE OF EMERGENCY, CALL 911.</li> <li>2. TOTAL DISTURBED AREA _____ WDID# _____</li> <li>RISK LEVEL 1 2 3 (CIRCLE ONE AS DETERMINED BY STATE GENERAL PERMIT FOR SITES GREATER THAN 1 ACRE)</li> <li>3. A STAND-BY CREW FOR EMERGENCY WORK SHALL BE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON (OCTOBER 15 TO APRIL 15). NECESSARY MATERIALS SHALL BE AVAILABLE ON-SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF EMERGENCY DEVICES WHEN RAIN IS IMMINENT.</li> <li>4. EROSION CONTROL DEVICES SHOWN ON THIS PLAN MAY BE REMOVED WHEN APPROVED BY THE BUILDING OFFICIAL IF THE GRADING OPERATION HAS PROGRESSED TO THE POINT WHERE THEY ARE NO LONGER REQUIRED.</li> <li>5. GRADED AREAS ADJACENT TO FILL SLOPES LOCATED AT THE SITE PERIMETER MUST DRAIN AWAY FROM THE TOP OF SLOPE AT THE CONCLUSION OF EACH WORKING DAY. ALL LOOSE SOILS AND DEBRIS THAT MAY CREATE A POTENTIAL HAZARD TO OFF-SITE PROPERTY SHALL BE STABILIZED OR REMOVED FROM THE SITE ON A DAILY BASIS.</li> <li>6. ALL SILT AND DEBRIS SHALL BE REMOVED FROM ALL DEVICES WITHIN 24 HOURS AFTER EACH RAINSTORM AND BE DISPOSED OF PROPERLY.</li> <li>7. A GUARD SHALL BE POSTED ON SITE WHEREVER THE DEPTH OF WATER IN ANY DEVICE EXCEEDS TWO FEET. THE DEVICE SHALL BE DRAINED OR PUMPED DRY WITHIN 24 HOURS AFTER EACH RAINSTORM. PUMPING AND DRAINING OF ALL BASINS AND DRAINAGE DEVICES MUST COMPLY WITH THE APPROPRIATE BMP FOR Dewatering OPERATIONS.</li> <li>8. THE PLACEMENT OF ADDITIONAL DEVICES TO REDUCE EROSION DAMAGE AND CONTAIN POLLUTANTS WITHIN THE SITE IS LEFT TO THE DISCRETION OF THE FIELD ENGINEER. ADDITIONAL DEVICES AS NEEDED SHALL BE INSTALLED TO RETAIN SEDIMENTS AND OTHER POLLUTANTS ON SITE.</li> <li>9. DESILTING BASINS MAY NOT BE REMOVED OR MADE INOPERABLE BETWEEN OCTOBER 15 AND APRIL 15 OF THE FOLLOWING YEAR WITHOUT THE APPROVAL OF THE BUILDING OFFICIAL.</li> <li>10. STORM WATER POLLUTION AND EROSION CONTROL DEVICES ARE TO BE MODIFIED, AS NEEDED, AS THE PROJECT PROGRESSES, THE DESIGN AND PLACEMENT OF THESE DEVICES IS THE RESPONSIBILITY OF THE FIELD ENGINEER. PLANS REPRESENTING CHANGES MUST BE SUBMITTED FOR APPROVAL IF REQUESTED BY THE BUILDING OFFICIAL.</li> <li>11. EVERY EFFORT MUST BE MADE TO ELIMINATE THE DISCHARGE OF NON-STORM WATER FROM THE PROJECT SITES AT ALL TIMES.</li> <li>12. ALL DEPOSITS MUST BE SWEEPED UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.</li> <li>13. ANY SLOPES WITH DISTURBED SOILS OR DENUDED OF VEGETATION MUST BE STABILIZED SO AS TO INHIBIT EROSION BY WIND AND WATER.</li> <li>14. ERODED SEDIMENTS AND POLLUTANTS SHALL BE RETAINED ON SITE AND SHALL NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE OR WIND.</li> <li>15. STOCKPILES OF EARTH AND OTHER CONSTRUCTION-RELATED MATERIALS SHALL BE COVERED AND/OR PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY WIND OR WATER.</li> <li>16. FUELS, OILS, SOLVENTS AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND SHALL NOT CONTAMINATE THE SOIL NOR THE SURFACE WATERS. ALL APPROVED TOXIC STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF PROPERLY AND SHALL NOT BE WASHED INTO THE DRAINAGE SYSTEM.</li> <li>17. NON-STORM WATER RUNOFF FROM EQUIPMENT AND VEHICLE WASHING AND ANY OTHER ACTIVITY SHALL BE CONTAINED ON THE PROJECT SITE.</li> <li>18. EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC WAY OR ANY DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTE ON-SITE UNTIL IT CAN BE APPROPRIATELY DISPOSED OF OR RECYCLED.</li> <li>19. TRASH AND CONSTRUCTION - RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF STORM WATER AND DISPERSAL BY WIND.</li> <li>20. SEDIMENTS AND OTHER MATERIALS SHALL 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 STREET/PUBLIC WAYS. ACCIDENTAL DEPOSITIONS MUST BE SWEEPED UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR BY ANY OTHER MEANS.</li> <li>21. RETENTION BASINS OF SUFFICIENT SIZE SHALL BE PROVIDED TO RETAIN STORM WATER RUNOFF ON-SITE AND SHALL BE PROPERLY LOCATED TO COLLECT ALL TRIBUTARY SITE RUNOFF.</li> <li>22. WHERE RETENTION OF STORM WATER RUNOFF ON-SITE IS NOT FEASIBLE DUE TO SITE CONSTRAINTS, RUNOFF MAY BE CONVEYED TO THE STREET AND THE STORM DRAIN SYSTEM PROVIDED THAT AN APPROVED FILTERING SYSTEM IS INSTALLED AND MAINTAINED ON-SITE DURING THE CONSTRUCTION DURATION.</li> <li>23. DEVELOPERS/CONTRACTORS ARE RESPONSIBLE TO INSPECT ALL EROSION CONTROL DEVICES AND BMP's TO ENSURE THEY ARE INSTALLED AND FUNCTIONING PROPERLY IF THERE IS A 50% OR GREATER PROBABILITY OF PREDICTED PRECIPITATION, AND AFTER ACTUAL PRECIPITATION. A CONSTRUCTION SITE INSPECTION CHECKLIST AND INSPECTION LOG SHALL BE MAINTAINED AT THE PROJECT SITE AT ALL TIMES AND AVAILABLE FOR REVIEW BY THE BUILDING OFFICIAL (COPIES OF SELF-INSPECTION CHECKLIST AND INSPECTION LOGS ARE AVAILABLE UPON REQUEST).</li> </ol>																
<b>EROSION CONTROL PLAN</b>																
20 10 0 20 40 SCALE: 1" = 20' 																
<b>CITY OF LOS ANGELES</b> PROJECT: GRANADA HILLS POOL AND BATHHOUSE ADDRESS: 16730 CHATSWORTH STREET GRANADA HILLS, CA 91344																
BID SET PROJECT ISSUE DATE: 06/22/21																
BUREAU OF ENGINEERING CITY OF LOS ANGELES ENGINEERING																
DATE BY _____																
INDEX NO. _____																
NO. _____ REVISION DESCRIPTION _____																
* REGISTERED PROFESSIONAL ENGINEER No. C36079 Exp. 6/30/20 CIVIL STATE OF CALIFORNIA																
CITY ENGINEER DATE: 03/03/2020 ARCHITECTURAL DIVISION ARCHITECT/ENGINEER: VIRGILIO AOANAN LIC. NO. C36079 DESIGNED BY: VIRGILIO AOANAN DRAWN BY: AUTUMN WAGGONER CHECKED BY: VIRGILIO AOANAN APPROVED BY: VIRGILIO AOANAN																
CITY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS GARY LEE MOORE, PE, ENV SP CITY ENGINEER DATE: 03/03/2020 ARCHITECTURAL DIVISION ARCHITECT/ENGINEER: VIRGILIO AOANAN LIC. NO. C36079 DESIGNED BY: VIRGILIO AOANAN DRAWN BY: AUTUMN WAGGONER CHECKED BY: VIRGILIO AOANAN APPROVED BY: VIRGILIO AOANAN																
WORK ORDER NO. #E170517 PLAN FILE NO. #308 DRAWING NO. C600 SHEET 18 OF 19 SHEETS PLOTTED: 06/18/2019 1:00:00 PM																

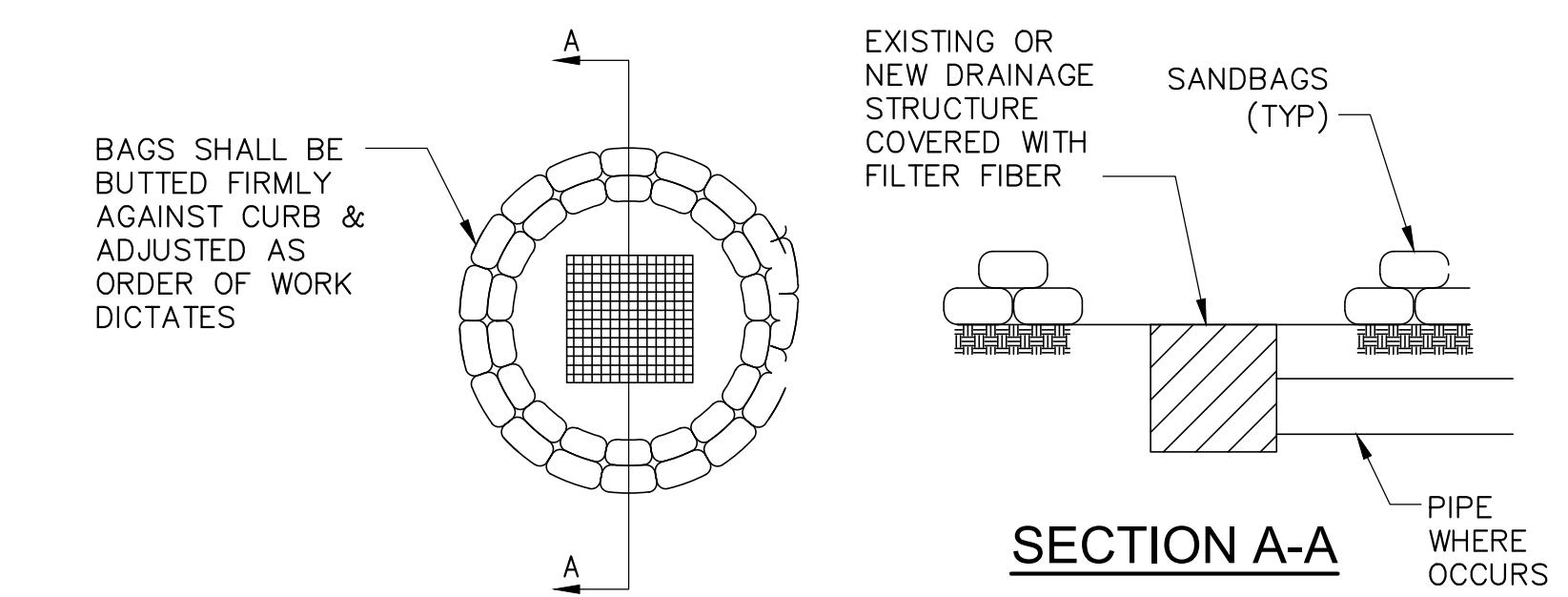


#### NOTE:

FUELING SHALL BE PERFORMED IN A DESIGNATED AREA, AWAY FROM COURSES. ABSORBENT CLEANUP MATERIAL SHALL BE ON SITE AND USED IMMEDIATELY IN THE EVENT OF A SPILL.

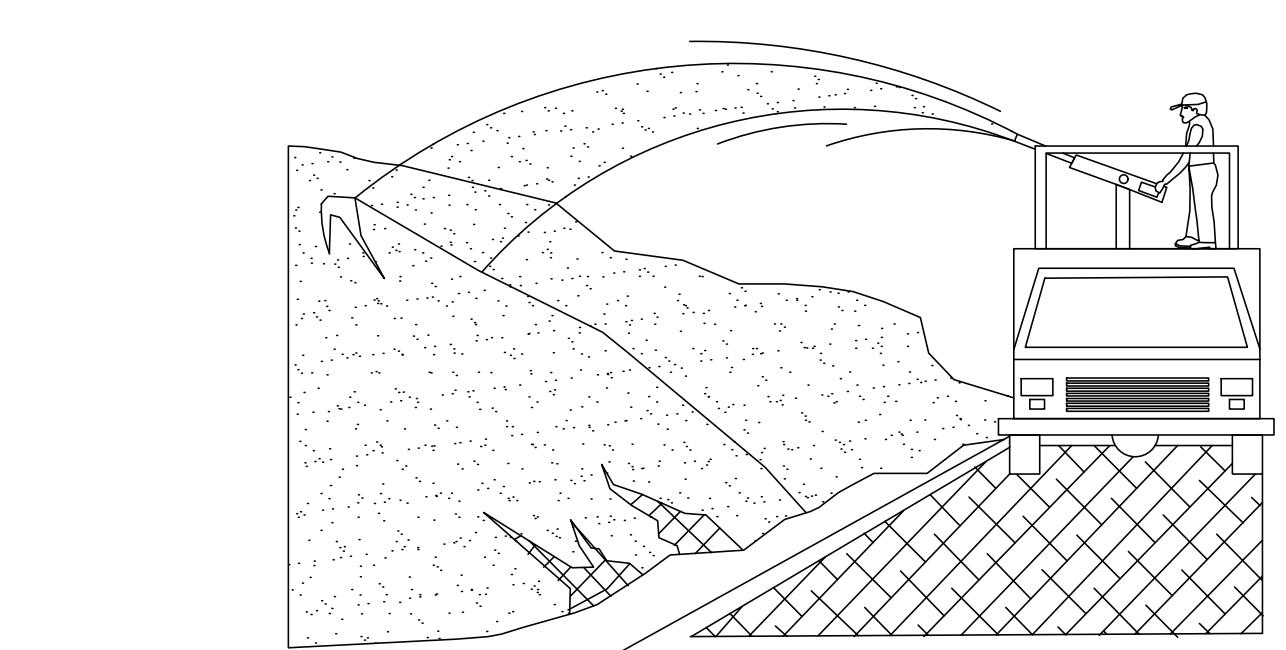
#### 1 VEHICLE / EQUIPMENT FUELING

SCALE: NOT TO SCALE



#### 2 GRAVEL BAG CHECKDAM

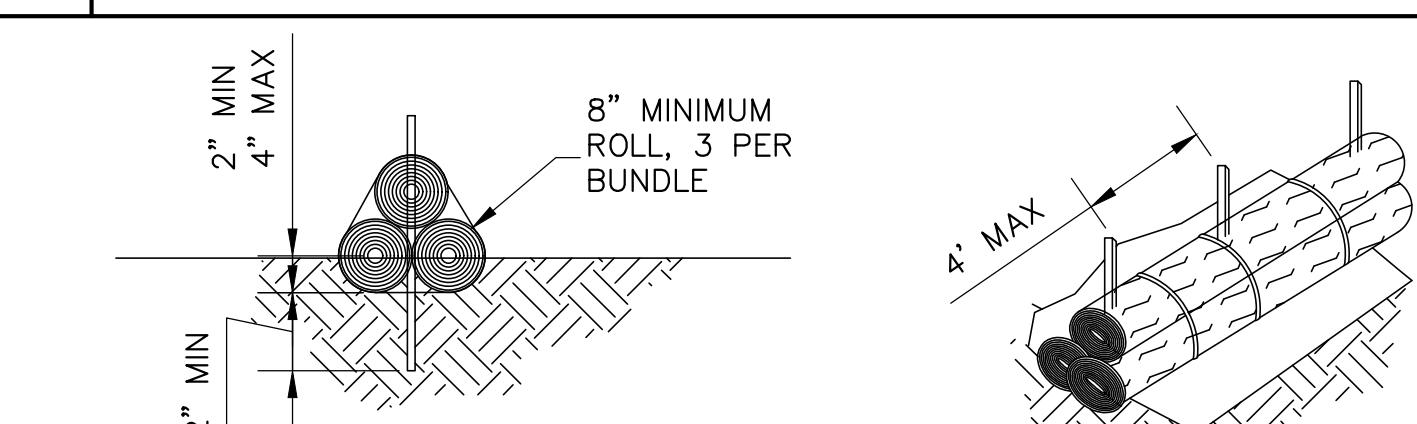
SCALE: NOT TO SCALE



#### NOTES:

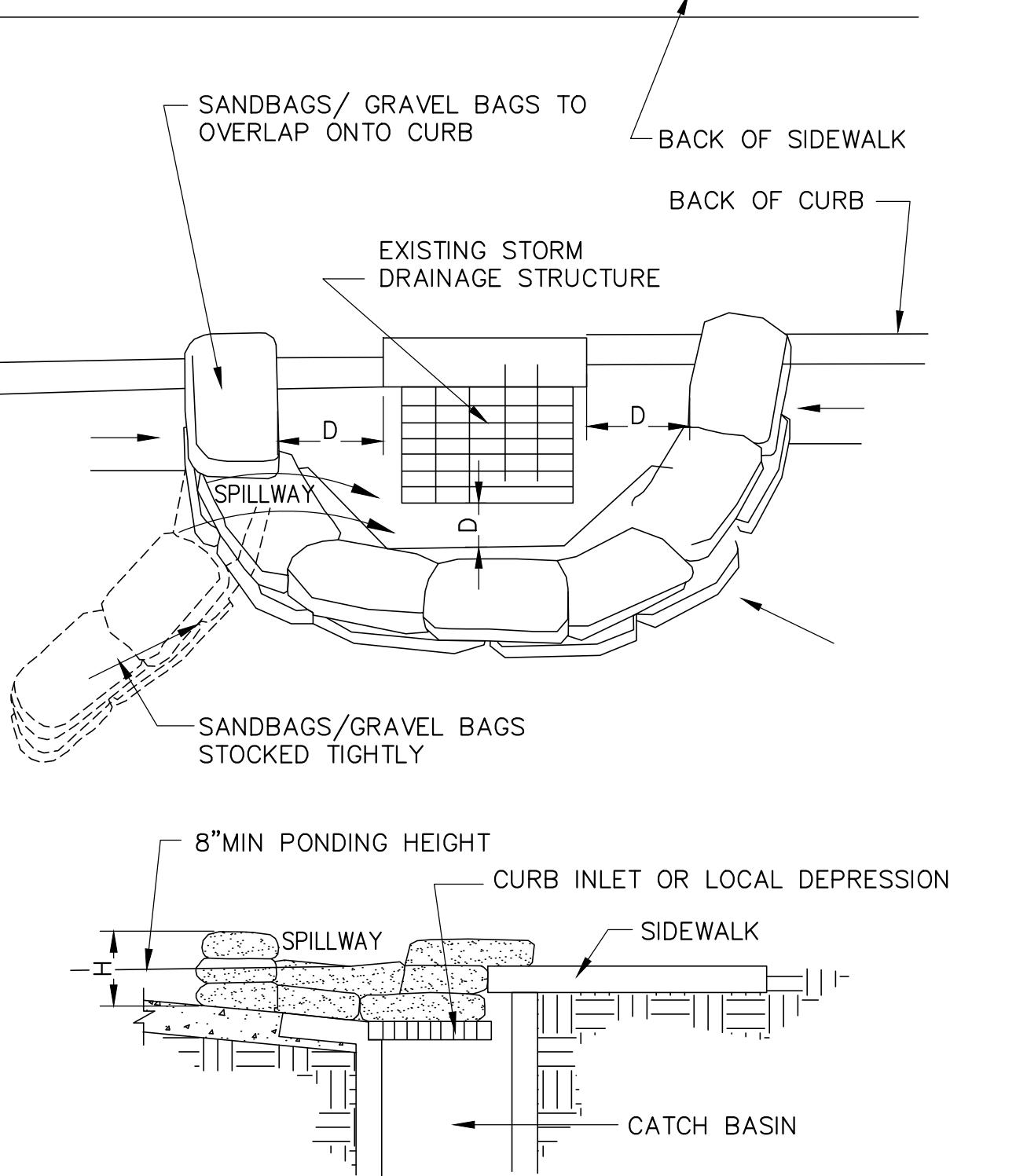
- SOIL/SLOPE STABILIZATION PRACTICES SHALL BE DESIGNED TO PRESERVE EXISTING VEGETATION WHERE FEASIBLE AND TO REVEGETATE OPEN AREAS AS SOON AS FEASIBLE AFTER GRADING. THESE CONTROL PRACTICES SHALL INCLUDE TEMPORARY SEEDING, PERMANENT SEEDING, MULCHING, SOD STABILIZATION, VEGETATIVE BUFFER STRIPS, PROTECTION OF TREES, OR OTHER SOIL STABILIZATION PRACTICES.
- SOIL STABILIZATION SHALL BE IMPLEMENTED ON ALL INACTIVE DISTURBED AREAS FROM NOVEMBER 1 THRU APRIL 15 AND ON ALL DISTURBED AREAS DURING A RAIN EVENT OR POTENTIAL RAIN.
- STABILIZATION PRACTICES SHALL CONTROL/PREVENT EROSION FROM THE FORCES OF WIND AND WATER.
- STABILIZATION PRACTICES SHALL BE IMPLEMENTED IN CONJUNCTION WITH SEDIMENT TRAPPING/FILTERING PRACTICES AND PRACTICES TO REDUCE THE TRACKING OF SEDIMENT ONTO PAVED ROADS.
- WHEN USING STRAW MULCHING, THE MINIMUM APPLICATION SHALL BE 2 TONS/ACRE. MULCH MUST BE ANCHORED IMMEDIATELY TO MINIMIZE LOSS BY WIND OR WATER.
- WHEN USING HYDROSEEDING/MULCHING, THE MINIMUM APPLICATION OF WOOD FIBER SHALL BE 1,500 LBS/ACRE, THAT DOES NOT CONTAIN MORE THAN 50 PERCENT NEWSPRINT.
- FOR SEEDING RECOMMENDATIONS, USDA, NATURAL RESOURCES CONSERVATION SERVICE.

#### 3 EROSION CONTROL



#### 4 FIBER ROLL DETAIL

SCALE: NOT TO SCALE

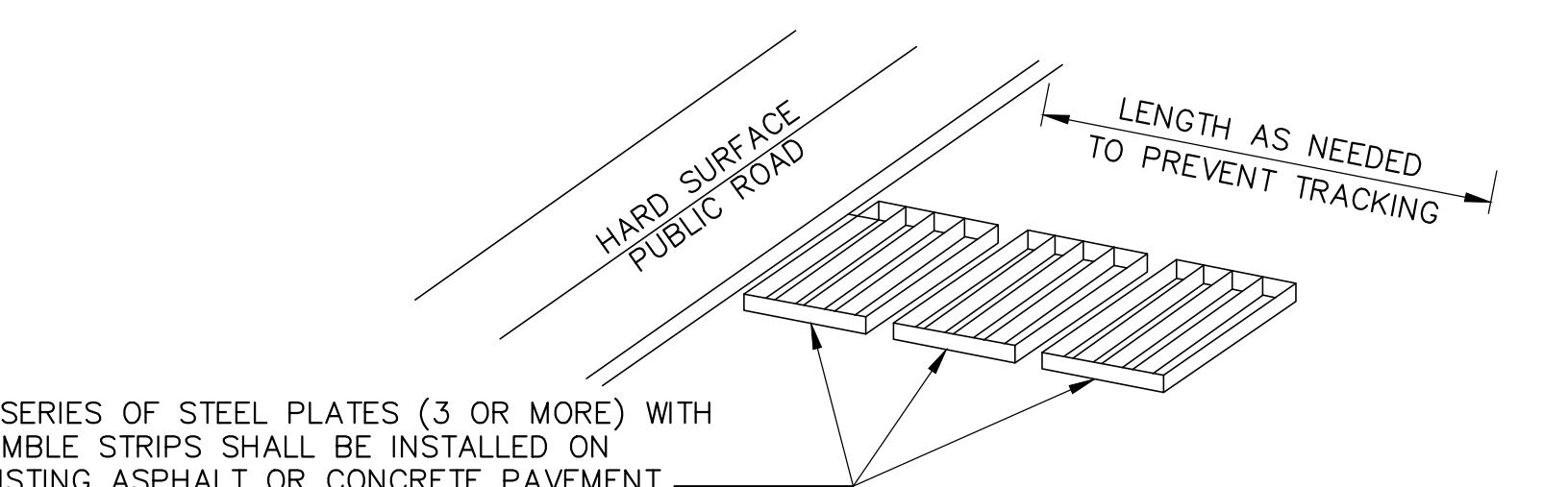


#### NOTES:

- INLET PROTECTION IS REQUIRED ALONG WITH OTHER POLLUTION PREVENTION MEASURES SUCH AS: EROSION CONTROL, SOIL STABILIZATION, AND MEASURES TO PREVENT TRACKING ONTO PAVED SURFACES.
- MODIFY INLET PROTECTION AS NEEDED TO AVOID CREATING TRAFFIC HAZARDS.
- INCLUDE INLET PROTECTION MEASURES AT HILLSIDE V-DITCHES AND MISCELLANEOUS DRAINAGE SWALES.
- INLET PROTECTION SHALL BE PROTECTED AND ACCUMULATED SEDIMENTS REMOVED. SEDIMENT SHALL BE DISPOSED OF PROPERTY AND IN A MANNER THAT ASSURES THAT THE SEDIMENT DOES NOT ENTER THE STORM DRAIN SYSTEM.
- DAMAGED BAGS SHALL BE REPLACED IMMEDIATELY.
- ADDITIONAL SANDBAG SEDIMENT TRAPS SHALL BE PLACED AT INTERVALS AS INDICATED ON SITE PLANT.

#### 5 CATCH BASIN/INLET PROTECTION

SCALE: NOT TO SCALE



#### NOTES:

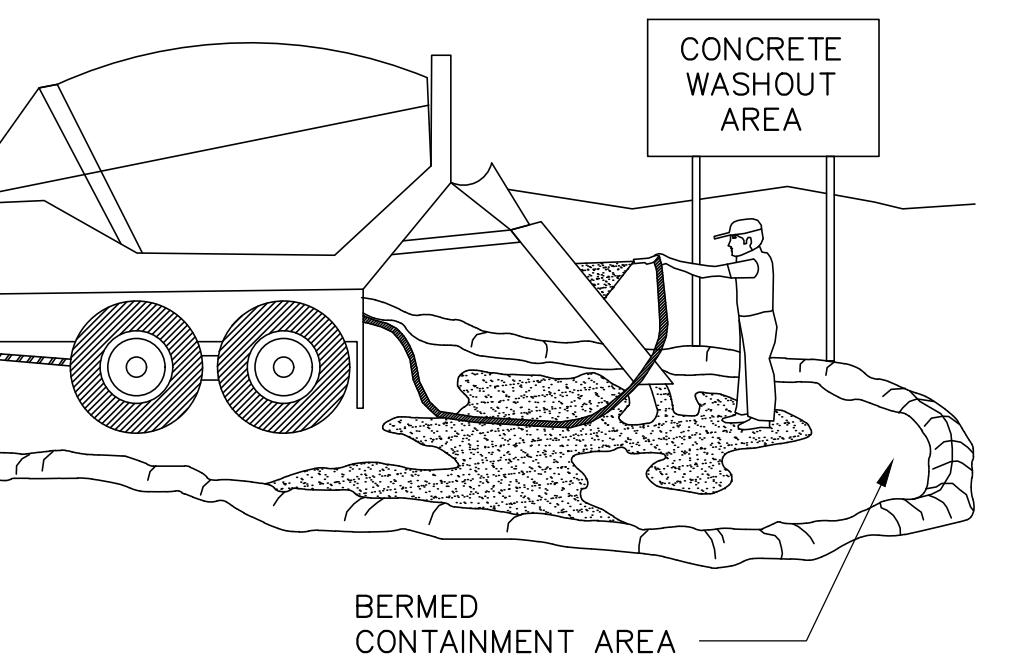
- SEDIMENTS AND OTHER MATERIALS SHALL NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS SHALL BE STABILIZED SO AS TO PREVENT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC ROADS. DEPOSITIONS MUST BE SWEEPED UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS INTO THE STORM DRAIN SYSTEM.
- STABILIZED CONSTRUCTION ENTRANCE SHALL BE:
  - LOCATED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE RD OR FROM A PUBLIC RIGHT OF WAY, STREET, ALLEY, AND SIDEWALK OR PARKING AREA.
  - A SERIES OF STEEL PLATES WITH "RUMBLE STRIPS", AND/OR MIN 4" COARSE AGGREGATE WITH LENGTH, WIDTH & THICKNESS AS NEEDED TO ADEQUATELY PREVENT ANY TRACKING ONTO PAVED SURFACES.
- ADDING A WASH RACK WITH A SEDIMENT TRAP LARGE ENOUGH TO COLLECT ALL WASH WATER CAN GREATLY IMPROVE EFFICIENCY.
- 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.

#### 6 STABILIZED CONSTRUCTION ENTRANCE / EXIT

NOT TO SCALE

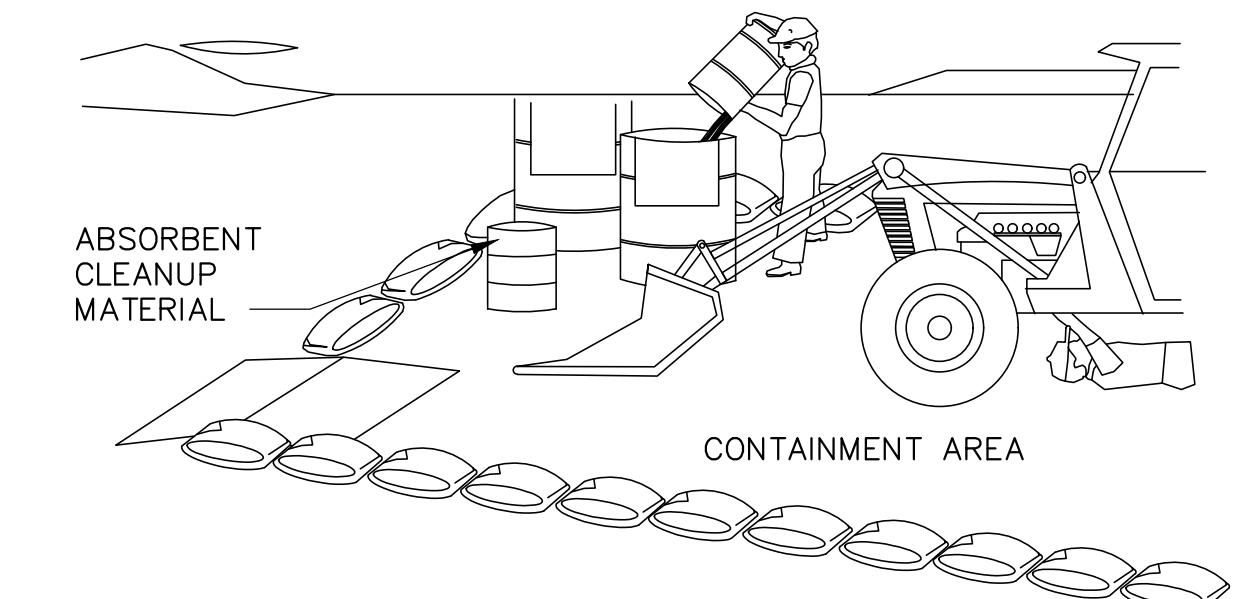


#### NOTES:

- EXCESS AND WASTE CONCRETE SHALL NOT BE WASHED INTO STREET OR A DRAINAGE SYSTEM.
- FOR WASHOUT OF CONCRETE AND MORTAR PRODUCTS, A DESIGNATED CONTAINMENT FACILITY OF SUFFICIENT CAPACITY TO RETAIN LIQUID AND SOLID WASTE SHALL PROVIDED ON SITE.
- SLURRY FROM CONCRETE AND ASPHALT SAW CUTTING SHALL BE VACUUMED OR CONTAINED, DRIED, PICKED UP AND DISPOSED OFF PROPERTY.

#### 7 CONCRETE WASTE MANAGEMENT

SCALE: NOT TO SCALE

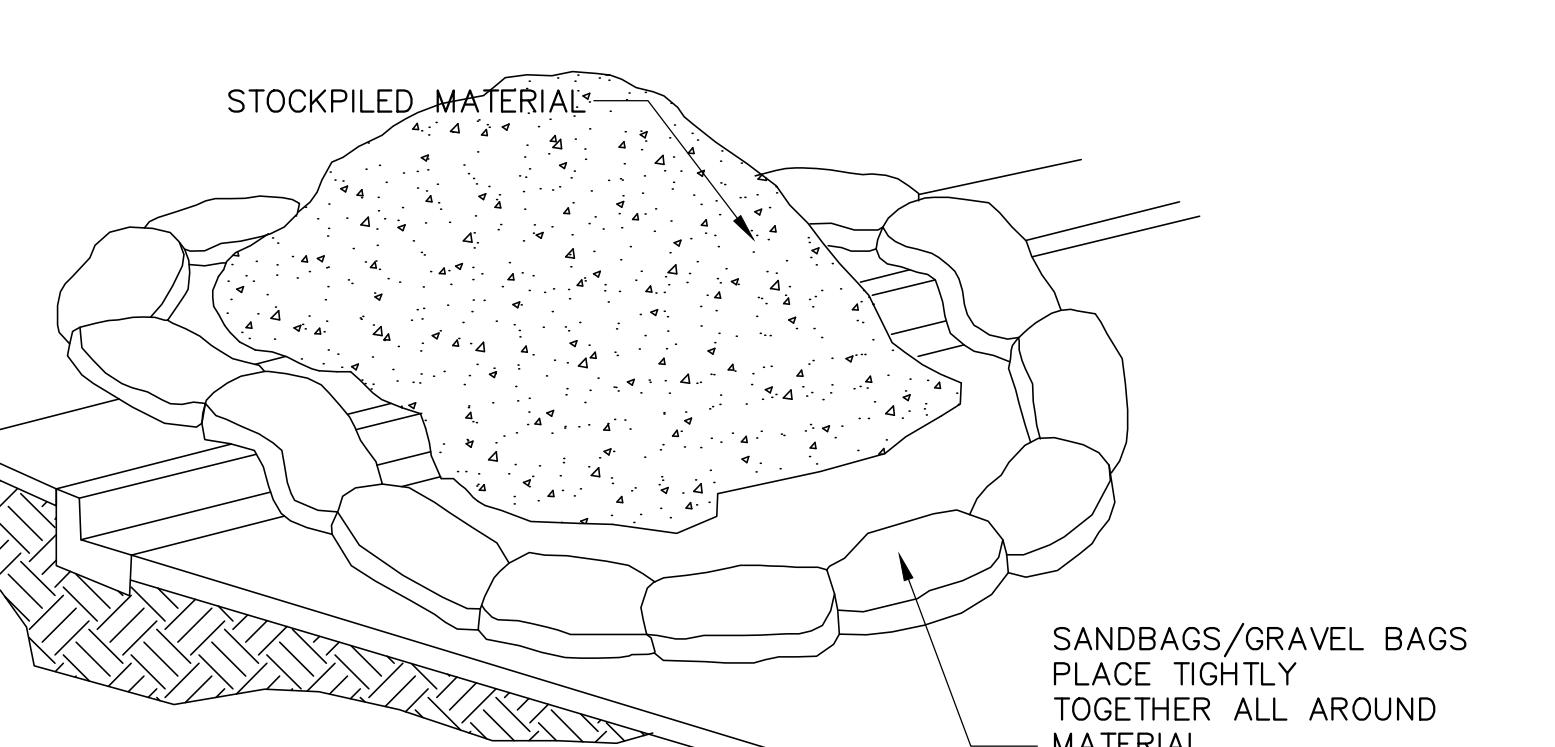


#### NOTES:

- LEAKING VEHICLES AND EQUIPMENT SHALL NOT BE ALLOWED ON-SITE. EQUIPMENT AND VEHICLES SHALL BE INSPECTED FREQUENTLY FOR LEAKS AND SHALL BE REPAIRED IMMEDIATELY. CLEAN UP SPILLS AND LEAKS PROMPTLY WITH ABSORBENT; DO NOT FLUSH WITH WATER.
- VEHICLES AND EQUIPMENT SHALL BE MAINTAINED AND REPAIRED ON-SITE ONLY IN DESIGNATED AREAS. PREVENT RUN-ON AND RUN-OFF FROM DESIGNATED AREAS. CONTAINMENT DEVICES SHALL BE PROVIDED AND AREAS SHALL BE COVERED IF NECESSARY.
- DESIGNATE ON-SITE VEHICLE AND EQUIPMENT MAINTENANCE AREAS, WAY FROM STORM DRAIN INLETS AND WATERCOURSES.
- ALWAYS USE SECONDARY CONTAINMENT, SUCH AS A DRAIN PAN OR DROP CLOTH, TO CATCH SPILLS AND LEAKS WHEN REMOVING OR CHANGING FLUIDS.
- LEGALLY DISPOSE OF USED OILS, FLUIDS, AND LUBRICANTS.
- PROVIDE SPILL CONTAINMENT DIKES OR SECONDARY CONTAINMENT AROUND STORED OIL, FUEL, AND CHEMICAL DRUMS.
- Maintain an adequate supply of absorbent spill cleanup materials in designated area.

#### 8 EQUIPMENT REPAIR/MAINTENANCE

SCALE: NOT TO SCALE



#### NOTES:

- DIRT AND OTHER CONSTRUCTION RELATED MATERIALS PLACED IN THE STREET OR ON OTHER IMPERVIOUS SURFACES MUST BE CONTAINED WITH SANDBAGS OR OTHER MEASURES TO PREVENT TRANSPORT TO THE STORM DRAIN SYSTEM.
- ANY CONSTRUCTION MATERIAL STORED OR STOCKPILED ON-SITE SHALL BE PROTECTED FROM BEING TRANSPORTED BY THE FORCE OF WIND OR WATER.

#### 9 MATERIAL STORAGE

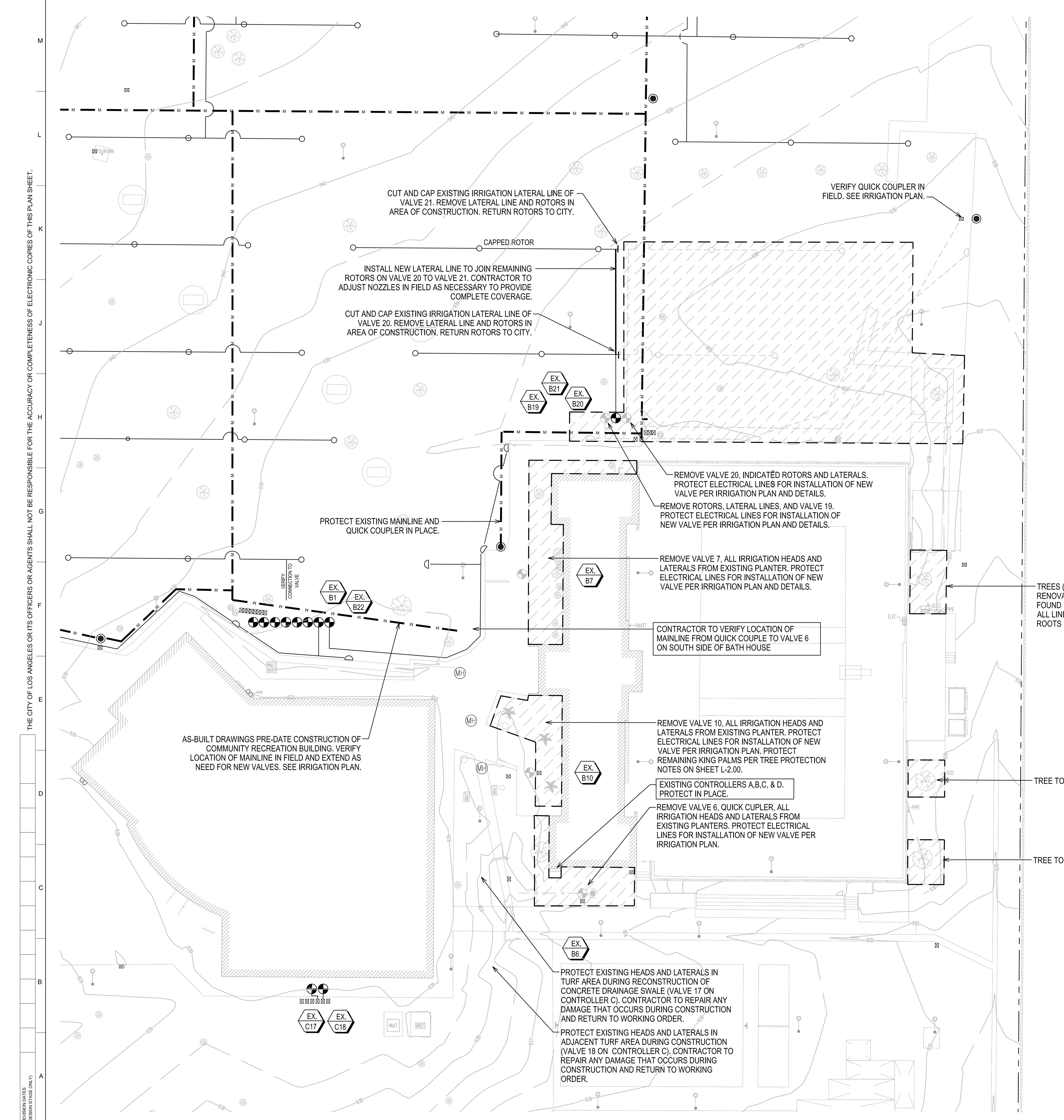
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INDEX NO.	RP-300118
NO.	
DATE	
REVISION DESCRIPTION	
* EXP. 6/30/20	
REGISTERED PROFESSIONAL ENGINEER No. C36079 CIVIL STATE OF CALIFORNIA OFFICIAL RECORD	

CITY ENGINEER	GARY LEE MOORE, PE, ENV SP
ARCHITECTURAL DIVISION	ARCHITECT/ENGINEER VIRGILIO AOANAN LIC NO. C36079
DESIGNED BY:	VIRGILIO AOANAN
DRAWN BY:	AUTUMN WAGGNER
CHECKED BY:	VIRGILIO AOANAN
APPROVED BY:	VIRGILIO AOANAN

PROJECT ISSUE DATE: 06/22/21	CITY OF LOS ANGELES
VERTICAL CONTROL:	SHEET NUMBER: MISCELLANEOUS DETAILS
HORIZONTAL CONTROL:	PROJECT: GRANADA HILLS POOL AND BATHHOUSE
WORK ORDER NO. #E170517	ADDRESS: 16730 CHATSWORTH STREET GRANADA HILLS, CA 91344
PLAN FILE NO. #308	DRAWING NO. C601
BID SET	
CITY OF LOS ANGELES	
SHEET 19 OF 19 SHEETS 19	





- NOTES:
- EXISTING IRRIGATION PLAN BASED ON 1986 AS-BUILTS AND IN-FIELD INSPECTION. CONTRACTOR SHALL VERIFY ALL INSTALLED IRRIGATION EQUIPMENT IN FIELD BEFORE ANY WORK BEGINS.
  - CONTRACTOR SHALL INSTALL TRACER WIRE/TAPE OVER ANY UNEARTHED MAINLINE BEFORE RE-BURYING LINE.
  - IRRIGATION CONTRACTOR TO REVIEW TREE REMOVAL PLAN.
  - EXISTING VALVE POSITIONS 6, 7, 10, 19, AND 20 ON CONTROLLER "B" ARE TO BE REUSED IN NEW IRRIGATION PLAN. PROTECT EXISTING WIRING TO REUSE WITH INSTALLATION OF NEW VALVES.
  - CONTRACTOR SHALL PROVIDE NEW AS-BUILT PLANS FOR ALL WORK DONE IN THIS CONTRACT.
  - IRRIGATION TO REST OF PARK TO BE PROTECTED IN PLACE AND MAINTAINED IN OPERATIONAL ORDER THROUGHOUT CONSTRUCTION. ANY DAMAGE THAT OCCURS SHALL BE REPAIRED IMMEDIATELY AT NO COST TO THE CITY.

INDICATES AREA OF CONSTRUCTION REQUIRING REMOVAL OF LANDSCAPE AND IRRIGATION EQUIPMENT

● EXISTING VALVE TO REMAIN

● VALVE TO BE REMOVED. PROTECT EX. WIRING FOR NEW VALVE INSTALLATION PER IRRIGATION PLAN

— EXISTING LATERAL LINE TO REMAIN  
— EXISTING LATERAL TO BE REMOVED  
○ EXISTING IRRIGATION ROTORS TO BE REMOVED



PROJECT ISSUE DATE: 06/22/21

CITY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

GARY LEE MOORE, PE, ENV SP

ARCHITECTURAL DIVISION

LACEY WITHERS LIC. NO.: CA 3320

DESIGNED BY: LACEY WITHERS DATE: 30/03/2020

DRAWN BY: PN DATE: 30/03/2020

CHECKED BY: LW DATE: 30/03/2020

APPROVED BY: LW DATE: 30/03/2020

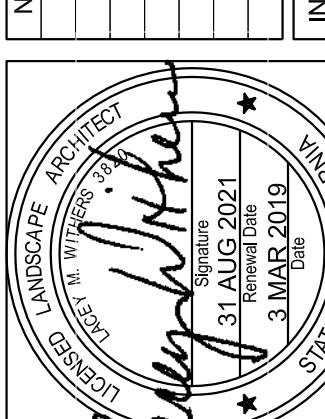
BUREAU OF ENGINEERING

CITY OF LOS ANGELES



BUILDING NO.

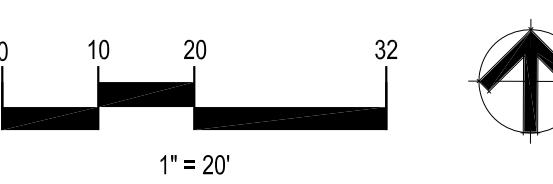
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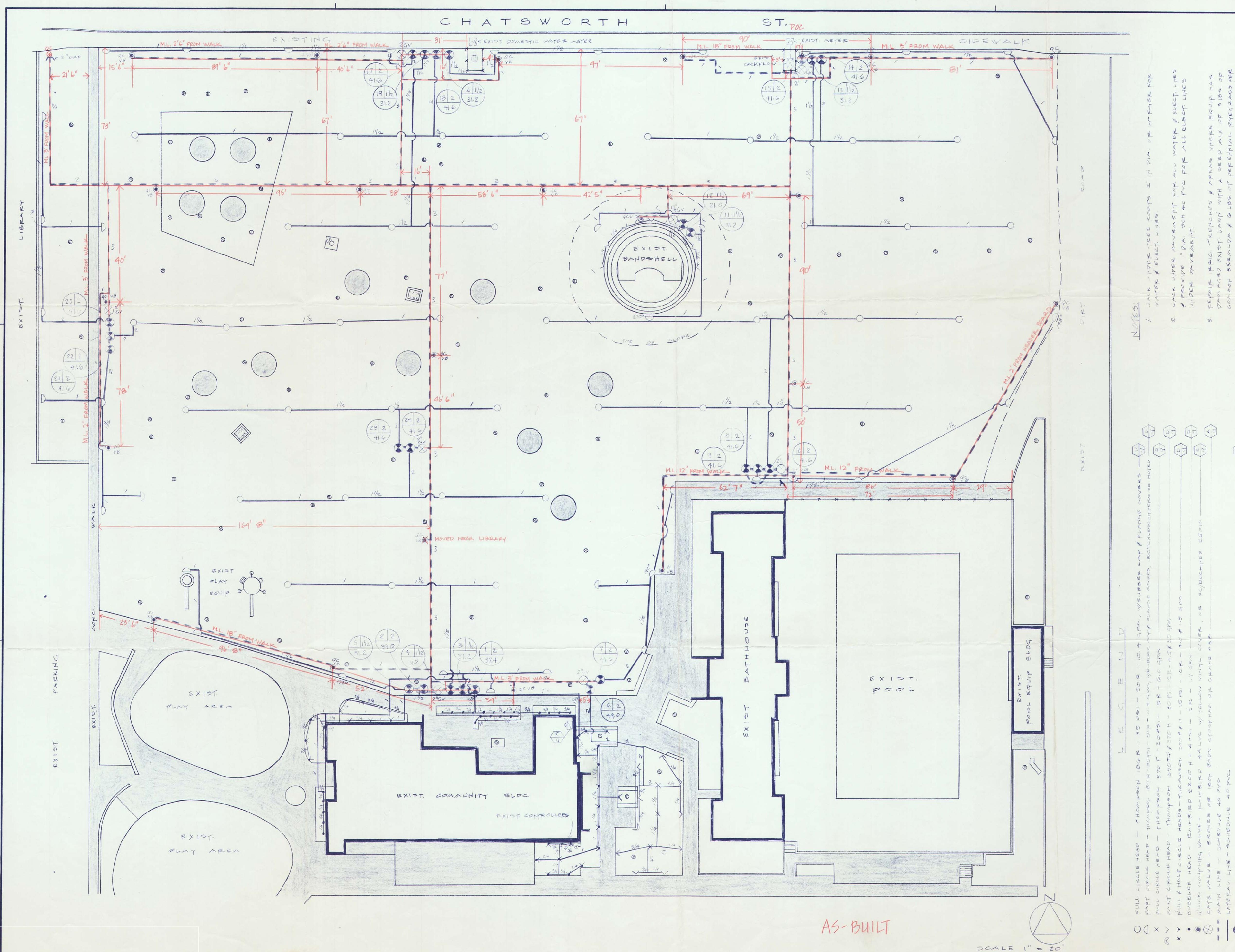


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PLAN FILE NO.	#308
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WITHERS & SANDREN  
LANDSCAPE ARCHITECTURE + PLANNING





**PRINT THIS SHEET IN COLOR FOR GREATER LEGIBILITY.**

<b>CITY OF LOS ANGELES, DEPARTMENT OF RECREATION A, 200 NORTH MAIN STREET, ROOM 1290, LOS ANGELES, CALIFORNIA, 90012</b>	
<b>DEPARTMENT OF PUBLIC WORKS</b>	<b>BUREAU OF ENGINEERING</b>
<b>GARY LEE MOORE, PE, ENV SP</b>	<b>R&amp;D</b>
ARCHITECTURAL DIVISION	GENERAL MANAGER
DESIGNED BY: LACEY WITHERS LIC. NO.: CA 3320	ASS'T GEN MGR - PLANNING & DEVELOPMENT
DRAWN BY: PW	REGIONAL ASST GEN MANAGER
CHECKED BY: LW	DATE BY:
APPROVED BY: LW	INDEX NO. RP-300118

**PROJECT ISSUE DATE: 06/22/21**

**CITY OF LOS ANGELES**

**OFFICIAL RECORD**

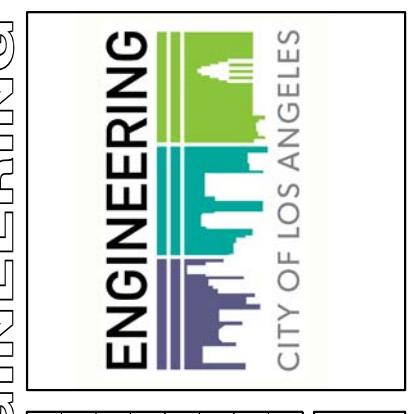
**WORK ORDER NO. #170517**

**PLAN FILE NO. #308**

**DRAWING NO. L-0.30**

**SHEET 16 SHEETS**

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**ENGINEERING**

**CITY OF LOS ANGELES**

**CITY OF LOS ANGELES**

M

## WATER EFFICIENT LANDSCAPE WORKSHEETS:

REFERENCE EVAPOTRANSPIRATION (ET<sub>0</sub>): 52.0 (MWEL0, JULY 2015, SAN FERNANDO)

HYDROZONE #/ PLANTING DESC.	VALVE(S)	PLANT FACTOR	IRRIGATION METHOD	IE	ETAF (PF/IE)	IRRIGATED AREA (SF)	ETAF x AREA	ETWU
<b>REGULAR LANDSCAPE AREAS:</b>								
A (LW) LOW WATER USE TREES	NEW_3, 5, 6	.3	TREE BUBBLERS	.81	.37	1,207	447	14,411
B (LW) LOW WATER USE PLANTINGS	NEW_2, 7, 8 / B6, B7, B10, B20	.3	SHRUB BUBBLERS	.81	.37	4,360	1,613	52,003
TOTALS: (A) 5,567 (B) 2,060 66,414								
<b>SPECIAL LANDSCAPE AREAS - EXISTING IRRIGATED TURF NOT INCLUDED</b>								
C SWIMMING POOL - ACTIVE PLAY AREA				1.0	9,110	9,110	293,706	
D SPLASH PAD - ACTIVE PLAY AREA				1.0	1,003	1,003	32,336	
TOTALS: (C) 10,113 (D) 10,113 326,043								
ETWU TOTAL: 392,457								
MAXIMUM ALLOWED WATER ALLOWANCE (MAWA): 406,809								
TOTAL IRRIGATED LANDSCAPE AREA FOR PROJECT: 15,680								
<b>ETWU = Estimated Total Water Use Per Year (gpy required)</b> <b>ETWU = ET<sub>0</sub> x 0.62 x ETAF x AREA</b>  <b>MAWA = Maximum Applied Water Allowance (gpy allowed)</b> <b>MAWA = (ET<sub>0</sub>) (0.62) [(ETAF x LA) + ((1-ETAF) x SLA)]</b> <b>LA = Total Landscape Area in SF</b> <b>SLA = Total Special Landscape Area in SF</b> <b>ETAF = For Regular Landscapes</b> <i>Must be 0.55 or below for residential areas or 0.45 or below for non-residential areas.</i>								
<b>ETAF CALCULATIONS:</b>  <b>REGULAR LANDSCAPE AREAS:</b> ALL LANDSCAPE AREAS:  <b>TOTAL ETAF x AREA: (B):</b> 2,060 <b>TOTAL ETAF x AREA:(B + D):</b> 12,173  <b>TOTAL AREA: (A):</b> 5,567 <b>TOTAL AREA: (A + C):</b> 15,680  <b>AVERAGE ETAF (B / A):</b> 0.37 <b>AVERAGE ETAF (B + D)/(A + C):</b> 0.77								

## LANDSCAPE AND IRRIGATION MAINTENANCE SCHEDULE:

- Landscapes shall be maintained to ensure water use efficiency.
- A regular maintenance schedule shall be submitted with the Certificate of Completion.
- Regular maintenance schedule shall include: Routine inspection, adjustment & repair of the irrigation system and its components, aerating and dethatching turf areas, replenishing mulch, fertilizing, pruning, weeding in all landscape areas, and removing and obstruction to emission devices.
- Operation of system is allowed for auditing and system maintenance.
- Repair of all irrigation equipment shall be done with the originally installed components or their equivalents.
- The project applicant/owner is encouraged to implement sustainable or environmentally-friendly practices for overall landscape maintenance.
- Mulch shall be replaced, at a minimum, on an annual basis or more frequently as-needed.
- Flush dripeline annually, or as needed after maintenance operations.

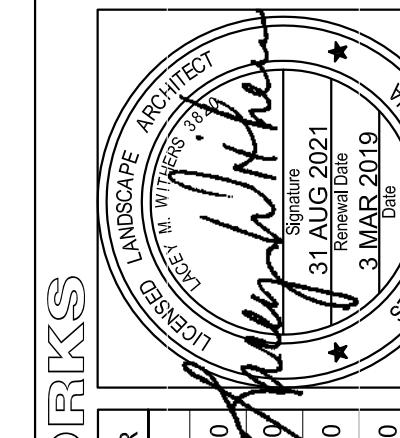
THIS LANDSCAPE DOCUMENTATION PACKAGE COMPLIES WITH CCR TITLE 23, DIV. 2, CH. 2.7: MODEL WATER EFFICIENT LANDSCAPE ORDINANCE. THE LANDSCAPE DOCUMENTATION PACKAGE SHALL CONTAIN:

- PROJECT INFORMATION
- WATER EFFICIENT LANDSCAPE WORKSHEETS
- SOIL MANAGEMENT REPORT (GEO-TECHNICAL REPORT)
- LANDSCAPE DESIGN PLAN
- IRRIGATION DESIGN PLAN
- GRADING (DRAINAGE) DESIGN PLAN (BY OTHERS)



DATE BY	
REVISION DESCRIPTION	
INDEX NO.	
BUILDING NO.	

NO.	
REVISION DESCRIPTION	
INDEX NO.	
RP-300118	



DEPARTMENT OF PUBLIC WORKS

GARY LEE MOORE, PE, ENV SP

ARCHITECTURAL DIVISION

DESIGNED BY: LACEY WITHERS

DRAWN BY: PW

CHECKED BY: LW

APPROVED BY: LW

WORK ORDER NO.	#170517
PLAN FILE NO.	#308
DRAWING NO.	L-1.00
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SHEETS	1

PROJECT ISSUE DATE: 06/22/21

CITY OF LOS ANGELES

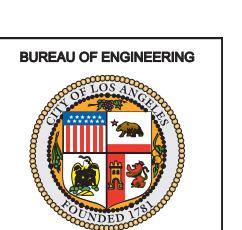
SHEET TITLE: IRRIGATION AS-BUILT

PROJECT: GRANADA HILLS POOL AND BATHHOUSE

ADDRESS: 16730 CHATSWORTH STREET

GRANADA HILLS, CA 91344

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BUREAU OF ENGINEERING

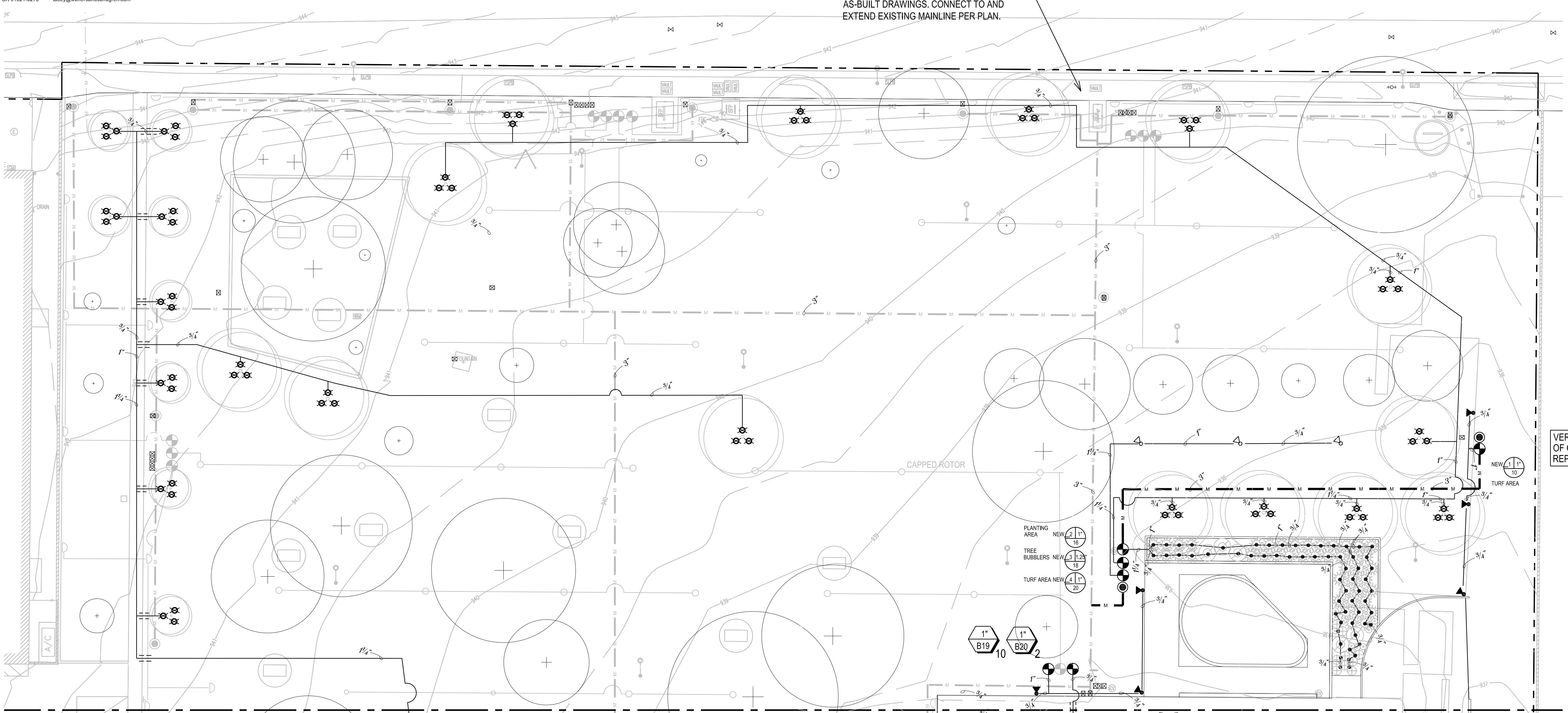
OFFICIAL RECORD



**WITHERS & SANDGREN**  
LANDSCAPE ARCHITECTURE + PLANNING

20948 TULSA STREET  
CHATSWORTH, CA 91311-0276  
(818) 291-0200  
lacey@withersandsandgren.com

THE CITY OF LOS ANGELES OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.



#### POINT-OF-CONNECTION (EX.)

METER SIZE AND ELEVATION: Verify in field.  
MAX FLOW: 21 GPM (New portion of system only)

Existing system High GPM not known.

STATIC PRESSURE (HIGH/LOW): 104/68

TOTAL SYSTEM NEEDS: 91 PSI (New portion of system only).

EXISTING SYSTEM PRESSURE: UNKNOWN

SOURCE AT LADWP: Water Distribution Engineering, (213) 367-0973

DATE INFO OBTAINED: 12 December 2018

THIS SYSTEM CONNECTS TO A POTABLE SOURCE.

NOTE TO CONTRACTOR:  
THE NEW PORTIONS SHOWN IN THIS IRRIGATION PLAN CONNECT TO AN EXISTING IRRIGATION SYSTEM. MODIFICATIONS HAVE BEEN MADE TO THE 1986 AS-BUILT DRAWINGS. INFORMATION ABOUT THE EXISTING SYSTEM IS LIMITED. CONTRACTOR TO VERIFY ALL INFORMATION IN FIELD PRIOR TO & DURING CONSTRUCTION AND MAKE NOTATIONS ON THE AS-BUILTS (PER R.A.P. STANDARDS) FOR FUTURE REFERENCE.

CONTRACTOR IS RESPONSIBLE FOR ENSURING THE PROPER WORKING CONDITION OF ALL EXISTING IRRIGATION SYSTEMS BEING PROTECTED THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES. ANY LANDSCAPE (PLANTING) FAILURES THAT OCCUR AS A RESULT OF CONSTRUCTION ACTIVITIES SHALL BE REPLACED IN-KIND AT NO ADDITIONAL COST TO THE CITY. CONTRACTOR TO PROVIDE TEMPORARY IRRIGATION TO PLANTING AREAS IF NECESSARY TO MAINTAIN THE HEALTH OF EXISTING PLANTS.

CONTROLLERS:  
SEE SHEET L-1.02 FOR EXISTING CONTROLLER LOCATION. ALL NEW AND REUSED VALVES ARE TO BE CONNECTED TO EXISTING CALSENSE ET-1 CONTROLLER "A." VERIFY IN FIELD WITH PARK MAINTENANCE STAFF.

IRRIGATION MAINLINE NOTE:  
MAINLINE IS SHOWN OUTSIDE OF LANDSCAPE AREAS FOR GRAPHIC CLARITY ONLY. MAINLINE SHALL BE INSTALLED WITHIN LANDSCAPE AREAS WHEREVER POSSIBLE. WHERE MAINLINE MUST RUN UNDER HARDCAPE, INSTALL IN SLEEVING PER R.A.P. STANDARDS - REFER TO SPECIFICATIONS. SLEEVES SHALL BE TWICE THE DIAMETER OF THE MAINLINE PIPE MIN.

SEE SHEET L-1.50 FOR IRRIGATION NOTES

GENERAL VALVE/QUICK COUPLER NOTE:  
CONTRACTOR SHALL NOT INSTALL ANY VALVES OR QUICK COUPLERS IN HARDCAPE AREAS. CONTRACTOR SHALL INSTALL THESE ITEMS IN PLANTER AREAS ONLY.

SLEEVING NOTE:  
CONTRACTOR TO TERMINATE ALL SLEEVES 3' BEYOND HARDCAPE INTO PLANTER AREA (PER R.A.P. STANDARDS). NO SLEEVES TO BE TERMINATED UNDER HARDCAPE. CONTRACTOR WILL BE RESPONSIBLE FOR VERIFYING LIMITS OF HARDCAPE PRIOR TO INSTALLING SLEEVES.

NOTE:  
CONTRACTOR IS RESPONSIBLE FOR MAINTAINING AN OPERATING IRRIGATION SYSTEM TO ALL EXISTING PLANTING AREAS FOR THE DURATION OF CONSTRUCTION. ANY PLANTS / LANDSCAPE THAT FAIL AS A RESULT OF LACK OF IRRIGATION SHALL BE REPLACED IN-KIND AT NO ADDITIONAL COST TO THE CITY.

PRESSURE REGULATOR:  
PRESSURE REGULATING DEVICES ARE REQUIRED IF WATER PRESSURE IS BELOW OR EXCEEDS THE RECOMMENDED PRESSURE OF THE SPECIFIED IRRIGATION DEVICES.

A DIAGRAM OF THE IRRIGATIONS PLAN SHOWING HYDROZONES SHALL BE KEPT WITH THE IRRIGATION CONTROLLER FOR SUBSEQUENT MANAGEMENT PURPOSES.

NOTICE TO CONTRACTOR:  
THE EXISTING IRRIGATION SYSTEM SHOWN IS A RECONSTRUCTION FROM "AS-BUILT" DRAWINGS DATED 1986 AND FIELD RESEARCH. CONTRACTOR TO VERIFY ALL IRRIGATION EQUIPMENT IN THE FIELD BEFORE THE START OF CONSTRUCTION. CONFIRM ALL VALVE NUMBERS AND PROTECT EXISTING WIRE FOR REUSE WHEN VALVE NUMBER IS REASSIGNED FOR A NEW INSTALLATION. WHEN AN IRRIGATION LINE IS COMPLETELY REMOVED DUE TO NEW CONSTRUCTION OR NEW HEADS ARE TO BE INSTALLED, THE EXISTING VALVE, VALVE BOX ARE TO BE REPLACED.

COORDINATE WITH CITY MAINTENANCE STAFF AS REQUIRED. ALL REMOVED IRRIGATION EQUIPMENT SHALL BE RETURNED TO THE CITY.

NOTE:  
CONTRACTOR SHALL RUN ALL EXISTING IRRIGATION PRIOR TO COMMENCEMENT OF WORK AND MAKE NOTATIONS TO A CLEAN SET OF PLANS OF THE OPERATION AND SCHEMATICS OF THE EXISTING SYSTEM.

NOTE:  
FOR PROJECTS THAT INCLUDE LANDSCAPE WORK, THE LANDSCAPE CERTIFICATION FORM GRN 12, SHALL BE COMPLETED PRIOR TO FINAL INSPECTION APPROVAL.

NOTE:  
AUTOMATIC LANDSCAPE IRRIGATORS SHALL BE INSTALLED IN SUCH A WAY THAT SPRAY DOES NOT IMPACT THE BUILDING.

CHECK VALVES OR ANTI-DRAIN VALVES ARE REQUIRED ON ALL SPRINKLER HEADS WHERE LOW POINT DRAINAGE COULD OCCUR.

AN IRRIGATION AUDIT REPORT SHALL BE COMPLETED AT THE TIME OF FINAL INSPECTION.

A CERTIFICATE OF COMPLETION SHALL BE FILLED OUT AND CERTIFIED BY EITHER THE SIGNER OF THE LANDSCAPE PLANS, THE SIGNER OF THE IRRIGATION PLANS, OR THE LICENSED LANDSCAPE CONTRACTOR FOR THE PROJECT.

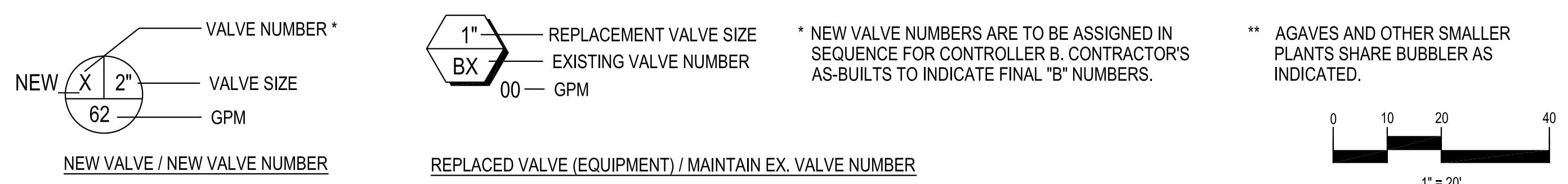
#### IRRIGATION LEGEND

SYMBOL	MANUFACTURER	MODEL	DESCRIPTION	DETAIL	REMARKS
●	RAINFIRB	EFB-CB	BRASS REMOTE CONTROL VALVE, SIZE AS NOTED, INSTALL IN CITY STD. VALVE BOX	-	BRASS VALVE, WITH MANUAL BLEED VALVE ON VALVE BODY
○	RAINFIRB	33DLRC	TWO PIECE QUICK COUPLING VALVE, WITH 44K KEY AND SH-1 HOSE SWIVEL. PROVIDE ONE QUICK COUPLER KEY AND HOSE SWIVEL FOR EACH FIVE QUICK COUPLERS INSTALLED, MINIMUM ONE QUICK COUPLER KEY. INSTALL IN CARSON VALVE BOX (OR EQUAL)	-	
■	EXISTING	EXISTING	EXISTING CONTROLLER	-	
—	ANY APPROVED		PRESSURE PVC MAIN LINE - SCH. 40 PVC, SOLVENT WELD TO 3" DIAMETER PIPE. SEE PLAN FOR MAINLINE SIZE.	-	MINIMUM 30" OF COVER OVER THE TOP OF THE PIPE.
—	ANY APPROVED	SCH. 40	NON-PRESSURE PVC LATERAL LINE, SOLVENT WELD, SEE PLAN FOR SIZE	-	MINIMUM 24" OF COVER OVER THE TOP OF THE PIPE.
—	ANY APPROVED	SCH. 40	PVC SLEEVE UNDER PAVING. TWICE LINE SIZE MINIMUM. CONTRACTOR TO SUPPLY PVC AND INSTALL SLEEVE UNDER ALL HARDCAPE AND PAVING.	-	COVER DEPTH SHALL BE THE SAME AS THE MAINLINE OR LATERAL LINE.
WS	ANY APPROVED	-	PVC WIRE SLEEVE (4" MINIMUM) AND WIRE CONDUIT (Labeled) CONTRACTOR TO INSTALL ALL WIRE IN CONDUIT.	-	MINIMUM 24" OF COVER OVER THE TOP OF THE PIPE.

#### IRRIGATION LEGEND

SYMBOL	MANUFACTURER	MODEL	DESCRIPTION	RAD.	G.P.M.	PRECIP. RATE	SPACING	P.S.I.	DETAIL
✖	RAINFIRB	RWS-M-B-C-1402	ROOT ZONE WATERING SYSTEM	1'	.25	3/TREE	30	1	
●	RAINFIRB	1401	FULL CIRCLE BUBBLER, INSTALLED ON RISER	1'	.25	.82 (S) / .95 (T)	1/SHRUB**	40	8
▽	RAINFIRB	F4-FC-SS AND F4-PC-SS	360° AND 180°, 90° ARC ROTORS	-	6.60 (F)	.38	35'	40	14

NOTE: ARC AND RADIUS ADJUSTMENTS SHALL BE MADE AT EACH AND EVERY NOZZLE TO ACHIEVE THE BEST IRRIGATION EFFICIENCIES AND CONSERVATION STANDARDS.



PROJECT ISSUE DATE: 06/22/2021  
CITY OF LOS ANGELES  
BID SET

VERTICAL CONTROL:

HORIZONTAL CONTROL:

WORK ORDER NO. #E170517  
PLAN FILE NO. #308  
DRAWING NO. L-1.01  
SHEET F OF 1 SHEETS

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**ENGINEERING**  
CITY OF LOS ANGELES

NO.	REVISION DESCRIPTION	DATE BY
INDEX NO.		
BUILDING NO.		



