APPENDICES

APPENDIX A1

PROJECT PLANS

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LIM.1 PRELIMINARY PROPOSED

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A1-2.1 REFLECTED CEILING PLANS & ROOF PLAN
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MR.3 DETAILS
MR.4 DETAILS
MR.5 DETAILS
MR.6 DETAILS
MR.7 DETAILS
MR.8 DETAILS
TOTAL SHEET COUNT: 41

RUHNAU CLARKE ARCHITECTS

PHASE
SCHEMATIC DEVELOPMENT

DATE
AUGUST 9, 2024

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3775 TENTH STREET, RIVERSIDE CALIFORNIA 92501 (951) 684 4664 / 5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010 (760) 438 5899

POOL MODERNIZATION
LAGUNA BEACH HIGH SCHOOL
670 PARK AVE, LAGUNA BEACH, CA 92651
LAGUNA BEACH UNIFIED SCHOOL DISTRICT

TITLE SHEET

T-1

Plot Date: 8/8/2024 5:18:02 PM Last Save By: ron.canedy Login: Ron Canedy

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POOL MODERNIZATION

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LAGUNA BEACH UNIFIED SCHOOL DISTRICT

CONCEPTUAL GRADING PLAN

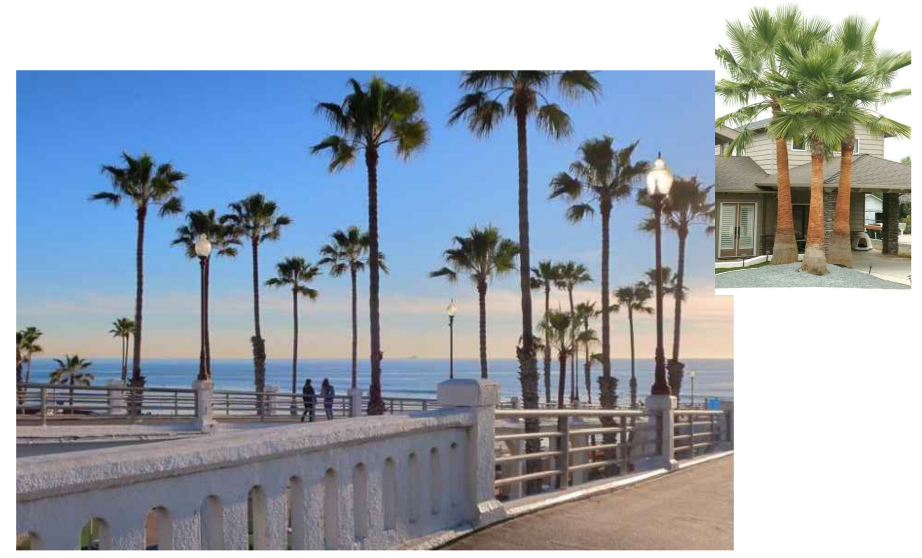
C1.00

TREES

ARBUTUS X
'MARINA'
MARINA STRAWBERRY
TREE

LAGERSTROEMIA INDICA
'RED ROCKET'
RED ROCKET CRAPE MYRTLE

PHOENIX ROEBELENII
PYGMY DATE PALM



WASHINGTONIA ROBUSTA
MEXICAN FAN PAM

SHRUBS

AGAVE ATTENUATA
'BOUTIN BLUE'
FOXTAIL AGAVE

ALOE ARBORESCENS
TORCH ALOE

ALOE STRIATA
CORAL ALOE

ALOE RUBROVIOLACEA
ARABIAN ALOE

BOUGAINVILLEA X
'RASPBERRY ICE'
RASPBERRY ICE BOUGAINVILLEA

BOUTELOUA GRACILIS
'BLONDE AMBITION'
BLUE GRAMA GRASS

CALAMAGROSTIS X ACUTIFLORA
'KARL FOERSTER'
FEATHER REED GRASS

DIANELLA REVOLUTA
'LITTLE REV'
LITTLE REV FLAX LILY

DODONAEA VISCOSA
'PURPUREA'
PURPLE HOPSEED BUSH

LANTANA SELLOWIANA
TRAILING LANTANA

LIRIOPE MUSCARI
'BIG BLUE'
BIG BLUE LILYTURF

NANDINA DOMESTICA
HEAVENLY BAMBOO

OLEA EUROPAEA
'MONTRA'
LITTLE OLLIE DWARF OLIVE

RHAPHIOLEPIS UMBELLATA 'MINOR'
DWARF YEDDO HAWTHORN

SENECIO SERPENS
BLUE CHALK STICKS

STRELITZIA NICOLAI
GIANT BIRD OF PARADISE

POOL MODERNIZATION: SCHEMATIC DEVELOPMENT 8/9/24

D:\BPA\Projects\Year 2024\RCA Laguna Beach HS Aquatic Center\02 Graphics\02 Plant Photo Board.dwg

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POOL MODERNIZATION
LAGUNA BEACH HIGH SCHOOL
670 PARK AVE, LAGUNA BEACH, CA 92651
LAGUNA BEACH UNIFIED SCHOOL DISTRICT

POOL
LANDSCAPE CONCEPTUAL

LPB.1

1-43-22

School: Laguna Beach HS
District: Laguna Beach Unified School District

August 7, 2024

ʾroposed Irrigation Equipment

ʾlease note that items below may or may not be used on this project at this time, but request overall approval in case scope expands for future reference.

Emission Devices:

1) Drip Tubing (is this allowed within the district yet?)
   - Netafim CV, Techline HCVXR
   - Rainbird quick check filter – model: PRB-QKCHK-100 (dirty water applications use Rainbird pressure reg model PSI-H50-100 +
   - Flush Valve – Spears 2000 Compact
   - Indicator Stake – hunter Eco-ID-12 + GPH indicator GDFN
2) Bubblers-Tree & Shrub (Trees receive 2-4"x48" perf pipe, w/ sand sock and black grate)
   - Body: Salco or hunter IH Riser
   - Nozzle: Salco SLV-PSTM-CV-2 Series (1gph shrub and 4 gph trees)
3) Spray Bodies:
   - Rainbird 1806-SAM-PRS or 1806-SAM-P45
4) Medium Range Rotor Heads (17'-46' Radius)
   - Hunter I-20 Series with stainless sleeve
5) long Range Rotor Heads (44'-69' Radius)
   - Hunter i-40 Series (fulls to be dual opposing nozzles) with stainless steel sleeve
6) Swing Joint
   - Spray heads: 12" sch.80 nipples and sch. 40 street ells or NDS TSA series (1/2")
   - Rotors and QC: Rainbird TSJ or NDS TSA models
   - No Funny Pipe permitted.

Flow Control Devices:

1) Backflow Preventer (Reduced Pressure Type)
   - Febco 825YA Series (¾"-2")
   - Febco 880v w/ valve setter (2.5"+)
2) Backflow Cage
   - VIT Poducts Smooth Touch
3) Booster Pump
   - Barret Engineered Pumps-Irriboost
4) Combination Air/ Vacuum Relief Valve (mainline)
   - Netafim 65ARIB1-150 (>3")
   - Jain Irrigation ARV-2 (4"+)

1) Master Control Valves (Normally Open/ normally closed)
   - Buckner/ Superior 3300 NO / 3200 NC (3/4"-3"(140gpm max))
   - Griswold 2000 series (4"+)
2) Flow Sensor
   - CST FSI SP3 Series PVC (3/4"-2")
   - Netafim Octave (3"+)
3) Gate Valves
   - Nibco Model: T-113-K (3/4"-2")
   - Nibco Model: F-619-RWS-SON (2.5"+)
4) Electric Control Valves (Brass)
   - Rain Bird PEB-PRS-D Series

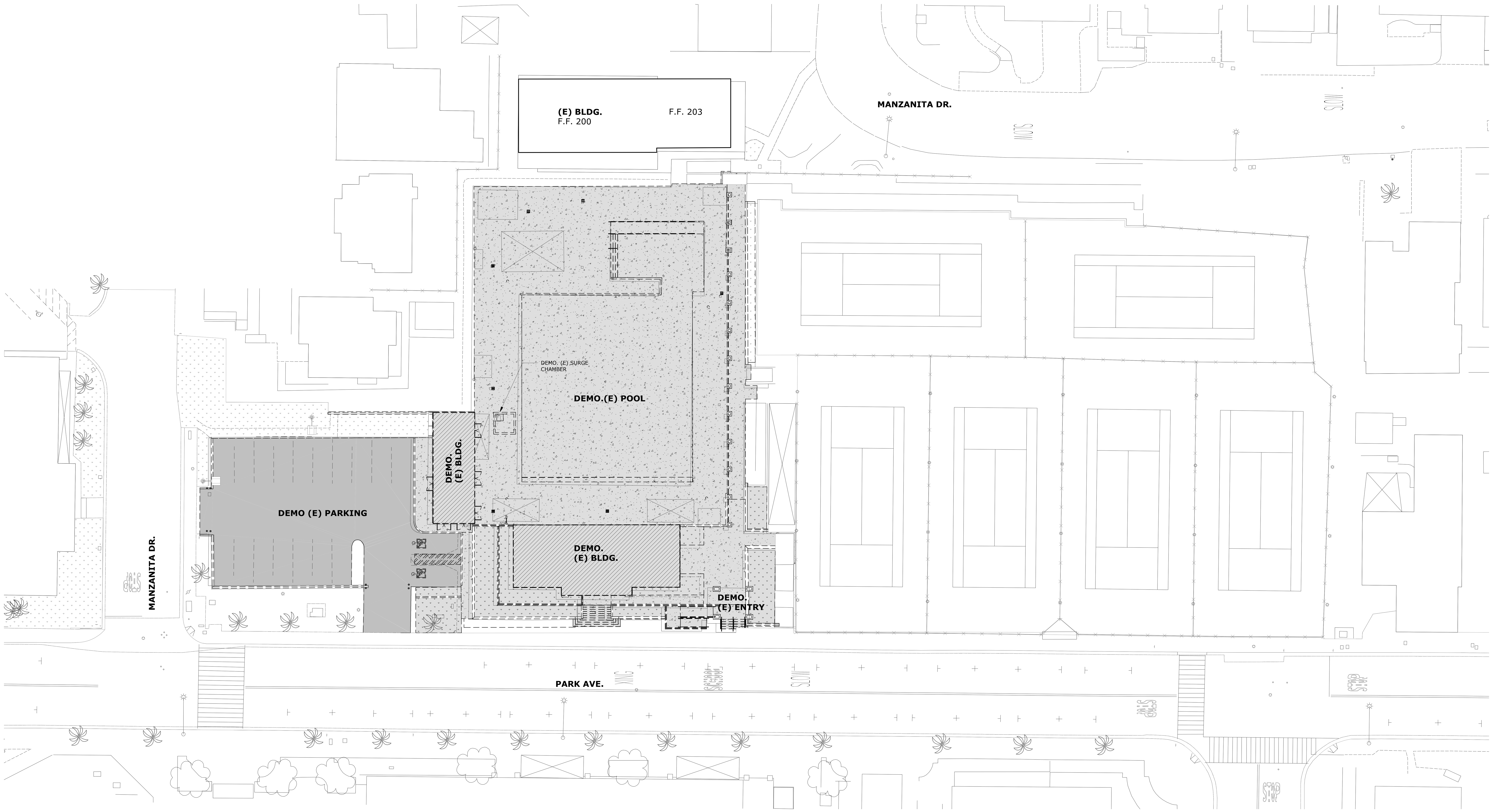
   *Each RCV to be installed with bronze ball valve and 2 unions
5) Quick Coupling Valves (1" Brass)
   - Rain Bird #44LRC Series
   - Superior 7645BS / Acme Key (Non-potable)
6) Valve Boxes (Landscape Areas Only)
   - Rainbird VB series
7) Valve Boxes (Hardscape Areas Only)
   - Old Castle Concrete Valve box or Polymer Concrete depending on rating
   - Brooks Concrete
8) Standard Controller
   - Rainbird ESPLXME2 Pro with remote and software and communication. Ethernet connection for smart functions.

   *Controller to be built by imperial technical services and be equipped with surge protection.
9) Flow Senor Wiring:
   - #16/1 pair Paige Shielded and Armored model P7162D-A
10) Control Wiring (14 AWG UF Single Conductor, Common: 12 AWG UF Single Conductor)
    - Paige Electric P7001D; Equal

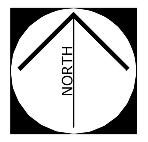
    *Color coded: Common: White; MV: Red; RCV: Black; Future: Orange
11) 2-Wire path and decoders (Where Applicable)
    - Rainbird Maxi Wire (install all wire in 1 ¼" pvc conduit)
    - Rainbird decoder model LXIVMSOL (only use single station decoders)
    - Rainbird Surge Model LXIVMSD
    - Rainbird Sensor device model LXIVMSEN (used with flow sensor)
    - Rainbird Pump start module model LXIVMOUT
12) Water Proof Wire Connector (Waterproof)
    - 3M DBY
    - 3M Scotchcast #3570G-N epoxy packs (must use on 2-wire systems)

Pipe and Restraints:

1) Pressure Mainline (1-1/2" and Smaller)
   - Sch 40 PVC, sch. 80 threaded fittings. No male adapters allowed
2) Pressure Mainline (2" through 3")
   - Class 315 PVC, sch. 80 threaded fittings, No male adapters allowed
3) Pressure Mainline (4"+)
   - Class 200 bell end gasketed PVC or Equal
     - Must use mechanical joint restraints as manufactured by Leemco, inc.
4) Non-Pressure Lateral Line (3/4" through 3")
   - Sch. 40 PVC
5) Sleeves
   - Sch. 40 PVC
6) Glue and Primer
   - Heavy body grey glue 711 and P70 Primer (No red hot blue glue allowed)



1 ENLARGED SITE PLAN - DEMO.
SCALE: 1" = 20'-0"



RUHNAU CLARKE ARCHITECTS

PHASE
SCHEMATIC DEVELOPMENT

DATE
AUGUST 9, 2024

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POOL MODERNIZATION
LAGUNA BEACH HIGH SCHOOL
670 PARK AVE, LAGUNA BEACH, CA 92651
LAGUNA BEACH UNIFIED SCHOOL DISTRICT

DEMOLITION SITE PLAN

AS-1.0

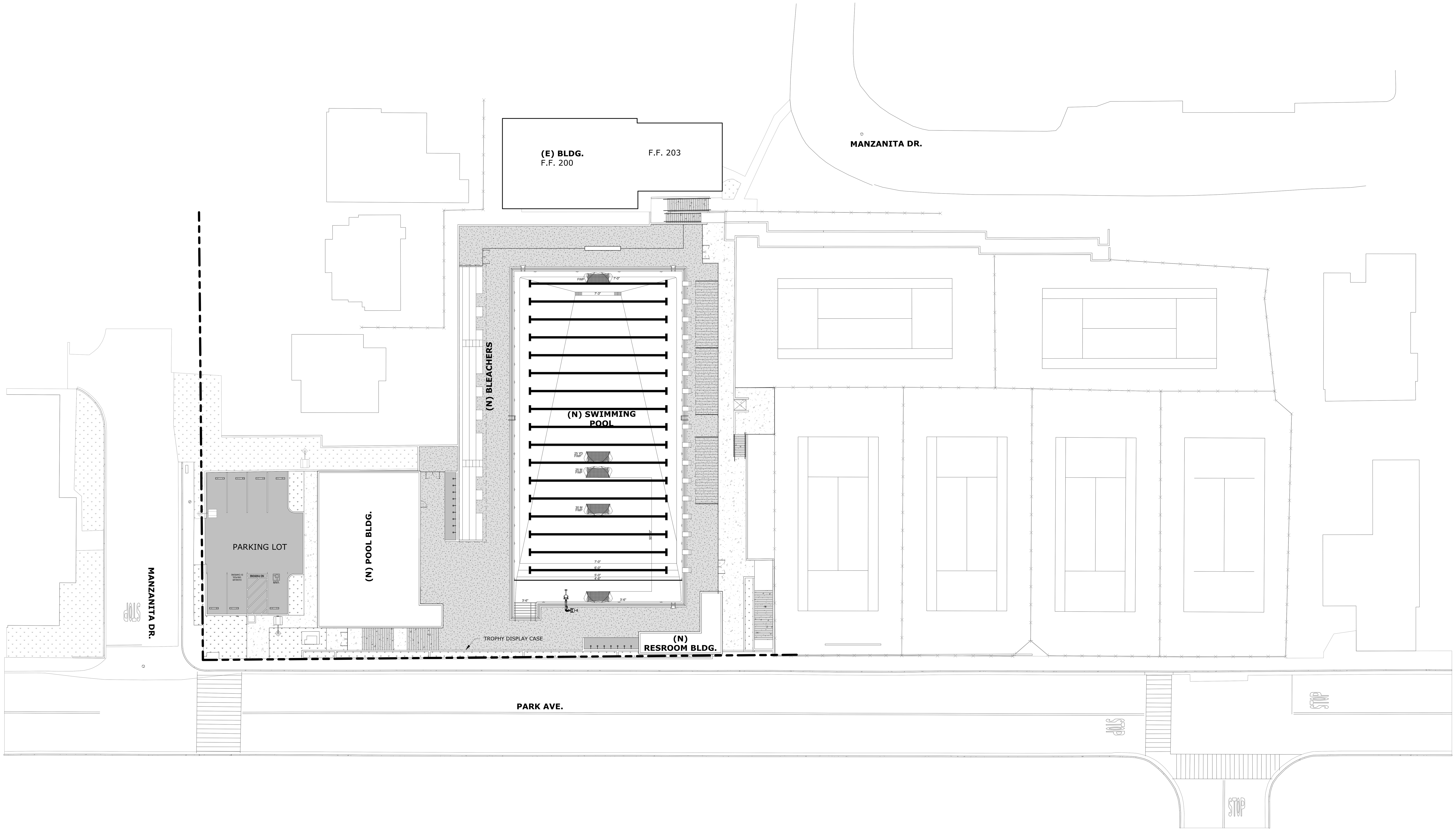
1-43-22

PLUMBING FIXTURE ANALYSIS (2022 CBC CH. 31B, 3116B)

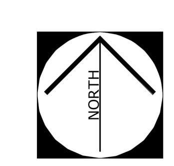
POOL SURFACE AREA (SQ. FT.):	NUMBER OF POOL OCCUPANTS	SHOWERS REQUIRED:	TOILETS REQUIRED:	LAVATORIES REQUIRED:	DRINKING FOUNTAINS REQUIRED:
75'-0" X 147'-8" = 11,073 SQ. FT.	11,073 SQ. FT. / 15 SQ. FT. = 738.2 OR 739 POOL USERS OR 370 MALES AND 370 FEMALES	740 / 50 = 14.8 = 15 SHOWERS	370 / 60 = 6.1 OR 7 FEMALE TOILETS AND 370 / 75 = 4.9 OR 5 MALE TOILETS AND 5 URINALS	739 / 80 = 9.2 OR 10 LAVATORIES	PER CBC 3117B: 4 DRINKING FOUNTAINS

PLUMBING FIXTURE ANALYSIS (2022 CPC CH. 4, TABLE 422.1 & 4-1)

FUNCTION OF SPACE:	OCCUPANT LOAD & TYPE:	SHOWERS REQUIRED:	WATER CLOSETS REQUIRED:	LAVATORIES REQUIRED:	DRINKING FOUNTAINS REQUIRED:	URINALS REQUIRED:
ASSEMBLY WITH FIXED SEATS: (SEE CB 1004.6, USE 50% OF FIXED SEATING VALUE)	280 SEATS / 2 = 140 OCCUPANTS 70 MALES AND 70 FEMALES USE A-5 ASSEMBLY (OUTDOOR SPORTING EVENTS)	0 SHOWERS	70 FEMALES = 3 : 51-100 70 MALES = 1 : 1-100	70 FEMALES = 1 : 1-100 70 MALES = 1 : 1-200	140 OCCUPANTS = 1 1:-250	70 MALES = 1 : 1-100



1 OVERALL SITE PLAN - MOD
SCALE: 1" = 20'-0"



RUHNAU CLARKE ARCHITECTS

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DESIGN DEVELOPMENT
DATE
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POOL MODERNIZATION
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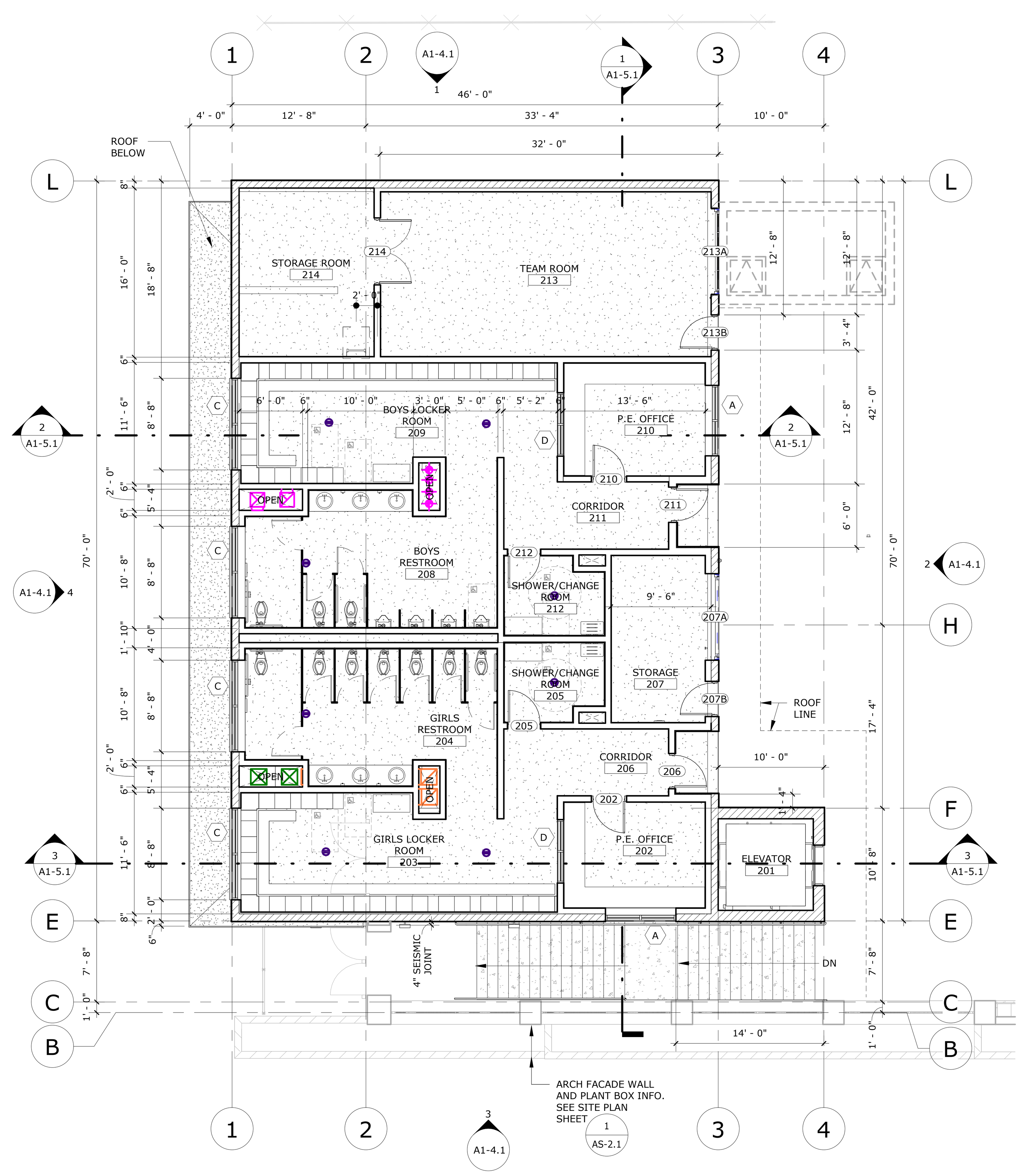
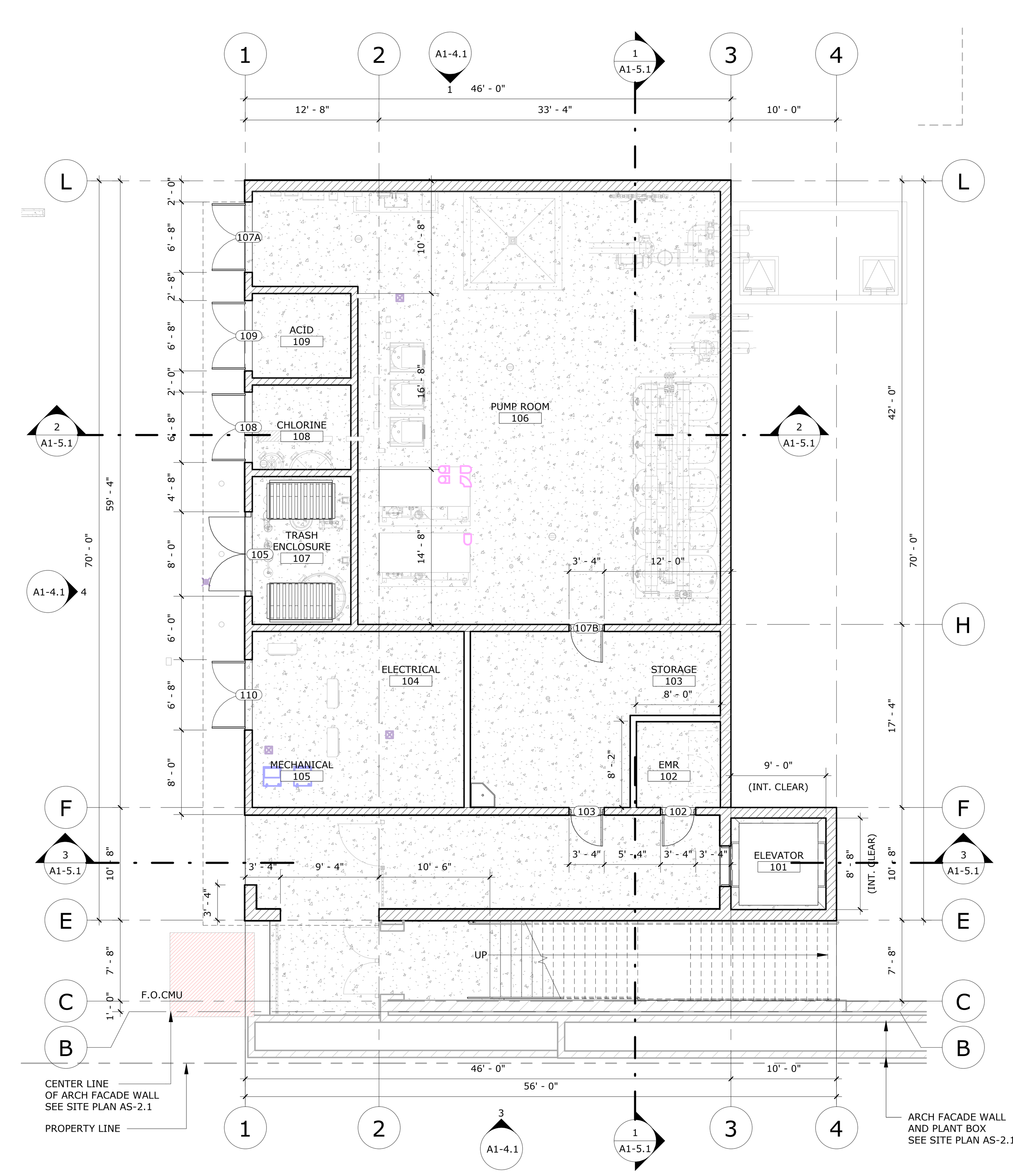
LAGUNA BEACH UNIFIED SCHOOL DISTRICT

OVERALL SITE PLAN
AS-1.1

1-43-22



SECOND FLOOR PLAN SCALE: 1/8" = 1'-0" REF.: 1/A1-4.1 2



FIRST FLOOR PLAN SCALE: 1/8" = 1'-0" REF.: 3/A1-4.1 1

GENERAL FLOOR PLAN NOTES

1. VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
2. ALL DIMENSIONS ARE TO FACE OF STUD, CENTERLINE OF COLUMN OR EDGE OF SLAB, U.N.O.
3. SEE SHEET #/# FOR WALL TYPE INFORMATION.
4. PROVIDE R-19 BATT INSULATION AT ALL EXTERIOR WALLS, U.N.O. GYPSUM BOARD AND INSULATION SHALL EXTEND FULL HEIGHT OF WALL TO UNDERSIDE OF ROOF STRUCTURE.
5. PROVIDE STUD BRACING AND SUPPORT FOR ALL WALL MOUNTED FIXTURES AND ACCESSORIES. PER DETAIL #/#
6. SEE SHEET #/# FOR DOOR AND WINDOW INFORMATION
7. SET DOORS ADJACENT TO WALLS A MIN. OF 6" AWAY FROM WALL U.N.O.

KEYNOTES

FLOOR PLAN LEGEND

TYP. NEW INTERIOR WALLS
ALL INTERIOR WALLS TO BE B1-6 U.N.O.

TYP. NEW RATED WALL ASSEMBLY
ALL RATED WALLS TO BE D1-12 U.N.O.

DEPRESSED FLOOR SLAB TO DRAIN (1/8" PER FOOT MIN. FOR ADDITIONAL INFORMATION, SEE STRUCTURAL DRAWINGS

ROOF ACCESS LADDER AND HATCH, SEE DETAIL -/---

101A 20 MIN — DOOR TAG / DOOR RATING -/---

A — WINDOW TAG -/---

B1- # — WALL TAG
STUD SIZE
WALL TYPE, FOR DETAILS SEE SHEET -/---

RUHNAU CLARKE ARCHITECTS

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SEPTEMBER 30, 2024

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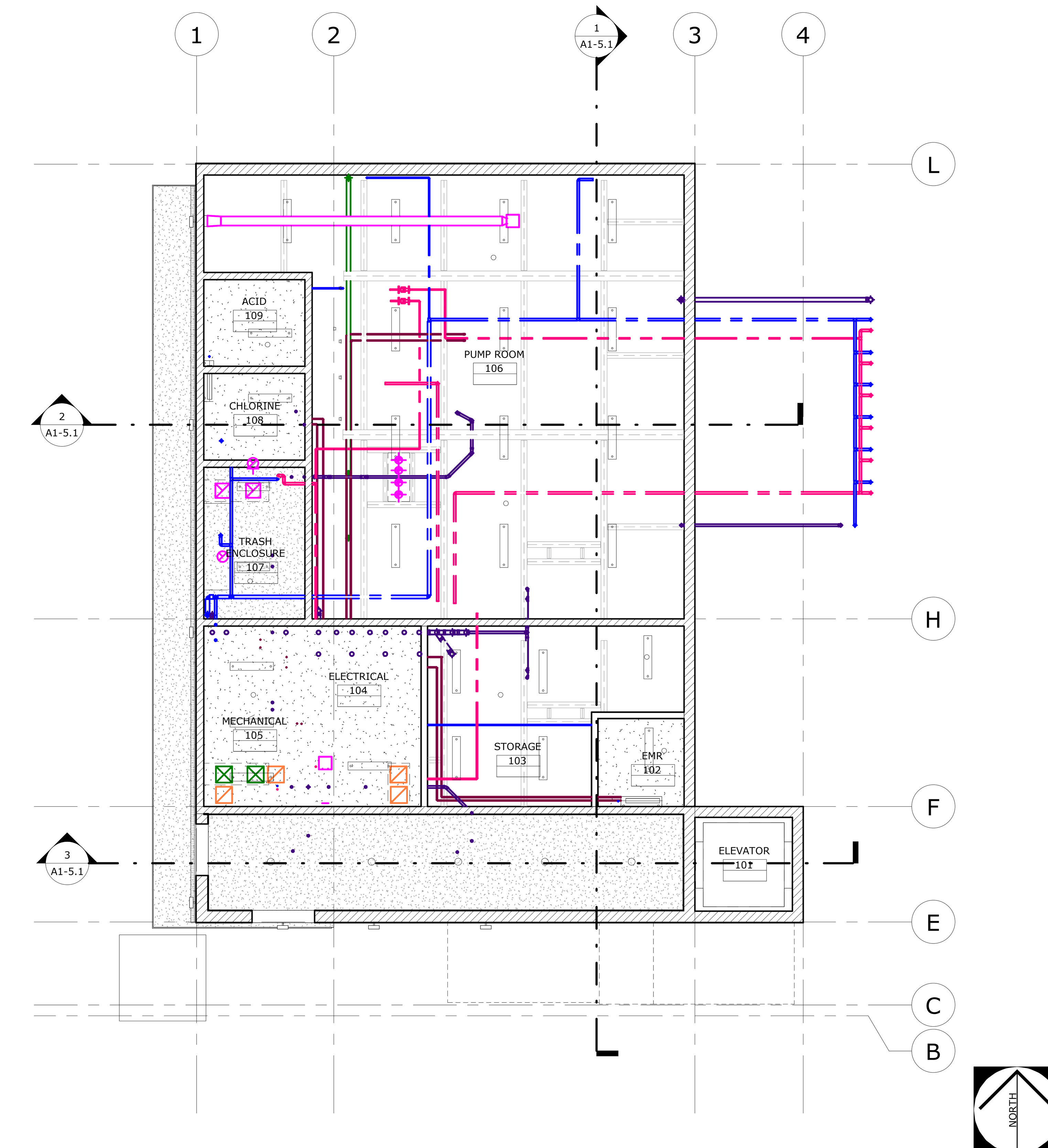
LAGUNA BEACH UNIFIED SCHOOL DISTRICT

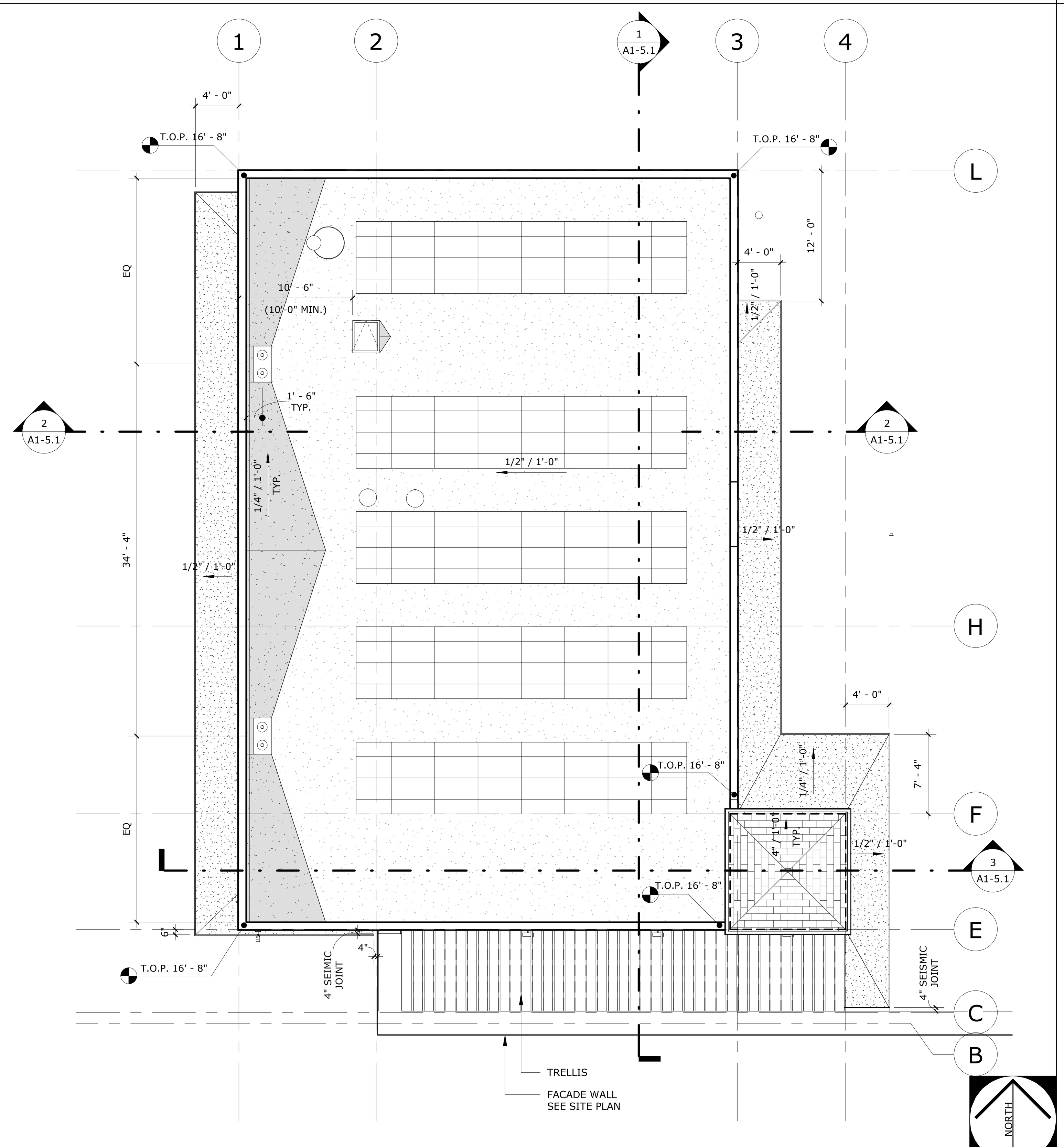
PUMP & LOCKER BLDG
FIRST & SECOND
FLOOR PLANS

A1-1.1

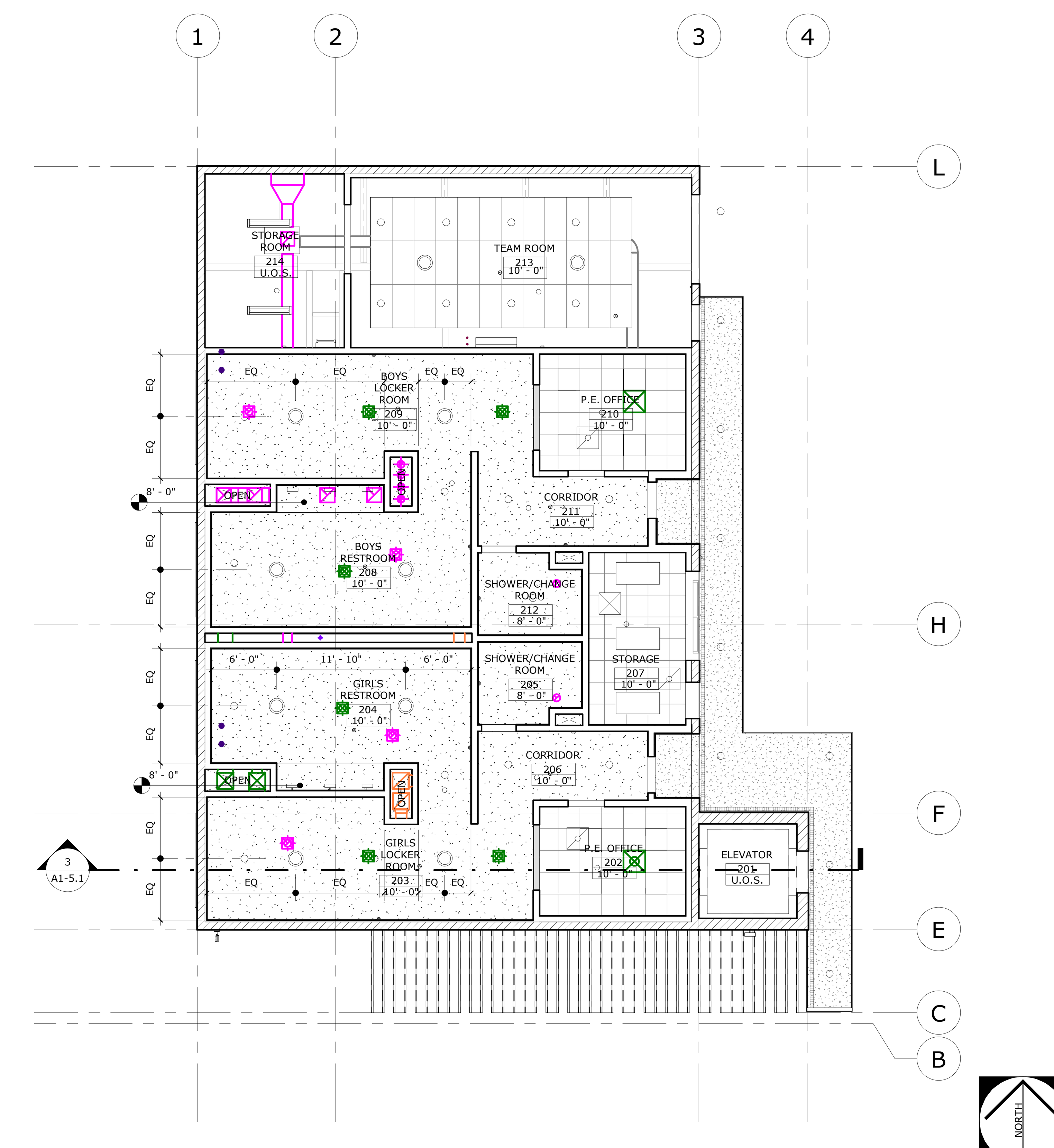
1-43-22



FIRST FLOOR REFLECTED CEILING PLAN SCALE: 1/8" = 1'-0" REF.: 3/A1-4.1 1



ROOF PLAN SCALE: 1/8" = 1'-0" REF.: 3/A1-4.1 3



SECOND FLOOR REFLECTED CEILING PLAN SCALE: 1/8" = 1'-0" REF.: 1/A1-4.1 2

GENERAL ROOF PLAN NOTES

1. SEE DETAIL FOR TYPICAL ROOF ASSEMBLY.
2. FOR PIPE VENT PENETRATIONS THROUGH ROOF, REFER TO DETAIL & FOR TYP. INFO.
3. ALL CRICKETS SHALL BE SHAPED WITH PLYWOOD WITH A MIN. 1.5% SLOPE TO ROOF AND OVERFLOW DRAINS.
4. PROVIDE 36" WIDE CONTINUOUS WALKWAY TREAD FROM THE LANDING OF EACH ROOF ACCESS HATCH TO EACH MECHANCIAL UNIT. TREAD AT EACH UNIT TO SURROUND PERIMETER
5. AT MECHANICAL EQUIPMENT, REFER TO DETAIL FOR ROOF CURB

GENERAL RCP NOTES

1. ALL LIGHT FIXTURES TO BE CENTERED IN SPACE, U.N.O.
2. ALL CEILING HEIGHTS ARE RELATIVE TO THE FINISH FLOOR DIRECTLY BENEATH.
3. ACOUSTICAL CEILING TILES AND GRID TO BE CENTERED IN ROOM. SEE SHEET # / # FOR SUSPENDED CEILING SEISMIC BRACING DETAILS AND TRAPEZE DETAILS
4. ALL EXPOSED STRUCTURE TO BE COVERED WITH BLACK SCRIM PAPER FASTENED TO BOTTOM OF JOISTS. ALL MECHANICAL (INCLUDING REGISTERS), ELECTRICAL, PLUMBING, HANGER, BRACING, SUPPORT WIRE, ETC. BELOW BLACK SCRIM PAPER TO BE PAINTED BLACK TO MATCH. REFER TO U.O.S. CEILINGS ON RCP AND IN FINISH SCHEDULE. ALL SUPPLIES AND RETURN REGISTERS TO BE PRE-FINISHED TO MATCH SCRIM PAPER COLOR.
5. ALL MECHANICAL, ELECTRICAL AND PLUMBING EQUIPMENT TO BE HELD AS TIGHT AS POSSIBLE TO CEILING STRUCTURE
6. ALL CONDUIT IN EXPOSED AREAS WHERE CEILING STRUCTURE IS EXPOSED CAN ONLY PENETRATE WALLS AT ROOF / FLOOR DECK
7. REFER TO ELECTRICAL & MECHANICAL DRAWINGS FOR CEILING COMPONENT CALLOUTS AND FIXTURE TYPES
8. PAINT ALL SUPPLY & RETURNS OF ALL ACCENT PAINTED CEILING AREAS

KEYNOTES

KEYNOTES

ROOF LEGEND

- CLASS 'A' ROOF ASSEMBLY
- ADHESIVE ROOF PADS
- 1.5% 1.5% ROOF CRICKET - MIN. 1.5% SLOPE TO ROOF AND OVERFLOW DRAINS MAINTAIN MIN. SLOPE PER SPECS ALONG FLOW LINES, U.N.O.
- ROOF ACCESS HATCH, SEE DETAIL
- ROOF DRAIN WITH SEPARATE OVERFLOW LINE, SEE DETAIL

NOTE:
REFER TO COLORS, MATERIALS, AND FINISHES LEGEND FOR ADDITIONAL INFORMATION

CEILING LEGEND

- EXTERIOR PLASTER CEILING SYSTEM
- GYPSUM BOARD CEILING SYSTEM
- 2'-0" x 4'-0" SUSPENDED TEE BAR ACOUSTICAL CEILING
- 2'-0" x 2'-0" SUSPENDED TEE BAR ACOUSTICAL CEILING
- ROOF ACCESS LADDER AND HATCH, SEE DETAIL
- CEILING ACCESS PANEL, SEE DETAIL

NOTE:
REFER TO COLORS, MATERIALS, AND FINISHES LEGEND FOR ADDITIONAL INFORMATION

RUHNAU CLARKE ARCHITECTS

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LAGUNA BEACH UNIFIED SCHOOL DISTRICT

PUMP & LOCKER BLDG REFLECTED CEILING & ROOF PLANS

A1-2.1

1-43-22

PARKING ANALYSIS

TOTAL PARKING REQUIRED = 7

SUFFICIENT PARKING STALLS FOR STAFF, VISITORS, & STUDENTS (PER CDE)

PARKING LOT:

ACCESSIBLE PARKING STALLS

REQUIRED (PER CBC TABLE 11B-208.2)	=1 VAN ACCESSIBLE
PROVIDED	=1 VAN ACCESSIBLE

ELECTRIC VEHICLE

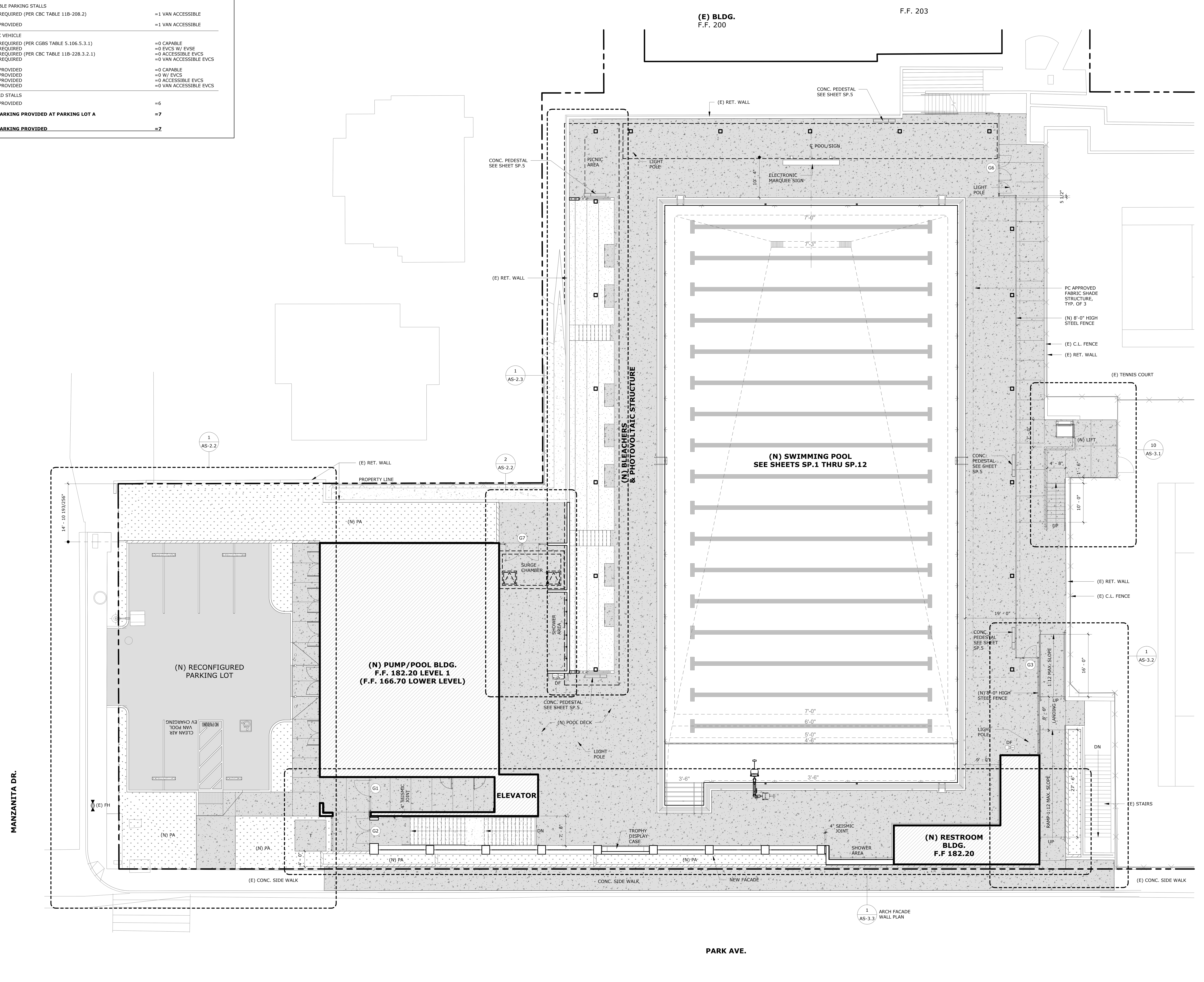
REQUIRED (PER CGBS TABLE 5.106.5.3.1)	=0 CAPABLE
REQUIRED	=0 EVCS W/ EVSE
REQUIRED (PER CBC TABLE 11B-228.3.2.1)	=0 ACCESSIBLE EVCS
REQUIRED	=0 VAN ACCESSIBLE EVCS
PROVIDED	=0 CAPABLE
PROVIDED	=0 W/ EVCS
PROVIDED	=0 ACCESSIBLE EVCS
PROVIDED	=0 VAN ACCESSIBLE EVCS

STANDARD STALLS

PROVIDED	=6

TOTAL PARKING PROVIDED AT PARKING LOT A =7

TOTAL PARKING PROVIDED =7



OVERALL SITE PLAN SCALE: 1" = 10'-0" REF.: 3/AS-2.2 1

GENERAL NOTES

1. THIS SITE IS NOT LOCATED WITHIN A FLOOD HAZARD ZONE PER FIRM PANEL: 0417K, 3/21/2019

KEYNOTES

GATE SCHEDULE

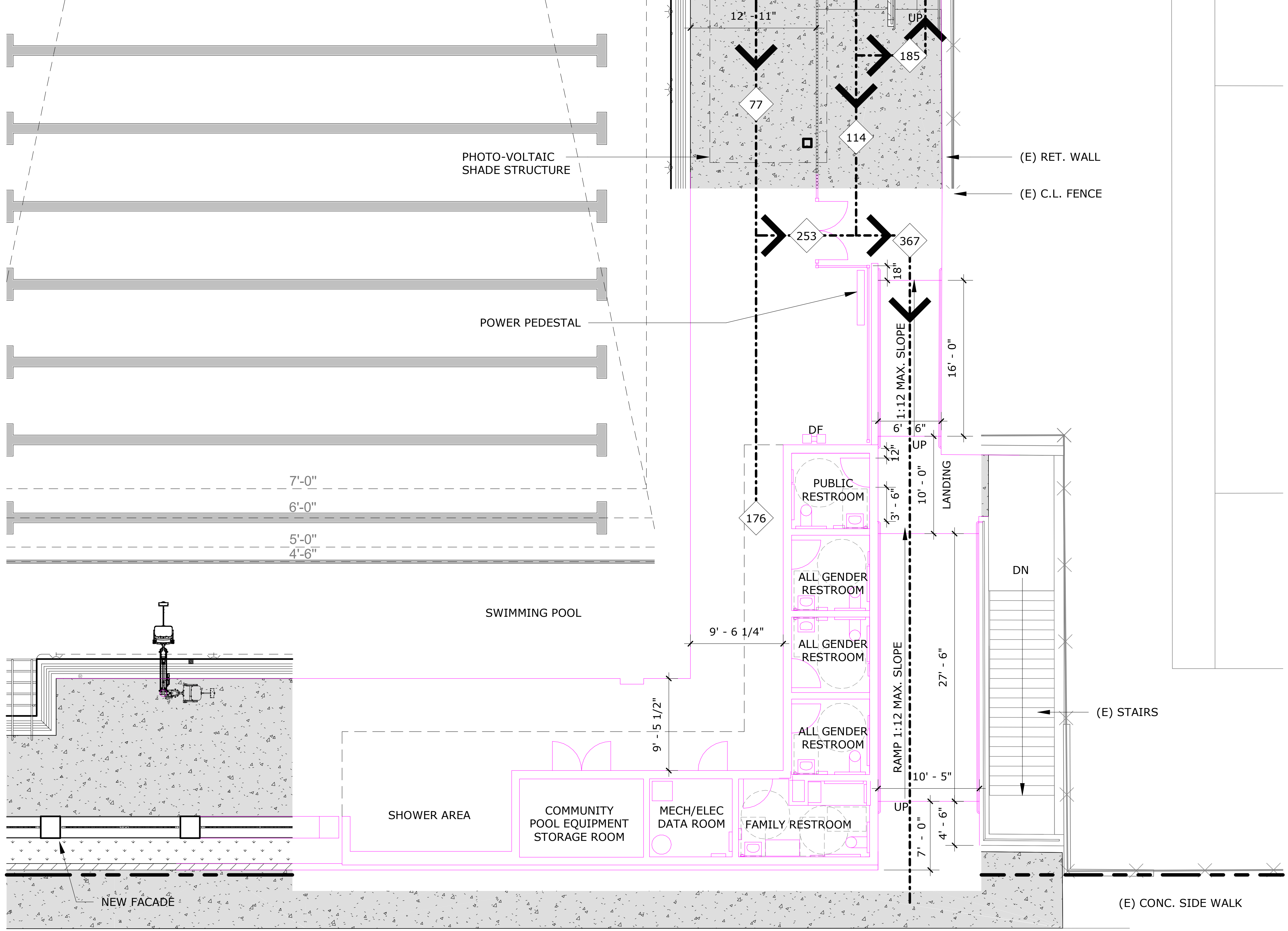
NO.	GATE SIZE (W X H)	TYPE	MATERIAL	FINISH	DETAIL	PANIC HDW	HDW GROUP	NOTES
G1	4'-0" x 8'-0"	ORNAMENTAL	STEEL	PT OR PD	##/ASD-2	YES	No 0#	1, 6, 7
G2	(PR) 3'-0" x 8'-0"				##/ASD-2	YES	No 0#	
G3	3'-0" x 8'-0"				##/ASD-2	YES	No 0#	
G4	4'-0" x 8'-0"				##/ASD-2	YES	No 0#	
G5	3'-0" x 8'-0"				##/ASD-2	YES	No 0#	
G6	(PR) 3'-0" x 8'-0"				##/ASD-2	YES	No 0#	
G7	SDFSDF	SDF	SDF		SDF			

NOTES:
1. PEDESTRIAN GATE
2. ~~ROLLING GATE~~
3. ~~SERVICE GATE~~
4. ~~FIRE LANE ACCESS GATE~~
5. PROVIDE NEW KNOX BOX, SEE DET.
6. ACCESSIBLE GATE IN COMPLIANCE WITH CBC 11B-404.2.4, REFER TO TYP. DET.
7. COORDINATE LOCATION OF NEW GATE POST FOOTINGS WITH EXISTING UTILITIES

G1 GATE IDENTIFICATION NUMBER, SEE GATE SCHEDULE.

LEGEND

- PROPERTY LINE
- (N) BUILDING
- (N) CONCRETE PAVING, SEE CIVIL DRAWINGS SHEET C2.00 & C3.00
- (N) ASPHALT PAVING, SEE CIVIL DRAWINGS SHEET C2.00 & C3.00
- (N) LANDSCAPE PER LANDSCAPE DRAWINGS LI-1.0 TRHU LPD-1.0



RUHNAU
CLARKE
ARCHITECTS

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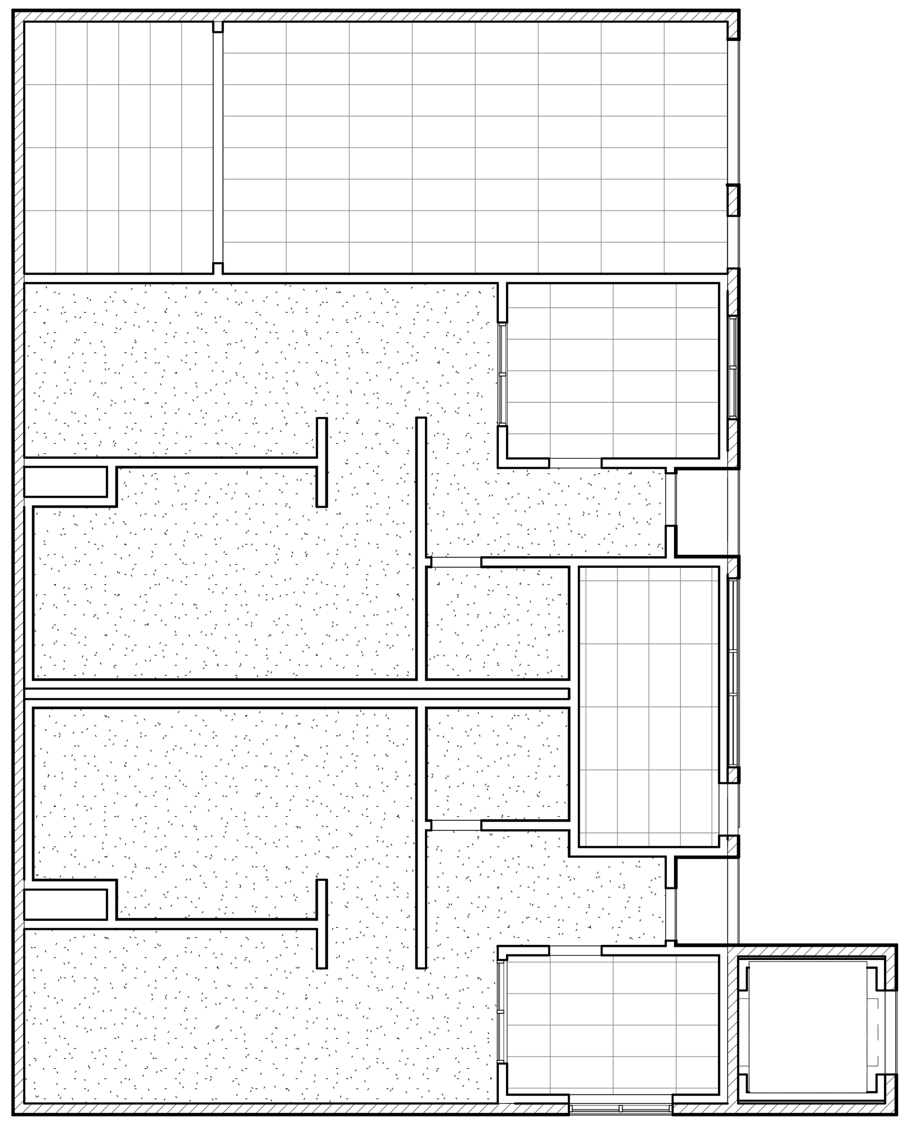
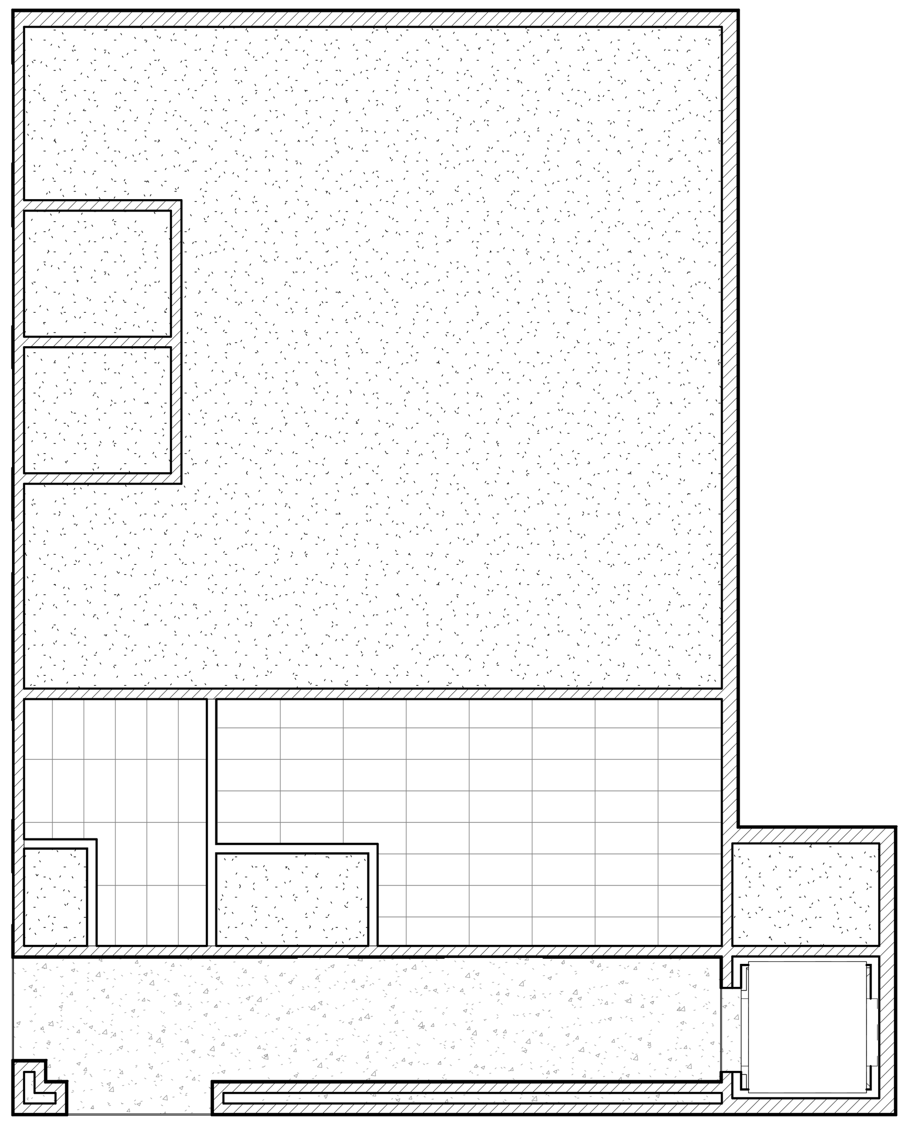
3775 TENTH STREET, RIVERSIDE CALIFORNIA 92501 (951) 684 4664 / 5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010 (760) 438 5899

POOL MODERNIZATION

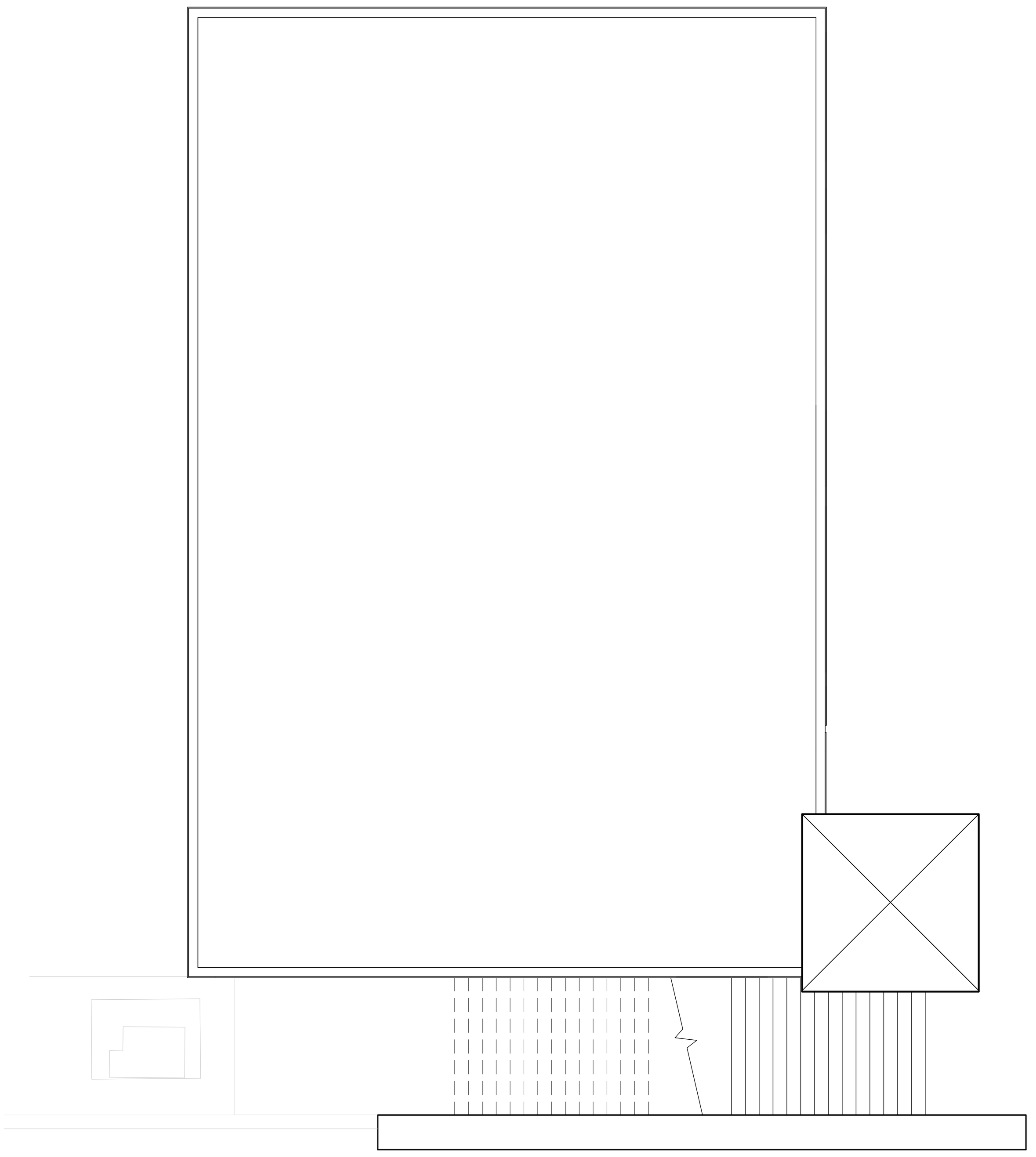
LAGUNA BEACH HIGH SCHOOL
670 PARK AVE, LAGUNA BEACH, CA 92651
LAGUNA BEACH UNIFIED SCHOOL DISTRICT



1 SECOND LEVEL RCP
SCALE: 1/8" = 1'-0"



2 FIRST LEVEL RCP
SCALE: 1/8" = 1'-0"



3 ROOF PLAN
SCALE: 1/8" = 1'-0"

CEILING LEGEND

- EXTERIOR PLASTER CEILING SYSTEM
- GYPSUM BOARD CEILING SYSTEM
- 2'-0" x 4'-0" SUSPENDED TEE BAR ACOUSTICAL CEILING
- 2'-0" x 2'-0" SUSPENDED TEE BAR ACOUSTICAL CEILING
- ROOF ACCESS LADDER AND HATCH, SEE DETAIL
- CEILING ACCESS PANEL, SEE DETAIL

NOTE:
REFER TO COLORS, MATERIALS, AND FINISHES LEGEND FOR ADDITIONAL INFORMATION

ROOF LEGEND

- CLASS 'A' ROOF ASSEMBLY
- ADHESIVE ROOF PADS
- 1.5% 1.5% ROOF CRICKET - MIN. 1.5% SLOPE TO ROOF AND OVERFLOW DRAINS MAINTAIN MIN. SLOPE PER SPECS ALONG FLOW LINES, U.N.O.
- ROOF ACCESS HATCH, SEE DETAIL
- ROOF DRAIN WITH SEPARATE OVERFLOW LINE, SEE DETAIL

NOTE:
REFER TO COLORS, MATERIALS, AND FINISHES LEGEND FOR ADDITIONAL INFORMATION

RUHNAU CLARKE ARCHITECTS

PHASE
DESIGN DEVELOPMENT
DATE
AUGUST 9, 2024

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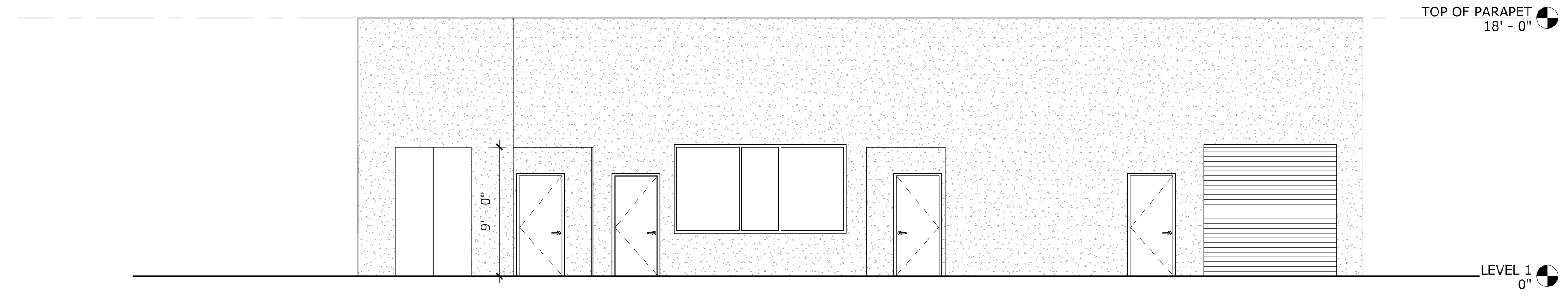
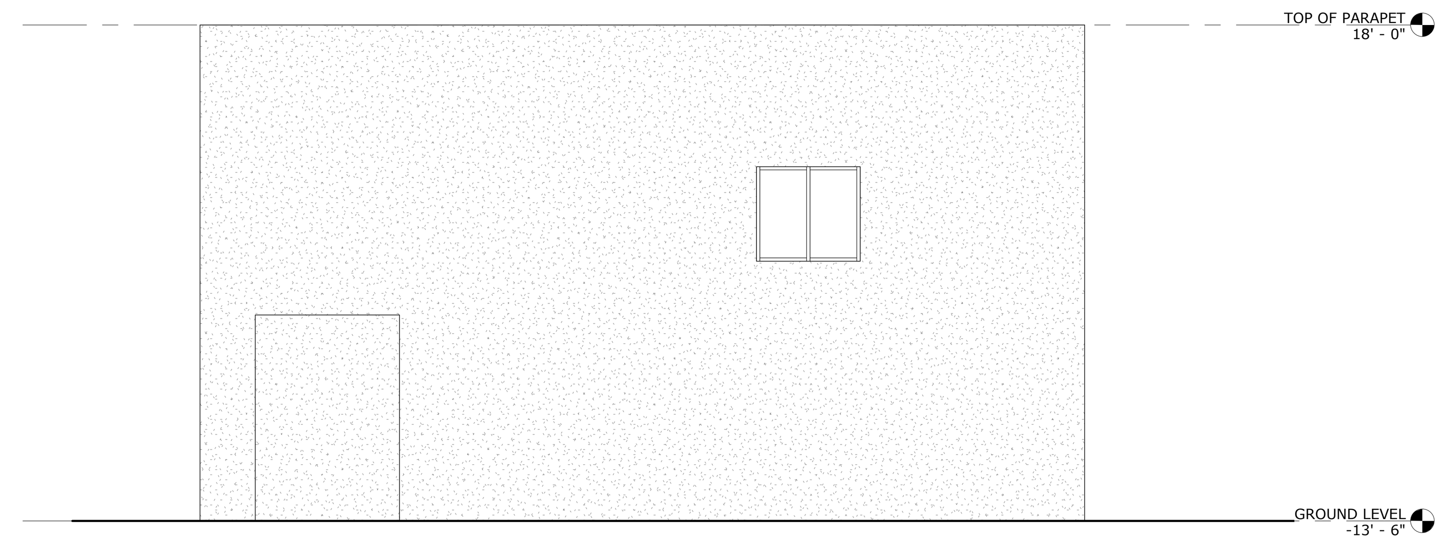
POOL MODERNIZATION
LAGUNA BEACH HIGH SCHOOL
670 PARK AVE, LAGUNA BEACH, CA 92651
LAGUNA BEACH UNIFIED SCHOOL DISTRICT

POOL BUILDING REFLECTED CEILING PLANS & ROOF PLAN

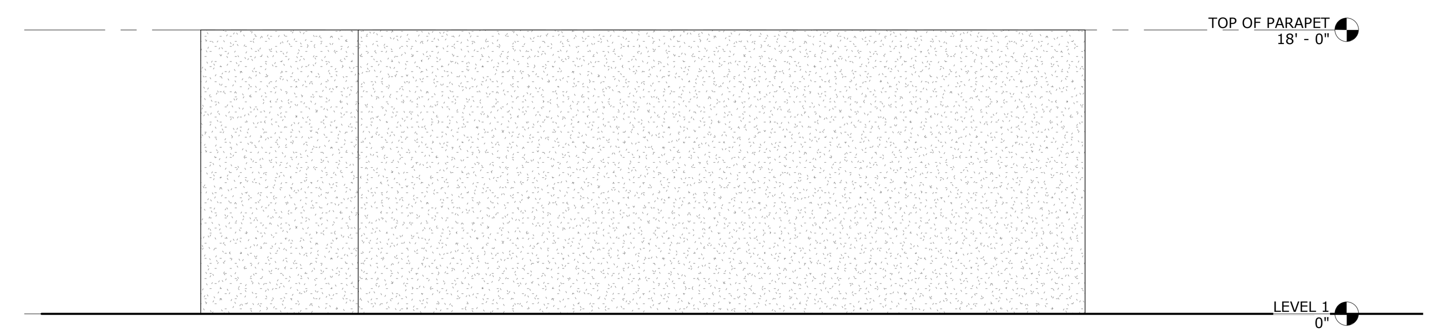
A1-2.1



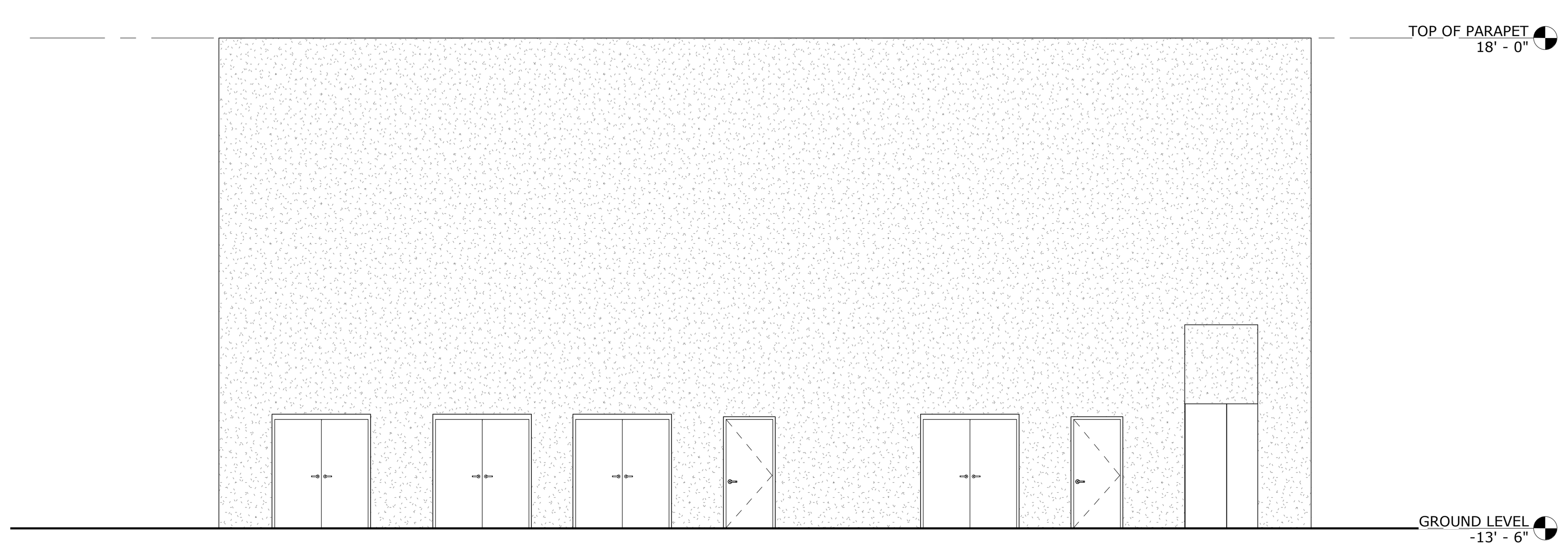
1 EAST ELEVATION
SCALE: 1/8" = 1'-0"



3 SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



2 NORTH ELEVATION
SCALE: 1/8" = 1'-0"



4 WEST ELEVATION
SCALE: 1/8" = 1'-0"

RUHNAU CLARKE ARCHITECTS

PHASE
SCHEMATIC DEVELOPMENT
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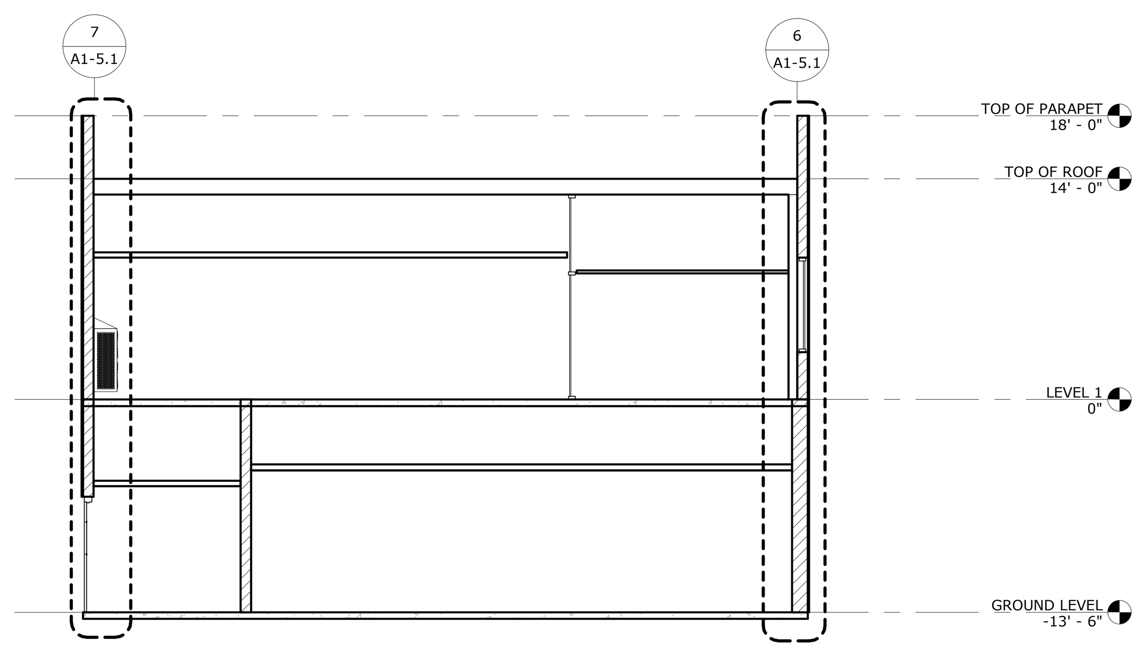
POOL MODERNIZATION
LAGUNA BEACH HIGH SCHOOL
670 PARK AVE, LAGUNA BEACH, CA 92651
LAGUNA BEACH UNIFIED SCHOOL DISTRICT

POOL BUILDING
BUILDING EXTERIOR
ELEVATIONS

A1-4.1

1-43-22



2 Section 2
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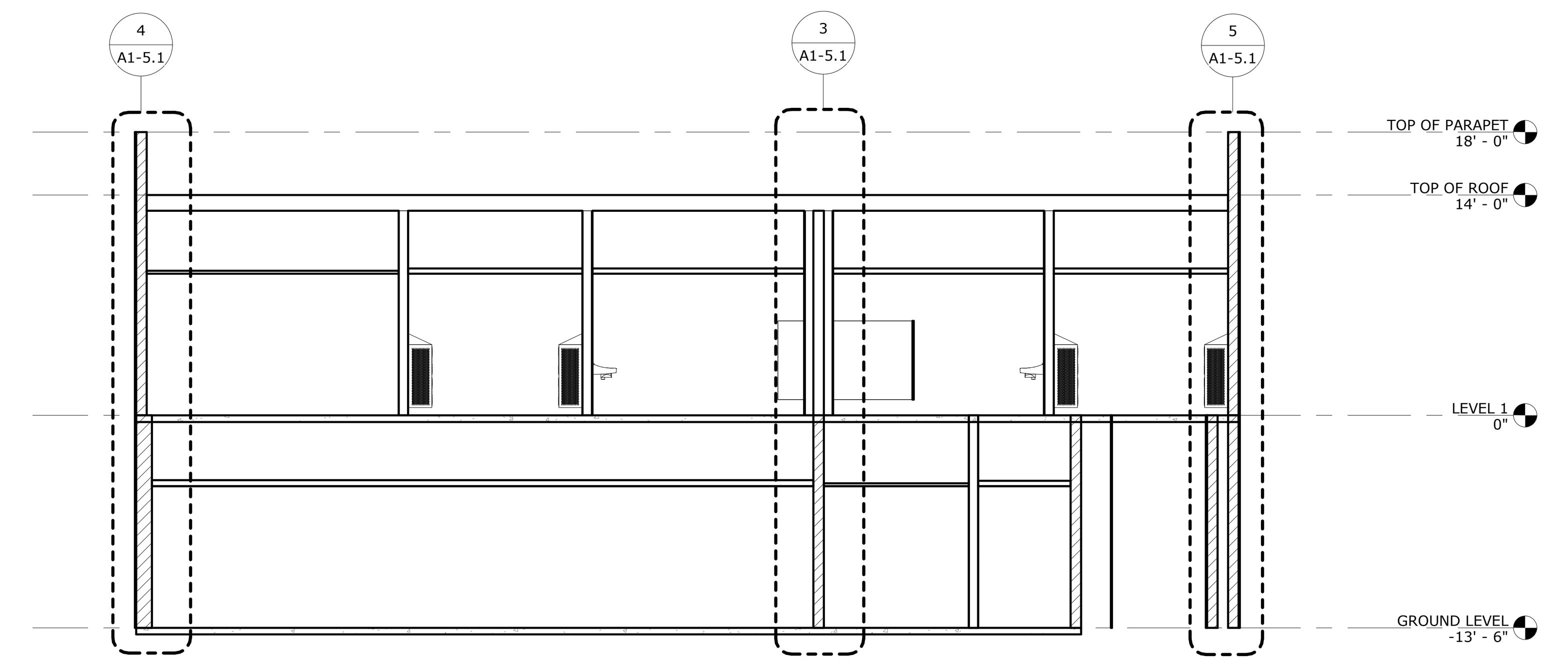
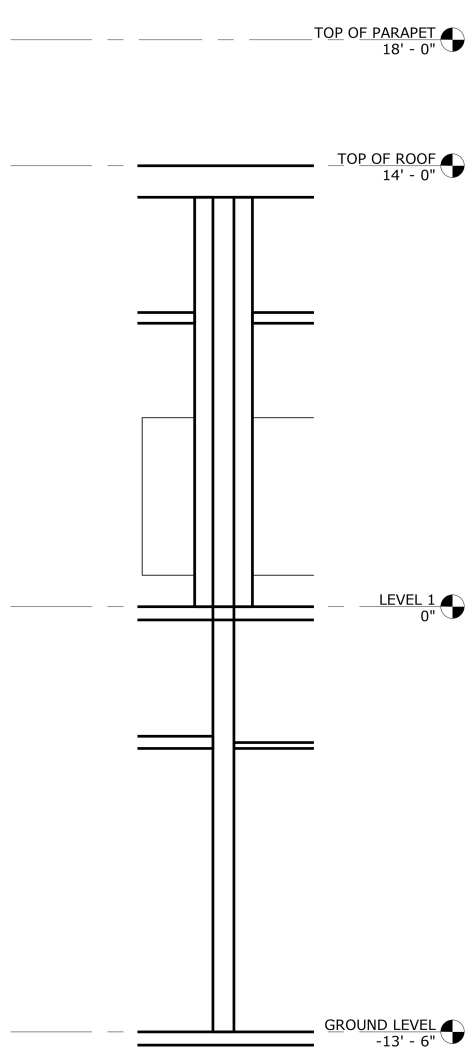
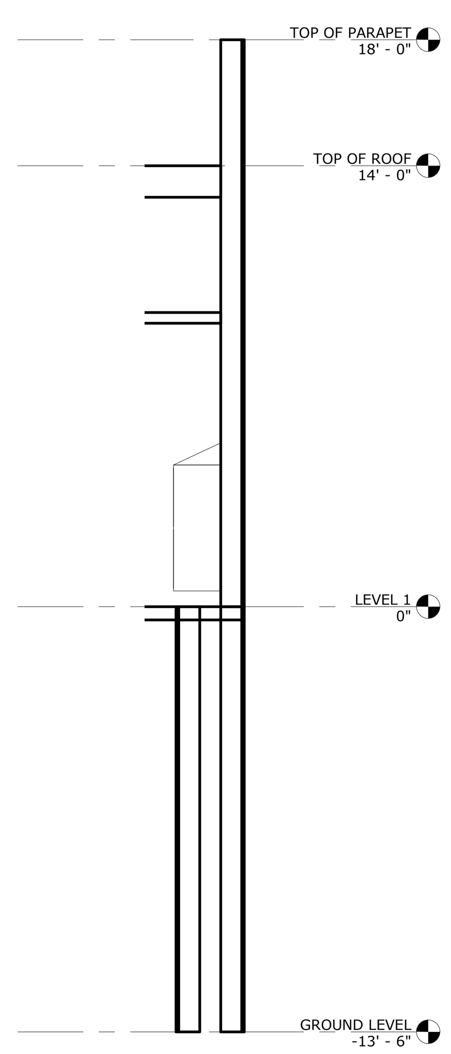


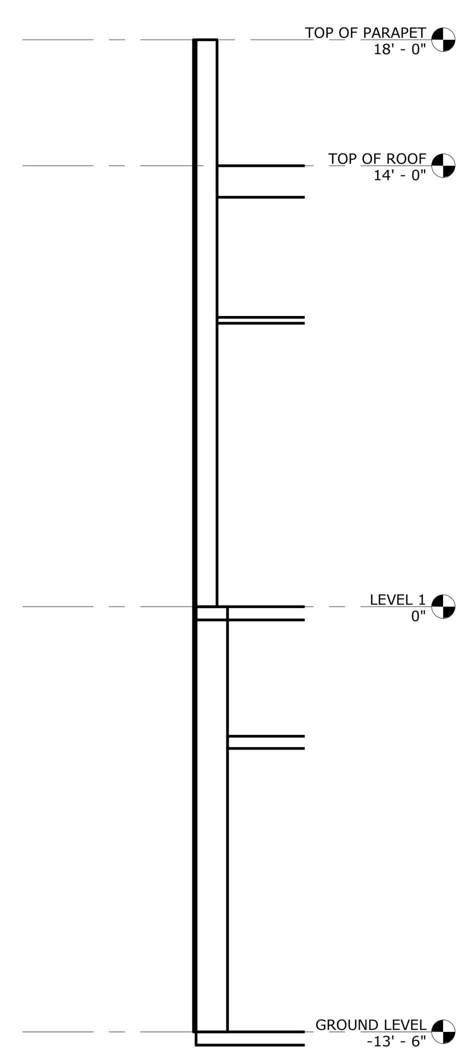
1 Section 1
SCALE: 1/8" = 1'-0"



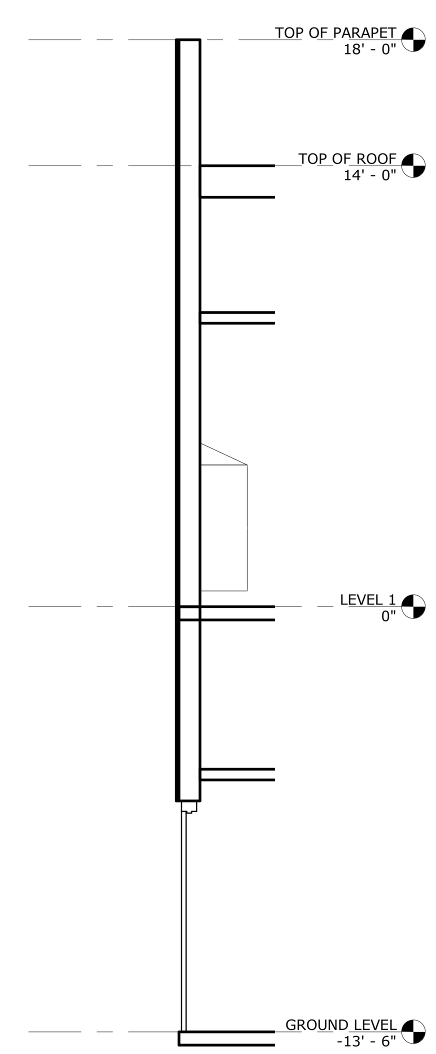
3 WALL SECTION
SCALE: 1/4" = 1'-0"



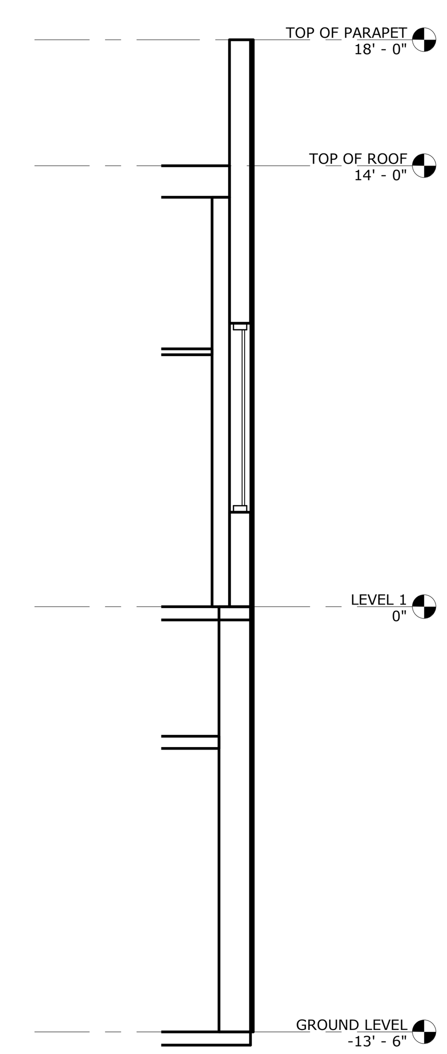
5 WALL SECTION
SCALE: 1/4" = 1'-0"



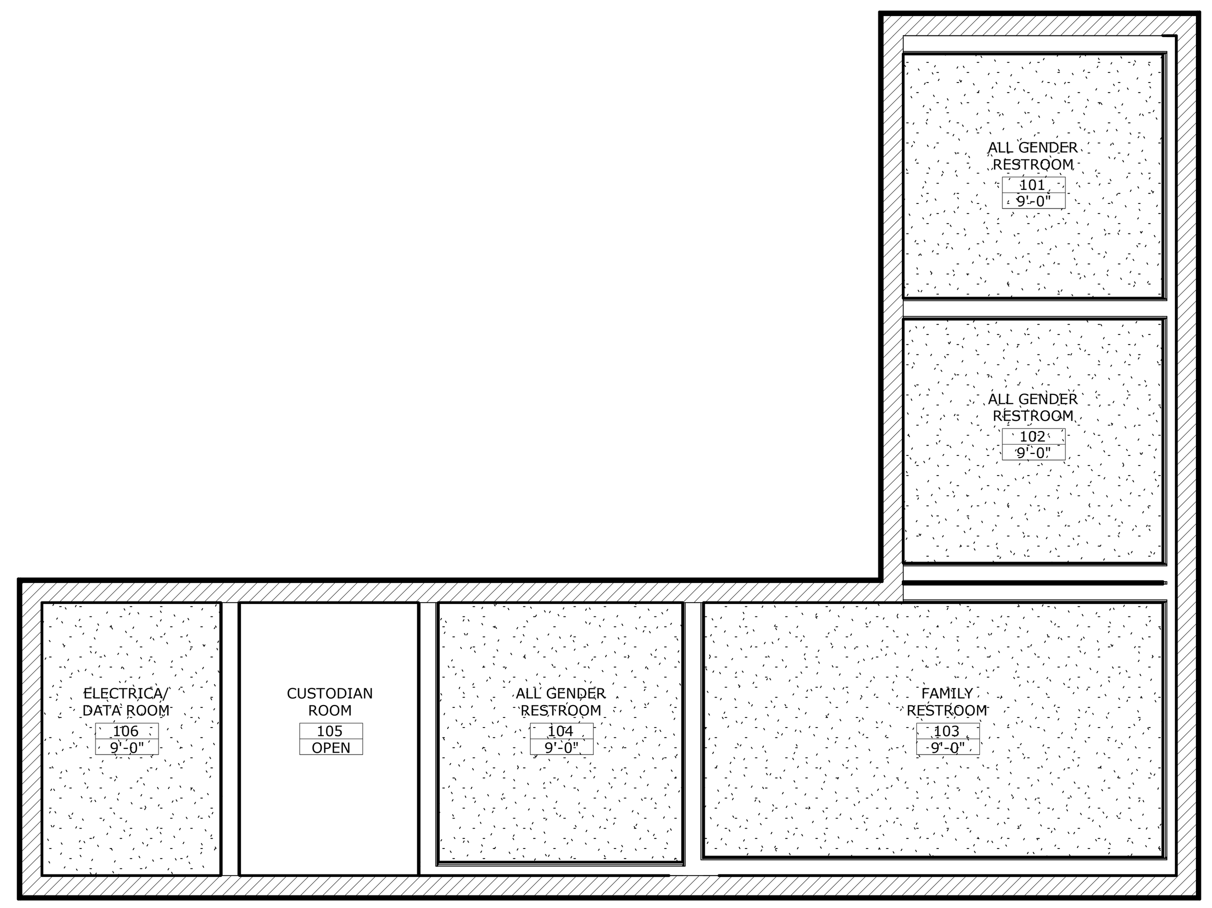
4 WALL SECTION
SCALE: 1/4" = 1'-0"



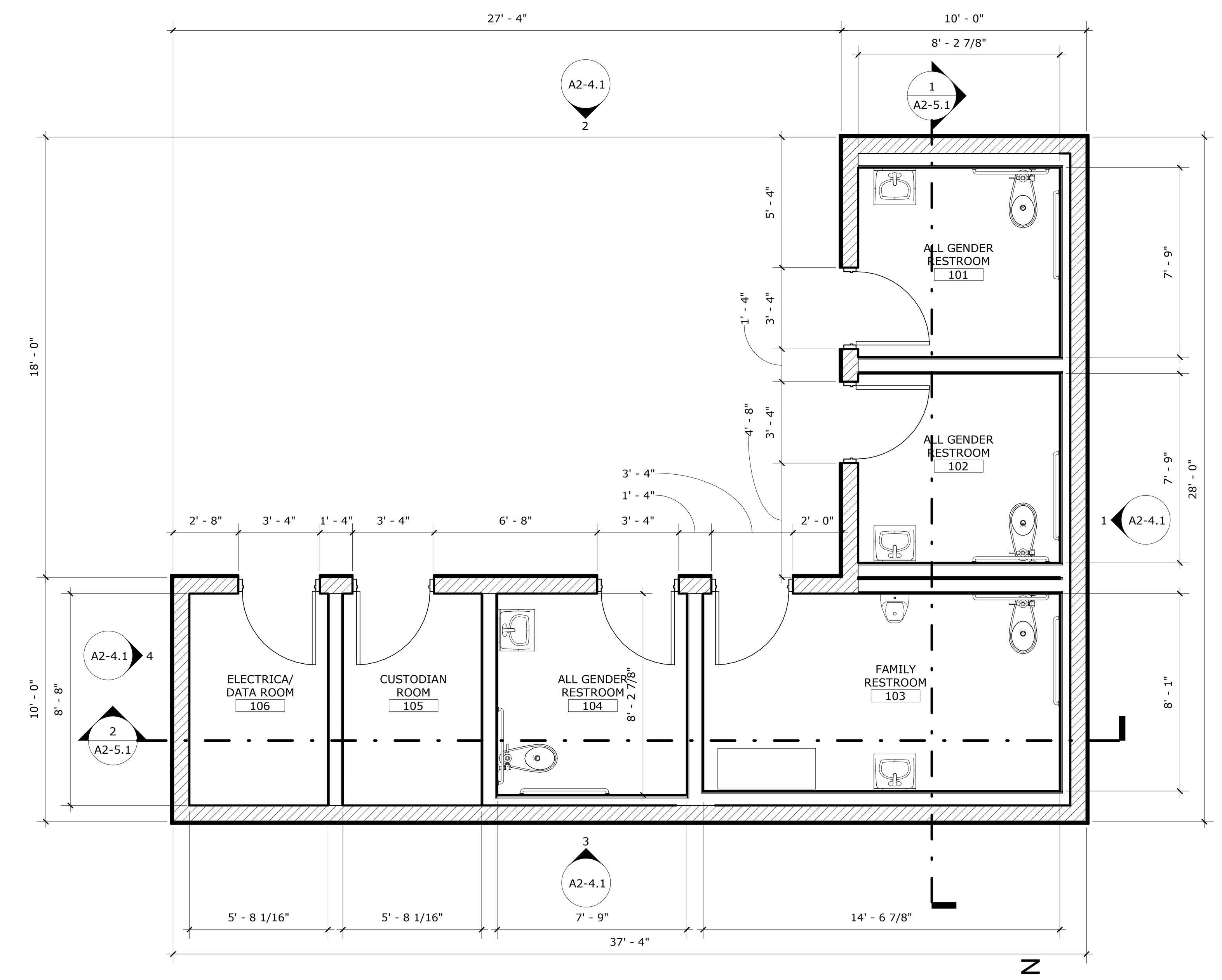
7 WALL SECTION
SCALE: 1/4" = 1'-0"



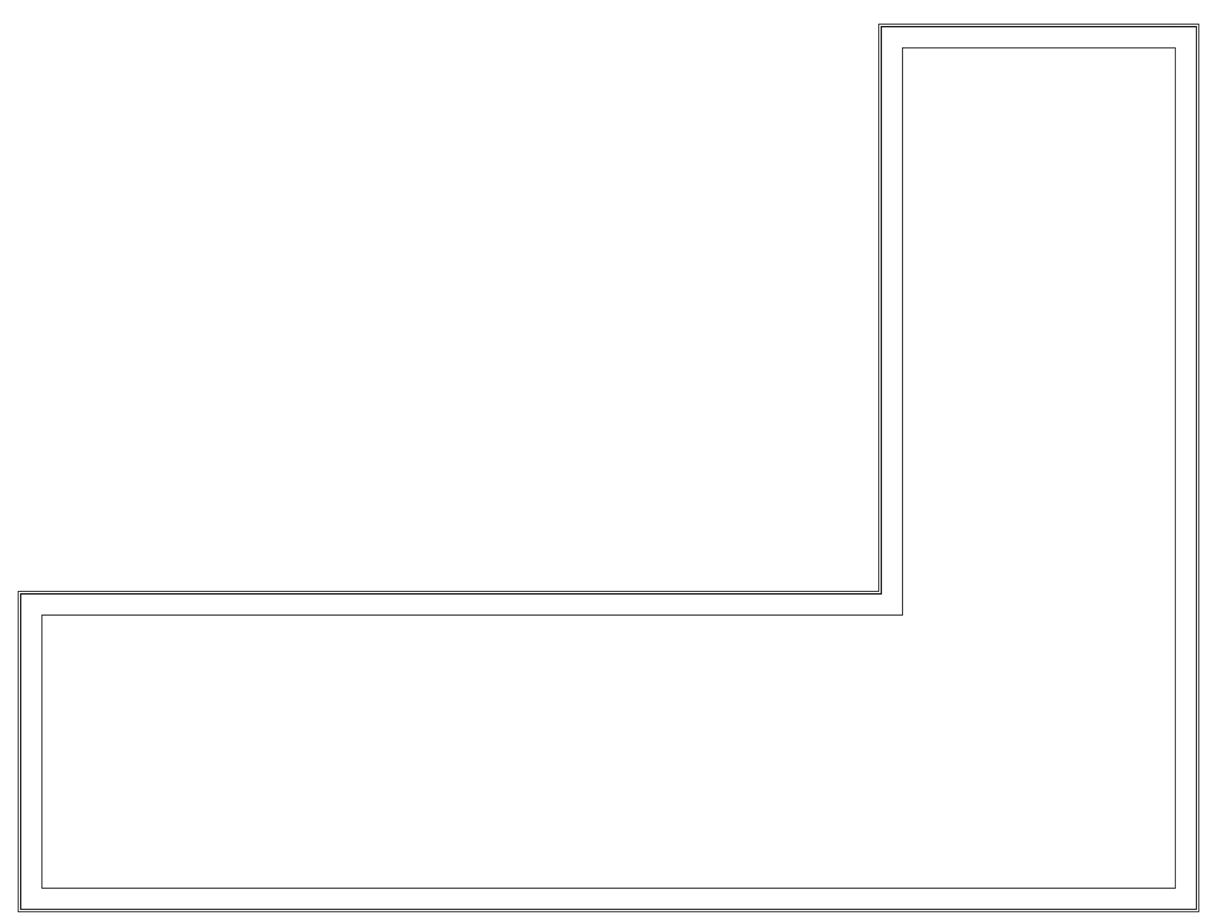
6 WALL SECTION
SCALE: 1/4" = 1'-0"



2 RCP PLAN
SCALE: 1/4" = 1'-0"



1 RESTROOM FLOOR PLAN
SCALE: 1/4" = 1'-0"



3 ROOF PLAN
SCALE: 1/4" = 1'-0"

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POOL MODERNIZATION
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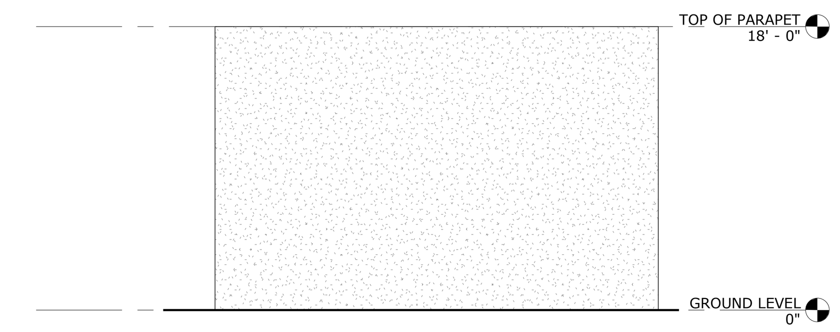
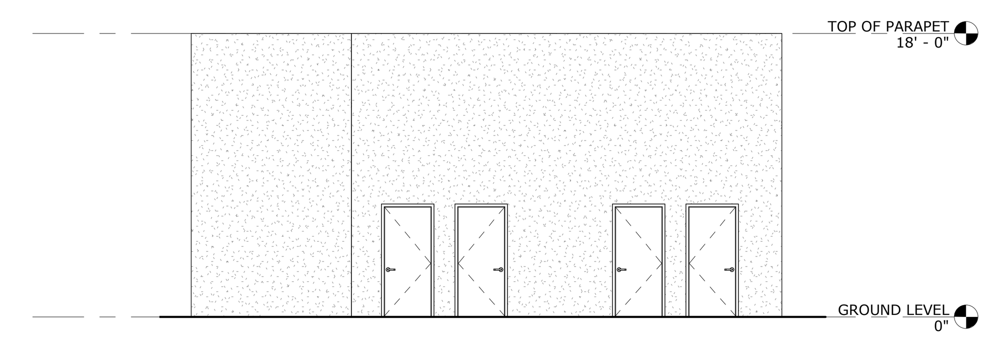
670 PARK AVE, LAGUNA BEACH, CA 92651
LAGUNA BEACH UNIFIED SCHOOL DISTRICT

RESTROOM BUILDING FLOOR, REFLECTIVE CEILING & ROOF PLAN

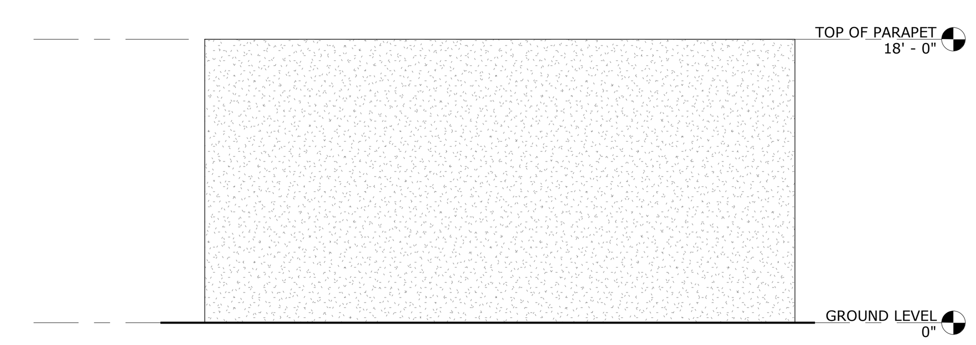
A2-1.1



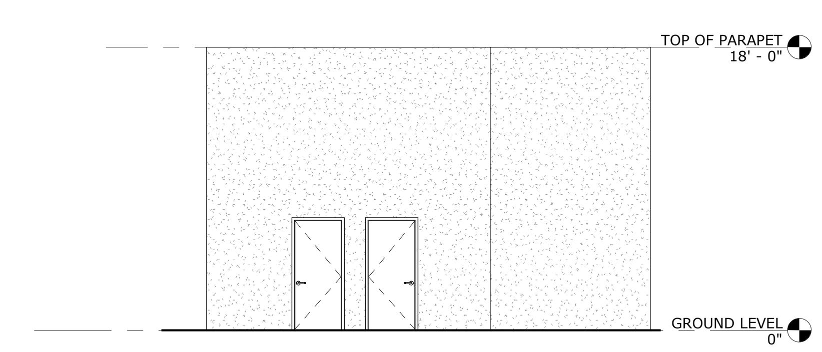
1 EAST ELEVATION
SCALE: 1/8" = 1'-0"



2 NORTH ELEVATION
SCALE: 1/8" = 1'-0"



3 SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



4 WEST ELEVATION
SCALE: 1/8" = 1'-0"

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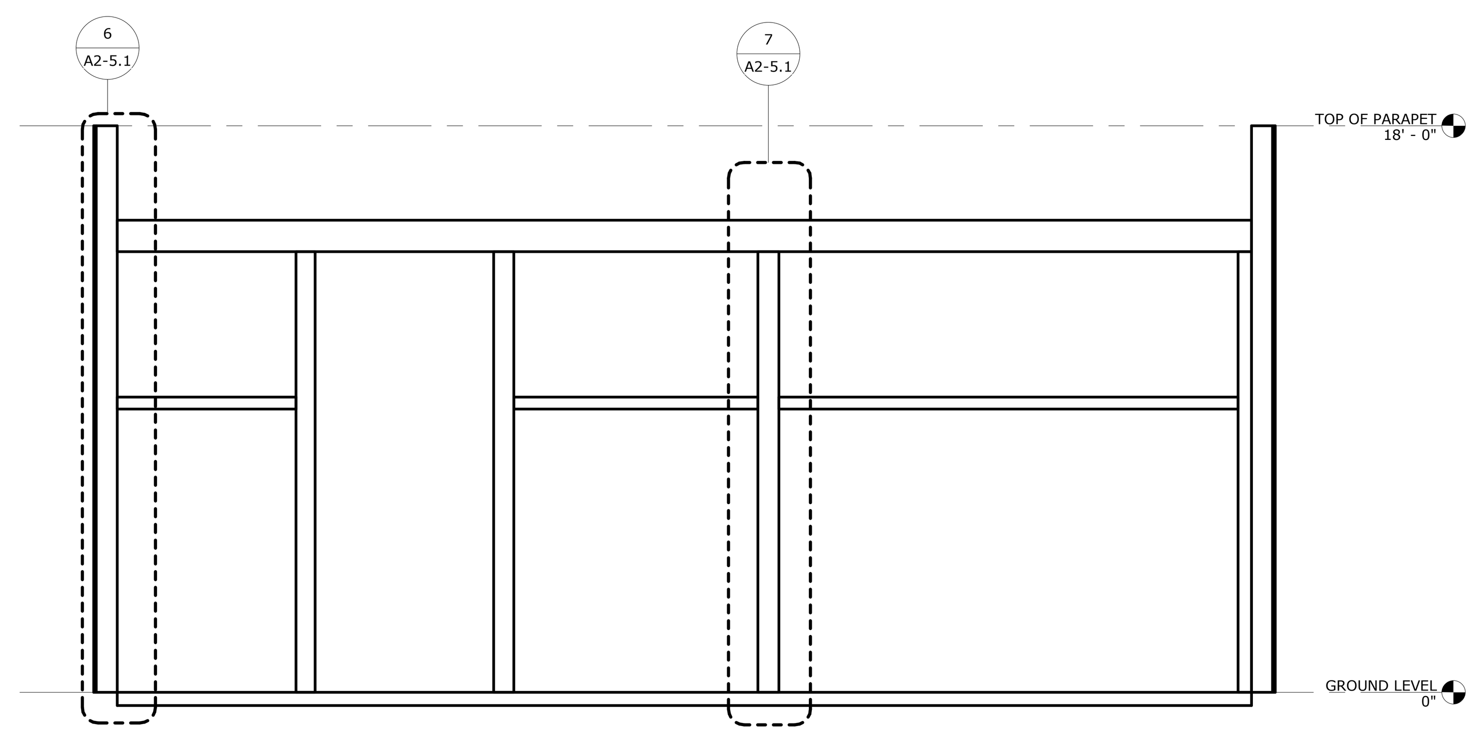
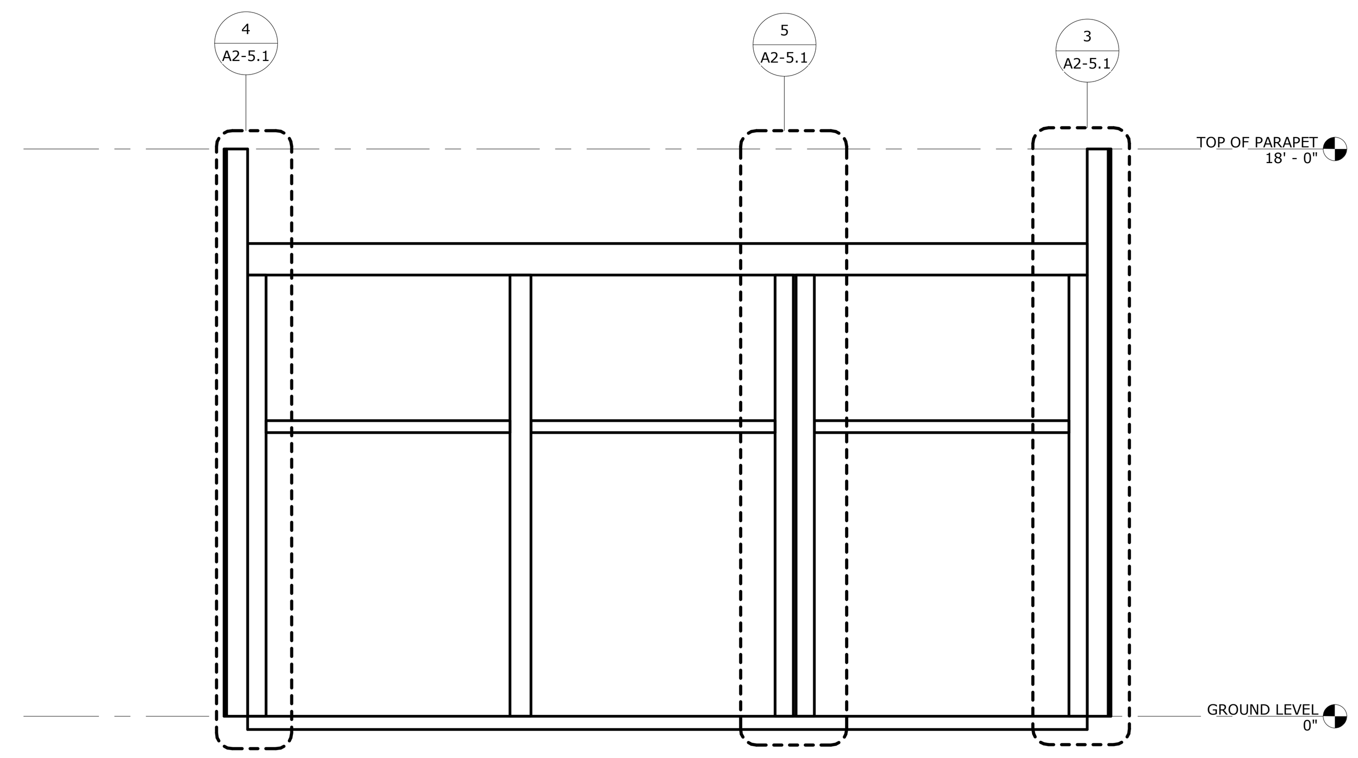
RESTROOM BUILDING
BUILDING EXTERIOR ELEVATIONS

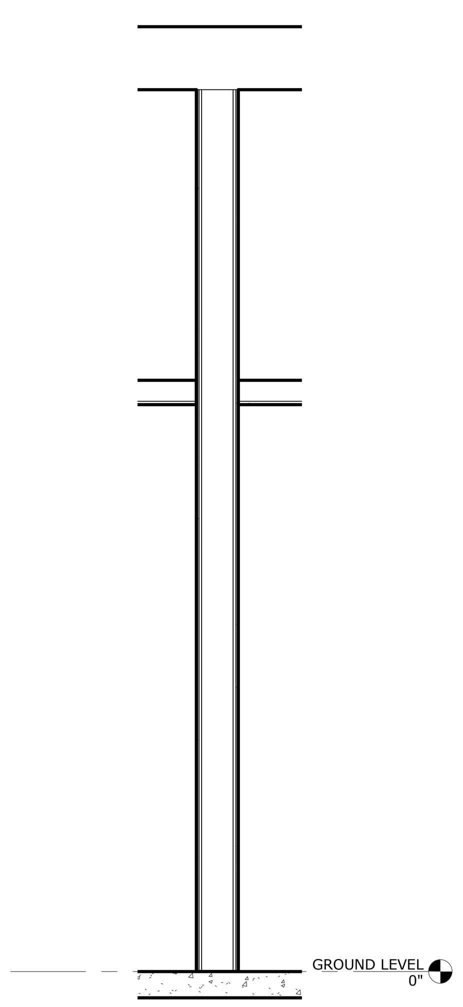
A2-4.1



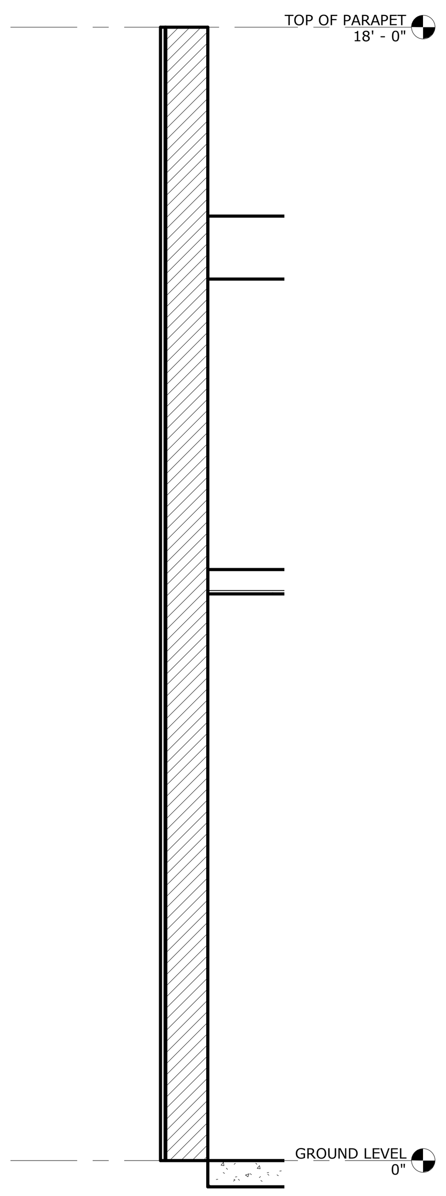
2 Section 2
SCALE: 1/4" = 1'-0"



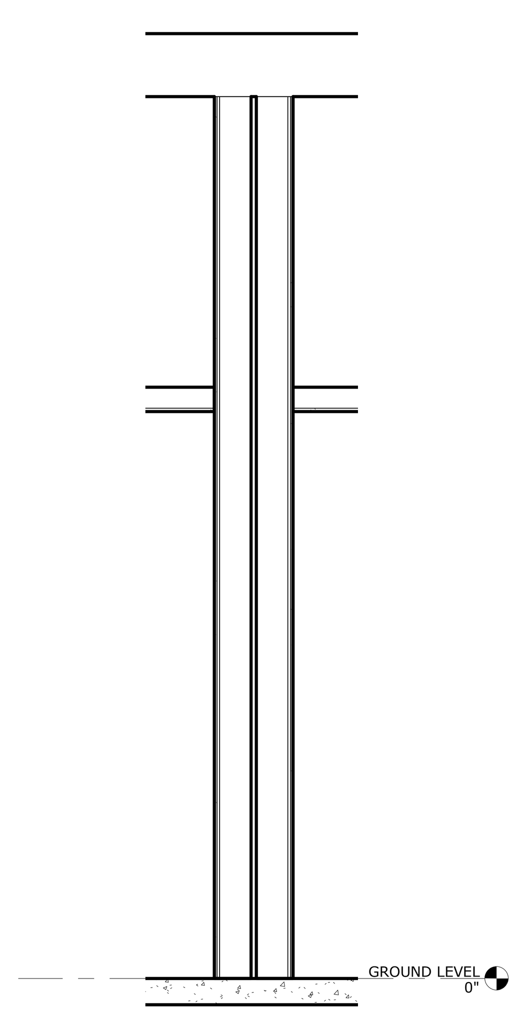
1 Section 1
SCALE: 1/4" = 1'-0"



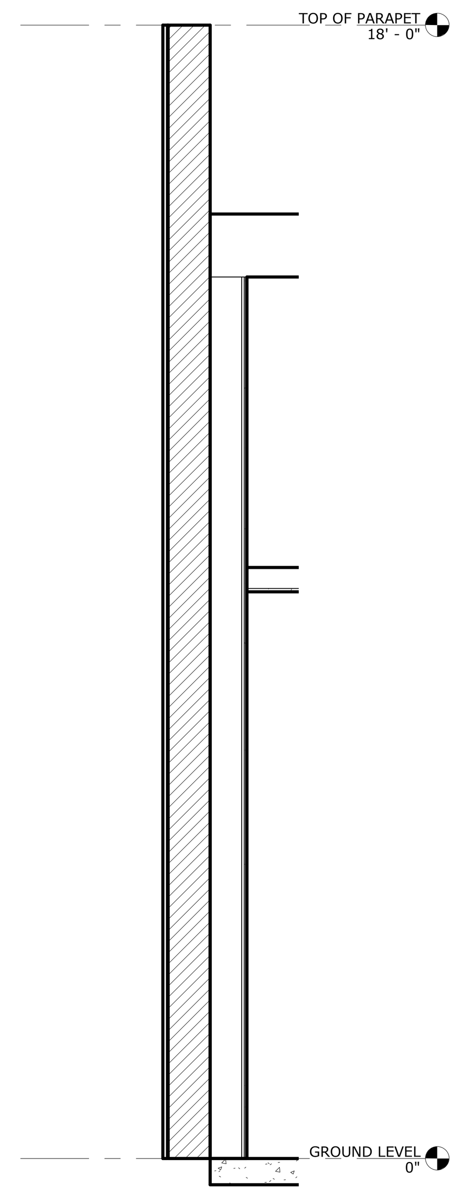
7 WALL SECTION
SCALE: 1/2" = 1'-0"



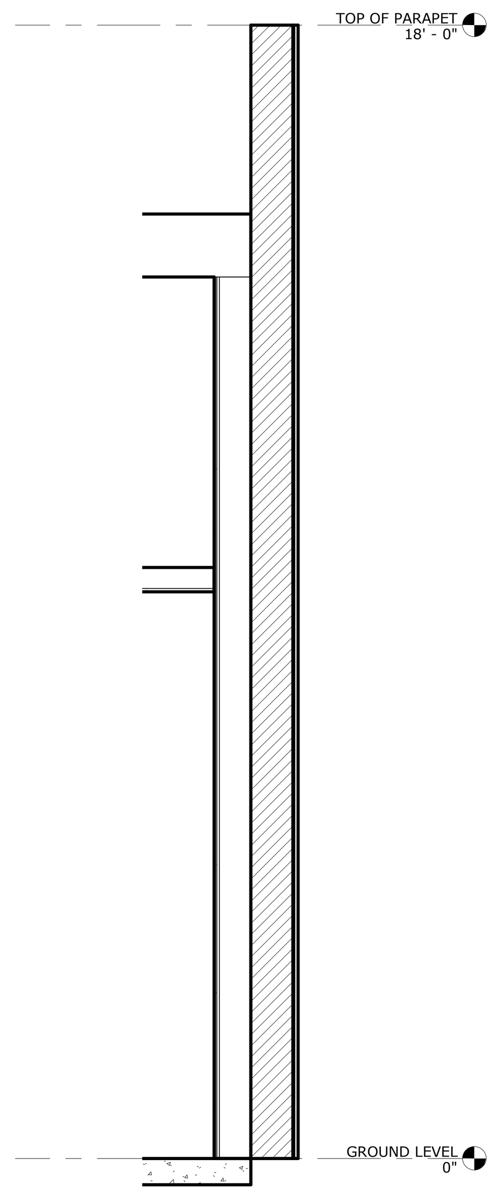
6 WALL SECTION
SCALE: 1/2" = 1'-0"



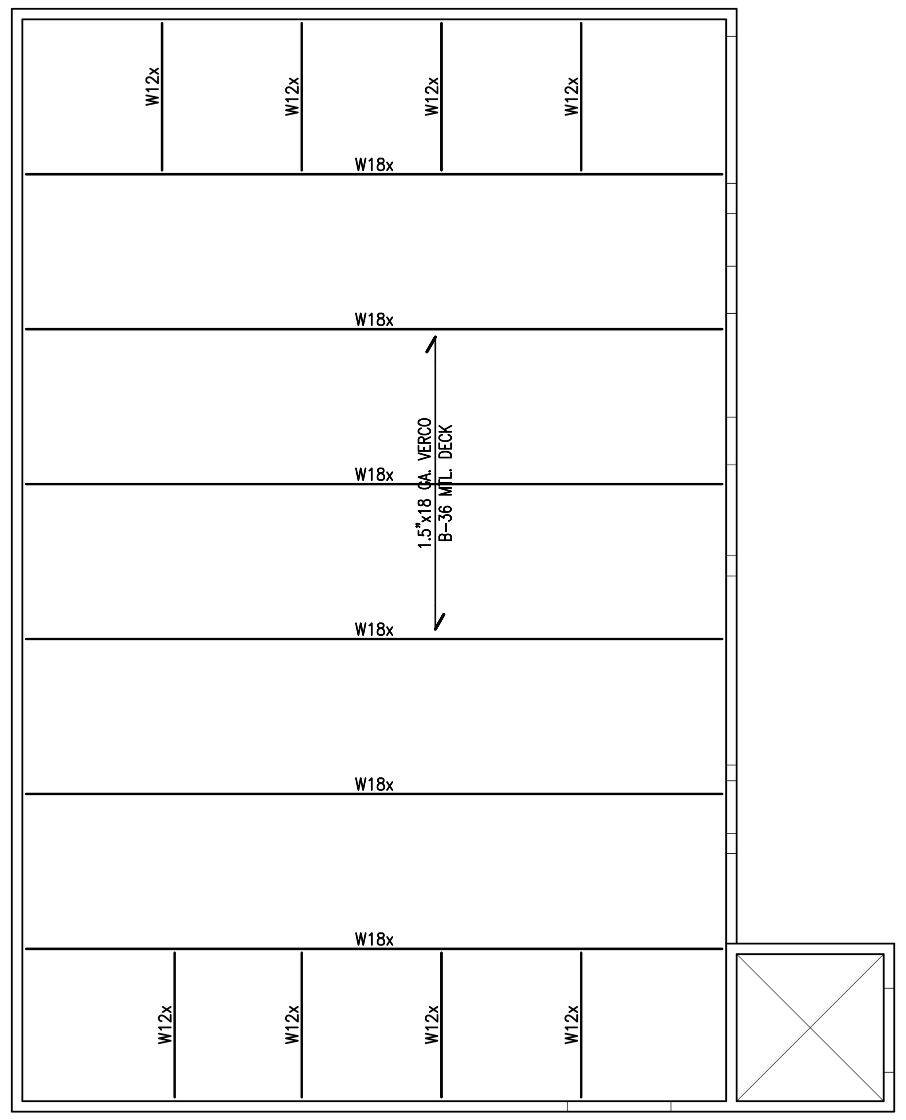
5 WALL SECTION
SCALE: 1/2" = 1'-0"



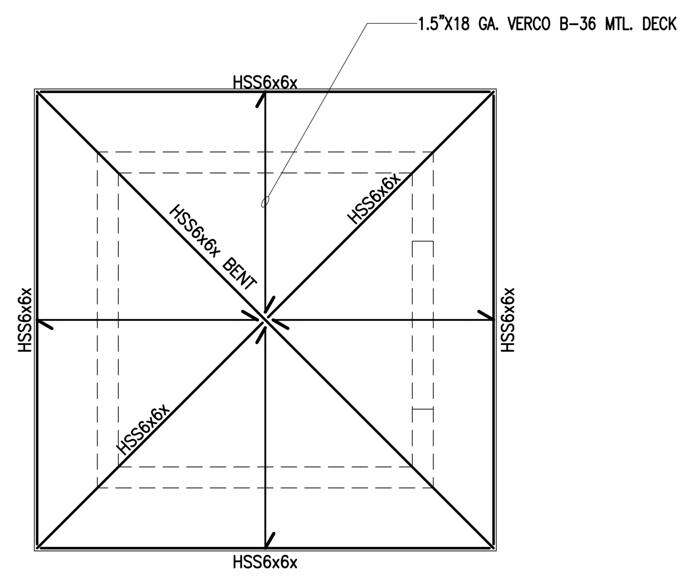
4 WALL SECTION
SCALE: 1/2" = 1'-0"



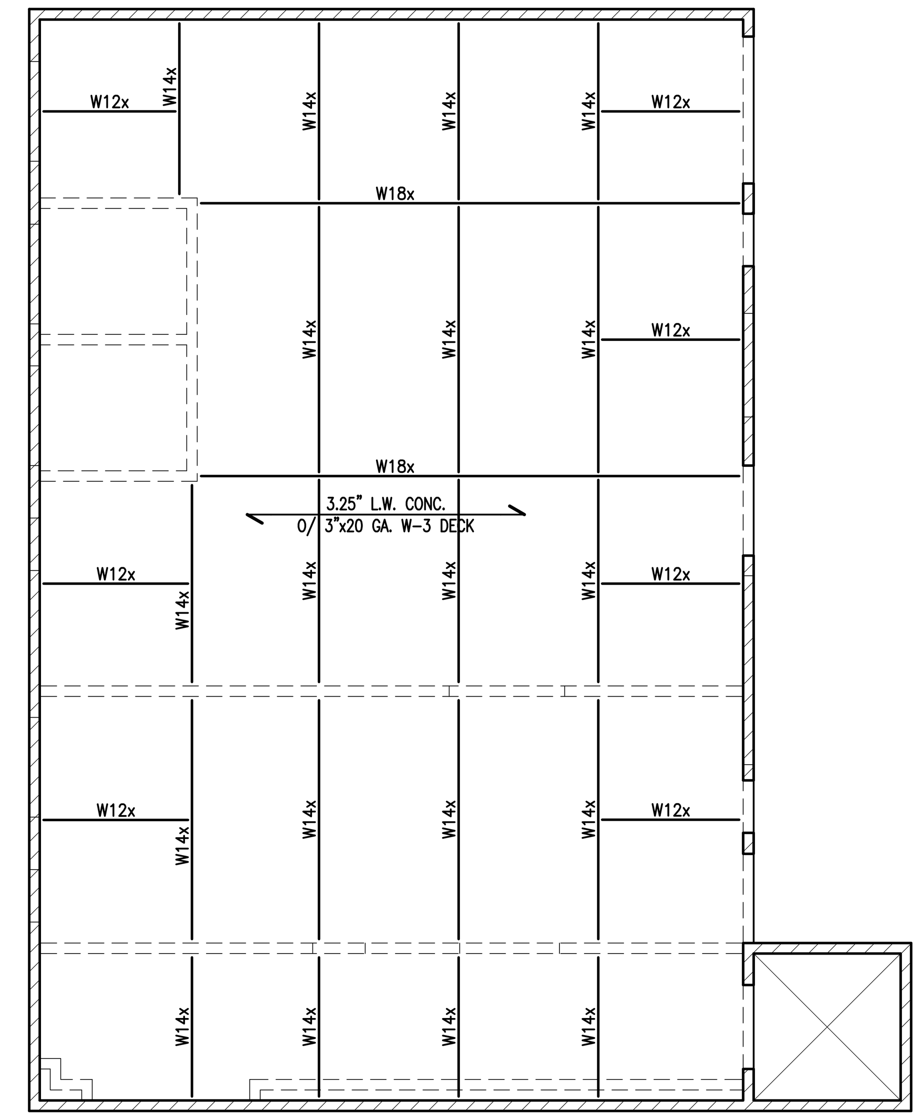
3 WALL SECTION
SCALE: 1/2" = 1'-0"



ROOF FRAMING PLAN
SCALE: 1/8" = 1'-0"



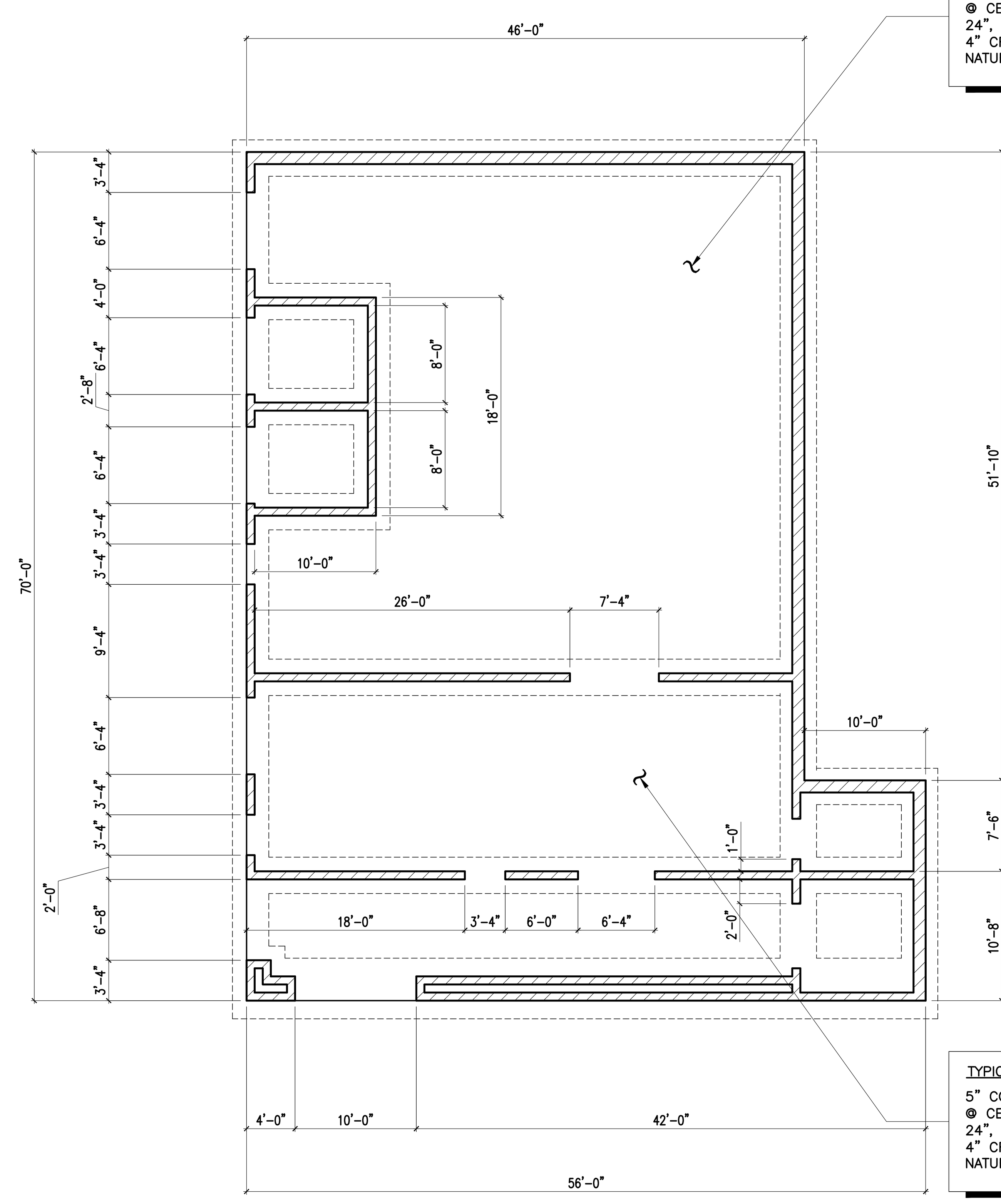
HIGH ROOF FRAMING PLAN
SCALE: 1/4" = 1'-0"



FLOOR FRAMING PLAN
SCALE: 1/8" = 1'-0"

TYPICAL SLAB ON GRADE

6" CONCRETE W/ #4 @ 24" EACH WAY @ CENTER LINE OF SLAB (MINIMUM SPLICE = 24", STAGGERED), OVER VAPOR BARRIER, OVER 4" CRUSHED ROCK, OVER COMPACTED FILL OR NATURAL GRADE, UNLESS NOTED OTHERWISE.



TYPICAL SLAB ON GRADE

5" CONCRETE W/ #4 @ 24" EACH WAY @ CENTER LINE OF SLAB (MINIMUM SPLICE = 24", STAGGERED), OVER VAPOR BARRIER, OVER 4" CRUSHED ROCK, OVER COMPACTED FILL OR NATURAL GRADE, UNLESS NOTED OTHERWISE.

FOUNDATION PLAN
SCALE: 1/8" = 1'-0"

FRAMING PLAN NOTES

1. SEE SHEETS ______ THROUGH ______ FOR GENERAL NOTES AND TYPICAL DETAILS.
2. SEE ARCHITECTURAL DRAWINGS FOR ALL TOP OF SHEATHING AND TOP OF WALL/PARAPET ELEVATIONS.
3. SEE ARCHITECTURAL, PLUMBING, MECHANICAL, AND ELECTRICAL DRAWINGS FOR SIZE AND LOCATION OF ROOF OPENINGS NOT SHOWN ON ROOF FRAMING PLANS. SEE DETAIL ______ FOR TYPICAL OPENING, UNLESS NOTED OTHERWISE.
4. SEE ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATION OF ALL DOOR AND WINDOW OPENINGS IN BEARING AND NON-BEARING WALLS.
5. PROVIDE 2" BY FULL DEPTH SOLID BLOCKING AT 8'-0" MAXIMUM FOR ROOF JOISTS OR RAFTERS MORE THAN 8" IN DEPTH. FOR ADDITIONAL INFORMATION SEE DETAIL ______ .
6. ALL LINES AND/OR MEMBERS INDICATED AS "STRUT" SHALL RECEIVE (2) ROWS OF BOUNDARY NAILING (B.N.), STAGGERED.
7. "MU" DENOTES MECHANICAL UNIT. MAXIMUM ALLOWABLE WEIGHT IS SHOWN. SEE MECHANICAL AND ARCHITECTURAL DRAWINGS FOR EXACT SIZE AND WEIGHT OF MECHANICAL UNITS. FOR TYPICAL FRAMING AT MECHANICAL UNITS, SEE DETAIL ______ .
8. WOOD I-JOIST HANGERS SHALL BE SIMPSON HIT HANGERS, UNLESS NOTED OTHERWISE.
9. SAWN LUMBER HANGERS SHALL BE SIMPSON W HANGERS, UNLESS NOTED OTHERWISE.
10. ALL WOOD I-JOIST BLOCKING PANELS SHALL RECEIVE END BLOCKS PER DETAIL ______ .

LEGEND

: INDICATES WOOD HEADER OVER OPENING BELOW. SEE DETAIL ______ FOR SIZE & FRAMING UNLESS NOTED OTHERWISE ON PLAN.

: INDICATES SPAN OF JOISTS.

: INDICATES EXTENT OF JOISTS.

FOUNDATION PLAN NOTES

1. SEE SHEETS _______ THROUGH ______ FOR GENERAL NOTES AND TYPICAL DETAILS.
2. SEE SPECIFICATIONS FOR ALL SITE AND SUBGRADE PREPARATIONS.
3. SEE ARCHITECTURAL AND/OR CIVIL DRAWINGS FOR FINISH FLOOR ELEVATIONS.
4. SEE ARCHITECTURAL AND CIVIL DRAWINGS FOR ALL EXTERIOR CONCRETE PAVING, SLABS, BASES, CURBS, SITE WALLS, ETC.
5. FOR ANY DIMENSIONAL INFORMATION NOT SHOWN, SEE ARCHITECTURAL DRAWINGS.
6. SEE PLANS AND ARCHITECTURAL DRAWINGS FOR DEPRESSIONS AND/OR SLOPES IN CONCRETE SLABS.
7. ALL DIMENSIONS SHOWN ARE FROM FACE OF STUD, CENTER LINE OF COLUMN, OR CENTER LINE OF WALL, UNLESS NOTED OTHERWISE. ALL COLUMNS ARE CENTERED IN STUD WALL, UNLESS NOTED OTHERWISE.
8. SEE ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATION OF ALL DOOR AND WINDOW OPENINGS IN BEARING AND NON-BEARING WALLS.
9. SEE ARCHITECTURAL DRAWINGS FOR LOCATION OF INTERIOR NON-BEARING PARTITIONS. INTERIOR NON-BEARING PARTITION WALLS THAT DO NOT REQUIRE CONCRETE CURBS ARE NOT SHOWN ON STRUCTURAL DRAWINGS.
10. SEE ARCHITECTURAL, PLUMBING, MECHANICAL, ELECTRICAL, AND KITCHEN DRAWINGS FOR ADDITIONAL EMBEDDED ITEMS AND SLAB PENETRATIONS.
11. ALL WALLS SHOWN WITH PLYWOOD SHEAR PANELS SHALL BE CONTINUOUSLY SHEATHED FOR THE FULL LENGTH OF THE WALL WITH THE SAME SHEATHING AS INDICATED. ALL EXTERIOR WALLS SHALL HAVE TYPE A PLYWOOD SHEATHING APPLIED TO THE OUTSIDE FACE PER DETAIL ______ , UNLESS NOTED OTHERWISE.
12. FOR TYPICAL PIPE CHASE IN CONCRETE STEM WALL, SEE DETAIL ______.
13. FOR TYPICAL SLAB JOINTS, SEE DETAIL ______.

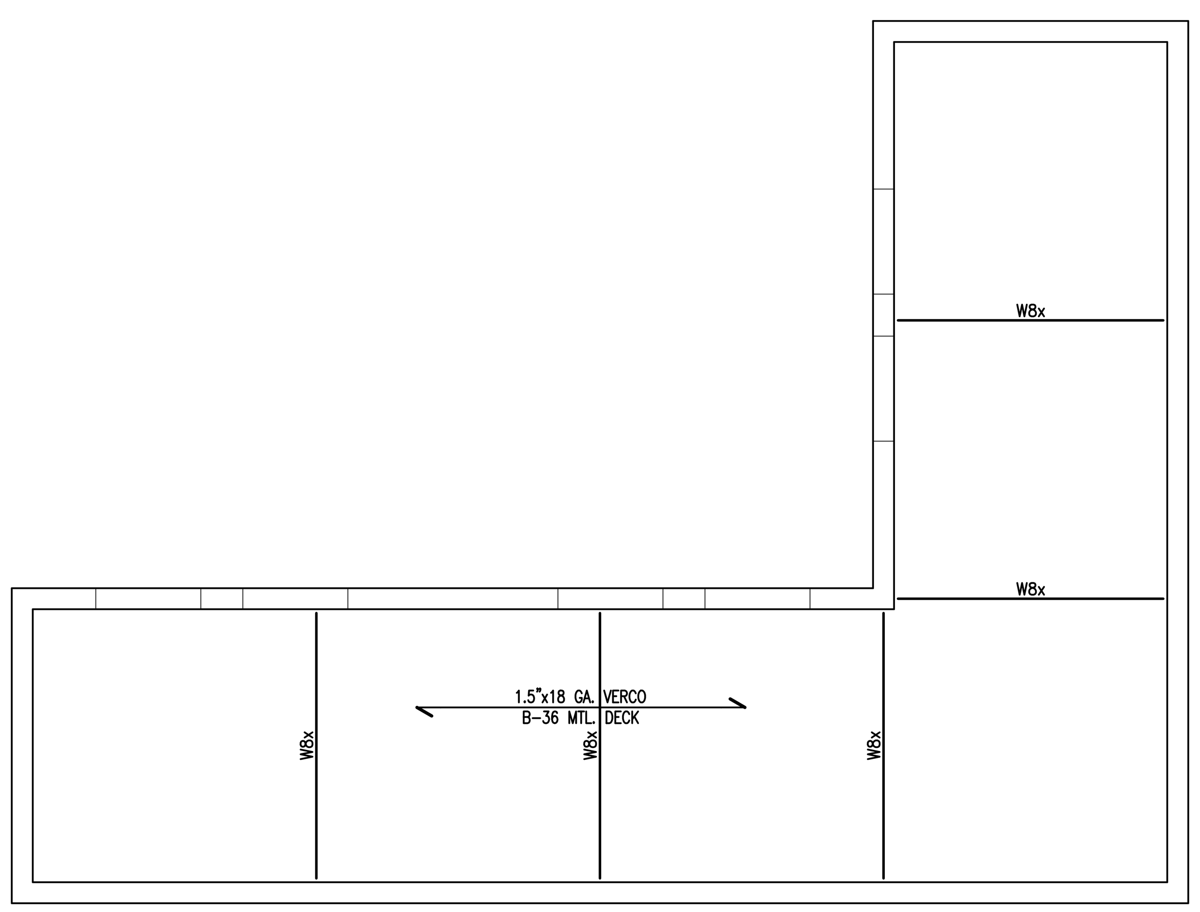
LEGEND

: INDICATES CONCRETE CURB. SEE PLANS AND DETAIL ______ FOR ADDITIONAL INFORMATION.

S ——— S : INDICATES STEP IN CONTINUOUS FOOTING. SEE DETAILS C104-0 AND C108-0 FOR ADDITIONAL INFORMATION. STEP CONTINUOUS FOOTING TO MATCH BOTTOM OF LOWEST ADJACENT FOOTING ELEVATION. (NOTE:STEPPED FOOTING SHOWN OM PLAN ARE PROVIDED TO AVOID UNDERGROUND UTILITIES AND ACTUAL LOCATION AND NUMBER OF STEPS SHALL BE COORDINATED IN THE FIELD, AND VERIFIED BY THE CONTRACTOR. ADDITIONAL LOCATIONS MAY BE REQUIRED. PROVIDE COMPLIANCE WITH DETAIL C103-0).

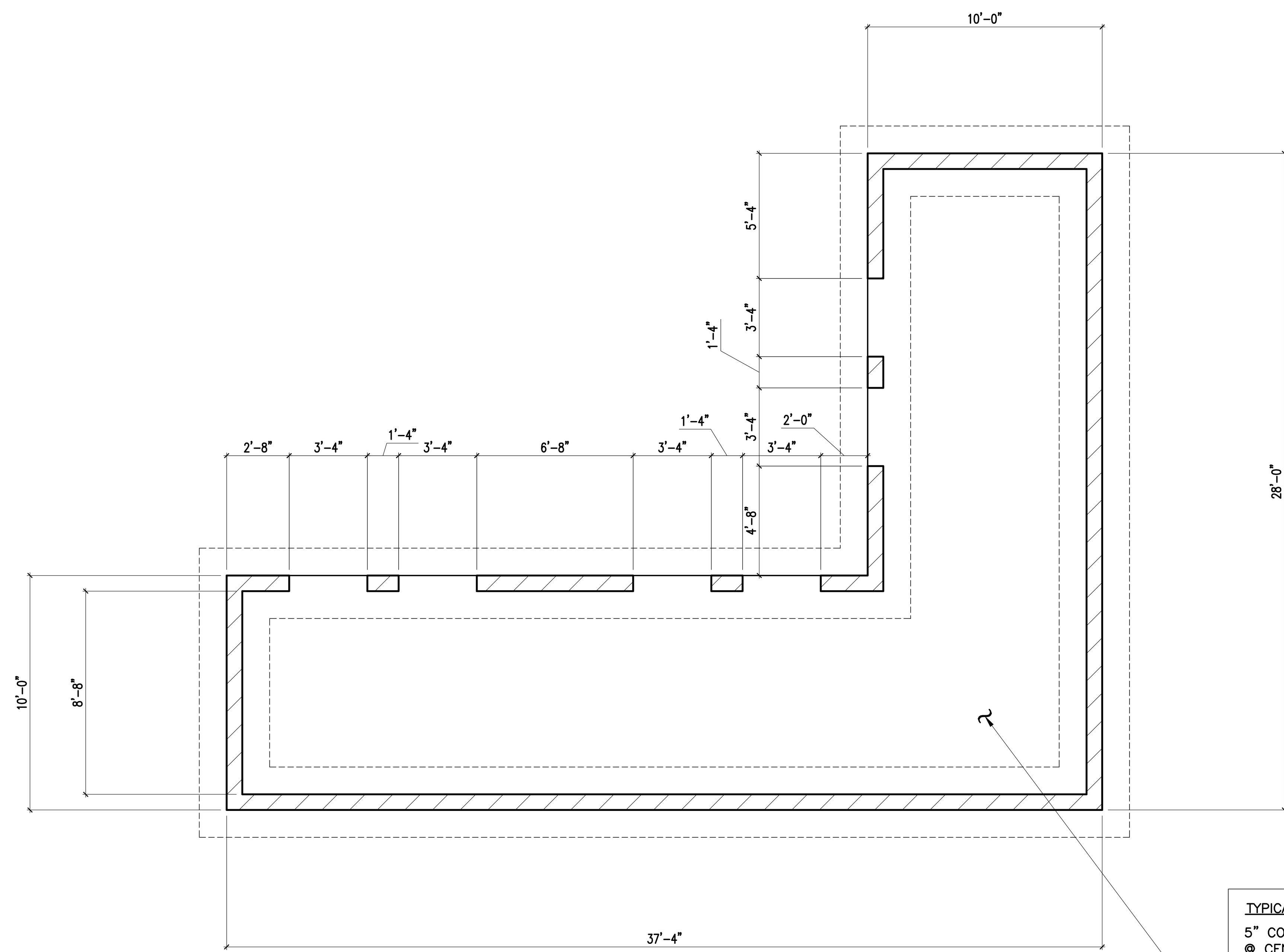
: INDICATES CHANGE IN ELEVATION.

: INDICATES TOP OF SLAB ELEVATION (WHERE INDICATED).



ROOF FRAMING PLAN

SCALE: ¼" = 1'-0"



TYPICAL SLAB ON GRADE

5" CONCRETE W/ #4 @ 24" EACH WAY @ CENTER LINE OF SLAB (MINIMUM SPLICE = 24", STAGGERED), OVER VAPOR BARRIER, OVER 4" CRUSHED ROCK, OVER COMPACTED FILL OR NATURAL GRADE, UNLESS NOTED OTHERWISE.

FOUNDATION PLAN

SCALE: ¼" = 1'-0"

ROOF FRAMING PLAN NOTES

1. SEE SHEETS _____ THROUGH _____ FOR GENERAL NOTES AND TYPICAL DETAILS.
2. SEE ARCHITECTURAL DRAWINGS FOR ALL TOP OF SHEATHING AND TOP OF WALL/PARAPET ELEVATIONS.
3. SEE ARCHITECTURAL, PLUMBING, MECHANICAL, AND ELECTRICAL DRAWINGS FOR SIZE AND LOCATION OF ROOF OPENINGS NOT SHOWN ON ROOF FRAMING PLANS. SEE DETAIL _____ FOR TYPICAL OPENING, UNLESS NOTED OTHERWISE.
4. SEE ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATION OF ALL DOOR AND WINDOW OPENINGS IN BEARING AND NON-BEARING WALLS.
5. PROVIDE 2" BY FULL DEPTH SOLID BLOCKING AT 8'-0" MAXIMUM FOR ROOF JOISTS OR RAFTERS MORE THAN 8" IN DEPTH. FOR ADDITIONAL INFORMATION SEE DETAIL _____ .
6. ALL LINES AND/OR MEMBERS INDICATED AS "STRUT" SHALL RECEIVE (2) ROWS OF BOUNDARY NAILING (B.N.), STAGGERED.
7. "MU" DENOTES MECHANICAL UNIT. MAXIMUM ALLOWABLE WEIGHT IS SHOWN. SEE MECHANICAL AND ARCHITECTURAL DRAWINGS FOR EXACT SIZE AND WEIGHT OF MECHANICAL UNITS. FOR TYPICAL FRAMING AT MECHANICAL UNITS, SEE DETAIL _____ .
8. WOOD I-JOIST HANGERS SHALL BE SIMPSON HIT HANGERS, UNLESS NOTED OTHERWISE.
9. SAWN LUMBER HANGERS SHALL BE SIMPSON W HANGERS, UNLESS NOTED OTHERWISE.
10. ALL WOOD I-JOIST BLOCKING PANELS SHALL RECEIVE END BLOCKS PER DETAIL _____ .

LEGEND

: INDICATES WOOD HEADER OVER OPENING BELOW. SEE DETAIL _____ FOR SIZE & FRAMING UNLESS NOTED OTHERWISE ON PLAN.

: INDICATES SPAN OF JOISTS.

: INDICATES EXTENT OF JOISTS.

FOUNDATION PLAN NOTES

1. SEE SHEETS ______ THROUGH _____ FOR GENERAL NOTES AND TYPICAL DETAILS.
2. SEE SPECIFICATIONS FOR ALL SITE AND SUBGRADE PREPARATIONS.
3. SEE ARCHITECTURAL AND/OR CIVIL DRAWINGS FOR FINISH FLOOR ELEVATIONS.
4. SEE ARCHITECTURAL AND CIVIL DRAWINGS FOR ALL EXTERIOR CONCRETE PAVING, SLABS, BASES, CURBS, SITE WALLS, ETC.
5. FOR ANY DIMENSIONAL INFORMATION NOT SHOWN, SEE ARCHITECTURAL DRAWINGS.
6. SEE PLANS AND ARCHITECTURAL DRAWINGS FOR DEPRESSIONS AND/OR SLOPES IN CONCRETE SLABS.
7. ALL DIMENSIONS SHOWN ARE FROM FACE OF STUD, CENTER LINE OF COLUMN, OR CENTER LINE OF WALL, UNLESS NOTED OTHERWISE. ALL COLUMNS ARE CENTERED IN STUD WALL, UNLESS NOTED OTHERWISE.
8. SEE ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATION OF ALL DOOR AND WINDOW OPENINGS IN BEARING AND NON-BEARING WALLS.
9. SEE ARCHITECTURAL DRAWINGS FOR LOCATION OF INTERIOR NON-BEARING PARTITIONS. INTERIOR NON-BEARING PARTITION WALLS THAT DO NOT REQUIRE CONCRETE CURBS ARE NOT SHOWN ON STRUCTURAL DRAWINGS.
10. SEE ARCHITECTURAL, PLUMBING, MECHANICAL, ELECTRICAL, AND KITCHEN DRAWINGS FOR ADDITIONAL EMBEDDED ITEMS AND SLAB PENETRATIONS.
11. ALL WALLS SHOWN WITH PLYWOOD SHEAR PANELS SHALL BE CONTINUOUSLY SHEATHED FOR THE FULL LENGTH OF THE WALL WITH THE SAME SHEATHING AS INDICATED. ALL EXTERIOR WALLS SHALL HAVE TYPE A PLYWOOD SHEATHING APPLIED TO THE OUTSIDE FACE PER DETAIL _____ , UNLESS NOTED OTHERWISE.
12. FOR TYPICAL PIPE CHASE IN CONCRETE STEM WALL, SEE DETAIL _____.
13. FOR TYPICAL SLAB JOINTS, SEE DETAIL _____.

LEGEND

HSS3x3x3/16
PF-2

: INDICATES STEEL OR WOOD COLUMN SIZE. SEE DETAIL _____ FOR STEEL COLUMN BASE PLATE, U.N.O.

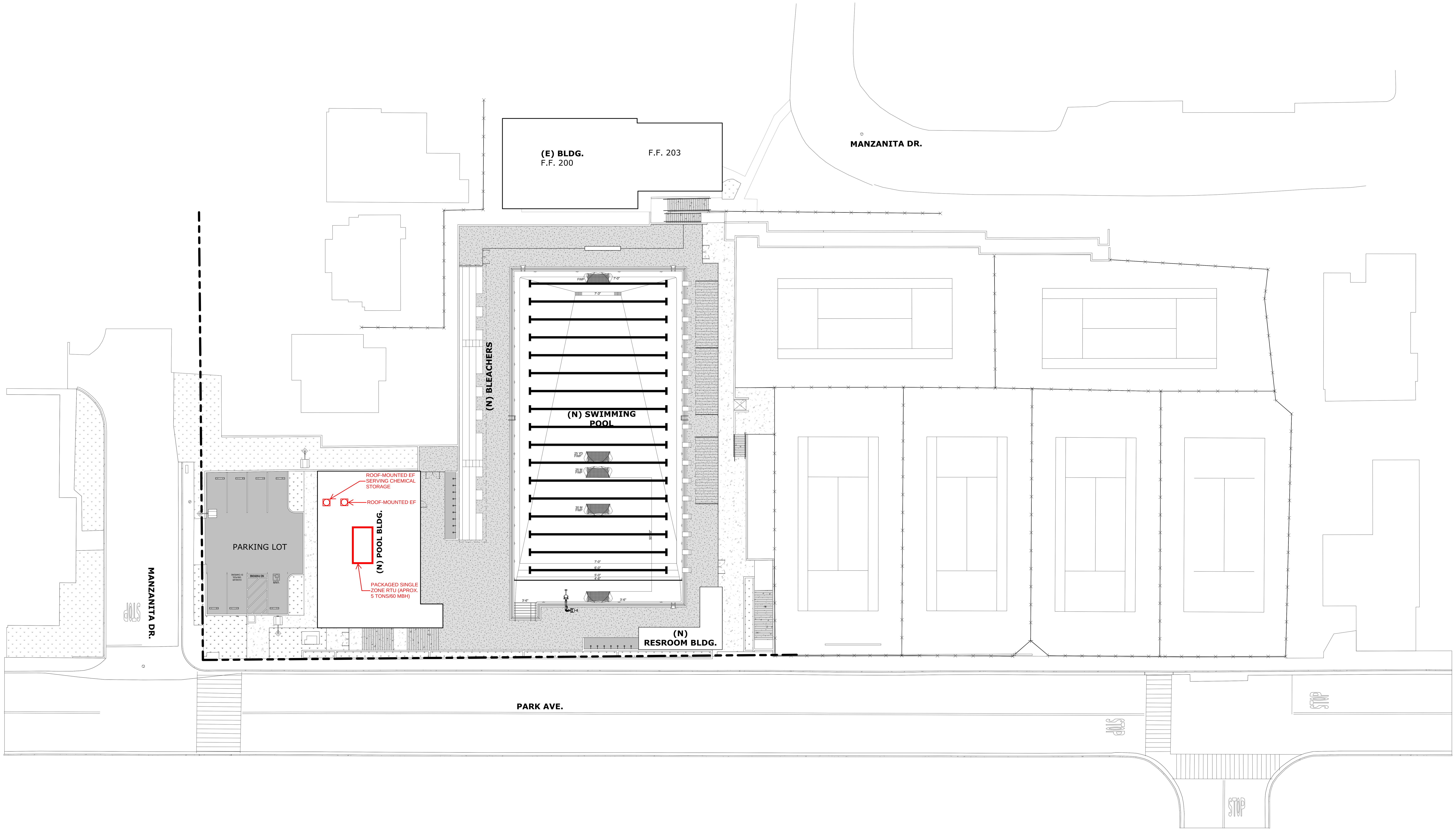
: INDICATES CONCRETE FOOTING. SEE DETAIL _____ FOR ADDITIONAL INFORMATION.

: INDICATES CONCRETE CURB. SEE PLANS AND DETAIL _____ FOR ADDITIONAL INFORMATION.

S S : INDICATES STEP IN CONTINUOUS FOOTING. SEE DETAILS C104-0 AND C108-0 FOR ADDITIONAL INFORMATION. STEP CONTINUOUS FOOTING TO MATCH BOTTOM OF LOWEST ADJACENT FOOTING ELEVATION. (NOTE:STEPPED FOOTING SHOWN OM PLAN ARE PROVIDED TO AVOID UNDERGROUND UTILITIES AND ACTUAL LOCATION AND NUMBER OF STEPS SHALL BE COORDINATED IN THE FIELD, AND VERIFIED BY THE CONTRACTOR. ADDITIONAL LOCATIONS MAY BE REQUIRED. PROVIDE COMPLIANCE WITH DETAIL C103-0).

: INDICATES CHANGE IN ELEVATION.

: INDICATES TOP OF SLAB ELEVATION (WHERE INDICATED).



1 OVERALL SITE PLAN - MOD
SCALE: 1" = 20'-0"

GENERAL NOTES

1. VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.

KEYNOTES

ASTRAL ENGINEERS

RUHNAU CLARKE ARCHITECTS

PHASE
SCHEMATIC DEVELOPMENT
DATE
AUGUST 9, 2024

RUHNAUCLARKE.COM
3775 TENTH STREET, RIVERSIDE CALIFORNIA 92501 (951) 684 4664 / 5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010 (760) 438 3899

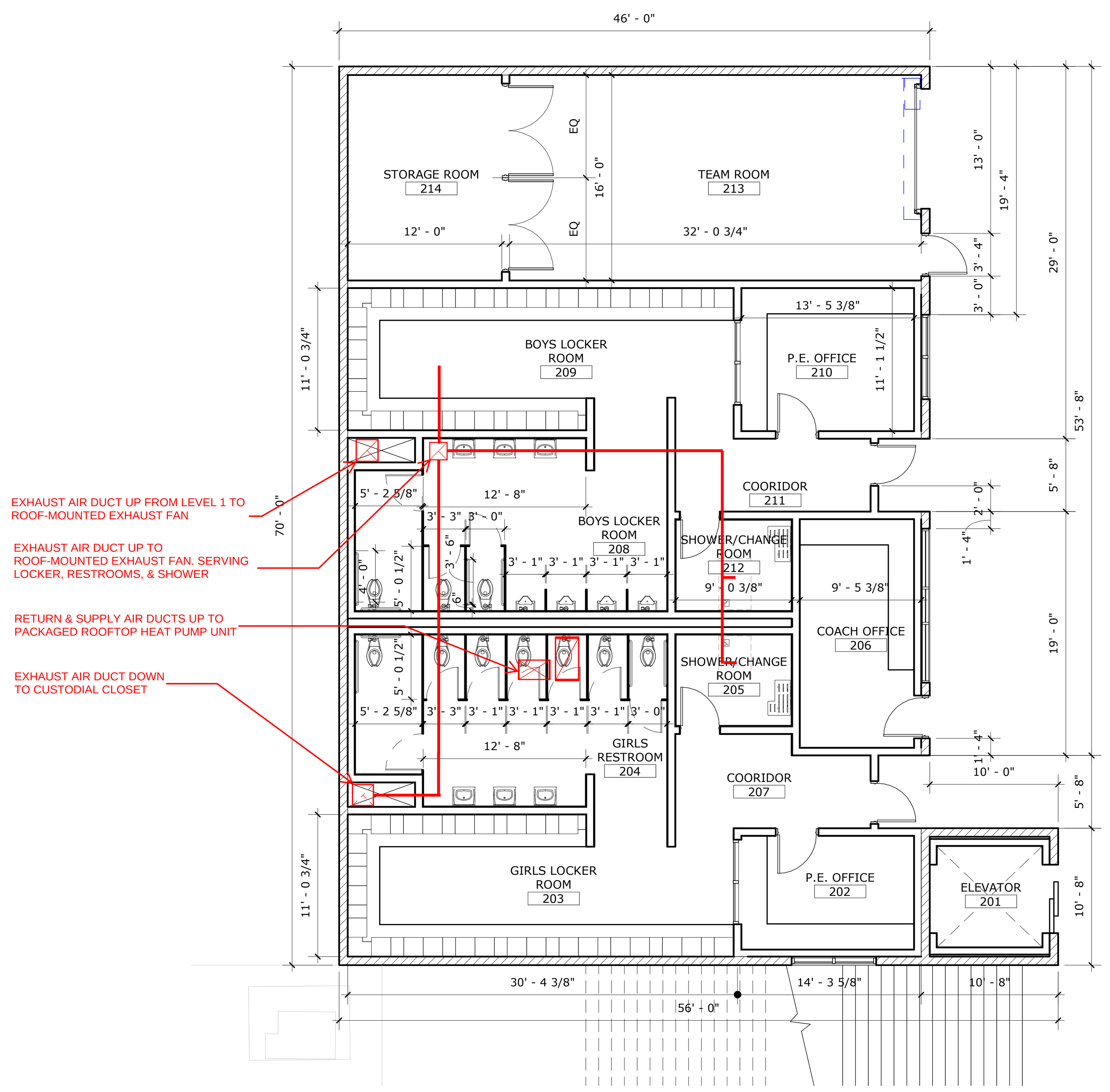
POOL MODERNIZATION
LAGUNA BEACH HIGH SCHOOL
670 PARK AVE, LAGUNA BEACH, CA 92651
LAGUNA BEACH UNIFIED SCHOOL DISTRICT

OVERALL SITE PLAN
MS-1.1

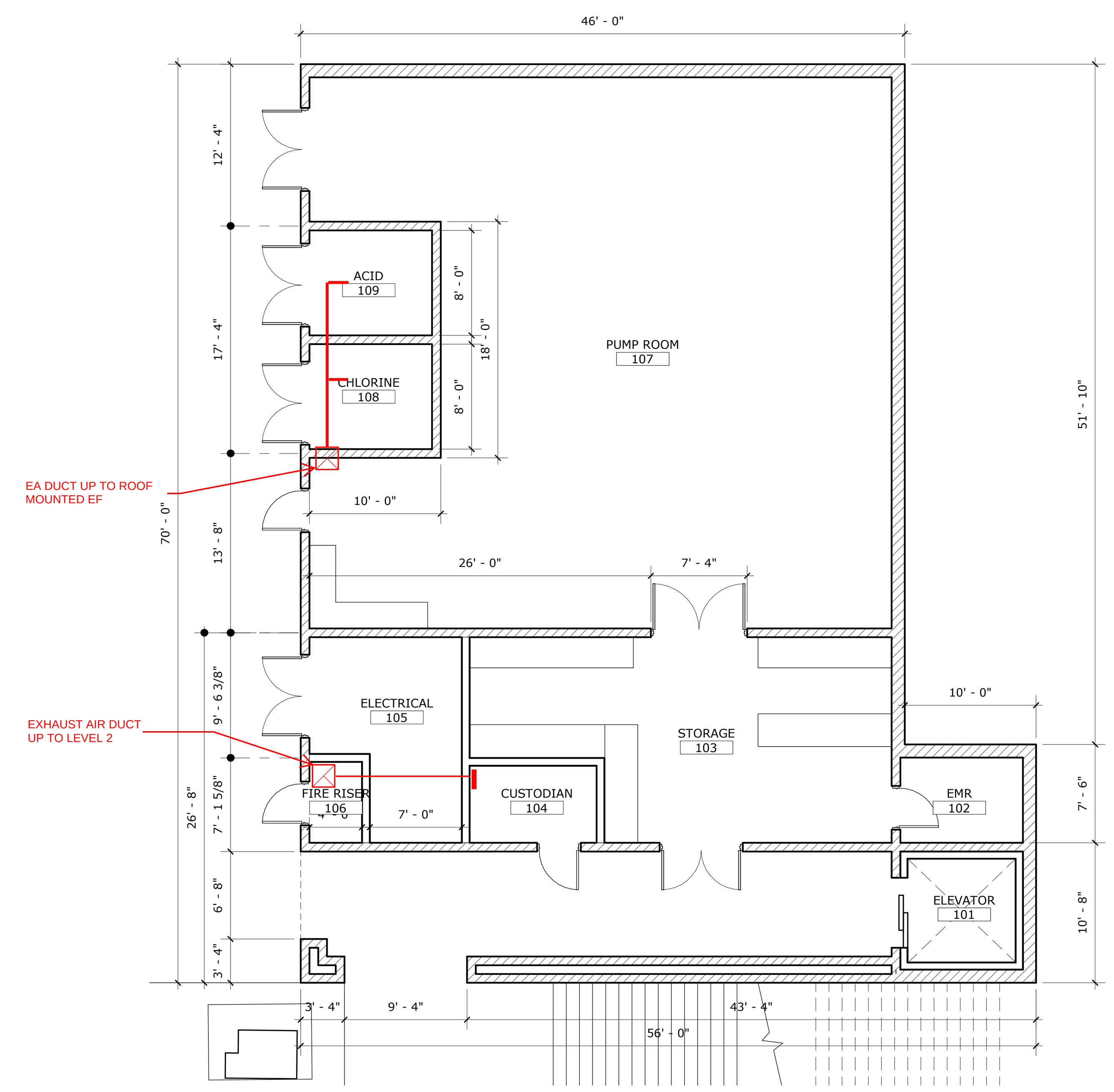
GENERAL NOTES

KEYNOTES

LEGEND



2 PUMP ROOM FLOOR PLAN LEVEL 2
SCALE: 1/8" = 1'-0"



1 PUMP ROOM FLOOR PLAN LEVEL 1
SCALE: 1/8" = 1'-0"

RUHNAU CLARKE ARCHITECTS

PHASE
SCHEMATIC DEVELOPMENT

DATE
AUGUST 9, 2024

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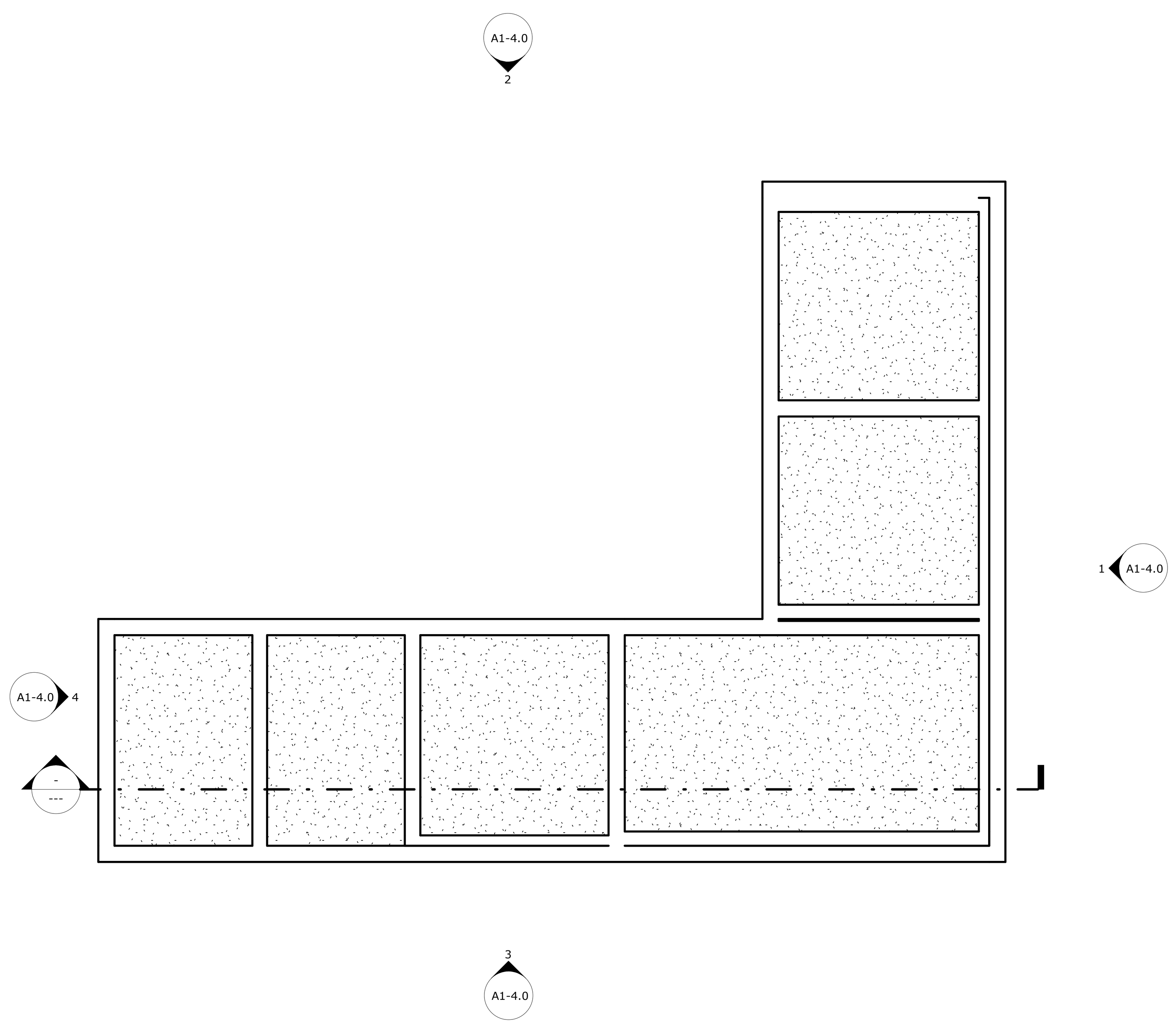
POOL MODERNIZATION
LAGUNA BEACH HIGH SCHOOL
670 PARK AVE, LAGUNA BEACH, CA 92651
LAGUNA BEACH UNIFIED SCHOOL DISTRICT

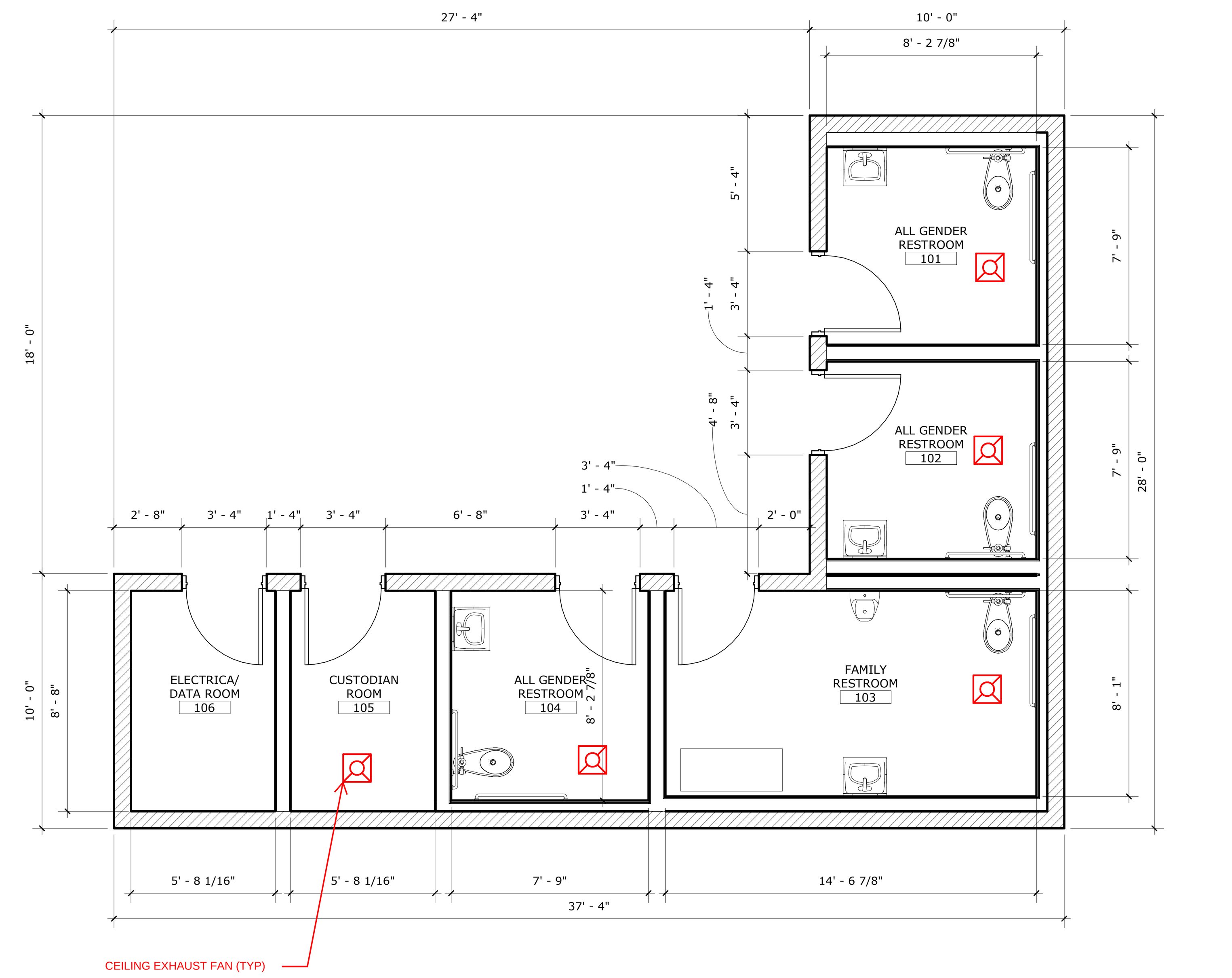
ASTRAL ENGINEERS

POOL BUILDING PUMP ROOM FLOOR PLANS

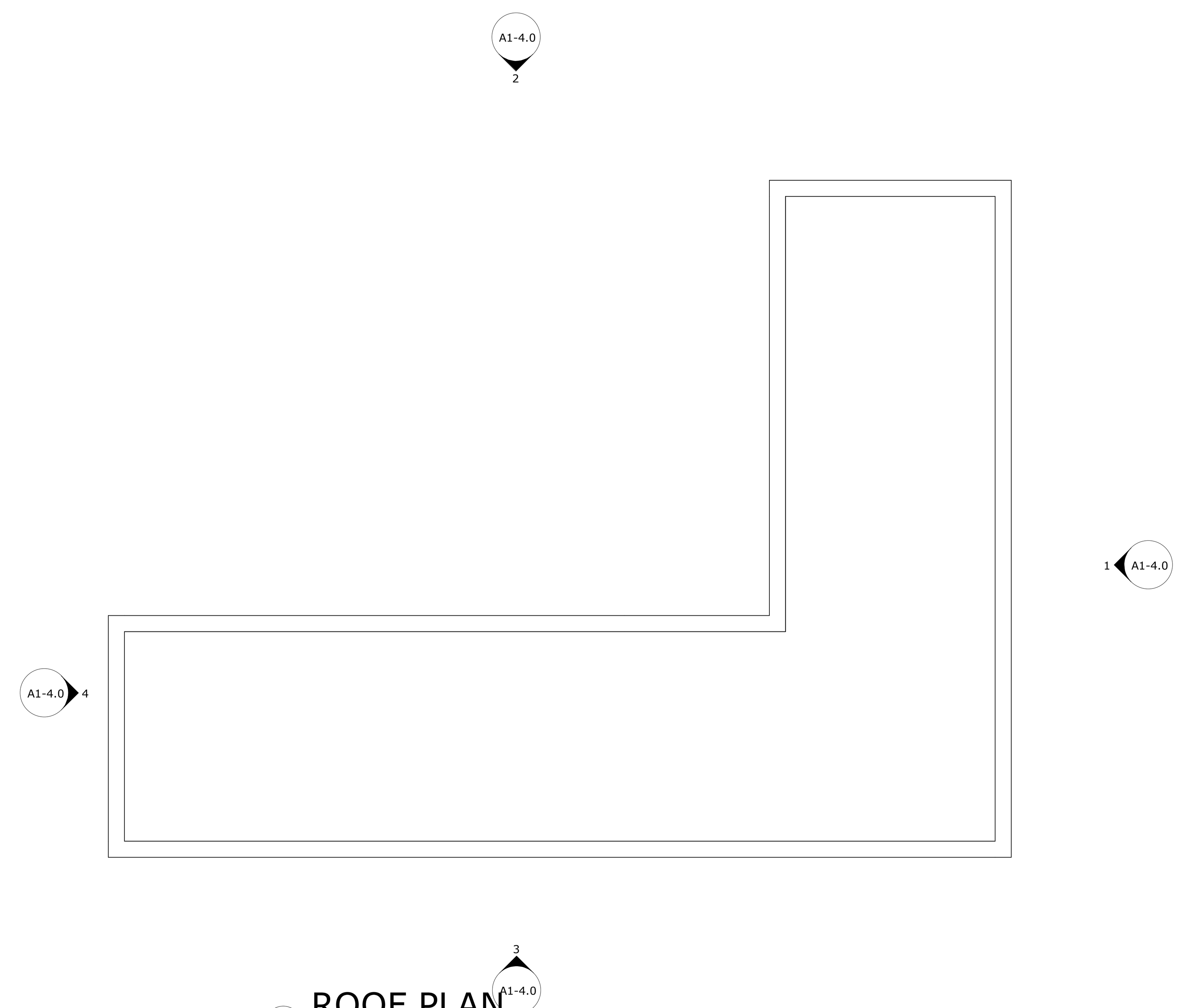
M1-1.1



2 GROUND LEVEL
SCALE: 1/4" = 1'-0"



1 RESTROOM FLOOR PLAN
SCALE: 1/4" = 1'-0"



3 ROOF PLAN
SCALE: 1/4" = 1'-0"

GENERAL NOTES

KEYNOTES

LEGEND

ASTRAL ENGINEERS

RUHNAU CLARKE ARCHITECTS

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POOL MODERNIZATION
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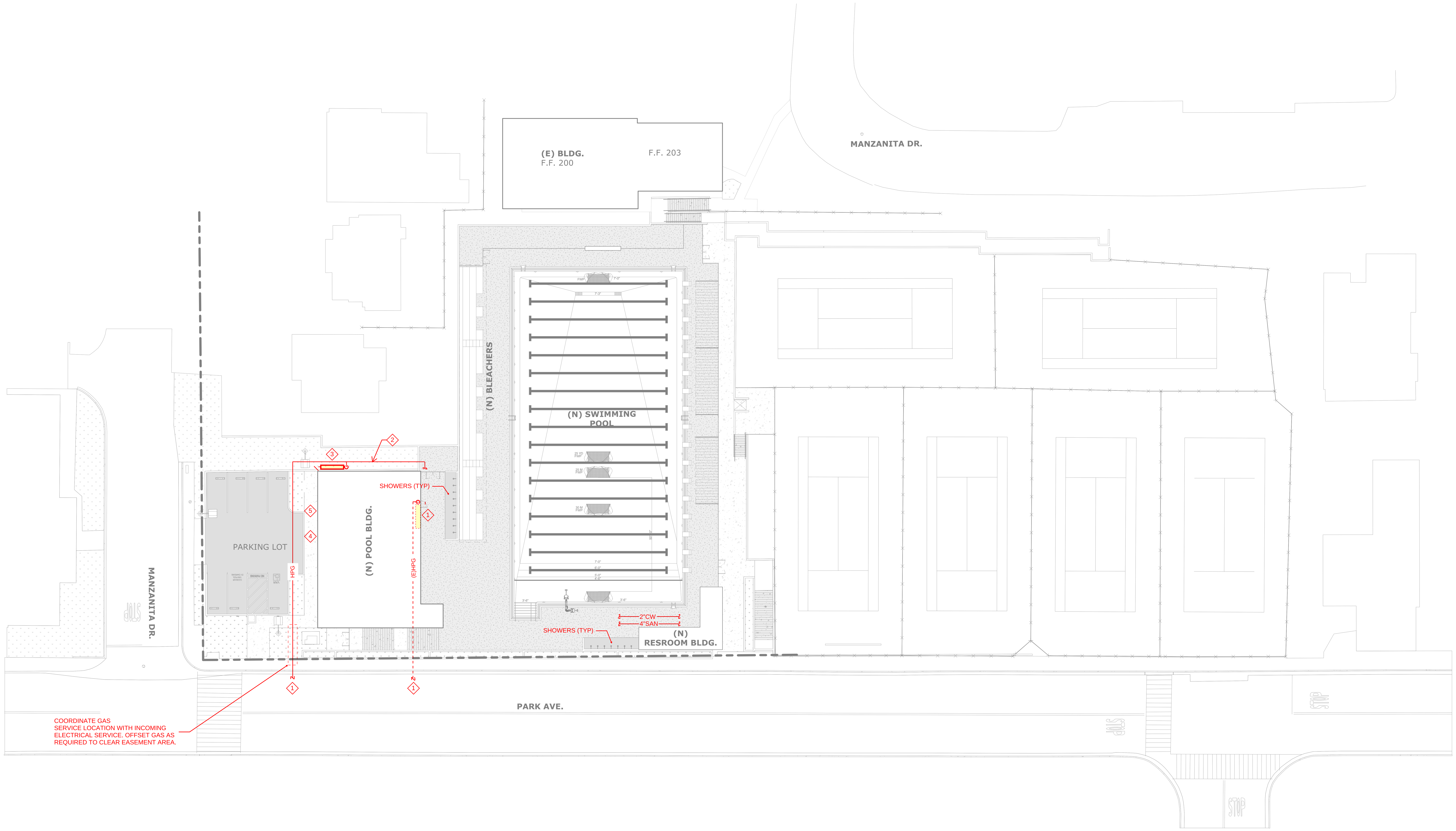
LAGUNA BEACH UNIFIED SCHOOL DISTRICT

RESTROOM BUILDING FLOOR, REFLECTIVE CEILING & ROOF PLAN

M2-1.1



1 OVERALL SITE PLAN - MOD
SCALE: 1" = 20'-0"

NORTH

GENERAL NOTES

1. VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.

KEYNOTES

1. COORDINATE THE RELOCATION OF THE GAS METER AND NEW SERVICE MAIN FROM THE STREET TO THE PROPOSED NEW METER LOCATION WITH SOUTHERN CALIFORNIA GAS COMPANY.
2. TEMPORARY GAS SUPPLY TO EXISTING PUMP HOUSE ASSUMING PUMP HOUSE REMAINS OPERATIONAL DURING NEW BUILDING CONSTRUCTION.
3. PROPOSED NEW 3000 CFH RATED GAS METER LOCATION.
4. PROPOSED 4" DOMESTIC WATER SERVICE.
5. PROPOSED 6" SANITARY SEWER.

ASTRAL ENGINEERS

RUHNAU CLARKE ARCHITECTS

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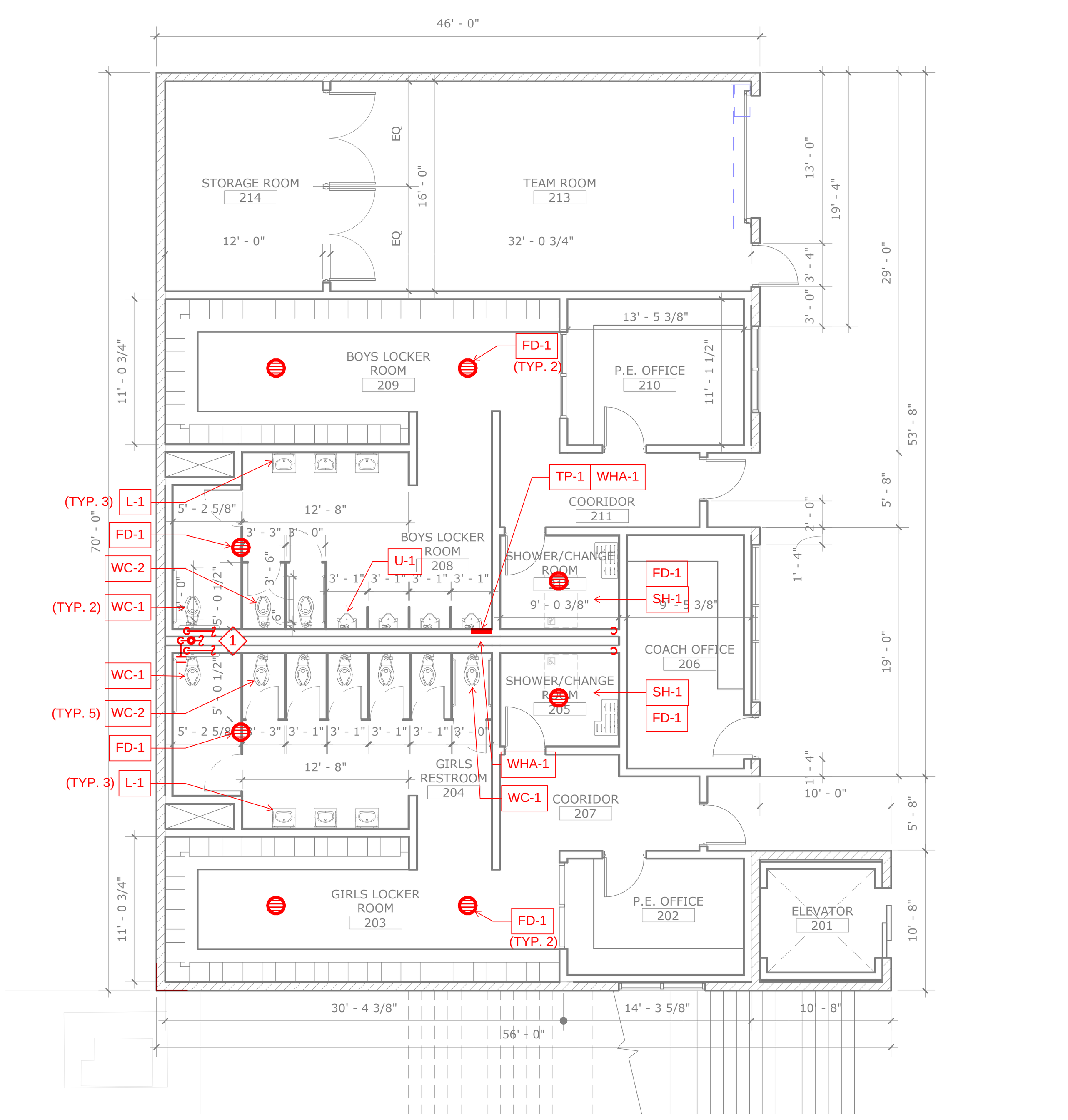
POOL MODERNIZATION
LAGUNA BEACH HIGH SCHOOL
670 PARK AVE, LAGUNA BEACH, CA 92651
LAGUNA BEACH UNIFIED SCHOOL DISTRICT

OVERALL SITE PLAN

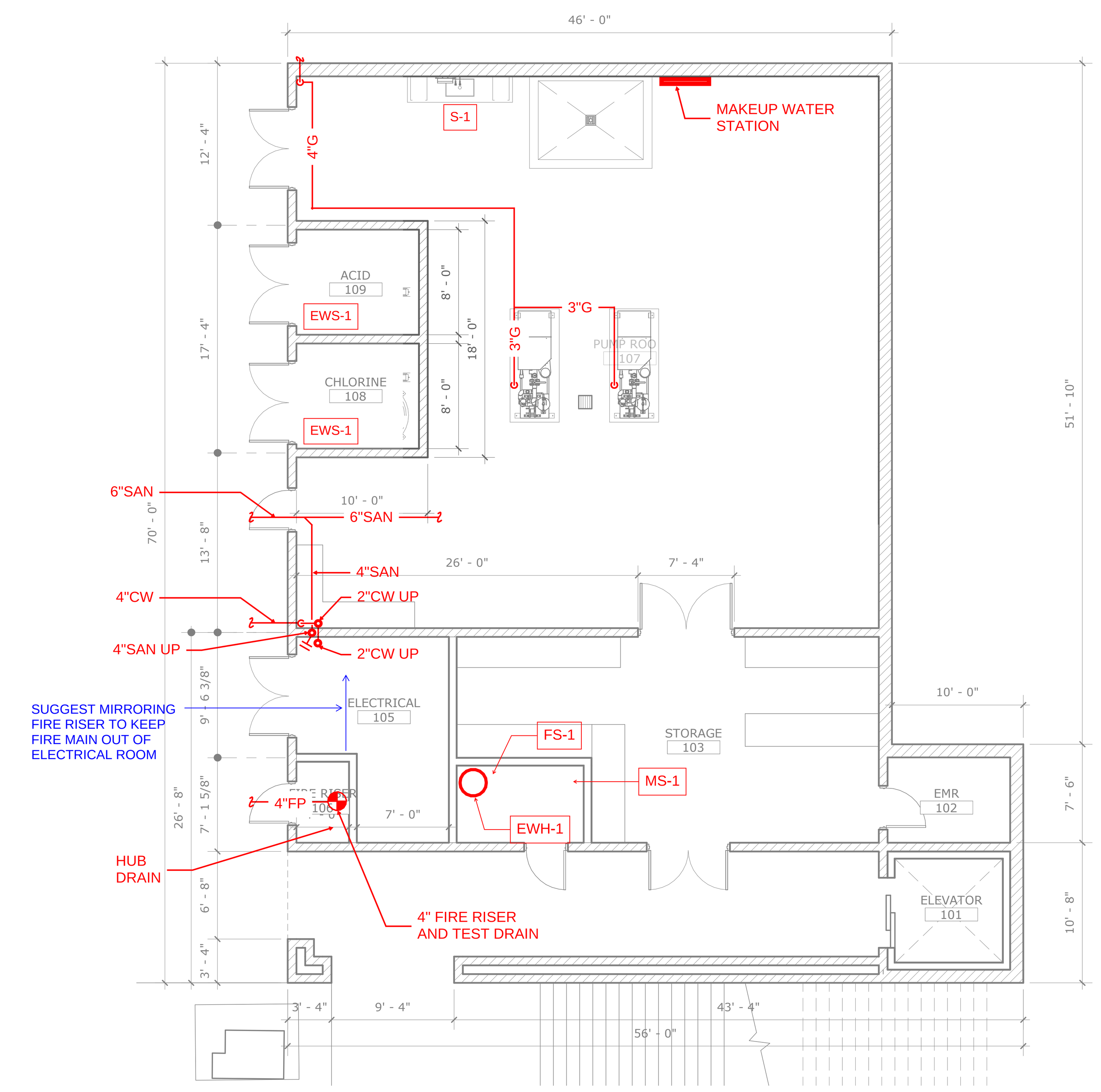
PS-1.1

1-43-22



2 PUMP ROOM FLOOR PLAN LEVEL 2

SCALE: 1/8" = 1'-0"



1 PUMP ROOM FLOOR PLAN LEVEL 1

SCALE: 1/8" = 1'-0"

GENERAL NOTES

1.

KEYNOTES

1 (2)2" CW, 4" SAN, 4"VENT HEADERS WITHIN THE WET WALL. SEE FLOOR PLAN BELOW FOR RISER LOCATIONS.

LEGEND

EWS-1	COMBINATION SHOWER FACE WASH STATION WITH ASSE LISTED MIXING VALVE
FD-1	FLOOR DRAIN WITH HEEL PROOF GRATE
FS-1	FLOOR SINK
L-1	ACCESSIBLE WALL MOUNTED LAVATORY, .5 GPM METERED FAUCET
MS-1	FLOOR MOUNT MOP SINK
SH-1	ACCESSIBLE SHOWER STATION WITH HAND HELD SHOWER
S-1	ACCESSIBLE SINK WITH MANUAL FAUCET
TP-1	AUTOMATIC TRAP PRIMER, PRESSURE ACTIVATED WITH DISTRIBUTION CUP
U-1	ACCESSIBLE URINAL WITH .125 GPF SENSOR OPERATED FLUSH VALVE
WC-1	ACCESSIBLE WATER CLOSET WITH 1.28 GPF HAND FREE FLUSH VALVE
WC-2	WATER CLOSET WITH 1.28 GPF HAND FREE FLUSH VALVE
WHA-1	WATER HAMMER ARRESTOR
WH-1	100 GALLON VERTICAL STORAGE GAS FIRED WATER HEATER, 200,000 BTU, WITH DIRECT VENT

ASTRAL ENGINEERS

RUHNAU CLARKE ARCHITECTS

PHASE

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POOL MODERNIZATION

LAGUNA BEACH HIGH SCHOOL

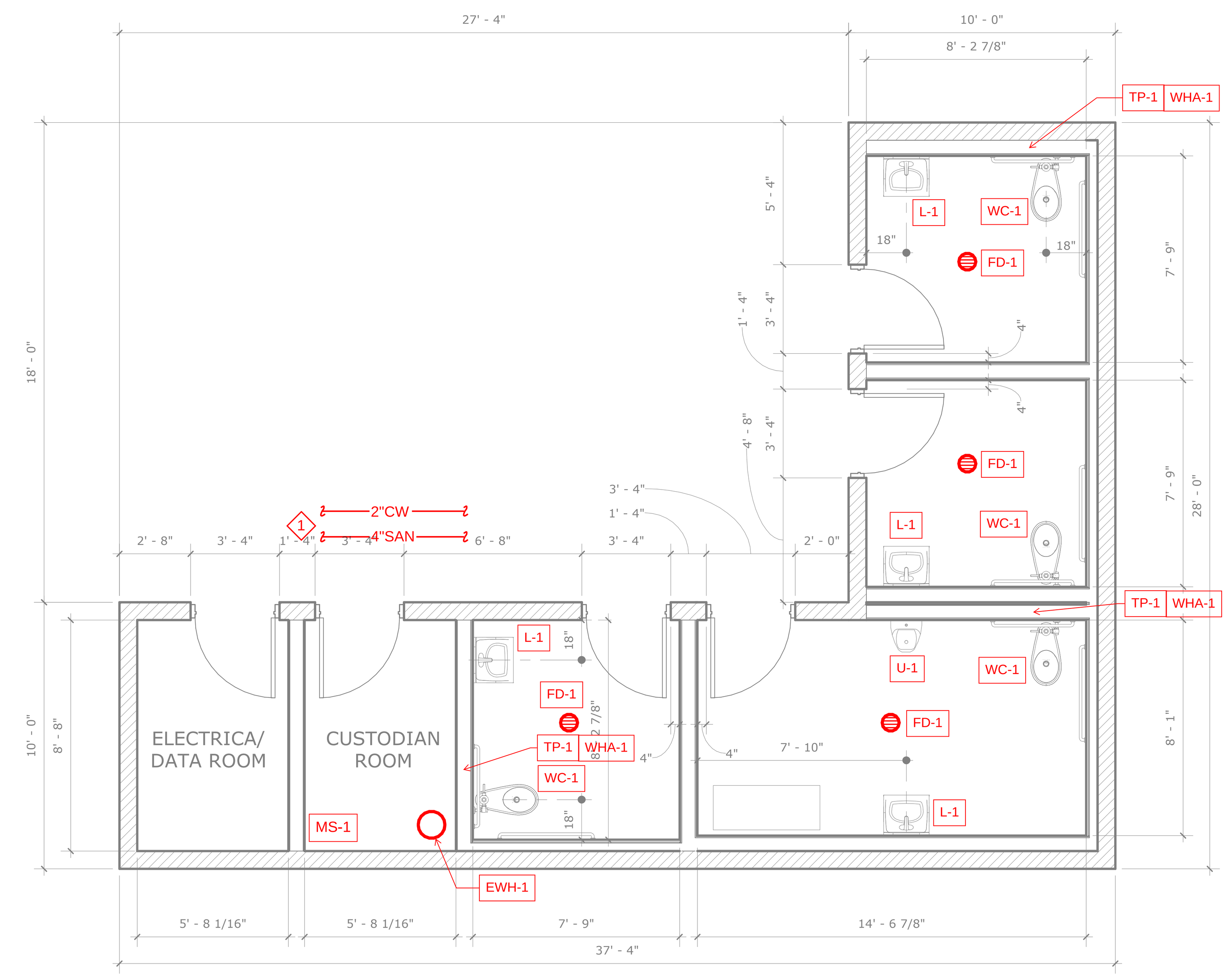
670 PARK AVE, LAGUNA BEACH, CA 92651

LAGUNA BEACH UNIFIED SCHOOL DISTRICT

POOL BUILDING PUMP ROOM FLOOR PLANS

P1-1.1

1-43-22



1 RESTROOM FLOOR PLAN

SCALE: 1/4" = 1'-0"

GENERAL NOTES

1.

KEYNOTES

1. 2" CW AND 4" SAN BUILDING SERVICE.

LEGEND

FD-1	FLOOR DRAIN WITH HEEL PROOF GRATE
FS-1	FLOOR SINK
L-1	ACCESSIBLE WALL MOUNTED LAVATORY, .5 GPM METERED FAUCET
MS-1	FLOOR MOUNT MOP SINK
SH-1	ACCESSIBLE SHOWER STATION WITH HAND HELD SHOWER
S-1	ACCESSIBLE SINK WITH MANUAL FAUCET
TP-1	AUTOMATIC TRAP PRIMER, PRESSURE ACTIVATED WITH DISTRIBUTION FOR MULTIPLE DRAINS
U-1	ACCESSIBLE URINAL WITH .125 GPF SENSOR OPERATED FLUSH VALVE
WC-1	ACCESSIBLE WATER CLOSET WITH 1.28 GPF HAND FREE FLUSH VALVE
WC-2	WATER CLOSET WITH 1.28 GPF HAND FREE FLUSH VALVE
WHA-1	WATER HAMMER ARRESTOR
EWH-1	20 GALLON VERTICAL STORAGE ELECTRIC WATER HEATER, 9 KW

NORTH

ASTRAL ENGINEERS

RUHNAU CLARKE ARCHITECTS

PHASE
SCHEMATIC DEVELOPMENT

DATE
AUGUST 9, 2024

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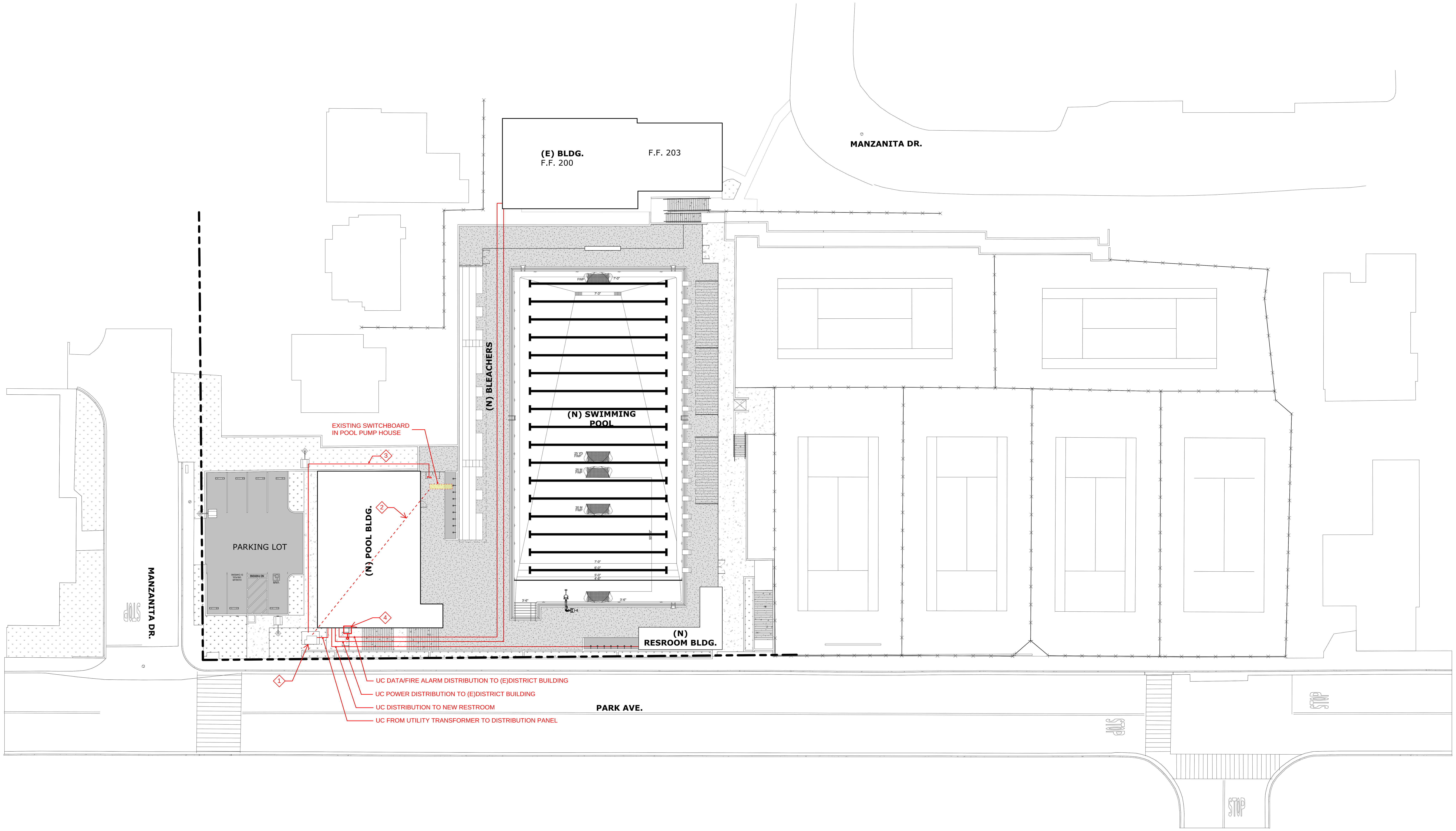
POOL MODERNIZATION
LAGUNA BEACH HIGH SCHOOL
670 PARK AVE, LAGUNA BEACH, CA 92651
LAGUNA BEACH UNIFIED SCHOOL DISTRICT

RESTROOM BUILDING FLOOR PLAN

P2-1.1

1-43-22



1 OVERALL SITE PLAN - MOD
SCALE: 1" = 20'-0"

GENERAL NOTES

1. VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.

KEYNOTES

1. UTILITY TRANSFORMER TO BE RELOCATED TO MEET UTILITY SERVICE CLEARANCES FROM NEW BUILDING. COORDINATE RELOCATION WITH SOUTHERN CALIFORNIA EDISON.
2. UNDERGROUND UTILITY SERVICE ENTRANCE FROM EXISTING TRANSFORMER TO EXISTING PUMP HOUSE SWITCHBOARD TO BE REMOVED.
3. TEMPORARY ELECTRICAL SERVICE ENTRANCE TO EXISTING PUMP HOUSE SWITCHBOARD ASSUMING PUMP HOUSE REMAINS OPERATIONAL DURING NEW BUILDING CONSTRUCTION.
4. EXISTING POLE LIGHT FIXTURE TO BE REMOVED.

ASTRAL ENGINEERS

RUHNAU CLARKE ARCHITECTS

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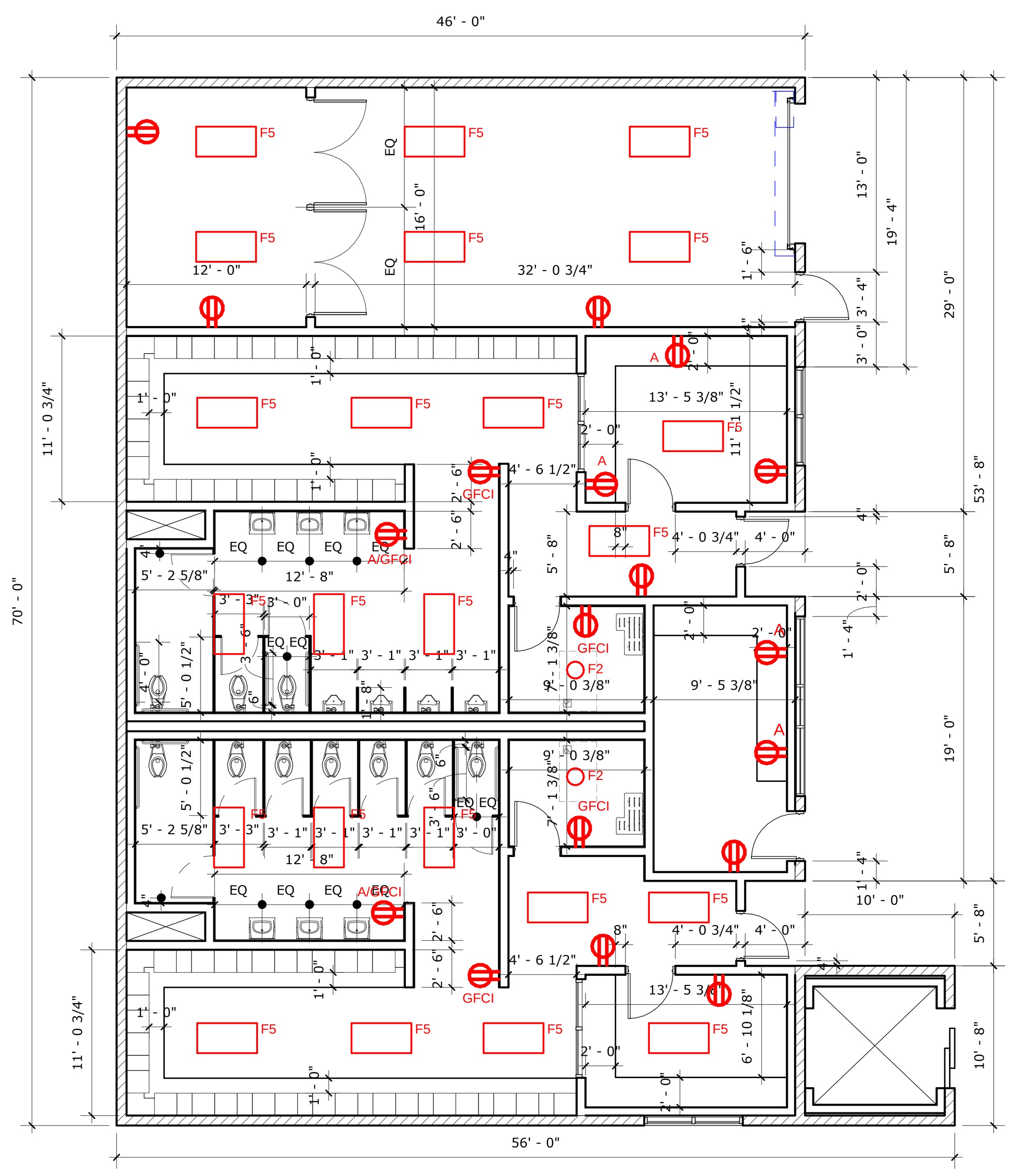
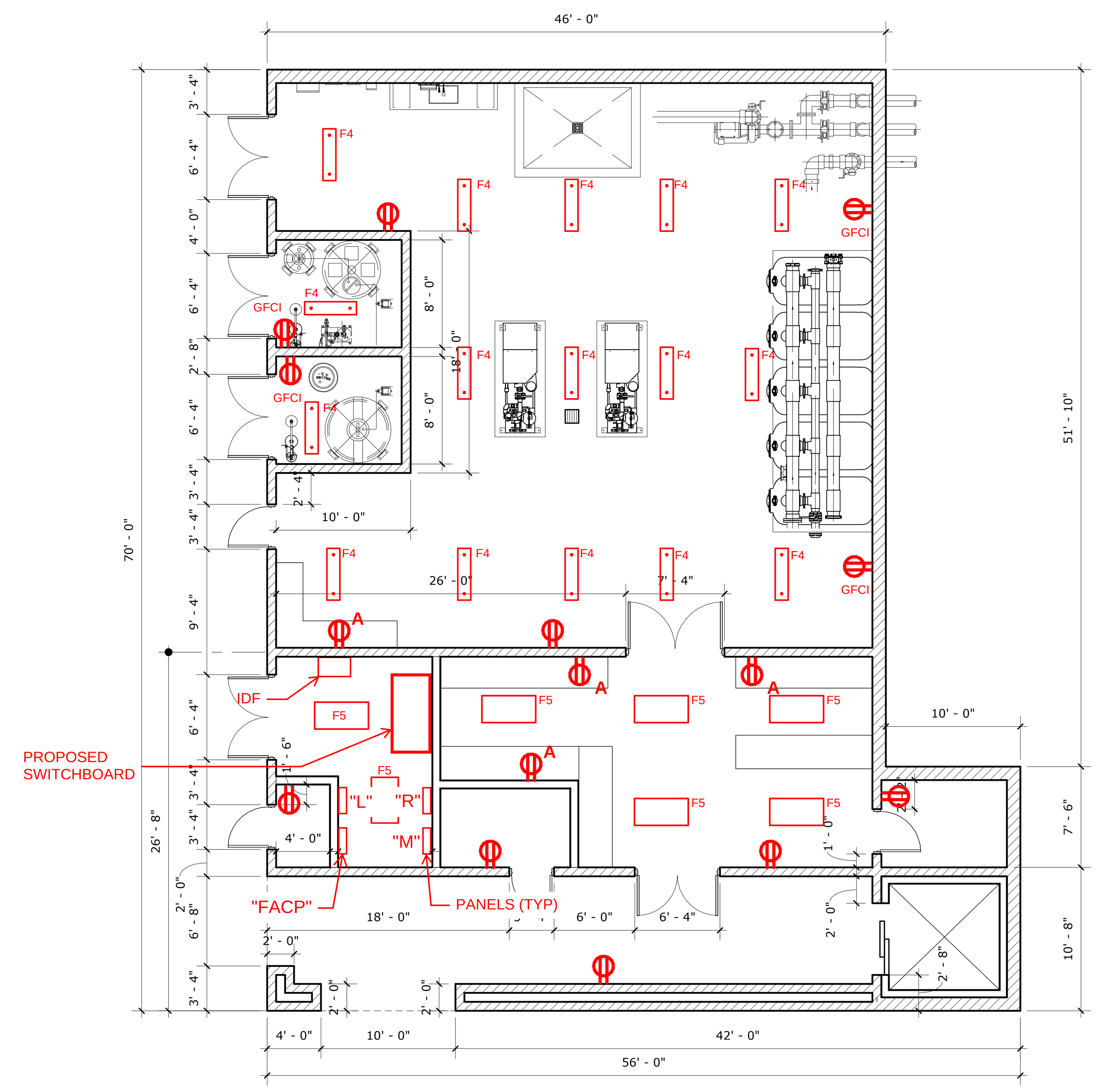
POOL MODERNIZATION
LAGUNA BEACH HIGH SCHOOL
670 PARK AVE, LAGUNA BEACH, CA 92651
LAGUNA BEACH UNIFIED SCHOOL DISTRICT

OVERALL SITE PLAN

ES-1.1



2 PUMP ROOM LEVEL 2
SCALE: 1/8" = 1'-0"



1 PUMP ROOM LEVEL 1
SCALE: 1/8" = 1'-0"

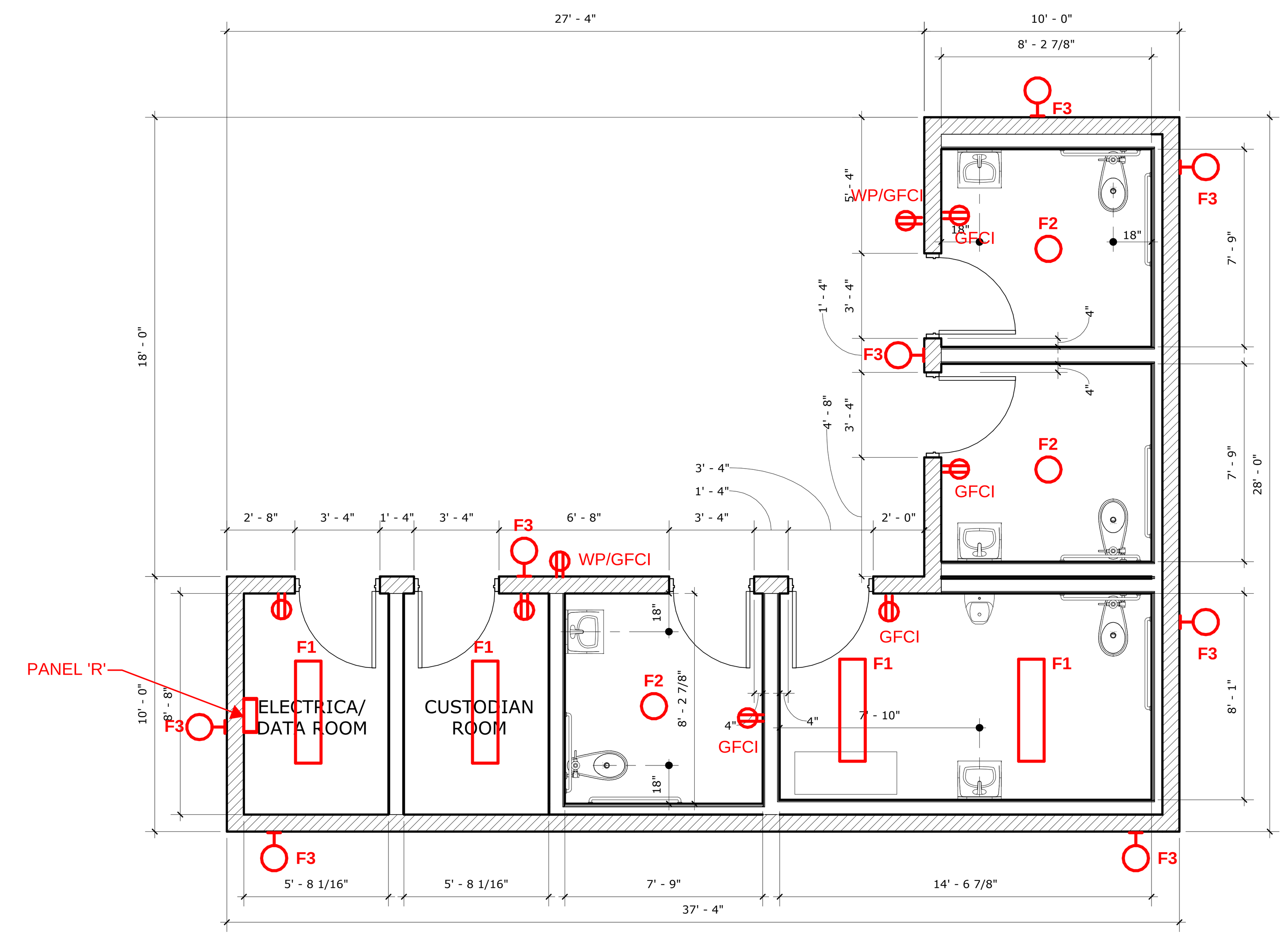
GENERAL NOTES

1.

KEYNOTES

LEGEND

ASTRAL ENGINEERS



1 RESTROOM FLOOR PLAN

SCALE: 1/4" = 1'-0"

GENERAL NOTES

1.

KEYNOTES

LEGEND

ASTRAL ENGINEERS

RUHNAU CLARKE ARCHITECTS

PHASE
SCHEMATIC DEVELOPMENT

DATE
AUGUST 9, 2024

RUHNAUCLARKE.COM

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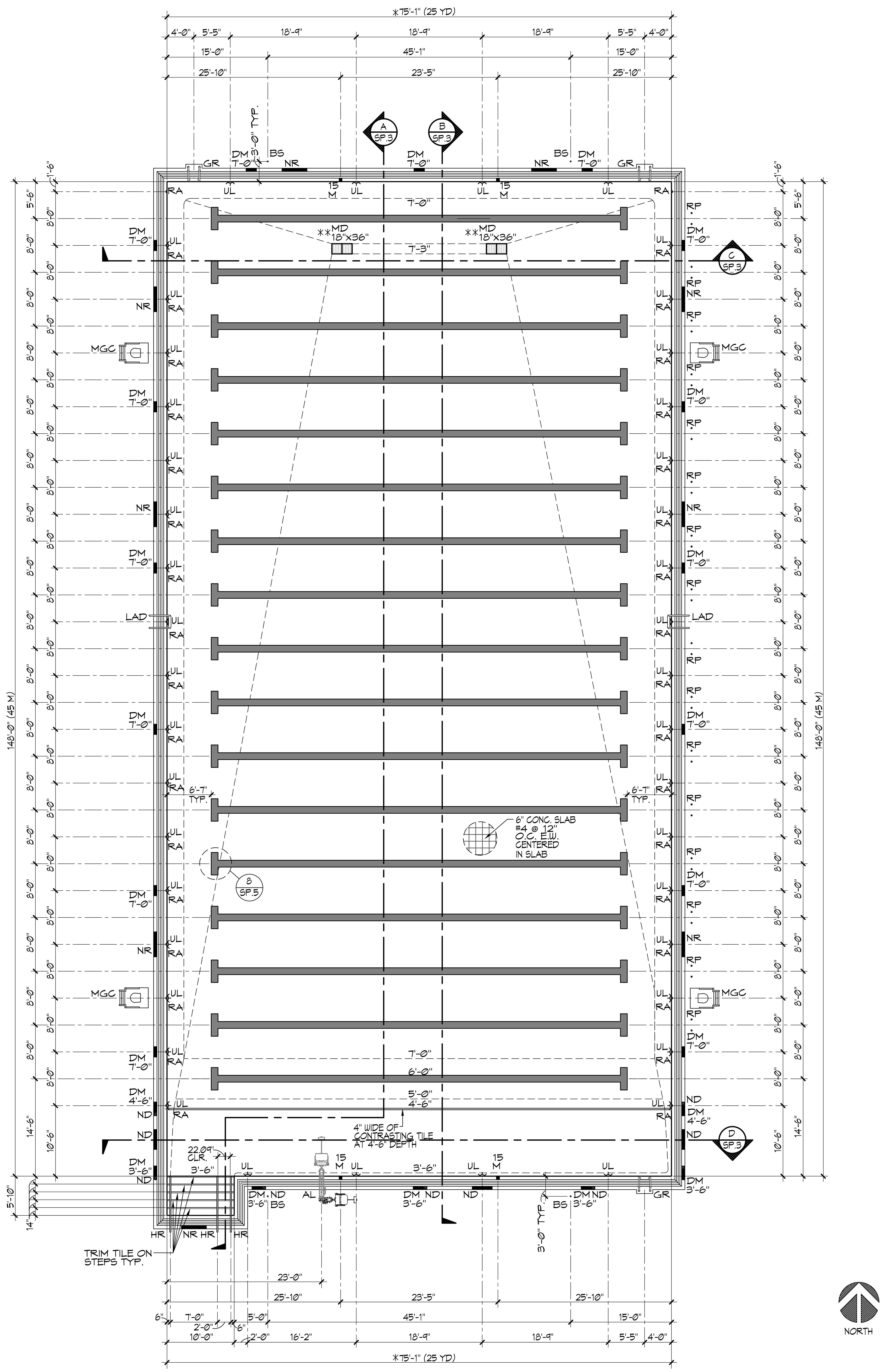
POOL MODERNIZATION
LAGUNA BEACH HIGH SCHOOL
670 PARK AVE, LAGUNA BEACH, CA 92651
LAGUNA BEACH UNIFIED SCHOOL DISTRICT

RESTROOM BUILDING FLOOR PLAN

E2-1.1



SWIMMING POOL DATA

SURFACE AREA	=	11,171 SQ. FT.
PERIMETER	=	458 FT.
DEPTHS	=	3'-6" TO 7'-3"
VOLUME	=	569,781 GAL.
6 HR TURNOVER	=	1,583 GPM

LEGEND

**MD	=	MAIN DRAIN	4 SP.8
GR	=	GRABRAIL	1 SP.7
DM	=	DEPTH MARKER	1 SP.6
NR	=	'NO RUNNING'	2 SP.6
ND	=	'NO DIVING'	2,3 SP.6
RA	=	ROPE ANCHOR	5 SP.7
RP	=	RACING PLATFORM	8 SP.6
BS	=	BACKSTROKE STANCHION	3 SP.7
15M	=	15 METER MARKER	6 SP.5
UL	=	UNDERWATER LIGHT	4 SP.9
MGC	=	MOVEABLE GUARD CHAIR	4 SP.7
AL	=	ACCESSIBLE LIFT	2 SP.6
LAD	=	LADDER	2 SP.8
HR	=	HANDRAIL	7 SP.6

CERTIFICATION REQUIREMENTS

* THE CONTRACTOR SHALL RETAIN AN INDEPENDENT LICENSED SURVEYOR TO PROVIDE PROOF OF COMPLIANCE FOR REQUIRED POOL LENGTHS AS FOLLOWS: (RECOMMEND PATRELL ENG. GROUP (626) 335-4362)

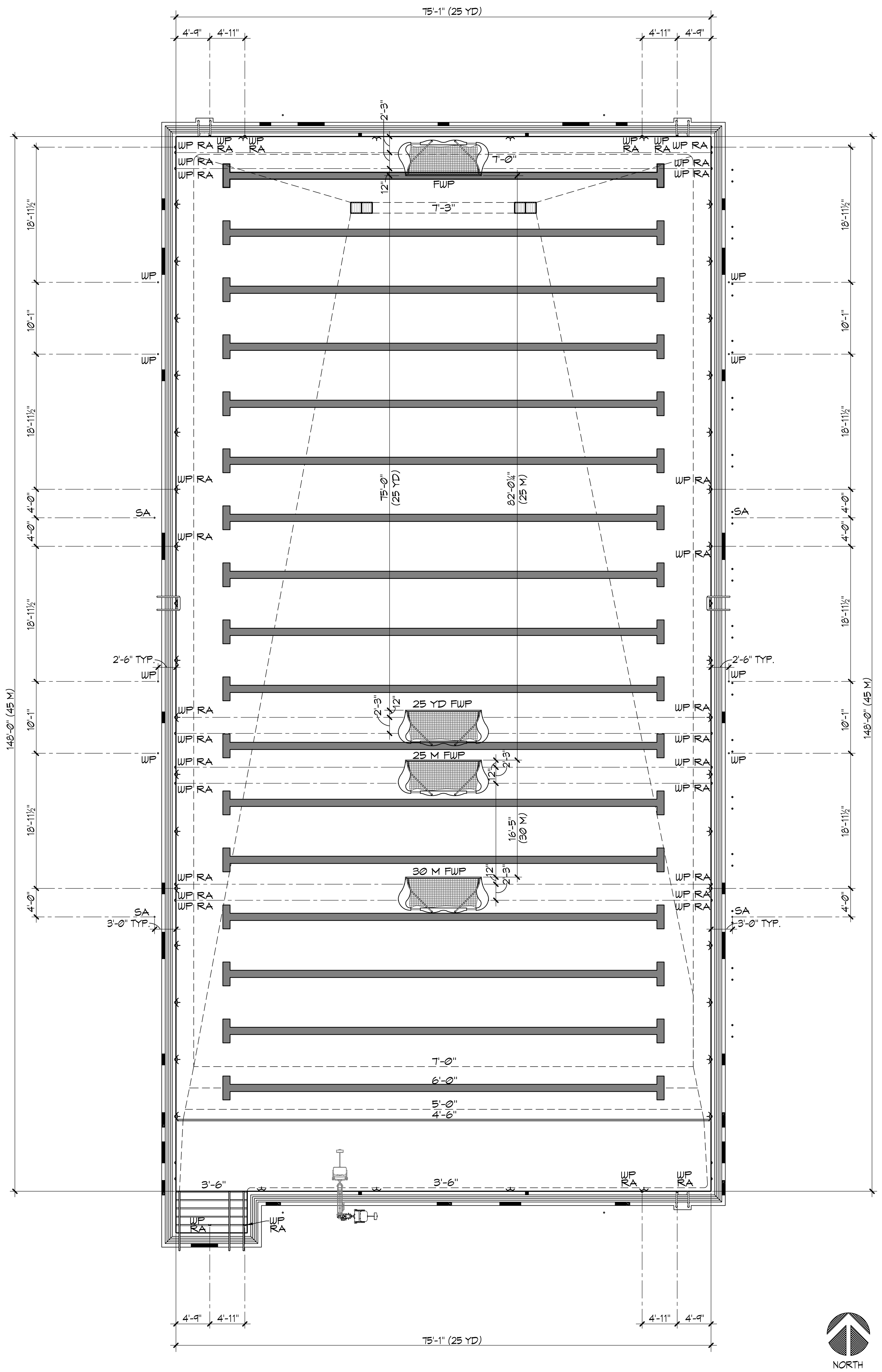
SHORT COURSE-25YDS: (ALLOWS FOR TOUCH PADS AT ONE END) 75'-0 5/16" MIN.: 75'-1 3/16" MAX.

TOLERANCE AGAINST LENGT,H SHALL EXTEND IN A VERTICAL PLANE 0.3M (12") ABOVE AND 0.8M. (2'-7½") BELOW THE SURFACE OF THE WATER AT ALL POINTS OF BOTH END WALLS TYP. OF ALL COURSES.

THE INDEPENDENT LICENSED SURVEYOR SHALL FILL OUT, NOTARIZE AND FILE OFFICIAL CERTIFICATION FORM(S) WITH USA SWIMMING.

** CONTRACTOR SHALL RETAIN A LICENSED ENGINEER TO CERTIFY THE FIELD BUILT MAIN DRAIN SYSTEMS AS V.G.B. COMPLIANT.

1 SWIMMING POOL LAYOUT PLAN (SWIMMING) 1/8"=1'-0"



SWIMMING POOL DATA

SURFACE AREA	=	11,171 SQ. FT.
PERIMETER	=	458 FT.
DEPTHS	=	3'-6" TO 7'-3"
VOLUME	=	569,781 GAL.
6 HR TURNOVER	=	1,583 GPM

LEGEND

SA	=	STANCHION ANCHOR	3 / SP.7
FWP	=	FLOATING WATERPOLO	1 / SP.8
WP	=	WATERPOLO (STATIONARY)	3 / SP.8
RA	=	ROPE ANCHOR	5 / SP.7

1 SWIMMING POOL LAYOUT PLAN (WATERPOLO) ⅛"=1'-0"

RUHNAU CLARKE ARCHITECTS

PHASE
SCHEMATIC DEVELOPMENT

DATE
AUGUST 9, 2024

AQUATIC DESIGN GROUP
2226 Faraday Ave. Carlsbad, CA 92008
AquaticDesignGroup.com
760.438.8400

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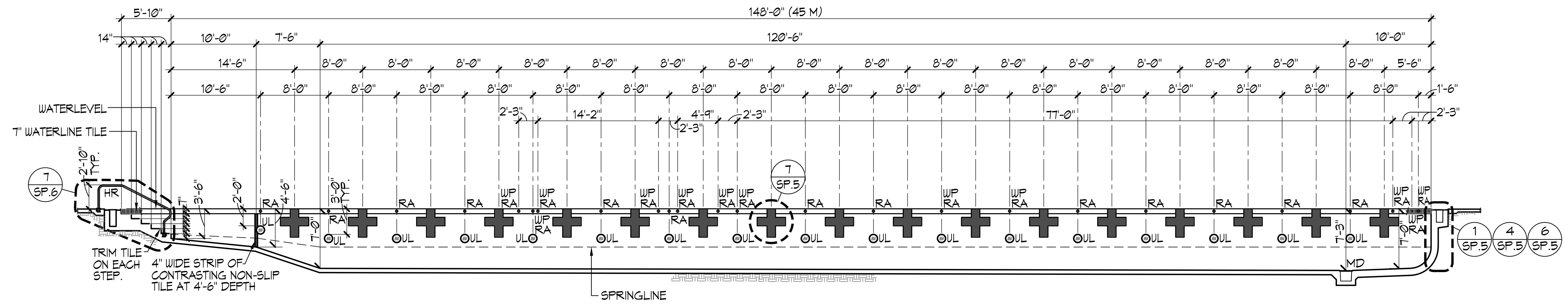
3775 TENTH STREET, RIVERSIDE CALIFORNIA 92501 (951) 684 4664 / 5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010 (760) 438 5899

POOL MODERNIZATION
LAGUNA BEACH HIGH SCHOOL
670 PARK AVE, LAGUNA BEACH, CA 92651
LAGUNA BEACH UNIFIED SCHOOL DISTRICT

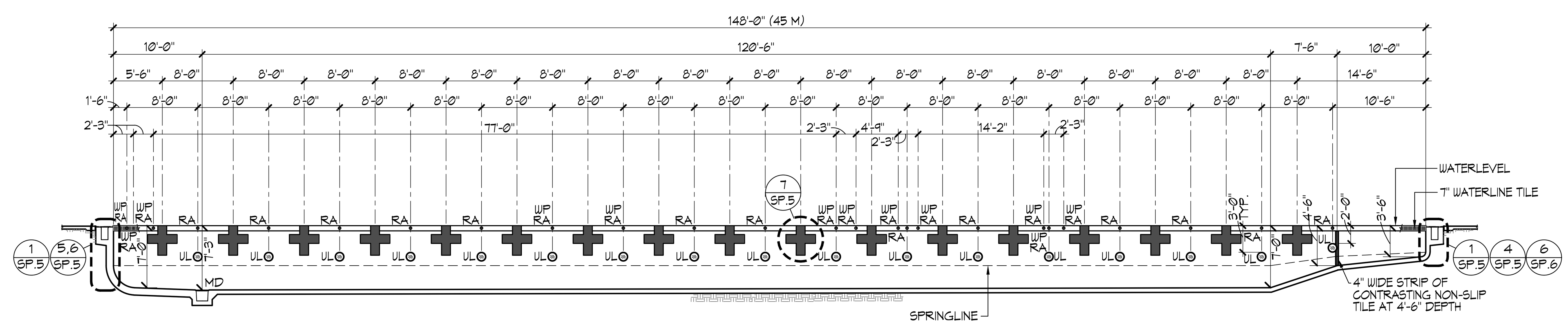
SWIMMING POOL LAYOUT PLAN (WATERPOLO)

SP.2

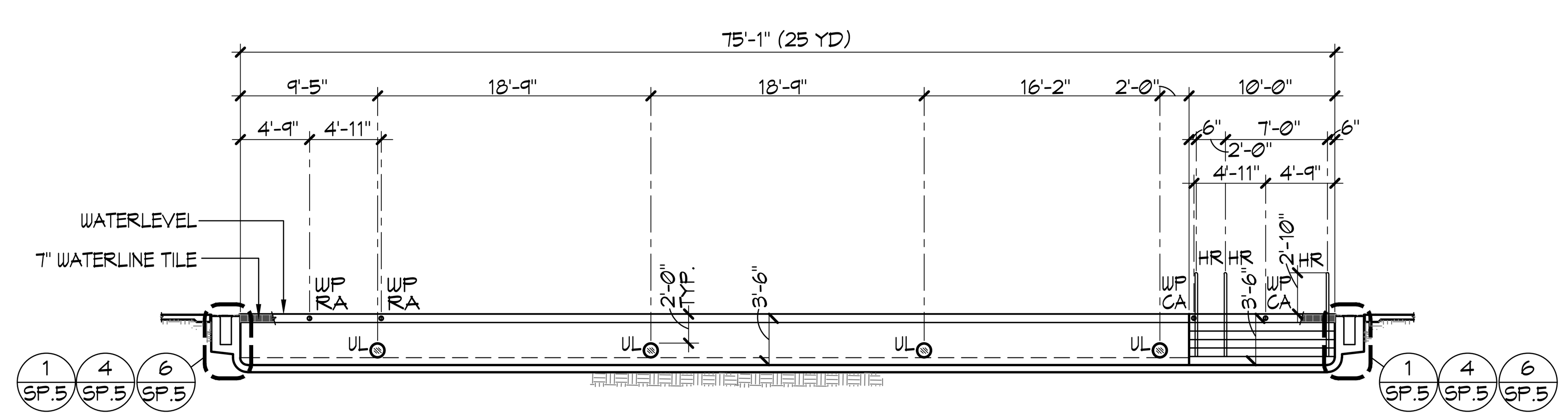
1-43-22



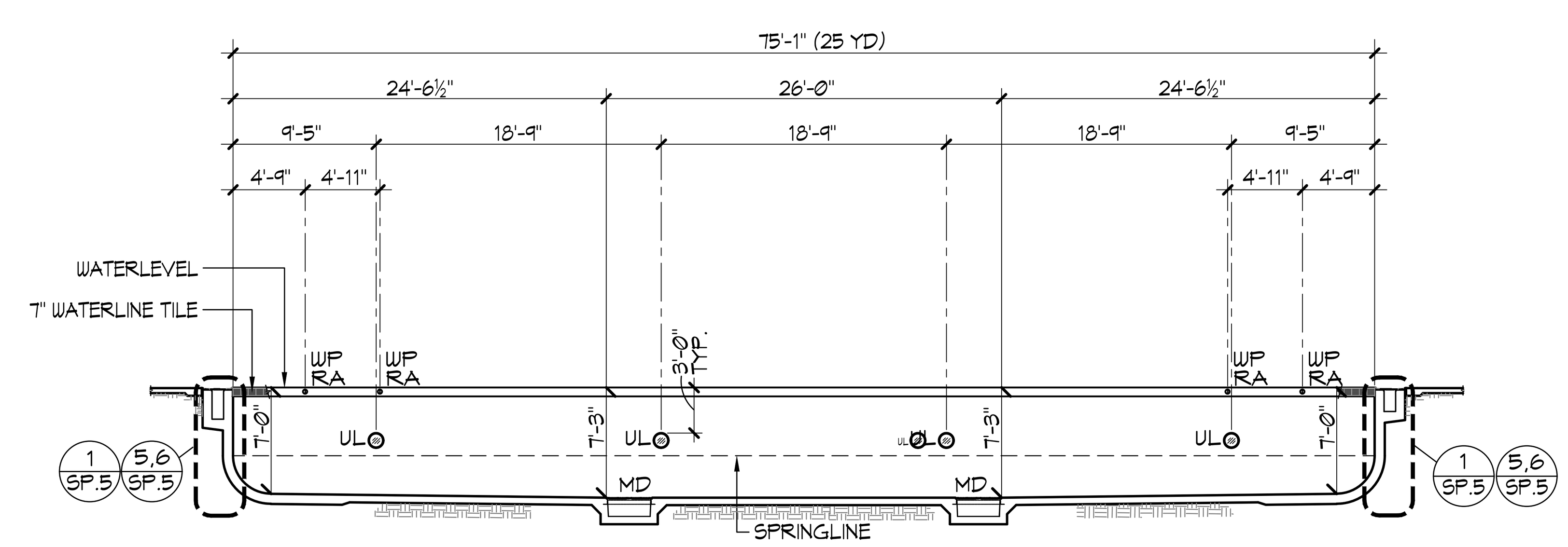
A SWIMMING POOL SECTION ⅛"=1'-0"



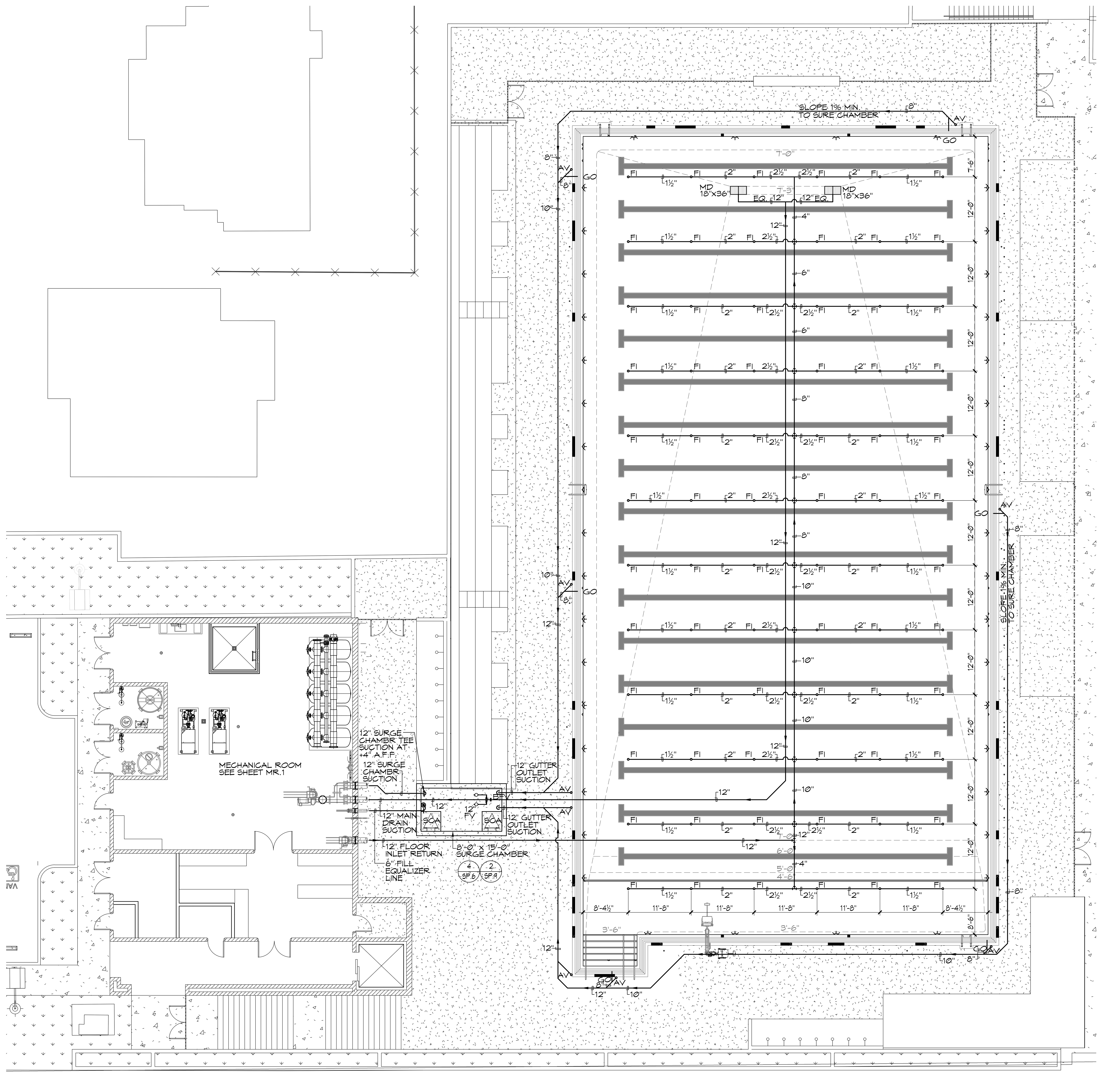
B SWIMMING POOL SECTION ⅛"=1'-0"



C SWIMMING POOL SECTION ⅛"=1'-0"



D SWIMMING POOL SECTION ⅛"=1'-0"



SWIMMING POOL DATA

SURFACE AREA	=	11,171 SQ. FT.
PERIMETER	=	458 FT.
DEPTHS	=	3'-6" TO 7'-3"
VOLUME	=	569,781 GAL.
6 HR TURNOVER	=	1,583 GPM

SWIMMING POOL SURGE DATA

REQUIRED SURGE CAPACITY	=	11,171 GAL.
SURGE IN PERIMETER GUTTER	=	5,145 GAL.
SURGE IN GUTTER PIPING	=	1,670 GAL.
8' x 15' SURGE IN SURGE CHAMBER	=	4,494 GAL.
TOTAL SUPPLIED SURGE	=	11,309 GAL.

∴ 11,309 GAL. > 11,171 GAL. OK

LEGEND

MD	=	MAIN DRAIN	4 / SP.8
FI	=	FLOOR INLET	5 / SP.8
GO	=	GUTTER OUTLET	7 / SP.8
AV	=	AIR VENT	6 / SP.8
SCA	=	SURGE CHAMBER ACCESS	5 / SP.6
BFV	=	BUTTERFLY VALVE	3 / SP.9
FV	=	FLOAT VALVE	
A.F.F.	=	ABOVE FINISH FLOOR	

1 / SP.9

NOTES:

1. PIPING ROUTES ARE SCHEMATIC IN NATURE AND SHOWN ON PLANS FOR CLARITY. CONTRACTOR SHALL ROUTE PIPING ACCORDINGLY TO MEET NOTED INVERT ELEVATIONS. REFER TO REFERENCED DETAIL FOR PIPE SPACING REQUIREMENTS.
2. ALL BELOW GRADE POOL PIPING SHALL BE SCHEDULE 40 PVC AND ALL ABOVE GRADE POOL PIPING SHALL BE SCHEDULE 80 PVC.
3 COORDINATE ALL PIPING WITH SITE AND BUILDING UTILITIES INCLUDING PIPING, CONDUITS / STRUCTURES AND THE LIKE. COORDINATE ROUTING OF PIPING THROUGH STRUCTURAL SLAB. ALL PIPING SHALL HAVE UNIFORM SLOPE IN ONE DIRECTION.
4. SURGE CHAMBER TEE SUCTION SHALL BE SET AT +6" A.F.F. MAINTAIN MAXIMUM SEPARATION BETWEEN SUCTION AND INFLUENT PIPING WITHIN THE SURGE CHAMBER.
5. EACH MAIN DRAIN SHALL BE EQUIPPED WITH HYDROSTATIC RELIEF VALVE PER RECOMMENDATIONS OF GEOTECHNICAL REPORT

NORTH

1 SWIMMING POOL PIPING PLAN ⅛"=1'-0"

RUHNAU CLARKE ARCHITECTS

PHASE
SCHEMATIC DEVELOPMENT

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2226 Faraday Ave. Carlsbad, CA 92008
AquaticDesignGroup.com
760.438.8400

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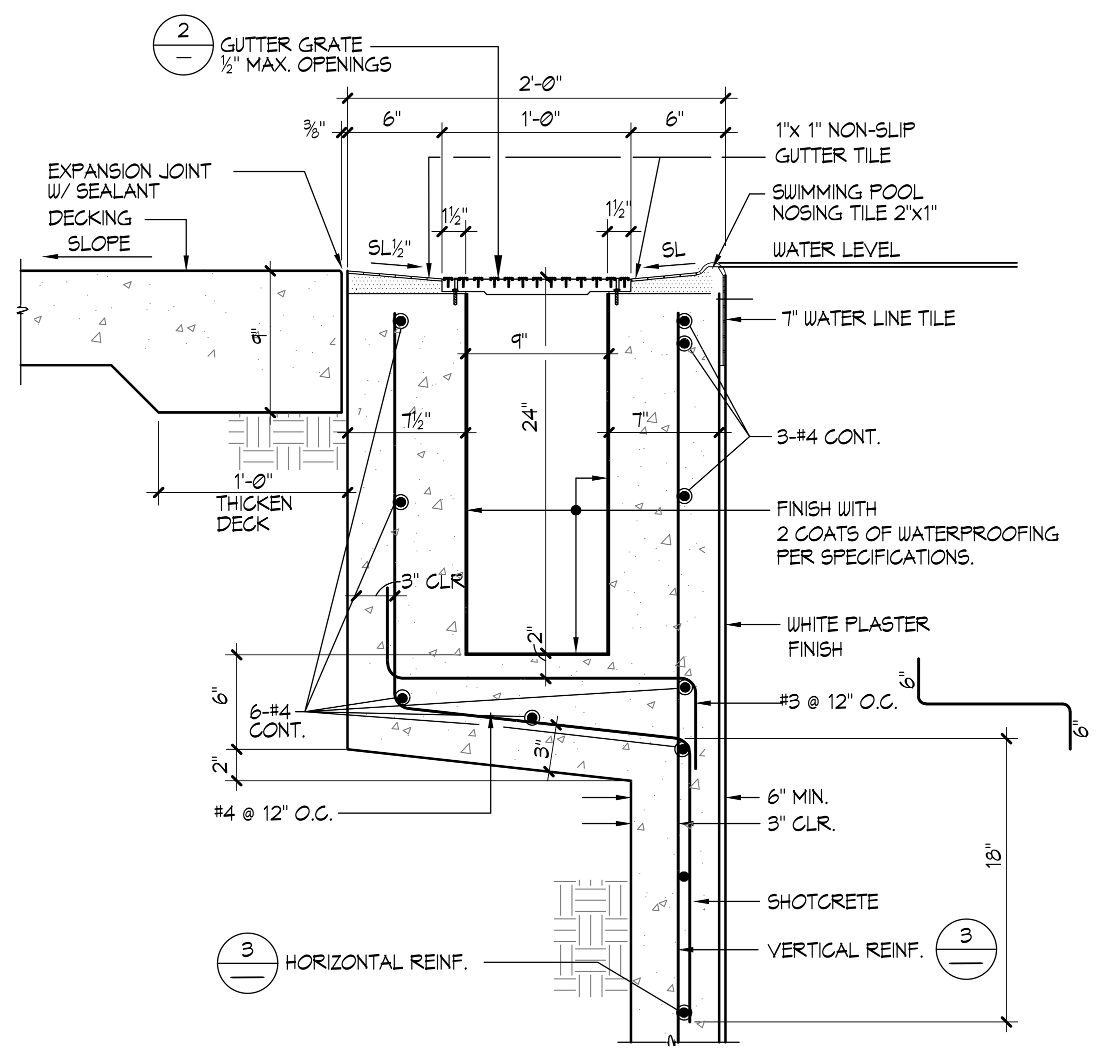
POOL MODERNIZATION
LAGUNA BEACH HIGH SCHOOL
670 PARK AVE, LAGUNA BEACH, CA 92651
LAGUNA BEACH UNIFIED SCHOOL DISTRICT

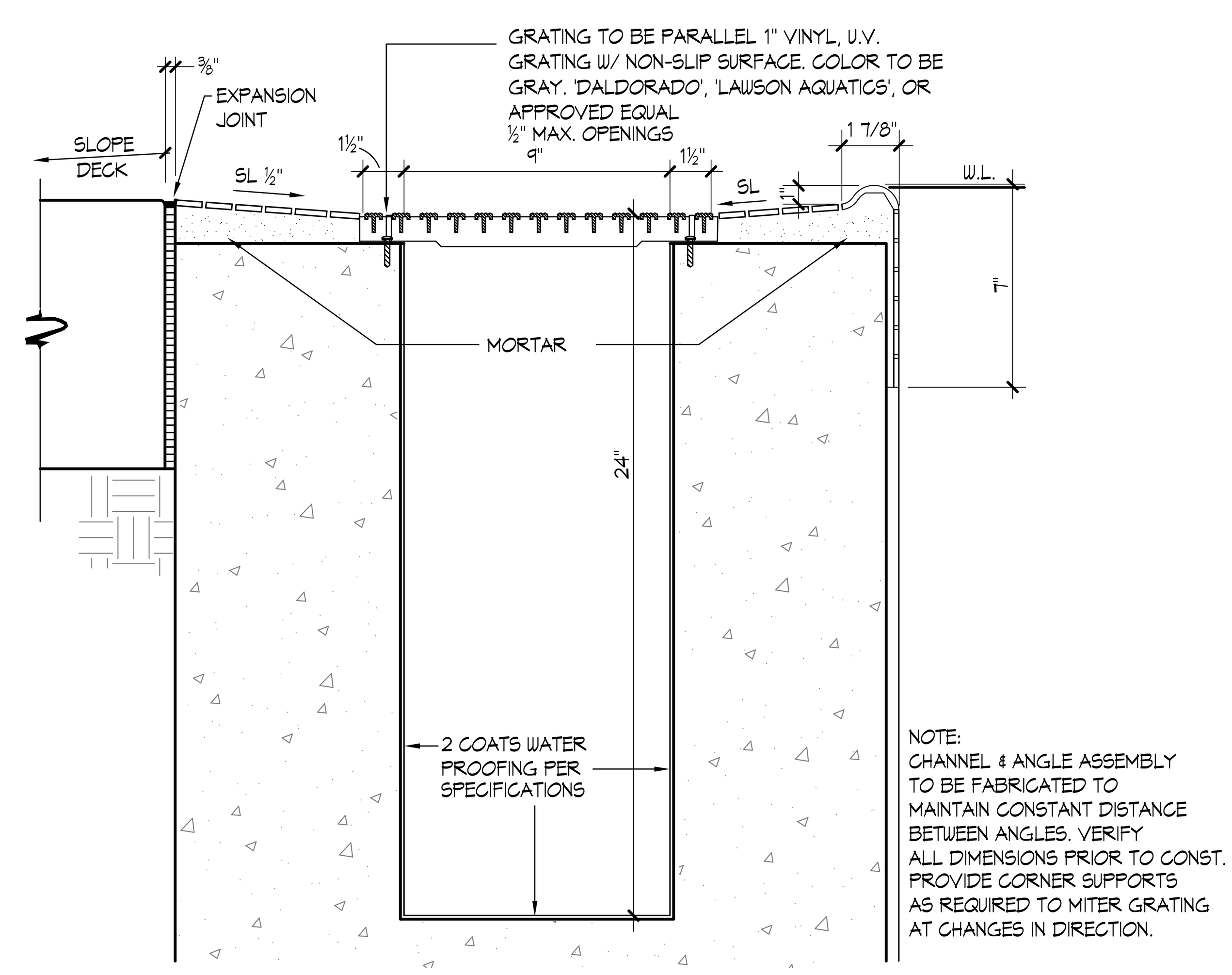
SWIMMING POOL PIPING PLAN

SP.4

1-43-22



1 RIM FLOW GUTTER 1½"=1'-0"



2 RIM FLOW GUTTER/GRATE 3"=1'-0"

REINFORCEMENT TABLE						
WATER DEPTH	"t"	"ds"	RADIUS	VERTICAL REINF.	HORIZONTAL REINF.	TRANSITION TO FLOOR REINF. BEYOND END RADIUS
3'-6"	6"	3"	6"	#4 @ 12" O.C.	#4 @ 12" O.C.	24"
3'-7" TO 5'-0"	8"	5"	6" TO 18"	#4 @ 12" O.C.	#4 @ 12" O.C.	24"
5'-1" TO 7'-3"	10"	7"	18" TO 2'-6"	#4 @ 6" O.C.	#4 @ 8" O.C.	24"

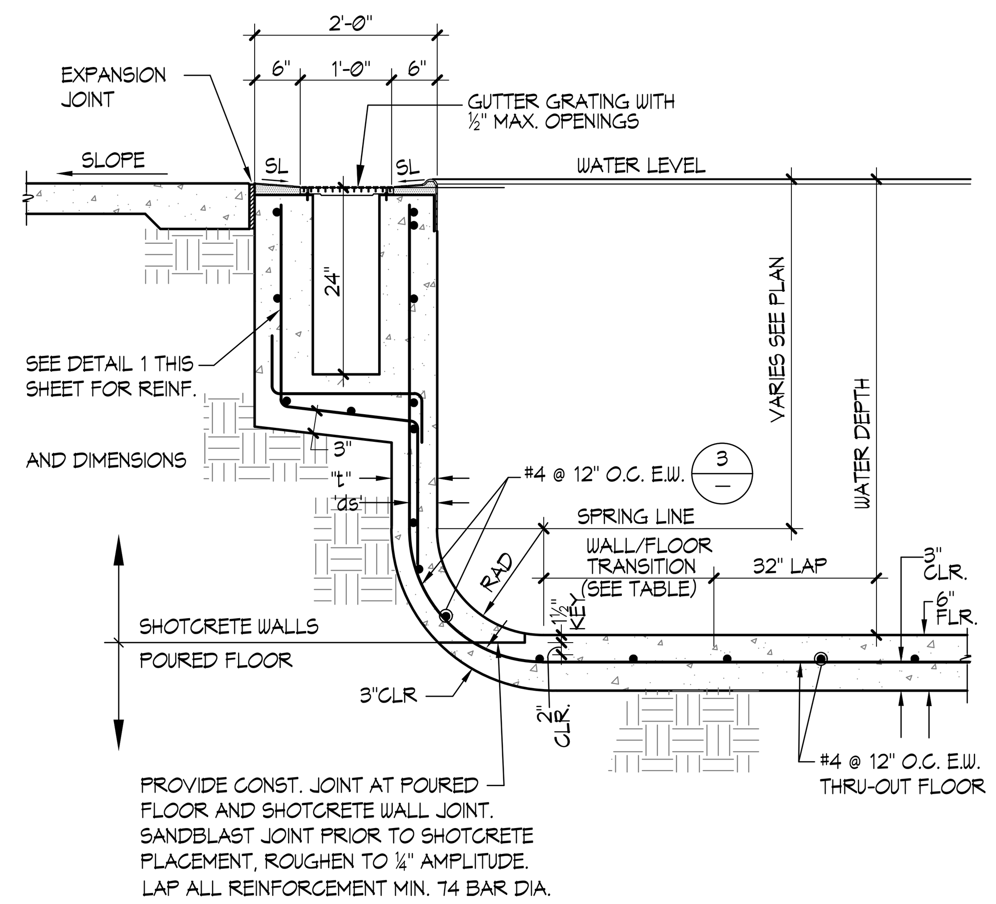
CONCRETE NOTES:

1. THE MINIMUM ULTIMATE COMPRESSIVE STRENGTH AT 28 DAYS WITH A 0.40 MIN. TO 0.45 MAX. WATER/CEMENT RATIO
   POOL = 4000 PSI
   SLAB-ON-GRADE = 4000 PSI
2. CONTINUOUS INSPECTION BY A DSA APPROVED INSPECTOR IS REQUIRED OF ALL CONCRETE PLACEMENT.
3. ALL CEMENT USED SHALL CONFORM TO A.S.T.M. C-150 TYPE II
4. FINE AND COARSE AGGREGATE SHALL CONFORM TO A.S.T.M. C-33. MAXIMUM SIZE OF AGGREGATE TO BE 1".
5. CONCRETE MIX DESIGNS SHALL BE BASED UPON ACI-318 SECTIONS 19.3.2 AND 26.4.2.
6. CONCRETE SHALL BE TESTED AND INSPECTED PER SECTION CBC 1705A.3 AND ACI 318, SECTION 26.12 AND MODIFIED PER 1905A.1.17.
7. REMOVAL OF FORMS SHALL COMPLY WITH ACI-318 SECTION 26.11.2.
8. ALL REINFORCING SHALL BE ASTM A-615, GRADE 60, UNLESS OTHERWISE NOTED. LAPS SHALL BE 64 BAR DIA.

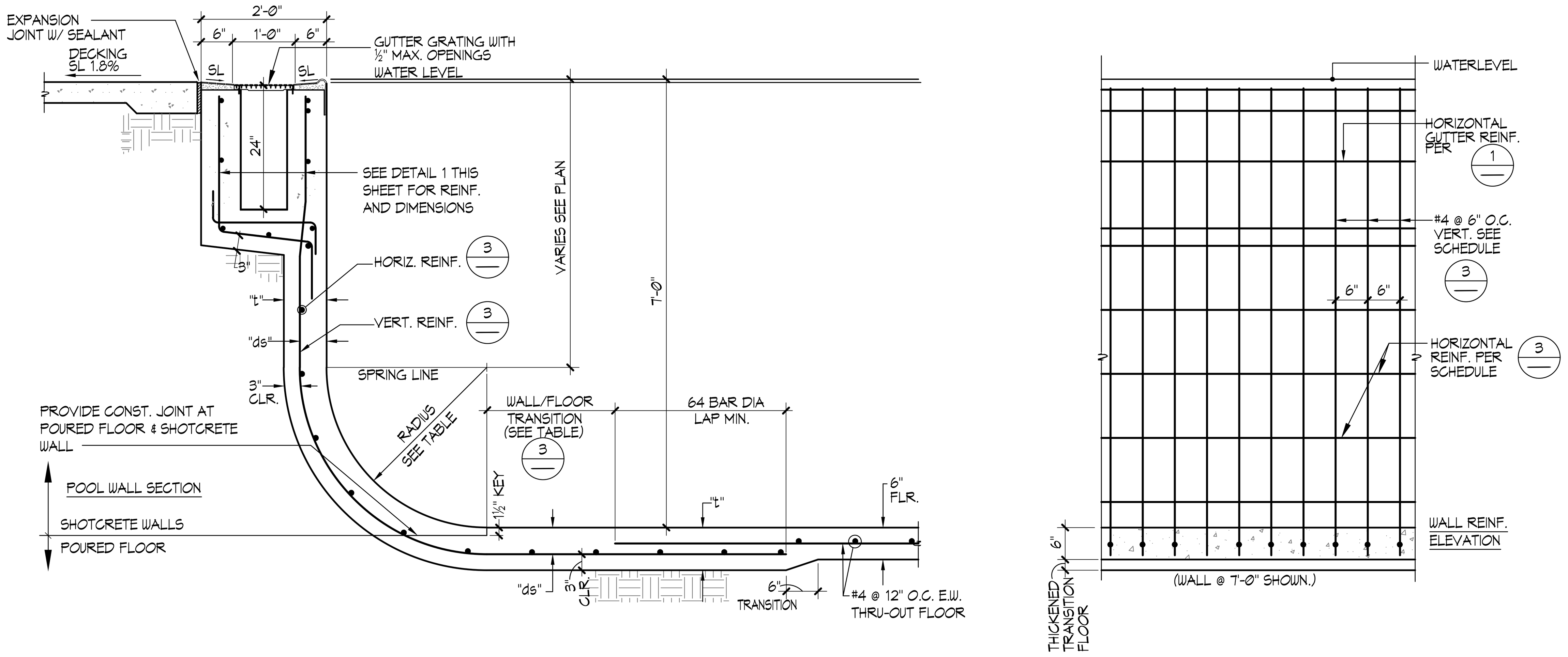
SHOTCRETE NOTES:

1. SHOTCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS. SHOTCRETE MATERIAL SHALL HAVE A WATER/CEMENT RATIO OF 0.40 MIN. TO 0.45 MAX. PER ACI 506R, PART 2, PRODUCTS, SECTION 2.5.3.3, WET-MIX PROCESS.
2. CONTINUOUS INSPECTION BY A D.S.A. APPROVED INSPECTOR IS REQUIRED OF ALL SHOTCRETE PLACEMENT.
3. ALL CEMENT USED SHALL CONFORM TO A.S.T.M. C-150 TYPE II
4. FINE AND COARSE AGGREGATE SHALL CONFORM TO A.S.T.M. C-33, AND SHALL CONFORM TO COARSE AGGREGATE GRADING NO. 2 PER ACI 506R TABLE 1.1.1. MAXIMUM SIZE OF AGGREGATE TO BE ⅜".
5. SHOTCRETE MIX DESIGNS SHALL BE PER CBC ACI 318-19 SECTION 26.4
6. SHOTCRETE SHALL BE TESTED AND INSPECTED PER CBC 1705A.3 AND ACI 318-19 SECTIONS 26.12 AND 26.13.
7. ANCHOR BOLTS, ANCHORS, DOWELS, INSERTS, ETC. SHALL BE SECURELY TIED IN PLACE PRIOR TO PLACING OF SHOTCRETE.
8. ALL REINFORCEMENT WITHIN SHOTCRETE SHALL MAINTAIN THE GREATER OF 6d AND 2½" CLEAR SPACING BETWEEN BARS, NON-CONTACT SPLICES.
9. THE FILM OF LAITANCE WHICH FORMS ON THE SURFACE OF THE SHOTCRETE SHALL BE REMOVED WITHIN APPROXIMATELY TWO HOURS AFTER APPLICATION BY BRUSHING WITH A STIFF BROOM. IF THIS IS NOT REMOVED WITHIN TWO HOURS, IT SHALL BE REMOVED BY THOROUGH WIRE BRUSHING OR SAND BLASTING. CONSTRUCTION JOINTS OVER EIGHT HOURS OLD SHALL BE THORUGHLY CLEANED WITH AIR AND WATER PRIOR TO RECEIVING SHOTCRETE.
10. ALL REINFORCING SHALL BE ASTM A-615, GRADE 60, UNLESS OTHERWISE NOTED. LAPS SHALL BE 64 BAR DIA.
11. PRE-CONSTRUCTION TEST AND REPORT IS REQUIRED PER ACI-318 AND CBC 1705A.3.9.2.

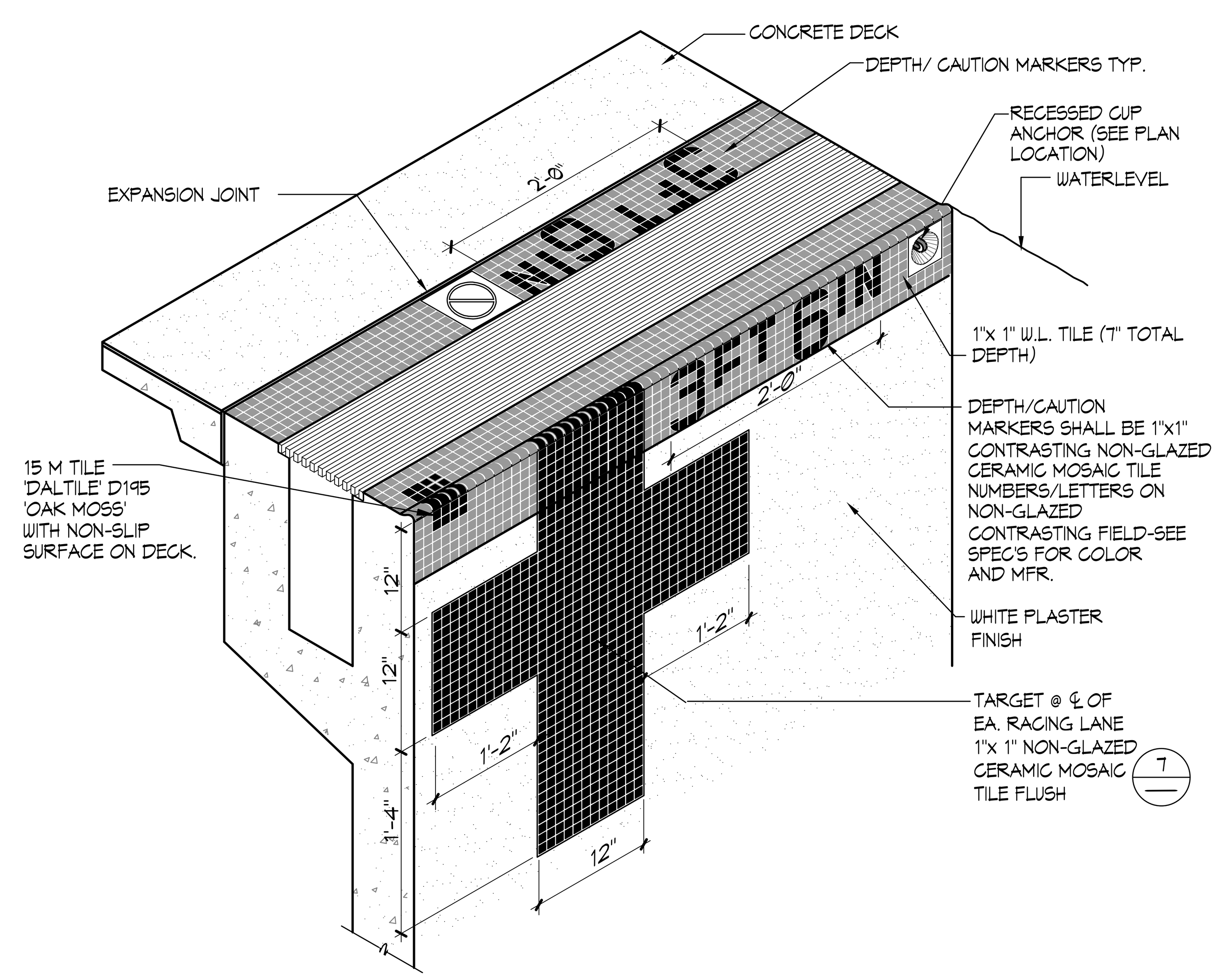
3 REINFORCEMENT TABLE



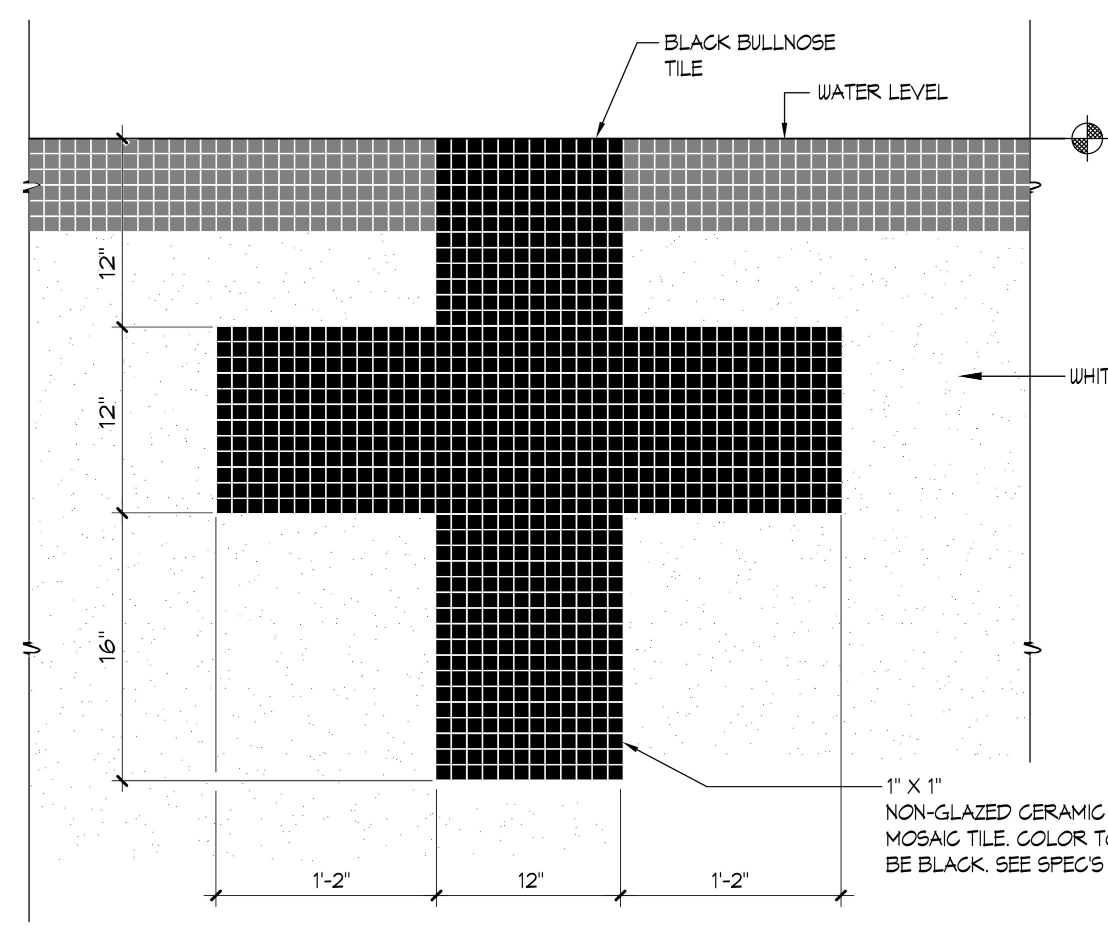
4 POOL WALL 3'-6" TO 5'-0" ¾" = 1'-0"



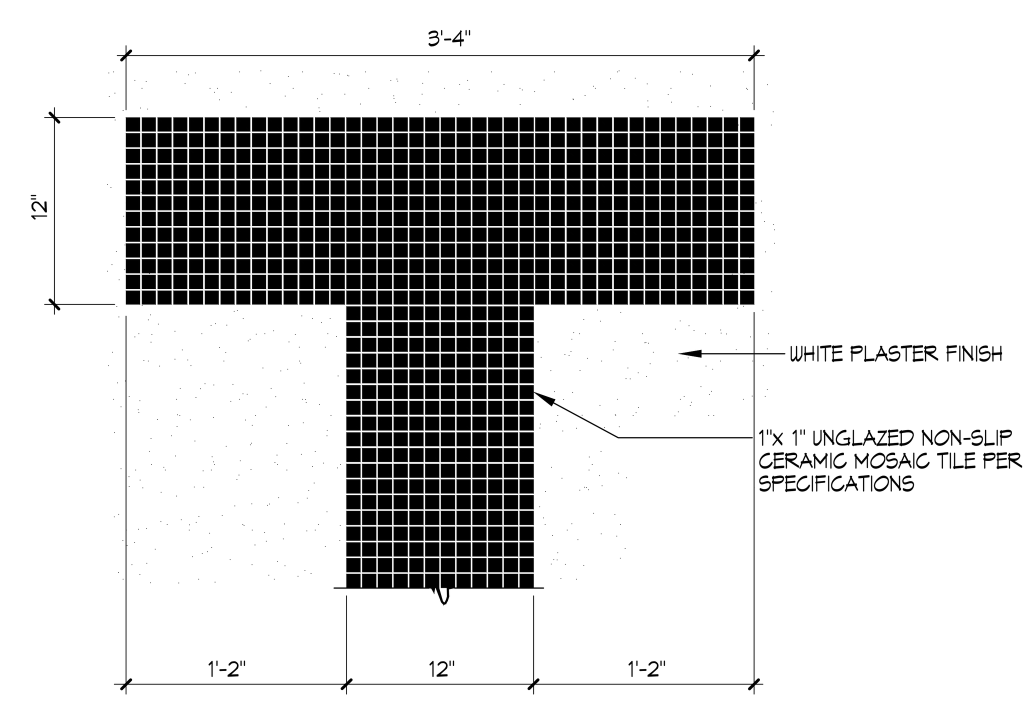
5 POOL WALL 5'-1" TO 7'-3" ¾"=1'-0"



6 TYPICAL RIM FLOW GUTTER PERSPECTIVE NO SCALE

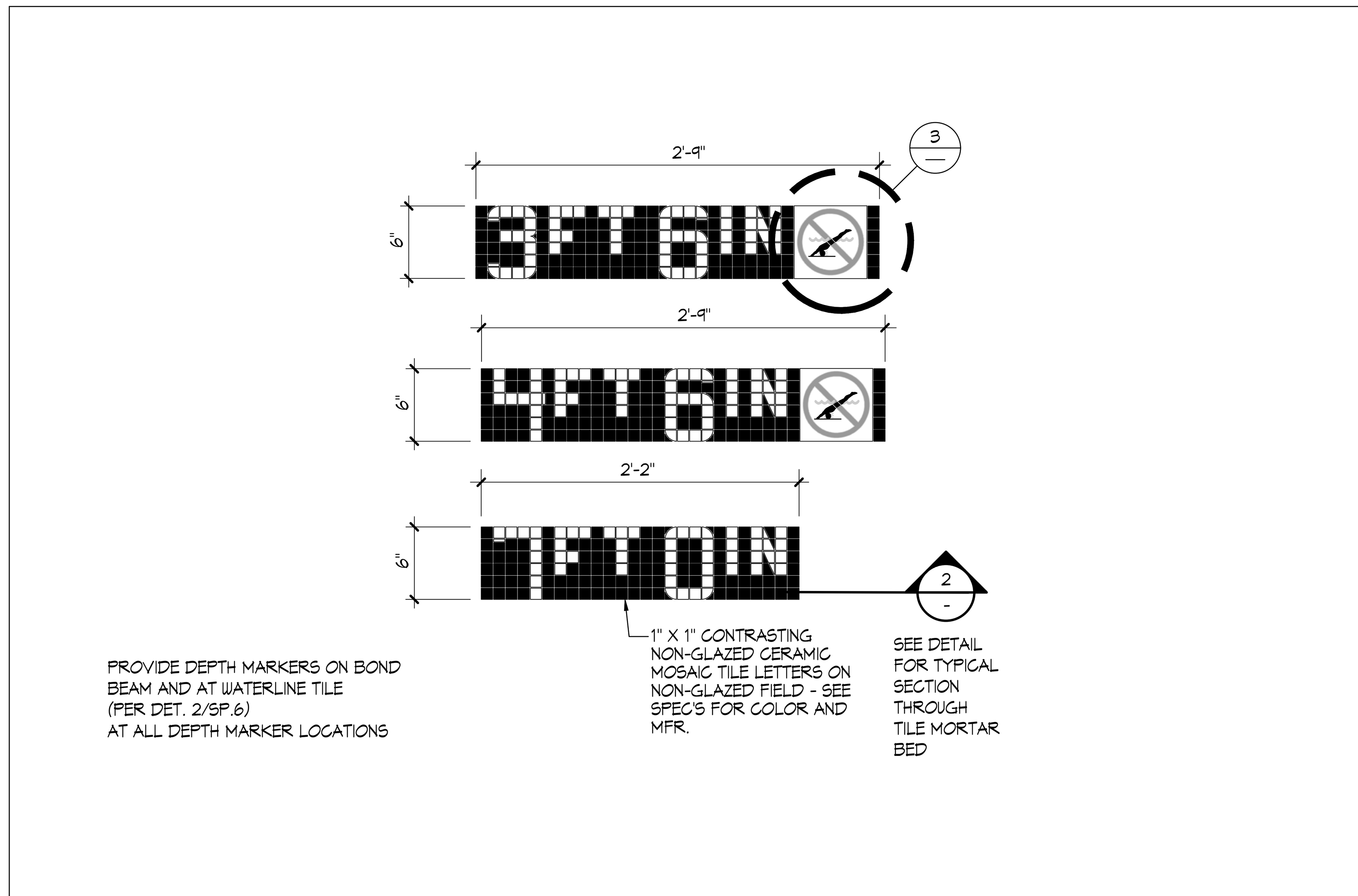


7 END WALL TARGETS 1½" = 1'-0"

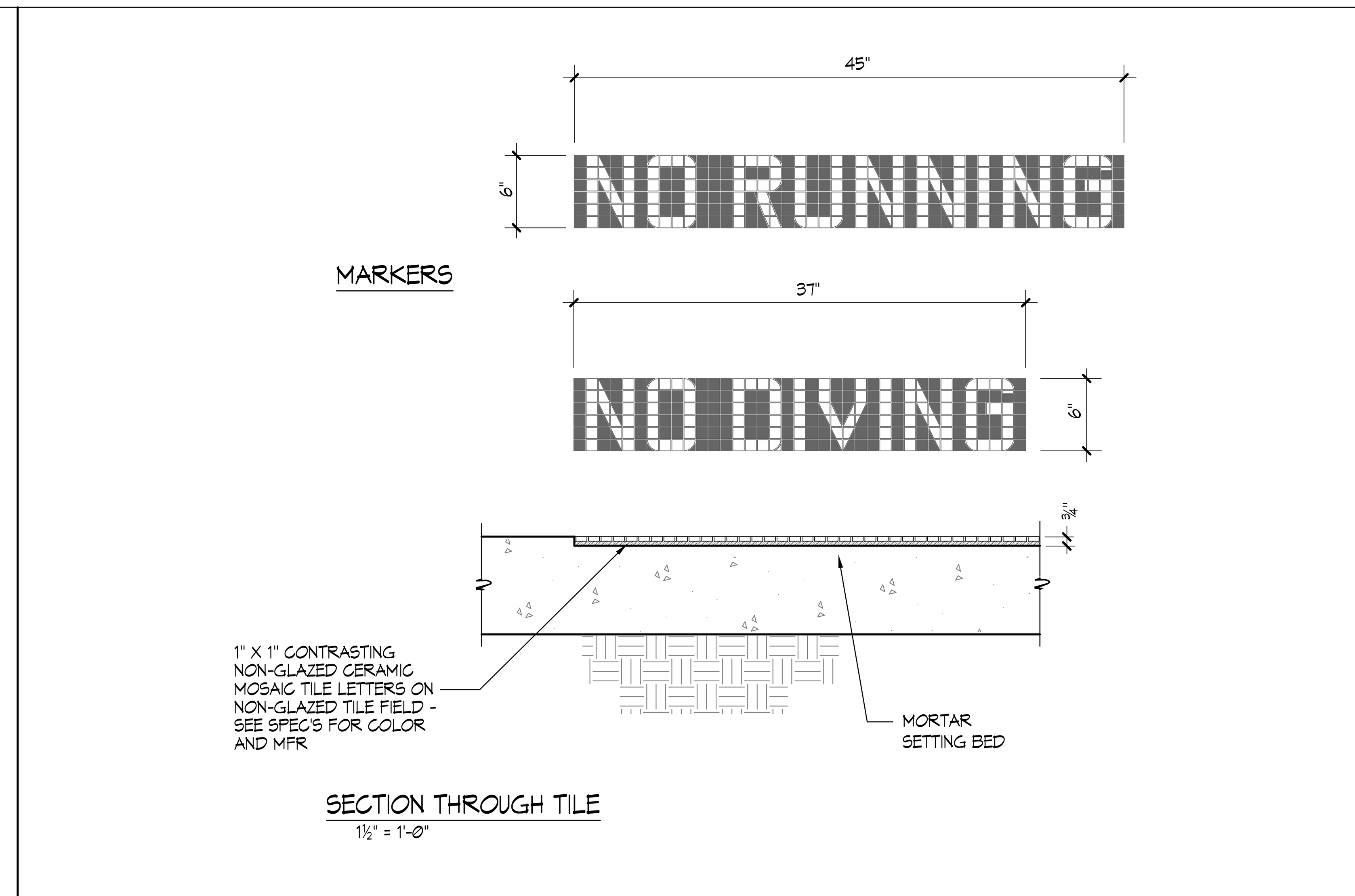


PLAN VIEW

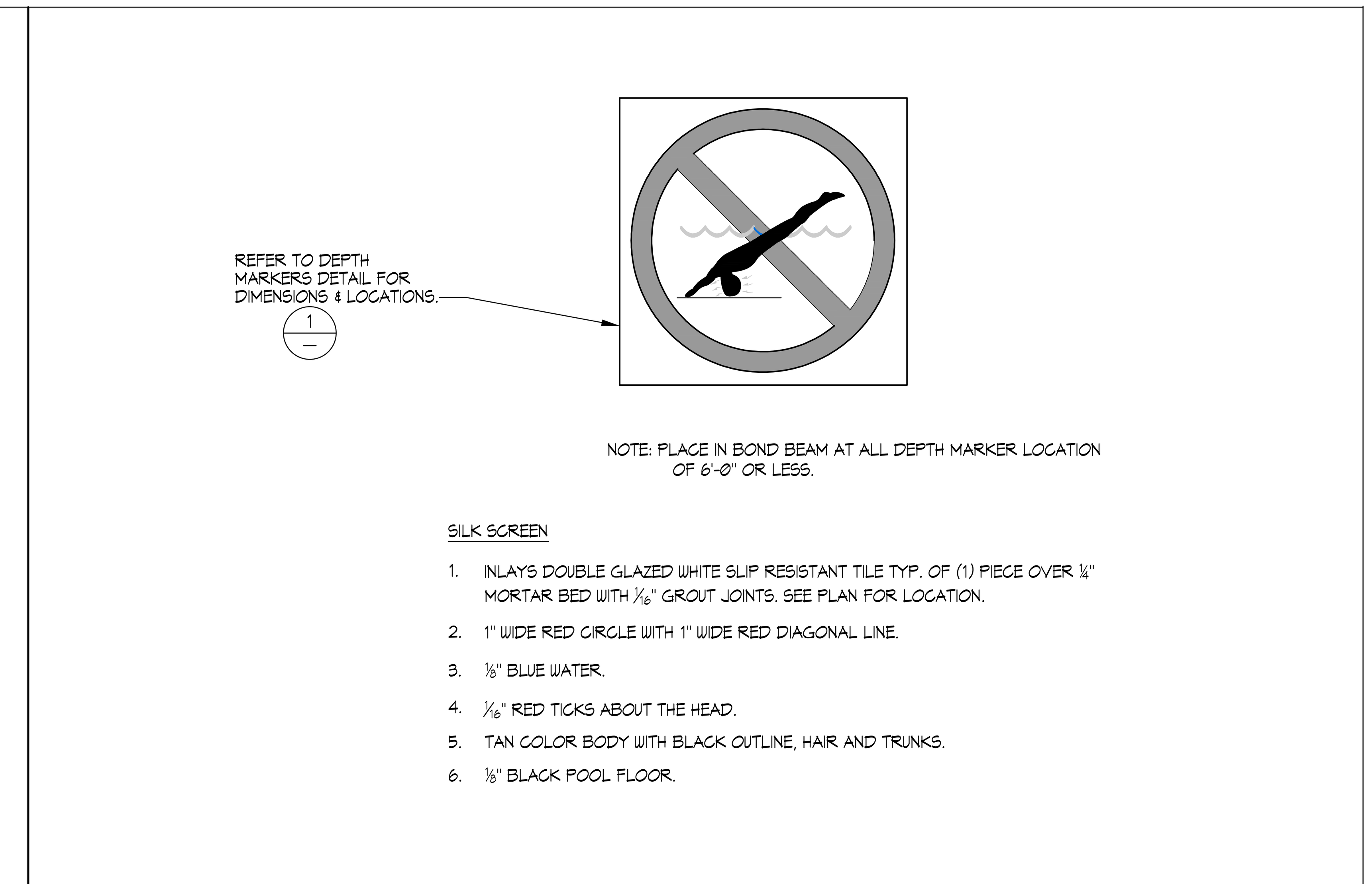
8 RACING LANE LINE 1½"=1'-0"



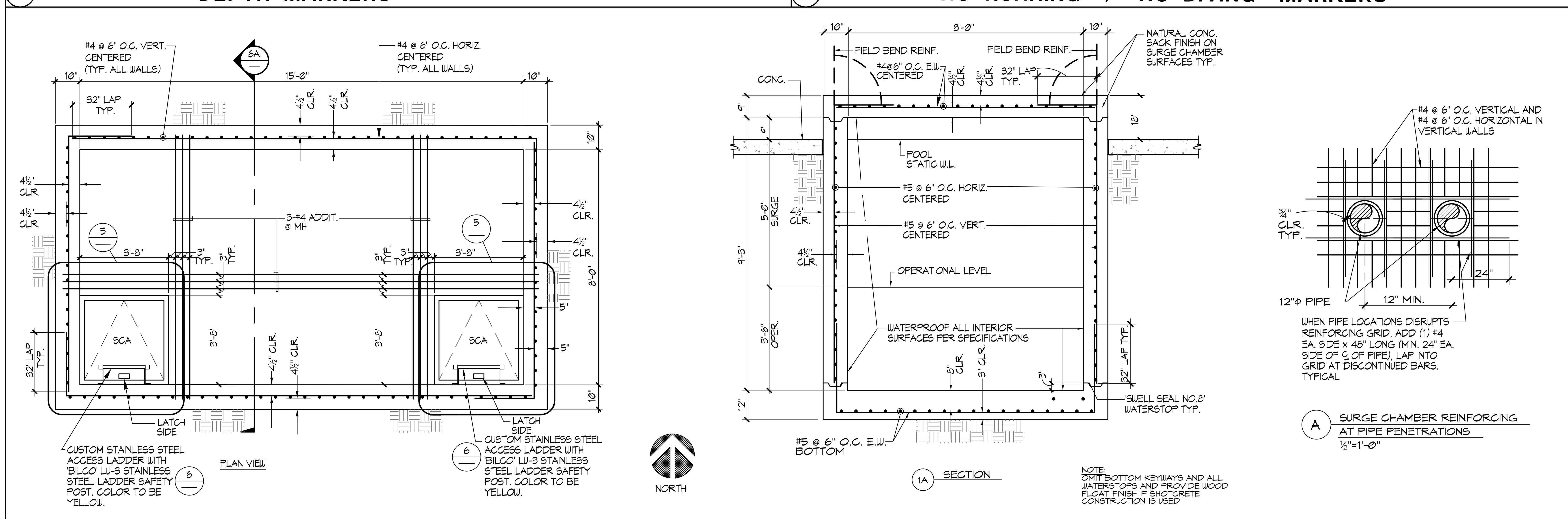
1 DEPTH MARKERS 1½" = 1'-0"



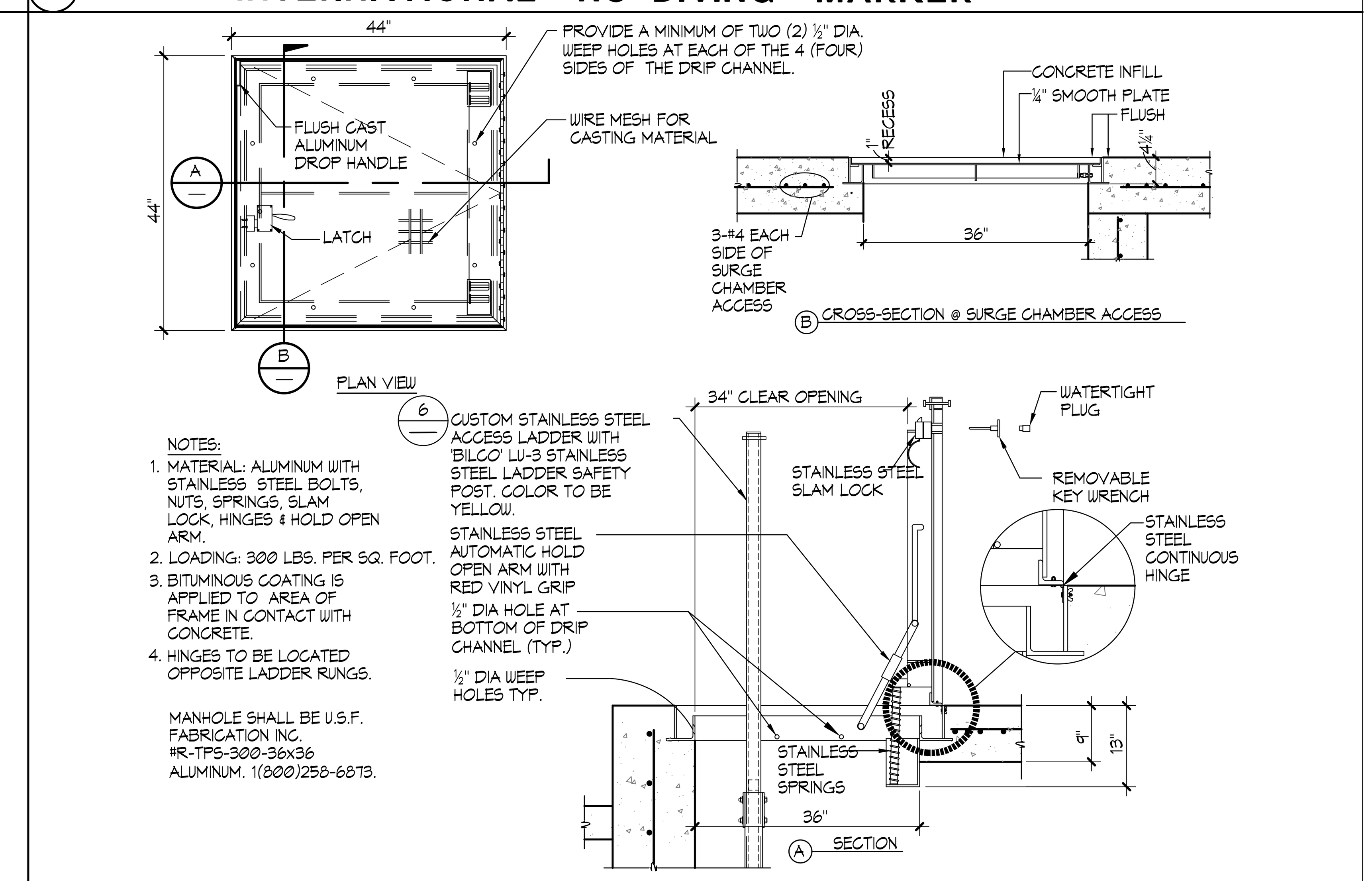
2 "NO RUNNING" / "NO DIVING" MARKERS 1½" = 1'-0"



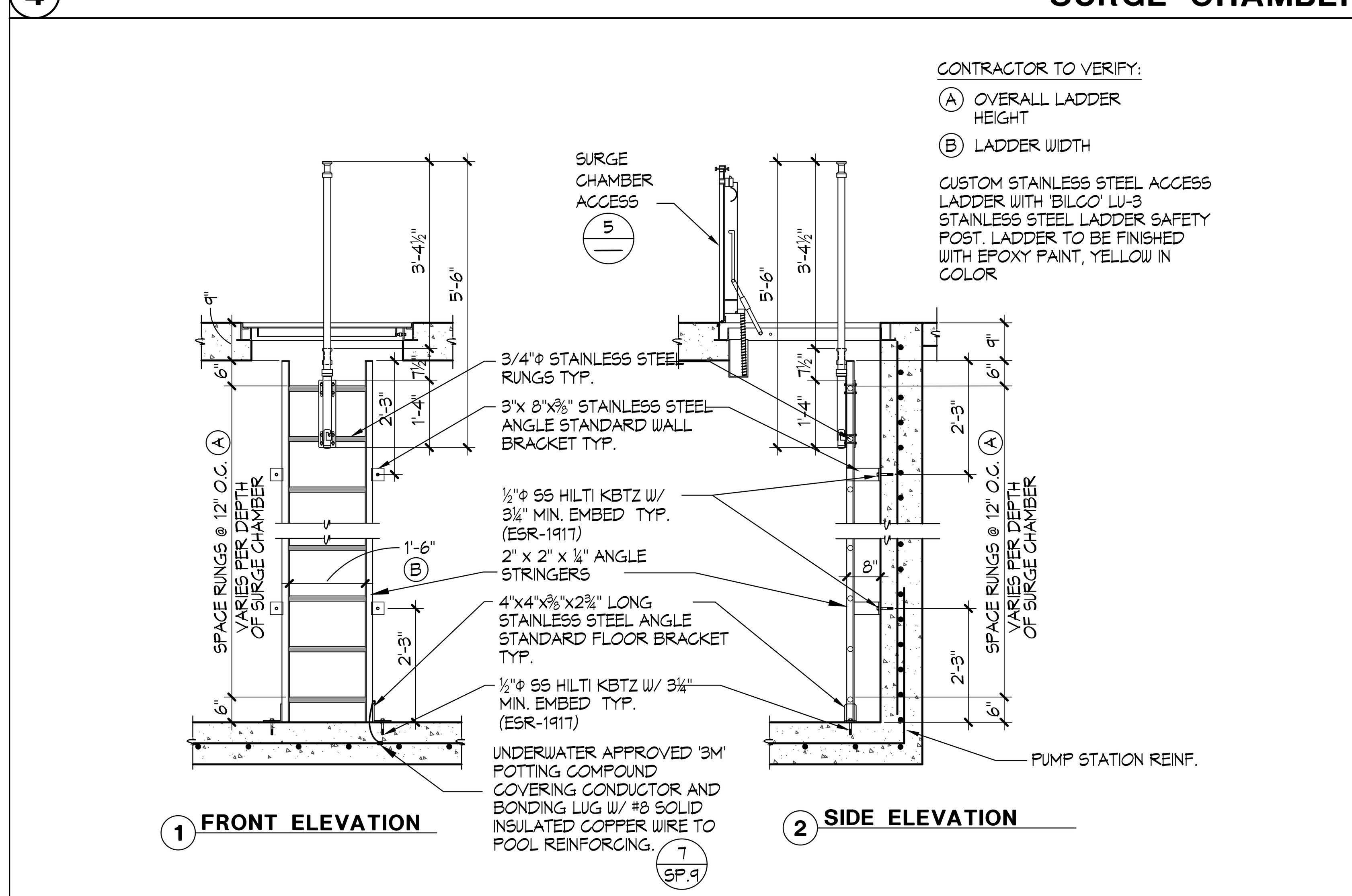
3 INTERNATIONAL "NO DIVING" MARKER 3" = 1'-0"



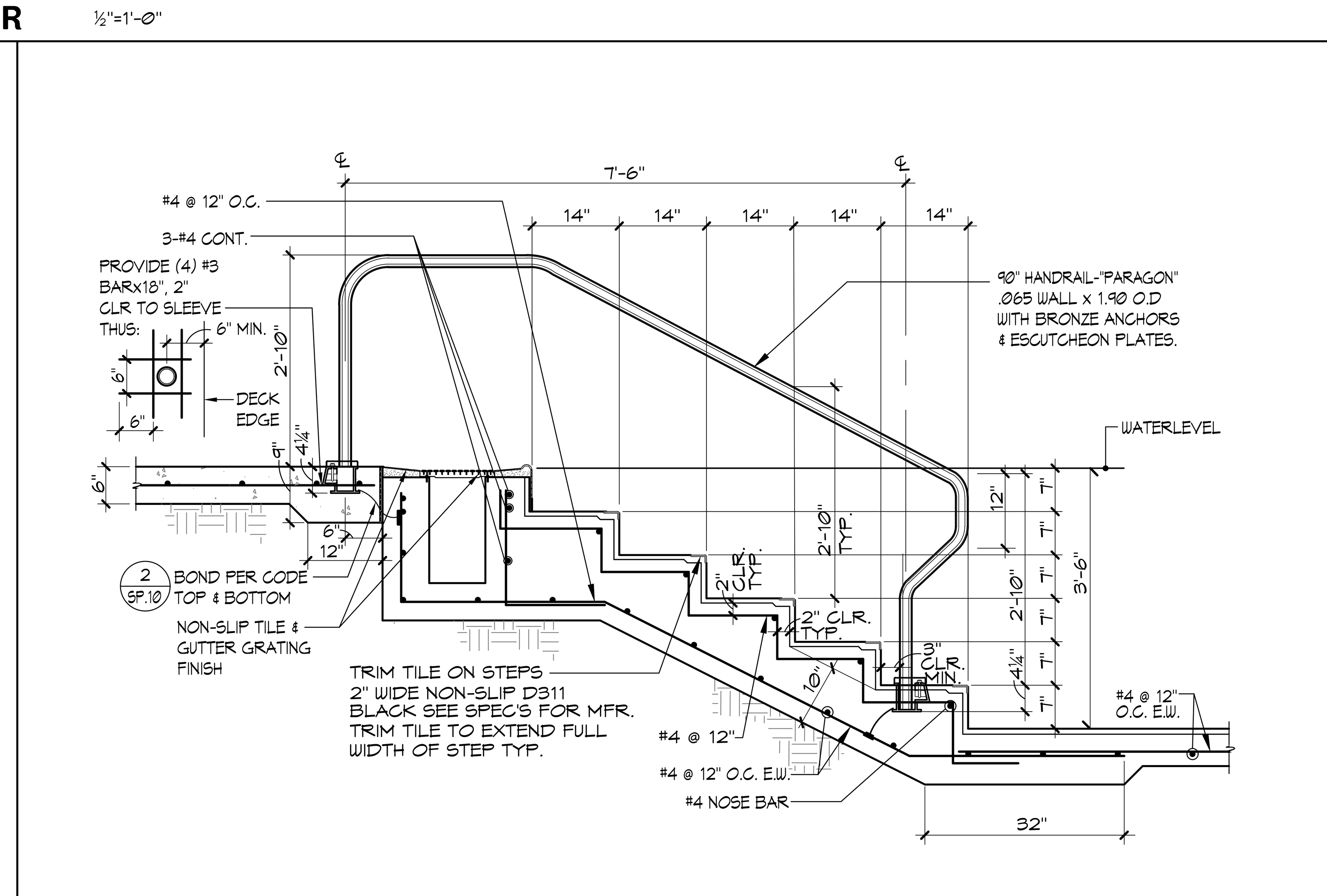
4 SURGE CHAMBER ½"=1'-0"



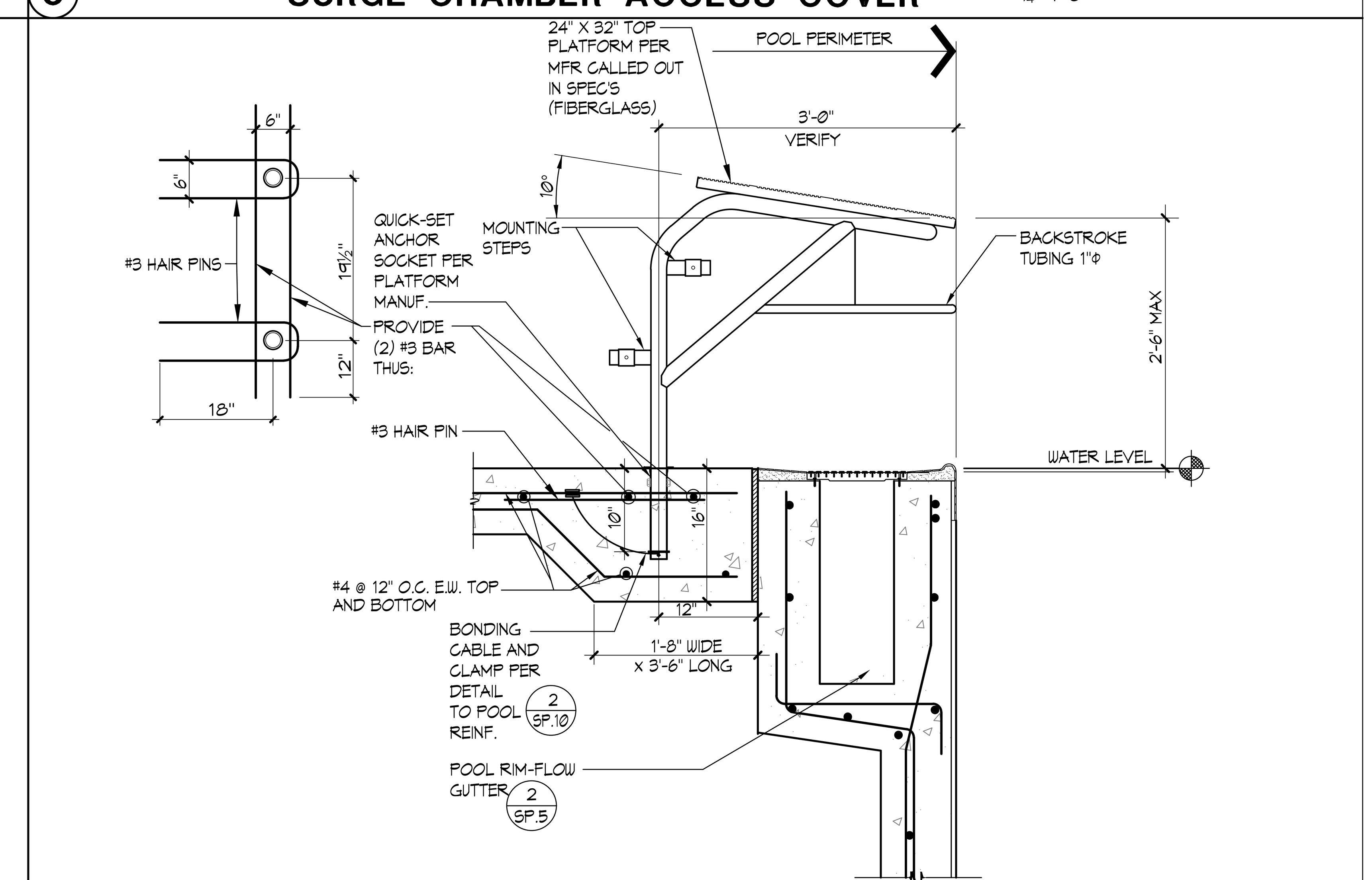
5 SURGE CHAMBER ACCESS COVER ¾"=1'-0"



6 SURGE CHAMBER ACCESS LADDER ½" = 1'-0"



7 HANDRAIL DETAIL ¾"=1'-0"



8 RACING PLATFORM 1"=1'-0"

RUHNAU CLARKE ARCHITECTS

PHASE
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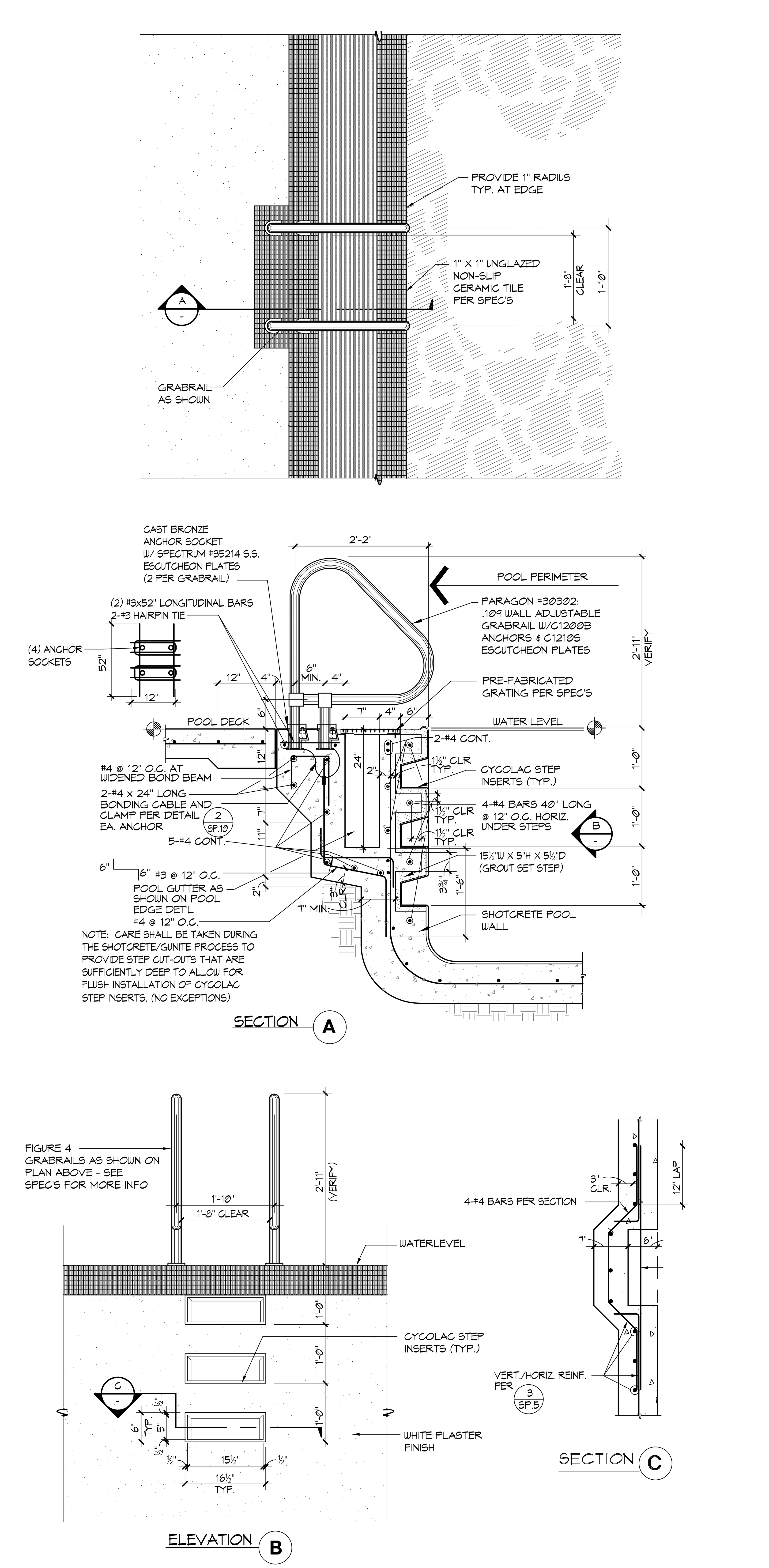
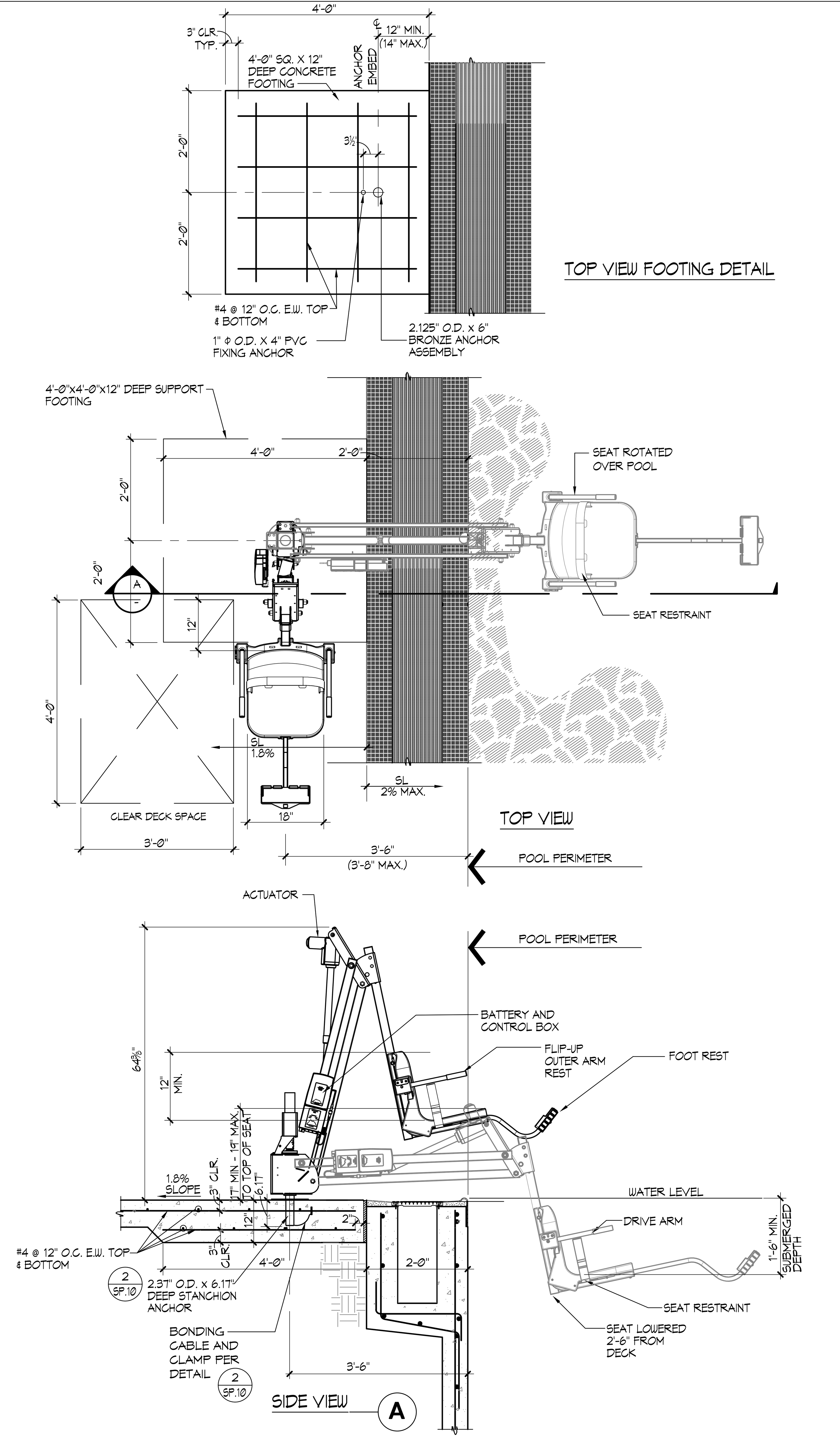
POOL MODERNIZATION
LAGUNA BEACH HIGH SCHOOL
670 PARK AVE, LAGUNA BEACH, CA 92651
LAGUNA BEACH UNIFIED SCHOOL DISTRICT

DETAILS

SP.6



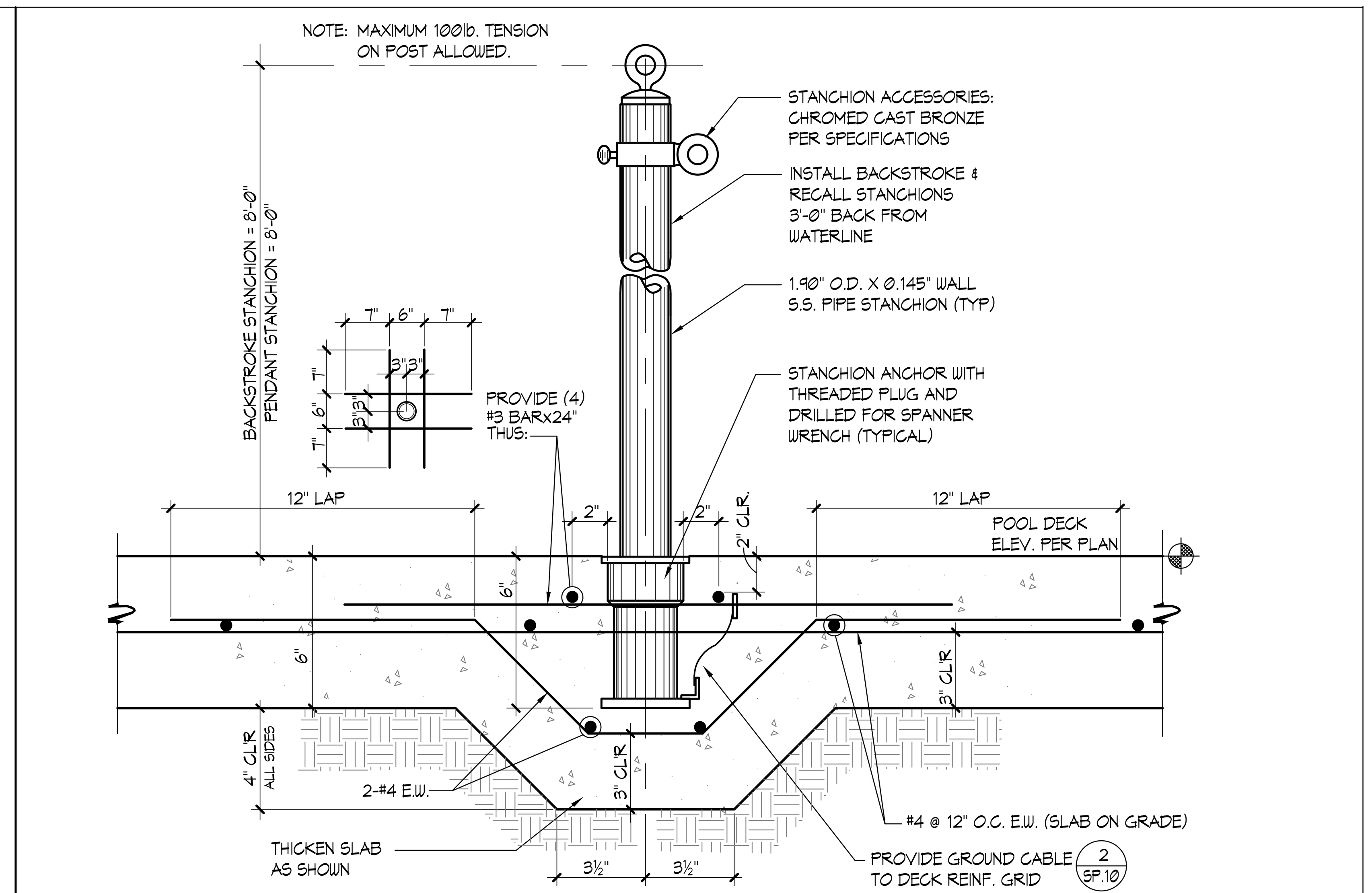
1 GRABRAIL WITH STEPS 1"=1'-0"



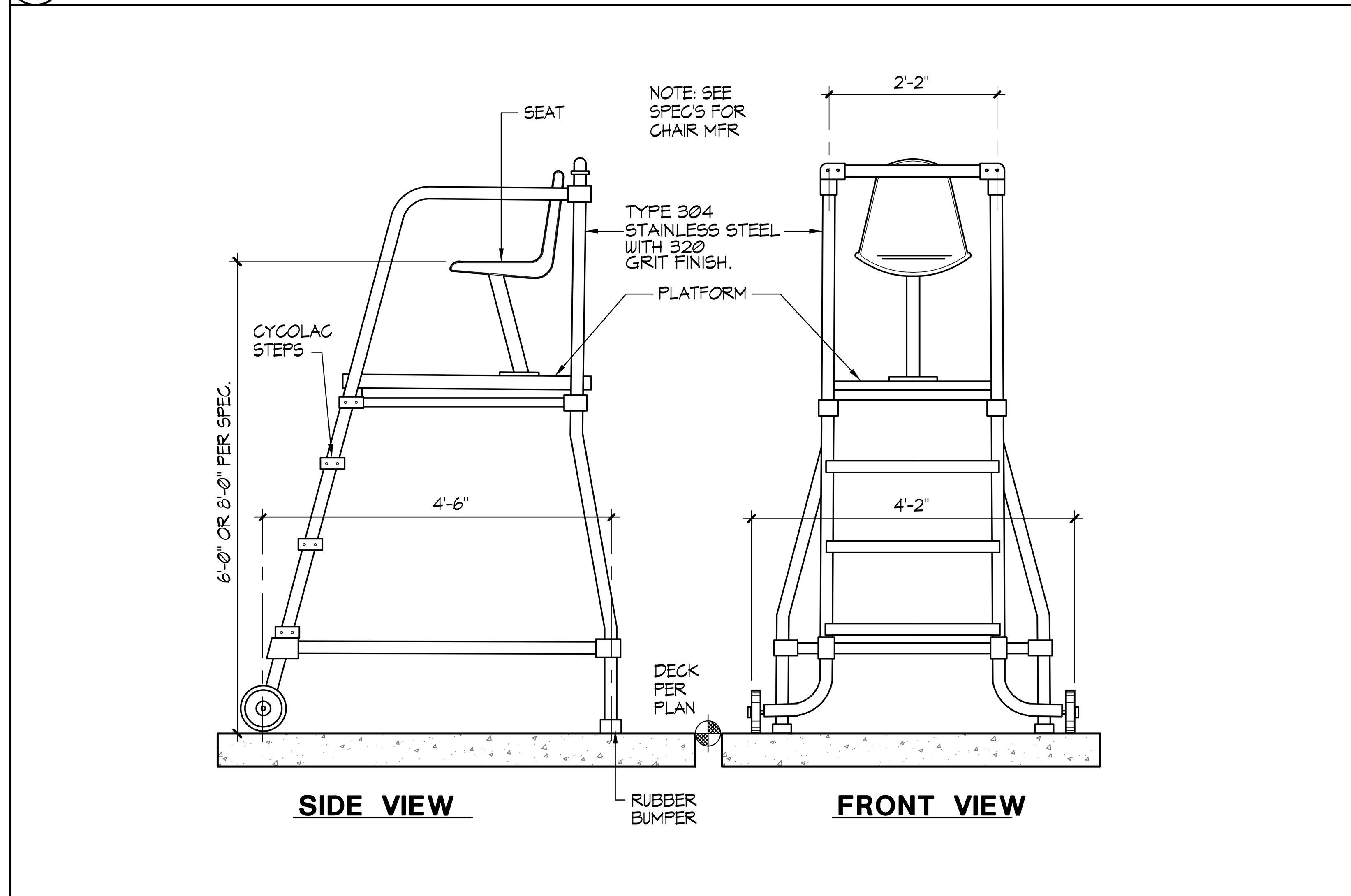
NOTES:

1. 'AQUA CREEK' MIGHTY 400 F-MTY-400 (350 lbs. MIN. LIVE LOAD AND 400 lbs. MAX. LIFTING CAPACITY)
2. GUSSET COVER PLATE TO BE ATTACHED REQUIRING A TOOL FOR REMOVAL.
3. CONTRACTOR SHALL PROVIDE COVER FOR LIFT 'SPECTRUM' #27365; EXTRA BATTERY PACK 'SPECTRUM' #13257; AND TRANSPORTER CART 'SPECTRUM' #26060.
4. UTILIZE OUTLET FOR POOL LIFT BATTERY CHARGE STATION.
5. POOL LIFT SHALL BE LOCATED WHERE THE WATER LEVEL IS AT LEAST 36" AND DOES NOT EXCEED 48" DEEP , UNLESS ENTIRE POOL IS GREATER THAT 48" DEEP.
6. ON THE RAISED POSITION, THE CENTERLINE OF THE SEAT SHALL BE LOCATED OVER THE DECK AND 16" MINIMUM FROM THE EDGE OF THE POOL. THE DECK SURFACE BETWEEN THE CENTERLINE OF THE SEAT AND THE POOL EDGE SHALL HAVE A 2% MAX. SLOPE.
7. CLEAR DECK SPACE SHALL BE PROVIDED ON SIDE OF SEAT OPPOSITE THE WATER PARALLEL TO THE WATER 36" WIDE x 48" MINIMUM FROM A LINE LOCATED 12" BEHIND THE REAR EDGE OF THE SEAT. THE CLEAR SPACE SHALL HAVE A 2% MAX. SLOPE.
8. THE HEIGHT OF THE LIFT SEAT SHALL BE DESIGNED TO ALLOW A STOP AT 17" MIN. TO 19" MAX. MEASURED FROM THE DECK TO THE TOP OF THE SEAT SURFACE WHEN IN THE RAISED POSITION.
9. THE SEAT SHALL BE RIGID AND 17" MIN. TO 19" MAX. WIDE. THE LIFT SEAT SHALL HAVE A BACK SUPPORT 12" MIN. TALL.
10. FOOTRESTS SHALL BE PROVIDED, EXCEPT FOR SPA LIFTS, AND SHALL MOVE WITH THE SEAT. LIFT SHALL HAVE TWO ARMRESTS. THE ARMREST POSITIONED OPPOSITE THE WATER SHALL BE REMOVABLE OR SHALL FOLD CLEAR OF THE SEAT WHEN THE SEAT IS IN THE RAISED POSITION.
11. THE LIFT SHALL BE CAPABLE OF UNASSISTED OPERATION FROM BOTH THE DECK AND WATER LEVELS. CONTROLS AND OPERATING MECHANISMS SHALL BE OPERABLE WITH ONE HAND AND SHALL BE UNOBSTRUCTED WHEN THE LIFT IS IN USE. LIFT MUST BE STABLE AND NOT PERMIT UNINTENDED MOVEMENT WHEN A PERSON IS GETTING INTO OR OUT OF THE SEAT.
12. THE LIFT SHALL BE DESIGNED SO THAT THE SEAT WILL SUBMERGE TO A WATER DEPTH OF 18" MIN. BELOW THE STATIONARY WATER LEVEL.
13. LIFT SEAT MUST HAVE AN OCCUPANT RESTRAINT FOR USE BY THE OCCUPANT OF THE SEAT AND THE RESTRAINT MUST MEET THE STANDARDS FOR OPERABLE CONTROLS.

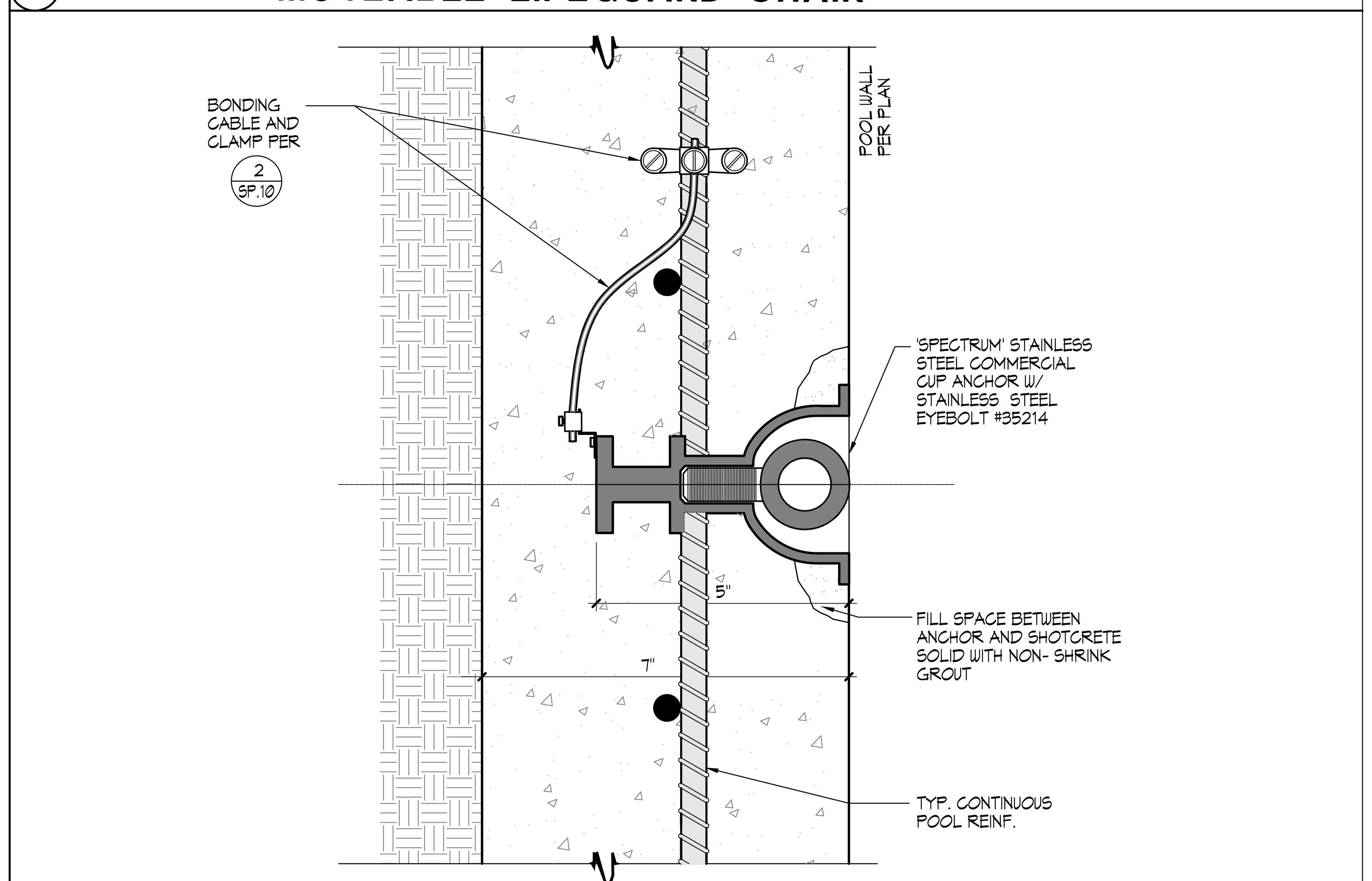
2 ACCESSIBLE LIFT ¾" = 1'-0"



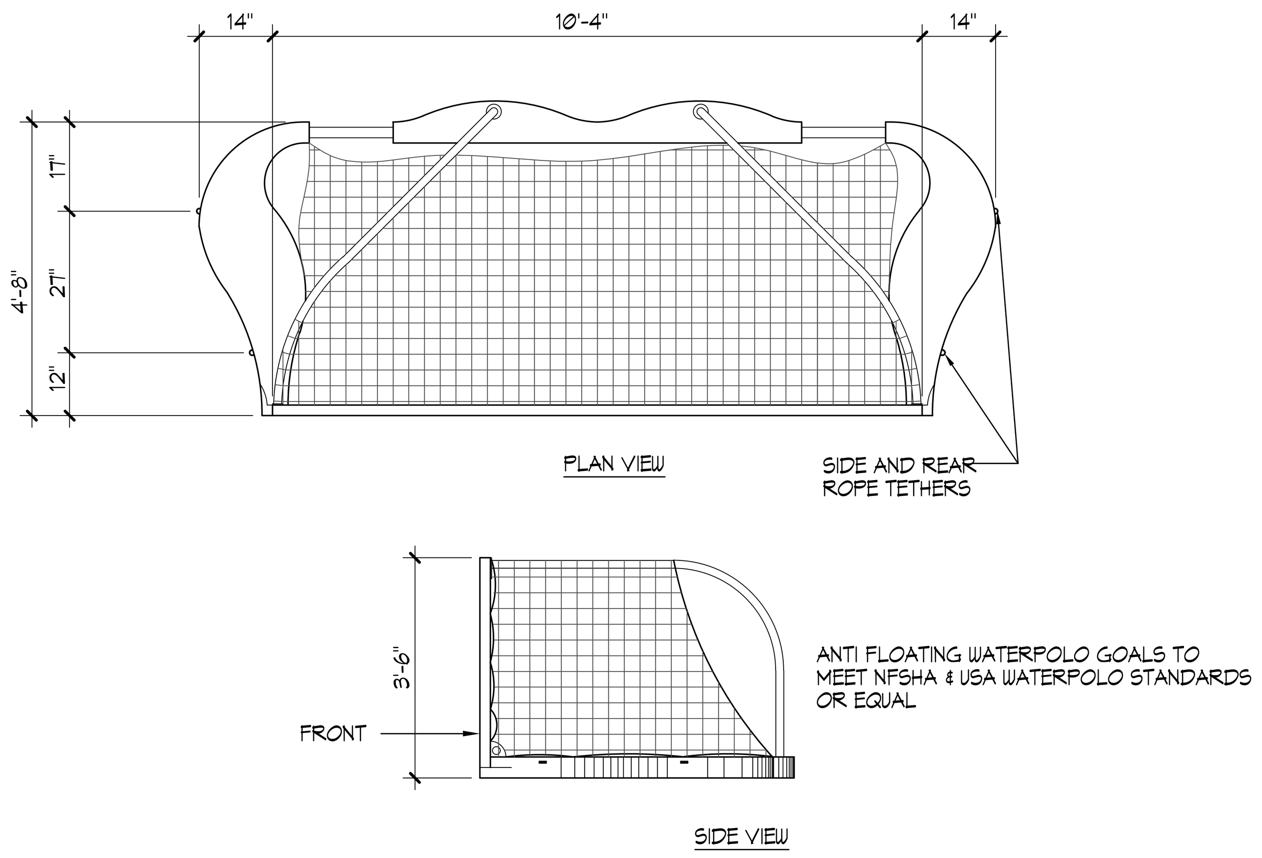
3 STANCHION POST/ANCHOR 3"=1'-0"



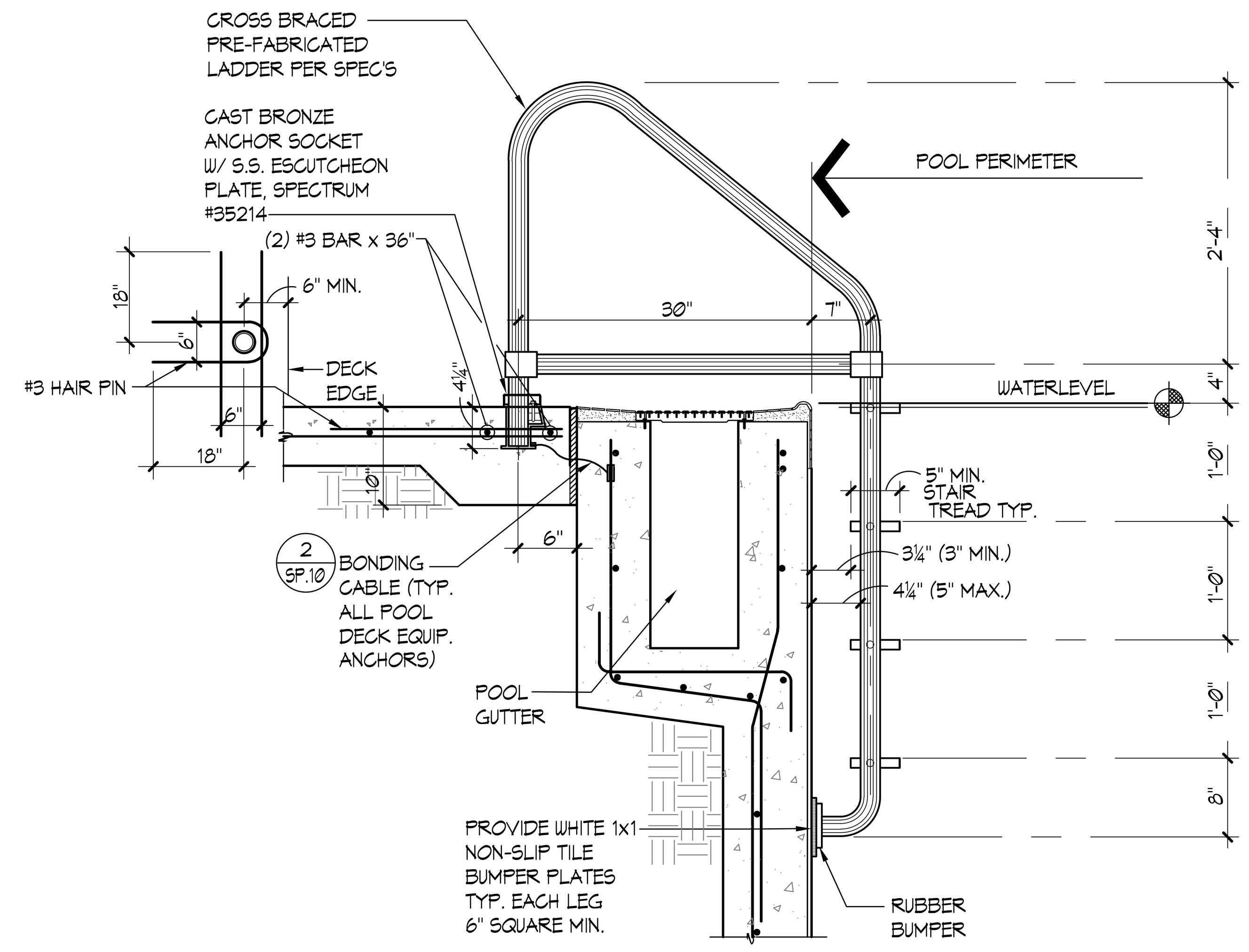
4 MOVEABLE LIFEGUARD CHAIR ¾"=1'-0"



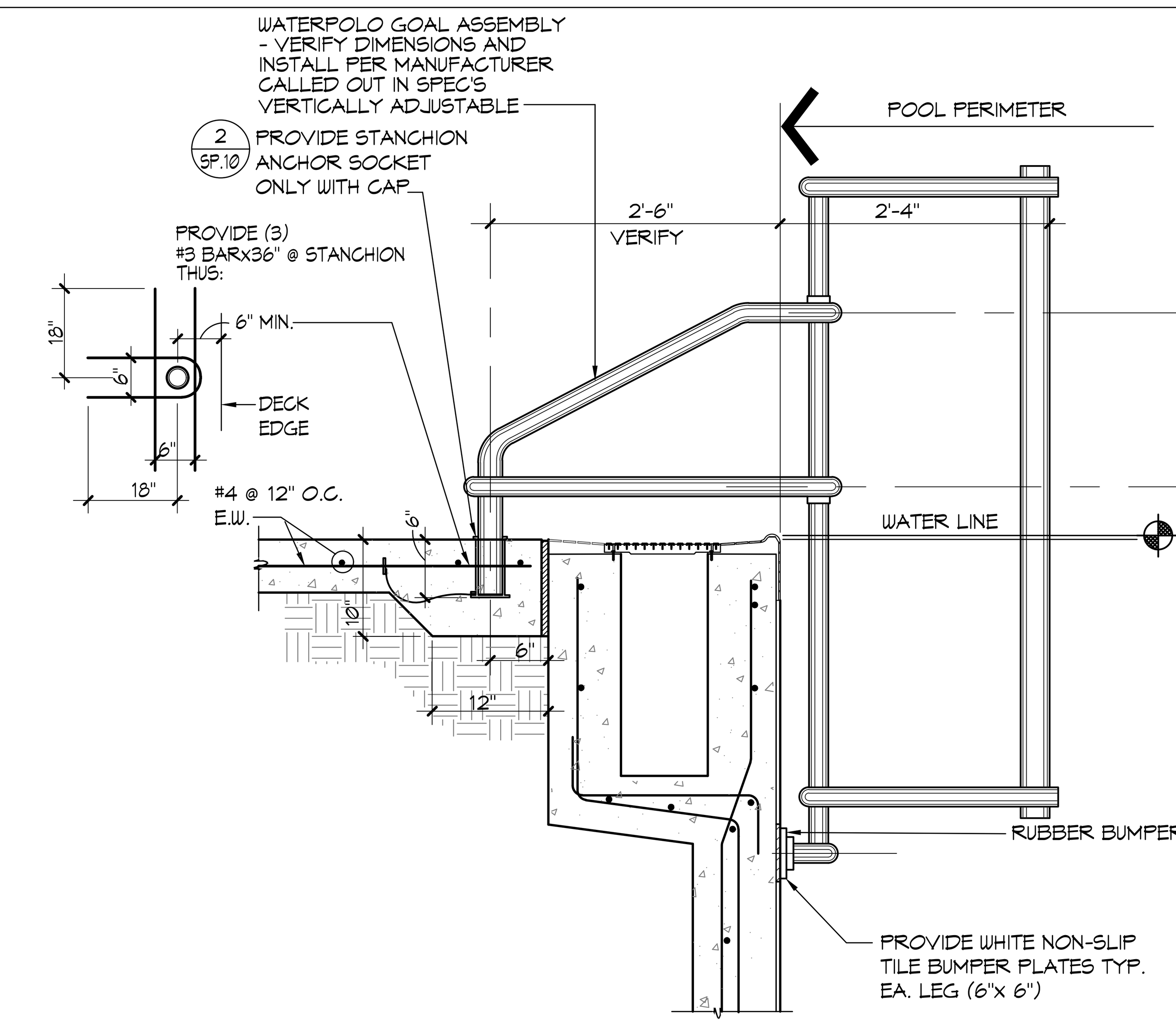
5 CUP ANCHOR ½" = 1"



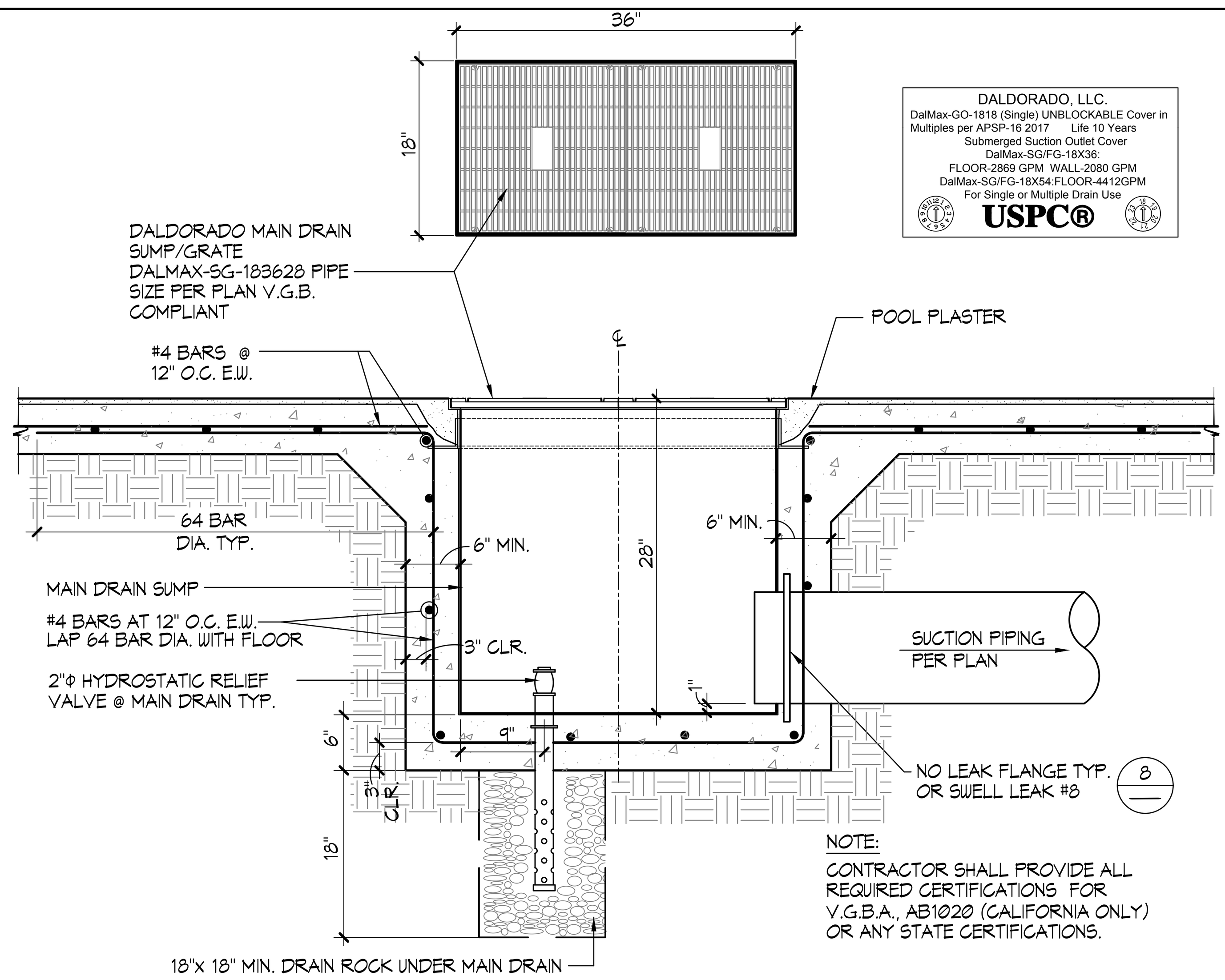
1 **FLOATING WATER POLO GOALS** ½"=1'-0"



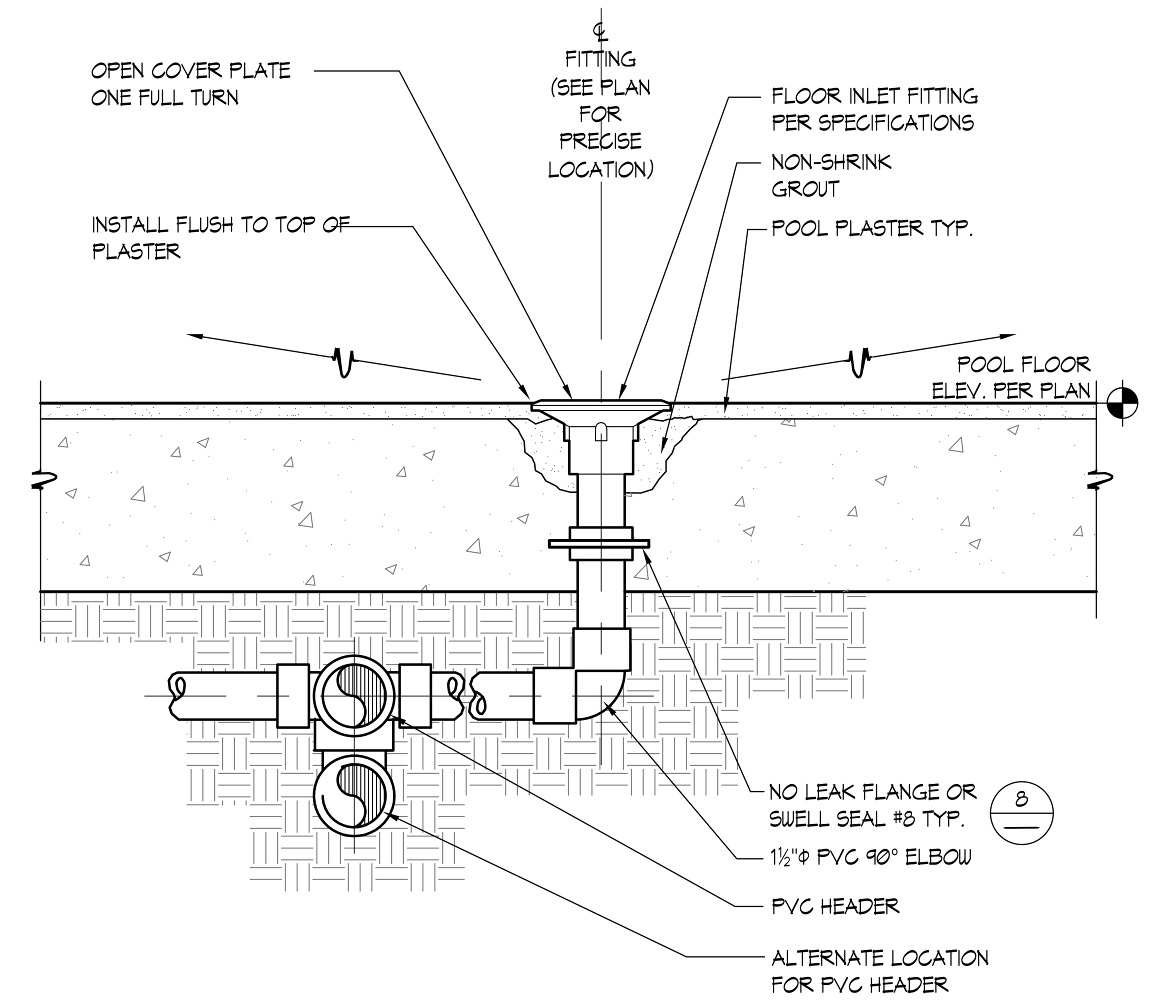
2 **POOL LADDER** 1"=1'-0"



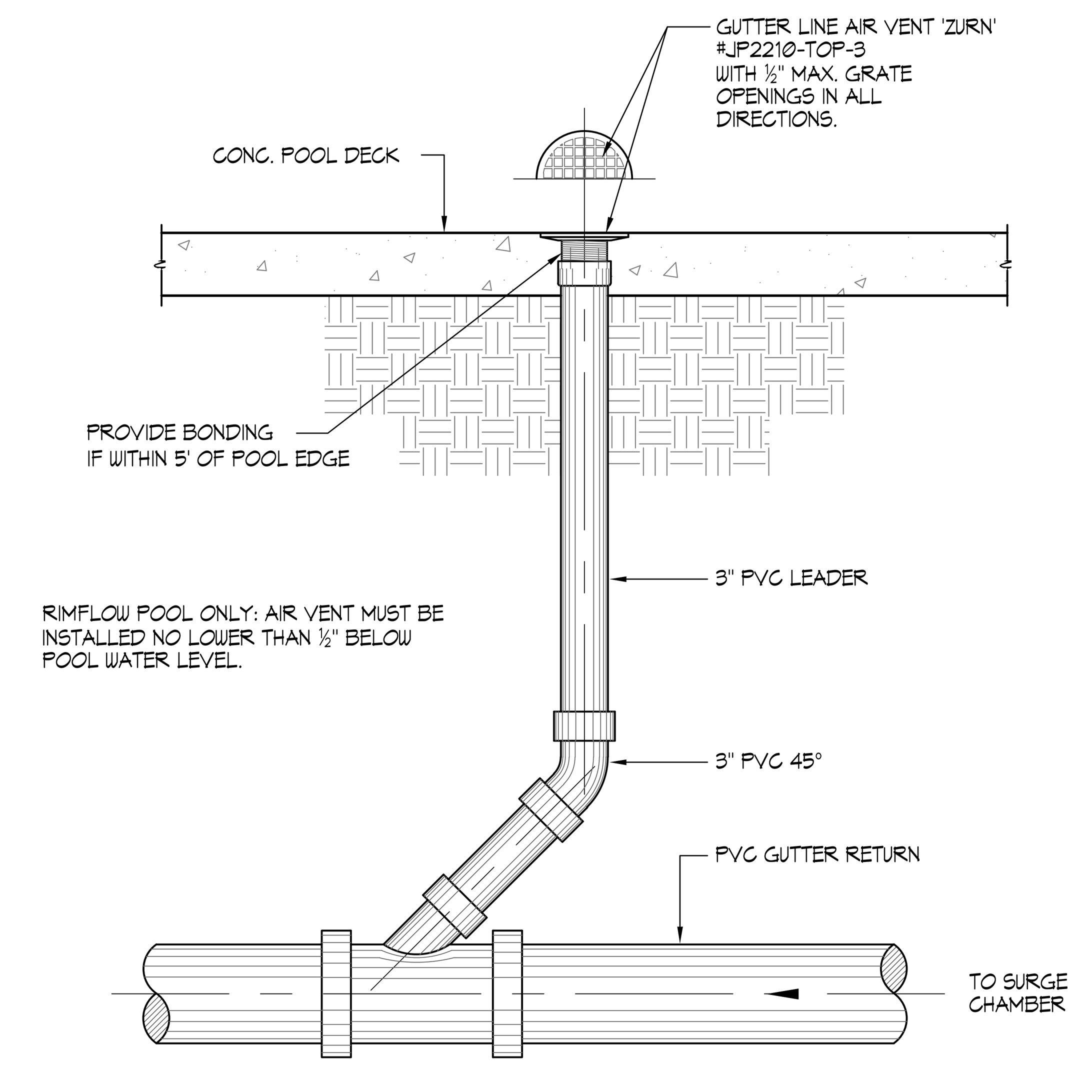
3 **WATERPOLO GOAL** 1"=1'-0"



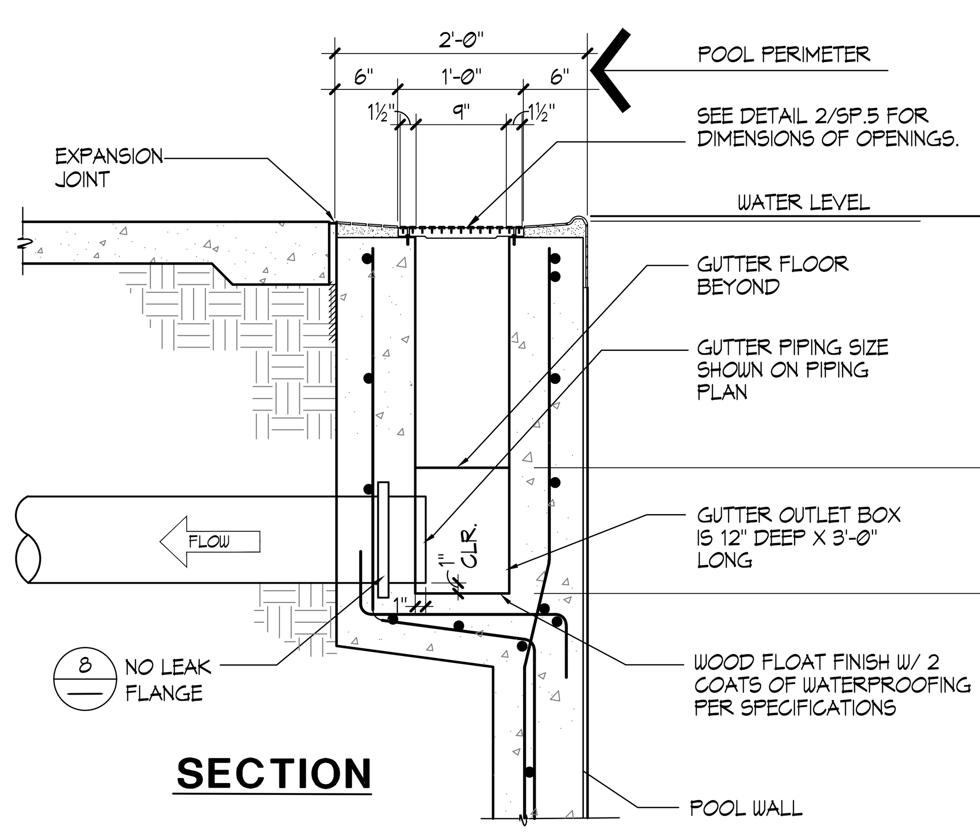
4 **MAIN DRAIN** 1" = 1'-0"



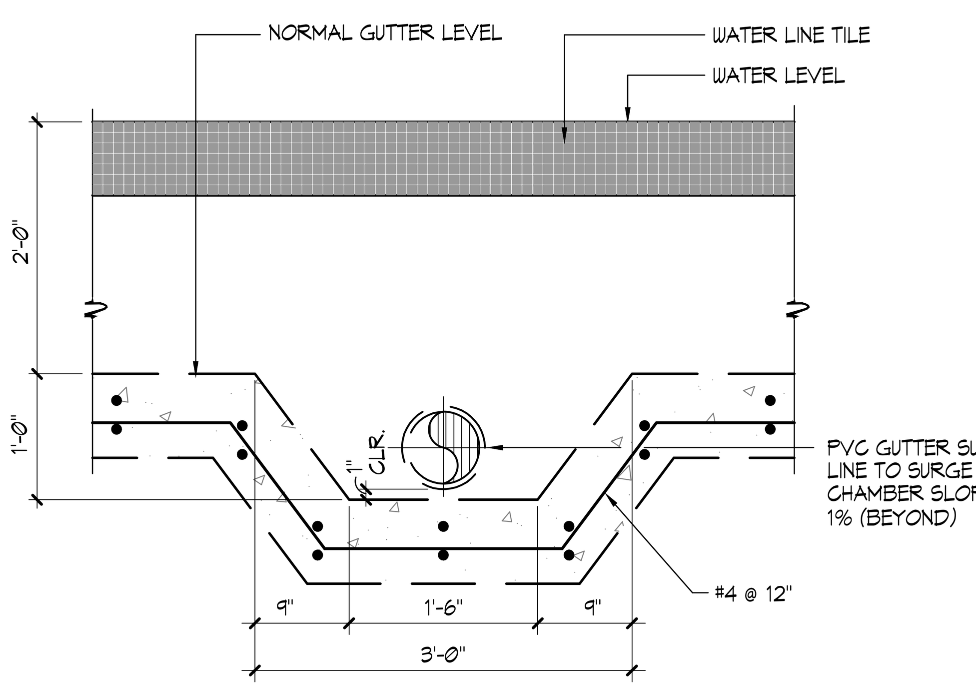
5 **FLOOR INLET** 3"=1'-0"



6 **AIR VENT** 1"=1'-0"

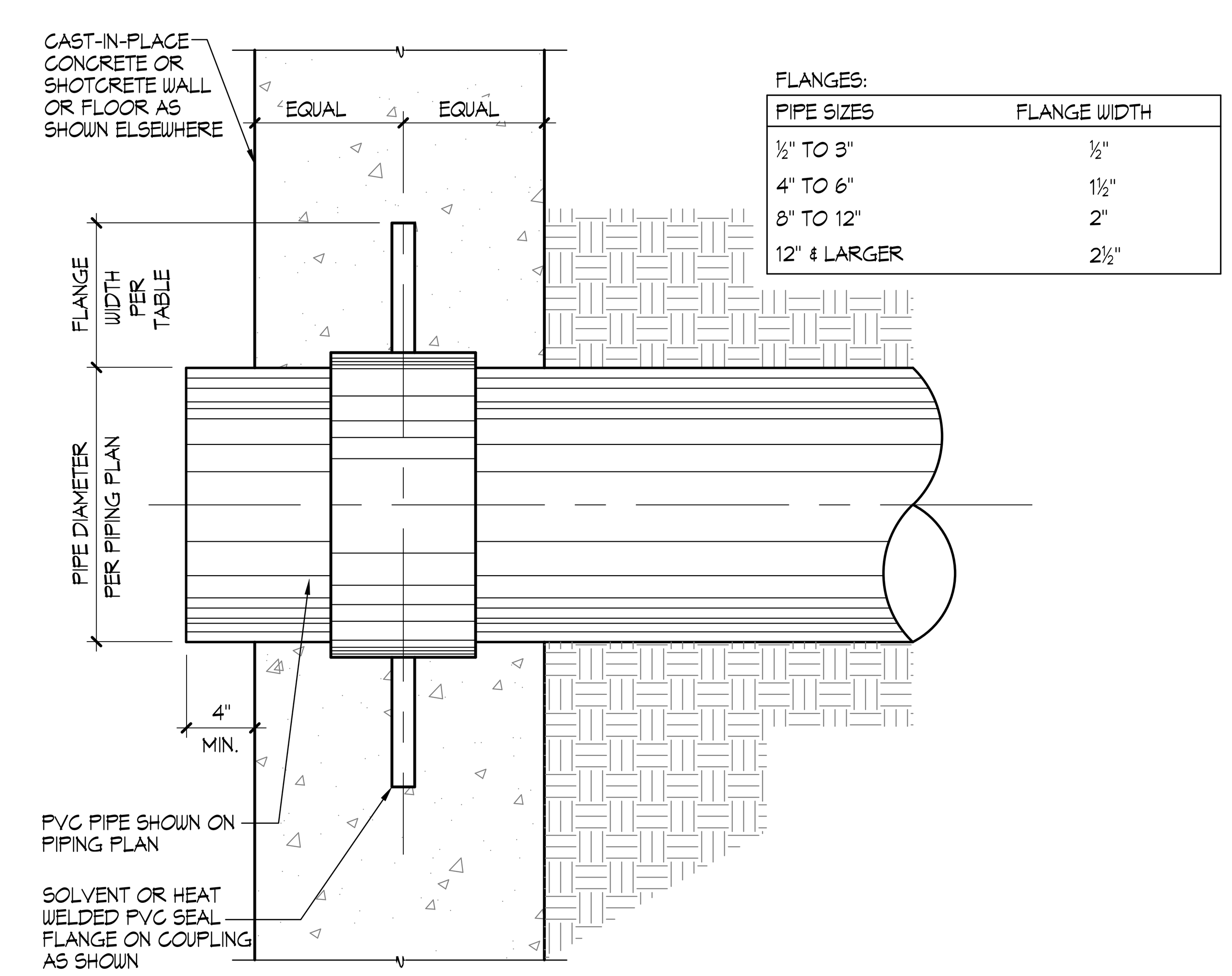


SECTION



ELEVATION

7 **GUTTER OUTLET** 1"=1'-0"



8 **WATER STOP DETAIL** NO SCALE

RUHNAU CLARKE ARCHITECTS

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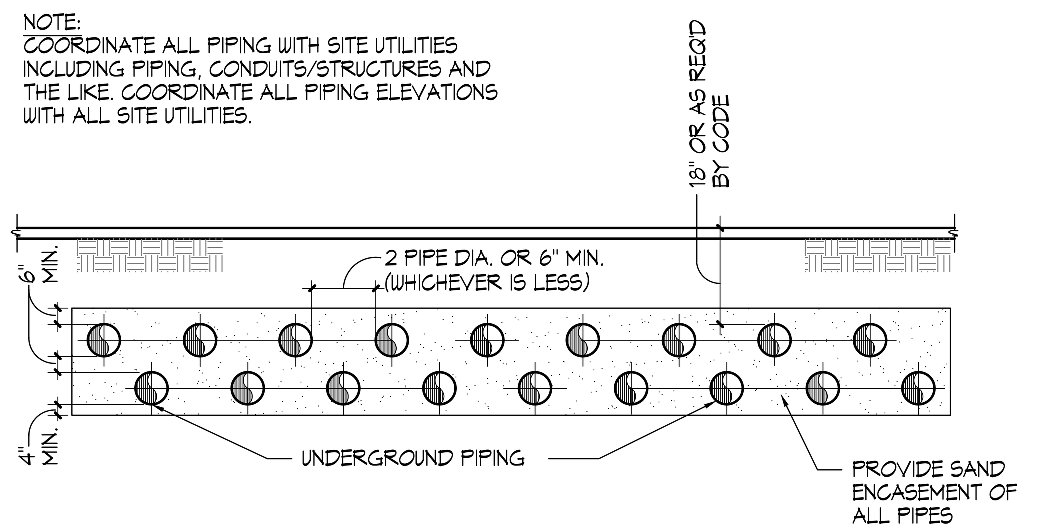
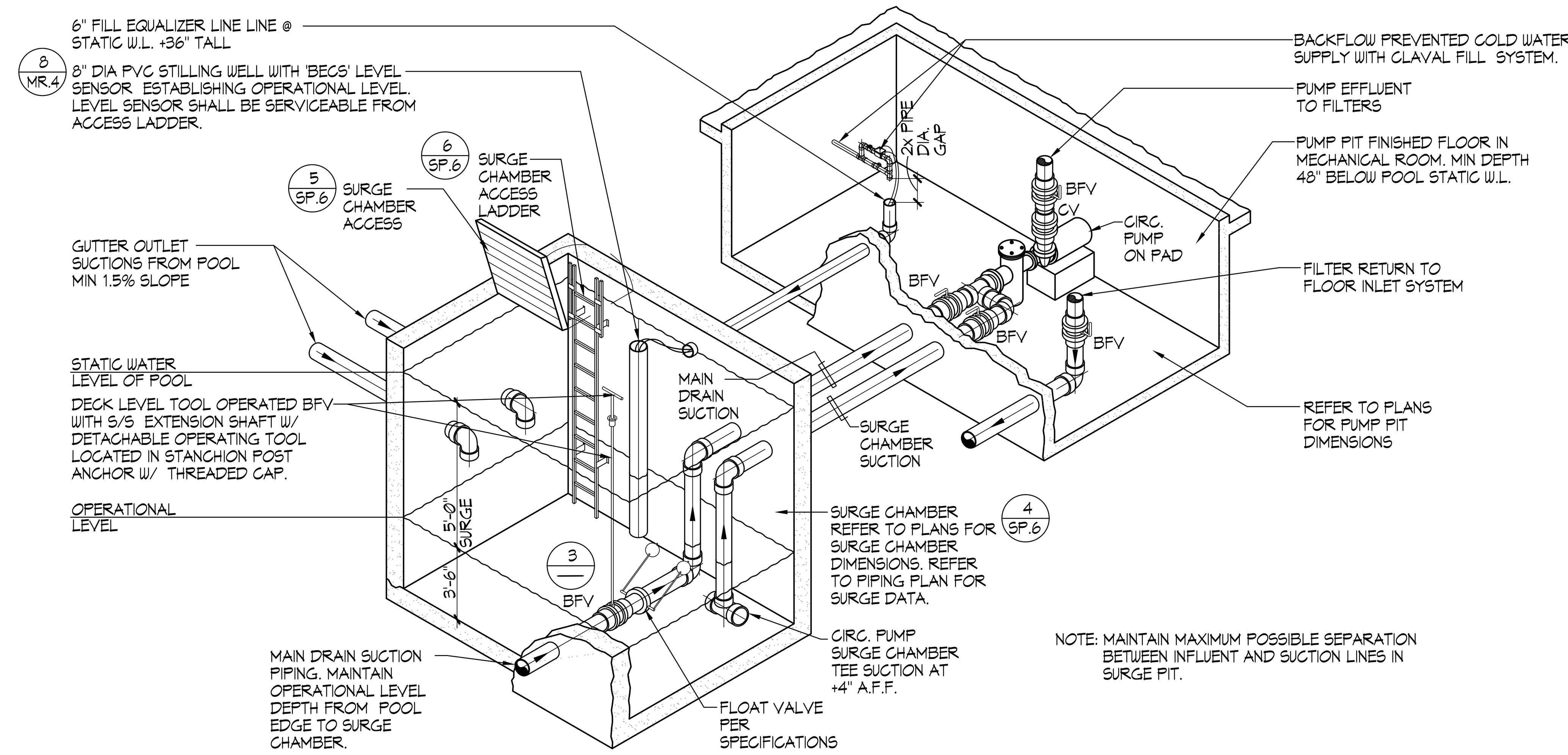
POOL MODERNIZATION
LAGUNA BEACH HIGH SCHOOL
670 PARK AVE, LAGUNA BEACH, CA 92651
LAGUNA BEACH UNIFIED SCHOOL DISTRICT

SP.8

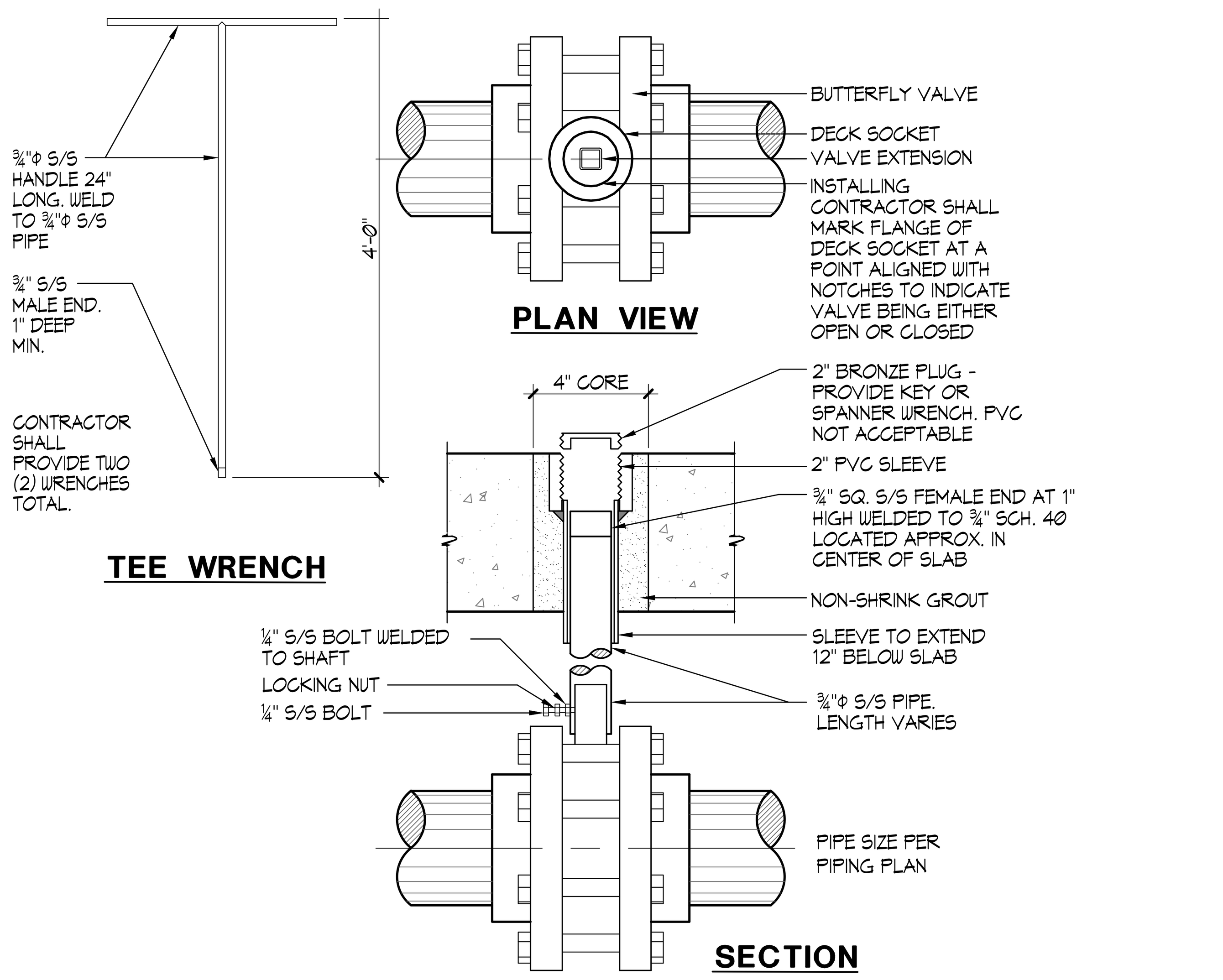
1-43-22



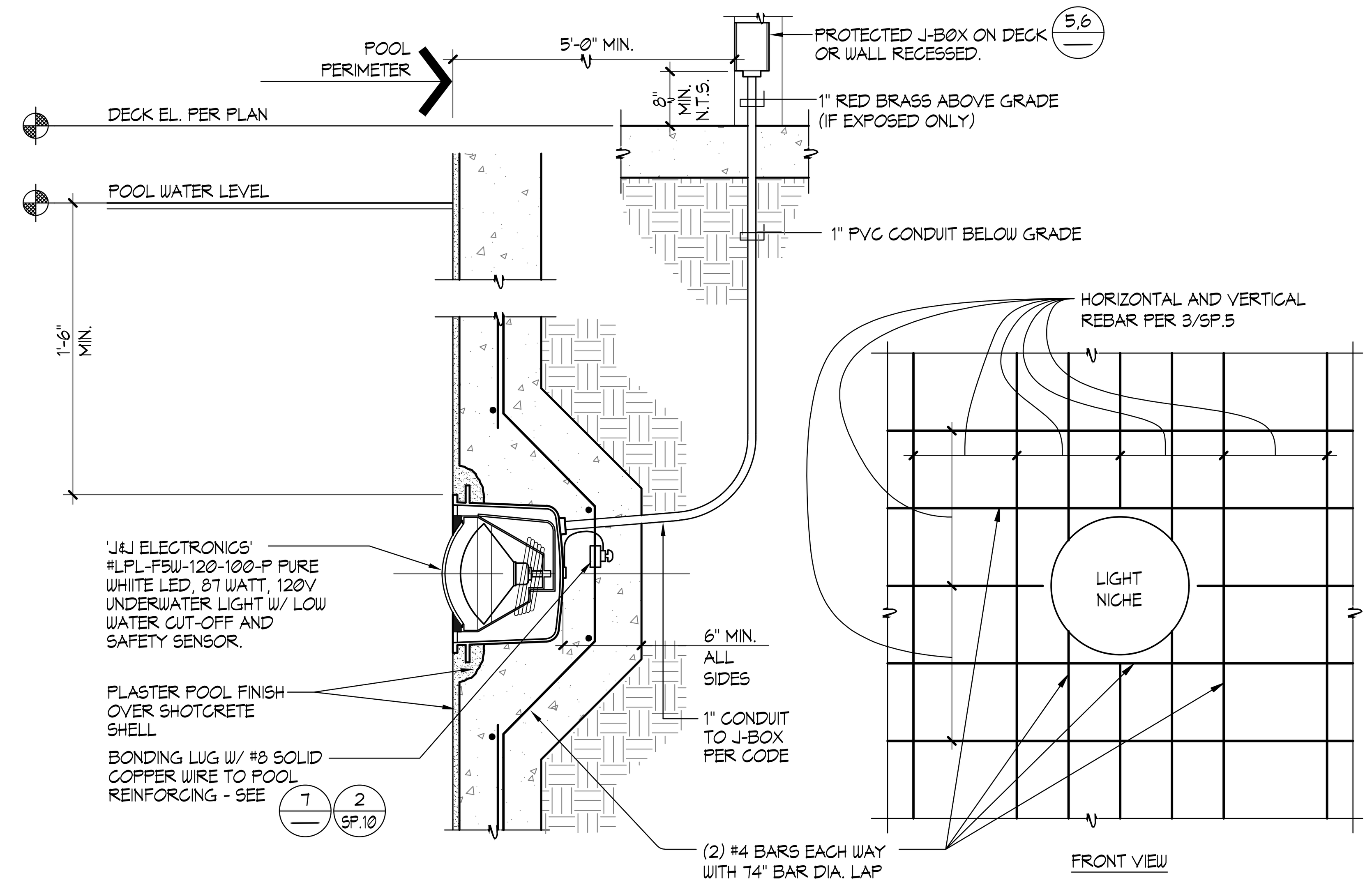
1 STACKED UNDERGROUND PIPING NO SCALE



2 SURGE CHAMBER PIPING SCHEMATIC NO SCALE



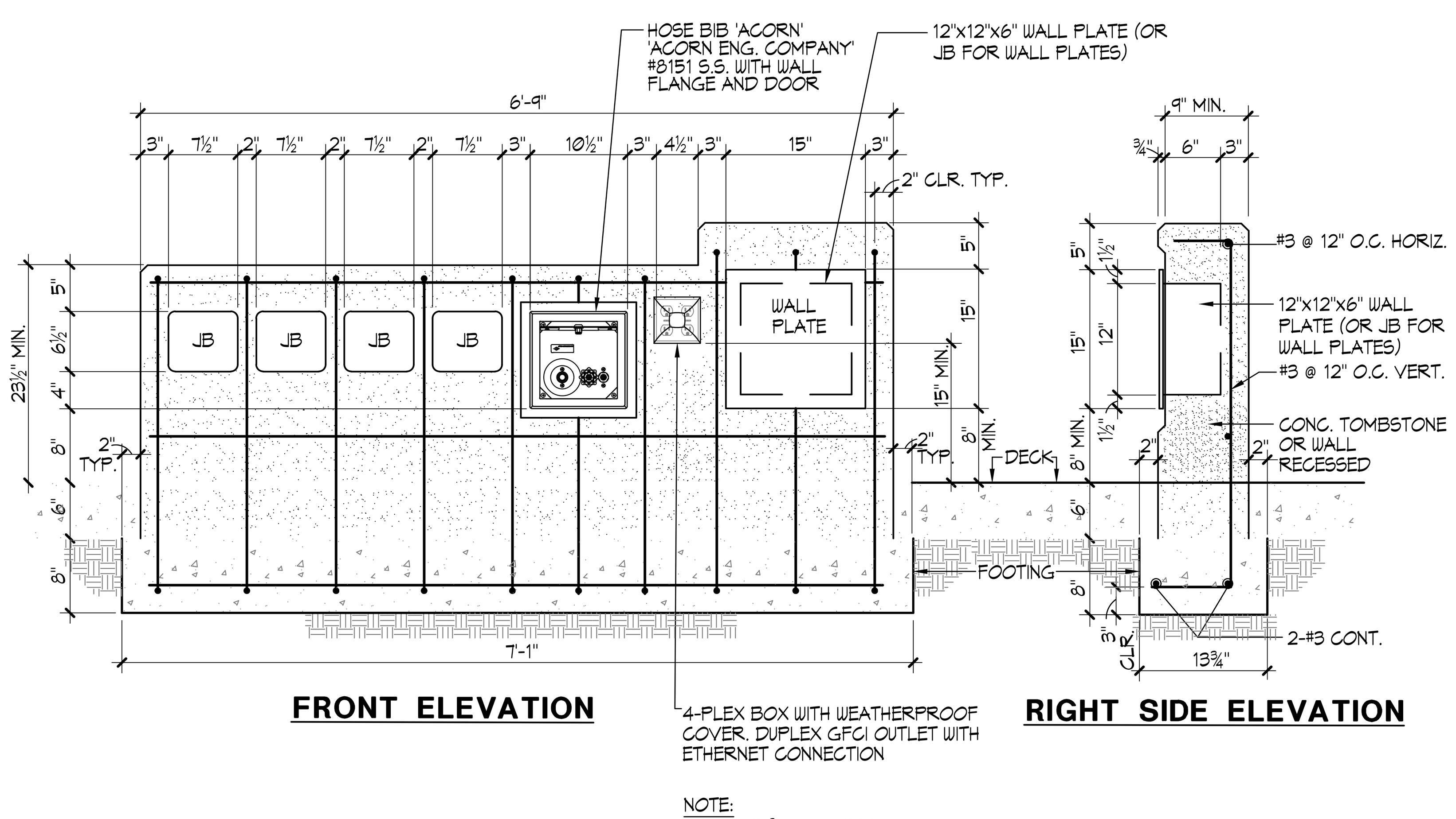
3 SURGE CHAMBER BUTTERFLY VALVE / EXTENSION DETAIL NO SCALE



UNDERWATER LIGHT NOTES:

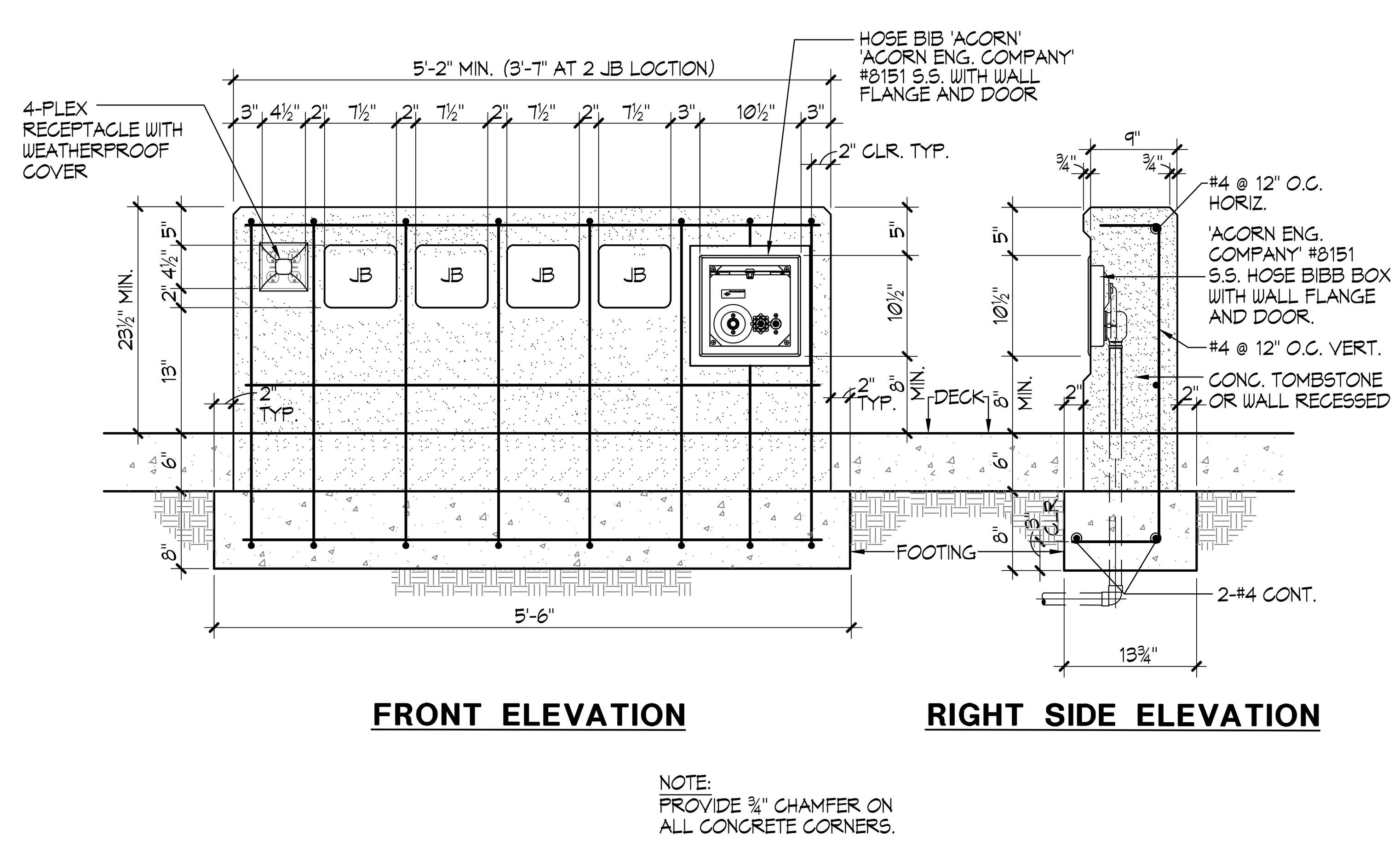
1. ALL CONDUITS IN POOL LIGHTING SYSTEM TO BE A MINIMUM OF 1"Ø.
2. CONDUCTORS TO POOL. J-BOXES SHALL BE MINIMUM 2-#8 & 1#8 (SEE UNDERWATER LIGHT PLAN) SOLID UNBROKEN TO MAIN PANEL ISOLATED GROUND BUSS. THIS BUSS IS TO BE CONNECTED WITH SOLID INSULATED #8 COPPER WIRE TO UFER & COLDWATER GROUNDING LUG ON GROUNDING BUSS. UPSIZE CONDUCTORS AS REQUIRED FOR HOMERUNS EXCEEDING 100'.
3. ALL BRASS POOL J-BOXES SHALL BE FLUSH MOUNTED IN WALLS. IF FLUSH MOUNTING IS NOT POSSIBLE THEN MOUNTING SHALL BE SURFACE MOUNTED AND CONCRETE ENCASED.
4. CONDUITS WHERE ALLOWED BY CODE SHALL BE P.V.C. (POLYVINYL CHLORIDE) FROM WET NICHES TO BRASS J-BOXES TO LIGHTING PANEL. ALL CONDUITS IN FREE AIR SPACE AND ALL RISERS SHALL BE RED BRASS TYPICAL. PVC CONDUITS SHALL BE SOLVENT WELDED WITH PURPLE PRIMER AND GRAY HEAVY BODIED GLUE.
5. LIGHTING CONTACTORS SHALL BE "ALLEN-BRADLEY" #500 L; OR EQUAL MOUNTED IN A NEMA 12 HINGED COVER - LOCKABLE ENCLOSURE. CONTACTORS TO BE SWITCHED BY MOMENTARY SWITCH EQUAL TO "HUBBELL" #1557 MOUNTED IN J-BOX IN MECHANICAL EQUIPMENT ROOM. REFER TO ELECTRICAL PLANS FOR LOCATION OF OWNER COORDINATED REMOTE UNDERWATER LIGHT SWITCH.
6. BRASS POOL J-BOXES SHALL BE "HYDREL" #1719 ; W/ 1" HUBS OR EQUAL. (NO DIE CAST BOXES).
7. STRINGS SHALL BE PULLED IN ALL CONDUITS PRIOR TO PLACEMENT OF CONCRETE.
8. LOCAL, COUNTY OR CITY CODES SHALL BE ADHERED TO, SPECIFICATIONS TO BE IN ACCORDANCE WITH SECTION 680 OF LATEST N.E.C. BOOK.
9. PROVIDE PULL BOXES AS MAY BE REQUIRED FOR RUNS EXCEEDING 150 FT. OR DUE TO CHANGES IN GRADE OR DIRECTION.
10. CONTRACTOR SHALL TEST UNDERWATER POOL LIGHT GFIC CIRCUITS AND PROVIDE LETTER TO OWNER/DSA UPON SUCCESSFUL TEST.
11. SEAL CONDUIT OPENING IN LIGHT NICHE WITH SILICON CAULKING AFTER LIGHT IS INSTALLED.
12. PRIOR TO LIGHT INSTALLATION, PROVIDE MINIMUM 10 PSI PRESSURE TEST ON ALL POOL LIGHT CONDUITS FOR FOUR (4) HOURS OBSERVED BY INSPECTOR OF RECORD. MAINTAIN PRESSURE UNTIL ALL DECKS ARE POURED.

4 UNDERWATER LED LIGHT 1½"=1'-0"

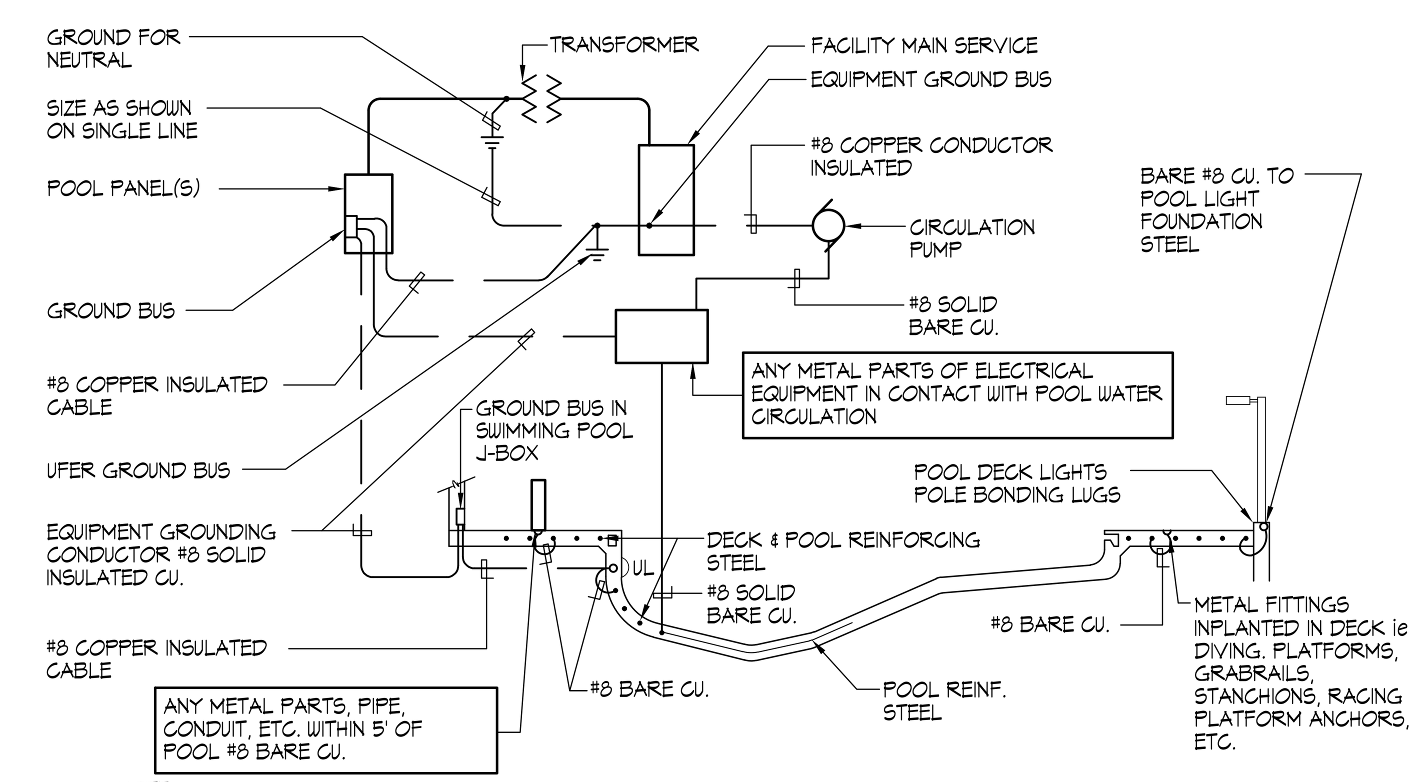


1"=1'-0"

5 UNDERWATER LIGHT JUNCTION BOX / HOSE BIB / WALL PLATE CONCRETE SURROUND DETAIL



6 UNDERWATER LIGHT JUNCTION BOX / HOSE BIB CONCRETE SURROUND DETAIL 1"=1'-0"



NOTE:

1. STRUCTURAL STEEL IN POOL DECK AND POOL SHALL BE BONDED TOGETHER (TIGHTLY MADE STEEL TIE-WIRES ARE APPROVED FOR BONDING STRUCTURAL ELEMENTS).
2. BONDING CONNECTOR TO COMMON GRID, (POOL STEEL MAY BE USED FOR THAT PURPOSE) SHALL BE MADE BY PRESSURE CONNECTORS OR CLAMPS OF BRASS, COPPER, OR COPPER ALLOY.
3. ALL GROUND BUSES SHALL BE SIZED FOR CONNECTION TO AWG SIZE 8 WIRE PROVIDING ONE SPARE TERMINAL.
4. GROUND AND BOND IN ACCORDANCE WITH ARTICLE 680 OF THE CALIFORNIA ELECTRICAL CODE. i.e. LADDERS, FENCING, POLE LIGHTS, DIVING & STARTING STANCHIONS, DISABLED LIFT ETC.
5. PROVIDE BONDING OF POOL COVER MOTORS REGARDLESS OF PROXIMITY TO POOL.

7 TYPICAL POOL BONDING AND GROUND DETAIL NO SCALE

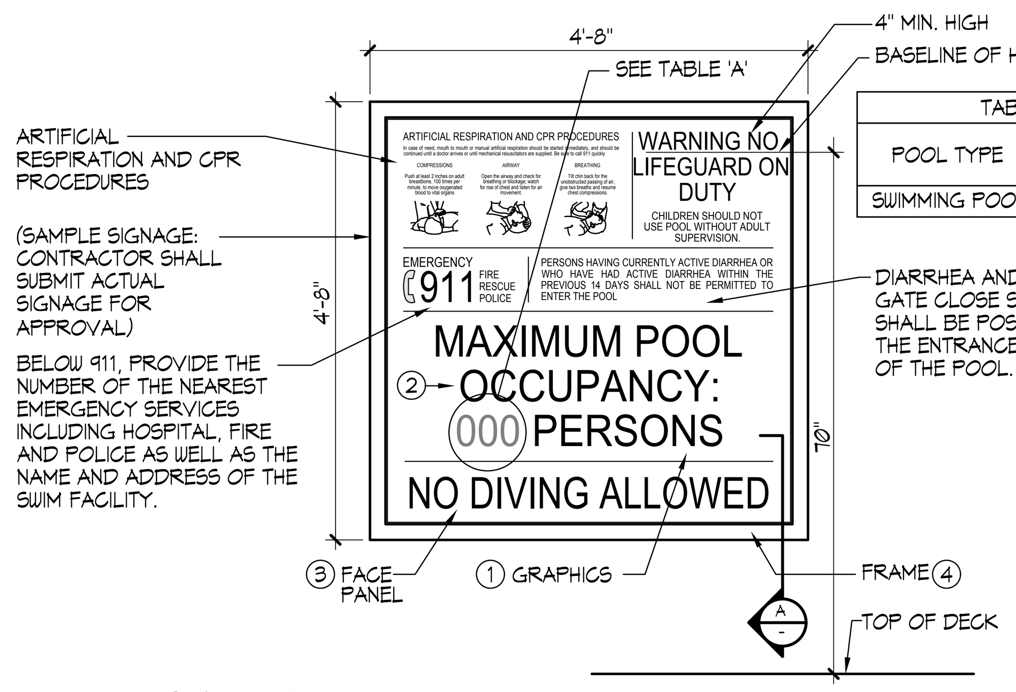
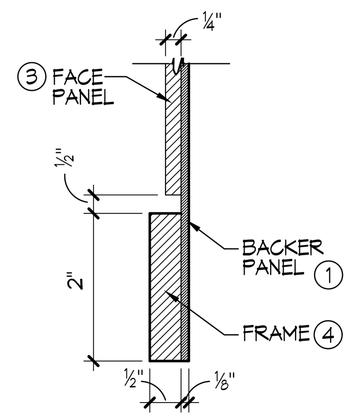


TABLE 'A'	
POOL TYPE	OCCUPANCY LOAD AT 1:20
SWIMMING POOL	558



A SECTION
6" = 1'-0"

SIGNAGE NOTES AND SPECIFICATIONS:

1. ⅛" THICK PAINTED ALUMINUM BACKER PANEL.
2. SILKSCREENED COPY/GRAPHICS WITH NON GLARE FINISH.
3. ¼" THICK PAINTED ALUMINUM FACE PANEL WITH SILKSCREENED COPY/GRAPHICS. ATTACH TO ⅛" THICK PAINTED ALUMINUM BACKER PANEL USING 'VHB' TAPE AND SILICONE ADHESIVE.
4. 2" WIDE x ½" THICK PAINTED ALUMINUM SIGN FRAME ADHERED TO ⅛" THICK PAINTED ALUMINUM BACKER USING 'LORDS' ADHESIVE AS REQUIRED. VERTICAL SECTIONS OF FRAME TO BE RECTANGULAR TUBE. FILL AND SAND SEAM ALONG EDGE AND FACE PRIOR TO PAINTING.

REQUIRED SIGNAGE:

1. ALL SIGNS SHALL HAVE CLEARLY LEGIBLE LETTERS OR NUMBERS NOT LESS THAN 4 INCHES HIGH, UNLESS OTHERWISE NOTED; AFFIXED TO A WALL, POLE, GATE, OR SIMILAR PERMANENT STRUCTURE IN A LOCATION VISIBLE TO ALL POOL USERS.
   A. POOL USER CAPACITY SIGN; A SIGN SHALL INDICATE THE MAXIMUM NUMBER OF POOL USERS PERMITTED FOR EACH POOL. LETTERS AND NUMBERS TO BE NOT LESS THAN 4 INCHES HIGH.
   B. NO LIFEGUARD SIGN; WHERE NO LIFEGUARD SERVICE IS PROVIDED, A WARNING SIGN SHALL BE POSTED STATING, "NO LIFEGUARD ON DUTY." THE SIGN ALSO SHALL STATE IN LETTERS AT LEAST 1 INCH HIGH, "CHILDREN SHOULD NOT USE POOL WITHOUT ADULT SUPERVISION."
   C. ARTIFICIAL RESPIRATION AND CARDIO PULMONARY RESUSCITATION SIGN; AN ILLUSTRATED DIAGRAM WITH TEXT AT LEAST ¼ INCH HIGH OF ARTIFICIAL RESPIRATION AND CARDIO PULMONARY RESUSCITATION PROCEDURES SHALL BE POSTED.
   D. EMERGENCY SIGN; THE EMERGENCY TELEPHONE NUMBER 911, WITH NUMBERS NOT LESS THAN 4 INCHES, THE NUMBER OF THE NEAREST EMERGENCY SERVICES AND THE NAME AND STREET ADDRESS OF THE POOL FACILITY SHALL BE POSTED WITH NUMBERS AND TEXT AT LEAST 1 INCH HIGH.
   E. NO USE AFTER DARK; WHERE POOLS WERE CONSTRUCTED FOR WHICH LIGHTING WAS NOT REQUIRED, A SIGN SHALL BE POSTED AT EACH POOL ENTRANCE ON THE OUTSIDE OF THE GATE(S) STATING, "NO USE OF POOL ALLOWED AFTER DARK."
   F. KEEP CLOSED; A SIGN SHALL BE POSTED ON THE EXTERIOR SIDE OF GATES AND DOORS LEADING INTO THE POOL ENCLOSURE AREA STATING, "KEEP GATE CLOSED" OR "KEEP DOOR CLOSED".
   G. DIARRHEA; THE POOL OPERATOR SHALL POST AT THE ENTRANCE AREA OF A PUBLIC POOL A SIGN IN LETTERS AT LEAST ONE INCH HIGH THAT CLEARLY STATES THAT PERSONS WITH DIARRHEA AND PERSONS WHO HAVE HAD DIARRHEA WITHIN THE PRIOR 14 DAYS SHALL NOT ENTER THE POOL WATER.
2. DIRECTION OF FLOW SIGNAGE AND LABELS.
   A. THE DIRECTION OF FLOW FOR THE RECIRCULATION EQUIPMENT SHALL BE LABELED CLEARLY WITH DIRECTIONAL SYMBOLS SUCH AS ARROWS ON ALL PIPING IN THE EQUIPMENT AREA.
   B. WHERE THE RECIRCULATION EQUIPMENT FOR MORE THAN ONE POOL IS LOCATED ON SITE, THE EQUIPMENT SHALL BE MARKED AS TO WHICH POOL THE SYSTEM SERVES.
   C. VALVES AND PLUMBING LINES SHALL BE LABELED CLEARLY WITH THE SOURCE OR DESTINATION DESCRIPTIONS.

1 **POOL SIGNAGE DETAIL** ¾"=1'-0"

EQUIPMENT LIST

(1) SWIMMING POOL STRAINER: 'FLUIDTROL' RSW SERIES FRP REDUCING BASKET STRAINER RSW116112831: ONE (1) 12"x8" STANDARD, WITH ACRYLIC LID AND TWO (2) STAINLESS STEEL STRAINERS EA. (141lbs.)

3/MR.3, 5/MR.4, 5-7/MR.6, 1,2/MR.7 (2) SWIMMING POOL CIRCULATION PUMP: 'PACO' #6015-7, 6"x8"x15" TYPE 'LC' END SUCTION CENTRIFUGAL PUMP; 1187 RPM 460V, 3PH; 40HP; RATED AT 1,665 GPM @ 60 FT. TDH; 82.84% EFFICIENT; PREMIMUM EFFICIENCY TEFC MOTOR; EPOXY COAT ALL WET SURFACES. 'PACO', 'AURORA' OR EQUAL. (760 lbs.) PROVIDE 'SPCS' EKO-FLEX PUMP CONTROL SYSTEM VARIABLE SPEED DRIVE MODEL SPCS040N4X4 (26"x9"x10" DRIVE AND 24"x24"x10" PANEL). COORDINATE MOUNTING LOCATION TO MAINTAIN DESIRED CLEARANCES, 460V 3PH. (316 lbs.)

1/MR.3, 5/MR.4, 3/MR.6 (3) SWIMMING POOL FILTERS: 'EKO³ SYSTEMS GEN 2' #EKO-42230-1206-T-5 AUTOMATIC FILTER CONTROL (AFC) FULLY AUTOMATIC HI-RATE PERMANENT MEDIA FILTER WITH 115 SQ. FT. OF FILTER AREA RATED AT 1,725 GPM AT 15 GPM/SQ. FT. COMPLETE WITH 12" FACE PIPING, 6" BACKWASH, SEISMIC ANCHORAGE. PROVIDE ALL UTILITIES, PIPING, VALVING ETC. (8,155 lbs EACH TANK) 'EKO³ SYSTEMS GEN 2' OR EQUAL. PROVIDE SIGNET P51530-PX FLOSENSOR WITH DIGITAL READ-OUT. ONE (1) SYSTEM TOTAL.

2/MR.3, 5/MR.4 (4) SWIMMING POOL HEATER(S): INDIRECT FIRED POOL HEATING PACKAGE SYSTEM; 'AQUAS' CREST WITH SMARTTOUCH CONTROL CONDENSING MODULATING BOILER, TITANIUM PLATE AND FRAME HEAT EXCHANGER WITH CPVC CONNECTIONS, FACTORY ASSEMBLED SKID MOUNTED PACKAGE, CALIFORNIA CODE CONTROLS, 1½" NATURAL GAS CONNECTION, 3" WATER CONNECTIONS, 8" DIAMETER VENT SIZE, 8" AIR INLET, PVC VENTED; 1,999,000 BTU PER HOUR INPUT, 97% EFFICIENT, PROVIDE ¾" COLD WATER TO EACH UNIT WITH ADJACENT FLOOR SINK FOR CONDENSATE. 'LOCHINVAR AP02000N', WEIGHT = 3,397 lbs. EA. TWO (2) TOTAL.

4/MR.3, 7,8/MR.3, 1/MR.4, 5/MR.4 (5) CHLORINE STORAGE/FEED SYSTEM: PROVIDE 'CHEM-TAINER' 500 GALLON #TC5971DC; DUAL STORAGE/ CONTAINMENT TANK WITH LID SEISMICALLY RESTRAINED; OPERATING WEIGHT = (4,165 lbs). TWO (2) TOTAL. COMPLIES WITH FED. REG #40CFR-264-193. FEED PUMPS SHALL BE 'STENNER' #170DM5; 170 GPD @ 25 PSI WITH FRP SHELF BRACKETS. ONE (1) TOTAL. HARD PIPE TO POINT OF INJECTION.

5-8/MR.3, 1/MR.4, 5/MR.4 (6) ACID STORAGE/FEED SYSTEM: PROVIDE 'CHEM-TAINER' 350 GALLON #TC5256DC; DUAL STORAGE/CONTAINMENT TANK WITH LID SEISMICALLY RESTRAINED; OPERATING WEIGHT =(2,915 lbs). COMPLIES WITH FED. REG #40CFR-264-193. PROVIDE 60 GALLON ACID VAPOR RECOVERY SYSTEM. ONE (1) TOTAL. FEED PUMP SHALL BE 'STENNER' #85M-5; 85 GPD @ 25 PSI WITH FRP SHELF BRACKETS. PROVIDE SPARE PARTS KIT.

8/MR.3, 1-5/MR.4 (7) CARBON DIOXIDE STORAGE FEED SYSTEM: PROVIDE ONE (1) 'NOVO-750', 750 lb. CRYOGENIC LIQUID CO2 STORAGE TANK WITH REMOTE FILL PORT. 594 LIQUID lbs., (5,195 CUBIC FEET OF GASEOUS CO2 AT NTP) ONE (1) TOTAL. PROVIDE EKO3PH-MTS CO2 HIGH EFFICIENCY FEED SYSTEM WITH ALKALINITY CONTROL, 0 TO 160 SCFH FEED CAPACITY BOOSTER PUMP, PIPING INJECTOR, FLOWMETER, RELAYS AND ACID FEED ALKALINITY CONTROL. ONE (1) SYSTEM TOTAL (92lbs. EA.) PROVIDE HARD WIRED 'ANALOX' #API KIT CO2 DETECTOR WITH AUDIBLE AND VISUAL ALARMS IN EACH CHEMICAL ROOM, UL 1971 STANDARD LISTED, ONE (1) TOTAL.

5/MR.4, 7/MR.4, 2/MR.5, 4,5/MR.5 (8) WATER CHEMISTRY CONTROLLER: PROVIDE ETHERNET CONNECTION TO 'BECSYS' CS-BECSYS7-BP-E WATER CHEMISTRY CONTROLLER. PROVIDE COMPLETE SYSTEM CONTROL PACKAGE. 'BECSYS SYSTEM 7', 'IMPACT', 'WALLACE & TIERNAN' OR APPROVED EQUAL.

5/MR.4, 6/MR.5 (9) ELECTRICAL: PROVIDE ALL ELECTRICAL WIRING, CONDUIT, PANEL(S), STARTER/DISCONNECT INTERCONNECT(S) ETC. AS REQUIRED FOR PROPER EQUIPMENT INSTALLATION PER MANUFACTURERS RECOMMENDATIONS AND SHOP DRAWINGS. COORDINATE ALL WORK WITH OTHER TRADES AS REQUIRED. REFER TO ELEC. PLANS FOR ALL ADDITIONAL INFO.

8/MR.5 (10) BACKWASH PIT: 8'-0" x 8'-0" x 5'-0" DEEP WITH 6"Φ P-TRAP OUTLET TO SEWER. PROVIDE WATERPROOFING PER SPECIFICATIONS. PROVIDE 2"Φ GALV. STANDARD STEEL PIPE GUARDRAIL. ACCESS LADDER TO BE CUSTOM STAINLESS STEEL LADDER. COORDINATE WITH STRUCTURAL AND PLUMBING PLANS.

8/MR.4 (11) FILL SYSTEM: 3" 'CLA-VAL' FILL SYSTEM TO INCLUDE 3" 'CLA-VAL' SOLENOID CONTROL VALVE #136-01BY, 3" DUCT IRON, EPOXY COATED BODY WITH CAST IRON DISC RETAINER AND DIAPHRAGM WASHER, BRONZE TRIM, FLANGED GLOBE PATTERN, 120V AT 60HZ. SOLENOID WIRING SHALL BE WIRED TO WATER CHEMISTRY CONTROLLER. PROVIDE 6" AIR GAP AT FILL POINT .

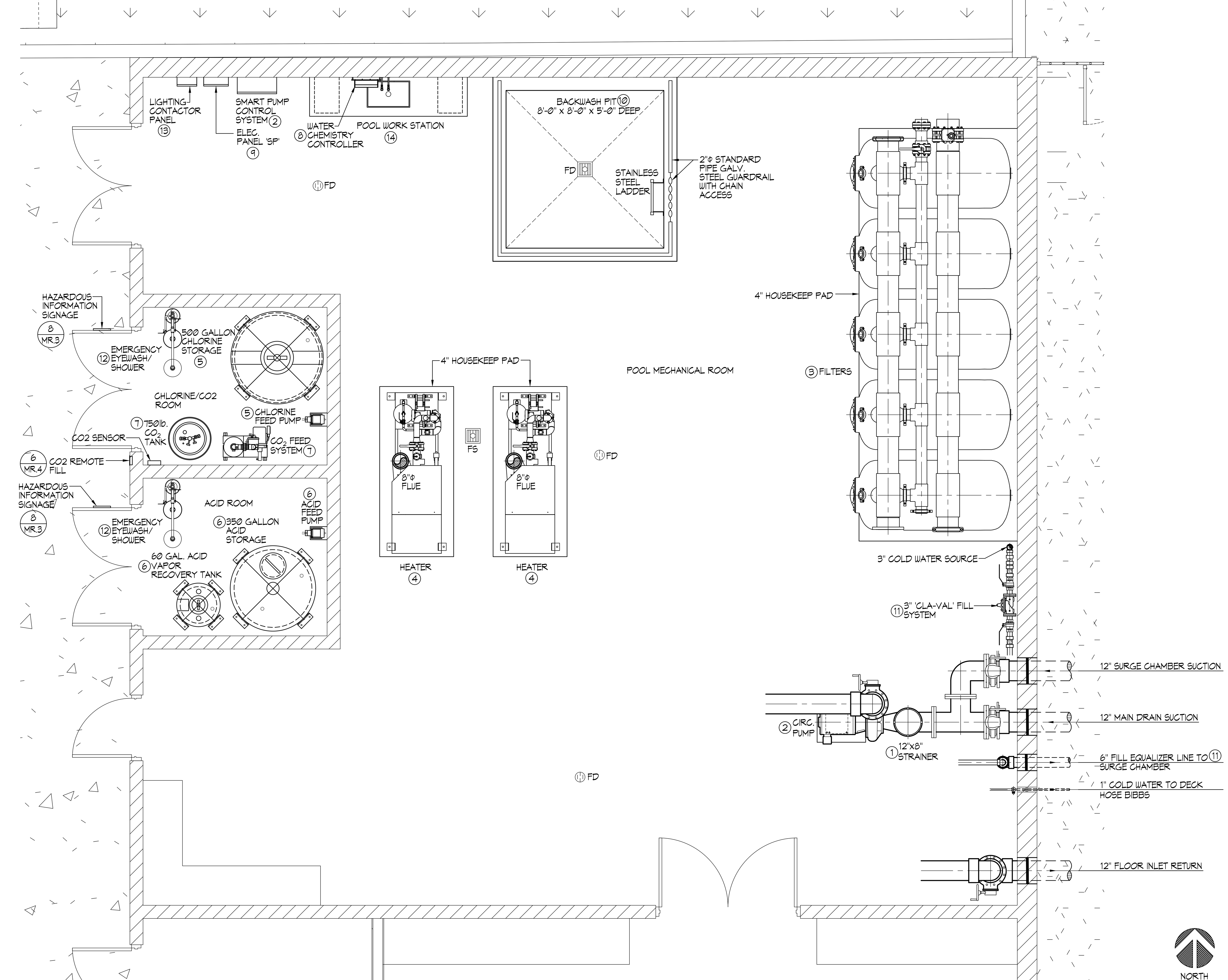
7/MR.5 (12) EYEWASH/SHOWER: HAWS MODEL #8300-8309CRP BARRIER FREE COMBINATION SHOWER AND EYE/FACE WASH WITH CORROSION RESISTANT PROTECTION. SEE MEP SHEETS FOR SUPPLY PIPING. TWO (2) TOTAL.

3/MR.7 (13) LIGHTING CONTACTOR PANEL: 'ALLEN BRADLEY' #500L; OR APPROVED EQUAL. PANEL SHALL BE MOUNTED IN A NEMA 12 HINGED COVER - LOCKABLE ENCLOSURE. CONTACTORS TO BE SWITCHED BY MOMENTARY SWITCH EQUAL TO 'HUBBELL' #1557 MOUNTED IN J-BOX IN MECHANICAL EQUIPMENT ROOM. REFER TO ELECTRICAL PLANS FOR LOCATION OF OWNER COORDINATED REMOTE UNDERWATER LIGHT SWITCH.

1/MR.8 (14) POOL OPERATOR WORKSTATION DESK: 'TOTAL LAB SOLUTIONS' EPOXY COUNTERTOP WITH DROP-IN SINK AND TWO (2) END CABINETS. FURNISH WITH WALL MOUNTED TWO (2) FAUCETS 'BROEN BOSS' OR APPROVED EQUAL. SEE MEP PLANS FOR WATER SUPPLY PIPING.

LEGEND

BV	= BALL VALVE	AI	= ACID INJECTION
BFV	= BUTTERFLY VALVE	CI	= CHLORINE INJECTION
CV	= CHECK VALVE	PH / PS	= PIPE HANGER / PIPE SUPPORT (2/MR.8, 4/MR.8)
FM	= FLOWMETER	PG/VG	= VACUUM / PRESSURE GAUGE (3/MR.5, 4/MR.6)
BW	= BACKWASH	FD	= FLOOR DRAIN
FS	= FLOOR SINK		



THREE PHASE MOTOR LOADS AT 460V

SWIMMING POOL CIRCULATION PUMP: 40 HP @ 460V = 52 AMPS

GENERAL NOTES

1. THE PIPING SYSTEM SHALL HAVE DIRECTION OF FLOW ARROWS INDICATED ON THE PIPES.
2. PUBLIC POOLS SHALL HAVE A FLOW DIAGRAM OF THE POOL'S PIPING SYSTEM WITH OPERATION INSTRUCTIONS.
3. THE FLOW DIAGRAM AND INSTRUCTIONS SHALL BE AVAILABLE ON THE PREMISES AT ALL TIME
4. ALL MECHANICAL ROOM FLOORS SHALL BE SLOPED A MIN ¼" PER FOOT TO A DRAIN PER CBC 3122B. SEE ARCHITECTURAL SHEETS FOR SPOT ELEVATIONS AND SLOPES.
5. ALL ELECTRICAL CONDUITS WITHIN MECHANICAL ROOM AND CHEMICAL ROOMS SHALL BE RIGID NEMA 3R SUITABLE FOR CORROSIVE ATMOSPHERE.
6. ALL CHEMICAL FEED SYSTEMS ARE INTERLOCKED WITH THEIR ASSOCIATED CIRCULATION PUMPS AND SHALL NOT OPERATE WHEN THE PUMP IS OFF DURING THE FILTER BACKWASH.

HEATER/GAS PIPING INSTALLATION NOTE

GAS FIRED POOL HEATER(S) INSTALLED ON A GAS SUPPLY SYSTEM UTILIZING A 2 PSI OR 5 PSI SUPPLY. GAS PRESSURE SHALL REQUIRE A REGULATOR TO REDUCE THE SUPPLY PRESSURE. A PROPERLY SIZED AND INSTALLED LOCK-UP-TYPE HIGH GAS PRESSURE REGULATOR (HGPR) SHALL BE USED TO REDUCE THE GAS PRESSURE AT THE UNIT INLET TO A MINIMUM OF 4" TO A MAXIMUM OF 11" WATER COLUMN.

'LOCHINVAR' RECOMMENDS THAT ANY REQUIRED LINE LOCK-UP-TYPE HIGH GAS PRESSURE REGULATOR BE INSTALLED WITH A MINIMUM OF 8 FEET TO 10 FEET OF PIPE FROM ITS DISCHARGE TO THE UNIT'S GAS INLET. IF A STRAIGHT DISTANCE OF GAS PIPE IS NOT AVAILABLE THE ADDITION OF A VERTICAL 'U' IN THE GAS PIPING DOWN STREAM FROM THE 'HGPR' CAN BE USED TO ACHIEVE THE 8 FEET TO 10 FEET OF DISTANCE.

CONTRACTOR IS RESPONSIBLE FOR HEATER VENTING, EXHAUST DUCTING, FLUE TERMINUS AND PENETRATION(S) THROUGH BUILDING STRUCTURE.

MECHANICAL ANCHORAGE

1. EXPANSION OR WEDGE ANCHORS INTO CONCRETE: HILTI KB TZ 2 (ICC ESR-4266) TO BE INSTALLED IN ACCORDANCE WITH ICC REPORT AND MANUFACTURER'S RECOMMENDATIONS.
2. EXPANSION OR WEDGE ANCHORS INTO MASONRY: HILTI KB TZ 2 (ICC ESR-4561) TO BE INSTALLED IN ACCORDANCE WITH ICC REPORT AND MANUFACTURER'S RECOMMENDATIONS.
3. FASTENERS SHALL BE STAINLESS STEEL FOR EXTERIOR USE OR WHEN EXPOSED TO WEATHER. PROVIDE GALVANIZED CARBON STEEL ANCHORS AT OTHER LOCATIONS, UNLESS OTHERWISE NOTED.
4. IF REINFORCEMENT IS ENCOUNTERED DURING DRILLING, ABANDON AND SHIFT THE HOLE LOCATION TO AVOID THE REINFORCEMENT. PROVIDE A MINIMUM OF 2 ANCHOR DIAMETERS OR 1 INCH, WHICHEVER IS LARGER, OF SOUND CONCRETE BETWEEN THE DOWEL AND THE ABANDONED HOLE. FILL THE ABANDONED HOLE WITH NON-SHRINK GROUT WITH CONCRETE STRENGTH EQUAL TO OR GREATER THAN BASE MATERIAL. IF THE ANCHOR OR DOWEL MAY NOT BE SHIFTED AS NOTED ABOVE, THE STRUCTURAL ENGINEER WILL DETERMINE A NEW LOCATION.
5. LOCATE REINFORCEMENT AND CONFIRM FINAL ANCHOR LOCATIONS PRIOR TO FABRICATING PLATES, MEMBERS, OR OTHER STEEL ASSEMBLIES ATTACHED WITH MECHANICAL ANCHORS.
6. ANCHORS SHALL BE PROOF-TESTED BY OWNER'S TESTING AND INSPECTION AGENCY.
7. TEST ANCHORS NO SOONER THAN 24 HOURS AFTER INSTALLATION.
8. APPLY TEST LOAD BY ANY METHOD THAT WILL EFFECTIVELY MEASURE THE TENSION OF THE ANCHOR SUCH AS DIRECT PULL WITH A HYDRAULIC JACK, TORQUE WRENCH, OR CALIBRATED SPRING LOADING DEVICES, ETC.
9. REACTION LOADS FROM TEST FIXTURES MAY BE APPLIED CLOSE TO THE ANCHOR BEING TESTED, PROVIDED THE ANCHOR IS NOT RESTRAINED FROM WITHDRAWING BY A BASE PLATE OR OTHER FIXTURE. IF RESTRAINT IS FOUND, LOOSEN AND SHIM OR REMOVE THE FIXTURE PRIOR TO TESTING.
10. UNLESS OTHERWISE NOTED, PROVIDE MINIMUM EMBEDMENT OF ANCHORS AS SHOWN IN TABLES BELOW.
11. TEST 50% OF ANCHORS PER ONE OF THE FOLLOWING METHODS AND IN ACCORDANCE WITH THE VALUES SHOWN IN THE TABLE:
    A. HYDRAULIC RAM METHOD: APPLY PROOF TEST LOAD WITHOUT REMOVING THE NUT. IF IT IS NOT POSSIBLE TO TEST WITH THE NUT INSTALLED, REPLACE THE NUT WITH A THREADED COUPLER TO THE LOAD. ANCHOR IS ACCEPTABLE IF NO MOVEMENT IS OBSERVED AT THE TEST LOAD. MOVEMENT MAY BE DETERMINED WHEN THE WASHER UNDER THE NUT BECOMES LOOSE.
    B. TORQUE WRENCH METHOD: TEST ANCHORS TO THE TORQUE LOAD INDICATED IN THE TABLE WITH ONE-HALF TURN OF THE NUT.
12. IF ANY ANCHOR FAILS TESTING, REPLACE ANCHOR AND TEST ADDITIONAL ANCHORS OF THE SAME CATEGORY NOT PREVIOUSLY TESTED UNTIL TWENTY (20) CONSECUTIVE TESTS PASS, THEN RESUME INITIAL TESTING FREQUENCY. CCD WILL BE REQUIRED.

WEDGE OR EXPANSION ANCHOR EMBEDMENT DEPTH AND TEST LOAD

SIZE	HILTI KB TZ 2 (SS) ANCHORS IN CONCRETE (ESR-4266)		KB TZ 2 (SS) ANCHORS IN CMU (ESR-4561)	
	MIN. EMBED (heff)	TORQUE LOAD (FT-LBS)	MIN. EMBED (heff)	TORQUE LOAD (FT-LBS)
¼" DIA.	1½"	6	1½"	6
⅜" DIA.	2½"	30	2½"	15
½" DIA.	3¼"	40	3¼"	25
⅝" DIA.	4"	60	4"	35
¾" DIA.	4¾"	125	4¾"	50

EPOXY REBAR PULL TESTING LOADS

BAR SIZE	DEPTH	PRODUCT	TEST VALUE
#4	3" EMBED	HILTI HIT-HY 200 V3 (ICC ESR-4868)	1,050 LBS

INSTALLATION PARAMETERS:
- MINIMUM CONCRETE AGE: 21 DAYS
- DRILLING: HAMMER DRILLED
- TEMPERATURE: 14-114°F
- MOISTURE CONDITION: DRY OR SATURATED
- CLEANING: AUTOMATIC OR COMPRESSED-AIR

MEP COMPONENT ANCHORAGE NOTE

ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA - APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26 AND 30.

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE, BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:

A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVING A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH ABOVE REQUIREMENTS.

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

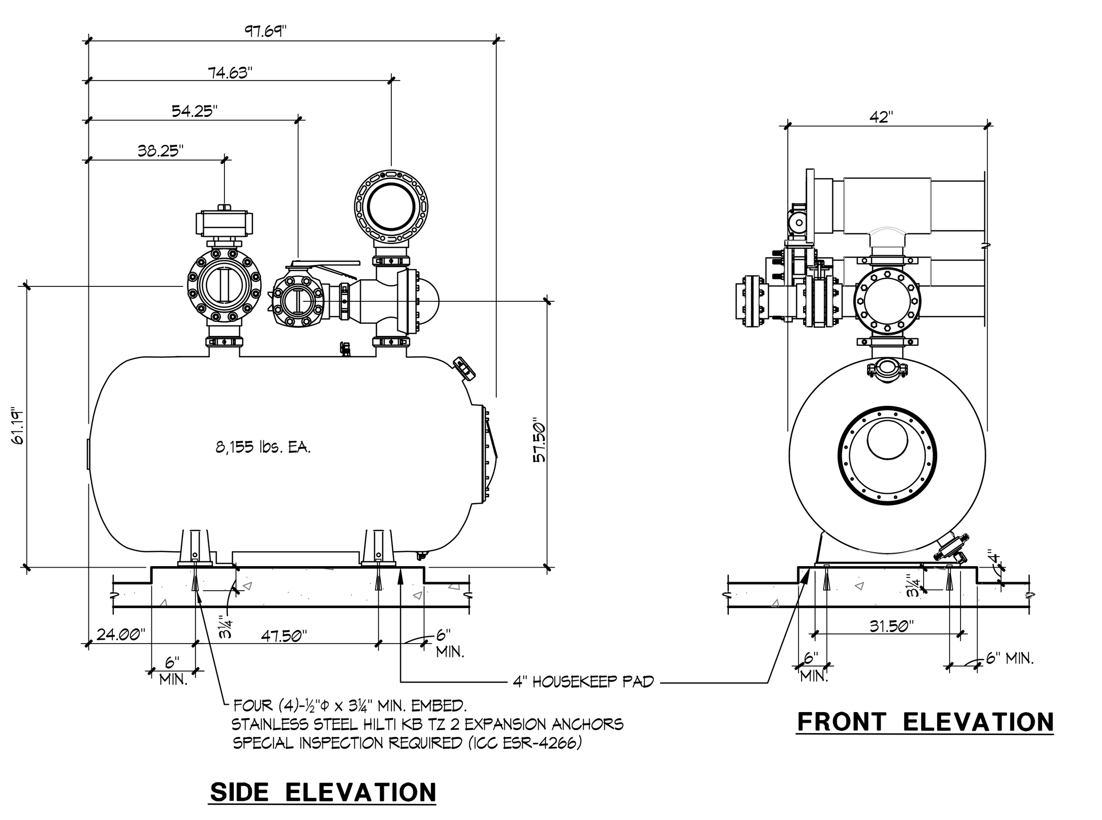
PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTION 13.6.5, 13.6.6, 13.6.7, 13.6.8; AND 2022 CBC, SECTIONS 1617A.1.24, 1617A.1.25, 1617A.1.26.

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (E.G., HCAi OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

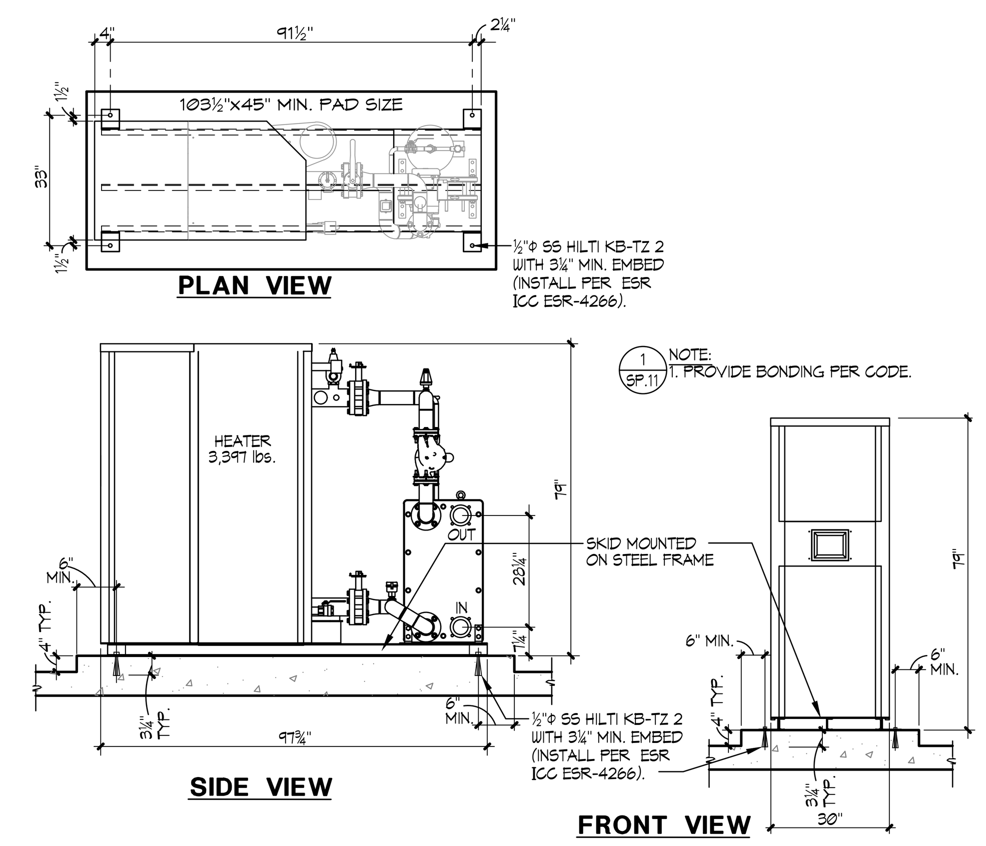
MECHANICAL PIPING (MP). MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):

MP ☒ MD ☐ PP ☒ E ☐ 1. SHALL COMPLY WITH HCAi (OSHPD) PRE-APPROVAL (OPM #) OPM #0043-22 AS INCLUDED IN THESE DRAWINGS WITH PROJECT SPECIFIC NOTED AND DETAILS.

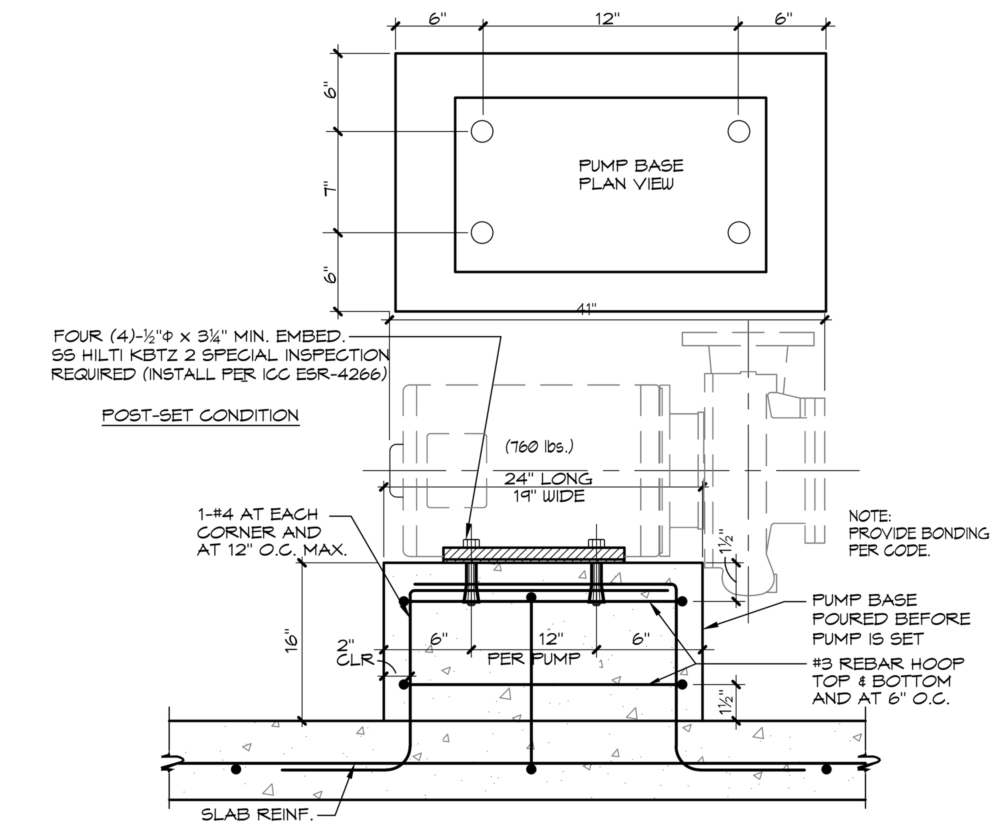
1 MECHANICAL ROOM LAYOUT PLAN 3/16"=1'-0"



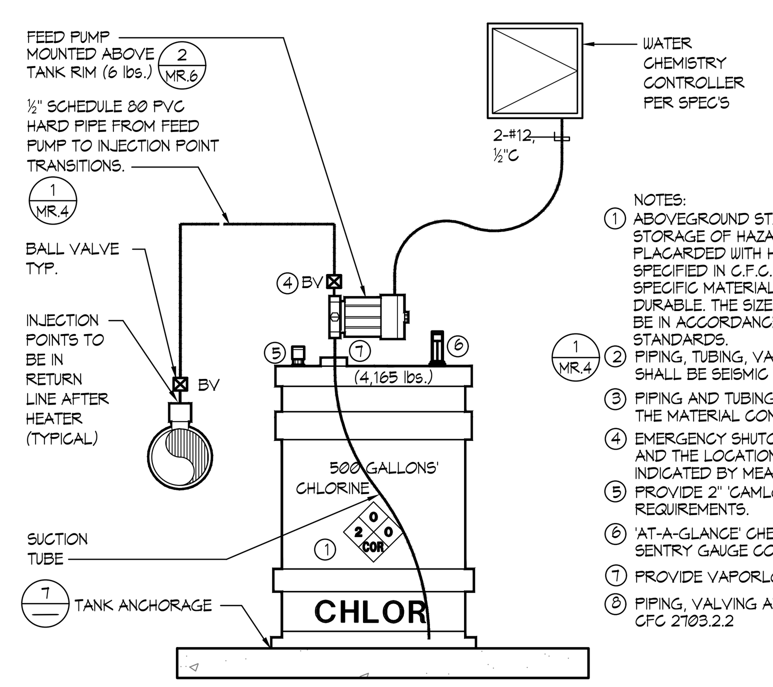
1 **FILTER ANCHORAGE** NO SCALE



2 **HEATER ANCHORAGE** NO SCALE



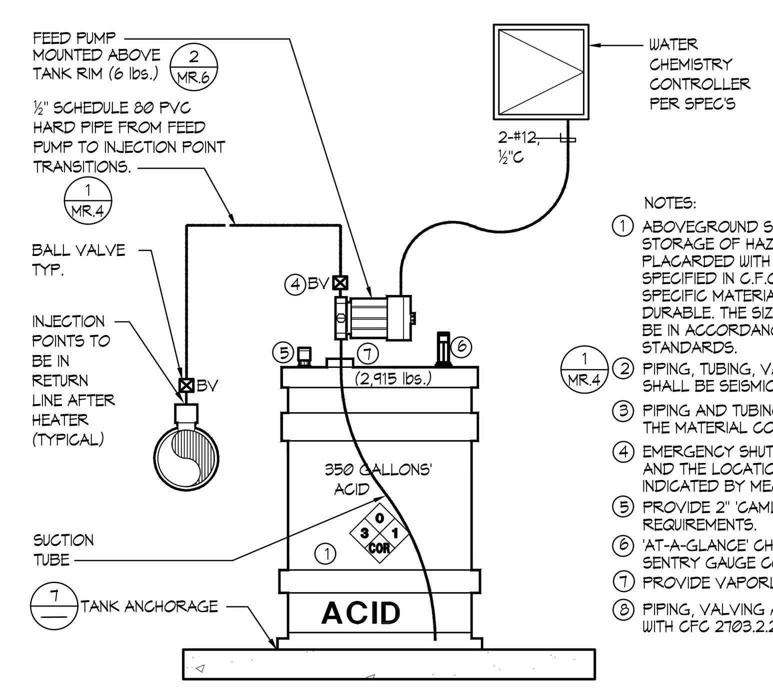
3 **PUMP ANCHORAGE** NO SCALE



NOTES:

1. ABOVEGROUND STATIONARY TANKS USED FOR THE STORAGE OF HAZARDOUS MATERIALS SHALL BE PLACARDED WITH HAZARD IDENTIFICATION SIGNS AS SPECIFIED IN C.F.C. 5003.5 AND NFPA 704 FOR THE SPECIFIC MATERIAL CONTAINED. SIGNS SHALL BE DURABLE. THE SIZE, COLOR AND LETTERING SHALL BE IN ACCORDANCE WITH NATIONALLY RECOGNIZED STANDARDS.
2. PIPING, TUBING, VALVES AND RELATED COMPONENTS SHALL BE SEISMIC BRACED. (1/MR.4)
3. PIPING AND TUBING SHALL BE IDENTIFIED TO INDICATE THE MATERIAL CONVEYED.
4. EMERGENCY SHUTOFF VALVES SHALL BE IDENTIFIED AND THE LOCATION SHALL BE CLEARLY VISIBLE AND INDICATED BY MEANS OF A SIGN.
5. PROVIDE 2" 'CAMLOCK' FILL PORT PER VENDOR'S REQUIREMENTS.
6. 'AT-A-GLANCE' CHEMICAL GUAGE BY KRUEGER SENTRY GAUGE CO. INC.
7. PROVIDE VAPORLOC CAP @ TUBING ENTRANCE
8. PIPING, VALVING AND FITTINGS SHALL COMPLY WITH CFC 2703.2.2

4 **SODIUM HYPOCHLORITE FEED SCHEMATIC** NO SCALE



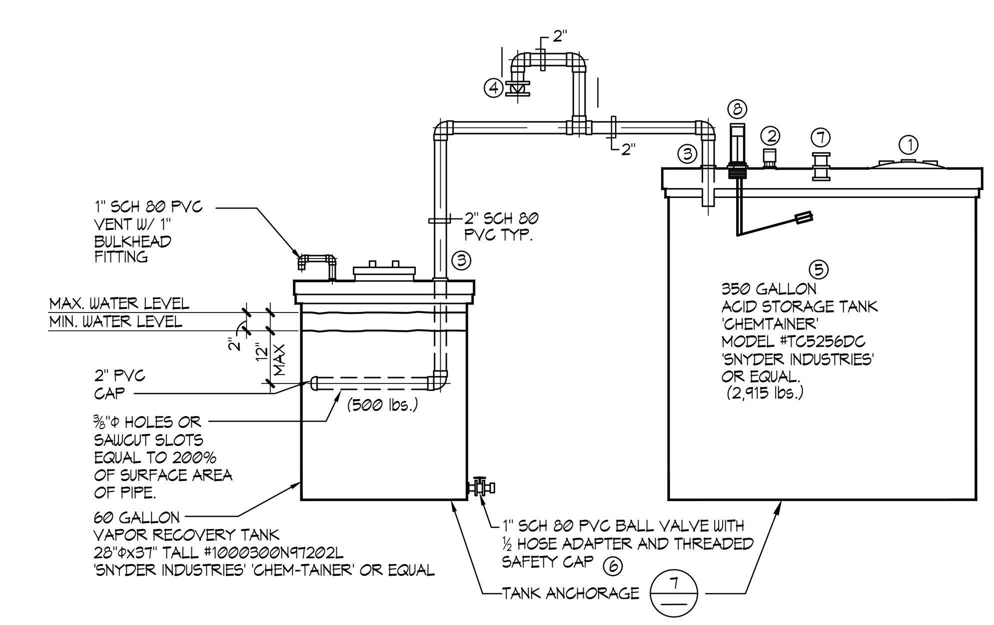
NOTES:

1. ABOVEGROUND STATIONARY TANKS USED FOR THE STORAGE OF HAZARDOUS MATERIALS SHALL BE PLACARDED WITH HAZARD IDENTIFICATION SIGNS AS SPECIFIED IN C.F.C. 5003.5 AND NFPA 704 FOR THE SPECIFIC MATERIAL CONTAINED. SIGNS SHALL BE DURABLE. THE SIZE, COLOR AND LETTERING SHALL BE IN ACCORDANCE WITH NATIONALLY RECOGNIZED STANDARDS.
2. PIPING, TUBING, VALVES AND RELATED COMPONENTS SHALL BE SEISMIC BRACED. (1/MR.4)
3. PIPING AND TUBING SHALL BE IDENTIFIED TO INDICATE THE MATERIAL CONVEYED.
4. EMERGENCY SHUTOFF VALVES SHALL BE IDENTIFIED AND THE LOCATION SHALL BE CLEARLY VISIBLE AND INDICATED BY MEANS OF A SIGN.
5. PROVIDE 2" 'CAMLOCK' FILL PORT PER VENDOR'S REQUIREMENTS.
6. 'AT-A-GLANCE' CHEMICAL GUAGE BY KRUEGER SENTRY GAUGE CO. INC.
7. PROVIDE VAPORLOC CAP @ TUBING ENTRANCE
8. PIPING, VALVING AND FITTINGS SHALL COMPLY WITH CFC 2703.2.2

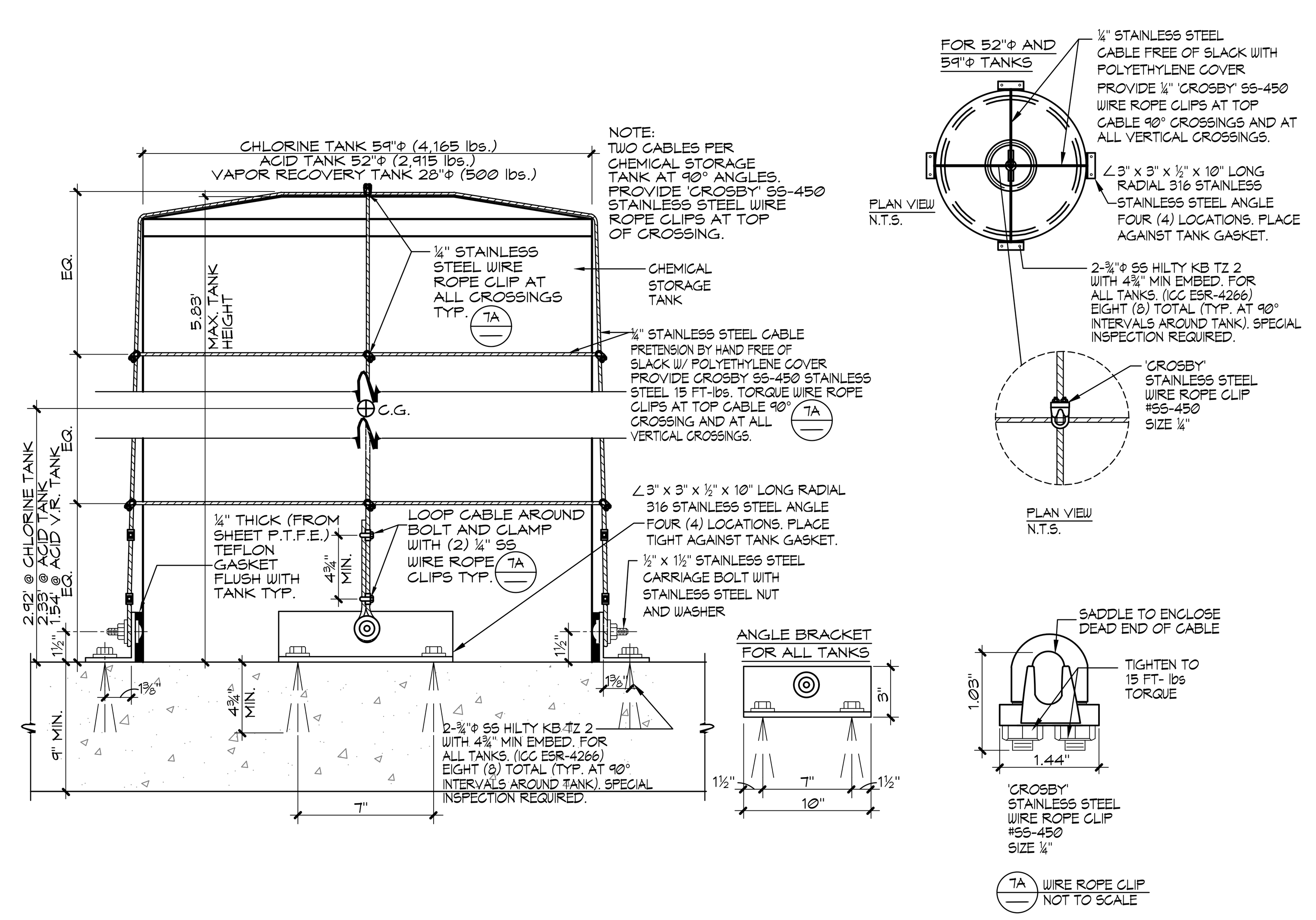
5 **MURIATIC ACID FEED SCHEMATIC** NO SCALE

NOTES:

1. SEAL NON-VENTED MANWAY AND PERMANENTLY CLOSE.
2. PROVIDE CAMLOCK FITTING FOR FILL HOSE.
3. PROVIDE 2" BULKHEAD FITTING.
4. PROVIDE 2" BALL CHECK VALVE.
5. PROVIDE DOUBLE WALLED DUAL CONTAINMENT TANK.
6. PROVIDE ¾"x100' HOSE W/ NON-CORROSIVE ENDS.
7. PROVIDE 2" BULKHEAD FITTING WITH 'VAPORLOC' SYSTEM FOR FEED PUMP SUCTION LINES(S).
8. PROVIDE 'AT-A-GLANCE CHEMICAL GAUGE' BY KRUEGER SENTRY GAUGE CO. INC.



6 **VAPOR RECOVERY TANK** NO SCALE



7 **CHEMICAL TANK ANCHOR (TYP. 3 TANKS)** NO SCALE

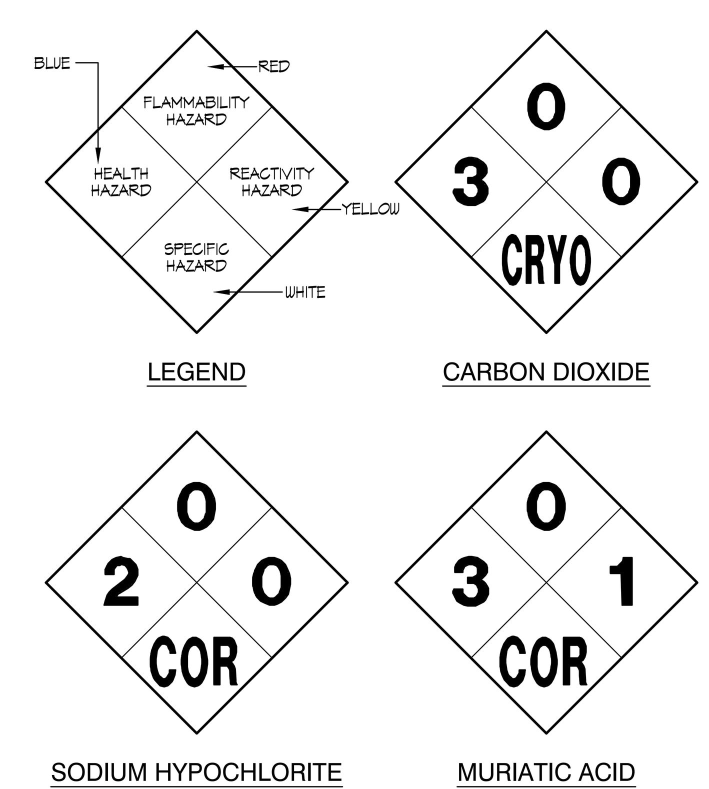
CHEMICAL CLASSIFICATION TABLE										
COMMON NAME	CHEMICAL NAME	% COMP.	CAS #	FORM	QUANT. STORED (NOT USED)	QUANT. IN USE (USE-CLOSED)	MAXIMUM ALLOWABLE QUANTITY	LOCATION (STORAGE & USE)	HAZ. CLASSES	JUSTIFICATION
SODIUM HYPOCHLORITE	SODIUM HYPOCHLORITE	12.5%	7681-52-9	LIQUID	0 GAL.	500 GAL.	500 GAL.	CHEM. ROOM	CORROSIVE LIQUID	MSDS
MURIATIC ACID	HYDROCHLORIC ACID	25%	7647-01-0	LIQUID	0 GAL.	350 GAL.	500 GAL.	CHEM. ROOM	CORROSIVE LIQUID	MSDS
CARBON DIOXIDE	CARBON DIOXIDE	100%	124-39-9	LIQUID	0 lbs.	600 lbs.	686 lbs.	CHEM. ROOM	CRYOGENIC INERT	MSDS

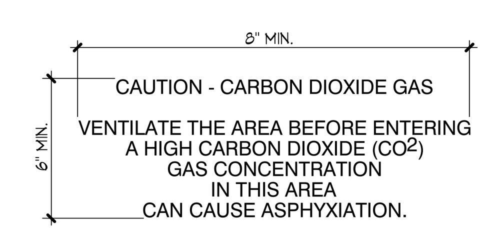
QUANTITIES OF CHEMICALS DO NOT EXCEED THE QUANTITIES LISTED IN CBC TABLES 307.1 (1) AND 307.1 (2).
FOR CARBON DIOXIDE GAS SEE TABLE 1.12.8(b) OF THE NFPA-1, 6,000 FT^3 ALLOWABLE OR 686 lbs. STORAGE PER CONTAINED AREA PROVIDE HARD WIRED CO_2 DETECTOR 'ANALOX SENSOR TECHNOLOGY' MODEL #AP1 KIT SENSOR AND STROBE UNITS 120V HARD WIRED W/ STROBE LIGHT AND AUDIBLE ALARM. SENSOR MOUNTED 18 INCHES A.F.F. AND ALARM LEVEL BETWEEN 70-76 INCHES AND WITHIN VISIBLE EYESIGHT OF DOOR. TO BE SET TO DETECT CO2 GAS IN LEVELS IN EXCESS OF THE PEL. PROVIDE IN EACH ROOM CONTAINING CO_2.

RATING EXPLANATION GUIDE					
RATING	HEALTH HAZARD	FLAMMABILITY HAZARD	REACTIVITY HAZARD	SPECIFIC HAZARD	
4	CAN BE LETHAL	EXTREMELY FLAMMABLE. IGNITES AT BELOW 73° F.	MAY EXPLODE AT NORMAL TEMPERATURES AND PRESSURES	OXIDIZER:	OX
				ACID:	ACID
3	CAN CAUSE SERIOUS OR PERMANENT INJURY	IGNITES AT ABOVE 73° F, BELOW 100° F.	MAY EXPLODE AT HIGH TEMPERATURES OR SHOCK	CORROSIVE:	COR
2	CAN CAUSE TEMPORARY INCAPACITATION OR RESIDUAL INJURY	IGNITES AT ABOVE 100° F, BELOW 200° F.	VIOLENT CHEMICAL CHANGE AT HIGH TEMPERATURES OR PRESSURES	ALKALI:	ALK
				USE NO WATER:	~~W~~
1	CAN CAUSE SIGNIFICANT IRRITATION	IGNITES AT ABOVE 200° F.	NORMALLY STABLE. HIGH TEMPERATURES MAKE UNSTABLE	RADIATION HAZARDS:	☢
0	NO HAZARD	WILL NOT BURN	STABLE	POLYMERIZES:	P

NOTES:

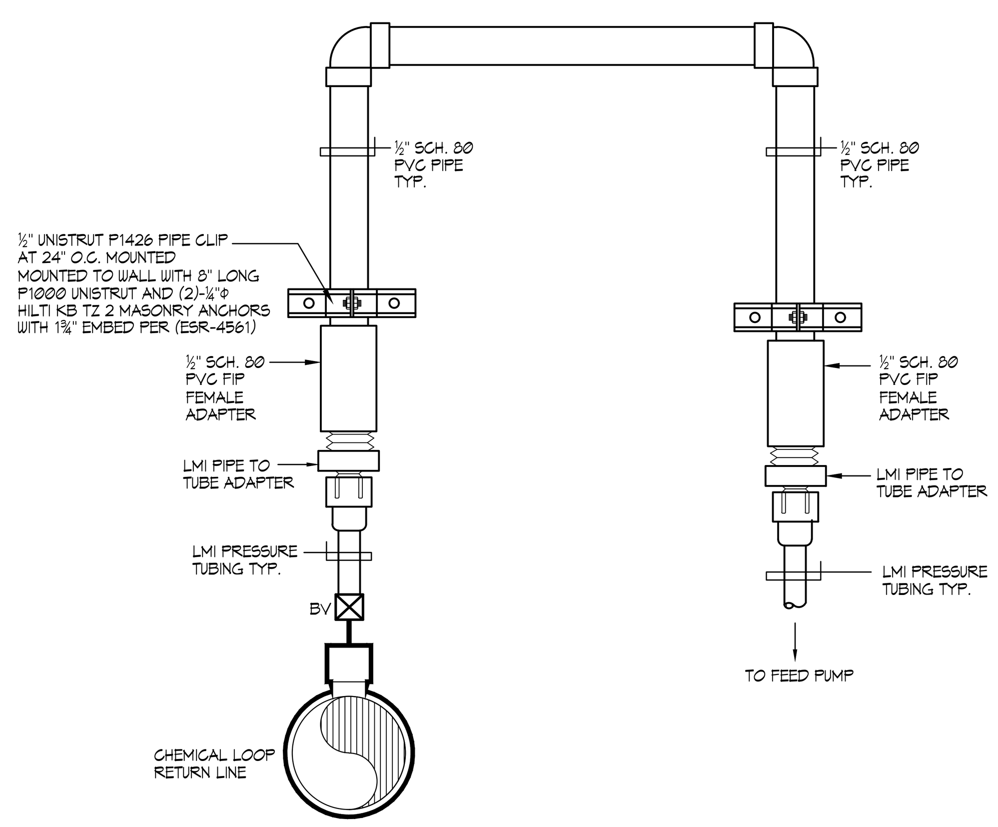
1. CONFIRM SIGNAGE WITH LOCAL FIRE MARSHALL AND/OR BUILDING CODES PRIOR TO INSTALLATION. SIGNS SHALL CONFORM TO NFPA 704.
2. SIGNS SHALL BE SIZES AND COLORS PER CODE MOUNTED AT +60" A.F.F. ON DOORS AT CHEMICAL ROOMS.



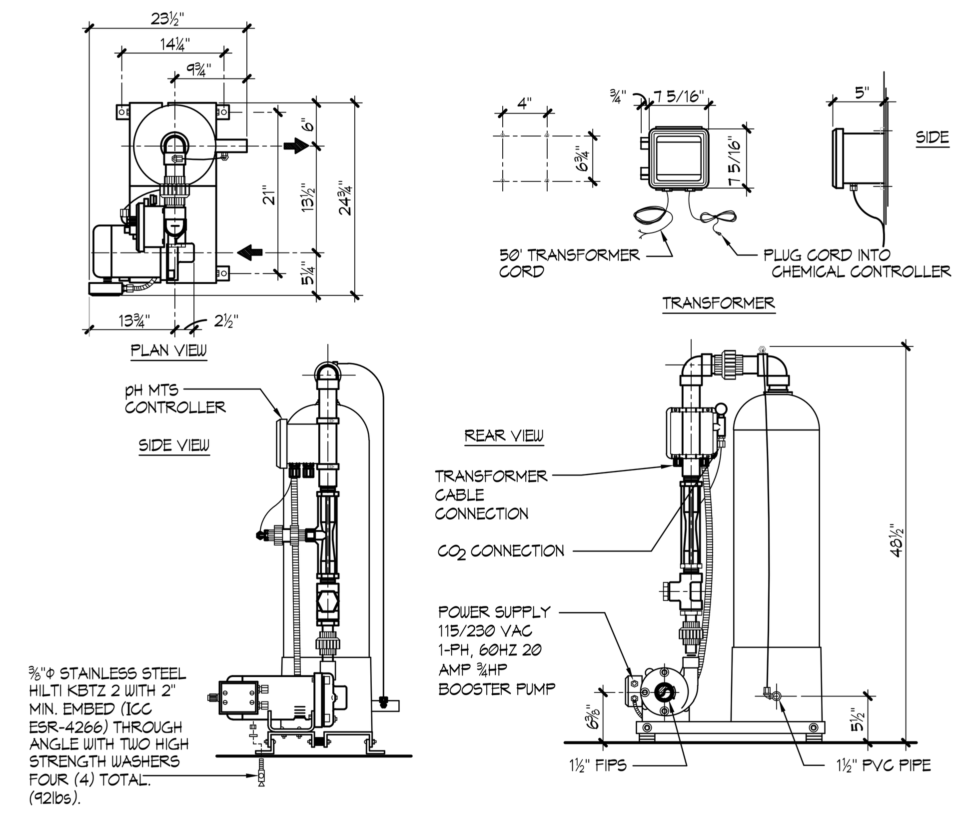


SIGN SHALL BE POSTED AT ROOM ENTRANCE; SIGN SHALL BE NOT LESS THAN 8" IN LENGTH AND 6" IN HEIGHT AND INDICATE:

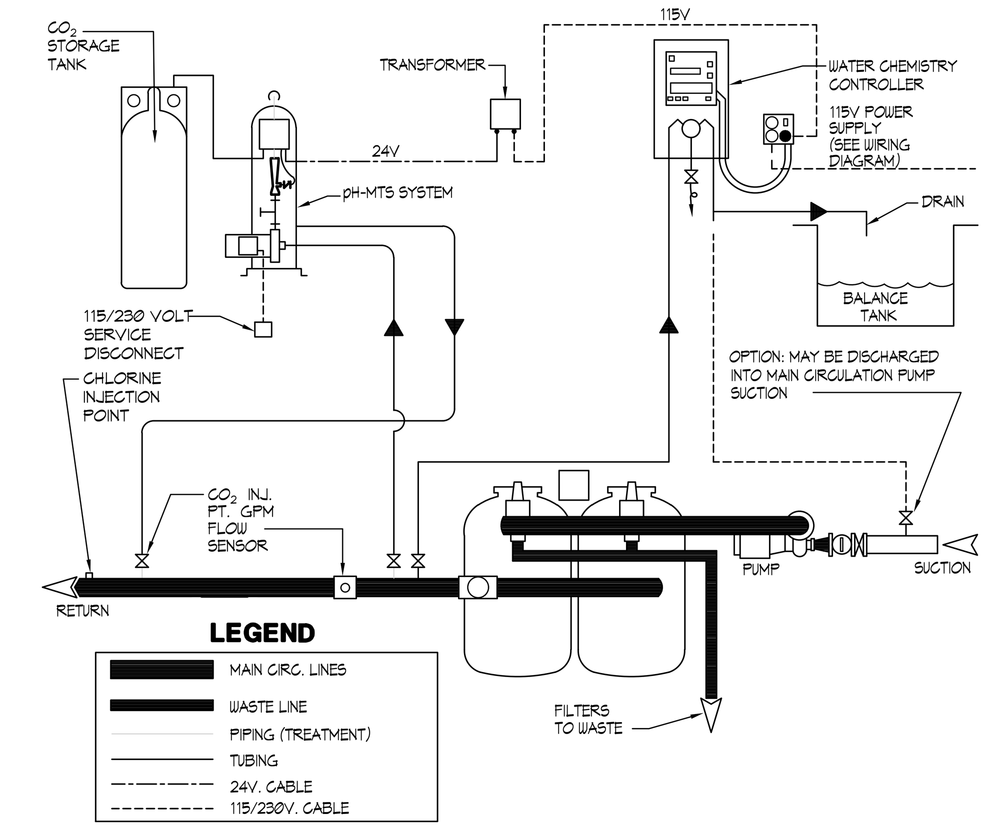
8 **HAZARDOUS INFORMATION SIGNAGE** NO SCALE



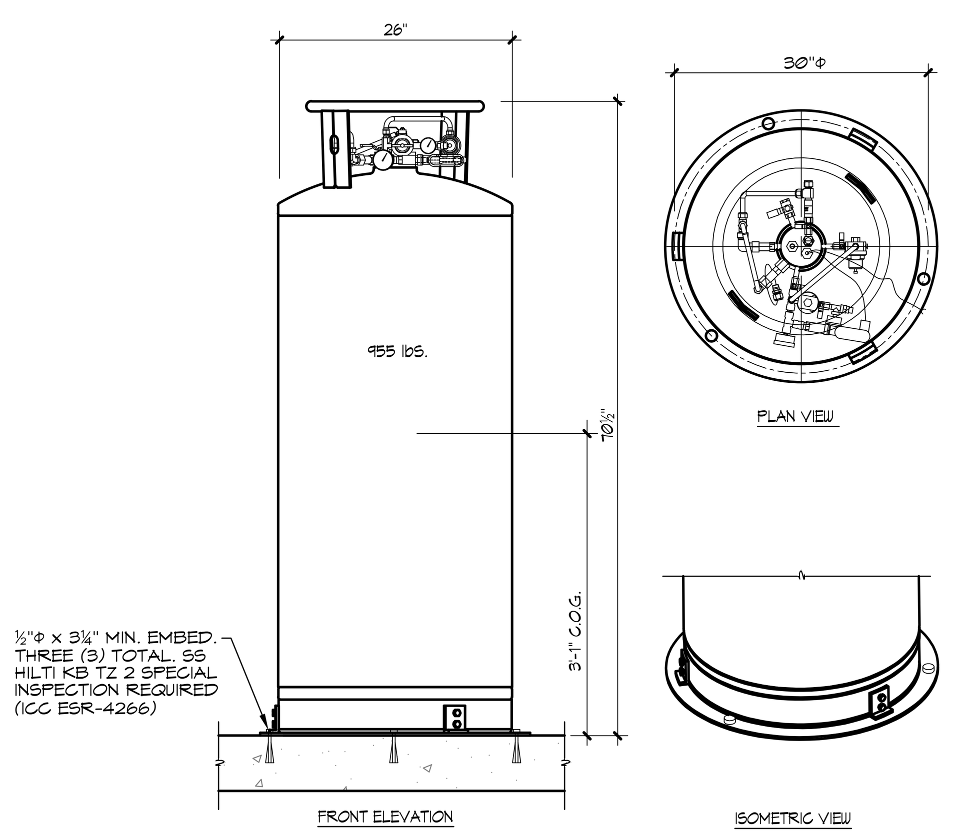
1 CHEMICAL FEED PIPING DETAIL
NO SCALE



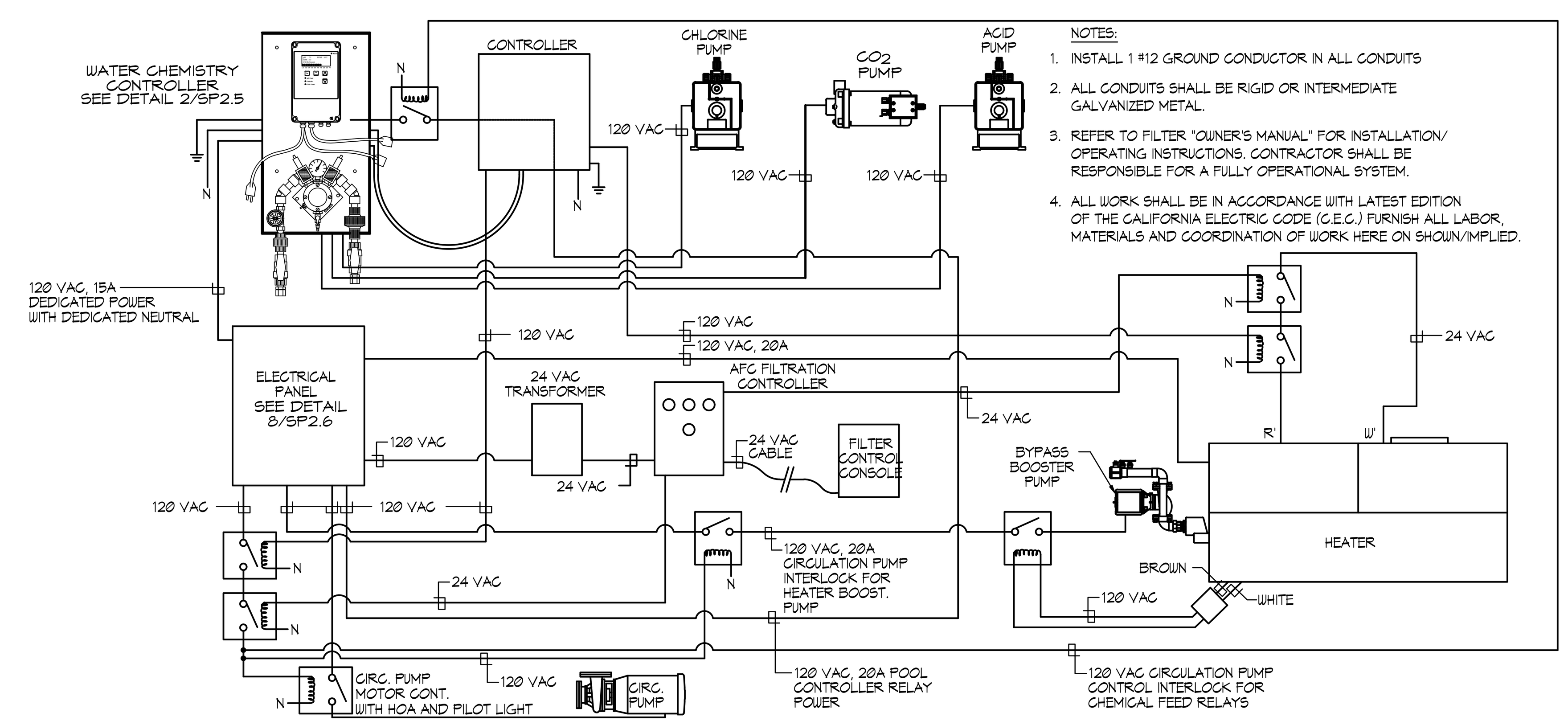
2 CARBON DIOXIDE pH MTS CONTROLLER
NO SCALE



3 TYPICAL CARBON DIOXIDE pH-MTS INSTALLATION
NO SCALE



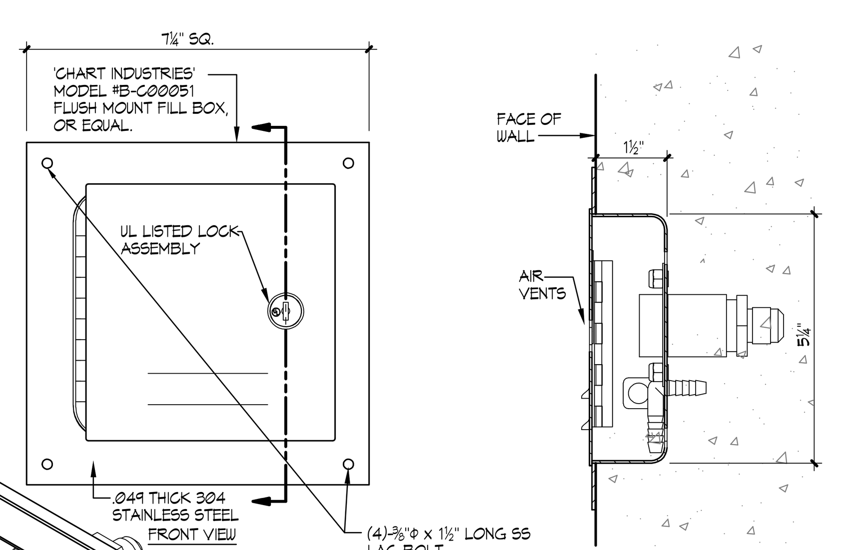
4 CO2 TANK ANCHORAGE DETAIL
NO SCALE

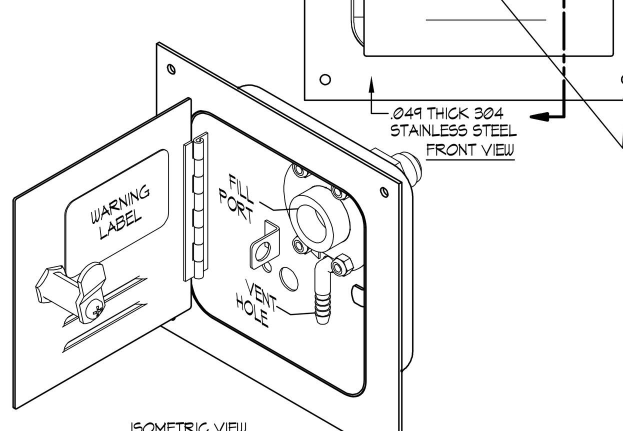


NOTES:

1. INSTALL 1 #12 GROUND CONDUCTOR IN ALL CONDUITS
2. ALL CONDUITS SHALL BE RIGID OR INTERMEDIATE GALVANIZED METAL.
3. REFER TO FILTER "OWNER'S MANUAL" FOR INSTALLATION/ OPERATING INSTRUCTIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR A FULLY OPERATIONAL SYSTEM.
4. ALL WORK SHALL BE IN ACCORDANCE WITH LATEST EDITION OF THE CALIFORNIA ELECTRIC CODE (C.E.C.) FURNISH ALL LABOR, MATERIALS AND COORDINATION OF WORK HERE ON SHOWN/IMPLIED.

5 POOL MECHANICAL ELECTRICAL INTERCONNECTION DIAGRAM
NO SCALE

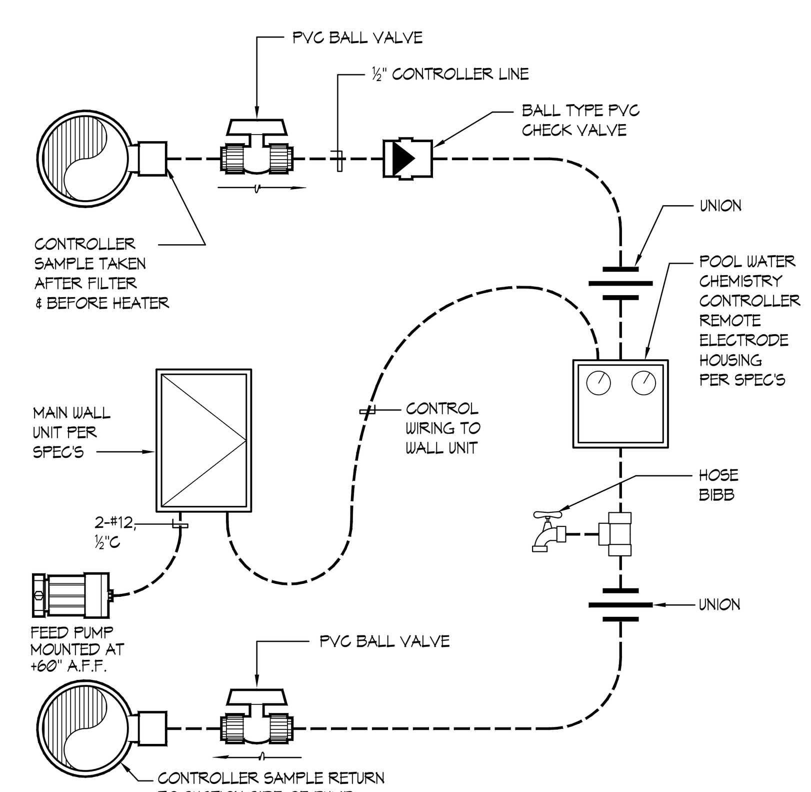




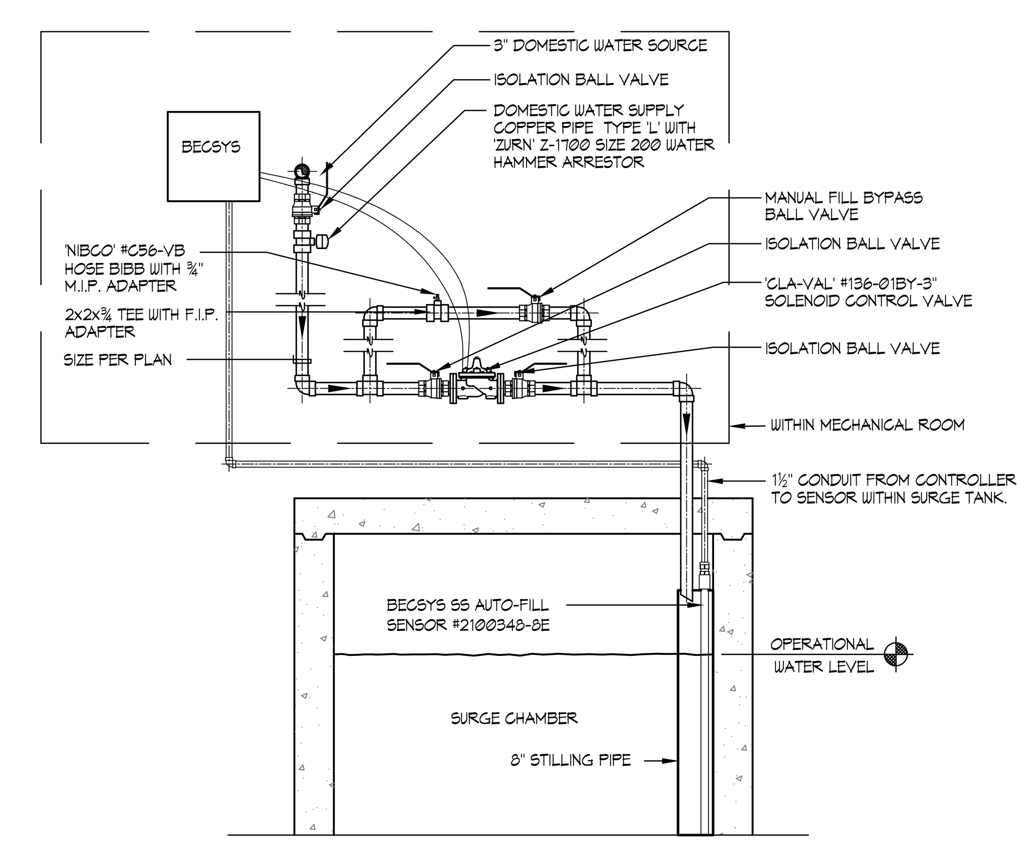
NOTES:

1. BOX MUST INCLUDE MAXIMUM ALLOWABLE WORKING PRESSURE WARNING LABEL ON INSIDE OF DOOR.
2. VENT HOLE ON CONNECTOR SHOULD POINT DOWN TOWARD BOTTOM OF BOX.
3. CONTRACTOR TO VERIFY WITH DELIVERY COMPANY FOR IDEAL FILL PORT LOCATION AND WHERE POSSIBLE LOCATE FILL PORT WITHIN SHORTEST DISTANT RUN FROM FILL LOCATION TO TANK PLACEMENT.
4. CONTRACTOR TO VERIFY LOCK ASSEMBLY WITH DELIVERY COMPANY AND SHALL PROVIDE A SET OF KEYS FOR OWNER AT SUBSTANTIAL COMPLETION.

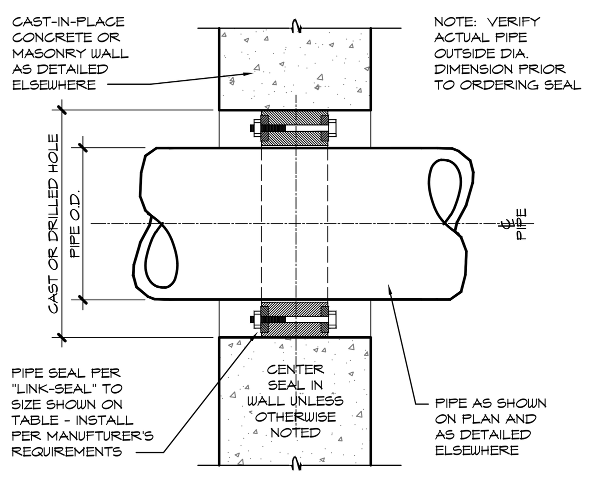
6 CO2 FLUSH MOUNT FILL BOX
½"=1"



7 WATER CHEMISTRY CONTROLLER SCHEMATIC
NO SCALE

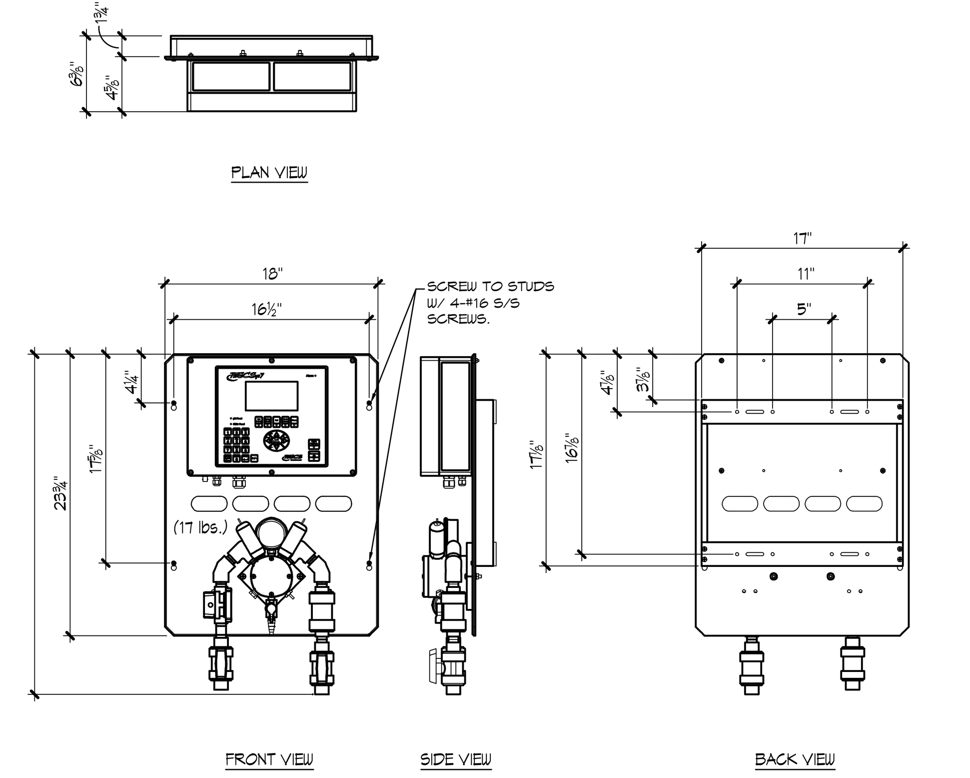


8 AUTOMATIC/MANUAL WATER MAKE-UP SCHEMATIC
NO SCALE

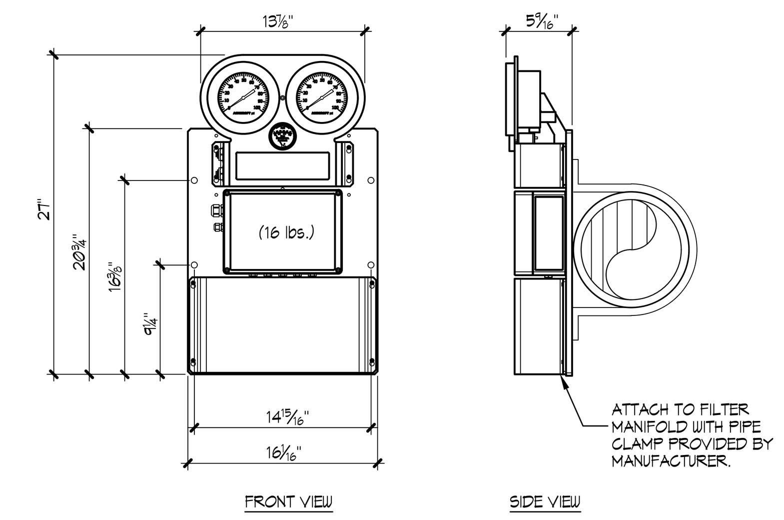


PIPE SIZE (NOMINAL)	OUTSIDE DIAMETER (PIPE O.D.)	CAST OR DRILLED CONCRETE HOLE INSIDE DIA. (I.D.)	LINK SEAL SIZE NO.	NO. OF LINKS PER SEAL
½"	0.840	2.0	LS-200	4
¾"	1.050	2.5	LS-275	5
1"	1.315	3.0	LS-300	4
1¼"	1.660	3.0	LS-275	7
1½"	1.900	3.5	LS-300	5
2"	2.375	4.0	LS-300	6
2½"	2.875	4.0	LS-200	9
3"	3.50	5.0	LS-300	8
3½"	4.00	6.0	LS-325	5
4"	4.50	6.0	LS-300	10
5"	5.563	8.0	LS-425	6
6"	6.625	10.0	LS-475	10
8"	8.625	12.0	LS-475	12
10"	10.75	14.0	LS-400	10
12"	12.75	16.0	LS-400	12
14"	14.00	16.0	LS-325	15
16"	16.00	18.0	LS-325	17
18"	18.00	23.0	LS-500	16
20"	20.00	25.0	LS-500	18
22"	22.00	27.0	LS-500	19
24"	24.00	29.0	LS-500	21
26"	26.00	31.0	LS-500	23
28"	28.00	33.0	LS-500	24
30"	30.00	35.0	LS-500	26
32"	32.00	37.0	LS-500	28
34"	34.00	39.0	LS-500	29
36"	36.00	41.0	LS-500	30

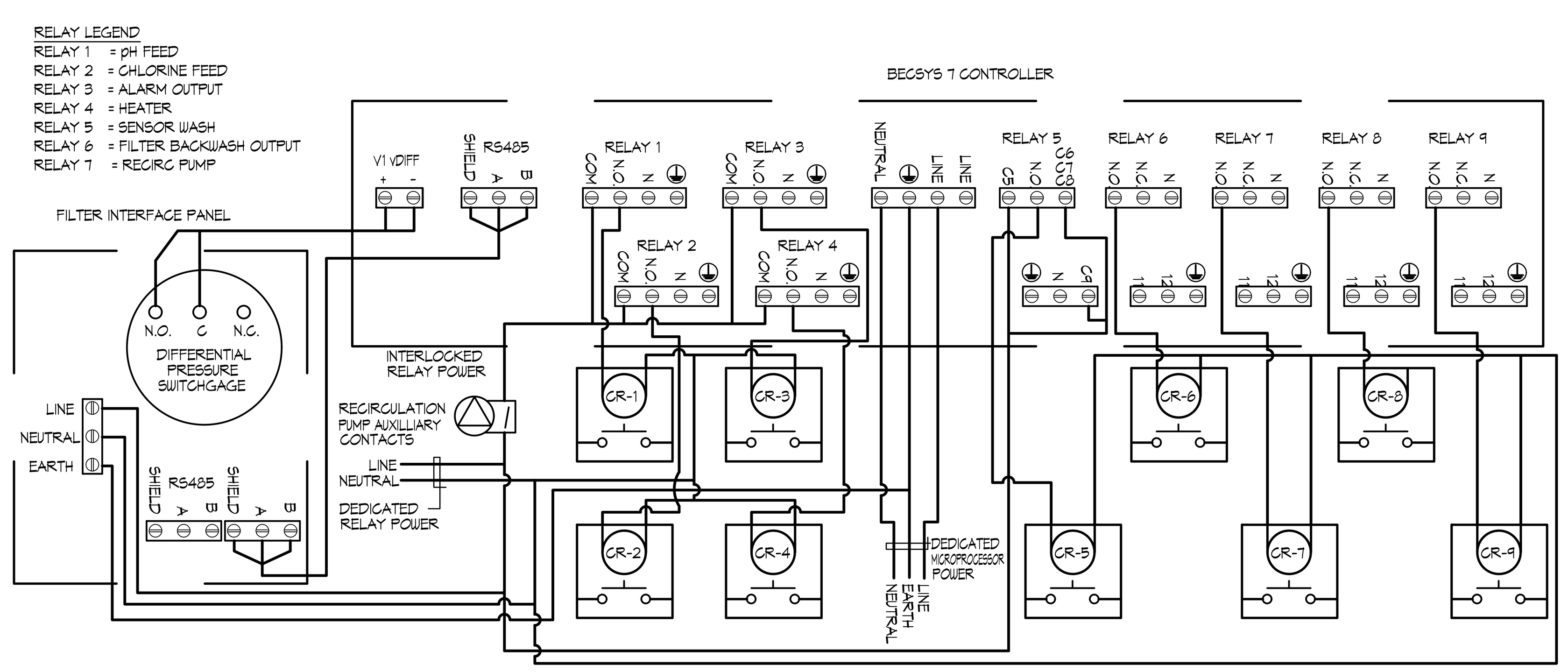
1 PIPE SEAL TO WALL / FLOOR NO SCALE



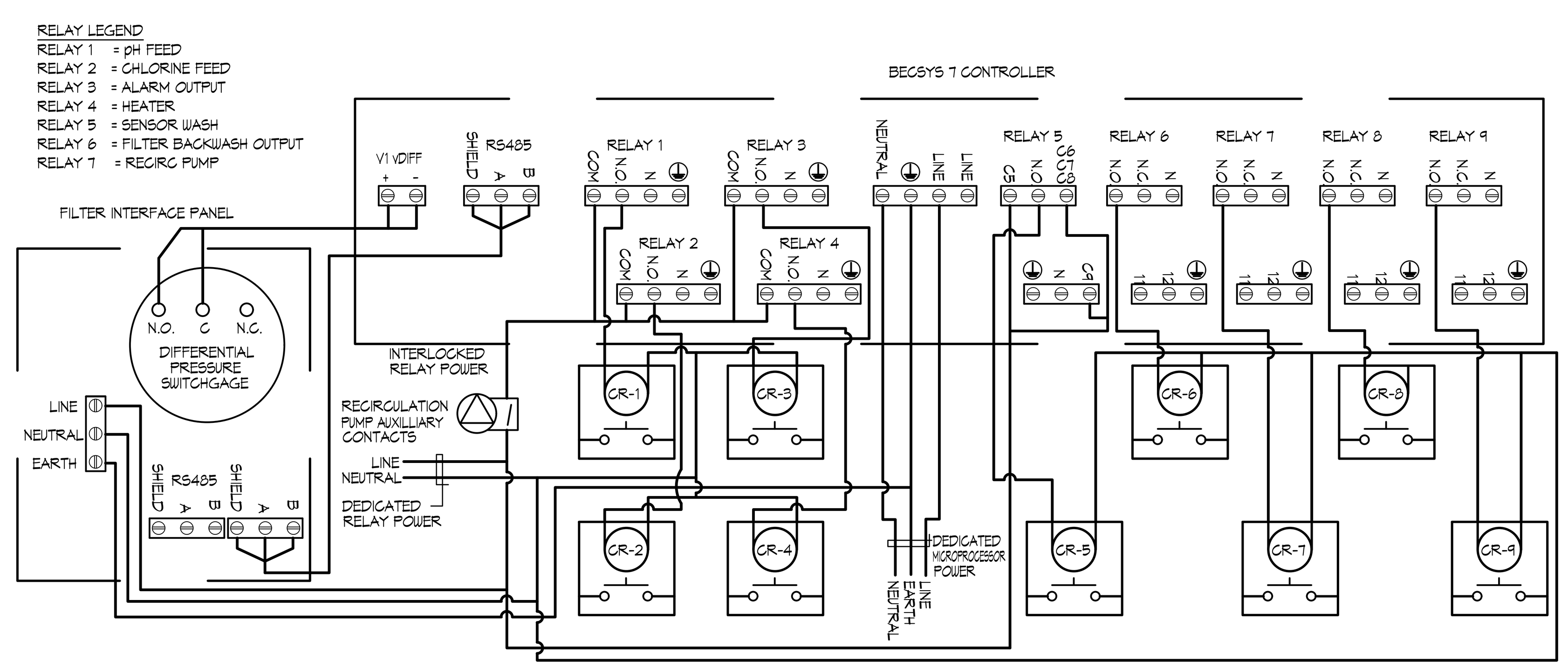
2 BECSYS 7 WATER CHEMISTRY CONTROLLER 1½"=1'-0"



3 BECSYS FILTER INTERFACE SYSTEM 1½"=1'-0"



4 BECSYS 7 CONTROLLER NO SCALE

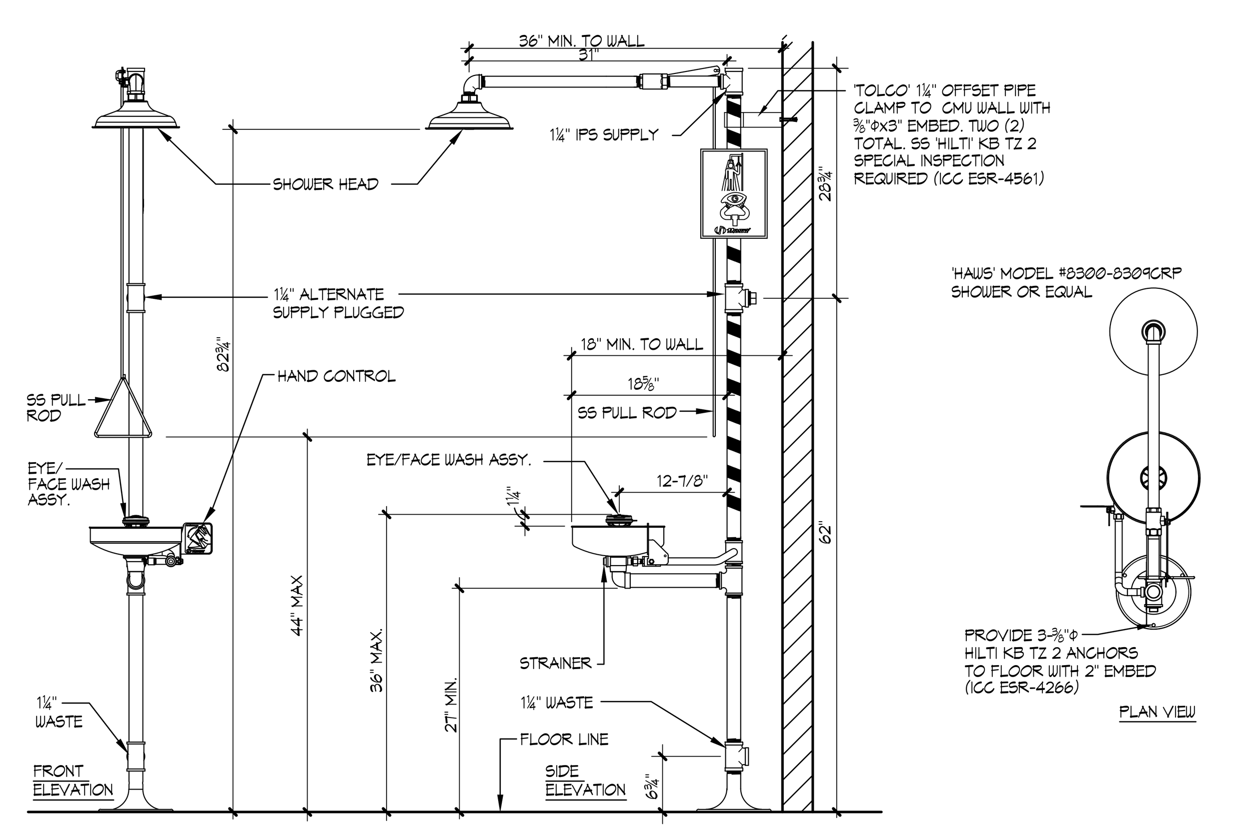


5 BECSYS 7 CONTROLLER NO SCALE

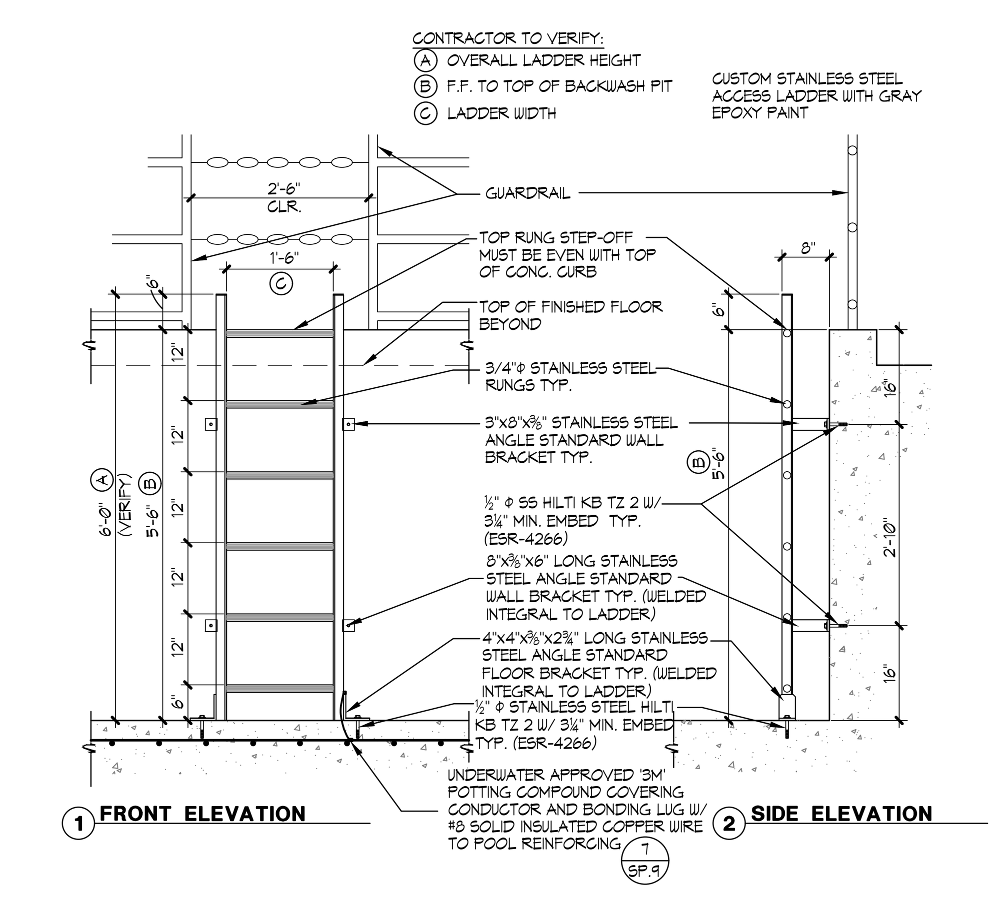
DESIGNATION: 'SP'	VOLTAGE: 120/208V 3PH 4W			LOCATION: MECHANICAL EQUIP. RM.				
	200AMP ☒MAIN BREAKER ☐MAIN LUG			MINIMUM DEVICE A.I.C. RATING ☒10,000 ☐14,000 ☐		PANELBOARD KEY NOTES ① ◯ ◯ ◯		
	☐RECESSED ☒SURFACE							
DESCRIPTION:	C/B	CIR NO.	ϕ A	ϕ B	ϕ C	CIR NO.	C/B	DESCRIPTION:
		1				2		
		3				4		
		5				6		
		7				8		
		9				10		
		11				12		
		13				14		
		15				16		
		17				18		
		19				20		
		21				22		
		23				24		
		25				26		
		27				28		
		29				30		
		31				32		
		33				34		
		35				36		
		37				38		
		39				40		
		41				42		
TOTAL PER PHASE						÷ 120V = AMPS		
+ 25% L.C.L.								
TOTAL								

① GFI CIRCUIT SP = SWIMMING POOL

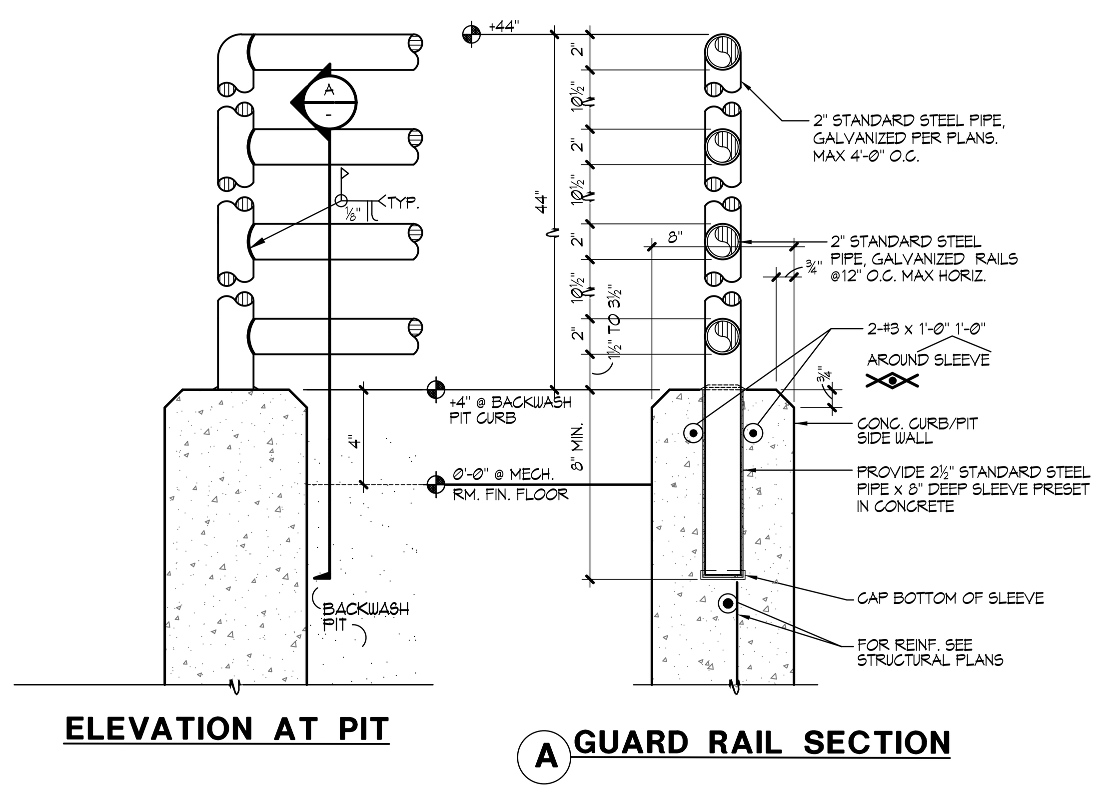
6 PANEL SCHEDULE



7 TYPICAL EYEWASH/SHOWER DETAIL NO SCALE



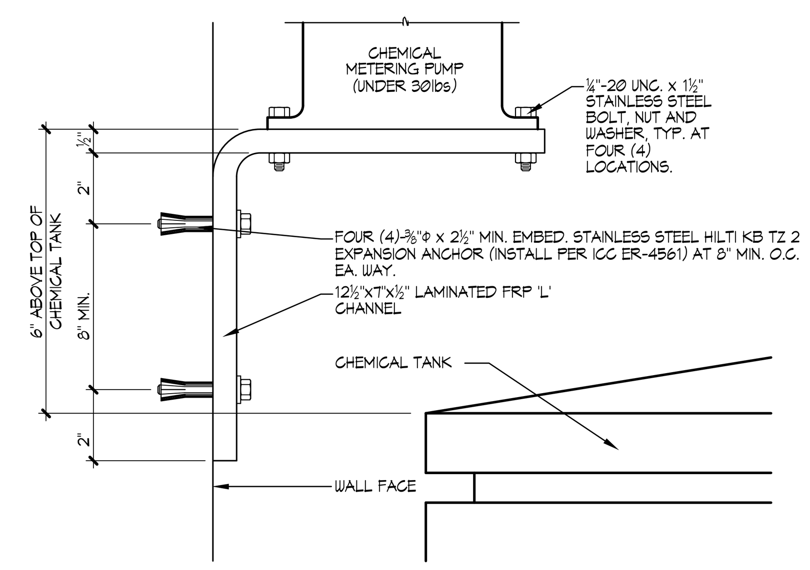
8 BACKWASH PIT ACCESS LADDER ¾"=1'-0"



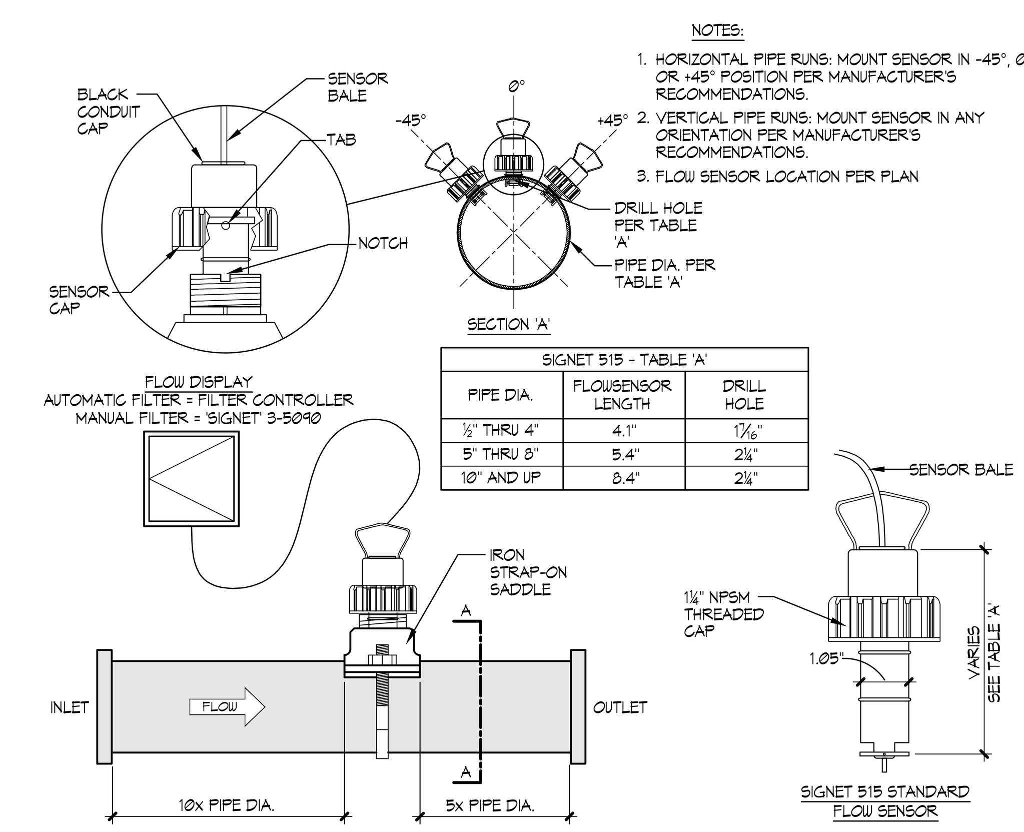
ELEVATION AT PIT

A GUARD RAIL SECTION

1 PIT GUARD RAIL 3"=1'-0"

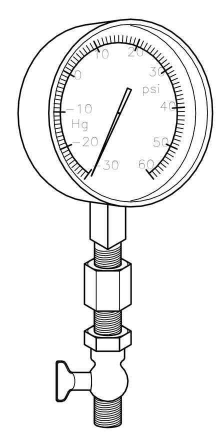


2 CHEMICAL PUMP SHELF 6"=1'-0"



SIGNET 515 - TABLE 'A'		
PIPE DIA.	FLOWSENSOR LENGTH	DRILL HOLE
½" THRU 4"	4.1"	1⅜"
5" THRU 8"	5.4"	2¼"
10" AND UP	8.4"	2¼"

3 SIGNET FLOWMETER NO SCALE



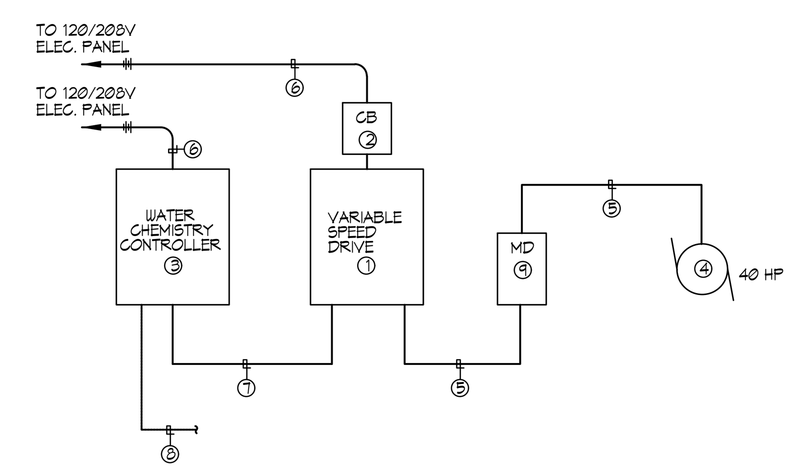
4½" S/S CASED LIQUID FILLED PRESSURE GAUGES SHALL HAVE A DIAL RANGE PRESSURE OF 60psi AND VACUUM RANGE OF 30" Hg THE MINOR GRADUATIONS SHALL HAVE A PRESSURE OF 2psi AND VACUUM OF 2" Hg. ¼" NPT PER SPECIFICATIONS.

SNUBBER

'PETCOCK' MODEL #A10, BRASS

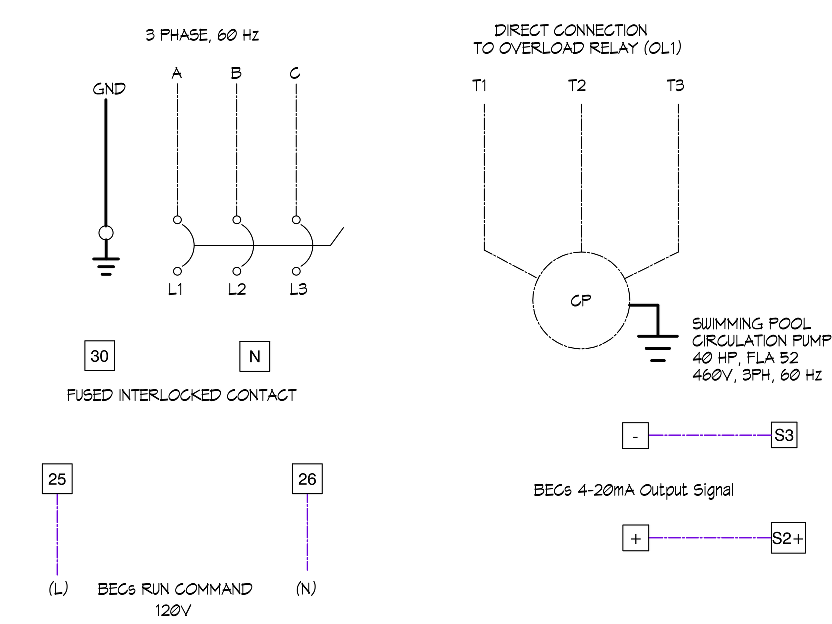
NOTES:
1. PRESSURE GAUGES SHALL BE INSTALLED BY MEANS OF DRILLING AND TAPPING PIPE TO BE MONITORED. THE GAUGE SHALL THEN BE THREADED INTO THE PIPE. PROVIDE WITH SNUBBER AND PET COCK.
2. GAUGE MAY BE USED WHEREVER CRUCIAL VACUUM OR PRESSURE READINGS ARE ESSENTIAL.

4 PRESSURE/VACUUM GAUGE 6"=1'-0"

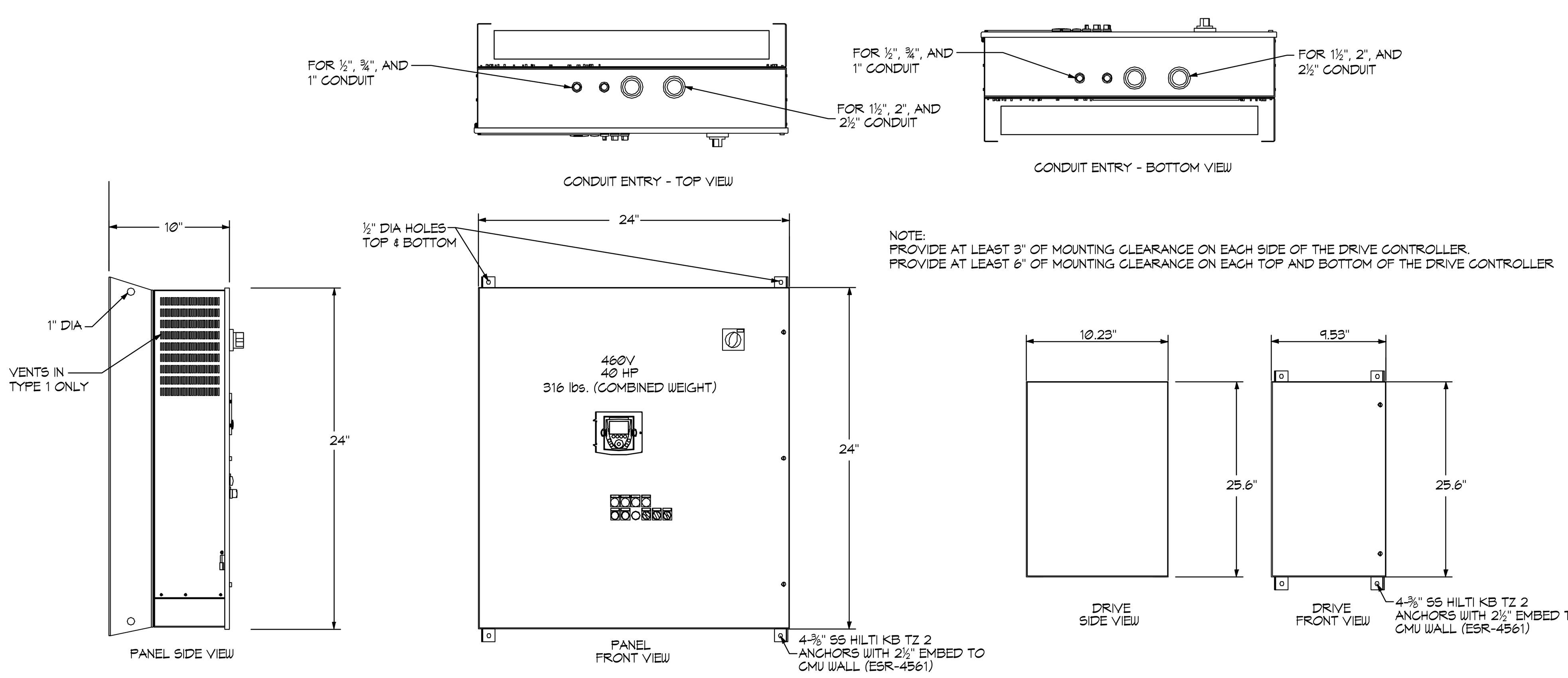


NOTES:
1. VARIABLE SPEED DRIVE MOTOR CONTROL CABINET, SEE PLANS AND SPECIFICATIONS.
2. ENCLOSED CIRCUIT BREAKER, SEE SINGLE LINE DIAGRAM.
3. WATER CHEMISTRY/FILTER CONTROL UNIT, SEE PLANS.
4. CONNECT TO CIRCULATION PUMP MOTOR, SEE PLANS.
5. MOTOR FEEDERS, SEE SINGLE LINE DIAGRAM.
6. 120 VOLT BRANCH CIRCUITS, SEE PLANS.
7. ¾"C, (4) #12, (1) #12 GND. (120 VOLT CONTROL WIRING)
8. 24 VOLT SIGNAL AND SENSOR CABLING, SEE SPECIFICATIONS AND INSTALLATION INSTRUCTIONS FOR ADDITIONAL REQUIREMENTS.
9. MOTOR DISCONNECT, SEE PLANS.

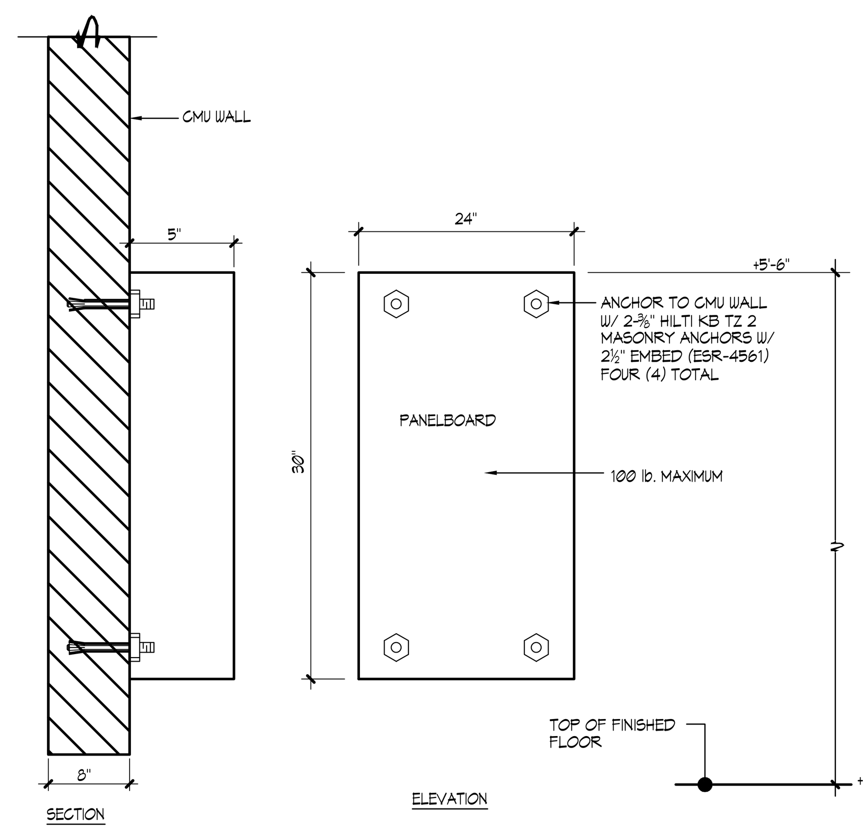
5 TYPICAL WIRING SCHEMATIC AT SPCS UNIT NO SCALE



6 'SPCS' EKO-FLEX FIELD CONNECTION DIAGRAM NO SCALE



7 'SPCS' EKO-FLEX ENCLOSURE DIMENSIONS NO SCALE



8 PANELBOARD MOUNTING DETAIL NO SCALE

RUHNAU CLARKE ARCHITECTS

PHASE
SCHEMATIC DEVELOPMENT

DATE
AUGUST 9, 2024

AQUATIC DESIGN GROUP

RUHNAUCLARKE.COM

3775 TENTH STREET, RIVERSIDE CALIFORNIA 92501 (951) 684 4664 / 5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010 (760) 438 5899

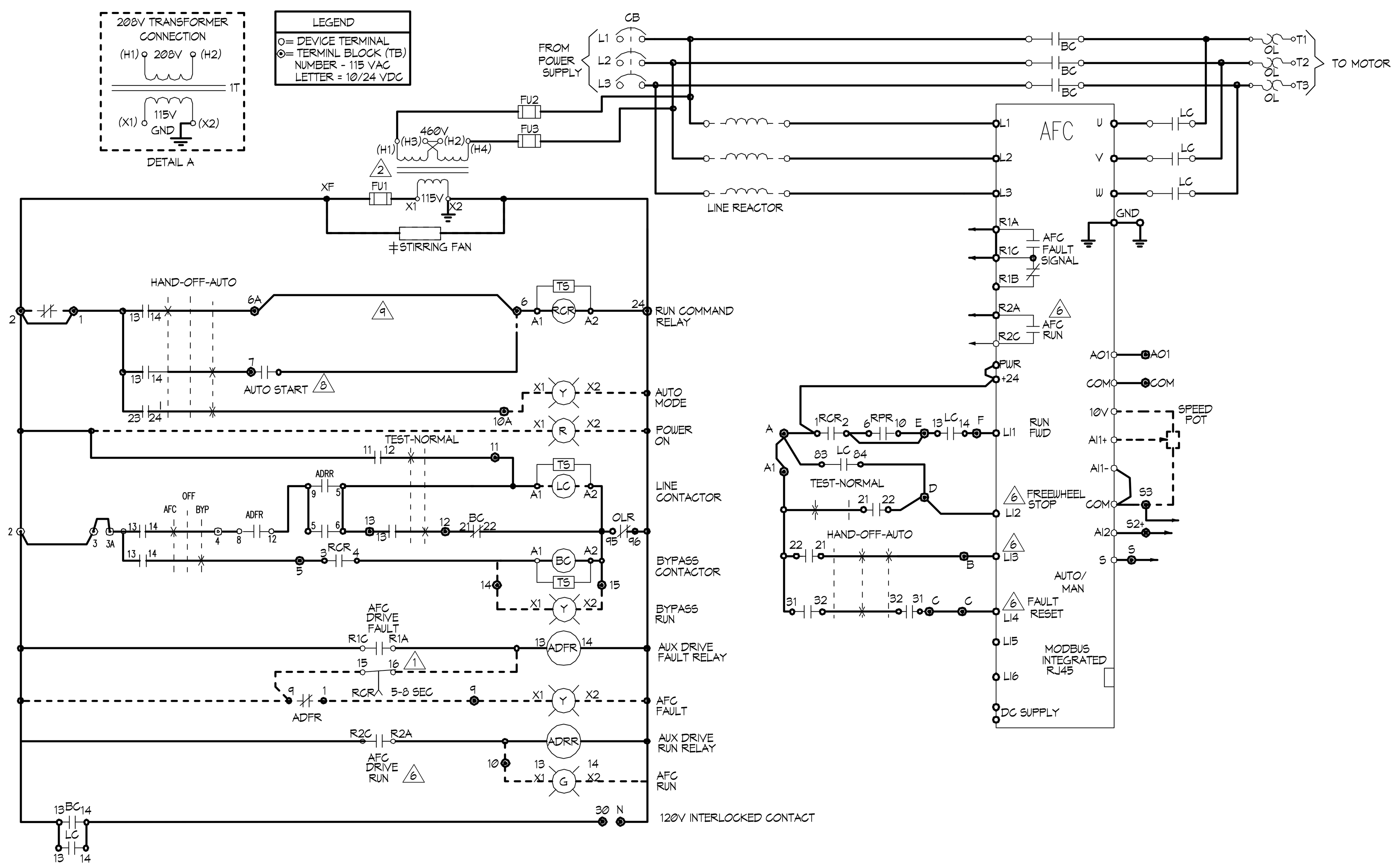
POOL MODERNIZATION

LAGUNA BEACH HIGH SCHOOL
670 PARK AVE, LAGUNA BEACH, CA 92651
LAGUNA BEACH UNIFIED SCHOOL DISTRICT

DETAILS

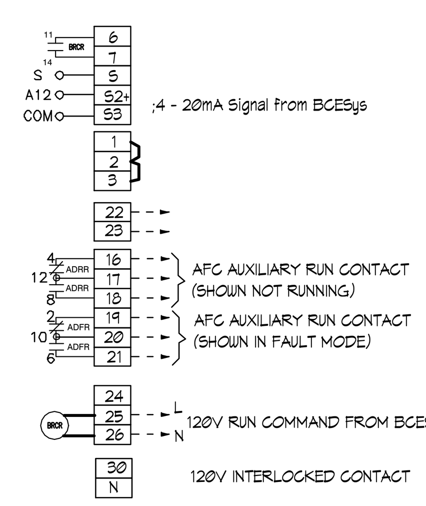
MR.6

1-43-22



EKO-FLEX ATV61 FACTORY CONFIGURATION					
MENU	No	SUB-MENU	DESCRIPTION	CODE	ADJ.
SIM	1.1	----	2/3 WIRE CONTROL	tCC	2C
SIM	1.1	----	PUMPS FANS	CFG	PnF
SIM	1.1	----	STANDARD MOT. FREQ (HZ)	bFr	60
SIM	1.1	----	ACCELERATION (SEC)	ACC	10
SIM	1.1	----	DECELERATION (SEC)	dEC	10
SIM	1.1	----	LOW SPEED (HZ)	LSP	3
SIM	1.3	----	SWITCHING FREQ. (HZ)	SCr	8
I - O	1.5	----	2 WIRE TYPE	tCt	LEL
I - O	1.5	AI2 CONFIG.	AI2 MIN. VALUE (mA)	CrI2	4
I - O	1.5	R2 CONFIG.	R2 ASSIGN - DRIVE RUNNING	r2C	rUn
CtL	1.6	----	REF. 1 CHAN	FR1	HMI
CtL	1.6	----		FR1	AI1
CtL	1.6	----	PROFILE	CHCF	SEP
FUn	1.7	STOP CONFIG.	FREEWHEEL STOP ASSIGN	nST	LI2
FUn	1.7	REFERENCE SWITCH	REF. 1B SWITCHING	rCb	LI3
FUn	1.7	REFERENCE SWITCH	REF. 1B CHAN	Fr1b	AI2
FLt	1.8	FAULT RESET	FAULT RESET	rSF	LI4
FLt	1.8	CATCH ON THE FLY	CATCH ON THE FLY	FLR	YES
FLt	1.8	OUTPUT PHASE LOSS	OUTPHASE LOSS	PDL	NO
COM	1.9	FORCED LOCAL	FORCED LOCAL ASSIGN.	FLt	LI4

DESCRIPTION	TYPE 1	TYPE 12K	TYPE 3R
ǂ STIRRING FANS	10-100 HP 460V, 7.5-50HP 208/230V	10-100 HP 460V, 7.5-50HP 208/230V	NA
ǂ VENTILIATION FAN	NA	NA	ALL HP
ǂ SPACE HEATER	NA	NA	ALL HP

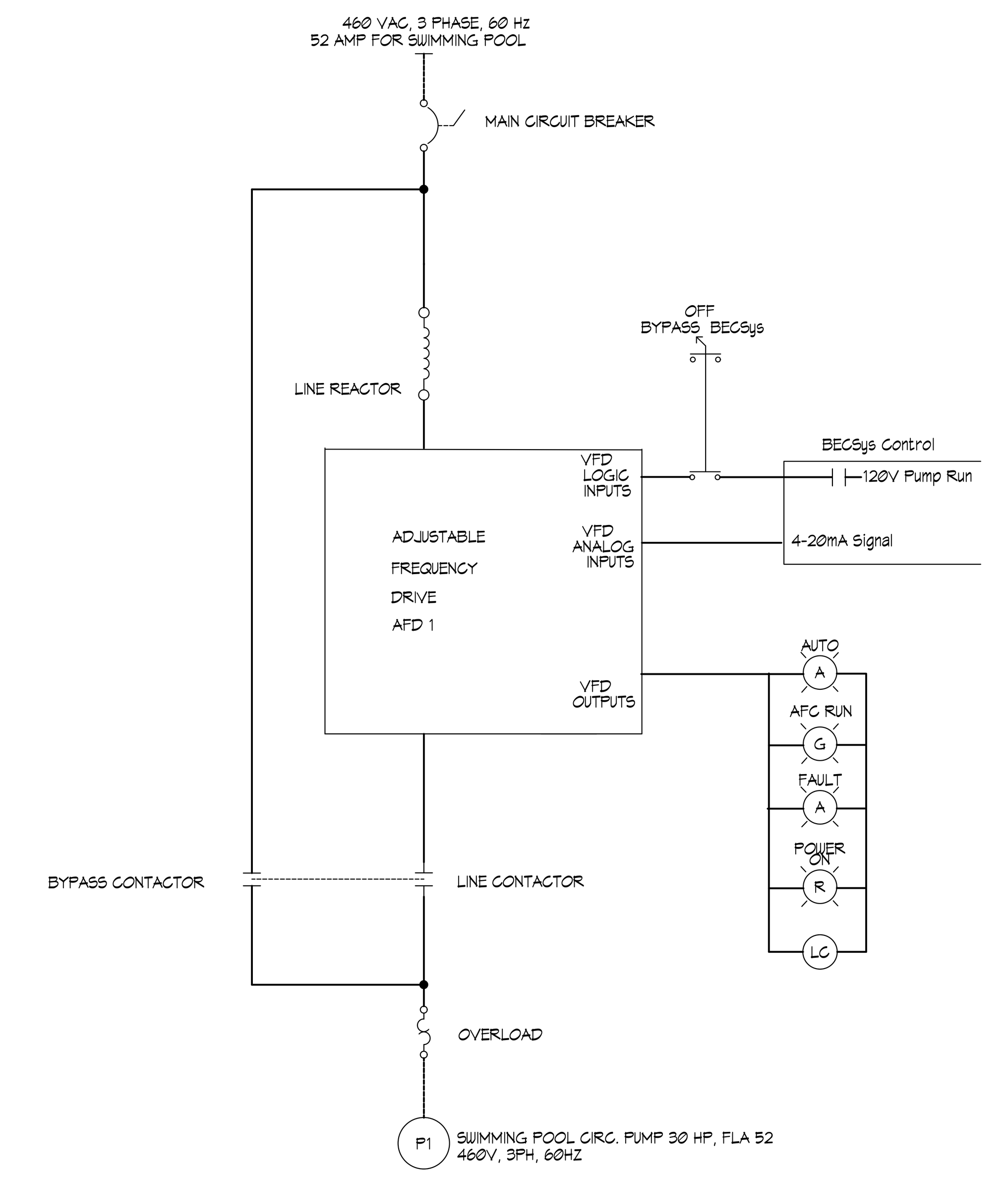


USER CONNECTIONS

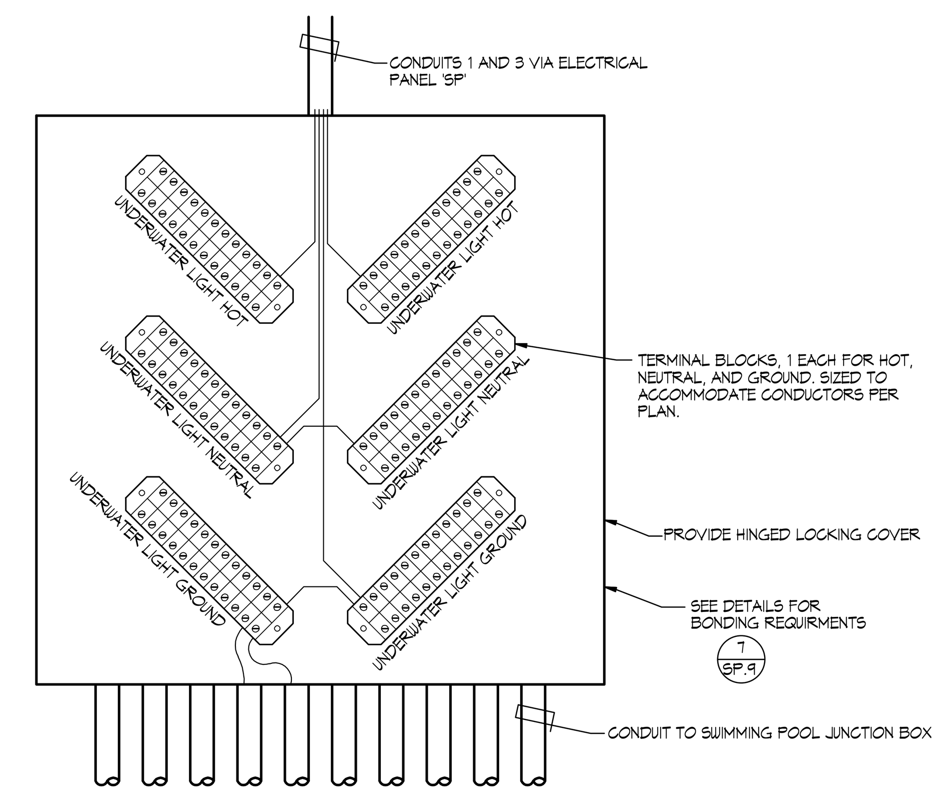
NOTES:

1. RCR TIMED CONTACT USED ONLY IF LINE CONTACTOR IS SUPPLIED
2. CONTROL TRANSFORMER SHOWN FOR 460V PRIMARY. FOR 230V PRIMARY, JUMPER H2-H3 IS
6. PROGRAMMED I/O SEE CONTROLLER FUNCTION CONFIGURATION TABLE.
8. BECs RUN COMMAND RELAY (BRCR)
9. JUMPER USED WHEN START-STOP PUSH BUTTONS NOT USED.

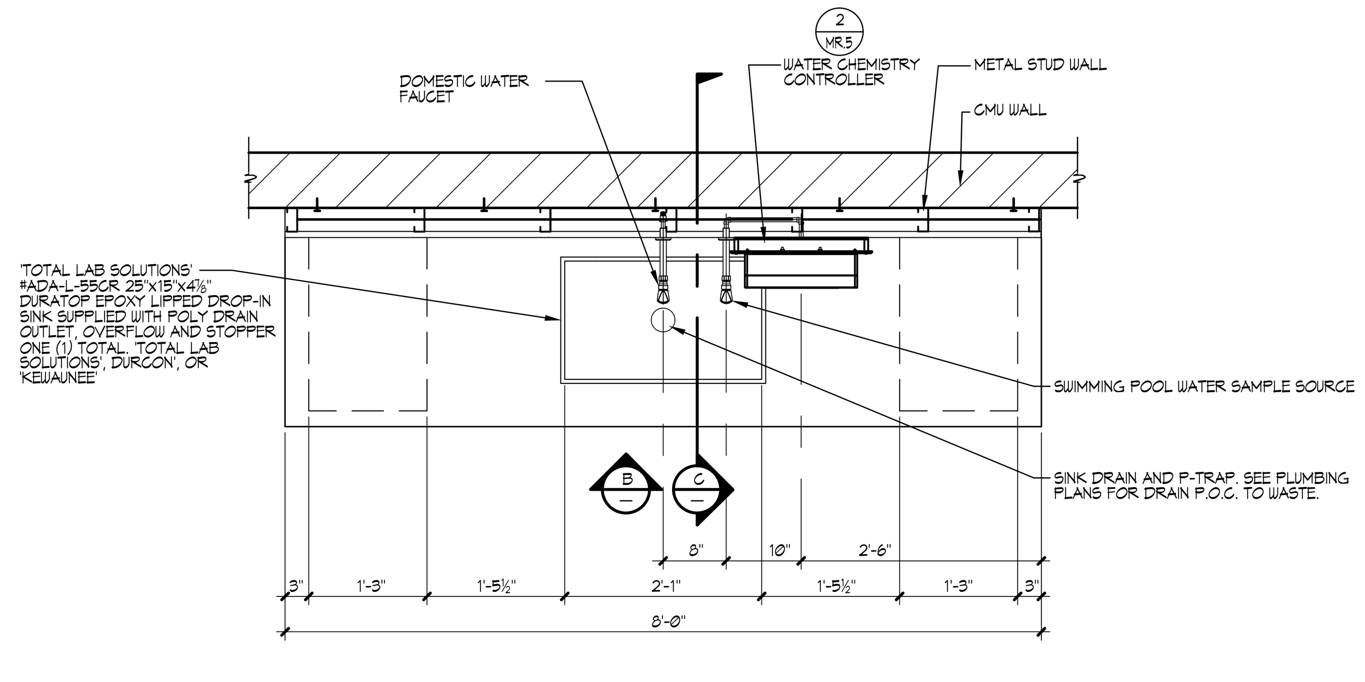
1 'SPCS' EKO-FLEX VARIABLE FREQUENCY DRIVE SYSTEM SCHEMATIC NO SCALE



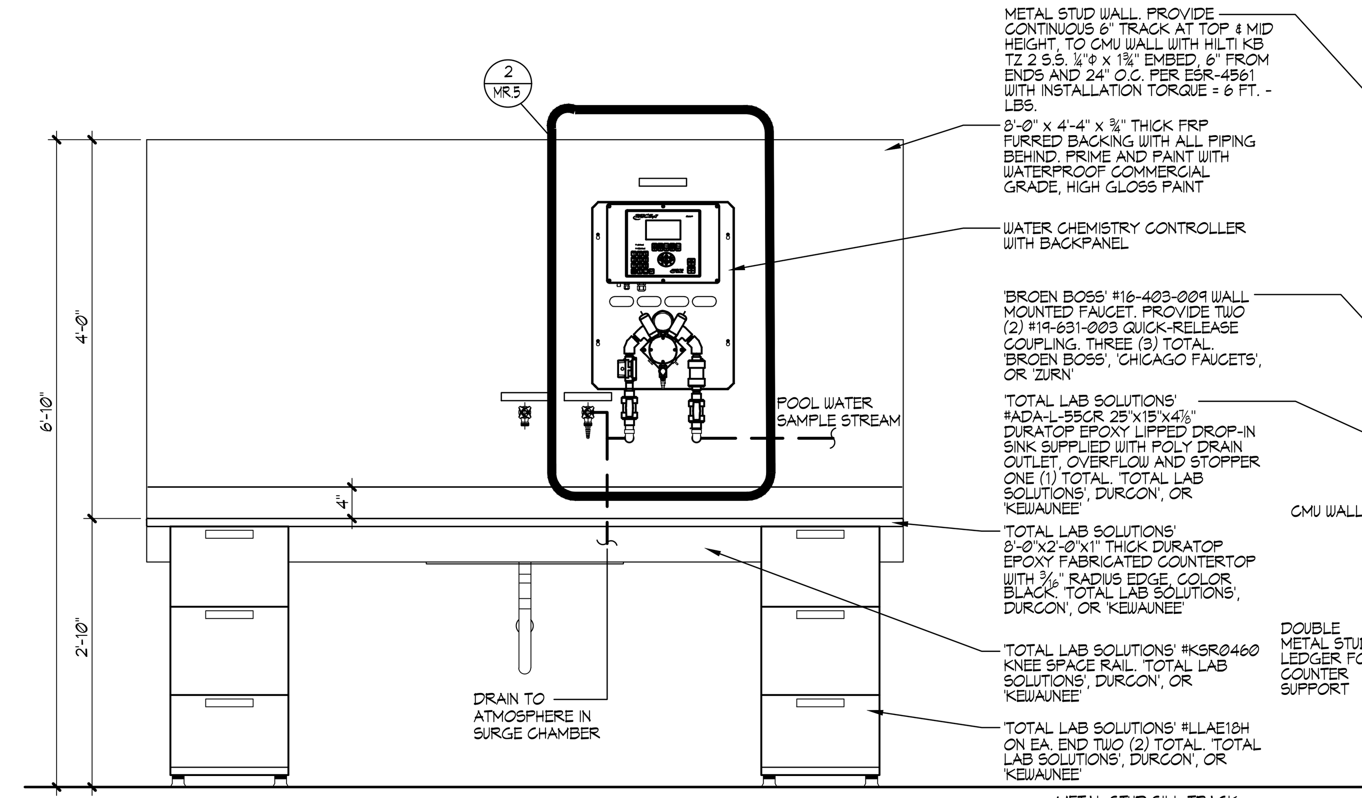
2 'SPCS' EKO-FLEX SINGLE LINE DIAGRAM NO SCALE



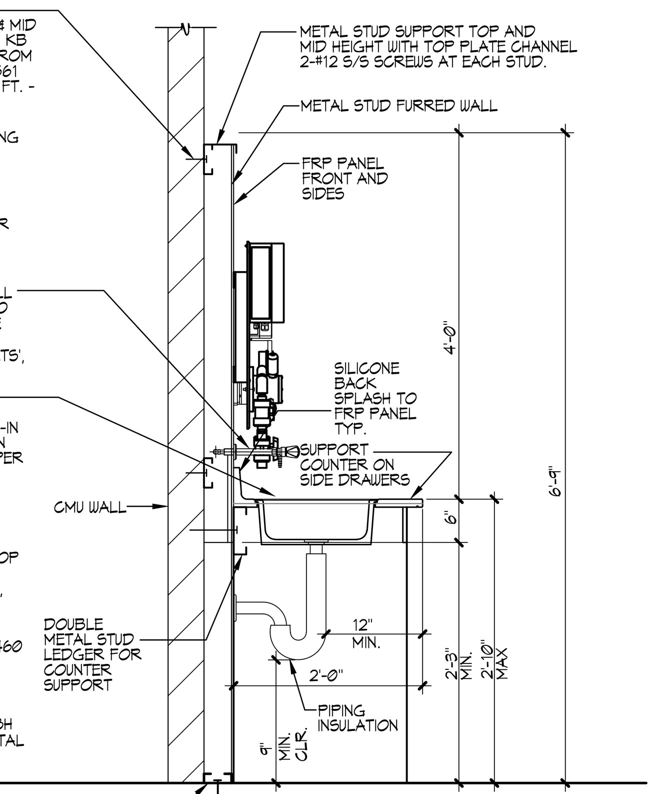
3 UNDERWATER LIGHT CONTACTOR PANEL NO SCALE



(A) PLAN VIEW



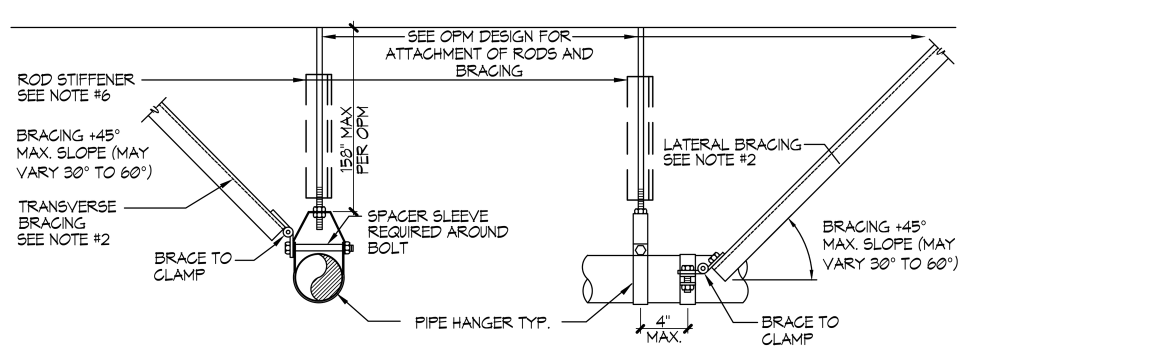
(B) FRONT ELEVATION



(C) SIDE SECTION

1 POOL OPERATOR WORKSTATION DESK DETAIL

1'=1'-0"



HANGER/BRACE PERPENDICULAR

HANGER/BRACE LONGITUDINAL

HANGER ROD SIZES/TABLE

½"Φ AT 3" PIPING MAX. ROD LENGTH = 158" MAX PER OPM PG. C1.22
⅝"Φ AT 4" PIPING MAX. ROD LENGTH = 158" MAX PER OPM PG. C1.34
¾"Φ AT 6" PIPING MAX. ROD LENGTH = 158" MAX PER OPM PG. C1.44
¾"Φ AT 8" PIPING MAX. ROD LENGTH = 158" MAX PER OPM PG. C1.44
¾"Φ AT 10" PIPING MAX. ROD LENGTH = 158" MAX PER OPM PG. C1.44
(2) ⅝"Φ AT TRAPEZE, MAX. ROD LENGTH = 158" MAX PER OPM PG. F1.30

MAX. PIPE HANGER SPACING FOR A SINGLE CLEVIS HANGER ONLY

4" PIPING OR SMALLER = 6'-0" O.C.
6" PIPING = 6'-0" O.C.
8" PIPING = 6'-0" O.C.
10" PIPING = 6'-0" O.C.
12" PIPING = 4'-0" O.C.

MAX. TRAPEZE SPACING FOR MULTI-PIPE SUPPORT

8" AND SMALLER = 6'-0" O.C.
12" PIPING AND SMALLER = 4'-0" O.C.

SUPPLEMENTAL CROSS SUPPORT (WHERE REQUIRED)

6" AND SMALLER PIPE = 1⅝x1⅝x12GA SINGLE CHANNEL, OPM PG. P1.12
10" AND/OR MULTIPLE PIPES = 1⅝x1⅝X12GA DOUBLE CHANNEL, SEE OPM PG. P1.12

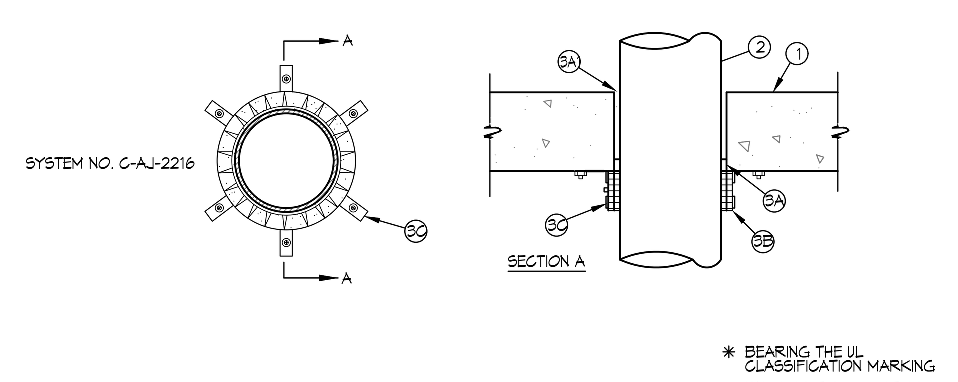
NOTES:

1. REFER TO OPM #0043-13 FOR PIPE HANGER HARDWARE & INSTALLATION. SEE PAGES SP2.9, SP2.10 AND SP2.11 FOR RELEVANT OPM SHEETS.
2. PROVIDE BRACING FOR EACH PIPE HANGER IN TWO DIRECTIONS AT THE FOLLOWING CONDITIONS.
   - AT EACH CHANGE IN PIPE RUN DIRECTION
   - MID LENGTH OF PIPE RUN
   - SPACING NOT TO EXCEED 12'-0" O.C.

   1⅝x1⅝x12GA SINGLE STRUT (5'-0" LENGTH MAX)
   1⅝x1⅝X12GA DOUBLE STRUT (14'-6" LENGTH MAX)
3. ALL HARDWARE SHALL BE STAINLESS STEEL OR GALVANIZED SEE SPECIFICATION FOR ADDITIONAL INFORMATION.
4. FOR COPPER TUBING USE COPPER PLATED OR PAINTED B3104CT, FELT LINED B3100F, OR PLASTIC COATED B3100C.
5. REFER TO SP2.1 FOR PIPE HANGER LOCATIONS.
6. PROVIDE ROD STIFFENER WHEN TRANSVERSE OR LONGITUDINAL BRACING IS USED AND ROD LENGTHS EXCEED THE FOLLOWING:
   2" PIPE AND SMALLER = 18" MAX. PER C1.22
   2½" - 4" PIPE = 31" MAX. PER C1.34
   6" - 12" PIPE = 37" MAX PER C1.44

2 'UNISTRUT' PIPING HANGER / SUPPORT DETAILS

NO SCALE



✱ BEARING THE UL CLASSIFICATION MARKING
++ BEARING THE UL LISTING MARK

(1) FLOOR OR WALL ASSEMBLY - MIN. 2½" THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 pcf) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS✱FLOOR MAY ALSO BE CONSTRUCTED OF ANY MIN. 6" THICK UL CLASSIFIED HOLLOW CORE PRECAST CONCRETE UNITS✱MAX. DIA. OF OPENING IS 5".

(2) THROUGH PENETRANTS-ONE NONMETALLIC PIPE OR CONDUIT TO BE CENTERED WITHIN OPENING WITH A NOM ¼" ANNULAR SPACE BETWEEN PIPE OR CONDUIT AND PERIPHERY OF OPENING. PIPE OR CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF THE FLOOR OR WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF NONMETALLIC PIPES OR CONDUITS MAY BE USED:

A. POLYVINYL CHLORIDE PIPE (PVC) - NOM. 4" DIAM. (OR SMALLER) SCHEDULE 40 SOLID CORE OR CELLULAR CORE PVC PIPE FOR USE IN CLOSED (PROCESS OR SUPPLY) OR VENTED (DRAIN, WASTE OR VENT) PIPING SYSTEMS.
B. RIDID NONMETALLIC CONDUIT++- NOM 4" DIAM. (OR SMALLER) SCHEDULE 40 PVC CONDUIT INSTALLED IN ACCORDANCE WITH ARTICLE 347 OF THE NATIONAL ELECTRICAL CODE (NFPA NO. 70).
C. CHLORINATED POLYVINYL CHLORIDE (CPVC) PIPE - NOM. 4" DIAM. (OR SMALLER) SDR13.5 CPVC PIPE FOR USE IN CLOSED (PROCESS OR SUPPLY) PIPING SYSTEMS.
D. ACRYLONITRATE BUTADIENE STYRENE (ABS) PIPE - NOM. 4" DIAM. (OR SMALLER) SCHEDULE 40 SOLID CORE OR CELLULAR CORE ABS PIPE FOR USE IN CLOSED (PROCESS OR SUPPLY) OR VENTED (DRAIN, WASTE OR VENT) PIPING SYSTEM.
E. FIRE RETARDANT POLYPROPYLENE (FRPP) PIPE - NOM 4" DIAM. (OR SMALLER) SCHEDULE 40 FRPP PIPE FOR USE IN CLOSED (PROCESS OR SUPPLY) OR VENTED (DRAIN, WASTE OR VENT) PIPING SYSTEMS.
F. POLYVINYLIDENE FLUORIDE (PVDF) PIPE - NOM 2" DIAM. (OR SMALLER) SDR 11, OR NOM 4" (OR SMALLER) SDR 32.5 PVDF PIPE FOR USE IN CLOSED (PROCESS OR SUPPLY) OR VENTED (DRAIN, WASTE OR VENT) PIPING SYSTEMS.

(3) FIRESTOP SYSTEM - THE DETAILS OF THE FIRESTOP SYSTEM SHALL BE AS FOLLOWS:

A. FILL, VOID OR CAVITY MATERIALS✱- CAULK, SEALANT OR PUTTY - MIN ½" THICKNESS OF CAULK OR PUTTY APPLIED WITHIN ANNULAR SPACE, FLUSH WITH BOTTOM OF FLOOR OR BOTH SIDES OF WALL.

   3M COMPANY - CP 25WB + CAULK, FB-3000 WT SEALANT, MP + STIX PUTTY, IC 15WB + CAULK OR FIREDAM 150 + CAULK (NOTE: W RATING APPLIES ONLY WHEN FB-3000 WT IS USED. CP 25WB + AND FIREDAM 150+ NOT SUITABLE FOR USE WITH CPVC PIPES.)

A1. FILL, VOID OR CAVITY MATERIALS - SEALANT (OPTIONAL, NOT SHOWN) - FOR FLOOR ASSEMBLIES, AN ADDITIONAL MIN ½" THICKNESS OF SEALANT MAY BE APPLIED WITHIN THE ANNULAR SPACE FLUSH WITH TOP SURFACE OF FLOOR.

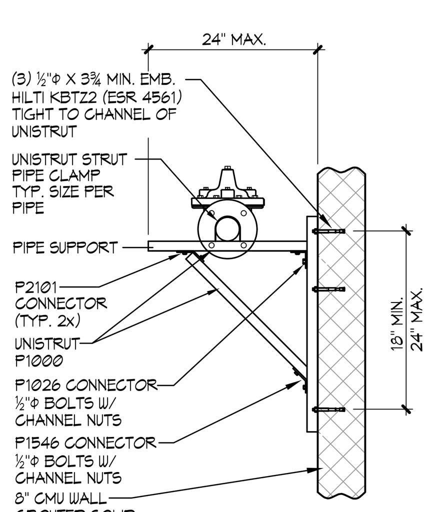
   3M COMPANY - FB-1000 NS OR FB-3000 WT SEALANT (NOTE: W RATING APPLIES WHEN FB-3000 WT OR FB-1000 NS IS USED.)

B. FILL, VOID OR CAVITY MATERIALS✱ WRAP STRIP - NOM ⅛" THICK INTUMESCENT MATERAIL SUPPLIED IN 2" WIDE STRIPS. WRAP STRIP TIGHTLY WRAPPED AROUND NONMETALLIC PIPE WITH CONTINUOUS LAYERS AND BUTTED TIGHTLY AGAINST THE BOTTOM SURFACE OF THE FLOOR OR BOTH SURFACES OF THE WALL. THE MIN. NUMBER OF LAYERS REQUIRED IS DEPENDENT UPON THE NOM. DIAM. OF THE PIPE. FOR NOM 2" DIAM. (AND SMALLER) PIPES, TWO LAYERS ARE REQUIRED. FOR NOM 2½" AND 3" DIAM. PIPES, THREE LAYERS ARE REQUIRED. FOR NOM 3½" AND 4" DIAM. PIPES, FOUR LAYERS ARE REQUIRED. WRAP STRIP LAYERS TEMPORARILY HELD IN POSITION USING ALUMINUM FOIL TAPE, STEEL WIRE TIE, OR EQUIVALENT.

C. STEEL COLLAR - NOM 2" DEEP COLLARS WITH 1¼" WIDE BY 2" LONG ANCHOR TABS AND MIN. ½" LONG TABS TO RETAIN WRAP STRIP LAYERS. COILS OF PRECUT 0.016" THICK (28 GAUGE) GALV SHEET STEEL AVAILABLE FROM WRAP STRIP MANUFACTURER. AS AN ALTERNATE, COLLAR MAY BE FIELD-FABRICATED FROM MIN. 0.016" THICK (28 GAUGE) GALV SHEET STEEL IN ACCORDANCE WITH INSTRUCTION SHEET SUPPLIED BY WRAP STRIP MANUFACTURER. STEEL COLLAR, WITH ANCHOR TABS BENT 90 DEG, WRAPPED TIGHTLY AROUND WRAP STRIP LAYERS WITH MIN. 1" OVERLAP AT SEAM. ANCHOR TABS TO BE PRESSED TIGHTLY AGAINST FLOOR OR WALL SURFACE(S), AND COLLAR TO BE COMPRESSED AROUND WRAP STRIP LAYERS USING A MIN. ½" WIDE BY 0.028" THICK STAINLESS STEEL BAND CLAMP AT THE COLLAR MIDHEIGHT. COLLAR TO BE SECURED TO FLOOR OR WALL SURFACE(S) WITH ¼" DIAM. BY MIN. 1½" LONG STEEL EXPANSION BOLTS, OR EQUIVALENT, IN CONJUNCTION WITH STEEL NUTS AND MIN. 1¼" DIAM. STEEL FENDER WASHERS. MIN. OF TWO, THREE OR FOUR ANCHOR BOLTS. SYMMETRICALLY LOCATED, FOR NOM 2" DIAM. (AND SMALLER), NOM 3" DIAM. (AND SMALLER) AND NOM 4" DIAM. (AND SMALLER), PIPES, RESPECTIVELY.

3 PIPE PENETRATION THRU 1-HR OR 2-HR WALL DETAIL

NO SCALE



EXTENDED WALL MOUNTED PIPE SUPPORT

MAX. PIPE SUPPORT SPACING

3" PIPING OR SMALLER = 6'-0" O.C.
6" PIPING = 6'-0" O.C.
8" PIPING = 6'-0" O.C.
10" PIPING = 6'-0" O.C.

4 WALL MOUNTED PIPE SUPPORT

NO SCALE

RUHNAU CLARKE ARCHITECTS

PHASE
SCHEMATIC DEVELOPMENT
DATE
AUGUST 9, 2024

AQUATIC DESIGN GROUP
2226 Faraday Ave. Carlsbad, CA 92008
AquaticDesignGroup.com
760.438.8400

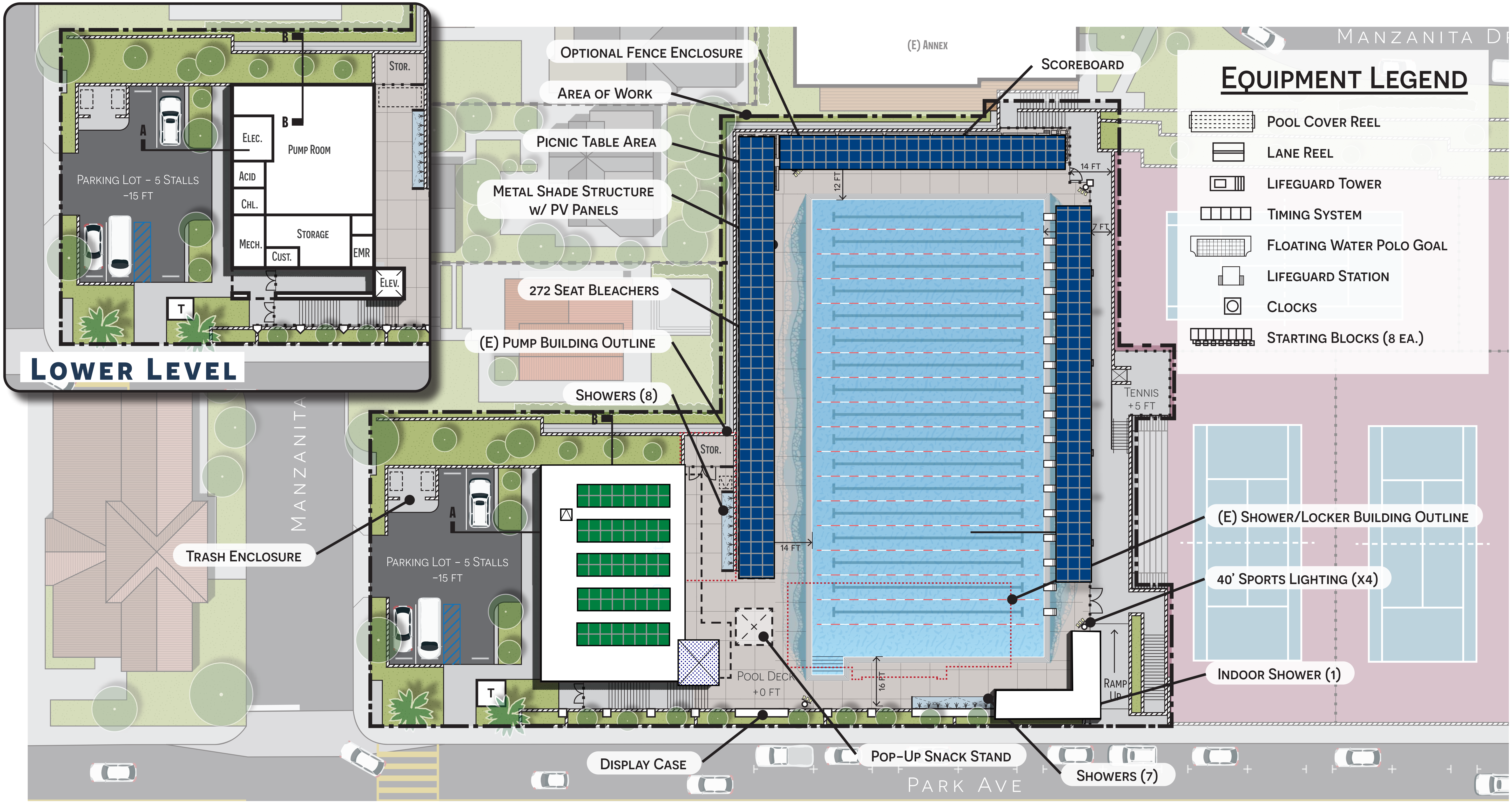
RUHNAUCLARKE.COM
3775 TENTH STREET, RIVERSIDE CALIFORNIA 92501 (951) 684 4664 / 5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010 (760) 438 5899

POOL MODERNIZATION
LAGUNA BEACH HIGH SCHOOL
670 PARK AVE, LAGUNA BEACH, CA 92651
LAGUNA BEACH UNIFIED SCHOOL DISTRICT

DETAILS

MR.8

1-43-22



Site Plan
Laguna Beach High school Pool

Solar photovoltaic	
Solar water heating	

Scale: 1" = 30'

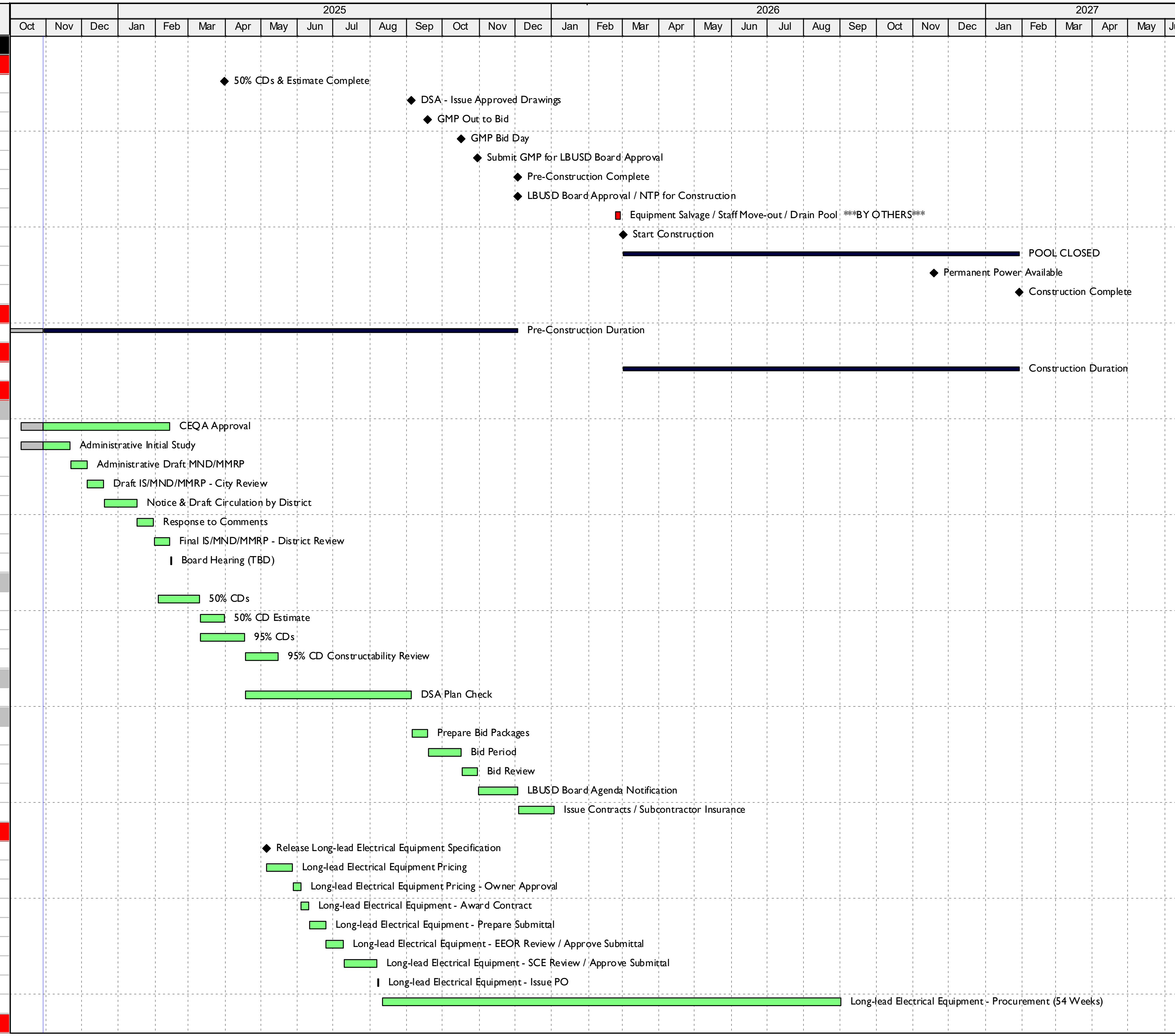
0' 15' 30' 60'

Ruhnau Clarke Architects

APPENDIX A2

ESTIMATED CONSTRUCTION SCHEDULE

Activity ID	Activity Name	Duration	Start	Finish
245004 - Laguna Beach USD - Laguna Beach HS Pool Modernization				
Project Milestones				
PCM-1100	50% CDs & Estimate Complete	0		Mar-31-25
PCM-1120	DSA - Issue Approved Drawings	0		Sep-04-25
PCM-1130	GMP Out to Bid	0		Sep-18-25
PCM-1140	GMP Bid Day	0		Oct-16-25
PCM-1060	Submit GMP for LBUSD Board Approval	0		Oct-30-25
PCM-1040	Pre-Construction Complete	0		Dec-03-25
PCM-1050	LBUSD Board Approval / NTP for Construction	0		Dec-03-25
PM-1060	Equipment Salvage / Staff Move-out / Drain Pool ***BY OTHERS***	5	Feb-23-26	Feb-27-26*
PCM-1010	Start Construction	0	Mar-02-26	
PM-1005	POOL CLOSED	334	Mar-02-26	Jan-29-27
PCM-1150	Permanent Power Available	0		Nov-18-26
PCM-1020	Construction Complete	0		Jan-29-27*
Pre-Construction Duration				
PRE-1000	Pre-Construction Duration	571	Mar-18-24 A	Dec-03-25
Construction Duration				
CD-1000	Construction Duration	334	Mar-02-26	Jan-29-27
Pre-Construction				
CEQA Approval				
DES-1170	CEQA Approval	87	Oct-11-24 A	Feb-13-25
DES-1180	Administrative Initial Study	30	Oct-11-24 A	Nov-21-24
DES-1200	Administrative Draft MND/MMRP	8	Nov-22-24	Dec-05-24
DES-1210	Draft IS/MND/MMRP - City Review	10	Dec-06-24	Dec-19-24
DES-1220	Notice & Draft Circulation by District	18	Dec-20-24	Jan-16-25
DES-1230	Response to Comments	10	Jan-17-25	Jan-30-25
DES-1240	Final IS/MND/MMRP - District Review	10	Jan-31-25	Feb-13-25
DES-1250	Board Hearing (TBD)	1	Feb-14-25	Feb-14-25
Construction Documents				
DES-1070	50% CDs	26	Feb-03-25*	Mar-10-25
DES-1130	50% CD Estimate	15	Mar-11-25	Mar-31-25
DES-1080	95% CDs	28	Mar-11-25	Apr-17-25
DES-1110	95% CD Constructability Review	20	Apr-18-25	May-15-25
DSA Approval				
DES-1090	DSA Plan Check	97	Apr-18-25	Sep-04-25
Bid / Award				
BID-1000	Prepare Bid Packages	10	Sep-05-25	Sep-18-25
BID-1010	Bid Period	20	Sep-19-25	Oct-16-25
BID-1020	Bid Review	10	Oct-17-25	Oct-30-25
BID-1030	LBUSD Board Agenda Notification	22	Oct-31-25	Dec-03-25
BID-1040	Issue Contracts / Subcontractor Insurance	20	Dec-04-25	Jan-02-26
Long-lead Electrical Equipment				
LLE-1000	Release Long-lead Electrical Equipment Specification	0		May-05-25
LLE-1010	Long-lead Electrical Equipment Pricing	15	May-06-25	May-27-25
LLE-1020	Long-lead Electrical Equipment Pricing - Owner Approval	5	May-28-25	Jun-03-25
LLE-1030	Long-lead Electrical Equipment - Award Contract	5	Jun-04-25	Jun-10-25
LLE-1040	Long-lead Electrical Equipment - Prepare Submittal	10	Jun-11-25	Jun-24-25
LLE-1050	Long-lead Electrical Equipment - EEOR Review / Approve Submittal	10	Jun-25-25	Jul-09-25
LLE-1060	Long-lead Electrical Equipment - SCE Review / Approve Submittal	20	Jul-10-25	Aug-06-25
LLE-1070	Long-lead Electrical Equipment - Issue PO	2	Aug-07-25	Aug-08-25
LLE-1080	Long-lead Electrical Equipment - Procurement (54 Weeks)	270	Aug-11-25	Sep-01-26
Submittals				

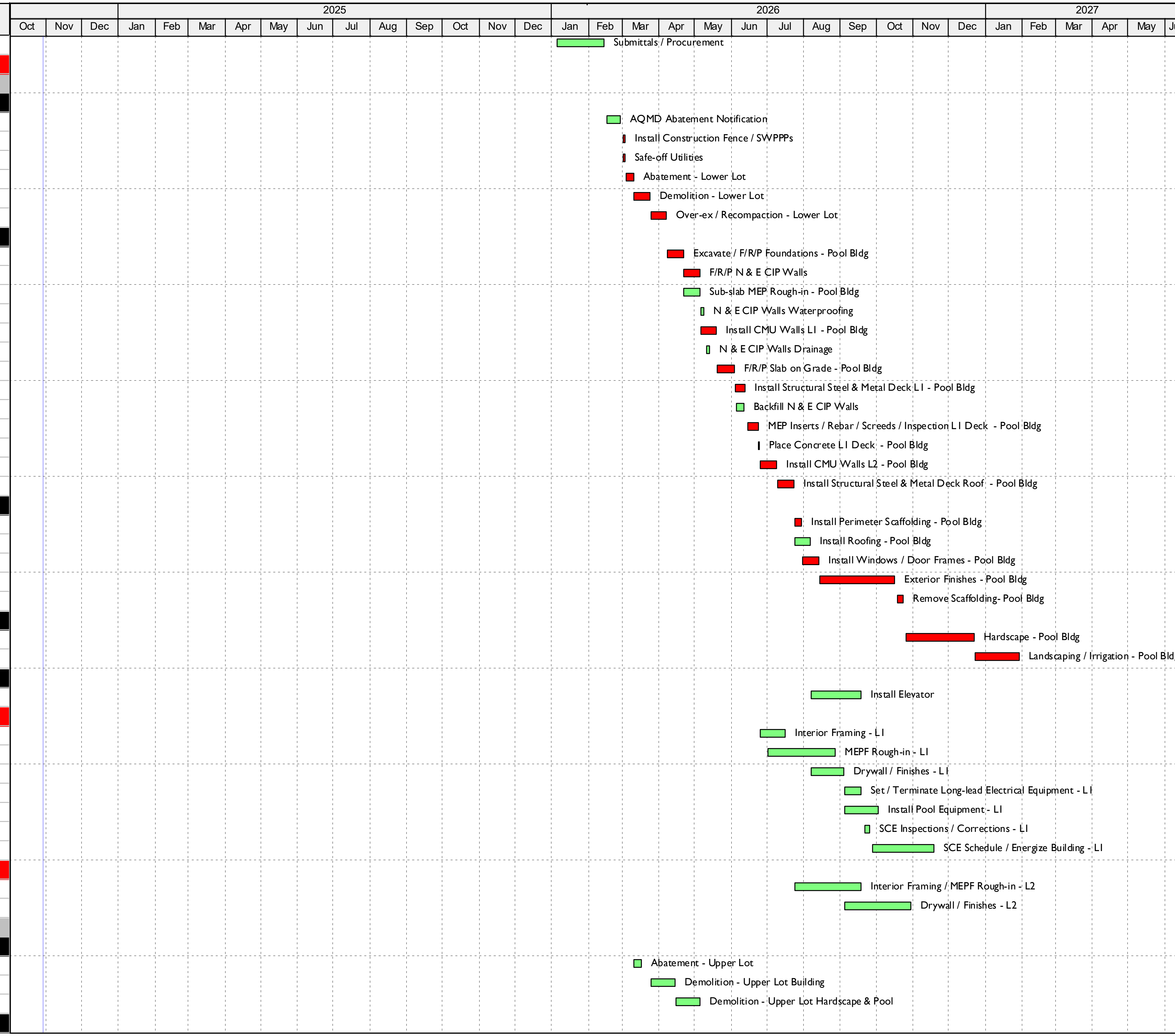


Run Date: Oct-30-24
Project ID: 245004
Data Date: Oct-30-24

Laguna Beach Unified School District
Laguna Beach High School Aquatic Center
Project Schedule Oct-30-24

C.W. Driver
BUILDERS SINCE 1919

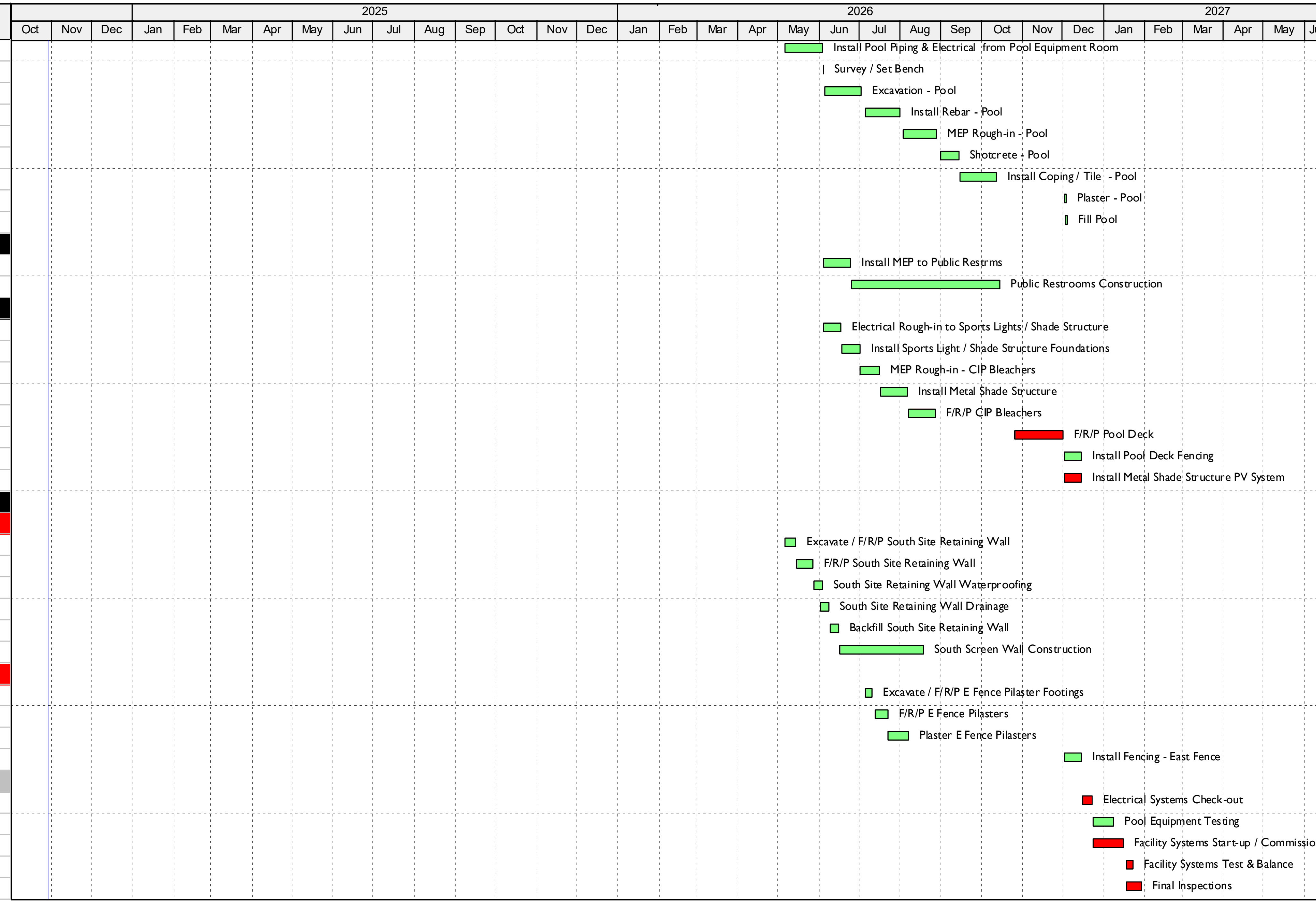
Activity ID	Activity Name	Duration	Start	Finish
SUB-1000	Submittals / Procurement	30	Jan-05-26	Feb-13-26
Construction				
Pool Building				
Site Preparation				
PB-1000	AQMD Abatement Notification	10	Feb-16-26	Feb-27-26
PB-1010	Install Construction Fence / SWPPPs	2	Mar-02-26	Mar-03-26
PB-1020	Safe-off Utilities	2	Mar-02-26	Mar-03-26
PB-1030	Abatement - Lower Lot	5	Mar-04-26	Mar-10-26
PB-1040	Demolition - Lower Lot	10	Mar-11-26	Mar-24-26
PB-1050	Over-ex / Recompaction - Lower Lot	10	Mar-25-26	Apr-07-26
Foundations / Structure				
PB-1060	Excavate / F/R/P Foundations - Pool Bldg	10	Apr-08-26	Apr-21-26
PB-1070	F/R/P N & E CIP Walls	10	Apr-22-26	May-05-26
PB-1110	Sub-slab MEP Rough-in - Pool Bldg	10	Apr-22-26	May-05-26
PB-1080	N & E CIP Walls Waterproofing	3	May-06-26	May-08-26
PB-1090	Install CMU Walls L1 - Pool Bldg	10	May-06-26	May-19-26
PB-1100	N & E CIP Walls Drainage	3	May-11-26	May-13-26
PB-1120	F/R/P Slab on Grade - Pool Bldg	10	May-20-26	Jun-03-26
PB-1140	Install Structural Steel & Metal Deck L1 - Pool Bldg	7	Jun-04-26	Jun-12-26
PB-1130	Backfill N & E CIP Walls	5	Jun-05-26	Jun-11-26
PB-1150	MEP Inserts / Rebar / Screeds / Inspection L1 Deck - Pool Bldg	7	Jun-15-26	Jun-23-26
PB-1160	Place Concrete L1 Deck - Pool Bldg	1	Jun-24-26	Jun-24-26
PB-1170	Install CMU Walls L2 - Pool Bldg	10	Jun-25-26	Jul-09-26
PB-1190	Install Structural Steel & Metal Deck Roof - Pool Bldg	10	Jul-10-26	Jul-23-26
Exteriors				
PB-1200	Install Perimeter Scaffolding - Pool Bldg	5	Jul-24-26	Jul-30-26
PB-1210	Install Roofing - Pool Bldg	10	Jul-24-26	Aug-06-26
PB-1230	Install Windows / Door Frames - Pool Bldg	10	Jul-31-26	Aug-13-26
PB-1260	Exterior Finishes - Pool Bldg	45	Aug-14-26	Oct-16-26
PB-1320	Remove Scaffolding- Pool Bldg	5	Oct-19-26	Oct-23-26
Site Improvements - Lower Lot				
PB-1330	Hardscape - Pool Bldg	40	Oct-26-26	Dec-22-26
PB-1340	Landscaping / Irrigation - Pool Bldg	26	Dec-23-26	Jan-29-27
Interiors				
PB-1250	Install Elevator	30	Aug-07-26	Sep-18-26
Level 1 - Equipment Rooms				
PB-1350	Interior Framing - L1	15	Jun-25-26	Jul-16-26
PB-1180	MEPF Rough-in - L1	40	Jul-02-26	Aug-27-26
PB-1240	Drywall / Finishes - L1	20	Aug-07-26	Sep-03-26
PB-1280	Set / Terminate Long-lead Electrical Equipment - L1	10	Sep-04-26	Sep-18-26
PB-1300	Install Pool Equipment - L1	20	Sep-04-26	Oct-02-26
PB-1290	SCE Inspections / Corrections - L1	5	Sep-21-26	Sep-25-26
PB-1310	SCE Schedule / Energize Building - L1	38	Sep-28-26	Nov-18-26
Level 2 - Locker Rooms				
PB-1220	Interior Framing / MEPF Rough-in - L2	40	Jul-24-26	Sep-18-26
PB-1270	Drywall / Finishes - L2	40	Sep-04-26	Oct-30-26
New Pool				
Site Preparation				
PL-1000	Abatement - Upper Lot	5	Mar-11-26	Mar-17-26
PL-1010	Demolition - Upper Lot Building	15	Mar-25-26	Apr-14-26
PL-1020	Demolition - Upper Lot Hardscape & Pool	15	Apr-15-26	May-05-26
Pool Construction				



Laguna Beach Unified School District
Laguna Beach High School Aquatic Center
Project Schedule Oct-30-24

C.W. Driver
BUILDERS SINCE 1919

Activity ID	Activity Name	Duration	Start	Finish
PL-1040	Install Pool Piping & Electrical from Pool Equipment Room	20	May-06-26	Jun-03-26
PL-1080	Survey / Set Bench	1	Jun-04-26	Jun-04-26
PL-1110	Excavation - Pool	20	Jun-05-26	Jul-02-26
PL-1170	Install Rebar - Pool	20	Jul-06-26	Jul-31-26
PL-1220	MEP Rough-in - Pool	20	Aug-03-26	Aug-28-26
PL-1240	Shotcrete - Pool	10	Aug-31-26	Sep-14-26
PL-1250	Install Coping / Tile - Pool	20	Sep-15-26	Oct-12-26
PL-1270	Plaster - Pool	2	Dec-02-26	Dec-03-26
PL-1310	Fill Pool	2	Dec-03-26	Dec-04-26
Public Restrooms				
PL-1160	Install MEP to Public Restrms	15	Jun-04-26	Jun-24-26
PL-1210	Public Restrooms Construction	78	Jun-25-26	Oct-14-26
Pool Deck				
PL-1100	Electrical Rough-in to Sports Lights / Shade Structure	10	Jun-04-26	Jun-17-26
PL-1130	Install Sports Light / Shade Structure Foundations	10	Jun-18-26	Jul-01-26
PL-1140	MEP Rough-in - CIP Bleachers	10	Jul-02-26	Jul-16-26
PL-1190	Install Metal Shade Structure	15	Jul-17-26	Aug-06-26
PL-1230	F/R/P CIP Bleachers	15	Aug-07-26	Aug-27-26
PL-1260	F/R/P Pool Deck	25	Oct-26-26	Dec-01-26
PL-1290	Install Pool Deck Fencing	10	Dec-02-26	Dec-15-26
PL-1300	Install Metal Shade Structure PV System	10	Dec-02-26	Dec-15-26
Site Improvements - Upper Lot				
South Screen Wall				
PL-1030	Excavate / F/R/P South Site Retaining Wall	7	May-06-26	May-14-26
PL-1050	F/R/P South Site Retaining Wall	8	May-15-26	May-27-26
PL-1060	South Site Retaining Wall Waterproofing	5	May-28-26	Jun-03-26
PL-1070	South Site Retaining Wall Drainage	5	Jun-02-26	Jun-08-26
PL-1090	Backfill South Site Retaining Wall	5	Jun-09-26	Jun-15-26
PL-1120	South Screen Wall Construction	45	Jun-16-26	Aug-18-26
East Fence				
PL-1150	Excavate / F/R/P E Fence Pilaster Footings	5	Jul-06-26	Jul-10-26
PL-1180	F/R/P E Fence Pilasters	8	Jul-13-26	Jul-22-26
PL-1200	Plaster E Fence Pilasters	12	Jul-23-26	Aug-07-26
PL-1280	Install Fencing - East Fence	10	Dec-02-26	Dec-15-26
Start-up / Testing / Inspections				
STRT-1000	Electrical Systems Check-out	6	Dec-16-26	Dec-23-26
STRT-1010	Pool Equipment Testing	10	Dec-24-26	Jan-08-27
STRT-1020	Facility Systems Start-up / Commissioning	15	Dec-24-26	Jan-15-27
STRT-1030	Facility Systems Test & Balance	5	Jan-18-27	Jan-22-27
STRT-1040	Final Inspections	10	Jan-18-27	Jan-29-27

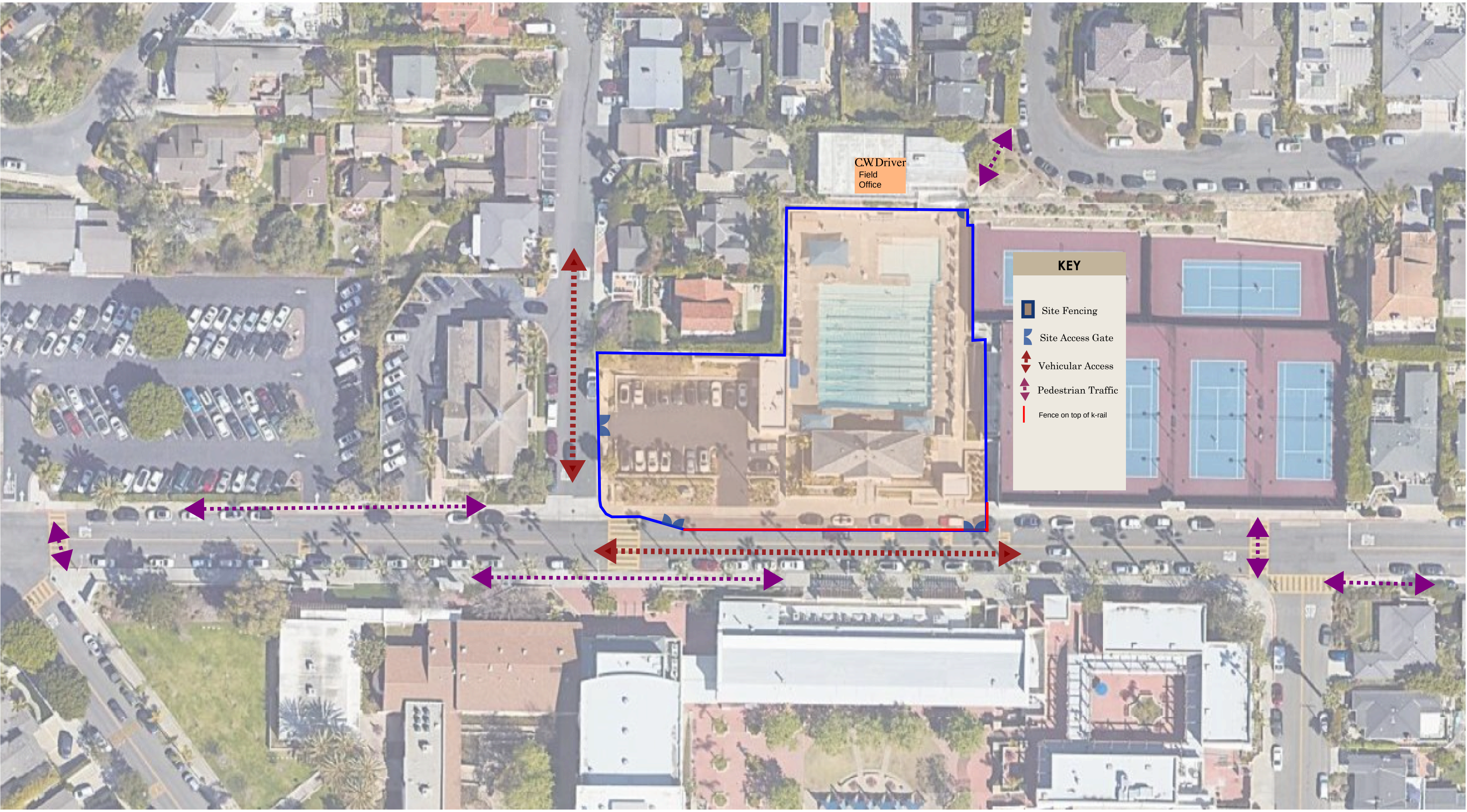


Laguna Beach Unified School District
Laguna Beach High School Aquatic Center
Project Schedule Oct-30-24

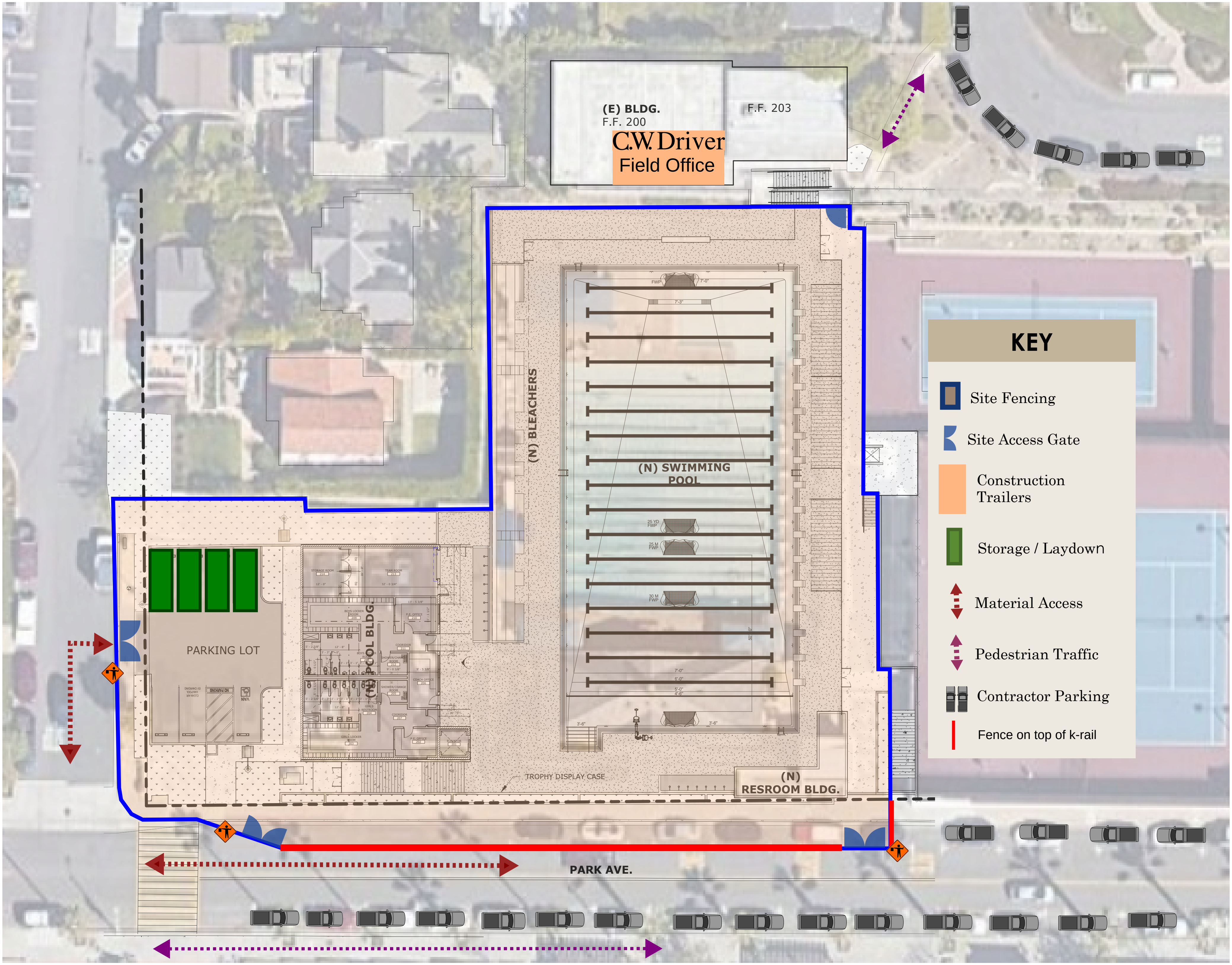
C.W. Driver
BUILDERS SINCE 1919

APPENDIX A3

LOGISTICS SITE PLAN



LAGUNA BEACH HIGH SCHOOL AQUATICS
Logistics Site Plan


(E) BLDG.
F.F. 200
F.F. 203
C.W. Driver
Field Office
(N) BLEACHERS
(N) SWIMMING POOL
(N) POOL BLDG.
PARKING LOT
TROPHY DISPLAY CASE
(N) RESROOM BLDG.
PARK AVE.
KEY
Site Fencing
Site Access Gate
Construction Trailers
Storage / Laydown
Material Access
Pedestrian Traffic
Contractor Parking
Fence on top of k-rail

APPENDIX B

CalEEMod INPUT AND RESULTS FOR AIR QUALITY ANALYSIS

7265/Laguna Beach High School Pool Modernization Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	7265/Laguna Beach High School Pool Modernization
Construction Start Date	1/9/2026
Operational Year	2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	13.6
Location	33.542351765502524, -117.77599665898057
County	Orange
City	Laguna Beach
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	6035
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.28

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Recreational Swimming Pool	1.25	1000sqft	0.03	1,250	0.00	—	—	—

General Office Building	5.00	1000sqft	0.06	5,000	0.00	—	—	2 STORY POOL BUILDING
Parking Lot	15.0	Space	0.13	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.20	1.00	9.69	14.1	0.02	0.38	0.07	0.45	0.35	0.02	0.37	—	2,729	2,729	0.11	0.03	0.36	2,741
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.63	2.60	14.1	17.1	0.03	0.61	5.45	6.05	0.56	2.60	3.16	—	3,170	3,170	0.13	0.03	0.02	3,183
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.60	0.51	4.17	5.97	0.01	0.17	0.22	0.39	0.15	0.08	0.24	—	1,129	1,129	0.05	0.01	0.08	1,134
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.11	0.09	0.76	1.09	< 0.005	0.03	0.04	0.07	0.03	0.02	0.04	—	187	187	0.01	< 0.005	0.01	188

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.20	1.00	9.69	14.1	0.02	0.38	0.07	0.45	0.35	0.02	0.37	—	2,729	2,729	0.11	0.03	0.36	2,741
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.63	2.60	14.1	17.1	0.03	0.61	5.45	6.05	0.56	2.60	3.16	—	3,170	3,170	0.13	0.03	0.02	3,183
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.60	0.51	4.17	5.97	0.01	0.17	0.22	0.39	0.15	0.08	0.24	—	1,129	1,129	0.05	0.01	0.08	1,134
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.11	0.09	0.76	1.09	< 0.005	0.03	0.04	0.07	0.03	0.02	0.04	—	187	187	0.01	< 0.005	0.01	188

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.16	0.16	0.04	0.25	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	8.19	188	197	0.84	0.01	0.02	219
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.12	0.12	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	8.19	188	196	0.84	0.01	0.02	218
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.15	0.15	0.04	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	8.19	188	196	0.84	0.01	0.02	219
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.03	0.03	0.01	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.36	31.2	32.5	0.14	< 0.005	< 0.005	36.3

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Area	0.16	0.16	< 0.005	0.22	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.89	0.89	< 0.005	< 0.005	—	0.90
Energy	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	178	178	0.01	< 0.005	—	179
Water	—	—	—	—	—	—	—	—	—	—	—	1.84	9.55	11.4	0.19	< 0.005	—	17.5
Waste	—	—	—	—	—	—	—	—	—	—	—	6.35	0.00	6.35	0.63	0.00	—	22.2
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	0.16	0.16	0.04	0.25	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	8.19	188	197	0.84	0.01	0.02	219
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Area	0.12	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	178	178	0.01	< 0.005	—	179
Water	—	—	—	—	—	—	—	—	—	—	—	1.84	9.55	11.4	0.19	< 0.005	—	17.5
Waste	—	—	—	—	—	—	—	—	—	—	—	6.35	0.00	6.35	0.63	0.00	—	22.2
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	0.12	0.12	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	8.19	188	196	0.84	0.01	0.02	218
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Area	0.15	0.15	< 0.005	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.61	0.61	< 0.005	< 0.005	—	0.61
Energy	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	178	178	0.01	< 0.005	—	179
Water	—	—	—	—	—	—	—	—	—	—	—	1.84	9.55	11.4	0.19	< 0.005	—	17.5
Waste	—	—	—	—	—	—	—	—	—	—	—	6.35	0.00	6.35	0.63	0.00	—	22.2
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	0.15	0.15	0.04	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	8.19	188	196	0.84	0.01	0.02	219
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Area	0.03	0.03	< 0.005	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.10	0.10	< 0.005	< 0.005	—	0.10
Energy	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	29.5	29.5	< 0.005	< 0.005	—	29.6
Water	—	—	—	—	—	—	—	—	—	—	—	0.31	1.58	1.89	0.03	< 0.005	—	2.90
Waste	—	—	—	—	—	—	—	—	—	—	—	1.05	0.00	1.05	0.11	0.00	—	3.68
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	0.03	0.03	0.01	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.36	31.2	32.5	0.14	< 0.005	< 0.005	36.3

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	0.44	4.09	5.58	0.01	0.13	—	0.13	0.12	—	0.12	—	852	852	0.03	0.01	—	855
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.22	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	46.7	46.7	< 0.005	< 0.005	—	46.8

Demoliti	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.73	7.73	< 0.005	< 0.005	—	7.76
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.45	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	124	124	< 0.005	< 0.005	0.01	125
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.4	27.4	< 0.005	< 0.005	< 0.005	28.8
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.88	6.88	< 0.005	< 0.005	0.01	6.97
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.50	1.50	< 0.005	< 0.005	< 0.005	1.58
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.14	1.14	< 0.005	< 0.005	< 0.005	1.15
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.25	0.25	< 0.005	< 0.005	< 0.005	0.26

3.3. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.44	3.74	5.54	0.01	0.19	—	0.19	0.17	—	0.17	—	858	858	0.03	0.01	—	861
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.20	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.0	47.0	< 0.005	< 0.005	—	47.2
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.79	7.79	< 0.005	< 0.005	—	7.81
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.23	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	62.0	62.0	< 0.005	< 0.005	0.01	62.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.44	3.44	< 0.005	< 0.005	0.01	3.49
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.57	0.57	< 0.005	< 0.005	< 0.005	0.58
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.22	1.02	9.19	9.69	0.02	0.42	—	0.42	0.39	—	0.39	—	1,714	1,714	0.07	0.01	—	1,720
Dust From Material Movement	—	—	—	—	—	—	5.31	5.31	—	2.57	2.57	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.25	0.27	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.0	47.0	< 0.005	< 0.005	—	47.1
Dust From Material Movement	—	—	—	—	—	—	0.15	0.15	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.78	7.78	< 0.005	< 0.005	—	7.80

Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.34	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	92.9	92.9	< 0.005	< 0.005	0.01	94.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.58	2.58	< 0.005	< 0.005	< 0.005	2.62
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.43	0.43	< 0.005	< 0.005	< 0.005	0.43
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction S/L & Pump (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.59	0.49	4.81	6.91	0.01	0.19	—	0.19	0.17	—	0.17	—	1,304	1,304	0.05	0.01	—	1,309
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.59	0.49	4.81	6.91	0.01	0.19	—	0.19	0.17	—	0.17	—	1,304	1,304	0.05	0.01	—	1,309
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	2.11	3.03	0.01	0.08	—	0.08	0.08	—	0.08	—	572	572	0.02	< 0.005	—	574
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.38	0.55	< 0.005	0.02	—	0.02	0.01	—	0.01	—	94.7	94.7	< 0.005	< 0.005	—	95.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.7	27.7	< 0.005	< 0.005	0.10	28.1
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	32.1	32.1	< 0.005	< 0.005	0.08	33.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.3	26.3	< 0.005	< 0.005	< 0.005	26.6
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	32.1	32.1	< 0.005	< 0.005	< 0.005	33.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.7	11.7	< 0.005	< 0.005	0.02	11.9
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.1	14.1	< 0.005	< 0.005	0.02	14.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.94	1.94	< 0.005	< 0.005	< 0.005	1.96
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.33	2.33	< 0.005	< 0.005	< 0.005	2.44
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Pool Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.59	0.49	4.81	6.91	0.01	0.19	—	0.19	0.17	—	0.17	—	1,304	1,304	0.05	0.01	—	1,309

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.21	1.74	< 0.005	0.05	—	0.05	0.04	—	0.04	—	329	329	0.01	< 0.005	—	330
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.22	0.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	54.4	54.4	< 0.005	< 0.005	—	54.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.7	27.7	< 0.005	< 0.005	0.10	28.1
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	32.1	32.1	< 0.005	< 0.005	0.08	33.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.73	6.73	< 0.005	< 0.005	0.01	6.82
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.10	8.10	< 0.005	< 0.005	0.01	8.46
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.11	1.11	< 0.005	< 0.005	< 0.005	1.13
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.34	1.34	< 0.005	< 0.005	< 0.005	1.40
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.59	0.49	4.24	5.30	0.01	0.18	—	0.18	0.16	—	0.16	—	823	823	0.03	0.01	—	826
Paving	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.12	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	22.5	22.5	< 0.005	< 0.005	—	22.6
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.73	3.73	< 0.005	< 0.005	—	3.75
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.80	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	217	217	< 0.005	0.01	0.02	219
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.02	6.02	< 0.005	< 0.005	0.01	6.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.00	1.00	< 0.005	< 0.005	< 0.005	1.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	2.48	2.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.66	3.66	< 0.005	< 0.005	—	3.67
Architectural Coatings	0.07	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.61	0.61	< 0.005	< 0.005	—	0.61
Architectural Coatings	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.5	10.5	< 0.005	< 0.005	< 0.005	10.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.29	0.29	< 0.005	< 0.005	< 0.005	0.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	130	130	0.01	< 0.005	—	130
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	7.51	7.51	< 0.005	< 0.005	—	7.54
Total	—	—	—	—	—	—	—	—	—	—	—	—	137	137	0.01	< 0.005	—	138
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Recreati Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	130	130	0.01	< 0.005	—	130
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	7.51	7.51	< 0.005	< 0.005	—	7.54
Total	—	—	—	—	—	—	—	—	—	—	—	—	137	137	0.01	< 0.005	—	138
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	21.5	21.5	< 0.005	< 0.005	—	21.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	1.24	1.24	< 0.005	< 0.005	—	1.25
Total	—	—	—	—	—	—	—	—	—	—	—	—	22.7	22.7	< 0.005	< 0.005	—	22.8

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

General Office Building	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	40.6	40.6	< 0.005	< 0.005	—	40.7
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	40.6	40.6	< 0.005	< 0.005	—	40.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
General Office Building	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	40.6	40.6	< 0.005	< 0.005	—	40.7
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	40.6	40.6	< 0.005	< 0.005	—	40.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
General Office Building	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.72	6.72	< 0.005	< 0.005	—	6.74
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.72	6.72	< 0.005	< 0.005	—	6.74

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.11	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.04	0.04	< 0.005	0.22	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.89	0.89	< 0.005	< 0.005	—	0.90
Total	0.16	0.16	< 0.005	0.22	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.89	0.89	< 0.005	< 0.005	—	0.90
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.11	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.12	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	< 0.005	< 0.005	< 0.005	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.10	0.10	< 0.005	< 0.005	—	0.10
Total	0.03	0.03	< 0.005	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.10	0.10	< 0.005	< 0.005	—	0.10

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	0.14	0.73	0.88	0.01	< 0.005	—	1.34
General Office Building	—	—	—	—	—	—	—	—	—	—	—	1.70	8.82	10.5	0.18	< 0.005	—	16.2
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1.84	9.55	11.4	0.19	< 0.005	—	17.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	0.14	0.73	0.88	0.01	< 0.005	—	1.34

General Office Building	—	—	—	—	—	—	—	—	—	—	—	1.70	8.82	10.5	0.18	< 0.005	—	16.2
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1.84	9.55	11.4	0.19	< 0.005	—	17.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	0.02	0.12	0.14	< 0.005	< 0.005	—	0.22
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.28	1.46	1.74	0.03	< 0.005	—	2.67
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.31	1.58	1.89	0.03	< 0.005	—	2.90

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	3.84	0.00	3.84	0.38	0.00	—	13.4

General Office Building	—	—	—	—	—	—	—	—	—	—	—	2.51	0.00	2.51	0.25	0.00	—	8.77
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	6.35	0.00	6.35	0.63	0.00	—	22.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	3.84	0.00	3.84	0.38	0.00	—	13.4
General Office Building	—	—	—	—	—	—	—	—	—	—	—	2.51	0.00	2.51	0.25	0.00	—	8.77
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	6.35	0.00	6.35	0.63	0.00	—	22.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	0.64	0.00	0.64	0.06	0.00	—	2.22
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.41	0.00	0.41	0.04	0.00	—	1.45
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1.05	0.00	1.05	0.11	0.00	—	3.68

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/9/2026	2/5/2026	5.00	20.0	—
Site Preparation	Site Preparation	2/6/2026	3/5/2026	5.00	20.0	—
Grading	Grading	3/6/2026	3/19/2026	5.00	10.0	—
Building Construction S/L & Pump	Building Construction	3/6/2026	10/15/2026	5.00	160	—
Pool Construction	Building Construction	4/16/2026	8/21/2026	5.00	92.0	—
Paving	Paving	10/16/2026	10/29/2026	5.00	10.0	—
Architectural Coating	Architectural Coating	10/30/2026	11/12/2026	5.00	10.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	2.00	6.00	84.0	0.37
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	1.00	367	0.40
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	6.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	6.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37

Building Construction S/L & Pump	Cranes	Diesel	Average	1.00	4.00	367	0.29
Building Construction S/L & Pump	Forklifts	Diesel	Average	2.00	6.00	82.0	0.20
Building Construction S/L & Pump	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Pool Construction	Cranes	Diesel	Average	1.00	4.00	367	0.29
Pool Construction	Forklifts	Diesel	Average	2.00	6.00	82.0	0.20
Pool Construction	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	4.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	7.00	81.0	0.42
Paving	Rollers	Diesel	Average	1.00	7.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	10.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	0.40	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	5.00	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT

Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	7.50	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction S/L & Pump	—	—	—	—
Building Construction S/L & Pump	Worker	2.13	18.5	LDA,LDT1,LDT2
Building Construction S/L & Pump	Vendor	1.02	10.2	HHDT,MHDT
Building Construction S/L & Pump	Hauling	0.00	20.0	HHDT
Building Construction S/L & Pump	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	17.5	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.85	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Pool Construction	—	—	—	—
Pool Construction	Worker	2.13	18.5	LDA,LDT1,LDT2
Pool Construction	Vendor	1.02	10.2	HHDT,MHDT
Pool Construction	Hauling	0.00	20.0	HHDT
Pool Construction	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	7,500	2,500	353

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	625	—
Site Preparation	—	—	10.0	0.00	—
Grading	—	—	7.50	0.00	—
Paving	0.00	0.00	0.00	0.00	0.13

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Recreational Swimming Pool	0.00	0%
General Office Building	0.00	0%
Parking Lot	0.13	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	532	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Recreational Swimming Pool	36.0	11.4	17.0	10,872	381	120	180	114,949
General Office Building	48.7	11.1	3.50	13,455	515	117	37.0	142,266
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	7,500	2,500	353

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00

Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Recreational Swimming Pool	0.00	532	0.0330	0.0040	0.00
General Office Building	89,101	532	0.0330	0.0040	126,732
Parking Lot	5,151	532	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Recreational Swimming Pool	73,929	0.00
General Office Building	888,669	0.00
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Recreational Swimming Pool	7.12	—
General Office Building	4.65	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Recreational Swimming Pool	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Recreational Swimming Pool	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	7.49	annual days of extreme heat
Extreme Precipitation	3.75	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	11.3	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2

Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	63.3
AQ-PM	42.4
AQ-DPM	16.2
Drinking Water	32.0
Lead Risk Housing	29.7
Pesticides	0.00
Toxic Releases	46.1
Traffic	69.1
Effect Indicators	—
CleanUp Sites	37.6
Groundwater	63.4

Haz Waste Facilities/Generators	35.6
Impaired Water Bodies	83.0
Solid Waste	80.0
Sensitive Population	—
Asthma	8.24
Cardio-vascular	3.71
Low Birth Weights	2.31
Socioeconomic Factor Indicators	—
Education	8.42
Housing	23.8
Linguistic	8.49
Poverty	14.5
Unemployment	63.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	90.59412293
Employed	93.50699346
Median HI	84.60156551
Education	—
Bachelor's or higher	90.33748236
High school enrollment	100
Preschool enrollment	1.873476197
Transportation	—
Auto Access	77.83908636
Active commuting	69.72924419

Social	—
2-parent households	80.82894906
Voting	65.9822918
Neighborhood	—
Alcohol availability	75.43949698
Park access	81.35506224
Retail density	63.45438214
Supermarket access	41.53727704
Tree canopy	81.48338252
Housing	—
Homeownership	75.69613756
Housing habitability	92.87822405
Low-inc homeowner severe housing cost burden	45.7590145
Low-inc renter severe housing cost burden	96.93314513
Uncrowded housing	88.2586937
Health Outcomes	—
Insured adults	72.20582574
Arthritis	0.0
Asthma ER Admissions	89.5
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	73.2
Cognitively Disabled	88.7
Physically Disabled	83.0

Heart Attack ER Admissions	94.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	54.8
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	98.9
SLR Inundation Area	70.2
Children	82.0
Elderly	5.1
English Speaking	68.1
Foreign-born	24.0
Outdoor Workers	71.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	88.6
Traffic Density	68.9
Traffic Access	23.0
Other Indices	—
Hardship	2.7
Other Decision Support	—
2016 Voting	85.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	9.00
Healthy Places Index Score for Project Location (b)	86.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	2 Story shower locker building
Construction: Construction Phases	Client provided
Construction: Architectural Coatings	1113 AC

APPENDIX C

BIOLOGICAL RESOURCES EVALUATION
SPECIES OCCURRENCE POTENTIAL DETERMINATIONS

Pseudognaphalium leucocephalum	Common Name (=Synonym)	Federal/State Status	Other Status	General Habitat Description in California	Plant Elevation Range (feet amsl)	BSA Contains Potential Suitable Habitats	BSA is Located Within the Plant Species' Known:		Potential For Occurrence in the BSA
							Elevation Range (166-191 ft)	General Distribution	
Listed Endangered, Threatened, Candidate and State Rare Plants: Plants with official status under the federal Endangered Species Act (ESA), the California Endangered Species Act (CESA), and/or the Native Plant Protection Act (NPPA). A species may have other sensitive designations in addition to their federal or state listing.									
Berberis nevinii (=Mahonia nevinii)	Nevin's barberry	FE, SE, CRPR: 1B.1	-	Lifeform: perennial evergreen shrub Habitats: two habitat types- alluvial scrub community, chaparral community Soils: alluvial scrub community it grows on sandy and gravelly substrates along the margins of dry washes, chaparral community, it grows on steep, north-facing slopes with coarse soils and rocky slopes Bloom Period: February to June	229 – 2,706	No	No	No	**Not expected to occur**. The project site is outside the known elevation range for this species. However there has been one observation (>5 years) within 2 miles of the BSA.
Brodiaea filifolia	thread-leaved brodiaea (=threadleaf clusterlily)	FT, SE, S2, CRPR: 1B.1	-	Lifeform: perennial bulbiferous herb Habitats: Chaparral (openings), cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools. Usually associated with annual grassland and vernal pools; often surrounded by shrubland habitats. Usually associated with annual grassland and vernal pools; often surrounded by shrubland habitats. Soils: Often found in openings on clay soils Bloom Period: March to June	82 – 3,674	No	Yes	Yes	**Not expected to occur**. The BSA does not contain suitable habitat for this species. However there has been one observation (>5 years) within 2 miles of the BSA.
Chloropyron maritimum ssp. maritimum (=Cordylanthus maritimus ssp. maritimus)	salt marsh bird's-beak	FE, SE, CRPR: 1B.2	-	Lifeform: annual herb Habitats: portions of salt marshes subject to periodic inundation from high tides, non-tidal areas or in areas of perched water tables Wetlands, Drainages, or Seeps: Yes Bloom Period: May to Novemeber	0 - 98	No	No	No	**Not expected to occur.** The BSA does not contain suitable habitat for this species.
Dudleya stolonifera	Laguna Beach dudleya	FT, ST, CRPR: 1B.1	OC NCCP/ HCP: Identified Species	Lifeform: perennial stoloniferous herb Habitats: thin, rocky sedimentary soil (some < ½ inch deep) on sandstone cliffs on steep canyon walls, Found in chaparral, cismontane woodlands, coastal scrub, and valley and foothill grasslands Bloom Period: May to July	33 - 853	No	Yes	Yes	**Not expected to occur**. The BSA does not contain suitable habitat for this species. However there has been one observation (>1 year) within 2 miles of the BSA.
Verbesina dissita	big-leaved crownbeard (=crown-beard)	FT, ST, CRPR: 1B.1	-	Lifeform: perennial herb Habitats: steep, rocky, north-facing slopes within 1.5 miles of the ocean in gravelly soils of southern maritime chaparral (90%) and coastal sage scrub (10%) plant communities Bloom Period: March to July	148 - 672	No	Yes	Yes	**Not expected to occur**. The BSA does not contain suitable habitat for this species. However there has been one observation (>1 year) within 2 miles of the BSA.
Sensitive Plants: These plants have no official status under the ESA, the CESA, and/or the NPPA; however they are designated as sensitive or locally important by federal agencies, state agencies, and/or local conservation agencies and organizations.									
Aphanisma blitoides	aphanisma	S2, CRPR 2B.2	-	Lifeform: annual herb Habitats: coastal bluff scrub, coastal dunes, and coastal scrub Soils: sandy soils Bloom Period: February to June	3 – 1,000	No	Yes	Yes	**Not expected to occur**. The BSA does not contain suitable habitat for this species.
Atriplex coulteri	Coulter's saltbush	S1S2, CRPR 1B.2	-	Lifeform: perennial herb Habitats : Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland; ocean bluffs, ridgetops, as well as alkaline low places. Soils: alkaline or clay soils Bloom Period: March to October	10 – 1,510	No	Yes	Yes	**Not expected to occur**. The BSA does not contain suitable habitat for this species.
Atriplex pacifica	South Coast saltscale	S2; CRPR 1B.2	-	Lifeform: annual herb Habitats :Coastal scrub, coastal bluff scrub, playas, coastal dunes. Soils: alkaline soils Bloom Period: March to October	0 - 459	No	Yes	Yes	**Not expected to occur**. The BSA does not contain suitable habitat for this species.
Atriplex parishii	Parish's brittlescale (=Parish's saltbush)	CRPR: 1B.1	-	Lifeform: annual herb Habitats: coastal bluff scrub, coastal dunes, coastal scrub, chenopod scrub and playas Soils: alkaline soils Bloom Period: March to October	82 – 6,232	No	Yes	No	**Not expected to occur**. The BSA does not contain suitable habitat for this species.
Atriplex serenana var. davidsonii	Davidson's saltscale (=Davidson's saltbush, bractscale)	CRPR: 1B.2	-	Lifeform: annual herb Habitats: coastal bluff scrub and coastal scrub, alkali vernal pools, alkali annual grasslands, alkali playa, and alkali scrub components of alkali vernal plains Bloom Period: April to October	33 – 656	No	Yes	Yes	**Not expected to occur**. The BSA does not contain suitable habitat for this species.
Calochortus weedii var. intermedius	intermediate mariposa lily (=Weeds mariposa lily)	CRPR: 1B.2	-	Lifeform: perennial bulbiferous herb Habitats: dry, rocky open slopes and rock outcrops in coastal scrub and chaparral Bloom Period: May to July	344 – 2,804	No	No	Yes	**Not expected to occur.** The project site is outside the known elevation range for this species. However there has been one observation (>1 year) within 1 mile of the BSA.

Pseudognaphalium leucocephalum	Common Name (=Synonym)	Federal/State Status	Other Status	General Habitat Description in California	Plant Elevation Range (feet amsl)	BSA Contains Potential Suitable Habitats	BSA is Located Within the Plant Species' Known:		Potential For Occurrence in the BSA
							Elevation Range (166-191 ft)	General Distribution	
Centromadia parryi ssp. australis (=Hemizonia parryi ssp. australis)	southern tarplant	CRPR: 1B.1	-	Lifeform: annual herb Habitats: margins of marshes and swamps, and in vernally mesic sites within valley and foothill grasslands and vernal pools Bloom Period: May to November	0 – 1,574	No	Yes	No	**Not expected to occur**. The BSA does not contain suitable habitat for this species.
Chaenactis glabriuscula var. orcuttiana	Orcutt's pincushion (=Orcutt's yellow pincushion)	S1; CRPR 1B.1	-	Lifeform: annual herb Habitats: Coastal bluff scrub, coastal dunes Soils: sandy sites Bloom Period: January to August	0 – 328	No	Yes	Yes	**Not expected to occur**. The BSA does not contain suitable habitat for this species.
Comarostaphylis diversifolia ssp. diversifolia	summer holly	S2, CRPR 1B.2	-	Lifeform: perennial evergreen shrub Habitats: chaparral and cismontane woodlands; often in mixed chaparral in California, sometimes post-burn. Bloom Period: April to June	100 - 2,590	No	Yes	Yes	**Not expected to occur**. The BSA does not contain suitable habitat for this species.
Dudleya blochmaniae ssp. blochmaniae	Blochman's dudleya	CRPR: 1B.1	-	Lifeform: perennial herb Habitats: valley/foothill grasslands, coastal bluff scrub, chaparral and coastal scrub Soils: open, rocky slopes, often serpentine or clay-dominated Bloom Period: April to June	16 – 1,476	No	Yes	Yes	**Not expected to occur**. The BSA does not contain suitable habitat for this species. However there has been one observation (>1 year) within 2 miles of the BSA.
Dudleya multicaulis	many-stemmed dudleya	CRPR: 1B.2	-	Lifeform: perennial herb Habitats: barrens, rocky places, and ridgelines as well as thinly vegetated openings in chaparral, valley and foothill grasslands, and coastal sage scrub Soils: clay soils, heavy soils, often clay Bloom Period: April to July	49 – 2,591	No	Yes	Yes	**Not expected to occur**. The BSA does not contain suitable habitat for this species. However there has been one observation (>1 year) within 1 mile of the BSA.
Euphorbia misera	cliff spurge	CRPR: 2B.2	-	Lifeform: perennial shrub Habitats: Mojavean desert scrub, coastal bluff scrub, and coastal scrub Soils: rocky sites Bloom Period: December to October	33 – 1,640	No	Yes	No	**Not expected to occur**. The BSA does not contain suitable habitat for this species. However there has been one observation (>1 year) within 2 miles of the BSA.
Harpagonella palmeri (=Pectocarya palmeri)	Palmer's grapplinghook	S3, CRPR 4.2	-	Lifeform: annual herb Habitats: Chaparral, coastal scrub, valley and foothill grassland; openings, and open grassy areas within shrubland. Soils: clay soils Bloom Period: March to May	65 – 3,135	No	Yes	No	**Not expected to occur**. The BSA does not contain suitable habitat for this species.
Helianthus nuttallii ssp. parishii	Los Angeles sunflower	CRPR: 1A	-	Lifeform: perennial rhizomatous herb Habitats: coastal salt and freshwater marshes and swamps Wetlands, Drainages, or Seeps: Yes Bloom Period: August to October	33 – 5,000	No	Yes	No	**Not expected to occur**. The BSA does not contain suitable habitat for this species.
Horkelia cuneata var. puberula (=Horkelia cuneata ssp. puperula)	mesa horkelia	CRPR: 1B.1	-	Lifeform: perennial herb Habitats: maritime chaparral, coastal scrub, and cismontane woodlands Soils: sandy or gravelly sites Bloom Period: February to September	230 – 2,657	No	No	Yes	**Not expected to occur.** The project site is outside the known elevation range for this species.
Imperata brevifolia	California satintail	CRPR: 2B.1	-	Lifeform: perennial rhizomatous herb Habitats: mesic sites within chaparral, coastal scrub, Mojavean desert scrub, meadows and seeps (often alkali), and riparian scrub Wetlands, Drainages, or Seeps: Yes Bloom Period: September to May	0 – 3,985	No	Yes	No	**Not expected to occur**. The BSA does not contain suitable habitat for this species.
Isocoma menziesii var. decumbens	decumbent goldenbush	S2, CRPR 1B.2	-	Lifeform: perennial shrub Habitats: Coastal scrub, chaparral. Often in distrubed sites. Soils: sandy soils Bloom Period: April to November	35 - 820	No	Yes	No	**Not expected to occur**. The BSA does not contain suitable habitat for this species.
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	S2, CRPR 1B.1	-	Lifeform: annual herb Habitats: Coastal salt marshes, playas, vernal pools, playas, sinks, and grasslands. Soils:Usually found on alkaline soils. Bloom Period: February to June	3 – 4,002	No	Yes	No	**Not expected to occur**. The BSA does not contain suitable habitat for this species.
Lepidium virginicum var. robinsonii	Robinson's pepper-grass	S3, CRPR 4.3	-	Lifeform: annual herb Habitats: chaparral and coastal sage scrub; shrubland. Soils: dry soils Bloom Period: January to July	3 – 2,903	No	Yes	No	**Not expected to occur**. The BSA does not contain suitable habitat for this species.
Nama stenocarpa	mud nama	S1S2, CRPR 2B.2	-	Lifeform: annual/perennial herb Habitats: Marshes and swamps (lake shores, river banks, intermittently wet areas). Bloom Period: January to July	15 - 1,640	No	Yes	No	**Not expected to occur**. The BSA does not contain suitable habitat for this species.
Navarretia prostrata	prostrate vernal pool navarretia (=prostrate navarretia)	S2, CRPR 1B.2	-	Lifeform: annual herb Habitats: coastal scrub, valley and foothill grasslands (alkaline washes), meadows and seeps, and vernal pools. Mesic, alkaline sites. Wetlands, Drainages, or Seeps: Yes Soils: alkaline soils Bloom Period: April to July	10 - 3,970	No	Yes	No	**Not expected to occur**. The BSA does not contain suitable habitat for this species.

Pseudognaphalium leucocephalum	Common Name (=Synonym)	Federal/State Status	Other Status	General Habitat Description in California	Plant Elevation Range (feet amsl)	BSA Contains Potential Suitable Habitats	BSA is Located Within the Plant Species' Known: Elevation Range (166-191 ft)	General Distribution	Potential For Occurrence in the BSA
Nemacaulis denudata var. denudata	coast woolly-heads	S2, CRPR 1B.2	-	Lifeform: annual herb Habitats: coastal dunes Bloom Period: April to September	0 - 328	No	Yes	No	**Not expected to occur**. The BSA does not contain suitable habitat for this species.
Nolina cismontana	chaparral nolina (=Peninsular nolina and =California beargrass)	CRPR: 1B.2	-	Lifeform: perennial evergreen shrub Habitats: chaparral and coastal scrub Soils: sandstone or gabbro soils Bloom Period: March to July	459 – 4,182	No	No	Yes	**Not expected to occur.** The project site is outside the known elevation range for this species.
Pentachaeta aurea ssp. allenii	Allen's pentachaeta	CRPR: 1B.1	-	Lifeform: annual herb Habitats: valley and foothill grasslands, chaparral, cismontane woodlands, riparian woodlands, coastal sage scrub, and lower montane coniferous forests Soils: dry, open or grassy areas and is often associated with clay substrates Wetlands, Drainages, or Seeps: Yes Bloom Period: March to June	246 – 1,706	No	No	Yes	**Not expected to occur.** The project site is outside the known elevation range for this species.
Pseudognaphalium leucocephalum (=Gnaphalium leucocephalum)	white rabbit-tobacco	S2, CRPR 2B.2	-	Lifeform: perennial herb Habitats: chaparral, cismontane woodlands, coastal scrub and riparian woodlands; sandy or gravelly benches, dry stream bottoms, canyon bottoms Soils: sandy and gravelly sites Bloom Period: (July) August to November (December)	0 – 6,890	No	Yes	Yes	**Not expected to occur**. The BSA does not contain suitable habitat for this species. However there has been one observation (>1 year) within 2 miles of the BSA.
Quercus dumosa	Nuttall's scrub oak	S3, CRPR 1B.1	OC NCCP/ HCP: Identified Species	Lifeform: perennial evergreen shrub Habitats: closed-cone coniferous forests, chaparral, and coastal scrub Soils: Generally on sandy soils near the coast; sometimes on clay loam Bloom Period: February to August	49 – 1,312	No	Yes	Yes	**Not expected to occur**. The BSA does not contain suitable habitat for this species.
Senecio aphanactis	chaparral ragwort (=rayless ragwort)	S2, CRPR 2B.2	-	Lifeform: annual herb Habitats: Chaparral, cismontane woodland, coastal scrub; sometimes on drying alkaline flats. Bloom Period: January to April (May)	49 – 2,624	No	Yes	No	**Not expected to occur**. The BSA does not contain suitable habitat for this species.
Sidalcea neomexicana	salt spring checkerbloom (=mountain sidalcea)	S2, CRPR 2B.2	-	Lifeform: perennial herb Habitats: Playas, chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, alkali springs and marshes, mesic sites. Bloom Period: March to June	49 – 5,018	No	Yes	No	**Not expected to occur**. The BSA does not contain suitable habitat for this species.
Suaeda esteroa	estuary seablite	S2, CRPR 1B.2	-	Lifeform: perennial fleshy herb Habitats: coastal salt marshes and swamps often growing with *Salicornia subterminalis.* Soils: clay, silt, and sand substrates Bloom Period: May to January	0 - 16	No	Yes	No	**Not expected to occur**. The BSA does not contain suitable habitat for this species.
Symphyotrichum defoliatum (=Aster bernardinus)	San Bernardino aster	CRPR: 1B.2	-	Lifeform: perennial rhizomatous herb Habitats: cismontane woodlands, coastal scrub, lower montane coniferous forests, meadows and seeps, marshes and swamps, and vernally mesic valley and foothill grasslands Soils: moist fine alluvial soils Wetlands, Drainages, or Seeps: Yes Bloom Period: July to November	7 – 6,691	No	Yes	No	**Not expected to occur**. The BSA does not contain suitable habitat for this species.

Legend and Notes

Federal Endangered Species Act (ESA) Listing Codes:

- **FE = federally listed as endangered:** any species of plant or animal that is in danger of extinction throughout all or a significant portion of their range.
- **FT = federally listed as threatened:** any species of plant or animal that is considered likely to become endangered throughout all or a significant portion of its range within the foreseeable future.
- **FC = federal candidate for listing:** candidate species are plants and animals for which the USFWS has sufficient information on their biological status and threats to propose them for listing as endangered or threatened under the ESA, but for which development of a proposed listing regulation is precluded by higher priority listing actions to address species in greater need. A proposed regulation has not yet been published in the Federal Register for these species.
- **FPE = federally proposed for listing as endangered:** a candidate species that has been proposed by USFWS for listing as endangered and the proposed rule, but not a final rule, to list has been published in the Federal Register.
- **FPT = federally proposed for listing as threatened:** a candidate species that has been proposed by USFWS for listing as threatened and the proposed rule, but not a final rule, to list has been published in the Federal Register.
- **FPD = federally proposed for delisting:** a species that has been proposed by USFWS for delisting (or down listing from endangered to threatened) and the proposed rule to delist has been published in the Federal Register.

California Endangered Species Act (CESA) Listing Codes:

- **SE = state-listed as endangered:** "endangered species" means a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease (Fish and Game Code § 2062).
- **ST = state-listed as threatened:** "threatened species" means a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts (Fish and Game Code § 2067).
- **SCE = state candidate for listing as endangered:** a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed published in the California Regulatory Notice Register as being under review by CDFW for addition to the list of endangered species, or a species for which the Fish and Game Commission has published a notice of proposed regulation to add the species to the list (Fish and Game Code § 2068).
- **SCT = state candidate for listing as threatened:** a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed published in the California Regulatory Notice Register as being under review by CDFW for addition to the list of threatened species, or a species for which the Fish and Game Commission has published a notice of proposed regulation to add the species to the list (Fish and Game Code § 2068).
- **SCD = state candidate for delisting:** a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed published in the California Regulatory Notice Register as being under review by CDFW for removal from either the list of endangered species or the list of threatened species, or a species for which the Fish and Game Commission has published a notice of proposed regulation to remove the species to either list.
- **SR = state rare:** A species, subspecies, or variety of native plant is rare when, although not presently threatened with extinction, it is in such small numbers throughout its range that it may become endangered if its present environment worsens (Fish and Game Code § 1901).

Pseudognaphalium leucocephalum	Common Name (=Synonym)	Federal/State Status	Other Status	General Habitat Description in California	Plant Elevation Range (feet amsl)	BSA Contains Potential Suitable Habitats	BSA is Located Within the Plant Species' Known:		Potential For Occurrence in the BSA
							Elevation Range (166-191 ft)	General Distribution	

California Rare Plant Ranks (Formerly known as CNPS Lists): the CNPS is a statewide, nonprofit organization that maintains, with CDFW, an Inventory of Rare and Endangered Plants of California. In the spring of 2011, CNPS and CDFW officially changed the name "CNPS List" or "CNPS Ranks" to "California Rare Plant Rank" (or CPRP). This was done to reduce confusion over the fact that CNPS and CDFW jointly manage the Rare Plant Status Review Groups and the rank assignments are the product of a collaborative effort and not solely a CNPS assignment.

- **CRPR: 1A** = California Rare Plant Rank 1A - plants presumed extirpated in California and either rare or extinct elsewhere: the plants with a CRPA of 1A are presumed extirpated because they have not been seen or collected in the wild in California for many years. This rank includes plants that are both presumed extinct as well as those plants which are presumed extirpated in California. All of the plants constituting CRPR 1A meet the definitions of § 2062 and § 2067 (CESA) of the Fish and Game Code, and are eligible for state listing. Should these taxa be rediscovered, it is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.
- **CRPR 1B** = California Rare Plant Rank 1B - plants rare, threatened, or endangered in California and elsewhere: plants with a CRPR of 1B are rare throughout their range with the majority of them endemic to California. Most of the plants that are ranked 1B have declined significantly over the last century. All of the plants constituting CRPR 1B meet the definitions of § 2062 and § 2067 (CESA) of the Fish and Game Code, and are eligible for state listing. It is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.
- **CRPR 2A** = California Rare Plant Rank 2A - plants presumed extirpated in California, but more common elsewhere: the plant taxa of CRPR 2A are presumed extirpated because they have not been observed or documented in California for many years. This list includes only those plant taxa that are presumed extirpated in California, but more common elsewhere in their range. All of the plants on List 2A meet the definitions of § 2062 and § 2067 (CESA) of the Fish and Game Code, and are eligible for state listing. Should these taxa be rediscovered, it is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.
- **CRPR 2B** = California Rare Plant Rank 2B - plants rare, threatened, or endangered in California, but more common elsewhere: except for being common beyond the boundaries of California, plants with a CRPR of 2B would have been ranked 1B. From the federal perspective, plants common in other states or countries are not eligible for consideration under the provisions of the ESA. All of the plants constituting CRPR 2B meet the definitions of § 2062 and § 2067 (CESA) of the Fish and Game Code, and are eligible for state listing. It is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.
- **CRPR 3** = California Rare Plant Rank 3 - plants about which more information is needed - a review list: the plants that comprise CRPR 3 are united by one common theme – CNPS and CDFW lack the necessary information to assign them to one of the other ranks or to reject them. Nearly all of the plants constituting CRPR 3 are taxonomically problematic. Some of the plants constituting CRPR 3 meet the definitions of § 2062 and § 2067 (CESA) of the Fish and Game Code, and are eligible for state listing. CNPS strongly recommends that CRPR 3 plants be evaluated for consideration during preparation of environmental documents relating to CEQA.
- **CRPR 4** = California Rare Plant Rank 4 - plants of limited distribution - a watch list: the plants in this category are of limited distribution or infrequent throughout a broader area in California. While CNPS and CDFW cannot call these plants "rare" from a statewide perspective, they are uncommon enough that their status should be monitored regularly. Should the degree of endangerment or rarity of a CRPR 4 plant change, CNPS and CDFW will transfer it to a more appropriate rank. Some of the plants constituting CRPR 4 meet the definitions of § 2062 and § 2067 (CESA) of the Fish and Game Code, and few, if any, are eligible for state listing. Nevertheless, many of them are significant locally, and CNPS strongly recommends that CRPR 4 plants be evaluated for consideration during preparation of environmental documents relating to CEQA.
- **Considered But Rejected** = plants that have been considered for inclusion into the CNPS Inventory, but were not included for various reasons.

California Native Plant Society (CNPS) Threat Ranks: The CNPS Threat Rank is an extension added onto the California Rare Plant Rank (CRPR) (as a decimal code) and designates the level of threats by a 1 to 3 ranking with 1 being the most threatened and 3 being the least threatened. A Threat Rank is present for all CRPR 1B's, 2B's, 4's, and the majority of CRPR 3's. CRPR 4 plants are seldom assigned a Threat Rank of .1, as they generally have large enough populations to not have significant threats to their continued existence in California; however, certain conditions exist to make the plant a species of concern and hence be assigned a CRPR. In addition, all CRPR 1A and 2A (presumed extirpated in California), and some CRPR 3 (need more information) plants, which lack threat information, do not have a Threat Rank extension.

- **.1** = seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- **.2** = moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
- **.3** = not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

Scientific Name (=Synonym)	Common Name (=Synonym)	Federal/State Status	Other Status	General Habitat Descriptions in California	The BSA: Located Within Species' Distribution and/or Elevation Range (if known)	The BSA: Contains Suitable Foraging, Roosting, and/or Breeding Habitats	Potential For Occurrence in the BSA
Listed Endangered, Threatened, and Candidate Wildlife: Wildlife with official status under the federal Endangered Species Act (ESA) and/or the California Endangered Species Act (CESA). A species may have other sensitive designations in addition to their federal or state listing.							
Listed Invertebrates							
Bombus crotchii	Crotch's bumble bee	SCE, S2	IUCN: EN	Habitats: grasslands and shrublands. Hotter and drier environment than other bumblebee species. Prefers milkweeds, dusty maidens, lupines, medics, phacelias, sages, clarkias, poppies, and wild buckwheats. This species occurs primarily in California, including the Mediterranean region, Pacific Coast, Western Desert, Great Valley, and adjacent foothills through most of southwestern California.	Yes	No	**Not expected to occur.** The BSA does not contain suitable habitat or vegetation to support this species.
Branchinecta sandiegonensis	San Diego fairy shrimp	FE. S1	OC NCCP/ HCP: Conditionally Covered Species;	Habitats: small, shallow vernal pools, which range in depth from 2 to 12 inches and in water temperature from 10 to 20 degrees Celsius, ditches and road ruts	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Danaus plexippus pop. 1	monarch butterfly	FC: California overwintering population, S2	IUCN: EN	Habitats:Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	Yes	No	**Low potential to occur.** The BSA does not contain suitable habitat to support this species, however, this species has been observed (>1 year) within 1000ft of the BSA.
Streptocephalus woottoni	Riverside fairy shrimp	FE, S2	OC NCCP/ HCP: Conditionally Covered Species	Habitats: deep, long-lived, cool lowland vernal pools, vernal pool like ephemeral ponds, and stock ponds that retain water, minimum depth of 30 cm at maximum filing and the water is usually moderately turbid, seasonal grasslands. Characteristics: Hatch in warm water later in the season.	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Listed Fish							
Eucyclogobius newberryi	tidewater goby	FE, SSC	-	Habitats: still waters of coastal lagoons, marshes, and creeks, coastal lagoons where freshwater runoff and salt water mix to yield the requisite brackish waters Characteristics: avoid areas of dense plant growth, avoid open areas where there is strong wave action or strong currents	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Oncorhynchus mykiss irideus pop. 10	steelhead – southern California DPS	FE[10], SCE[10]	-	Habitats: cool, clear, well-oxygenated streams Characteristics: higher-elevation headwaters are primary spawning and rearing areas	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Listed Amphibians							
Anaxyrus californicus (=Bufo californicus)	arroyo toad	FE; S2; SSC	IUCN:LC; OC NCCP/ HCP: Conditionally Covered Species	Habitats: Semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc.; breeds in and near streams Characteristics: nearby sandy terraces, dampened in places by capillary action, and with some scattered vegetation providing surface sheltering and burrowing sites and foraging areas. Rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range.	Yes	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Listed Birds							
Agelaius tricolor	tricolored blackbird	ST, SSC, BCC	-	Habitats: fresh water, preferably in emergent wetland with tall, dense cattails (*Typha* sp.) or tules, natural grassland, woodland, or agricultural cropland Characteristics: species is not migratory, but is nomadic and highly colonial	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Athene cunicularia	burrowing owl	SCT; BLM:S; BCC	-	Habitats: open, dry, flat ground or low rolling hills with sparse vegetation and available burrows; may be found in desert, rural, urban, and suburban habitats Characteristics: prefer to use existing burrows dug by small mammals (e.g., gophers), but will also dig their own burrows in suitably soft soils.	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Charadrius nivosus nivosus (=Charadrius alexandrinus nivosus)	western snowy plover - Pacific coastal population	FT[18], FT, SSC[19], BCC[20]	-	Habitats: coastal beaches, sand spits, dune-backed beaches, sparsely-vegetated dunes, beaches at creek and river mouths, and salt pans at lagoons and estuaries, sparsely vegetated ground at alkaline or saline lakes, reservoirs, and pond; on riverine sand bars; and at sewage, salt-evaporation, and agricultural waste-water ponds	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Elanus leucurus	white-tailed kite	fully protected	-	Habitats: undisturbed, open grasslands, meadows, emergent wetlands, farmlands, crops, pastures, and other cultivated habitats Characteristics: adjacent to their nesting woodland must be open foraging grasslands	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Laterallus jamaicensis coturniculus	California black rail	ST, fully protected	-	Habitats: high coastal marshes to freshwater marshes along the lower Colorado River, pickleweed, bulrushes, and matted salt grass (*Distichlis spicata*) and other marsh vegetation Characteristics: they use areas of shallow water with relatively stable water levels and flat shoreline	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Passerculus sandwichensis beldingi	Belding's savannah sparrow	SE, BCC	-	Habitats:mud flats, shorelines, and rock jetties Characteristics: associated with coastal salt marshes in the upper intertidal marsh zone	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Polioptila californica californica	coastal California gnatcatcher	FT; SSC; S2	OC NCCP/ HCP: Target Species	Habitats: small, non-migratory, permanent resident of coastal sage scrub, small, non-migratory, permanent resident of coastal sage scrub	Yes	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Rallus obsoletus levipes (=Rallus longirostris levipes)	light-footed rail (=light-footed clapper rail)	FE, SE, fully protected	-	Habitats: coastal southern California, freshwater marshes, although this is not common Characteristics: require shallow water and mudflats for foraging	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Riparia riparia	bank swallow	ST; S3	IUCN:LC	Habitats: naturally eroding habitats of major lowland river systems, sandy, vertical bluffs or riverbanks Characteristics: birds build nests within two to three-foot deep burrows that are dug perpendicularly into near vertical earthen banks along streams, coastal bluffs, and sand and gravel pits	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Sternula antillarum browni (=Sterna antillarum browni)	California least tern	FE, SE, fully protected Season of Concern: nesting colony	-	Habitats: bare or sparsely vegetated flat substrates, beaches or sandbars near the coast, nearby shallow water Characteristics: near estuaries, bays, or harbors where small fish are abundant	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Vireo bellii pusillus	least Bell's vireo	FE; SE; S3	OC NCCP/ HCP: Conditionally Covered Species	Habitats: dry, intermittent streams, on the desert slopes mesquite (Prosopis sp.) and sandbar willow in canyon locations, willow-dominated riverine riparian habitats with well-developed overstories, understories, and low densities of aquatic and herbaceous cover	Yes	No	**Low potential to occur.** The BSA does not contain suitable habitat to support this species, however, this species has been observed (>3 years) within 2 miles of the BSA.

Scientific Name (=Synonym)	Common Name (=Synonym)	Federal/State Status	Other Status	General Habitat Descriptions in California	The BSA: Located Within Species' Distribution and/or Elevation Range (if known)	The BSA: Contains Suitable Foraging, Roosting, and/or Breeding Habitats	Potential For Occurrence in the BSA
Listed Mammals							
Perognathus longimembris pacificus	Pacific pocket mouse	FE, SSC	OC NCCP/ HCP: Conditionally Covered Species	Habitats: open, shrubby vegetation, including coastal strand, coastal dunes, weedy vegetation on river alluvium, and open coastal sage scrub Soil: fine-grained, sand soil and alluvial sands near the ocean	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Sensitive Wildlife: These animals have no official status under the ESA and/or the CESA; however they are designated as sensitive or locally important by federal agencies, state agencies, and/or local conservation agencies and organizations							
Sensitive Invertebrates							
Bombus pensylvanicus	American bumble bee	Special Animals List; S2	IUCN:VU	Habitats: open farmlands and fields where it nests on the surface of the ground, among long grass, but occasionally underground; males congregrate outside nest entrances in search of mates	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Cicindela hirticollis gravida (=Pacific Hairy-necked tiger beetle)	sandy beach tiger beetle (=Pacific hairy-necked tiger beetle)	Special Animals List	-	Habitats: found in moist sand near the ocean, for example in swales behind dunes or upper beaches beyond normal high tides	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Cicindela latesignata	western beach tiger beetle	Special Animals List, G2G3, S1	-	Habitats: salt marsh, mud flat, or other estuarine habitat and any other associated habitats (usually nearby beaches) where a adults and/or larvae or have recently occurred with potential for persistence or regular recurrence	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Coelus globosus	globose dune beetle	Special Animals List	-	Habitats: foredunes and sand hummocks immediately bordering the coast from Bodega Bay Head to Ensenada, Baja California, and all of the Channel Islands except San Clemente Island	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Habroscelimorpha gabbii	western tidal-flat tiger beetle	Special Animals List	-	Habitats: salty coastal habitats including salt marshes, tidal flats, beaches	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Tryonia imitator	mimic tryonia	Special Animals List, G2, S2	-	Habitats: freshwater, herbaceous wetlands	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Sensitive Fish							
Gila orcuttii	arroyo chub	S2; SSC; USFS:S	AFS:VU; IUCN:VU	Habitats: slow-moving or backwater sections of warm to cool (10-24 C) streams with mud or sand substrates	Yes	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Sensitive Amphibians							
Spea hammondii	western spadefoot	FPT; S3S4; SSC	IUCN:NT; OC NCCP/ HCP: Identified Species	Habitats: coastal sage scrub, open chaparral, pine-oak woodlands and grassland habitats, grasslands with vernal pools or mixed grassland/coastal sage scrub areas Characteristics: upland habitats adjacent to potential breeding sites in burrows approximating 1 meter in depth	Yes	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Sensitive Reptiles							
Anniella stebbinsi	southern California legless lizard	S3; SSC	-	Habitats: occurs in many habitats with sandy soil. Habitats: coastal sand dunes and a variety of interior habitats, including sandy washes and alluvial fans. Population occurs in Piute and Tehachapi mountains at elevation of 400-900 m in oak woodland and mixed conifer forest	Yes	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species, however, this species has been observed (>1 year) within 2 miles of the BSA.
Arizona elegans occidentalis	California glossy snake	S2; SSC	-	Habitats: all ecological zones, from the coast to the mountain foothills, light shrubby to barren desert, sagebrush flats, grassland, chaparral-covered slopes, and woodlands Characteristics: refugia takes the form of mammal burrows, rock outcrops, and to a lesser extent under surface objects such as flat rocks and vegetation residue. Individuals occasionally burrow in loose soil.	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Aspidoscelis hyperythra (=Cnemidophorus hyperythrus beldingi)	orange-throated whiptail	WL	OC NCCP/ HCP: Target Species	Habitats: semi-arid brushy areas typically with loose soil and rocks, including washes, stream sides, rocky hillsides, and coastal chaparral Characteristics: friable soil appears to be a necessary requirement for excavating burrows and hiding eggs	Yes	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species, however, this species has been observed (>1 year) within 2 mile of the BSA.
Aspidoscelis tigris stejnegeri (=Cnemidophorus tigris multiscutatus)	San Diegan whiptail (=coastal whiptail)	S3; SSC	OC NCCP/ HCP: Identified Species	Habitats: variety of ecosystems, primarily hot and dry open areas with sparse foliage such as deserts, chaparral and semiarid, found in open, often rocky areas with little vegetation or sunny microhabitats within shrub or grassland Characteristics: ground may be firm soil, sandy, or rocky	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Crotalus ruber	red diamond rattlesnake	SSC	OC NCCP/ HCP: Identified Species	Habitats: arid scrub, coastal chaparral, oak and pine woodlands, rocky grassland, cultivated areas (it avoids the mountains above around 4,000 feet), to warm inland mesas and valleys Characteristics: need rodent burrows, cracks in rocks or surface cover objects	Yes	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species, however, this species has been observed (>1 year) within 1 mile of the BSA.
Actinemys pallida =(Emys marmorata pallida); =(Actinemys marmorata pallida); = (Clemmys marmorata pallida)	southwestern pond turtle (=southern western pond turtle; = western pond turtle)	FPT; SSC; S3; G3G4	IUCN:VU	Habitat: A thoroughly aquatic turtle of small ponds, small lakes, marshes, rivers, intermittent streams, creeks, permanent and ephemeral shallow wetlands, stock ponds, sewage treatment lagoons, and irrigation ditches. Typically occurs with abundant aquatic vegetation, and either rocky or muddy bottoms. They are found below 6000 ft elevation in woodland, forest, and grassland habitats. Microhabitat: Needs basking sites such as logs, rocks, cattail mats, grassy open fields and exposed banks. Also needs upland habitat up to 0.5 km from water for egg-laying. May enter brackish water and even seawater. Adjacent upland areas provide overwintering and estivation sites.	Yes	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Phrynosoma blainvillii (=Phrynosoma coronatum) (=Phrynosoma coronatum blainvillei)	Blainville's horned lizard (=coast horned lizard) (=San Diego horned lizard)	S3; SSC	IUCN:LC; OC NCCP/ HCP: Identified Species	Habitats: wide variety of vegetation types including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland and coniferous forest, habitats are loose, fine soils with a high sand fraction; an abundance of native ants or other insects; and open areas with limited overstory for basking and low	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Thamnophis hammondii	two-striped gartersnake	S3S4; SSC	IUCN:LC;	Habitats: aquatic and it is rarely found far from water, permanent or semi-permanent bodies of freshwater and adjacent riparian habitat, oak woodlands, chaparral and coniferous forests on the coastal slopes of mountains and foothills to sea level	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Sensitive Birds							

Scientific Name (=Synonym)	Common Name (=Synonym)	Federal/State Status	Other Status	General Habitat Descriptions in California	The BSA: Located Within Species' Distribution and/or Elevation Range (if known)	The BSA: Contains Suitable Foraging, Roosting, and/or Breeding Habitats	Potential For Occurrence in the BSA
Accipiter cooperii	Cooper's hawk	WL; S4	IUCN:LC	Habitats: usually mature forest, mostly conifer, also near open woodland and forest edge; usually builds nest on horizontal limb near trunk 6-18m above ground Characteristics: tolerant of human activities near the nest and is often seen nesting and feeding in urban/residential areas	Yes	No	**Low potential to occur.** The BSA does not contain suitable habitat to support this species, however, this species has been observed (>1 year) within 1 mile of the BSA. Occurrence of this species would likely be restricted to pass over.
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	WL; S4	OC NCCP/ HCP: Identified Species	Habitats: dry, steep sloping land and hillsides with a moderate density of low, scattered shrubs, coastal sage scrub, interspersed with grasses and forbs and occasional rock outcrops for song perches Characteristics: nests are placed in small depressions on the ground	Yes	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Ammodramus savannarum	grasshopper sparrow	SSC,	-	Habitats: California breed (and primarily apparently winter) on slopes and mesas containing grasslands of varying compositions Characteristics: avoid grassland areas with extensive shrub cover and the presence of native grasses is less important than the absence of trees	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Buteo regalis	ferruginous hawk	WL, BCC	-	Habitats: in California only as winter visitor or a migrant, in September and depart by mid-April, open terrain, grasslands of plains and foothills, agricultural, and arid areas with an abundance of prey species Characteristics: trees, utility poles, towers, fence posts, rocky outcrops, cliffs, and ground are perching substrates used by ferruginous hawks	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Campylorhynchus brunneicapillus sandiegensis	coastal cactus wren (=San Diego cactus wren)	BCC	OC NCCP/ HCP: Target Species	Habitats: coastal sage scrub plant community in which cacti are prominent Characteristics: usually absent from areas where only low, sprawling cacti grow	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Coturnicops noveboracensis	yellow rail	SSC, BCC	-	Habitats: large wet meadows or shallow marshes dominated by sedges and grasses Characteristics: nest is shallow cup of sedges and grasses	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Eremophila alpestris actia	California horned lark	WL	-	Habitats: grasslands along the coast and deserts near sea level to alpine dwarf-shrub habitat above treeline Characteristics: mostly eats insects, snails, and spiders during breeding season; adds grass and forb seeds and other plant matter to diet at other seasons. Grasses, shrubs, forbs, rocks, litter, clods of soil, and other surface irregularities provide cover.	Yes	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Icteria virens	yellow-breasted chat	SSC; S4	-	Habitats: dense riparian thickets of willows, vines, and brush associated with streams and other wetland habitats Characteristics: nest is an open cup placed in dense shrubs or thickets within 3 to 8 feet above ground along a stream or river	Yes	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Pandion haliaetus	osprey	WL	-	Habitats: rivers, large streams, lakes, reservoirs, marshes, bays, estuaries, and surf zones Characteristics: nests are usually within 1,312 feet of fish-producing water	Yes	No	**Low potential to occur.** The BSA does not contain suitable habitat to support this species, however, this species has been observed (>1 year) within 2 mile of the BSA. Occurrence of this species would likely be restricted to pass over.
Setophaga petechia (=Dendroica petechia)	yellow warbler	SSC, BCC	-	Habitats: deciduous trees of the riparian woodland from coastal desert woodlands to the Sierra Nevada – willows (Salix sp.), cottonwoods (Populus sp.), aspens (Populus sp.), California sycamores (Platanus racemosa), and alders (Alnus sp.) Characteristics: nests are deep cups, placed in an upright fork in a deciduous sapling or shrub, typically 2 to 16 feet high	Yes	No	**Low potential to occur.** The BSA does not contain suitable habitat to support this species, however, this species has been observed (>1 year) within 12mile of the BSA. Occurrence of this species would likely be restricted to pass over.
Sensitive Mammals							
Antrozous pallidus	pallid bat	SSC; S3	IUCN:LC; WBWG:H	Habitats: variety of habitats is occupied by pallid bats, including deserts, grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests Characteristics: night roosts may be in more open sites, such as porches and open buildings	Yes	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Chaetodipus californicus femoralis	Dulzura pocket mouse (=California pocket mouse)	SSC	-	Habitats: coastal scrub, chaparral and grassland, dense patches of chaparral with only small openings Characteristics: edges between shrubs and open areas with sparse herbaceous plants show high use	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Eumops perotis californicus	western mastiff bat	S3S4; SSC	WBWG:H	Habitats: low-lying desert areas of southern California, desert riparian, desert wash, desert scrub, desert succulent shrub, alkali desert scrub, palm oasis, conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, chaparral, urban. Roosts in crevices in cliff faces, high buildings, trees, and tunnels Characteristics: bats often are found in large groups	Yes	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Lasiurus cinereus	hoary bat	S4	IUCN:LC; WBWG:M	Habitats: near open grassy areas in coniferous and deciduous forest or near lakes, open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding Characteristics: winter roosts include sides of buildings and tree trunks	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Myotis yumanensis	Yuma myotis (=Yuma bat)	BLMS, Special Animals List	-	Habitats: open forests and woodlands Characteristics: forage around marshes on moist shorelines	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Neotoma lepida intermedia	San Diego desert woodrat	SSC	OC NCCP/ HCP: Identified Species	Habitats: variety of shrub and desert habitats primarily associated with rock outcroppings, boulders, cacti, or areas of dense undergrowth Characteristics: cactus patches are also a favorite den site	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Nyctinomops macrotis	big free-tailed bat	S3; SSC	IUCN:LC; WBWG:MH	Habitats: rugged, rocky habitats in arid landscapes, located in a variety of plant associations including desert shrub, woodlands, and evergreen forests. This bat roosts mainly in the crevices of cliff rocks although May 28, 2024 roost in buildings, caves, and tree cavities. Characteristics: appears to be associated with lowlands primarily below 5,900 ft in the southwestern U.S.	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Sorex ornatus salicornicus	southern California saltmarsh shrew	SSC	-	Habitats: coastal marshes Characteristics: require fairly dense vegetation and woody debris for cover	No	No	**Not expected to occur.** The BSA does not contain suitable habitat to support this species.
Legend and Notes							

Federal Endangered Species Act (ESA) Listing Codes:

- **FE =** federally listed as endangered: any species of plant or animal that is in danger of extinction throughout all or a significant portion of their range.
- **FT =** federally listed as threatened: any species of plant or animal that is considered likely to become endangered throughout all or a significant portion of its range within the foreseeable future.
- **FC =** federal candidate for listing: candidate species are plants and animals for which the USFWS has sufficient information on their biological status and threats to propose them for listing as endangered or threatened under the ESA, but for which development of a proposed listing regulation is precluded by higher priority listing actions to address species in greater need. A proposed regulation has not yet been published in the Federal Register for these species.
- **FPE =** federally proposed for listing as endangered: a candidate species that has been proposed by USFWS or NMFS for listing as endangered and the proposed rule, but not a final rule, to list has been published in the Federal Register.
- **FPT =** federally proposed for listing as threatened: a candidate species that has been proposed by USFWS or NMFS for listing as threatened and the proposed rule, but not a final rule, to list has been published in the Federal Register.
- **FPD =** federally proposed for delisting: a species that has been proposed by USFWS or NMFS for delisting (or down listing from endangered to threatened) and the proposed rule to delist has been published in the Federal Register.
- **FDR =** federally delisted as a result of population recovery

California Endangered Species Act (CESA) Listing Codes:

Scientific Name (=Synonym)	Common Name (=Synonym)	Federal/State Status	Other Status	General Habitat Descriptions in California	The BSA: Located Within Species' Distribution and/or Elevation Range (if known)	The BSA: Contains Suitable Foraging, Roosting, and/or Breeding Habitats	Potential For Occurrence in the BSA

• **SE =** state-listed as endangered: "endangered species" means a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease (Fish and Game Code § 2062).
• **ST =** state-listed as threatened: "threatened species" means a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts (Fish and Game Code § 2067).
• **SC=** state candidate for listing as threatened or endangered: a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed published in the California Regulatory Notice Register as being under review by CDFW for addition to the list of endangered species, or a species for which the Fish and Game Commission has published a notice of proposed regulation to add the species to the list (Fish and Game Code § 2068).
• **SCD =** state candidate for delisting: a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed published in the California Regulatory Notice Register as being under review by CDFW for removal from either the list of endangered species or the list of threatened species, or a species for which the Fish and Game Commission has published a notice of proposed regulation to remove the species to either list.
• **SCE =** state candidate for listing as endangered: a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed published in the California Regulatory Notice Register as being under review by CDFW for addition to the list of endangered species, or a species for which the Fish and Game Commission has published a notice of proposed regulation to add the species to the list (Fish and Game Code § 2068).
• **SCT =** state candidate for listing as threatened: a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed by publication in the California Regulatory Notice Register as being under review by CDFW for addition to the list of threatened species, or a species for which the Fish and Game Commission has published a notice of proposed regulation to add the species to the list (Fish and Game Code § 2068).

California Department of Fish and Wildlife (CDFW) Designations:

• **SSC =** species of special concern: a species of special concern is a species, subspecies, or distinct population of an animal (fish, amphibian, reptile, bird and mammal) native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria: is extirpated from the state or, in the case of birds, in its primary seasonal or breeding role; is listed as federally-, but not state-, threatened or endangered; meets the state definition of threatened or endangered, but has not formally been listed; is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for state threatened or endangered status; has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for state threatened or endangered status.
• **Fully protected:** fully protected animal species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock. Lists were created for fish (Fish and Game Code § 5515), amphibians and reptiles (Fish and Game Code § 5050), birds (Fish and Game Code § 3511) and mammals (Fish and Game Code § 4700).
• **WL =** watch list: consisting of taxa that were previously SSCs, but do not meet SSC criteria. These are species for which there is concern and a need for additional information to clarify status.
• **Special Animals List:** The Special Animals List contains taxa that are actively inventoried, tracked, and mapped by the CNDDB, as well as taxa for which mapped data may not yet be incorporated into CNDDB user products.

United States Fish and Wildlife Service (USFWS) Designations:

• **FSC =** federal species of concern: federal species of concern is an informal term. It is not defined in the ESA. The term commonly refers to species that are declining or appear to be in need of conservation.
• **BCC =** bird of conservation concern: a bird of conservation concern is listed in the USFWS' 2008 Birds of Conservation Concern report. The report identifies species, subspecies, and populations of all migratory and non-migratory bird species (beyond those already designated as federally threatened or endangered) that, without additional conservation actions, are likely to become candidates for listing under the ESA. While all of the bird species included in the report is priorities for conservation action, the list makes no finding with regard to whether they warrant consideration for ESA listing.

Western Bat Working Group (WBWG) Designations:

• **H = High Priority:** These species are considered the highest priority for funding, planning, and conservation actions, Information about status and threats to most species could result in effective conservation actions being implemented should a commitment to management exist. These species are imperiled or are at high risk of imperilment.
• **M = Medium Priority:** These species warrant closer evaluation, more research, and conservation actions of both the species and possible threats. A lack of meaningful information is a major obstacle in adequately assessing these species' status and should be considered a threat.

APPENDIX D

CULTURAL RESOURCES ASSESSMENT

PHASE I
CULTURAL RESOURCES INVENTORY

FOR THE

LAGUNA BEACH HIGH SCHOOL POOL MODERNIZATION
LAGUNA BEACH UNIFIED SCHOOL DISTRICT
CITY OF LAGUNA BEACH,
ORANGE COUNTY, CALIFORNIA

Prepared for:
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Prepared by:
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Megan Black Doukakis, M.A.
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October 2024

Key Words: City of Laguna Beach; *Laguna Beach, Calif*. USGS 7.5' topo map; Juaneño/Acjachemen tribe; Gabrielino/Tongva tribe; negative findings.

PHASE I
CULTURAL RESOURCES INVENTORY

FOR THE

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October 31, 2024

Prepared by: Date: October 31, 2024

Stephen O'Neil, M.A., RPA
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1.0 Introduction

1.1 Overview

This Phase I Cultural Resource Inventory report was prepared by UltraSystems Environmental (UltraSystems) at the request of the Laguna Beach Unified School District to conduct a Cultural Resources Inventory in support of the Laguna Beach High School Pool Modernization Project (Project). The Project consists of a proposed modernization of the existing pool complex at Laguna Beach High School in the city of Laguna Beach, Orange County, California. The Proposed Project will constitute substantial upgrades to this existing pool facility. This pool complex currently hosts year-round water polo training and swim team coaching programs. Laguna Beach High School also uses the pool for their swim and water polo team practices and events. The pool currently has ten 25-yard lap lanes with an attached shallow kids' pool. Improvements of this pool modernization project are an upgrade of the facility to provide a multi-sport, 50- meter swimming pool that can support not only the high school but also serve community uses as well. The project would include demolition, excavation, grading, drainage, and construction to lower the existing pool deck elevation by approximately five feet and elongate the pool within its current configuration. The existing pool support building would also be reconstructed on the west side of the pool and extend out into the current parking lot area. The proposed site work would modify the existing retaining walls and walkways to maintain pedestrian circulation and implement the proposed pool design features. The proposed pool layout is to accommodate a wide range of activities ranging from competition to community recreational use.

The Project is located in the central portion of the city of Laguna Beach, and is specifically located at 670 Park Avenue, at the corner of Park Avenue and Manzanita Drive. This may be seen on the *Laguna Beach, Calif.*, USGS topographical quadrangles, Range 09 West, Township 07 South, in the SE ¼ of the SW ¼ of Section 24 and in the NE ¼ of the NW ¼ of Section 25. The subject property is surrounded by the Laguna Beach High School across Park Avenue to the south, the Church of Jesus Christ of Latter Day Saints temple to the west, single-family residences to the north and high school tennis courts to the east. This is shown on **Map 1** and **Map 2** (**Attachment A**), the Project area is depicted with a 0.5-mile buffer in **Map 3** (**Attachment A**).

Area of Potential Effect (APE)

The APE for the undertaking encompasses the maximum extent of ground disturbance required by the project design (see **Attachment A, Map 3**).

1.1.1 Methods

The South Central Coastal Information Center (SCCIC) located at California State University Fullerton (CSUF), which is the local California Historic Resources Information System (CHRIS) facility, was contacted requesting a cultural resources records search. The records search was conducted to identify previously recorded cultural resources (prehistoric and historic archaeological sites/isolates, historic buildings, structures, objects, or districts) within the Project area and to determine if previous cultural resource surveys were conducted. The Project site and a 0.5-mile buffer zone are included in the search radius for archival studies. These records included a review of previously recorded prehistoric and historic archaeological resources and a review of listed cultural resource survey reports within that same geographical area.

Stephen O'Neil, who served as the Principal Investigator and the lead author of this report, qualifies as Principal Prehistoric Archaeologist and Historic Archaeologist per United States Secretary of the Interior Standards (see **Attachment B**). Mr. O'Neil contacted the Native American Heritage Commission (NAHC) and requested a Sacred Lands File (SLF) search as well as a list of interested local Native American tribal organizations and potentially affiliated Native American individuals. Outreach to the identified parties was contacted requesting cultural resource information.

Megan B. Doukakis, M.A., Assistant Project Archaeologist (see **Attachment B**), contributed to this report, conducted the CHRIS records search on March 27, 2023, and otherwise contributed to preparation of this report. Mrs. Doukakis also conducted the search of the Built Environment Resources Directory (BERD) to determine the presence of properties evaluated under the National Register of Historic Places (NRHP) (**Section 4.4**). Mr. Rodrigo Jacobo, M.A., Historian, also assisted with portions of this report (see **Attachment B**). An intensive pedestrian cultural resources survey was conducted by Mr. O'Neil on October 17, 2024.

1.1.2 Disposition of Data

This report will be filed with the SCCIC, California State University Fullerton; the City of Laguna Beach; and UltraSystems Environmental, Inc., Irvine, California. All field notes and other documentation related to the study will remain on file at the Irvine office of UltraSystems.

2.0 Background Settings

2.1 Natural Setting

The City of Laguna Beach is located in the mid-southern coastal portion of Orange County. The city covers an area of 9.86 square miles. Laguna Beach's Pacific Ocean coastline stretches seven miles (11 km) with 27 beaches and coves. It is bordered by the Pacific Ocean to the southwest, Crystal Cove State Park to the northwest, and the cities of Laguna Woods to the northeast, Aliso Viejo and Laguna Niguel to the east, and Dana Point to the southeast. The city boundary encompasses the unincorporated area of Emerald Bay, which separates the northern Irvine Cove area from the rest of the city's coastal expanse. The city had a population of 23,032 inhabitants according to the 2020 census (US Census 2024); the population had been 22,723 at the time of the 2010 census, indicating a slightly increasing population.

From the rocky coastline bluffs, Laguna Beach swiftly ascends inland to the rolling hills and canyons of the San Joaquin Hills. Temple Hill, standing tall at 1,007 feet (307 m) and located in the Top of the World neighborhood, marks the highest point in town. Due to the surrounding hills and open wilderness surrounding it, Laguna Beach has limited road access, with Pacific Coast Highway (State Route 1) linking it to Newport Beach in the northwest and Dana Point to the south, while Laguna Canyon Road (State Route 133) travels northeastward through Laguna Canyon. A portion along the east edge of the city adjoins Aliso/Wood Canyons Regional County Park.

The Laguna Coast Wilderness Park, spanning 7,000 acres (2,800 ha) in the hills encircling Laguna Beach to the north and west, contains coastal canyons and ridge lines of the San Joaquin Hills, and the region's only natural lakes. Diverse wildlife still lives here including deer, coyotes, bobcats, a variety of birds and reptiles. Vegetation habitants include Chapparal, patches of Oak Woodlands, and Riparian along Laguna Creek.

The region's environment is characterized by a warm summer Mediterranean climate, with the average maximum temperature in August reaching 78 degrees Fahrenheit (°F) and the average minimum temperature in December at around 59°F. The rainy season lasts from December through March, with the summer heat occurring from July 8 through October 3rd. Rainfall is typically 14 inches annually. (Weatherspark.com 2024.)

2.2 Cultural Setting

2.2.1 Prehistoric Context

The term "prehistoric period" refers to the period of pre-contact Native California lifeways and traditions prior to the arrival of Euro-Americans.

It is widely acknowledged that human occupation in the Americas began about 13,000 or more years ago (all dates presented here are calibrated radiocarbon ages or calendar dates). However, recent discoveries in areas outside of California have pushed that age back several thousand years more to about 15,000 or even perhaps up to nearly 20,000 years ago (Smith and Barker, 2017).

To describe and understand the cultural processes that occurred during prehistory, archaeologists have routinely developed a number of chronological frameworks to correlate technological and cultural changes recognized in the archaeological record. These summaries bracket certain time spans into distinct archaeological horizons, traditions, complexes, and phases.

There are many such models even for the various sub-regions of Southern California (cf. Grayson, 2011; Warren, 1984; Jones and Klar, 2007). Given the variety of environments and the mosaic of diverse cultures within California, prehistory is typically divided into specific sub-regions that include the Interior of Southeastern California and the Mojave Desert (Warren and Crabtree, 1986), and San Diego and the Colorado Desert (Meighan, 1954; True, 1958, 1970).

Many archaeologists tend to follow the regional syntheses adapted from a scheme developed by William J. Wallace in 1955 and modified by others (Wallace, 1978; Warren, 1968; Chartkoff and Chartkoff, 1984; Moratto 1984; Sutton et al., 2007 and others). Although the beginning and ending dates vary, the general framework of prehistory in the Southern California area consists of the following four periods:

- **Paleoindian and Lake Mojave Periods** [Pleistocene and Early Holocene] (ca. 11000 B.C. to 6000 B.C.). This time period is characterized by highly mobile foraging strategies and a broad spectrum of subsistence pursuits. These earliest expressions of aboriginal occupation in America were marked by the use of large dart or spear points (Fluted and Concave Base Points) that are an element of the Western Clovis expression. Following the earliest portions of this time span there was a change in climate coincident with the retreat of the glaciers. Large bodies of water existed, and lakeside aboriginal adaptations were common. Large stemmed points (Western Stemmed Series – Lake Mojave and Silver Lake point types) were accompanied by a wide variety of formalized stone tools and were employed with the aid of atlatls (dart throwing boards). The latter archaeological materials are thought to be representative of an adaptation that was in part focused on lacustrine and riverine environments.

- **Millingstone Horizon** [Middle Holocene] (ca. 6000 B.C. to A.D. 1000). During this time span mobile hunter-gatherers evolved and became more sedentary. Certain plant foods and small game animals came to the forefront of indigenous subsistence strategies. This prehistoric cultural expression is often notable for its large assemblage of millingstones. These are especially well-made, deep-basin metates accompanied by formalized, portable handstones (manos). Additionally, the prehistoric cultural assemblage of this time period is dominated by an abundance of scraping tools (including scraper planes and pounding/pulping implements), with only a slight representation of dart tipped - projectile points (Pinto, Elko and Gypsum types).

- **Late Prehistoric Period** (ca. A.D. 1000 to 1500). Following the Millingstone Horizon were cultures that appeared to have a much more complex sociopolitical organization, more diversified subsistence base and exhibited an extensive use of the bow and arrow. Small, light arrow points (Rose Spring Series), and, later, pottery mark this period along with the full development of regional Native cultures and tribal territories.

- **Protohistoric Period** (ca. A.D. 1500 to 1700s). This final cultural period ushered in long-distance contacts with Europeans, and thereby led to the Historic Period (ca. A.D. 1700 to contemporary times). Small arrow points recognized as Desert Side-notched and Cottonwood forms are a hallmark of this time period.

2.2.2 Ethnohistoric Context

The Gabrielino /Tongva

The Project is located in a region traditionally occupied by the Takic-speaking Gabrielino Indians. Prior to European colonization, the Gabrielino occupied a diverse area that included the watersheds of the Los Angeles, San Gabriel, and Santa Ana rivers; the Los Angeles basin; and the islands of San Clemente, San Nicolas, and Santa Catalina (Bean and Smith 1978). This includes the western portion of Orange County and, as described by A.L. Kroeber, reaching south to Aliso Creek.

With the notable exception of the northern Chumash neighbors, the Gabrielino were considered the most populous, wealthiest, and therefore one of the most powerful ethnic nationalities in aboriginal southern California (Bean and Smith 1978:538). Unfortunately, most Gabrielino cultural practices had declined long before systematic ethnographic studies were instituted. Today, the leading sources on Gabrielino culture are Bean and Smith (1978), and McCawley (1996).

The Gabrielino Indians were hunter-gatherers and lived in permanent communities located near the presence of a stable food supply and some measure of protection from flooding. Community populations generally ranged from 50-100 inhabitants, although larger settlements may have existed. The Gabrielino are estimated to have had a population numbering around 5,000 in the pre-contact period (Kroeber, 1925).

The term "Gabrielino" is the Spanish term used to describe Native Californians residing on lands affiliated with Mission San Gabriel. Most Gabrielino descendants today refer to themselves as Tongva. According to Padon and Breece (1985), A. L. Kroeber documented the Luiseño designation for Gabrielino as Tumangamalum, meaning "northerners," while C. H. Merriam recorded the Buena Vista Lake Yokut term for Gabrielino as miyah-hik-tchal-lop, translating to "long arms"(Merriam 1968). Additionally, the Ventura Chumash, residing north of the Gabrielino, referred to them as Ataplilish (Padon and Breece 1985: 9-10).

The Gabrielino language belonged to the Cupan branch of the Takic family within the broader Uto-Aztecan linguistic group. Within the Takic family, there are six distinct languages: Gabrielino-Fernandeño, Luiseño-Juaneño, Serrano, Kitanemuk, Cahuilla, and Cupeño (Golla 2007; Padon and Breece 1985: 9-10).

The Takic-speaking groups migrated to southwestern California by at least 500 A.D., displacing the earlier Hokan-speaking communities associated with the Chumash in the Santa Barbara region and the Yumans in San Diego County. Ethnographic records and archaeological findings within the Gabrielino territory suggest that the Gabrielino people inhabited numerous permanent villages along the coastline and in the inland valley areas.

The intricacies of Gabrielino social organization are not well known. There appeared to have been at least three hierarchically ordered social classes, topped with an elite consisting of the chiefs, their immediate families, and the very rich (Bean and Smith 1978). Some individuals owned land, and property boundaries were marked by the owner's personalized symbol. Villages were politically autonomous, composed of non-localized lineages, each with its own leader. The dominant lineage's leader was usually the village chief, whose office was generally hereditary through the male line. Leadership was passed down through inheritance, validated by the possession of a "sacred bundle" that symbolized a connection to their revered history. Chiefs collaborated with shamans and other officials within the community, overseeing tasks like distributing food after communal hunts and coordinating yearly mourning rituals (Bean and Smith 1978; Padon and Breece 1985: 9-10).

Often several villages were allied under the leadership of a single chief. The villages were frequently engaged in warfare against one another, resulting in what some consider to be a state of constant enmity between coastal and inland Gabrielino groups.

Their subsistence primarily relied on gathering wild foods and engaging in limited hunting in the interior regions, while they focused extensively on collecting shellfish and hunting sea mammals along the coast (Padon and Breece 1985: 9-10).

The first Franciscan establishment in Gabrielino territory and the broader region was Mission San Gabriel, founded in 1772. Priests from here proselytized the Tongva throughout the Los Angeles Basin region. As early as 1542, however, the Gabrielino were in contact with the Spanish during the historic expedition of Juan Rodríguez Cabrillo, but it was not until 1769 that the Spaniards took steps to colonize Gabrielino territory. Shortly afterwards, most of the Gabrielino people were incorporated into Mission San Gabriel and other missions in southern California (Engelhardt 1931). Due to introduced diseases, dietary deficiencies, and forceful *reducción* (removal of non-agrarian Native populations to the mission compound), Gabrielino population dwindled rapidly from these impacts. By 1900, the Gabrielino Native community had almost ceased to exist as a culturally identifiable group. In the late 20th century, however, a renaissance of Native American activism and cultural revitalization among a number of groups of Gabrielino descendants took place. Among the results of this movement has been a return to a traditional name for the tribe, the Tongva, which is employed by several of the bands and organizations representing tribal members. Many of the bands focus on maintaining and teaching traditional knowledge, with an emphasis on language, place names and natural resources, as well as preservation of traditional cultural resources.

<u>The Acjachemen /Juaneño</u>

The project site also lies within the northern extant of Acjachemen lands (also known as the Juaneño) (Bean and Shipek 1978:551). Many contemporary Juaneño who identify themselves as descendants of the indigenous society have adopted the indigenous term *Acjachemen*. They spoke a language of the Uto-Aztecan language family, (a distinct dialect of Luiseño) of the southern, or Cupan, branch of Takic (Golla 2007). Their lands coincide with the modern political boundaries of southern Orange and northern San Diego counties, reaching from the San Joaquin Hills in the north to Las Pulgas Creek in the south (the middle of Marine Corps Base Camp Pendleton), and from the Pacific Ocean coast inland to the include the Santa Ana Mountains (O'Neil 1988 and 2002). The Juaneño maintained three known villages within a few miles of the project site during the Contact Period – *Ahunx* seven miles north-northeast along upper Aliso Creek, *Lukup* two and a half miles east along lower Aliso Creek, and *Tobane* seven miles southeast at the mouth of San Juan Creek on the coast (O'Neil 1988).

Acjachemen villages and territory extended from Las Pulgas Creek in northern San Diego County, north to Laguna Canyon and into the San Joaquin Hills of Orange County's central coast, and from the Pacific Ocean into the Santa Ana Mountains. The core of their population occupied the drainages of two large creeks, San Juan Creek (and its major tributary, the Trabuco), and San Mateo Creek (combined with the San Onofre, which emptied into the ocean at the same point) (O'Neil 2002:68–78).

The Acjachemen resided in permanent, well-defined villages and associated seasonal camps. Each village contained 35 to 300 persons; these consisted of a single lineage in the smaller villages, and of a dominant clan joined with other families in the larger towns. As Boscana said of the Acjachemen, “all the rancherias were composed of a single relationship” (Boscana 1933:33). Each clan/village had its own resource territory and was politically independent, yet maintained ties to others through economic, religious, and social networks in the immediate region. There were three hierarchical social classes: the elite class consisting of chiefly families, lineage heads, and other ceremonial specialists; a “middle class” of established and successful families; and finally, there were people of disconnected or wandering families and captives of war (Bean 1976:109–111). Native leadership consisted of the *Nota*, or clan chief, who conducted community rites and regulated ceremonial life in conjunction with the council of elders, or *puuplem*, which was made up of lineage heads and ceremonial specialists in their own right. This body discussed and decided upon matters of the community, which were then carried out by the *Nota* and his staff.

As a strongly patrilineal society, residence has been regarded as patrilocal, but recent study of the Mission San Juan Capistrano sacramental registers has indicated a number of births at the mother’s village as well as at third villages (O’Neil 2002); however, patrilocality did dominate. Polygyny was practiced, but most likely only by chiefs and *puuls* with ceremonial positions who had larger economic roles within the community (Boscana 1933:44). Marriage was used as a mechanism of politics, ecology, and economics. Important lineages were allied through marriage, and reciprocally useful alliances were arranged between groups of differing ecological niches.

As summarized by Bean and Shipek (Bean and Shipek 1978:552), plant foods were, by far, the greatest part of the traditional diet. Acorns were the most important single food source; two species were used locally. Villages were located near water sources necessary for the leaching of acorns, which was a daily occurrence. As an almost daily staple, the acorn mush, or *weewish*, could be fixed in various ways and was served as gruel, cakes, or fried. Grass seeds were the next most abundant plant food used. Other important seeds were manzanita, sunflower, sage, chia, lemonade berry, wild rose and pine nuts. Seeds were parched, ground, and cooked as mush in various combinations according to taste and availability, much in the manner as *weewish*. Greens such as thistle, lamb’s-quarters, miner’s lettuce, white sage, and clover were eaten raw or cooked or sometimes dried for storage. Cactus pods and fruits were used. Cooked yucca buds, blossoms, and pods provided a sizable addition to the community’s food resources. Bulbs, roots, and tubers were dug in the spring and summer and usually eaten. Various teas were made from flowers, fruits, stems, and roots for medicinal cures as well as beverages.

The principal game animals were deer, rabbit, jackrabbit, woodrat, mice, ground squirrels, antelope, quail, dove, ducks, and other birds. Trout and other fish were caught in the streams, while salmon were available when they ran in the larger creeks. Predominantly a coastal people, the Acjachemen made extensive use of marine foods in their diet. Sea mammals, fish, and crustaceans were hunted and gathered from both the shoreline and the open ocean, using reed and dugout canoes. Shellfish were the most heavily used resource, including abalone, turbans, mussels, and others from the rocky shores; some clams, scallops, and univalves from the sandy beaches; and *Chione*, bubble shells, and others gathered from the estuaries.

By 1873, a government report (Ames 1873) recorded the presence of approximately 40 Juaneño associated with Mission San Juan Capistrano. A wave of migration by Juaneño out of San Juan occurred in 1880–1900 as towns in northern Orange County started to form and needed laborers. Today many Native Americans whose ancestors were associated with Mission San Juan Capistrano still reside in the local area. Acjachemen interest in their own history has increased in recent decades, and a considerable body of evidence tracing that history has been amassed. There is currently a petition for federal recognition filed by the Juaneño Band of Mission Indians.

2.2.2.1 Local Native American Settlements and Features

The coast of Orange County is known to have been heavily populated during the Late Prehistoric and Contact Period by Native American settlement. A few of these settlements are known by name, while others, represented by large archaeological sites, have yet to be associated with place names.

Although it took 10 to 20 years to complete the process of *reduccion* (baptizing and removing tribal populations from the villages to the mission establishment) in today's southern portion of Orange County by taking the inhabitants to the missions or as labor on ranchos, the impact of Spanish hegemony on the traditional indigenous way of life began as soon as the Capistrano mission was established. The military guard at the mission maintained a small herd of horses, and cattle herding began immediately. The San Mateo floodplain was ideal farmland and was soon regarded by the missionaries as more valuable than the San Juan Valley where the mission had been established. While the immediate impact on game animals and grasslands was minimal, there would have been frequent Euro-American traffic within lands belonging to the various clans. Supply trains, mail routes, and military troop convoys which linked the chain of Spanish missions and presidios, passed through the San Mateo and Cristianitos Canyons and hence on through the Saddleback Valley immediately inland of Laguna Beach from 1769 through 1778. "Archaeologists have identified scores of Indian village sites across Orange County. Some were more or less permanent, while others were used seasonally or were mere campsites during food gathering times. They can be found from some of the highest canyons in the Santa Ana Mountains right down to the coast. Some date back thousands of years; others were still occupied into the 19th century" (Brigandi 2024). Below are some of the villages in Orange County in the region surrounding the City of Laguna Beach.

Genga: Located north of the project site, atop the bluffs lining the eastern banks of the Santa Ana River, adjacent to the Estancia Adobe in Costa Mesa, stands an instance of a mission outpost strategically positioned near a significant village. McCawley highlights the original *diseño* map of the Rancho Santiago de Santa Ana, identifying the Back Bay at Newport as the "Bolsa de Gengara" (aka Bolsa de Kengaa) (Brigandi 2024).

Lukup: There are varying opinions regarding the location of this expansive village, all based on A.L. Kroeber's original single notation. Kroeber (1925) and Johnston (1962) place it on the western banks of the Santa Ana River within Rancho Las Bolsas, while McCawley proposes the vicinity near the Newland House, situated near Beach and Adams in Huntington Beach. However, Mr. O'Neil was able to determine, based on Capistrano mission baptismal records notes and marriage patterns of the Lukup (aka *Llekupenga*) inhabitants, that it was an Acjachemen settlement within the Aliso and Wood Canyons Wilderness Park area, just southeast of the city boundary of Laguna Beach (Brigandi 2024). Baptisms of inhabitants were conducted at Capistrano from 1778 through 1793 (O'Neil 2002).

Moyo: Various experts, among them O'Neil, situate this village within the Newport Center region of Newport Beach, overlooking the Back Bay, northwest of the project site. Conversely, Kroeber positions it farther up the bay, hinting at a potential link with the subsequent mission outpost site located in the San Joaquin Wildlife Sanctuary (a marsh) in Irvine. McCawley raises the question of whether *Moyoonga* functioned as a community or merely a geographical name, although findings from archaeological investigations in the San Joaquin Hills suggest the presence of enduring, year-round settlements in this vicinity (Brigandi 2024).

Pasbenga: Situated in southwest Santa Ana and north of the project site, this location is referenced in Mission San Gabriel's records as "*cerca del Rio de Santa Ana*," indicating its proximity to the Santa Ana River. The Early California Population Project (ECCA) identifies it just west of Bristol and south of Seventh Street, although with a margin of error of about three miles. An 1830s map of the Rancho Santiago de Santa Ana depicts a "rancheria" or Indian village east of the Refugio adobe, near Raitt Avenue and Myrtle Street, which was the long-term residence of José Sepulveda. Don Meadows, in his work on Historic Place Names of Orange County (1966), mentions a village called Policarpo located "near Warner Avenue about one mile west of Main Street," with records mentioning it as late as 1849. These locations and names may hold connections, especially considering the natural allure of the large spring at Refugio as a settlement site, both for indigenous communities and Mexican rancheros (Brigandi 2024).

Piwiva: Situated south of the project site, just above the mouth of Gobernadora Canyon on the Rancho Mission Viejo, this location's name appears to have connections to piivat, a type of wild tobacco. During the initial passage of the Portolá expedition in July 1769, the village seemed temporarily abandoned. However, upon their return south in January 1770, Father Crespí documented encountering small houses covered with tule rushes, inhabited by numerous indigenous men, women, and children encamped in the hollow. The villagers, upon seeing the expedition, approached without weapons and spent the afternoon with the explorers. This village is believed to be Piwiva, situated closest to the expedition's campsite at the mouth of Gobernadora Canyon (Brigandi 2024).

Tobe: Situated south of the project site and near the confluence of Gabino Canyon and Cristianitos Canyon on the Rancho Mission Viejo, this location was encountered by the Portolá Expedition in 1769. Father Crespí described encountering a sizable indigenous village at one of the two canyons, where the inhabitants greeted them enthusiastically and guided them towards the watering place they were seeking. Father Boscana mentioned that the name of the village "signifies a kind of clay or fine argil, white, similar to white lead, with which the women painted themselves." Interestingly, there were several clay mines operating nearby in the early 20th century (Brigandi 2024).

Totabit: Situated north of the project site along the Santa Ana River, the ECCA identifies its location on the west side, near to Anaheim Stadium, albeit with a potential margin of error of two miles. Alternatively, it has been proposed that the village was near the old Rodriguez Crossing, situated just north of Chapman Avenue in Orange. Notably, during Mexican times, the community of Santa Ana Abajo emerged in this area around the residence of José Antonio Yorba II, highlighting the importance of a reliable water source for any settlement. Baptisms from this village are documented as late as 1819 (Brigandi 2024).

In Laguna Beach itself there is the Acjachemen placename of *Tom-ok'* associated with "Laguna" thought to refer to the Laguna Canyon and the creek that runs through it (O'Neil 1998:112).

Nawíl: This place name is associated near where Aliso Creek crossed El Camino Real, which was originally a major Native American trail and is now Interstate - 5 freeway. This is a point along the northern boundary of Rancho El Niguel and is the term the rancho derives its name from dating back to the 1810s when it was a ranch of the Mission San Juan Capistrano. The southern portion of the ranch along the Pacific coast encompasses the City of Laguna Beach. (O'Neil and Evans 1980:230; O'Neil 1998:112).

2.2.3 Historic Context

2.2.3.1 Spanish/Mexican Era

The first Europeans to explore the area that would become the state of California were members of the A.D. 1542 expedition of Juan Rodriguez Cabrillo. Cabrillo sailed along the coast of California but did not explore the interior. Europeans did not attempt inland exploration until 1769 when Lt. Colonel Gaspar de Portolá led an overland expedition of 62 people from San Diego to San Francisco Bay and the, on the second trek, to Monterey (Brown 2001). He founded presidios at both locations and the accompanying Franciscan priests founded religious missions there as well. This represents the first recorded contacts between Europeans and the mainland Native Americans of the Southern California region (Bolton 1927; McCawley 1996:5-6; Meadows 1966). The Expedition passed several miles to the east of the project area on August 14, 1769, with stops in the Santa Ana Mountains foothills at Trabuco Mesa to the south and Tomato Springs to the north on their trek to locate Monterey Bay. Keeping to the same route, Portolá and company entered the same area twice more in 1770 on their return trip to find the capital of the new province to the north.

The missions of San Gabriel established in 1771, and San Juan Capistrano established in 1776, were the first permanent Spanish settlements in the region. The first privately operated rancho in the area was the Nieto Tract allotted Manuel Nieto in 1784 along the coast from present day Huntington Beach to Long Beach in the north – though title remained with the Spanish Cown. Closer was the Rancho Santiago de Santa Ana along the Santa Ana River to the Yorba and Peralta families in 1810. With the Secularization Acts of 1833-1834, the number of privately owned ranchos in the Los Angeles and Orange County regions grew exponentially through the acquisition of lands that had previously belonged to the missions. These ranchos prospered greatly with the use of Native American labor. Although life in the Los Angeles basin had been slowly deteriorating for Native Americans during the Rancho Period, the arrival of Euroamericans in 1884 initiated a new form of interaction that had dire consequences for the Native Americans. Although the largely *mestizo* Mexican settlers interacted and even intermarried with native peoples, American policy towards Native Americans was more exclusionary.

The Spanish soon frequented the road they had forged over Indian trails as Mission San Gabriel was founded to the north in 1772, and troops, padres, mail and supplies passed back and forth from the San Diego Presidio to the northern missions. Soon shifted from the original coastal route, this road came to be known as El Camino Real and was the forerunner of Highway 101 and eventually Interstate-5.

The founding of Mission San Juan Capistrano in 1776 gave the Spanish a foothold in the area. Priests immediately began proselytizing the local tribal villages, and within two years converts started to come from the Acjachemen community of *Lukepna* located along lower Aliso Creek just inland of the southeast end of Laguna Beach (O'Neil 1988:112; 2002). Inhabitants from the other villages in the region likewise were baptized and relocated to the mission to live as *neofitos*, though this was not the case with all of the Native Americans. Military reports and letters from the priests state that during the first five years of the Mission the most active resistance to the colonial invaders came from the region south of the mission and specifically from villages within the San Mateo Creek drainage (O'Neil 2002:182-184). There was resulting conflict with Native Americans, as traditional hunting and gathering lands were converted to ranch and farmland. The two missions laid claim to much of what would become Orange County, grazing cattle, horses, and sheep there until the 1830s (Brigandi 2006).

California started to change politically and economically in the 1820s when Mexico's revolt against Spain resulted in California becoming a province of the independent nation of Mexico. There was a rapid influx of colonizers and a growing demand for grants of land on which to start ranches (Beck and Williams 1972: 77-80). Concurrently the decades of disease, crowding, and forced assimilation to a new social order had taken their toll on the Native population both at the missions and the surrounding territories. Meanwhile the growing population of *Gente de Razon* who had been bidding their time for decades as well as newcomers wanted more lands (to be taken from the missions who had been holdings the lands in trust for their neophyte populations) and more Indians to work the lands for them (from the now floundering neophytes leaving the disbanded missions).

After an initial period of exploration, the Spanish concentrated on the founding of presidios, missions, and secular towns with the land held by the Crown (1769-1821). In contrast, the later Mexican policy stressed individual ownership of the land. Mexico rebelled against Spain in 1810, and by 1821, Mexico, including its California province, achieved independence. The Mexican Republic began to grant private land to citizens to encourage emigration to California. When secularization of the missions occurred in the 1830s, huge land grant ranchos took up large sections of land in California. Former mission lands were granted to soldiers, other Mexican citizens, and a few wealthy foreigners. In 1841, the former mission became a Mexican pueblo named San Juan Capistrano and ranchos surrounded the mission lands in all directions (Castillo 1978).

As with the rest of California, the arrival of Europeans resulted in the introduction of diseases with the Euro-American colonists. Later, with the secularization of the missions in the 1830s the mission lands were granted to secular landowners. Nonetheless, some Luiseno/Acjachemen semi-traditional villages remained in the interior mountains, and the people of these villages still practiced hunting and gathering, although agriculture also had become an important part of their economy (Bean and Shipek 1978).

The Mission San Juan Capistrano developed a number of ranchos to more efficiently administer its holdings where various crops were gown and herds of animals, particularly cattle and horses, were maintained. One of these was El Niguel to the north of the mission. When the mission was secularized in the 1830s this land, with its other holdings, were available to be granted to private ranchers. This happened in 1840s when Juan Avila petitioned to the provincial government to acquire El Niguel, which was granted by Governor Juan Alvarado in 1842. This encompassed three square leagues, a very large area that stretched from El Camino Real (now the I-5 freeway) to the Pacific Ocean coast, and from Laguna Canyon in the north to south of the hills just above San Juan Capistrano, ith Aliso Creek running through the middle. This includes the central and southern portions of what would become the City of Laguna Beach. Of note is that the name, Niguel, is derived from a Juaneño place name where Aliso Creek crosses the northern border of the ranch; the term is from "*nawíl*," meaning "young woman," and may be associated with the tribe's girls' coming of age ceremony which might have taken place along the creek (O'Neil and Evans 1980:230).

The Mexican-American War of 1846 saw the invasion of California from both land and sea. Following several skirmishes in the San Diego and Los Angeles areas, and the capture of the territorial capital in Monterey, the United States rule was firmly established.

2.2.3.2 Early American Period

The signing of the Treaty of Guadalupe Hidalgo in 1848 ended the Mexican-American War and California became a territory of the United States. The discovery of gold at Sutter's Mill in 1848 was following by the rapid influx of population to the north because of the Gold Rush of 1849, and California was made a state in 1850 (Dumke 1944).

The economic and social order was slow to change in the southern portion of the state, however, and rancheros were left in control of their vast estates through the 1860s. Los Angeles was a part of the "Cow Counties" and had little representation in the state legislature because of the sparse population (Cleland 1951). This allowed the predominantly Anglo population of the north to pass laws aimed at breaking up the ranches for settlement by Eastern farmers and, coupled with devastating droughts that crippled many livestock owners, their dismemberment soon came. This helped pave the way for the "Boom of the Eighties" which saw an influx of people from the rest of the United States and the beginning of many of the towns we see today (Dumke 1944).

Founding trade route trails across California's southeastern deserts assisted with the development of freighting and express companies as well as the appearance of a stagecoach system. Thousands of settlers and immigrants poured into the state, particularly after the completion of the transcontinental railroad in 1869. The 1860's and 1870's show an increase in farmers, and merchants into the region (Cleland 1951).

2.2.3.3 Orange County

In 1857, a group of German immigrants living in San Francisco bought a portion of the Rancho San Juan Cajon de Santa Ana to start a new community, built on winemaking. After the initial development was complete, the first colonists moved to Anaheim in 1859 (Brigandi 2006). Anaheim became the first American town founded in what is now Orange County.

In 1870, the first commercial vessel entered Newport Bay, which soon became a regular shipping point. The Southern Pacific built the first railroad in the area, extending its tracks south from Los Angeles to Anaheim in 1875. The Southern Pacific railroad held a monopoly in Southern California until 1885, when the Santa Fe pushed its tracks over the Cajon Pass (Masters 2013). That competition brought growth to the area in the form of lowered cost of living and a real estate boom that created many small towns. Some were deemed "paper towns" and a number of these small enclaves disappeared as the boom faded and they were absorbed into larger towns such as Fullerton, Buena Park, San Clemente, and Irvine (Brigandi 2006).

But this burst of economic growth had led to the creation of the County of Orange in March 1889 that was created out of the southernmost coastal section of Los Angeles County, occupying 780 square miles. Orange County remained primarily agricultural and ranching in the southern half through much of the twentieth century. Until the 1950s, agriculture was king. But the oil industry was steadily growing starting in the early 20th Century with oil wells being drilled in La Habra and Olinda. A mini oil boom was started when major strikes were found in Placentia (1919) and Huntington (1920) (Masters 2013; Brigandi 2006).

The Interstate-5 (I-5) freeway was completed in 1954 and connected a swath of many Orange County communities through the central length of the county with Los Angeles, making Orange County a bedroom community for many who moved to Southern California to work in the new developing aerospace and manufacturing industries attracted to the area. Orange County received a further boost in 1955 with the opening of Disneyland (Galvin 2011).

By the 1980s the county had become a suburban center with numerous master planned communities and became the second most populous county in California as the population topped two million for the first time. Today Orange County is identified with amusement parks, including Disneyland, as well as its many miles of beaches complementing a score of suburban towns and commercial industry as well as a California State University campus (Fullerton) and a University of California campus in Irvine (Masters 2013).

2.2.3.4 City of Laguna Beach

Laguna Canyon was referred to as *Cañada de las Lagunas* on the Rancho San Juaquin Mexican land grant map from 1841 (Laguna Beach Historical Society 2024). After the Mexican–American War ended in 1848, Alta California was transferred to the United States under the Treaty of Guadalupe Hidalgo, which also mandated the recognition of Mexican land grants. Rancho San Joaquin, encompassing a portion of Laguna Beach on the north side of Laguna Canyon, had been granted to José Antonio Andres Sepúlveda in the 1830s. Sepúlveda later sold the land to James Irvine following a drought in 1864 (Orange County Historical Society 2024). The greater part of Laguna, the central and southern area, is derived from what had originally been part of the Rancho El Niguel. However, when Avila's title to El Niguel was confirmed in the U.S. court it was found that the area used as seen on the original *diseño* map was larger than the three leagues described in the 1842 petition. Therefore the southwest portion, much of the coastal lands, were retained by the federal government which opened them up for homesteading.

Following the American Civil War, settlers began arriving in Laguna Beach, spurred on by incentives such as the Homestead Act and Timber Culture Act (Orange County Historical Society 2024). These acts offered up to 160 acres of land to homesteaders who planted a minimum of 40 acres of trees. In Laguna Beach, settlers took to planting eucalyptus groves. The first permanent homestead in the area was established in 1871 by the Thurston family on 152 acres of Aliso Creek Canyon. By 1876, brothers William and Lorenzo Nathan "Nate" Brooks had acquired land in Bluebird Canyon (around what is now Diamond Street), where they developed homes and laid the groundwork for the budding community of Arch Beach. Samuel Armor, in his *History of Orange County, California* (1921), credited Nate Brooks' homestead as the genesis of modern-day Laguna Beach, bestowing upon Brooks the title of the "Father of Laguna Beach" (Laguna Beach Historical Society 2024).

During the 1880s, the community in Laguna Canyon and around the main beach experienced significant growth (Laguna Beach Historical Society 2024). The city officially established a post office in 1887 under the name *Lagona*, but in 1904, the postmaster Nicholas Isch successfully petitioned for a correction to the name *Laguna Beach*. By that time, Laguna Beach had already established itself as a popular tourist destination. In 1886, Hubbard Goff constructed a large hotel at Arch Beach, which was later relocated and incorporated into Joseph Yoch's Laguna Beach Hotel, built in 1888 on the main beach. Visitors from nearby cities often set up tents on the beaches for vacations during the warm summer months (Orange County Historical Society 2024).

In the early 1900s, the beauty of the secluded coastline and hills in Laguna Beach drew plein-air painters, including William Wendt, Frank Cuprien, and Edgar Payne, who later settled there and formed the Laguna Beach Art Association (Orange County Historical Society 2024). The first art gallery opened in 1918 and eventually evolved into the Laguna Beach Art Museum. The precursors to The Festival of Arts and the Pageant of the Masters began in 1921, ultimately taking on their present-day forms under Roy Ropp in 1936. Because of its close proximity to Hollywood, Laguna Beach also became a favored filming location. Starting in 1913, numerous silent films were produced at local coves, featuring stars like Harold Lloyd, Mary Pickford, Douglas Fairbanks Jr., and others. During extended production periods, actors and film crews often lodged at the Arch Beach Tavern situated on the hillside above Moss Street (Laguna Beach Historical Society 2024).

The influx of painters, photographers, filmmakers, and writers established Laguna Beach as a renowned artistic community. Despite having only around 300 residents in 1920, a significant portion of them were involved in creative endeavors (Laguna Beach Historical Society 2024). The town, however, remained relatively secluded until 1926 due to the solitary and winding Laguna Canyon Road being the sole access point. The completion of the Pacific Coast Highway that year which connected the town to communities to the north and south along the coast included expectations of a population surge. To preserve the small-town ambiance of the art colony, residents, affectionately known as "Lagunatics," advocated for incorporation. Laguna Beach officially became a city on June 29, 1927. Since then, the city has seen consistent population growth, expanding from 1,900 residents in 1927 to over 10,000 by 1962 (Orange County Historical Society 2024), with a current population of 23,032.

During the late 1960s and early 1970s, Laguna Beach emerged as the focal point of Southern California's 'alternative' hippie culture. In early 1967, John Griggs and fellow founding members of the Brotherhood of Eternal Love moved from Modjeska Canyon, in the relatively close Santa Ana Mountain foothills directly up El Toro Road, to the Woodland Drive neighborhood of Laguna Beach, renaming it "Dodge City" (Laguna Beach Historical Society 2024). Notably, Timothy Leary resided in a beach house on Gaviota Drive during this period. Additionally, the Utsava Rajneesh Meditation Center, the last remaining commune in the United States for followers of spiritual teacher Osho, Bhagwan Shree Rajneesh, was situated along Laguna Canyon Road (Orange County Historical Society 2024).

In October 1993, a devastating fire swept through Laguna Beach, resulting in the destruction or damage of 441 homes and burning over 14,000 acres (5,700 ha) on the north and west side of town. This fire was ranked by the National Fire Protection Association as the seventh-largest loss of wildland fire in the United States that year. In response to the damage caused to wildlife during the fire, efforts are underway to establish a wildlife corridor between Laguna Beach and the Cleveland National Forest. This corridor aims to provide a safe retreat for animals during future fires, ensuring their safety and well-being (Laguna Beach Historical Society 20-24).

2.2.3.5 Project Site History

Historic Aerial Photographs

Historical aerial photos are available for the City of Laguna Beach, the earliest dating from 1938 through 2020. The historic aerials that are available for the project site are: 1938, 1946, 1952, 1963, 1972, 1980, 1981, 1985, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2002, 2003, 2005, 2009, 2010, 2012, 2014, 2016, 2018, and 2020 (NETROnline 2024). In the earliest aerial photo, 1938, the project site (on the north side of Park Avenue) is already developed with a large rectangular structure oriented east-west, with open space on the west and east sides. Laguna Beach High School is also present on the south side of Park Avenue with the athletic field in the southern portion and larger buildings in the northeast and northwest, and open space in the central portion of the campus. Much of the wider area is developed with all of the present-day roads and single-family residences to the north, south and west. Farther to the east of the project boundary is open space and land being used for orchards. The 1946 aerial map is almost the same as 1936 except that the area farther to the east of the project boundary has been developed into single-family residences.

The 1952 aerial photo shows that immediately west of the project site there is now a church. The 1963 aerial photo shows an additional building added to the central area of the campus and the athletic field is repositioned to be more central to the campus property. Additional buildings to the north and east of the pool facility also appear in the photo. The 1972 aerial image shows no change from 1963. The 1980 aerial photo is the same except for the presence of an athletic field in what had been open space immediately east of the project site. No change is seen in the 1981 and 1985 images.

The 1993 aerial photo shows the rectangular building within the project boundary has been removed and open ground is being graded, presumably for construction of the pool facility. Smaller buildings to the north and east were also removed. As seen in the 1994 aerial photo, the pool facility, consisting of the pool and support facilities, is complete with a parking lot on the west side and visible in this aerial photo.

No changes occur in the later aerial photos from 1995 through 2020 (NETROnline 2024).

Topographic Maps

The U.S. Geological Survey (USGS) topographic maps available for this area begin with 1896 through 2022. These are: 1896, 1899, 1901, 1907, 1915, 1925, 1932, 1945, 1949, 1957, 1964, 1967, 1974, 1977, 1982, 2012, 2015, 2018, and 2022 (USGS).

The topographic map for 1896 showed the project site in the midst of open hilly land with no roads or structures in the area. There are a few scattered structures on the coastal bluff to the southwest and a winding road between the project area and the coast at the 100-foot elevation, as well as one through Laguna Canton to the west. The 1899, 1901, 1907, 1915, 1925, 1932, and 1945 topo maps show the same open space and lack of development in the surrounding area, though starting in 1901 there are a few more structures in what would become the downtown area.

The 1949 topographic map is the first to show development in Laguna Beach with all the roads and Pacific Coast Highway present throughout the greater part of the town present as they are currently. The "Union High School" (Laguna Beach High School) is present on the south side of Park Avenue with approximately ten structures and there is a structure on the north side of Park where the project site is shown with the symbol for a school – no pool is indicated. All other major and minor roads that connect to Coast Highway and the Laguna Canyon Road are now present and visible. Other various Laguna Beach development features are also present such as the Canyon Acres Estates, the Top of the World, as well as various landmarks along the coast. There is no change in the 1947 topo map. The 1964 topo version now shows all the city of Laguna Beach highlighted as urban, though the high school land is left not colored. A building with a "church" symbol (Church of Jesus Christ of Latter Day Saints) is now directly to the west and an additional building to the north of the project site pool facility are present on the 1967 map identified as "Thurston School" and the high school is now identified as "High School" (the Thurston School had been relocated several blocks away in approximately the 1980s and its buildings were incorporated into the high school [personal communication Ryan Zajda; October 17, 2024]).

The 1974 through 1982 topo maps show no change from 1967. The 2012 through 2022 topo maps only show roads and no structures, though in 2015 there is a symbol for a school at Park Avenue where the high school is. No pool facility is specifically indicated on any of the maps.

3.0 Research Methods

This cultural resources inventory and related archival research included a background cultural resources records check (archival research) at the SCCIC, California State University Fullerton. Additionally, a search of their SLF was requested from the NAHC, as well as a list of local Native American groups and individuals for outreach. Finally, a pedestrian cultural resource survey of the entire project site was conducted.

3.1 Records Search

A cultural resource records search to identify cultural resources on or near the project site was completed by Ms. Doukakis at the SCCIC on March 27, 2024. The local CHRIS facility for Orange County, maintained at the SCCIC, was reviewed to identify resources that have been previously evaluated for historic significance, as well as to identify any previous completed cultural resources survey reports for the area.

Also searched and reviewed were: the National Register of Historic Places; Listed Properties and Determined Eligible Properties (2024); California Register of Historical Resources (2024); California Points of Historical Interest (2024); Built Environment Resource Directory (OHP 2024); California Historical Landmarks (2024); and Historic Spots in California (2002).

For the current study, the scope of the records search included a 0.5-mile buffer zone from the Project's APE (see **Attachment A, Figure 3**). The research effort was completed to assess the sensitivity of the project site for both surface and subsurface archaeological resources and to assist in determining the potential to encounter such resources, especially prehistoric—i.e., Native American cultural remains, during earth-moving activities associated with the proposed project.

3.2 Field Survey

On October 17, 2024, Mr. O'Neil visited the project site to conduct a pedestrian survey, during which the project site was carefully inspected for any indication of human activities dating to the prehistoric or historic periods (i.e., 50 years or older).

3.3 Native American Outreach

On March 15, 2024, Ms. Doukakis contacted the NAHC via email notifying them of the project activities, requesting a search of their SLF and a list of local tribal organizations and individuals to contact for project outreach. The NAHC replied on April 5, 2024 with a letter dated the same day reporting on the SLF search finding of positive results, and a list of 20 tribal representatives representing 13 tribal entities to contact.

Letters to local tribes were sent on April 8, 2024 to all of the tribal organizations and individuals on the NAHC list (**Attachment C**).

4.0 Findings

4.1 Records Search

4.1.1 Recorded Archaeological Sites

Based on the cultural resources records search, it was determined that no prehistoric or historic cultural resources were previously recorded within the project site boundary. Within the 0.5-mile buffer zone, there are 27 cultural resource sites: seven prehistoric and 20 historic.

Of the seven prehistoric era sites, three are habitation sites (CA-ORA-005, Strudwick 2017a; CA-ORA-285, McKinney 1970a; CA-ORA-775, Magalousis 1979), two are cave sites with middens (CA-ORA-286, McKinney 1970b; CA-ORA-457, Cooley 1974), and two are shell middens with lithics present (CA-ORA-578, Leonard 1975; CA-ORA-790, Magalousis 1978). CA-ORA-775 is associated with the Laguna Woman site which is adjacent (Magalousis 1979, Mitchell 1979 and Strudwick 2017b). The closest site to the project boundary APE is CA-ORA-790 which consisted of a shell midden with lithic flakes and a large stone bowl found during the construction of 650 homes to the north up-slope of the project site (Magalousis 1978). **Table 4.1-1** summarizes these site records.

Twenty of the resources in the buffer zone are historic era sites. Six of these are single family residences, five are multi-family residences, and nine are commercial buildings. Thirteen of these have been evaluated for the NRHP.

Of the six single family properties, three were categorized by the NRHP in the category of 5D2 which are determined to be contributors to a multi-component resource that is eligible for local listing or designation (30-158068, McKenna 2009a; 30-158304, McKenna 2002a; 30-158305, McKenna 2002b). Both 30-158304 and 30-158305 are early 1920's Cottage and Bungalow style properties that were recorded as part of the Early Art Colony Development in Laguna Beach for the proposed Community/Senior Center on Third Street by McKenna in 2002 (McKenna 2002c). The official name of the district that these residences belong to was not provided. A fourth 5D2 category property is an Eclectic English Cottage residence (30-158068) that was recorded as part of the Laguna Beach Development but the official name of the district was not provided (McKenna 2009b).

Of the six multi-family residences, four were categorized by the NRHP in the category of 5D2 which are determined to be contributors to a multi-component resource that is eligible for local listing or designation (30-158048, Smallwood 2008; 30-158306, McKenna 2002c, 30-158307, McKenna 2002d, 30-158308, McKenna 2002e). 30-158306, 30-158307 and 30-158308 are early 1920's Cottage and Bungalow style properties that were recorded as part of the Early Art Colony Development in Laguna Beach for the proposed Community/Senior Center on Third Street by McKenna in 2002 (McKenna 2002c). The official name of the district that these residences belong to was not provided. 30-158048 is a Dutch Colonial Revival influenced single-family residence that is recorded as part of the Second-quarter 20th century residential development. The official name of the district that these residences belong to was not provided.

Of the commercial buildings, four appear eligible for the NRHP, including the New Lynn Theatre (30-157866, Les 1981a), the Isch Building (30-157869, Anonymous 1981), a Normandy Revival influenced two-story commercial building (30-157895, Les 1981b), and the Laguna Beach Funeral Home (30-157899, Les 1981c). One commercial resource, the Hotel Laguna, was individually determined eligible for the National Register by Tax Certification and listed in the California Register (2S3) (30-157873, Anonymous 1980). One commercial property, St. Francis by the Sea American

Catholic Church, is individually listed in the National Register by the Keeper and the listed in the California Register. (1S) (30-158226, Frank 1988).

According to the BERD, seven additional properties identified during this records search within the 0.5-mile radius were recognized as historically significant by local government as a contributor to a multi-component resource that is eligible for local listing or designation (5D2). These include the properties at 368 3rd Avenue (30-158304), 374 3rd Avenue (30-158305), 386 3rd Avenue (30-158306), 390 3rd Avenue (30-158307), 394 3rd Avenue (30-158308), 580 Oak Street (30-158048), and 625 Seaview Street (30-158068).

None of 20 historic resources in the 0.5-mile radius of the project boundary are visible from the project boundary. The closest historic resource is St. Francis by the Sea American Catholic Church which is located 0.2 mile (approximately 1,056 feet) to the west of the project boundary and is not visible from the project's boundary.

Table 4.1-1 summarizes these site records.

Table 4.1-1
KNOWN CULTURAL RESOURCES WITHIN A 0.5-MILE RADIUS

Site Number	Author(s)	Date	Type	Description
CA-ORA-005	Anonymous P. G. Chace Steve Colegrove and John Houser Ivan Strudwick	1949 1966 1973 2017	Prehistoric	Prehistoric habitation site with shell midden, including quantities of marine shell and flaked stone scrapers and cores and manos are present.
CA-ORA-285	McKinney	1970	Prehistoric	Four house sites on a hill near sandstone shelters. A single skeleton exposed during grading activities.
CA-ORA-286	McKinney	1970	Prehistoric	A small cave with midden in front of the opening, containing of shell and fish bones.
CA-ORA-457	T. Cooley	1974	Prehistoric	A small cave with midden in front of the opening.
CA-ORA-578	N. Leonard N. Magalousis	1975	Prehistoric	A midden with shellfish remains, quartz flakes, fire-cracked rocks.

Site Number	Author(s)	Date	Type	Description
CA-ORA-775	Nicholas M. Magalousis L. Mitchell L. Mitchell Ivan H. Strudwick	2017 1979 1979 1979	Prehistoric	A prehistoric habitation site with quantities of marine shell. Site associated with the Laguna Women and possibly location of Laguna Woman skull was found, thought to have washed down from upslope due to shell found below the skull dating later than the skull itself.
CA-ORA-790	Nicholas M. Magalousis	1978	Prehistoric	Shell midden also containing lithic flakes and a large stone bowl.
30-157866	Kathleen Les	1981	Historic	New Lynn Theater. Mediterranean Revival influenced theater building with retail commercial spaces at the street level constructed in 1934 and appears eligible for the National Register individually through survey evaluation (3S).
30-157869	Anonymous	1981	Historic	Isch Building. Spanish Mediterranean Revival one-story building with strong Spanish influence constructed in 1927. and appears eligible for the National Register individually through survey evaluation (3S).
30-157873	Anonymous	1980	Historic	Hotel Laguna. Mission Revival style three-story "L" shaped building built in 1930 and was individually determined eligible for NR by Part 1 Tax Certification and listed in the California Register (2S3).
30-157895	Kathleen Les	1981	Historic	Normandy Revival influenced two-story commercial building built in 1936 and appears eligible for the National Register individually through survey evaluation (3S).
30-157899	Kathleen Les	1981	Historic	Laguna Beach Funeral Home. This funeral home is a two-story Mediterranean Revival building with tile hoods and stucco finish and appears eligible for the National Register individually through survey evaluation (3S).

Site Number	Author(s)	Date	Type	Description
30-158048	Josh Smallwood and Bai “Tom” Tang	2008	Historic	One and a half story wood framed Dutch Colonial Revival influenced single-family residence dating from the 1930s / 1940s and has been converted into a multi-family residence. This residence is a contributor to a multi-component resource that is eligible for local listing or designation. (5D2).
30-158068	Jeanette A. McKenna	2009	Historic	Eclectic English Cottage style, single family residence was built in 1931 with subsequent renovations in ca. 1948 with conversion of garage to bedroom and attic to a second residential unit. This residence is a contributor to a multi-component resource that is eligible for local listing or designation. (5D2).
30-158226	Anne Frank	1988	Historic	St. Francis by the Sea American Catholic Church. A mixture of Mediterranean Revival, Romanesque, Gothic, Byzantine and Craftsman styles church, constructed between 1933 and 1938. This church is individually listed in the National Register by the Keeper and also listed in the CR. (1S)
30-158304	Jeanette A. McKenna	2002	Historic	California Bungalow style, single story, single family residence of with a gable roof, small front porch, stoop, double hung sash windows, and redwood siding constructed in 1921. This residence is a contributor to a multi-component resource that is eligible for local listing or designation. (5D2).
30-158305	Jeanette A. McKenna	2002	Historic	Three single story, single family residences in the Cottage Bungalow style, constructed in 1920, 1926 and 1989. This property is a contributor to a multi-component resource that is eligible for local listing or designation. (5D2).

Site Number	Author(s)	Date	Type	Description
30-158306	Jeanette A. McKenna	2002	Historic	Three residential buildings. One is a single story, Eclectic style single-family residence constructed in 1918. The second is a two-story, single-family residence in the Cottage/bungalow style with an irregular floor plan; wood shingle siding constructed in 1948. The third is a single story, Minimal Traditional style, multi-family residential structure (duplex) with stucco siding over wood frame constructed in 1924. This property is a contributor to a multi-component resource that is eligible for local listing or designation. (5D2).
30-158307	Jeanette A. McKenna	2002	Historic	Two residential buildings. Both are two story multi-family residences with stucco and wood siding with some Craftsman elements constructed in 1928. This property is a contributor to a multi-component resource that is eligible for local listing or designation. (5D2).
30-158308	Jeanette A. McKenna	2002	Historic	Single story, multi-family (duplex), Eclectic style residence with a gable roof and rock composition roofing with evidence of additions to the rear constructed in 1921. This multi-family residence is a contributor to a multi-component resource that is eligible for local listing or designation. (5D2).
30-177043	Pamela Daly	2010	Historic	Small, single family, single-story, front gable house built in a simple, vernacular Craftsman bungalow style, constructed in 1931.
30-177470	Hubert Switalski Jeremy Adams Salli Hosseini Ivan H. Strudwick	2013 2016 2016 2017	Historic	Laguna Canyon Road, in use sometime prior to 1896 . It and runs the length of Laguna Canyon between Laguna Beach and Irvine, a distance of 9.6 miles.
30-177540	K.A. Crawford	2014	Historic	A one- and two-story, asymmetrical, irregular shaped, Modern Spanish style, commercial office building located in a mixed use commercial and residential neighborhood, constructed in 1967.

Site Number	Author(s)	Date	Type	Description
30-177625	Jeanette A. McKenna	2002	Historic	Two story, Eclectic style, multi-family residence (duplex) with a gable roof and composition roofing constructed in the 1920's.
30-177626	Jeanette A. McKenna	2002	Historic	A two story, Eclectic style, single family residence exhibiting a "barn" style of architecture, constructed in 1923.
30-177627	Jeanette A. McKenna	2002	Historic	A multi-story, Cottage/bungalow style multi-family structure with an irregular floor plan, constructed in 1941.
30-177883	SWCA Megan Wilson	2006 2017	Historic	Sewage Treatment Plant constructed in 1935 in a Tudor-style; this is a public utility building/engineering structure/government building.

4.1.2 Previous Cultural Resource Investigations

The SCCIC records indicate there have been fifteen previous cultural resource studies within a one-half-mile buffer of the project site. These are listed in **Table 4.1-2** below (see **Attachment D**). One of these studies, a Historic Resources Inventory covered the project boundary and the entire city of Laguna Beach (OR-04179, Anonymous 2008). This study did not identify any resources in the project boundary.

Seven of the studies were Cultural Resources Inventories and Assessments including archaeology field surveys (OR-00612, Magalousis 1981; OR-00620, Weisboro 1981; OR-01926, Ezell and Carrico 1977; OR-03441, Bonner and Crawford 2007; OR-03884, McKenna 2009b; OR-03937, Daly and Maxon, 2010; OR-04449, Bonner et al., 2014). Three of these studies identified resources within the 0.5-mile radius of the project area. The Archaeological Survey for the Aliso Water Management Agency Project identified three prehistoric sites (30-000285, 30-000286, 30-000578) (OR-01926, Ezell and Carrico 1977). The Cultural Resources Assessment for the Bainer residence recorded that residence (30-158068, OR-03884, McKenna 2009). The Phase I Cultural Resources Assessment for the Noppenberger Work/Live Development Project identified six prehistoric (30-000005, 30-000285, 30-000286, 30-000457, 30-000578, 30-000775) and one historic resource (30-158068) in the 0.5-mile radius of that project area (OR-03937, Daly and Maxon 2010).

Five of the studies include Historic Building Studies such as Historic Property Survey Reports, Historic Building Assessments, and Architectural Evaluation Studies (OR-02815, Shepard 2002; OR-03504, Tibbet 2007; OR-03569, Tang and Hogan 2008; OR-04449A, Bonner and Crawford 2014; OR-04558, Supernowicz 2014). None of these studies identified resources in the project boundary or in the 0.5- mile radius for this project.

Other studies include notes on the *Laguna Excavations at the Moro Canyon Site/Heil Site* (OR-00527, Anonymous [Winterbourne?] 1936). This report recorded a single prehistoric site, located in the 0.5-mile radius of the project boundary (30-000285). Another study included the survey notes for Indian Campsites in Orange County (OR-00512, Romero 1935). This report recorded a single prehistoric habitation site located in the 0.5-mile radius of the project boundary (30-000005). Ferguson and

McKenna (2002) conducted a Cultural Resources Inventory and Historic Property Survey for the Proposed Community Senior Center (OR-02545). They recorded several historic properties within the 0.5-mile radius of the project boundary which were noted during the cultural resource records search for the current project at the SCCIC and are described in **Section 4.1.1** above.

Table 4.1-2
KNOWN CULTURAL RESOURCE STUDIES WITHIN A 0.5-MILE RADIUS

Report Number	Author(s)	Date	Title	Resources
OR-00512	Romero, John B.	1935	Orange County, California, Indian Campsites	30-000001, 30-000002, 30-000003, 30-000004, 30-000005, 30-000006, 30-000007, 30-000008, 30-000009, 30-000010, 30-000011, 30-000012, 30-000013, 30-000014, 30-000015, 30-000016, 30-000017, 30-000018, 30-000019, 30-000020, 30-000021, 30-000022, 30-000023, 30-000024, 30-000025, 30-000026, 30-000027, 30-000028, 30-000029, 30-000030, 30-000280
OR-00527	Anonymous	1936	Laguna Excavations, Moro Canyon Site, Heil Site	30-000109, 30-000280, 30-000281, 30-000283, 30-000285
OR-00612	Magalousis, Nicholas M.	1981	Archaeological Report: CA-ORA-775 Specific Location: 250 and 260 Saint Ann's Drive, Laguna Beach, California	30-000775
OR-00620	Weisboro, Jill	1981	Cultural Resource Survey of the Irvine Bowl Park Site	30-001000, 30-001001
OR-01926	Ezell, Paul H. and Carrico, Richard L.	1977	Archaeological Survey Report of Aliso Water Management Agency Project Committees 7, 11-A and 15	30-000009, 30-000074, 30-000109, 30-000280, 30-000281, 30-000285, 30-000286, 30-000334, 30-000335, 30-000576, 30-000577, 30-000578, 30-000583, 30-000596, 30-001683
OR-02545	Ferguson, Charles and McKenna, Jeanette A.	2002	Cultural Resources Investigation and Historic Property Survey for the Proposed Community Senior Center on Third Street, City of Laguna Beach, Orange County, California	30-158304, 30-158305, 30-158306, 30-158307, 30-158308, 30-177625, 30-177626, 30-177627

Report Number	Author(s)	Date	Title	Resources
OR-02815	Shepard, Richard S.	2002	Historic Property Survey Report for the Laguna Beach Urban Runoff Diversion Project Laguna Beach, Orange County California	19-000755
OR-03441	Bonner, Wayne H. and Kathleen A. Crawford	2007	Cultural Resource Records Search and Site Visit Results for Cingular Wireless Candidate Lsancac097 (Laguna Beach), 625 1/2 Park Avenue, Laguna Beach, Orange County, California	30-000005, 30-000285, 30-000286, 30-000457, 30-000578, 30-000775, 30-000790
OR-03504	Tibbet, Casey	2007	Historic Building Assessment, Heisler Building 400-424 South Coast Highway, City of Laguna Beach, Orange County, California	
OR-03569	Tang, Bai "Tom" and Michael Hogan	2008	Historic Building Study: Residence at 580 Oak Street, City of Laguna Beach, Orange County, California	30-158048
OR-03884	McKenna, Jeanette A.	2009	A Cultural Resources Assessment and Brief History of the Bainer Residence at 625 Seaview Street in the City of Laguna Beach, Orange County, California	30-158068
OR-03937	Daly, Pamela and Patrick Maxon	2010	Phase I Cultural Resources Assessment Report, Noppenberger Work/Live Development Project in Laguna Beach	30-000005, 30-000007, 30-000285, 30-000286, 30-000457, 30-000576, 30-000577, 30-000578, 30-000775, 30-000790, 30-000791, 30-001000, 30-001001, 30-001683, 30-158068, 30-177043
OR-04179	Anonymous	2008	Laguna Beach Historic Resources Inventory	30-157939
OR-04449	Bonner, Diane, Wills, Carrie, and Crawford, Kathleen	2014	Cultural Resources Records Search and Site Visit Results for T-Mobile West, LLC Candidate LA02251A (CM251 Benson) 465 Forest Avenue, Laguna Beach, Orange County, California	30-000005, 30-000285, 30-000286, 30-000578, 30-000790, 30-001000, 30-001001, 30-159468, 30-177540

Report Number	Author(s)	Date	Title	Resources
OR-04449A	Bonner, Wayne H. and Kathleen A. Crawford	2014	Direct APE Historic Architectural Assessment for T-Mobile West, LLC Candidate LA02251A (CM251 Benson) 465 Forest Avenue, Laguna Beach, Orange County, California	
OR-04558	Supernowicz, Dana E.	2014	Architectural Evaluation Study of the St. Catherine of Siena Parish Project, AT&T Mobility Site No. OC0410, 990 Temple Terrace, Laguna Beach, Orange County, California, 92651	

4.2 Native American Outreach

On March 15, 2024, Mrs. Doukakis contacted the NAHC via a letter sent by email notifying them of the project, requesting a search of their SLF and asking for a list of local tribal organizations and individuals to contact for project outreach. The results of the search request were received April 4, 2024 from Mr. Andrew Green, Cultural Resources Analyst. The NAHC letter stated that "A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were positive [emphasis in the original]. Please contact the Juaneño Band of Mission Indians Acjachemen Nation – Belardes on the attached sheet for information." (See **Attachment C**.)

UltraSystems prepared letters to each of the 20 contacts representing 13 tribal organizations, describing the project with a map showing the project's location, requesting a reply if they have knowledge of cultural resources in the area, and asked if they had any questions or concerns regarding the project (see **Attachment C**). On April 8, 2024, Mrs. Doukakis mailed and emailed the letters with accompanying maps to all tribal contacts. The letter sent to Sonia Johnston, Chairperson for the Juaneño Band of Mission Indians was returned as undeliverable to the UEI office on April 17, 2024.

An email response was received from the Brandy Salas, Admin Specialist for the Gabrieleno Band of Mission Indians - Kizh Nation on behalf of Chairperson Andrew Salas and Secretary Christina Swindall Martinez, on April 8, 2024 requesting the lead agency's contact information. This was provided on April 9, 2024. On May 7, 2024, the tribe's Admin Specialist requested the lead agency's contact information again. Mr. O'Neil responded on May 7, 2024 that the lead agency is the District and that they have let us know that Ms. Salas had already been in contact with them on April 24 and 25 of 2024.

An email response was received from Joyce Perry, Cultural Resource Director for the Juaneño Band of Mission Indians - Acjachemen Nation-Belardes on June 26, 2024 indicating that the project is located within the tribe's territory, and is a sensitive area to the tribe. The project site is located within 0.5 mile of several areas of concern. She requested to consult on this project and recommends Native American monitoring during ground disturbance.

Following up on the initial letter and email contacts, telephone calls were conducted on September 12, 2024, to complete the outreach process. These calls were to the 14 tribal contacts who had not already responded to UltraSystems' mailing and email. Nine telephone calls were placed with no answer and messages were left describing the project and requesting a response. These were to Anthony Morales, Chairperson of the Gabrieleno/Tongva San Gabriel Band of Mission Indians; Christina Conley, Cultural Resource Administrator for the Gabrielino Tongva Indians of California Tribal Council; Robert Dorame, Chairperson for the Gabrielino Tongva Indians of California Tribal Council; Sam Dunlap, Cultural Resource Director for the Gabrielino-Tongva Tribe; Heidi Lucero, Chairperson of the Juaneño Band of Mission Indians Acjachemen Nation 84A; Alexis Wallick, Assistant THPO, Christopher Nejo, Legal Analyst/Researcher, Shasta Gaughen, Tribal Historic Preservation Officer for the Pala Band of Mission Indians; and Temet Aguilar, Chairperson for the Pauma Band of Luiseno Indians. No phone number was provided for Sonia Johnston, Chairperson of the Juaneño Band of Mission Indians so no call was placed to her. In a call to Sandonne Goad, Chairperson for the Gabrielino /Tongva Nation there was no answer, and no message could be left as the voicemail box was full. In a call to Charles Alvarez, Chairperson for the Gabrielino-Tongva Tribe, the phoneline was disconnected. No further responses have been received.

During the telephone calls of September 12, 2024, Joseph Ontiveros of the Cultural Resource Department for the Soboba Band of Luiseño, on behalf of Chairperson Isaiah Vivanco and Cultural Resource Specialist Jessica Valdez, indicated that the tribe would defer to Juaneño groups in that area. The tribal receptionist for the Santa Rosa Band of Cahuilla Indians, on behalf of Tribal Chair Lovina Redner, indicated that Laguna Beach is outside of the tribe's area and that they have no comment on the project. In a call to Norma Contreras, Chairperson for the La Jolla Band of Luiseño Indians, the tribal receptionist indicated that the Chairperson has been replaced by Wendy Schlater and to contact her by email. An email was sent on September 13, 2024. An automatic undeliverable reply was received. The tribal office was called again to verify the email address and the tribal receptionist indicated that it was correct. There has been no response to date. (See **Attachment C**.)

4.3 Pedestrian Survey Results

A pedestrian survey was conducted on October 17, 2024 by Mr. O'Neil. The survey consisted of walking, visually inspecting, and photographing the exposed ground surface and landscaped areas of the project site using standard archaeological procedures and techniques. The survey was conducted in the late morning; the temperature was in the mid-60s° F and the sky was fully overcast.

The project site consists of the parking lot on a lower elevation on the west half of the lot and a swimming pool with related facilities on the higher elevation on the east side. The only ground surface available for observation consists of numerous discontinuous landscape beds surrounding the edge of the parking lot and of the pool facilities, sometimes on terraces, sometimes in raised beds. These were observed by walking along the edge of the beds and looking into the landscaping.

Around the lower parking lot there are a series of two beds on the west side along Manzanita Derive, a large bed on the south side along Park Avenue, and two small beds on either side of the entrance off Park Avenue in the southeast corner. The two side beds are approximately four feet deep and 24' and 27' long (**Figure 4.3-1**). The main bed along Park Avenue is approximately 70' long and 20' deep (**Figure 4.3-2**). The small bed on the left (west) side of the entrance is approximately 18' long by four feet deep (**Figure 4.3-3**) while that on the right (east) side is approximately 20 feet square. These beds contain shrubs such as bird of paradise, tree (giant) bird of paradise, lantana, jade plants, daisy shrubs, four mature fan palm trees, privet (*Ligustrom* spp.) hedge shrubs, and various succulents, all of them mature plants. These beds' ground surface visibility ranges from approximately 20 percent to 40 percent. The soil here would not be the original native surface soil given the grading and other ground disturbance that has taken place over the past hundred or more years of road and building construction (see **Section 2.2.3.5** above). The soil here is a dark brown loamy soil with no rocks (potentially derived in part from the original soil remaining after construction, but also soil added by the District's landscape department over the years).

Around the outer edge of the pool facility is another series of landscape beds – a large bed that wraps around the west front and west side of the building with upper and lower levels, another situated in the east front side of the building, and two raised beds situated in the corridor space between the pool facility and the tennis courts. The latter two landscape beds, while not in the original project site boundary, will be demolished as the corridor is widened to allow expansion of the pool and still maintain a walkway and therefore they were also inspected (personal communication, Ryan Zajda, Laguna Beach Unified School District Facilities Director; during tour of the project site). The west upper bed is approximately 40' long on the west side and 40' long on the south side and nine feet deep (**Figure 4.3-4**); the smaller bed in the tier above that is also 40' long on both sides and four feet deep (**Figure 4.3-5**). There are two beds situated end-to-end along the east front of the buildings, both being 24' long and four feet deep, with two nine-foot square beds on the east side of the building (**Figure 4.3-6**). In the corridor between the pool facility and the tennis courts are two raised beds; the northern bed is 21' long and nine feet wide (**Figure 4.3-7**), the southern bed is 36' long and 12' wide (**Figure 4.3-8**). The landscape beds bordering the building include bird of paradise, privet hedge, sago palm, lily plants and nut grass. The plants in the corridor beds contain privet shrubs and other ornamental shrubs. Those beds along the edge of the building have approximately 40 percent ground visibility while those in the corridor have approximately 80 percent ground visibility. The soil here would not be the original native surface soil given the grading into the slope to construct the facility and being raised beds. The soil appears to be the same dark brown loamy soil with no rocks as seen around the lower parking lot.

The result of the pedestrian survey was negative for both historic and prehistoric cultural resources. The ground surface visibility ranged from 20 to 40 percent in some landscape beds to 80 percent in other beds. Photographs of the project site were taken during the cultural resources survey.

Figure 4.3-1
LANDSCAPE BED ALONG MANZANITA DRIVE ON WEST EDGE OF PARKING LOT; VIEW TO THE SOUTH

Figure 4.3-2
LANDSCAPE BED ALONG PARK AVENUE IN FRONT OF PARKING LOT; VIEW TO THE EAST

Figure 4.3-3
LABDSCAPE BED AT PARK AVENUE ENTRANCE TO PARKING LOT; VIEW TO THE SOUTH

Figure 4.3-4
LOWER TIER LANDSCAPE BED AT WEST SIDE FRONT OF POOL FACILITY; VIEW TO THE WEST

Figure 4.3-5
UPPER TIER LANDSCAPE BED AT WEST SIDE FRONT OF POOL FACILITY; VIEW TO THE WEST

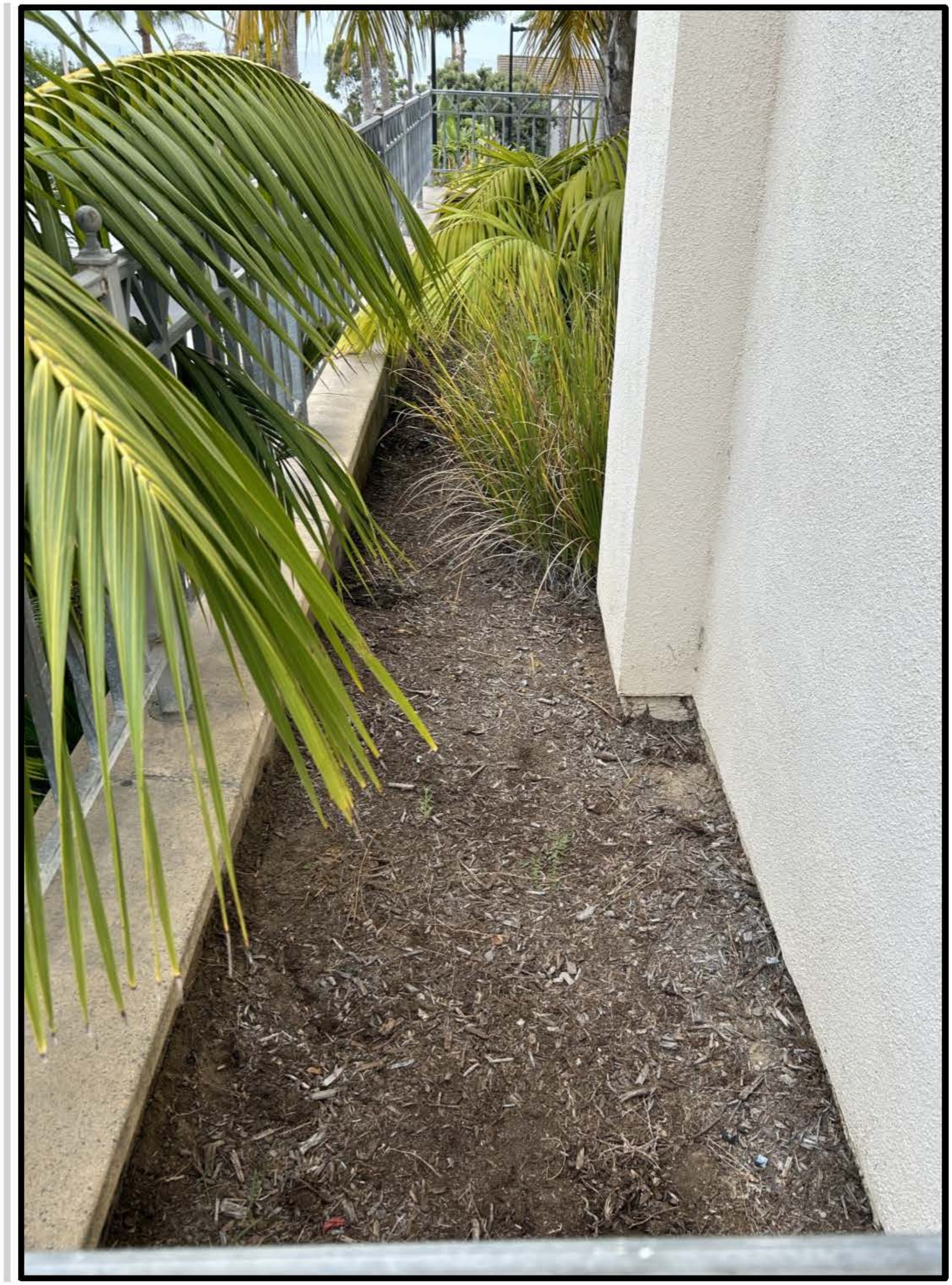

Figure 4.3-6
EAST LANDSCAPE BED ALONG EAST FRONT OF POOL FACILITY; VIEW TO THE NORTHEAST

<u>Figure 4.3-7</u>
NORTH LANDSCAPE BED IN CORRIDOR EAST SIDE OF POOL FACILITY; VIEW TO THE SOUTH

Figure 4.3-8
SOUTH LANDSCAPE BED IN CORRIDOR TO EAST OF POOL FACILITY; VIEW TO THE SOUTH

4.4 National Register of Historic Places

A search of the Built Environment Resources Directory (BERD) provided by the Office of Historic Preservation (2024) was conducted for this project by Mrs. Doukakis on September 23, 2024. It was determined that the project APE does not have any resources present that have been evaluated under the NRHP.

It was determined that within the 0.5-mile buffer zone, there are total of 251 recorded historic-era cultural resources. The table in **Attachment E** catalogs these properties, displaying the primary number, the property number, the name of the property, the address of the properties, the evaluation status code as set forth by the Office of Historic Preservation of the State of California, and the year the property was constructed.

One of these properties is listed in the National Register as a contributor to a multi-component resource such as a district (1D). One of these properties is individually listed in the National Register (1S). One property is individual determined eligible for the National Register by consensus through Section 106 process (2S2). One property is individual determined eligible for the National Register by Part 1 Tax Certification (2S3). Three properties appear eligible for the National Register as a contributor to an eligible multi-component resource through survey evaluation (3D). Thirteen properties appear eligible for the National Register individually through survey evaluation (3S). There were 222 properties that were recognized as historically significant by local government as a contributor to a multi-component resource that is eligible for local listing or designation (5D2). Two properties were recognized as historically significant by local government as individually eligible for local listing or designation (5S2). Seven properties have been categorized as needing to be reevaluated as they have been formerly coded as may become National Register eligible with specific conditions (7N).

Thirteen properties recorded during the SCCIC / CHRIS facility search were also identified on the BERD. The St. Francis by the Sea American Catholic Church (30-158226) was designated as individually listed in the National Register(1S). Hotel Laguna (30-157873) was designated as individual determined eligible for the National Register by Part 1 Tax Certification (2S3). Four properties – the New Lynn Theatre, South Coast Theatre (30-157866), the Isch Building (30-157869), the Laguna Beach Funeral Home, Ray Family Mortuary (30-157899), and the property at 901 SR 1 S – appear eligible for the National Register individually through survey evaluation (3S). Seven properties – 368 3rd Avenue (30-158304), 374 3rd Avenue (30-158305), 386 3rd Avenue (30-158306), 390 3rd Avenue (30-158307), 394 3rd Avenue (30-158308), 580 Oak Street (30-158048), and 625 Seaview Street (30-158068) – were recognized as historically significant by local government as a contributor to a multi-component resource that is eligible for local listing or designation (5D2).

Of these 251 recorded historic era resources, seven are in direct view of the project boundary. The Manzanita Neighborhood District (30-158261) and five properties of that district are located to the north. These resources were constructed from 1925 to 1930 and are recognized as historically significant by local government as a contributor to a multi-component resource that is eligible for local listing or designation (5D2) and include: 30-158243 at 721 Manzanita Drive, 30-158244 at 731 Manzanita Drive, 30-158247 at 769 Manzanita Drive, 30-158249 at 787 Manzanita Drive, and 30-158251 at 791 Manzanita Drive. 30-158243 located at 721 Manzanita Drive is also noted on the City of Laguna Beach Historic Properties Register (City of Laguna Beach 2024) twice, with Historic Register Numbers of 13 and 321. This resource has been categorized as "Key" under the City of

Laguna Beach Historic Properties Register. The Register does not provide a description of what the categories of properties represent (City of Laguna Beach 2024).

The last resource identified on the BERD list that is in direct view of the project boundary is the property at 625 Park Avenue (Property Number: 167961), which is individually determined eligible for the National Register by consensus through Section 106 process (2S2). It is unclear if this property is the High School property itself, which is at the same address. Further research has not provided any information to clarify this.

5.0 Management Considerations

5.1 Site Evaluation Criteria

Evaluation of significance under the California Environmental Quality Act (CEQA) uses criteria found in eligibility descriptions from the California Register of Historical Resources (CRHR). Generally, a resource is to be considered historically significant if it meets the criteria for listing in the California Register [Public Resources Code § 5024.1; California Code of Regulations § 15064.5(a)(3)]. These criteria provide that a resource may be listed as potentially significant if it:

- Is associated with the events that have made a significant contribution to the broad patterns of California history and cultural heritage.
- Is associated with the lives of persons important in our past.
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic value.
- Has yielded, or may be likely to yield, information important in prehistory or history.

No cultural (prehistoric and/or historic archaeological) resources within the project APE were identified during the present investigation; therefore, evaluation was not required for this study. A total of seven historic properties are within view of the project APE, but there will be no direct effect resulting from the project development.

5.2 Potential Effects

There are no CRHR listed prehistoric or historic cultural resource sites within the project boundary. No cultural resources will be adversely affected by the project. However, the presence of buried cultural (prehistoric and/or historic archaeological) resources cannot be ruled out. If prehistoric and/or historic artifacts are observed during subsurface excavation, work should be stopped in that area and a qualified archaeologist monitor should be called to assess the finds.

6.0 Conclusions and Recommendations

No prehistoric archaeological resources or historic resources were identified in the Project's boundary during the CHRIS record literature search. No prehistoric or historic archaeological resources were identified during the pedestrian field survey of the project. The potential for subsurface cultural deposits is considered to be minimal.

Three Native American responses to UltraSystems' tribal outreach have been received to date (see **Section 4.2** and **Attachment C**). The Juaneño Band of Mission Indians - Acjachemen Nation – Belardes stated that the project is located within the tribe's territory, and is sensitive area to the tribe and request Native American monitoring during ground disturbance. The Soboba Band of Luiseno indicated they would defer to tribes closer to the project. Santa Rosa Band of Cahuilla Indians also indicated that Laguna Beach is outside of the tribe's area and that they have no comment on the project.

The cultural resources study findings suggest that there is a low potential for the presence of prehistoric cultural resources. The CHRIS records showed that while a previous regional survey located four prehistoric camp sites surrounding the project boundary, none were located within the project itself (see **Section 4.1.1**). Construction work at the time of their discovery and since then would have disturbed or destroyed those sites. However, if prehistoric and/or historic items are observed during subsurface activities, work should be stopped in that area and a qualified archaeologist and Native American monitor should be called to assess the findings and retrieve the material. A total of seven historic properties identified on the BERD inventory are within view of the project APE, but there will be no direct effect resulting from the project development to these properties.

The results of the pedestrian assessment indicate no impacts to prehistoric or historical resources are anticipated during project construction. The cultural resources study findings suggest that there is a low potential for the presence of prehistoric cultural resources. Therefore, it is not recommended that archaeological monitoring be conducted during subsurface ground construction work.

If human remains are encountered during excavations associated with this project, work will halt in that area and the Orange County Coroner will be notified (§ 5097.98 of the Public Resources Code). The coroner will determine whether the remains are of recent human origin or older Native American ancestry. If the coroner, with the aid of the supervising archaeologist, determines that the remains are prehistoric, they will contact the NAHC. The NAHC will be responsible for designating the most likely descendant (MLD), who will make recommendations as to the manner for handling these remains and further provide for the disposition of the remains, as required by § 7050.5 of the California Health and Safety Code. Following notification by the NAHC, the MLD will make these recommendations within 48 hours of having access to the project site following notification by the NAHC. These recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials (§ 7050.5 of the Health and Safety Code).

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1896 *Laguna Beach, Calif*. 7.5', USGS Quadrangle map.

1899 *Laguna Beach, Calif*. 7.5', USGS Quadrangle map.

1901 *Laguna Beach, Calif*. 7.5', USGS Quadrangle map.

1907 *Laguna Beach, Calif*. 7.5', USGS Quadrangle map.

1915 *Laguna Beach, Calif*. 7.5', USGS Quadrangle map.

1925 *Laguna Beach, Calif*. 7.5', USGS Quadrangle map.

1932 *Laguna Beach, Calif*. 7.5', USGS Quadrangle map.

1935 *Laguna Beach, Calif*. 7.5', USGS Quadrangle map.

1945 *Laguna Beach*, *Calif*. 7.5', USGS Quadrangle map.

1950 *Laguna Beach, Calif*. 7.5', USGS Quadrangle map.

1957 *Laguna Beach, Calif*. 7.5', USGS Quadrangle map.

1962 *Laguna Beach, Calif*. 7.5', USGS Quadrangle map.

1967 *Laguna Beach, Calif*. 7.5', USGS Quadrangle map.

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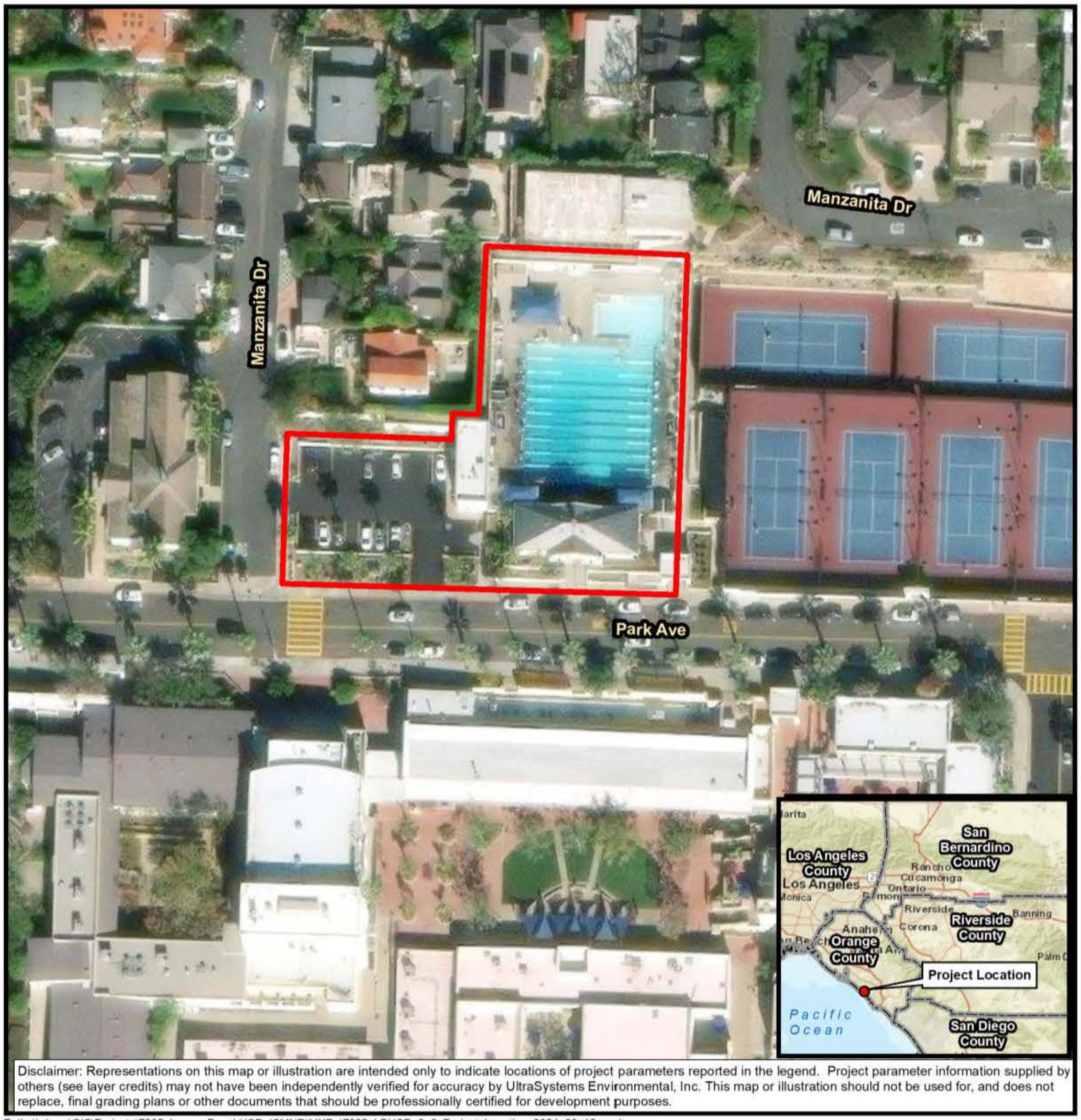
ATTACHMENTS

ATTACHMENT A

PROJECT MAPS

Map 1
PROJECT REGIONAL LOCATION MAP

Map 2
PROJECT STUDY AREA



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Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community; UltraSystems Environmental, Inc., 2024.

March 15, 2024

Scale: 1:960

N

0 40 80 Feet

0 10 20 Meters

Legend

Project Boundary

Laguna Beach High School and Community Pool Modernization

Project Location

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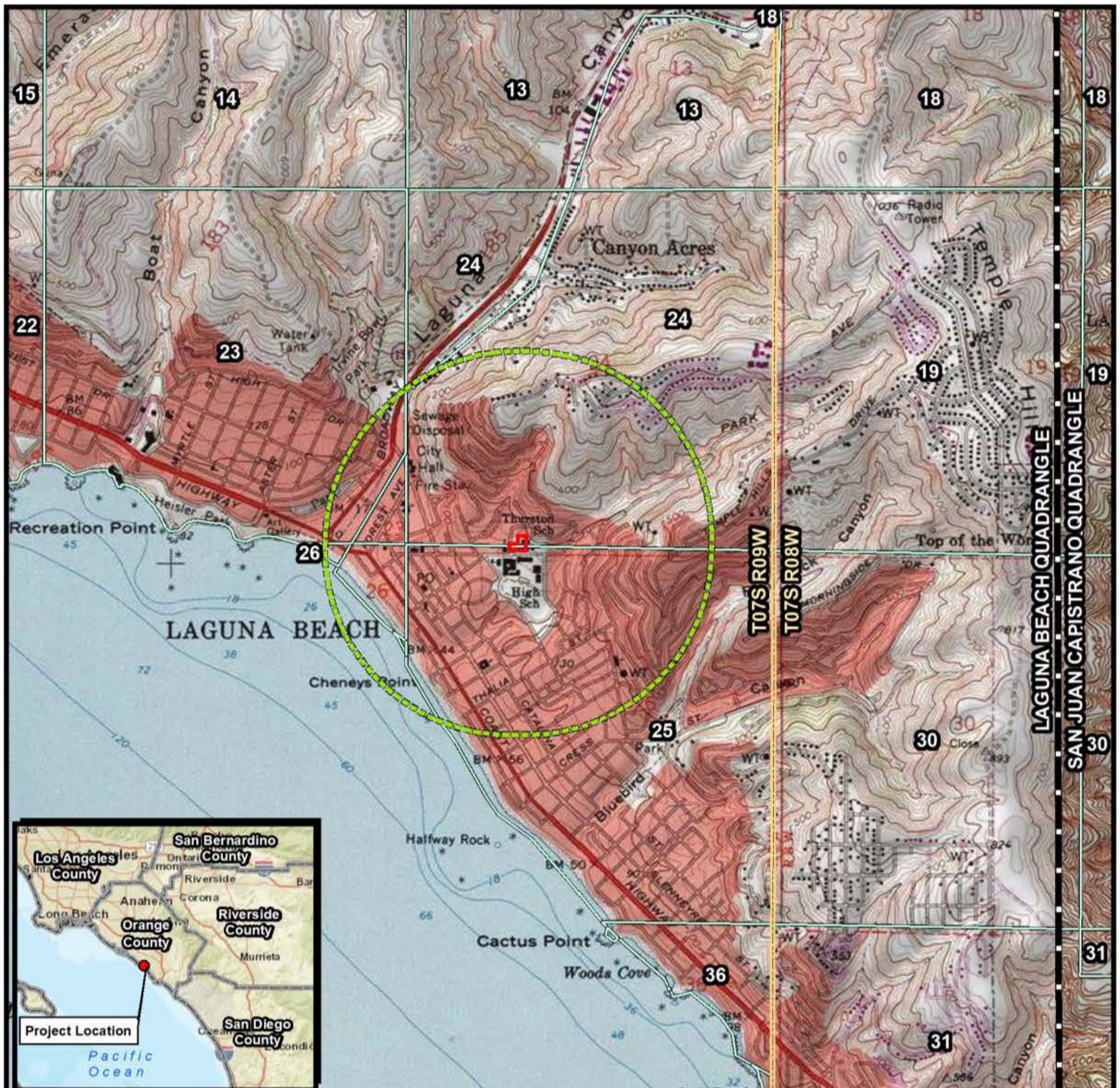
Map 3
USGS TOPO MAP OF PROJECT STUDY AREA



Disclaimer: Representations on this map or illustration are intended only to indicate locations of project parameters reported in the legend. Project parameter information supplied by others (see layer credits) may not have been independently verified for accuracy by UltraSystems Environmental, Inc. This map or illustration should not be used for, and does not replace, final grading plans or other documents that should be professionally certified for development purposes.

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Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Copyright:© 2013 National Geographic Society, i-cubed; California Department of Conservation, 2019; UltraSystems Environmental, Inc., 2024.

March 15, 2024

Scale: 1:24,000

N

0 1,000 2,000 Feet

0 250 500 Meters

Legend

- Project Boundary
- Half-Mile Radius
- Quadrangle Boundary
- Township Boundary
- Section Boundary

Laguna Beach High School and Community Pool Modernization

Topographic Map
USGS Quadrangle: Laguna Beach
Township: 7S Range: 9W
Sections: 24, 25

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ATTACHMENT B

PERSONNEL BACKGROUND

Stephen O'Neil, M.A., RPA

Cultural Resources Manager, Cultural Anthropology/Archaeology

Education

- M.A., Anthropology (Ethnography emphasis), California State University, Fullerton, CA, 2002
- B.A., Anthropology, California State University, Long Beach, CA, 1979

Professional and Institutional Affiliations

- California Mission Studies Association
- City of Laguna Beach Environmental Sustainability Committee, appointed 2012
- Orange County Natural History Museum; Board Member
- Pacific Coast Archaeological Society; Board Member and Past President
- Society of California Archaeology

Professional Registrations and Licenses

- Register of Professional Archaeologists (No. 16104) (current)
- Riverside County, CA, Cultural Resource Consultant (No. 259) (current)
- Cultural Resource Field Director, BLM Permit (CA-13-19) – California, 2013
- NEPA and CEQ Consultation for Environmental Professionals; course by the National Association of Environmental Professionals, 2013

Professional Experience

Mr. O'Neil has 30 years of experience as a cultural anthropologist in California. He has researched and written on archaeology, ethnography, and history. Mr. O'Neil has archaeological experience in excavation, survey, monitoring, and lab work. Most of this has been on Native American prehistoric sites, but also includes Spanish, Mexican, and American period adobe sites. His supervisory experience includes excavation and survey crew chief and project director of an adobe house excavation. He has a wide range of expertise in Phase I & II Environmental Site Assessments, archaeological resource assessment surveys, salvage operations, and cultural background studies for various EIR projects. Mr. O'Neil has worked for cultural resource management firms as well as government agencies and Native American entities. He has prepared technical reports as well as published journal articles.

Select project experience

Inglewood Avenue Corridor Widening Project, City of Lawndale, Los Angeles County, CA: 2013–2014

Mr. O'Neil directed and conducted archaeological field survey, cultural resource records search, Native American contacts and report writing for this project. The City of Lawndale is widening Inglewood Avenue from Marine Avenue north. The project uses Caltrans funds and the cultural resources report was prepared in Caltrans format. A separate historic properties report was prepared as well. Prepared for Huitt-Zollars Engineering.

Via Ballena Storm Drain Relocation, City of San Clemente, Orange County, CA: 2013

Mr. O'Neil directed and conducted archaeological field survey, cultural resource records search, Native American contacts and report writing for this project. This residential area has a damaged storm drain under Via Ballena that was causing earth movement and erosion. The meet requirements for state funding, and cultural resources inventory report was required. Prepared for the City of San Clemente

Pine Canyon Road – Three Points Road to Lake Hughes Road, Los Angeles County, CA: 2013

Mr. O'Neil directed and conducted archaeological field survey, cultural resource records search, Native American contacts and report writing for this project. This nine-mile portion of Pine Canyon Road lies partially within the Angeles National Forest. A series of widening and culvert repairs is planned by the Los Angeles County Department of Public Works (LACDPW). An assessment was made of possible cultural resources, historic and prehistoric that may be affected by the construction, and four historic sites were recorded. Prepared for LACDPW.

Alton Parkway Extension Project, Cities of Irvine and Lake Forest, Orange County, CA: 2012

Mr. O'Neil directed and conducted archaeological and paleontological monitoring, archaeological excavation, cultural resource records search, Native American contacts and report writing for this project. Alton Parkway was extended 2.1 miles between the cities of Irvine and Lake Forest. For the portion within the City of Irvine, UltraSystems conducted monitoring and excavation services. One prehistoric site was excavated and reported on; a series of living features were discovered and also reported. The final monitoring report described the paleontological and archaeological findings. A separate technical report on the archaeological excavations was also prepared. Mr. O'Neil directed research into historic and prehistoric background, and prepared the final assessment of potential impacts. Prepared for the Orange County Department of Public Works.

NEPA and CEQA Documentation, Los Angeles Regional Interoperable Communications System (LA-RICS), Los Angeles County, CA: 2011–2014

Mr. O'Neil is part of UltraSystems team currently preparing technical studies and NEPA and CEQA documentation toward the construction of LA-RICS, an $800-million emergency communications system due to be operational in 2016. LA-RICS will provide a highly coordinated emergency communications system to all first-responders to natural and man-made disasters throughout Los Angeles County. Mr. O'Neil is the cultural and historical resources studies team leader, directing five researchers. These studies include coordination of field visits to all 260-plus locations for an archaeologist and/or an architectural historian with agency escorts to observe and record any onsite prehistoric and historic features, performing records and literature searches at archaeology information centers and local archives, contacting local agencies for historically listed structures and districts, coordinate public notices of the project throughout Los Angeles County, consultation with the NAHC and all local tribal organizations, and direct consultation with the California State Historic Preservation Officer (SHPO). This information was compiled by Mr. O'Neil and is used to prepare FCC historical resource forms which were submitted to the SHPO for review.

Megan B. Doukakis, M.A.

Assistant Project Archaeologist

Education

- M.A. Public Archaeology, California State University, Northridge, 2012–2018
- B.A., Anthropology, California State University, Long Beach, 2011
- University of California, Los Angeles - Pimu Catalina Archaeological Field School, 2010
- International Scholar Laureate Program: Delegation on Anthropology and Archaeology in China, 2009
- Earthwatch Institute, "Unearthing Mallorca's Past" archaeological excavation, Mallorca, Spain, 2005

Professional and Institutional Affiliations

- Phi Kappa Phi National Honor Society, 2011
- Sigma Alpha Lambda, National Leadership and Honor Organization, 2010
- Society for California Archaeology Membership 2012–2015

Professional Experience

Ms. Doukakis has over 12 years of experience as an archaeologist in California. She has conducted pedestrian archaeological survey, test and full scale excavations, archaeological monitoring, laboratory curation of archaeological materials to comply with state and federal historic preservation laws in Southern California and abroad. Ms. Doukakis has authored a number of Phase I, II, and III, ISMND, ICRMP, FCC form, EIR documents and project proposals. She has extensive experience with the California Historical Resources Information System as well as conducting paleontology record searches and the Native American Heritage Commission in conducting record searches and consulting with Native American groups. Ms. Doukakis is proficient at project management and project scheduling for large and small-scale projects.

Select project experience

Results of the Condition Assessment, Site Monitoring, and Effects Treatment Plan (CASMET) Marine Corps Base Camp Pendleton, San Diego County, CA

Client: Marine Corps Base Camp Pendleton, Duration: 5/11 to 9/11

Mrs. Doukakis conducted survey and excavation for the USMC Base Camp Pendleton condition assessment project. Areas were tested around Camp Pendleton for the presence and condition of cultural material previously recorded. She also conducted laboratory work and curation for the material collected within excavations. Mrs. Doukakis contributed to the final report with background records searches and prehistoric and historic background writing for the report.

Archaeological Excavation Results Report for the Alton Parkway Extension Project, Orange County, CA

Client: Orange County Department of Public Works; Contract: $357,170, 10/10 to 6/12

Mrs. Doukakis participated in the Alton Parkway project, City of Irvine, Orange County, CA. She was responsible for cleaning and cataloging the artifacts recovered from the excavation and surface collections. She also contributed to the final report by compiling the historical background information.

Identification and Evaluation of Historic Properties ADA Wheelchair Access Ramp Improvement Project, City of Lake Forest, Orange County, CA

Client: City of Lake Forest/Penco, Contract: $2,981.62, Duration: 6/12 to 7/12

Mrs. Doukakis contributed to the cultural resource records search, field survey, Native American contacts and report writing for this project. This residential area required wheelchair access ramps on every corner in this neighborhood. An assessment of the possible cultural resources that may be affected with this construction was made for the City of Lake Forest. Mrs. Doukakis contributed the historic and prehistoric background, and the assessment of the possible resources in the area.

Tenaska Solar Projects Imperial Solar Energy Center–South; Imperial Solar Energy Center–West; and Wistaria Ranch, Imperial County, CA

Client: Tenaska/CSOLAR Development, Contract: $3,441,809, 10/13 to 8/15.

Mrs. Doukakis conducted Native American contacts for field monitoring, coordinated with subcontractors to initiate cultural and paleontological field surveys, for the several solar energy projects being handled by UltraSystems Environmental in the El Centro area, Imperial County, CA. She contributed different parts of the survey report and monitoring program documents, including historic and prehistoric background, editorial review. At ISEC- West, Mrs. Doukakis was responsible for contacting and organizing Tribal monitors for this project. She contacted tribal organizations and inquired about their interest in providing tribal monitors for this project, directly organized with Native American groups to sign agreements, and fill out tax paperwork. She was also responsible for organizing and keeping track of and gathering field log from monitors from six tribal groups. She also recovered previously recorded artifacts in the field before the start of the project.

NEPA and CEQA Documentation, Los Angeles Regional Interoperable Communications System -Long Term Evolution, Los Angeles County, CA

Client: LARICS Joint Powers Authority, Contract: $3,051,312, 1/12 to 1/15.

UltraSystems' team prepared technical studies and NEPA and CEQA documentation toward the construction of LA-RICS-LTE, an $800-million emergency communications system that will provide a highly coordinated emergency communications system to all first-responders to natural and man-made disasters throughout Los Angeles County. For this project Mrs. Doukakis conducted record searches at the South Central Coastal Information Center for the Department of Commerce on over 300 project sites throughout the County of Los Angeles. She helped prepare letters to the NAHC and tribal organizations associated with the project area. Mrs. Doukakis contributed to contacting, organizing, and scheduling architectural historians to conduct historical research around the project areas. Letters were written for contact to local agencies and cities. A public notice was constructed and published in three local newspapers. Mrs. Doukakis also constructed hundreds of Federal Communications Commission 620 and 621 forms for submission to California State Historic Preservation Office.

Newton Canyon Monitoring Project, CA

Client: County of Los Angeles Department of Public Works, Contract: $2,930.00, Duration: 7/13 to 12/13

Mrs. Doukakis was an archaeological monitor for this project. She monitored all ground disturbing activities as well as lightly surveying the area for cultural material. Mrs. Doukakis also conducted the records center research at the South Central Coastal Information Center at CSUF. Through email, letter, and telephone correspondence, Mrs. Doukakis contacted the NAHC and associated tribal groups.

Rodrigo Jacobo, MA, BA

Historian/ Cultural Resources Specialist

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Years of Experience
10

Years with Firm
>1

Education

- Bachelor's Degree in History, with an emphasis on Latin American Studies from the University of California, San Diego
- Master's Degree in History, with an emphasis on Latin America/US History from National University
- Online Teaching Certificate in General Education from Palomar College.

Areas of Expertise

- Word
- Excel
- PowerPoint
- Bilingual: Fluent in Spanish

PROFESSIONAL SUMMARY

Rodrigo Jacobo has worked as an academic research historian since 2013 and as an adjunct professor of history since 2017. As both a research historian and adjunct professor he specialized not only in history but also ethnic and cultural studies. He has extensive expertise in the application of research methods and analysis, qualitative and quantitative, as well as the utilization of archival records and primary sources. He has worked with other historians and professionals to compile and compose historical reports, monographs and historiographies. In addition to his historical and research skills, he is also a well-spoken public speaker, a skill he mastered as an academic. He holds a BA from the University of California, San Diego (UCSD) and an MA from National University (NU) in history.

ULTRASYSTEMS PROJECT EXPERIENCE

Kaizer Permanente Medical Center Project, Redlands, California, San Bernardino County, CA; 2023

The Project consists of the expansion of the existing Kaiser Permanente Redlands Medical Offices site in multiple phases – the first phase is a new 4-stpry Medical Office Building/Ambulatory Services Center; the second phase is a 7-story hospital; the third phase is a 4-story Medical Office Buildings; the fourth phase will be an addition to the hospital. UltraSystems conducted a cultural resources study to evaluate the potential presence of prehistoric and historic resources. The project site is 36.5 acres in area. This is located in northeast Redlands, *Redlands, Calif.*, USGS topo quad, R 03 W, T 01 N, in the NE ¼ of Section 19. The subject property was vacant.

Mr. Jacobo conducted an archaeological field survey of the project site in December 2023 with Stephen O'Neil, M.A., RPA, the Principal Investigator and assisted with preparation of the subsequent Phase I cultural resources inventory report. UEI Project 7214.

Fontana Civic Center Expansion Project, City of Fontana, San Bernardino County, CA; 2023

The proposed project includes the construction of a new City Hall and a new Annex Building with minor landscaping improvements. The project boundary covers an area of approximately 10 acres. Currently the site is occupied by the current City Hall and an annex building on a landscaped and hardscape parcel. This is located in central Fontana Redlands, *Fontana, Calif.*, USGS topo quad, R 06 W, T 01 N, in the NW ¼ of Section 18. The subject property is occupied by the current City Hall campus.

Mr. Jacobo conducted an archaeological field survey of the project site in December 2023 with Stephen O'Neil, M.A., RPA, the Principal Investigator and assisted with preparation of the subsequent Phase I cultural resources inventory report. UEI Project 7230.

SELECT HISTORICAL EXPERIENCE

Adjunct History Professor, Palomar College; August 2017 to Ongoing

Currently teaching history at Palomar College, instructing on the following courses: US History, World History, Western Civilization, Chicano Studies, History of the Americas (Latin American Studies). He has taught these courses in both in-classroom and online settings. This demonstrates his expertise in a wide range of historical fields. These classes have been taught using the Blackboard and Canvas platforms. Furthermore, through his time in the

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Website: www.ultrasystems.com

Rodrigo Jacobo

classroom, he has gathered more than adequate experience working with students and their many needs, which has allowed him to adapt to a variety of individuals, while exposing him to a wide range of learning skills. Finally, through his experiences as a professor he has gained invaluable knowledge about the means to conduct a class, how to prepare and give lectures, how to grade assignments, how to prepare for a class, to understand the learning capabilities of students and, most importantly how to engage students intellectually. He has worked with students of all backgrounds and learning abilities, as well different age groups, from high school students to older adults. Other duties: Participate in curriculum development of transfer courses; Serve with full-time Humanities faculty as resource staff in the History Department for part-time faculty and for the college at large; Participate in Humanities Program responsibilities including, but not limited to, program development and review, Student Learning Outcomes assessment and review, and course coordination; serve on college-wide committees and work with other university departments and community partners to improve student success; maintain professional currency in the field of history.

Research Historian, Palomar College/Free Agent; August 2013 to Ongoing

Currently assisting a variety of professors in their studies and/or research at Palomar College, San Diego County. Mr. Jacobo has assisted in conducting both qualitative and quantitative research, ex. archival research, but also statistical research. This roll has allowed him to further develop his knowledge and expertise in the fields of history and historical research. Being a research historian has allowed him to gain much knowledge and insight into how to conduct research dealing with anything historical in nature. This position has left Mr. Jacobo with research skills that are multi-disciplinary. Also, as a Research Assistant he has specific duties that include data organization and management, data analysis, interpretation, and discussion of results with research teams and/or professors, auditing data quality, preparation of draft documents and presentations, interacting with professors/researchers, coordinating research staff, monitoring project budgets and timelines, and other research support as needed. Lastly, this work has allowed him to develop strong interpersonal skills, strong oral and written communication skills, strong quantitative and qualitative analysis skills and a strong grounding in research methodology, and the ability to work in a team environment. Other duties: Having expert level understanding of the historical method of research and inquiry, including the ability to conduct basic historical research, speak and write effectively, keep necessary records and prepare reports, and be highly analytical. Also, being able to and having the knowledge of to access data bases and archival holdings for the purpose of conducting research.

History Instructor, Idyllwild Arts Academy; August 2021 to May 2023

Mr. Jacobo worked as a history instructor at the international boarding school, Idyllwild Arts Academy. He taught sophomores, juniors, and seniors in the subjects of World History and US History. He also taught Latin American History and History of World Revolutions, courses that he created. IAA is an international school making it a very diverse environment. Working in this environment allowed him to interact with students of all walks of life and origin. He had the responsibility of teaching these many subjects and carrying out the duties that came with the job, such as giving classes, grading homework and tests and taking part in faculty meetings to collaborate. Such experience includes the ability to develop and implement equity minded classroom pedagogy and initiatives to improve student success and close equity gaps. Other duties included: Possessing an expert level understanding of the historical method of research and inquiry, including the ability to conduct basic historical research, speak and write effectively, maintain necessary records and prepare reports, and be highly analytical; have excellent public speaking skills, and be highly adaptable to situations to take effective action.

ATTACHMENT C

NATIVE AMERICAN HERITAGE COMMISSION RECORDS SEARCH AND NATIVE AMERICAN CONTACTS

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March 15, 2024

Government Program Analyst
Native American Heritage Commission
1550 Harbor Blvd., Suite 100
West Sacramento, California 95691

Subject: Cultural Resources Inventory for the proposed Laguna Beach High School Pool Modernization Project, Laguna Beach, Orange County, California. UltraSystems Environmental Project No. 7265.

Dear NAHC Staff,

UltraSystems Environmental, Inc. (UEI) has been contracted by Laguna Beach Unified School District to conduct a Cultural Resources Inventory in support of the Laguna Beach High School Pool Modernization Project (Project). The Project consists of a proposed modernization of the existing pool complex at Laguna Beach High School, in the city of Laguna Beach, Orange County, California. UltraSystems will conduct a cultural resources study to evaluate the potential presence of prehistoric and historic resources within the project boundary. I am requesting a Native American contact list of interested tribes, organizations and individuals in the general Project area, and a search of the Sacred Lands File for potential traditional cultural sites.

The Proposed Project will constitute substantial upgrades to this existing pool facility. This pool complex currently hosts year-round water polo training and swim team coaching programs. Laguna Beach High School also uses the pool for their swim and water polo team practices and events. The pool currently has ten 25-yard lap lanes with an attached shallow kids' pool. Improvements of this pool modernization project are an upgrade of the facility to provide a multi-sport, 50-meter swimming pool that can support not only the high school but also serve community uses as well. The project would include demolition, excavation, grading, drainage, and construction to lower the existing pool deck elevation by approximately five feet and elongate the pool within its current configuration. The existing pool support building would also be reconstructed on the west side of the pool and extend out into the current parking lot area. Proposed site work would modify the existing retaining walls and walkways to maintain pedestrian circulation and implement the proposed pool design features. The proposed pool layout is to accommodate a wide range of activities ranging from competition to community recreational use.

The Project is located in the central portion of the city of Laguna Beach, and is specifically located at 670 Park Avenue, at the corner of Park Avenue and Manzanita Drive. This may be seen on the *Laguna Beach, Calif.,* USGS topographical quadrangles, Range 09 West, Township 07 South, in the SE ¼ of the SW ¼ of Section 24 and in the NE ¼ of the NW ¼ of Section 25. The subject property is surrounded by the Laguna Beach High School across Park Avenue to the south, and in all other directions by single-family residences. This is shown on the attached map and the Project area is depicted with a one-half mile buffer.

If you require additional information or have any questions, please contact me.

Thank you for your help.

Sincerely,

Stephen O'Neil

Stephen O'Neil, M.A., RPA
Cultural Resources Manager
soneil@ultrasystems.com
Corporate Office – Orange County
16431 Scientific Way
Irvine, CA 92618 7443
Telephone: 949.788.4900, ext. 276
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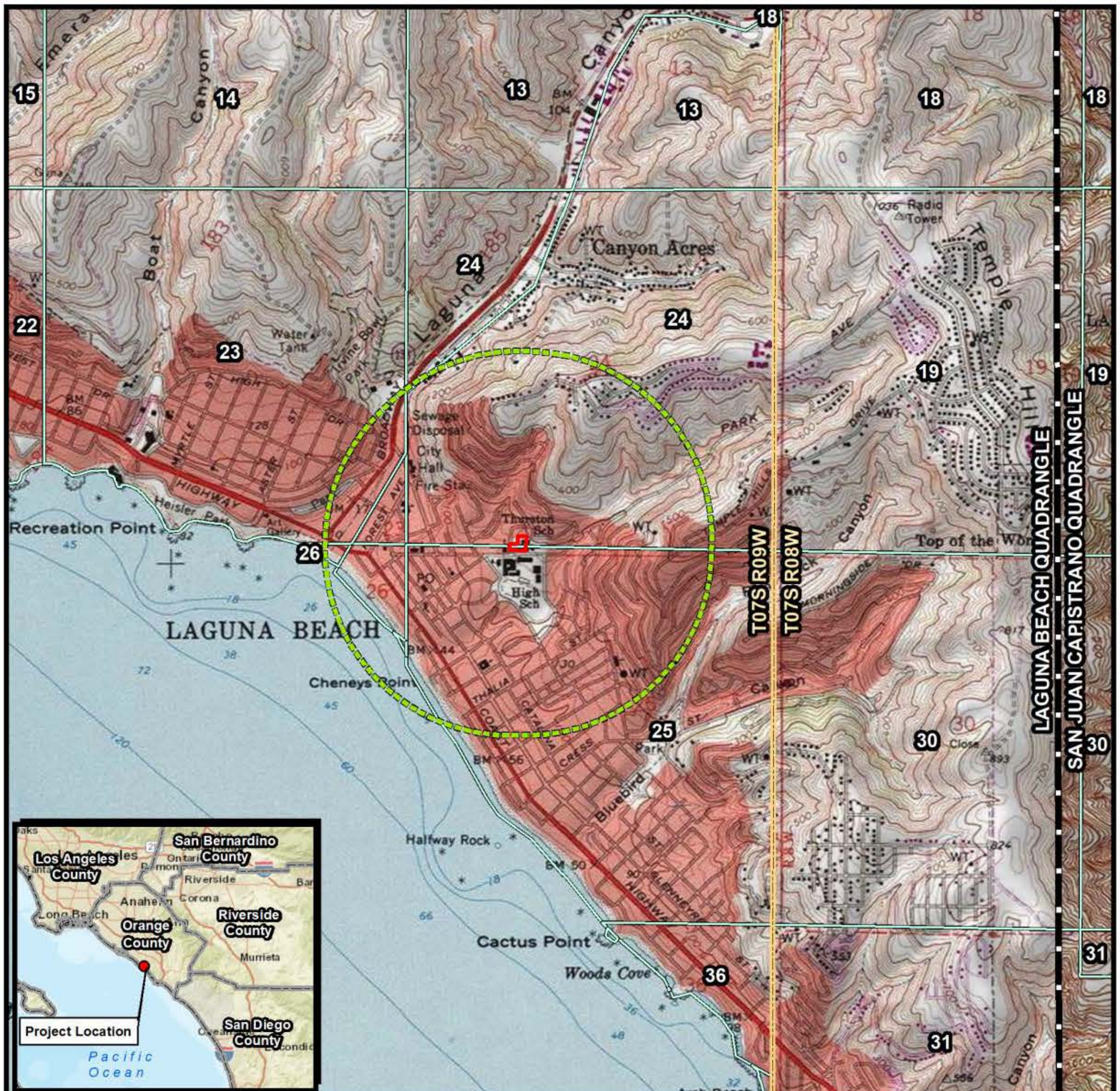

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March 15, 2024

Scale: 1:24,000

N

0 1,000 2,000 Feet

0 250 500 Meters

Legend

- Project Boundary
- Half-Mile Radius
- Quadrangle Boundary
- Township Boundary
- Section Boundary

Laguna Beach High School and Community Pool Modernization

Topographic Map
USGS Quadrangle: Laguna Beach
Township: 7S Range: 9W
Sections: 24, 25

UltraSystems

STATE OF CALIFORNIA Gavin Newsom, Governor

NATIVE AMERICAN HERITAGE COMMISSION

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

April 4, 2024

Stephen O'Neil
UltraSystems Environmental

Via Email to: soneil@ultrasystems.com

Re: Laguna Beach High School Pool Modernization Project, Orange County

To Whom It May Concern:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information submitted for the above referenced project. The results were positive. Please contact the Juaneno Band of Mission Indians Acjachemen Nation - Belardes on the attached list for information. Please note that tribes do not always record their sacred sites in the SLF, nor are they required to do so. A SLF search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with a project's geographic area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites, such as the appropriate regional California Historical Research Information System (CHRIS) archaeological Information Center for the presence of recorded archaeological sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. Please contact all of those listed; if they cannot supply information, they may recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green

Andrew Green
Cultural Resources Analyst

Attachment

Page 1 of 1

Native American Heritage Commission
Native American Contact List
Orange County
4/4/2024

Tribe Name	Fed (F) Non-Fed (N)	Contact Person	Contact Address	Phone #	Fax #	Email Address	Cultural Affiliation	Counties
Gabrieleno Band of Mission Indians - Kizh Nation	N	Andrew Salas, Chairperson	P.O. Box 393 Covina, CA, 91723	(844) 390-0787		admin@gabrielenoindians.org	Gabrieleno	Los Angeles,Orange,Riverside,San Bernardino,Santa Barbara,Ventura
Gabrieleno Band of Mission Indians - Kizh Nation	N	Christina Swindall Martinez, Secretary	P.O. Box 393 Covina, CA, 91723	(844) 390-0787		admin@gabrielenoindians.org	Gabrieleno	Los Angeles,Orange,Riverside,San Bernardino,Santa Barbara,Ventura
Gabrieleno/Tongva San Gabriel Band of Mission Indians	N	Anthony Morales, Chairperson	P.O. Box 693 San Gabriel, CA, 91778	(626) 483-3564	(626) 286-1262	GTTribalcouncil@aol.com	Gabrieleno	Los Angeles,Orange,Riverside,San Bernardino,Santa Barbara,Ventura
Gabrielino /Tongva Nation	N	Sandonne Goad, Chairperson	106 1/2 Judge John Aiso St., #231 Los Angeles, CA, 90012	(951) 807-0479		sgoad@gabrielino-tongva.com	Gabrielino	Los Angeles,Orange,Riverside,San Bernardino,Santa Barbara,Ventura
Gabrielino Tongva Indians of California Tribal Council	N	Christina Conley, Cultural Resource Administrator	P.O. Box 941078 Simi Valley, CA, 93094	(626) 407-8761		christina.marsden@alumni.usc.edu	Gabrielino	Los Angeles,Orange,Riverside,San Bernardino,Santa Barbara,Ventura
Gabrielino Tongva Indians of California Tribal Council	N	Robert Dorame, Chairperson	P.O. Box 490 Bellflower, CA, 90707	(562) 761-6417	(562) 761-6417	gtongva@gmail.com	Gabrielino	Los Angeles,Orange,Riverside,San Bernardino,Santa Barbara,Ventura
Gabrielino-Tongva Tribe	N	Sam Dunlap, Cultural Resource Director	P.O. Box 3919 Seal Beach, CA, 90740	(909) 262-9351		tongvanation@gmail.com	Gabrielino	Los Angeles,Orange,Riverside,San Bernardino,Santa Barbara,Ventura
Gabrielino-Tongva Tribe	N	Charles Alvarez, Chairperson	23454 Vanowen Street West Hills, CA, 91307	(310) 403-6048		Chavez1956metro@gmail.com	Gabrielino	Los Angeles,Orange,Riverside,San Bernardino,Santa Barbara,Ventura
Juaneno Band of Mission Indians	N	Sonia Johnston, Chairperson	P.O. Box 25628 Santa Ana, CA, 92799			sonia.johnston@sbcglobal.net	Juaneno	Orange,Riverside,San Diego
Juaneno Band of Mission Indians Acjachemen Nation - Belardes	N	Joyce Perry, Cultural Resource Director	4955 Paseo Segovia Irvine, CA, 92603	(949) 293-8522		kaamalam@gmail.com	Juaneno	Los Angeles,Orange,Riverside,San Diego
Juaneno Band of Mission Indians Acjachemen Nation 84A	N	Heidi Lucero, Chairperson, THPO	31411-A La Matanza Street San Juan Capistrano, CA, 92675	(562) 879-2884		jbmian.chairwoman@gmail.com	Juaneno	Los Angeles,Orange,Riverside,San Bernardino,San Diego
La Jolla Band of Luiseno Indians	F	Norma Contreras, Chairperson	22000 Highway 76 Pauma Valley, CA, 92061	(760) 742-3771			Luiseno	Orange,Riverside,San Diego
Pala Band of Mission Indians	F	Alexis Wallick, Assistant THPO	PMB 50, 35008 Pala Temecula Road Pala, CA, 92059	(760) 891-3537		awallick@palatribe.com	Cupeno Luiseno	Orange,Riverside,San Bernardino,San Diego
Pala Band of Mission Indians	F	Christopher Nejo, Legal Analyst/Researcher	PMB 50, 35008 Pala Temecula Road Pala, CA, 92059	(760) 891-3564		cnejo@palatribe.com	Cupeno Luiseno	Orange,Riverside,San Bernardino,San Diego
Pala Band of Mission Indians	F	Shasta Gaughen, Tribal Historic Preservation Officer	PMB 50, 35008 Pala Temecula Road Pala, CA, 92059	(760) 891-3515		sgaughen@palatribe.com	Cupeno Luiseno	Orange,Riverside,San Bernardino,San Diego
Pauma Band of Luiseno Indians	F	Temet Aguilar, Chairperson	P.O. Box 369 Pauma Valley, CA, 92061	(760) 742-1289	(760) 742-3422	bennaecalac@aol.com	Luiseno	Orange,Riverside,San Diego
Santa Rosa Band of Cahuilla Indians	F	Lovina Redner, Tribal Chair	P.O. Box 391820 Anza, CA, 92539	(951) 659-2700	(951) 659-2228	lsaul@santarosa-nsn.gov	Cahuilla	Imperial,Los Angeles,Orange,Riverside,San Bernardino,San Diego
Soboba Band of Luiseno Indians	F	Isaiah Vivanco, Chairperson	P.O. Box 487 San Jacinto, CA, 92581	(951) 654-5544	(951) 654-4198	ivivanco@soboba-nsn.gov	Cahuilla Luiseno	Imperial,Los Angeles,Orange,Riverside,San Bernardino,San Diego
Soboba Band of Luiseno Indians	F	Jessica Valdez, Cultural Resource Specialist	P.O. Box 487 San Jacinto, CA, 92581	(951) 663-6261	(951) 654-4198	jvaldez@soboba-nsn.gov	Cahuilla Luiseno	Imperial,Los Angeles,Orange,Riverside,San Bernardino,San Diego
Soboba Band of Luiseno Indians	F	Joseph Ontiveros, Tribal Historic Preservation Officer	P.O. Box 487 San Jacinto, CA, 92581	(951) 663-5279	(951) 654-4198	jontiveros@soboba-nsn.gov	Cahuilla Luiseno	Imperial,Los Angeles,Orange,Riverside,San Bernardino,San Diego

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

Record: Report:

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Laguna Beach High School Pool Modernization Project, Orange County.

04/04/2024 02:21 PM
1 of 2

UltraSystems
environmental•management•planning

April 8, 2024

Temet Aguilar, Chairperson
Pauma Band of Luiseno Indians
P.O. Box 369
Pauma Valley, CA, 92061

Subject: Cultural Resources Inventory for the proposed Laguna Beach High School Pool Modernization Project, Laguna Beach, Orange County, California. UltraSystems Environmental Project No. 7265.

Chairperson Aguilar,

UltraSystems Environmental, Inc. (UEI) has been contracted by Laguna Beach Unified School District to conduct a Cultural Resources Inventory in support of the Laguna Beach High School Pool Modernization Project (Project). The Project consists of a proposed modernization of the existing pool complex at Laguna Beach High School, in the city of Laguna Beach, Orange County, California. UltraSystems is conducting a cultural resources assessment and records search to evaluate the potential presence of prehistoric and historic resources within the project boundary.

The Proposed Project will constitute substantial upgrades to this existing pool facility. Laguna Beach High School uses the pool complex for their swim and water polo team practices and events. The pool currently has ten 25-yard lap lanes with an attached shallow kids' pool. This pool modernization project will upgrade the facility to provide a multi-sport, 50-meter swimming pool that can support not only the high school but also serve community uses. The project would include demolition, excavation, grading, drainage, and construction to lower the existing pool deck elevation by approximately five feet and elongate the pool within its current configuration. The existing pool support building would be reconstructed on the west side of the pool and extend out into the current parking lot area. Proposed site work would modify the existing retaining walls and walkways to maintain pedestrian circulation and implement the proposed pool design features. The proposed pool layout is to accommodate activities ranging from competition to community recreational use.

As part of the cultural resources study for the Project, I am writing to request your input on potential Native American resources in or near the Area of Potential Effect (APE). In a letter dated April 4, 2024, the Native American Heritage Commission stated: "A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were positive. [emphasis in the original]." The Commission recommended that local Native American individuals and organizations be contacted for further information, including the Pauma Band of Luiseno Indians.

The Project is located in the central portion of the city of Laguna Beach, and is specifically located at 670 Park Avenue, at the corner of Park Avenue and Manzanita Drive. This may be seen on the *Laguna Beach, Calif.*, USGS topographical quadrangle, Range 09 West, Township 07 South, in the SE ¼ of the SW ¼ of Section 24 and in the NE ¼ of the NW ¼ of Section 25. The subject property is surrounded by the Laguna Beach High School across Park Avenue to the south and east, and by single-family residences to the north and west. This is shown on the attached map and the Project area is depicted with a one-half mile buffer.

If you require additional information or have any questions, please contact me.

Thank you for your assistance.

Respectfully yours,

Steph O'Neil

Stephen O'Neil, M.A., RPA
Cultural Resources Manager
soneil@ultrasystems.com

Corporate Office – Orange County
16431 Scientific Way
Irvine, CA 92618-7443
Telephone: 949.788.4900, ext. 276
Facsimile: 949.788.4901
Website: www.ultrasystems.com

Laguna Beach High School Pool Modernization Project , Orange County, California.
[UltraSystems #7265]
Native American Contact Log

Name	Tribe/Affiliation	Letter Contacts	E-mail Contacts	Telephone Contacts	Comments
Andrew Green, Cultural Resources Analyst	Native American Heritage Commission	N/A	March 15, 2024, April 4, 2024	N/A	Request for Sacred Lands File search and local Native American representatives contact information. There was a response from Mr. Green on April 4, 2024 stating positive findings in the Sacred Lands File and providing a list of 20 local tribal contacts.
Andrew Salas	Gabrieleno Band of Mission Indians - Kizh Nation	April 8, 2024	April 8, 2024	N/A	Letter and email describing project and requesting input on concerns was sent April 8, 2024. An email response was received from Admin Specialist Brandy Salas on April 8, 2024 requesting the lead agencies contact information. This was provided on April 9, 2024. On May 7, 2024, the tribe's Admin Specialist requested the lead agencies contact information again. Mr. O'Neil responded on May 7, 2024 that the lead agency is the school district and that they have let us know that Ms. Salas has already been in contact with them on April 24 and 25 of 2024.
Christina Swindall Martinez, Secretary	Gabrieleno Band of Mission Indians - Kizh Nation	April 8, 2024	April 8, 2024	N/A	Letter and email describing project and requesting input on concerns was sent April 8, 2024. See the email correspondence for Andrew Salas above.
Anthony Morales, Chairperson	Gabrieleno/Tongva San Gabriel Band of Mission Indians	April 8, 2024	April 8, 2024	September 12, 2024	Letter and email describing project and requesting input on concerns was sent April 8, 2024. A phone call was made September 12, 2024. There was no answer; a message was left. There has been no response to date.
Sandonne Goad, Chairperson	Gabrielino /Tongva Nation	April 8, 2024	April 8, 2024	September 12, 2024	Letter and email describing project and requesting input on concerns was sent April 8, 2024. A phone call was made September 12, 2024. There was no answer; no message was left as the Voicemail was full. There has been no response to date.
Christina Conley, Cultural	Gabrielino Tongva Indians of	April 8, 2024	April 8, 2024	September 12, 2024	Letter and email describing project and requesting input on concerns

Name	Tribe/Affiliation	Letter Contacts	E-mail Contacts	Telephone Contacts	Comments
Resource Administrator	California Tribal Council				was sent April 8, 2024. A phone call was made September 12, 2024. There was no answer; a message was left. There has been no response to date.
Robert Dorame, Chairperson	Gabrielino Tongva Indians of California Tribal Council	April 8, 2024	April 8, 2024	September 12, 2024	Letter and email describing project and requesting input on concerns was sent April 8, 2024. A phone call was made September 12, 2024. There was no answer; a message was left. There has been no response to date.
Sam Dunlap, Cultural Resource Director	Gabrielino-Tongva Tribe	April 8, 2024	April 8, 2024	September 12, 2024	Letter and email describing project and requesting input on concerns was sent April 8, 2024. A phone call was made September 12, 2024. There was no answer; a message was left. There has been no response to date.
Charles Alvarez, Chairperson	Gabrielino-Tongva Tribe	April 8, 2024	April 8, 2024	September 12, 2024	Letter and email describing project and requesting input on concerns was sent April 8, 2024. A phone call was made September 12, 2024. The phoneline was disconnected. There has been no response to date.
Sonia Johnston, Chairperson	Juaneño Band of Mission Indians	April 8, 2024	April 8, 2024	No number provided	Letter and email describing project and requesting input on concerns was sent April 8, 2024. The letter was returned to the UltraSystems Office on April 17, 2024. No phone call was made as no phone number was provided. There has been no response to date.
Joyce Perry, Cultural Resource Director	Juaneño Band of Mission Indians - Acjachemen Nation-Belardes	April 8, 2024	April 8, 2024	N/A	Letter and email describing project and requesting input on concerns was April 8, 2024. An email response was received on June 26, 2024 from Ms. Perry indicating that the project is located within the tribes territory, and is sensitive area to the tribe. The project site is located within a half mile of several areas of concern. She requested to consult on this project and recommends Native American monitoring during ground disturbance.
Heidi Lucero, Chairperson, THPO	Juaneño Band of Mission Indians -	April 8, 2024	April 8, 2024	September 12, 2024	Letter and email describing project and requesting input on concerns was sent April 8, 2024. A phone call

Name	Tribe/Affiliation	Letter Contacts	E-mail Contacts	Telephone Contacts	Comments
	Acjachemen Nation 84A				was made September 12, 2024. There was no answer; a message was left. There has been no response to date.
Norma Contreras, Chairperson	La Jolla Band of Luiseno Indians	April 8, 2024	No email address provided.	September 12, 2024	Letter describing project and requesting input on concerns was sent April 8, 2024. A phone call was made September 12, 2024. The tribal receptionist indicated that the Chairperson has been replaced by Wendy Schlater and to contact her by email. An email was sent on September 13, 2024. An automatic undeliverable reply was received. The tribal office was called again to verify the email address and the tribal receptionist indicated that it was correct. There has been no response to date.
Alexis Wallick, Assistant THPO	Pala Band of Mission Indians	April 8, 2024	April 8, 2024	September 12, 2024	Letter and email describing project and requesting input on concerns was sent April 8, 2024. A phone call was made September 12, 2024. There was no answer; a message was left. There has been no response to date.
Christopher Nejo, Legal Analyst/Researcher	Pala Band of Mission Indians	April 8, 2024	April 8, 2024	September 12, 2024	Letter and email describing project and requesting input on concerns was sent April 8, 2024. A phone call was made September 12, 2024. There was no answer; a message was left. There has been no response to date.
Shasta Gaughen, Tribal Historic Preservation Officer	Pala Band of Mission Indians	April 8, 2024	April 8, 2024	September 12, 2024	Letter and email describing project and requesting input on concerns was sent April 8, 2024. A phone call was made September 12, 2024. There was no answer; a message was left. There has been no response to date.
Temet Aguilar, Chairperson	Pauma Band of Luiseno Indians	April 8, 2024	April 8, 2024	September 12, 2024	Letter and email describing project and requesting input on concerns was sent April 8, 2024. A phone call was made September 12, 2024. There was no answer; a message was left. There has been no response to date.

Name	Tribe/Affiliation	Letter Contacts	E-mail Contacts	Telephone Contacts	Comments
Lovina Redner, Tribal Chair	Santa Rosa Band of Cahuilla Indians	April 8, 2024	April 8, 2024	September 12, 2024	Letter and email describing project and requesting input on concerns was sent April 8, 2024. A phone call was made September 12, 2024. The tribal receptionist indicated that she can provide an answer on this. She indicated that Laguna Beach is outside of the tribes area and that they have no comment on the project.
Isaiah Vivanco, Chairperson	Soboba Band of Luiseno Indians	April 8, 2024	April 8, 2024	N/A	Letter and email describing project and requesting input on concerns was sent April 8, 2024. See response from Joseph Ontiveros below.
Jessica Valdez, Cultural Resource Specialist	Soboba Band of Luiseno Indians	April 8, 2024	April 8, 2024	N/A	Letter and email describing project and requesting input on concerns was sent April 8, 2024. See response from Joseph Ontiveros below.
Joseph Ontiveros, Cultural Resource Department	Soboba Band of Luiseño Indians	April 8, 2024	April 8, 2024	September 12, 2024	Letter and email describing project and requesting input on concerns was sent April 8, 2024. A phone call was made September 12, 2024. Mr. Ontiveros indicated that the tribe would defer to Juaneño groups in that area.

From: Gabrieleno Administration <admin@gabrielenoindians.org>
Sent: Monday, April 8, 2024 3:34 PM
To: Megan Black <mblack@ultrasystems.com>
Subject: Re: Project 7265 - Cultural Resources Inventory, Laguna Beach High School Pool Modernization Project, Laguna Beach, Orange County, California

Hello Megan

Thank you for your email. Can you please provide the lead agencies contact information?

Than you

Brandy Salas

Admin Specialist
Gabrieleno Band of Mission Indians - Kizh Nation
PO Box 393
Covina, CA 91723

Office: 844-390-0787

website: www.gabrielenoindians.org

The region where Gabrieleño culture thrived for more than eight centuries encompassed most of Los Angeles County, more than half of Orange County and portions of Riverside and San Bernardino counties. It was the labor of the Gabrieleño who built the missions, ranchos and the pueblos of Los Angeles. They were trained in the trades, and they did the construction and maintenance, as well as the farming and managing of herds of livestock. "The Gabrieleño are the ones who did all this work, and they really are the foundation of the early economy of the Los Angeles area " . "That's a contribution that Los Angeles has not recognized--the fact that in its early decades, without the Gabrieleño, the community simply would not have survived."

On Tue, Apr 9, 2024 at 11:04 AM Megan Black <mblack@ultrasystems.com> wrote:

Good morning Brandy,

The lead agency would be the Laguna Beach Unified School District. See their contact information below.

Ryan Zajda, Director of Facilities

Laguna Beach Unified School District

550 Blumont Street

Laguna Beach, CA 92551

(949) 497-7700 ext. 5213

rzajda@lbusd.org

Best regards,

Megan Black Doukakis | **Assistant Project Archaeologist** | **M.A.**

UltraSystems Environmental | **WBE/DBE/SBE/WOSB**

16431 Scientific Way Irvine, CA 92618
Office **949.788.4900 Ext. 228** Fax 949.788.4901

Cell 310.850.8127

From: Gabrieleno Administration
To: Megan Black
Subject: Re: Project 7265 - Cultural Resources Inventory, Laguna Beach High School Pool Modernization Project, Laguna Beach, Orange County, California
Date: Tuesday, April 9, 2024 12:29:38 PM
Attachments: image001.jpg

Thank you Megan

Brandy Salas
Admin Specialist
Gabrieleno Band of Mission Indians - Kizh Nation
PO Box 393
Covina, CA 91723
Office: 844-390-0787
website: www.gabrielenoindians.org

The region where Gabrieleño culture thrived for more than eight centuries encompassed most of Los Angeles County, more than half of Orange County and portions of Riverside and San Bernardino counties. It was the labor of the Gabrieleño who built the missions, ranchos and the pueblos of Los Angeles. They were trained in the trades, and they did the construction and maintenance, as well as the farming and managing of herds of livestock. "The Gabrieleño are the ones who did all this work, and they really are the foundation of the early economy of the Los Angeles area ". "That's a contribution that Los Angeles has not recognized--the fact that in its early decades, without the Gabrieleño, the community simply would not have survived."

From: Joyce Perry <kaamalam@gmail.com>
Sent: Wednesday, June 26, 2024 1:32 PM
To: Megan Black <mblack@ultrasystems.com>
Cc: Steve Oneil <soneil@ultrasystems.com>; Rodrigo Jacobo <rjacobo@ultrasystems.com>
Subject: Re: Project 7265 - Cultural Resources Inventory, Laguna Beach High School Pool Modernization Project, Laguna Beach, Orange County, California

Good Afternoon,

I am responding on behalf of the Juaneno Band of Mission Indians, Acjachemen Nation-Belardes to your letter regarding Project 7265 - Cultural Resources Inventory, Laguna Beach High School Pool Modernization Project, Laguna Beach.This project is located within our territory, and a sensitive area to our tribe. The project site is located within a half mile of several areas of concern to our tribe. We wish to consult on this project as it moves forward and our preliminary recommendation is for native monitoring during ground disturbance.

Thank you and we look forward to hearing from you.

Joyce Stanfield Perry

Húu'uni 'óomaqati yáamaqati- Teach peace

Payomkawichum Kaamalam - President

kaamalam.com

Juaneño Band of Mission Indians, Acjachemen Nation

Cultural Resource Director

From: Joyce Perry
To: Steve Oneil
Cc: Megan Black
Subject: Re: Project 7265 - Cultural Resources Inventory, Laguna Beach High School Pool Modernization Project, Laguna Beach, Orange County, California
Date: Thursday, September 12, 2024 3:28:16 PM
Attachments: image004.jpg
image003.jpg

Thank you for the update.

On Thu, Sep 12, 2024 at 3:10 PM Steve Oneil <soneil@ultrasystems.com> wrote:

> Greetings Joyce,
>
> I trust you and all are doing well. I realize there has been this delay in responding to your reply about the Laguna Beach High School pool project. Shortly before your reply the project was placed on hold and all aspects were shut down. Just this week we can return to segments such as tribal outreach.
>
> Regarding AB 52 consultation, that will be conducted by the Lead Agency, the Laguna Beach Unified School District. While I expect the Juaneño Band – Belardes is on their contact list, I will forward your email to them so they know to include the Band. They will include you when they initiate consultation, which I expect will be some weeks or even months off.
>
> In the meantime your response here will be included on the cultural resources report under preparation.
>
> Best regards,
>
> Steve
>
> **Stephen O'Neil** | Cultural Resources Manager | M.A./RPA
>
> **UltraSystems Environmental | WBE/DBE/SBE/WOSB**
>
> 16431 Scientific Way
>
> Irvine, CA 92618
> Office 949.788.4900 ext. 276

From: Joyce Perry
To: Steve Oneil
Cc: Megan Black
Subject: Re: Project 7265 - Cultural Resources Inventory, Laguna Beach High School Pool Modernization Project, Laguna Beach, Orange County, California
Date: Thursday, September 12, 2024 3:28:16 PM
Attachments: image004.jpg
image003.jpg

Thank you for the update.

ATTACHMENT D

CHRIS RECORDS SEARCH BIBLIOGRAPHY

Report List

7265 Laguna Beach HS Pool

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
OR-00512		1935	Romero, John B.	Orange County, California, Indian Campsites		30-000001, 30-000002, 30-000003, 30-000004, 30-000005, 30-000006, 30-000007, 30-000008, 30-000009, 30-000010, 30-000011, 30-000012, 30-000013, 30-000014, 30-000015, 30-000016, 30-000017, 30-000018, 30-000019, 30-000020, 30-000021, 30-000022, 30-000023, 30-000024, 30-000025, 30-000026, 30-000027, 30-000028, 30-000029, 30-000030, 30-000280
OR-00527		1936	Unknown	Laguna Excavations, Moro Canyon Site, Heil Site		30-000109, 30-000280, 30-000281, 30-000283, 30-000285
OR-00612		1981	Magalousis, Nicholas M.	Archaeological Report: CA-ORA-775 Specific Location: 250 and 260 Saint Ann's Drive Laguna Beach, California	Interdisciplinary Research Group	30-000775
OR-00620		1981	Weisboro, Jill	Cultural Resource Survey of the Irvine Bowl Park Site	LSA Associates, Inc.	30-001000, 30-001001
OR-01926		1977	Ezell, Paul H. and Carrico, Richard L.	Archaeological Survey Report of Aliso Water Management Agency Project Committees 7, 11-A and 15	Westec Service, Inc.	30-000009, 30-000074, 30-000109, 30-000280, 30-000281, 30-000285, 30-000286, 30-000334, 30-000335, 30-000576, 30-000577, 30-000578, 30-000583, 30-000596, 30-001683
OR-02545		2002	Ferguson, Charles and McKenna, Jeanette A.	Cultural Resources Investigation and Historic Property Survey for the Proposed Community Senior Center on Third Street, City of Laguna Beach, Orange County, California	McKenna et al.	30-158304, 30-158305, 30-158306, 30-158307, 30-158308, 30-177625, 30-177626, 30-177627
OR-02815		2002	Shepard, Richard S.	Historic Property Survey Report for the Laguna Beach Urban Runoff Diversion Project Laguna Beach, Orange County Califonria	Chambers Group, Inc.	19-000755
OR-03441	Cellular -	2007	Bonner, Wayne H. and Kathleen A. Crawford	Cultural Resource Records Search and Site Visit Results for Cingular Wireless Candidate Lsancac097 (laguna Beach), 625 1/2 Park Avenue, Laguna Beach, Orange County, California	Michael Brandman Associates	30-000005, 30-000285, 30-000286, 30-000457, 30-000578, 30-000775, 30-000790
OR-03504		2007	Tibbet, Casey	Historic Building Assessment, Heisler Building 400-424 South Coast Highway, City of Laguna Beach, Orange County, California	LSA Associates, Inc.	

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Report List

7265 Laguna Beach HS Pool

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
OR-03569		2008	Tang, Bai "Tom" and Michael Hogan	Historic Building Study: Residence at 580 Oak Street, City of Laguna Beach, Orange County, California	CRM Tech	30-158048
OR-03884		2009	McKenna, Jeanette A.	A Cultural Resources Assessment and Brief History of the Bainer Residence at 625 Seaview Street in the City of Laguna Beach, Orange County, California	McKenna et al.	30-158068
OR-03937		2010	Daly, Pamela and Patrick Maxon	Phase I Cultural Resources Assessment Report, Noppenberger Work/Live Development Project in Laguna Beach	BonTerra Consulting	30-000005, 30-000007, 30-000285, 30-000286, 30-000457, 30-000576, 30-000577, 30-000578, 30-000775, 30-000790, 30-000791, 30-001000, 30-001001, 30-001683, 30-158048, 30-158068, 30-177043
OR-04179		2008	unknown	Laguna Beach Historic Resources Inventory	City of Laguna Beach	30-157939
OR-04449		2014	Bonner, Diane, Wills, Carrie, and Crawford, Kathleen	Cultural Resources Records Search and Site Visit Results for T-Mobile West, LLC Candidate LA02251A (CM251 Benson) 465 Forest Avenue, Laguna Beach, Orange County, California	EAS	30-000005, 30-000285, 30-000286, 30-000578, 30-000790, 30-001000, 30-001001, 30-159468, 30-177540
OR-04449A		2014	Bonner, Wayne H. and Kathleen A. Crawford	Direct APE Historic Architectural Assessment for T-Mobile West, LLC Candidate LA02251A (CM251 Benson) 465 Forest Avenue, Laguna Beach, Orange County, California	Environmental Assessment Specialists, Inc.	
OR-04558		2014	Supernowicz, Dana E.	ARCHITECTURAL EVALUATION STUDY OF THE ST. CATHERINE OF SIENA PARISH PROJECT, AT&T MOBILITY SITE NO. OC0410, 990 TEMPLE TERRACE, LAGUNA BEACH, ORANGE COUNTY, CALIFORNIA 92651	Historic Resource Associates	

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ATTACHMENT E

National Register of Historic Places

Built Environmental Resource Directory

Primary Number	Property Number	Name	St Number	St Name	Evaluation Info	Construction Year(s)
30-158299	37664		415	2ND AVE	3D	1928
30-158300	37665		306	3RD AVE	7N	
30-158310	37675		326	3RD AVE	5D2	1937
30-158301	37666		349	3RD AVE	5D2	1922
30-158302	37667		350	3RD AVE	5D2	1919
30-158303	37668		359	3RD AVE	5D2	1914
30-158304	37669		368	3RD AVE	5D2	1921
30-158305	37670		374	3RD AVE	5D2	1920
30-158306	37671		386	3RD AVE	5D2	1918
30-158307	37672	390	390	3RD AVE	5D2	1923
30-158308	37673		394	3RD AVE	5D2	1921
30-158309	37674		398	3RD AVE	5D2	1921
30-158232	37597		457	3RD AVE	5D2	1920
30-158233	37598		468	3RD AVE	5D2	1923
30-158058	37423		305	ANITA ST	5D2	1926
30-158059	37424		380	ANITA ST	5D2	1928
30-158060	37425		416	ANITA ST	5D2	1927
30-158061	37426		505	ANITA ST	5D2	1932
30-158062	37427		510	ANITA ST	5D2	1929
30-158063	37428		527	ANITA ST	5D2	1927
30-158064	37429		533	ANITA ST	5D2	1930
30-158065	37430		543	ANITA ST	5D2	1930
30-158066	37431		560	ANITA ST	5D2	1926
30-158091	37456		411	Arroyo Chico	3S	1884
30-158255	37620		410	BLUMONT ST	5D2	1929
30-158256	37621		471	BLUMONT ST	5D2	1922
30-158034	37399		1215	BRANGWYN WY	5D2	1937
30-158262	37627	LAGUNA BEACH MOTORS CO, SWENSONS ICE CREAM	217	BROADWAY	5D2	1935
30-158263	37628	POST OFFICE	298	BROADWAY	5D2	1938
30-158264	37629		496	BROADWAY	5D2	1935

Primary Number	Property Number	Name	St Number	St Name	Evaluation Info	Construction Year(s)
30-158202	37567	TEMPLE HILLS NEIGHBORHOOD		CANYON VIEW DR	5D2	1926
30-158171	37536	ARCH BEACH, LUGUNA-SOUTH		CATALINA ST	5D2	1909
30-158132	37497		1035	CATALINA ST	5D2	1920
30-158133	37498		1045	CATALINA ST	5D2	1929
30-158134	37499		1067	CATALINA ST	5D2	1920
30-158208	37573		654	CATALINA ST	5D2	1930
30-158127	37492	THOMAS HARPER HOUSE	820	CATALINA ST	3S	1929
30-158128	37493		939	CATALINA ST	5D2	1928
30-158129	37494		951	CATALINA ST	5D2	1928
30-158130	37495		960	CATALINA ST	5D2	1926
30-158131	37496		971	CATALINA ST	5D2	1928
30-158399	37764		125	CEDAR WY	5D2	1925
30-158092	37457	REGINALD ENDWOOD HOUSE	339	CLEO ST	3S	1932
30-158213	37578	EL MIRADOR TRACT, EL BOSQUE ST NEIGHBORHOOD		EL BOSQUE ST	5S2	1931
30-158203	37568		400	EL BOSQUE ST	5D2	1931
30-158204	37569		441	EL BOSQUE ST	5D2	1931
30-158205	37570		455	EL BOSQUE ST	5D2	1932
30-158206	37571		475	EL BOSQUE ST	5D2	1932
30-158209	37574		405	EL CAMINO DEL MAR	5D2	1940
30-158210	37575		417	EL CAMINO DEL MAR	5D2	1932
30-158211	37576		420	EL CAMINO DEL MAR	5D2	1940

Primary Number	Property Number	Name	St Number	St Name	Evaluation Info	Construction Year(s)
30-158212	37577		494	EL CAMINO DEL MAR	5D2	1940
30-158313	37678	DOWNTOWN LAGUNA BEACH		FOREST AVE	5D2	1914
30-158276	37641	THOMPSON BUILDING	228	FOREST AVE	5D2	1946
30-158277	37642	BLUE & WHITE GROCERY & MARKET, FOREST MARKET	230	FOREST AVE	5D2	1923
30-158278	37643		234	FOREST AVE	5D2	1928
30-158279	37644		241	FOREST AVE	5D2	1928
30-158280	37645		245	FOREST AVE	5D2	1928
30-158281	37646		255	FOREST AVE	5D2	1928
30-158282	37647		269	FOREST AVE	5D2	1926
30-158283	37648		280	FOREST AVE	5D2	1917
30-158284	37649		292	FOREST AVE	5D2	1940
30-158285	37650		302	FOREST AVE	5D2	1935
30-158286	37651		305	FOREST AVE	3S	1927
30-158287	37652		326	FOREST AVE	5D2	1916
30-158288	37653		384	FOREST AVE	3S	1919
30-158289	37654		439	FOREST AVE	5D2	1925
30-158290	37655		477	FOREST AVE	5D2	1930
30-158291	37656		501	FOREST AVE	5D2	1931
30-158292	37657		505	FOREST AVE	5D2	1951
30-158294	37659		521	FOREST AVE	5D2	1935
30-158097	37462		1086	GLENNEYRE ST	5D2	1929
30-158098	37463		1094	GLENNEYRE ST	5D2	1928
30-158311	37676		412	GLENNEYRE ST	3S	1897
30-158312	37677		424	GLENNEYRE ST	3S	1930
30-158093	37458		655	GLENNEYRE ST	5D2	1921

Primary Number	Property Number	Name	St Number	St Name	Evaluation Info	Construction Year(s)
30-158094	37459		667	GLENNEYRE ST	5D2	1918
30-158095	37460		684	GLENNEYRE ST	5D2	1931
30-158096	37461		950	GLENNEYRE ST	5D2	1930
30-158082	37447		422	GRACELAND DR	5D2	1930
30-158083	37448		444	GRACELAND DR	5D2	1924
30-158086	37451		500	GRACELAND DR	5D2	1910
30-158084	37449		539	GRACELAND DR	5D2	1924
30-158085	37450	OLD ART GALLERY	571	GRACELAND DR	3S	1981
30-158405	37770		126	HIGH DR	5D2	1920
30-158254	37619		435	HILLEDGE DR	5D2	1929
30-158252	37617		815	LA VISTA DR	5D2	1930
30-158253	37618	ALTA MIRA	825	LA VISTA DR	5D2	1933
30-158216	37581		264	LEGION ST	5D2	1925
30-158222	37587	SCHOOLHOUSE, LEGION HALL	384	LEGION ST	7N	1908
30-158223	37588		410	LEGION ST	5D2	1934
30-158049	37414		501	Lombardy Ln	5D2	1927
30-158050	37415		505	Lombardy Ln	5D2	1927
30-158051	37416		527	Lombardy Ln	5D2	1930
30-158052	37417		533	Lombardy Ln	5D2	1927
30-158053	37418		577	Lombardy Ln	5D2	1928
30-158054	37419		585	Lombardy Ln	5D2	1927
30-158055	37420		597	Lombardy Ln	5D2	1927
30-158056	37421		665	Lombardy Ln	5D2	1936
30-158057	37422		685	Lombardy Ln	5D2	1934
30-158207	37572		400	LOS ROBLES	5D2	1930
30-158261	37626	MANZANITA NEIGHBORHOOD		MANZANITA DR	5D2	1925

Primary Number	Property Number	Name	St Number	St Name	Evaluation Info	Construction Year(s)
30-158243	37608		721	MANZANITA DR	5D2	1932
30-158244	37609		731	MANZANITA DR	5D2	1925
30-158245	37610		732	MANZANITA DR	5D2	1930
30-158246	37611	CLAUDE BRONNER HOME, ANNELIESE'S PRESCHOOL	758	MANZANITA DR	3D	1927
30-158247	37612		769	MANZANITA DR	5D2	1925
30-158248	37613		780	MANZANITA DR	5D2	1932
30-158249	37614		787	MANZANITA DR	5D2	1930
30-158250	37615		790	MANZANITA DR	5D2	1930
30-158251	37616		791	MANZANITA DR	5D2	1925
30-158295	37660		347	MERMAID ST	5D2	1920
30-158296	37661		357	MERMAID ST	5D2	1921
30-158297	37662		393	MERMAID ST	5D2	1929
30-158298	37663		407	MERMAID ST	5D2	1926
30-158037	37402		387	OAK ST	5D2	1928
30-158038	37403		445	OAK ST	5D2	1921
30-158039	37404		469	OAK ST	5D2	1921
30-158040	37405		473	OAK ST	5D2	1939
30-158041	37406		500	OAK ST	5D2	1939
30-158042	37407		511	OAK ST	5D2	1924
30-158043	37408		513	OAK ST	5D2	1925
30-158044	37409		532	OAK ST	5D2	1925
30-158045	37410		541	OAK ST	5D2	1922
30-158046	37411		554	OAK ST	5D2	1931
30-158047	37412		577	OAK ST	5D2	1937
30-158048	37413		580	OAK ST	5D2	1927
30-158265	37630	MARINE CAFE, MARINE ROOM	214	OCEAN AVE	5D2	1935
30-158266	37631		278	OCEAN AVE	5D2	1920

Primary Number	Property Number	Name	St Number	St Name	Evaluation Info	Construction Year(s)
30-158267	37632		312	OCEAN AVE	5D2	1920
30-158268	37633		398	OCEAN AVE	5D2	1926
30-158269	37634		404	OCEAN AVE	5D2	1920
30-158270	37635		418	OCEAN AVE	5D2	1920
30-158271	37636		419	OCEAN AVE	5D2	1920
30-158272	37637		432	OCEAN AVE	5D2	1940
30-158273	37638		442	OCEAN AVE	5D2	1930
30-158274	37639		479	OCEAN AVE	5D2	1925
30-158242	37607	PARK AVENUE NEIGHBORHOOD		PARK AVE	5D2	1907
30-158275	37640	RANKINS DRUG STORE, PARK FOREST PHARMACY	202	PARK AVE	5D2	1937
30-158224	37589		363	PARK AVE	5D2	1923
30-158225	37590		421	PARK AVE	5D2	1923
30-158226	37591	ST FRANCIS BY THE SEA AMERICAN CATHOLIC CHURCH	430	PARK AVE	1S	1933
30-158227	37592		431	PARK AVE	5D2	1926
30-158228	37593		441	PARK AVE	5D2	1926
30-158229	37594		481	PARK AVE	5D2	1935
30-158230	37595		504	PARK AVE	5D2	1912
30-158231	37596		524	PARK AVE	5D2	1907
	167961		625	PARK AVE	2S2	1934
30-158221	37586	RAMONA WAY		RAMONA WY	5S2	1919
30-158214	37579		564	RAMONA WY	5D2	1926
30-158215	37580		580	RAMONA WY	5D2	1935
30-158217	37582		616	RAMONA WY	5D2	1935
30-158218	37583		626	RAMONA WY	5D2	1922
30-158219	37584		652	RAMONA WY	5D2	1925
30-158220	37585		658	RAMONA WY	5D2	1922
30-158234	37599		515	REED ST	5D2	1926
30-158235	37600		539	REED ST	5D2	1926

Primary Number	Property Number	Name	St Number	St Name	Evaluation Info	Construction Year(s)
30-161950	76566	STINSON COTTAGE	0	S COAST HWY	1D	
30-158067	37432		615	SEAVIEW ST	5D2	1930
30-158068	37433		625	SEAVIEW ST	5D2	1931
30-157882	37247		619	SLEEPY HOLLOW DR	7N	1925
30-158438	37803	LAGUNA VISTA CAFE, COTTAGE RESTAURANT	308	SR 1 N	3S	1917
30-158439	37804		320	SR 1 N	5D2	1912
30-158440	37805		412	SR 1 N	5D2	1928
30-158441	37806	ALDEITA COURT	414	SR 1 N	5D2	1939
30-158442	37807	COUSE'S AUTOCOURT	427	SR 1 N	5D2	1930
30-158443	37808		434	SR 1 N	7N	1915
30-158444	37809		506	SR 1 N	5D2	1915
30-158445	37810		520	SR 1 N	5D2	1923
30-158446	37811		538	SR 1 N	5D2	1927
30-158447	37812		556	SR 1 N	5D2	1927
30-158448	37813	CHAMPION HOUSE	568	SR 1 N	5D2	1917
30-158449	37814		578	SR 1 N	5D2	1910
30-158450	37815		590	SR 1 N	5D2	1938
30-158451	37816		770	SR 1 N	5D2	1930
30-158452	37817		790	SR 1 N	5D2	1924
30-157866	37231	NEW LYNN THEATRE, SOUTH COAST THEATRE	162	SR 1 S	3S	1934
30-157867	37232		214	SR 1 S	5D2	1927
30-157869	37234	ISCH BUILDING	232	SR 1 S	3S	1927
30-157868	37233	BIRDS CAFE, WHITE HOUSE CAFE	300	SR 1 S	7N	1918
30-157870	37235		374	SR 1 S	5D2	1930

Primary Number	Property Number	Name	St Number	St Name	Evaluation Info	Construction Year(s)
30-157871	37236	HEISLER BUILDING	400	SR 1 S	7N	1931
30-157872	37237		424	SR 1 S	5D2	1931
30-157873	37238	HOTEL LAGUNA	425	SR 1 S	2S3	1930
30-157874	37239		448	SR 1 S	5D2	1934
30-157875	37240		460	SR 1 S	5D2	1930
30-157876	37241		470	SR 1 S	5D2	1928
30-157877	37242		509	SR 1 S	5D2	1902
30-157878	37243		513	SR 1 S	5D2	1902
30-157879	37244		535	SR 1 S	5D2	1937
30-157880	37245		541	SR 1 S	3D	1887
30-157881	37246		629	SR 1 S	5D2	1930
30-157883	37248		650	SR 1 S	5D2	1914
30-157884	37249		656	SR 1 S	5D2	1925
30-157885	37250		658	SR 1 S	5D2	1917
30-157886	37251		664	SR 1 S	5D2	1931
30-157887	37252		703	SR 1 S	5D2	1924
30-157888	37253		729	SR 1 S	5D2	1930
30-157889	37254		779	SR 1 S	5D2	1917
30-157890	37255		797	SR 1 S	5D2	1921
30-157891	37256		826	SR 1 S	5D2	1924
30-157892	37257		845	SR 1 S	7N	1915
30-157894	37259		881	SR 1 S	5D2	1928
30-157895	37260		901	SR 1 S	3S	1936
30-157896	37261		947	SR 1 S	5D2	1924
30-157897	37262		961	SR 1 S	5D2	1923
30-157898	37263		967	SR 1 S	5D2	1924
30-157899	37264	LAGUNA BEACH FUNERAL HOME, RAY FAMILY MORTUARY	976	SR 1 S	3S	1929
30-158087	37452		241	ST ANNS DR	5D2	1925
30-158088	37453		251	ST ANNS DR	5D2	1930
30-158089	37454		410	ST ANNS DR	5D2	1926

Primary Number	Property Number	Name	St Number	St Name	Evaluation Info	Construction Year(s)
30-158090	37455		495	ST ANNS DR	5D2	1929
30-158197	37562		685	ST ANNS DR	5D2	1922
30-158198	37563		729	ST ANNS DR	5D2	1929
30-158199	37564		761	ST ANNS DR	5D2	1927
30-158194	37559		1102	TEMPLE HILLS DR	5D2	1930
30-158195	37560		1284	TEMPLE HILLS DR	5D2	1930
30-158196	37561		1492	TEMPLE HILLS DR	5D2	1926
30-158190	37555		740	TEMPLE HILLS DR	5D2	1926
30-158191	37556		805	TEMPLE HILLS DR	5D2	1928
30-158192	37557		820	TEMPLE HILLS DR	5D2	1932
30-158193	37558		978	TEMPLE HILLS DR	5D2	1930
30-158169	37534	LOMBARDY LANE, THOMAS CUMMINGS MEMORIAL BEN		TEMPLE TERRACE	5D2	1945
30-158167	37532		200	TEMPLE TERRACE	5D2	
30-158168	37533	ST CATHERINE OF SIENA CATHOLIC CHURCH	990	TEMPLE TERRACE	5D2	1931
30-157893	37258		154	THALIA ST	5D2	1915
30-158069	37434		392	THALIA ST	5D2	1920
30-158070	37435		439	THALIA ST	5D2	1928
30-158071	37436		485	THALIA ST	5D2	1929
30-158072	37437		541	THALIA ST	5D2	1931
30-158073	37438		562	THALIA ST	5D2	1930
30-158074	37439		614	THALIA ST	5D2	1929

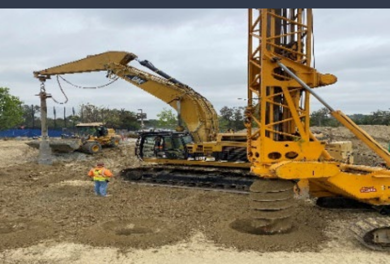
Primary Number	Property Number	Name	St Number	St Name	Evaluation Info	Construction Year(s)
30-158075	37440	SHEA APARTMENTS, HOTEL CALIFORNIA	615	THALIA ST	5D2	1921
30-158076	37441		616	THALIA ST	5D2	1929
30-158077	37442		621	THALIA ST	5D2	1909
30-158078	37443		639	THALIA ST	5D2	1929
30-158079	37444		683	THALIA ST	5D2	1931
30-158080	37445		684	THALIA ST	5D2	1931
30-158081	37446		711	THALIA ST	5D2	1931
30-158236	37601		535	THROUGH ST	5D2	1922
30-158237	37602		544	THROUGH ST	5D2	1930
30-158238	37603		545	THROUGH ST	5D2	1923
30-158239	37604		555	THROUGH ST	5D2	1924
30-158240	37605		556	THROUGH ST	5D2	1921
30-158241	37606		567	THROUGH ST	5D2	1907
30-158257	37622		631	VIRGINIA PARK DR	5D2	1926
30-158258	37623		639	VIRGINIA PARK DR	5D2	1928
30-158259	37624		640	VIRGINIA PARK DR	5D2	1929
30-158260	37625		680	VIRGINIA PARK DR	5D2	1936
30-158200	37565	TEMPLE HILLS NEIGHB HIST DIS	854	WENDT TERRACE	5D2	1932
30-158201	37566		860	WENDT TERRACE	5D2	1927

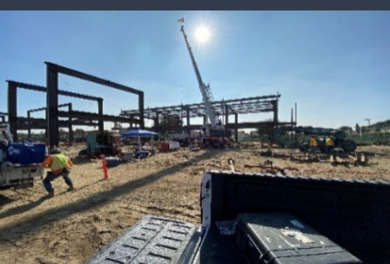
APPENDIX E1

GEOTECHNICAL REPORT

GEOTECHNICAL INVESTIGATION

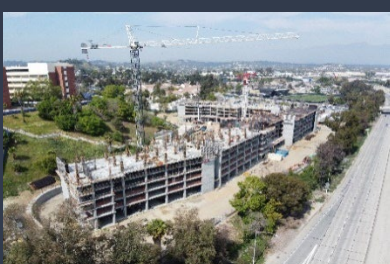
LAGUNA BEACH HIGH SCHOOL POOL MODERNIZATION
670 PARK AVENUE
LAGUNA BEACH, CALIFORNIA

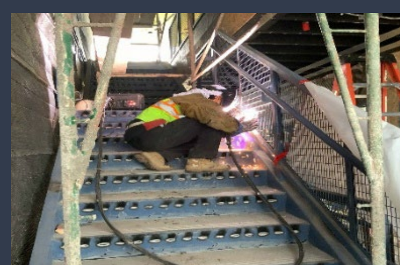


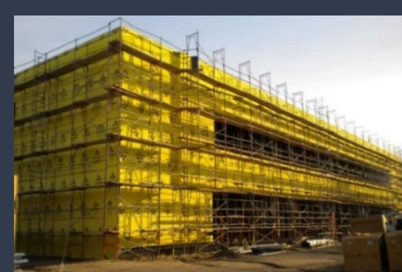


LAGUNA BEACH UNIFIED SCHOOL DISTRICT
550 BLUMONT STREET
LAGUNA BEACH, CALIFORNIA

Date: September 16th, 2024
MTGL Project No.: 2520A02
MTGL Log No.: 24-0280







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September 16, 2024

MTGL Project No.: 2520A02
MTGL Log No.: 24-0280
MTGL Branch: Anaheim

Ryan Zajda, Director of Facilities
Laguna Beach Unified School District
550 Blumont Street
Laguna Beach, California 92651

Subject: **GEOTECHNICAL INVESTIGATION**
Laguna Beach High School Pool Replacement Project
670 Park Avenue
Laguna Beach, California

Dear Mr. Zajda,

MTGL Inc. is pleased to present this report describing the results of our geotechnical investigation for the subject project. With your authorization, we have performed this work in general accordance with our proposal dated February 21st, 2024. Based on the results of our investigation, we consider the planned developments feasible from a geotechnical perspective, provided the recommendations of this report are followed.

We appreciate this opportunity to be of continued service and look forward to providing additional consulting services during the planning and construction of the project. Should you have any questions regarding this report, please do not hesitate to contact us.

Respectfully submitted,
MTG$_L$, Inc.

LICENSED PROFESSIONAL ENGINEER
ISAAC B. CHUN
No. 2649
EXP. 12/31/25
GEOTECHNICAL
STATE OF CALIFORNIA

Isaac Chun, P.E., G.E.
Vice President

CERTIFIED ENGINEERING GEOLOGIST
GREGORY S. WILSON
No. 2776
EXP. 7/31/26
STATE OF CALIFORNIA

Greg Wilson, P.G., C.E.G.
Senior Engineering Geologist

Trevor Carter, E.I.T.
Staff Engineer

EXECUTIVE SUMMARY

In accordance with your request and authorization, we have completed our geotechnical investigation for the subject site located at 670 Park Avenue in Laguna Beach, California. We understand that the project currently involves demolishing the main pool facility building, pump house, pool, and pool deck, as well as the parking lot. The proposed design includes a new a two-story pool building, pool and pool deck, bleachers, parking lot, restrooms and showers, equipment storage areas, shade structures with solar panels, scoreboard, and light poles. The proposed two-story pool building is expected to cover approximately 6,670 square feet, with the foundation level around 3,400 square feet. The approximate square footage of the new pool will be on the order of 11,100 square feet. The purpose of our work is to provide conclusions and recommendations regarding the geotechnical aspects of the project.

Our subsurface investigation was performed between August 15th and 16th, 2024 and consisted of drilling six exploratory soil borings within areas of proposed improvements. Six borings (B-1, B-2, P-1, and HA-1 through HA-3) were drilled to depths ranging from approximately 8½ to 51½ feet below ground surface (BGS) using hand tools, and a truck mounted drilling rig equipped with an 8 inch hollow stem auger. One shallow boring was converted to a borehole percolation test to evaluate infiltration feasibility. An MTGL engineer logged the borings and collected samples of the encountered materials for geotechnical laboratory testing. Selected samples were tested in our laboratory to evaluate their engineering properties.

As encountered in our borings, the site is underlain by undocumented fill (Qf), colluvium (Qoc), old paralic deposits (Qop) and Topanga Formation (Tt). Undocumented fill was encountered in each of the borings, excluding Boring P-1, beneath the existing pavement section and extended to depths ranging from approximately 2 to 7 feet BGS. As encountered, the fill generally consisted of various shades of brown, loose to medium dense, fine to coarse grained, silty to clayey sand, and stiff, sandy clay, with variable amounts of gravel, cobbles, rootlets, and debris. Colluvium was encountered in each of the borings, excluding Boring HA-3, either beneath the exiting pavement section or beneath the fill and extended to depths ranging from approximately 5 to 13 feet BGS. As encountered, the colluvium generally consisted of various shades of brown, loose to dense, fine to medium grained, silty to clayey sand. Old paralic deposits were encountered beneath the fill and/or colluvium in each of the borings and extended to the maximum depth explored, excluding Boring B-2. As encountered, the old paralic deposits generally consisted of various shades of brown, gray and olive, medium dense to very dense, silty to clayey sands, and very stiff to hard clays. Topanga Formation was encountered beneath the old paralic deposits in Boring B-2 at a depth of approximately 40 feet BGS and extended to the maximum depth explored. As encountered, the Topanga Formation generally consisted of light gray to olive, moderately cemented, fine to medium grained, silty sandstone.

The main geotechnical considerations affecting the project are the potential for cut/fill transitions below the proposed pool, the presence of potentially compressible and expansive undocumented fill soils, and the presence of existing retaining walls near the proposed two-story building and pool. To reduce the potential for settlement, the existing undocumented fill and colluvium should be excavated in their entirety below buildings, pools, and other settlement sensitive improvements. Areas to receive proposed structures and the new pool area should be graded in a manner that removes any existing cut/fill transitions and reduces the potential for new cut/fill transitions to develop during grading.

To reduce the potential for expansive heave, shallow foundations, concrete slabs-on-grade, pool shells, pavements, and hardscapes, should be underlain by at least 2 feet of material with an expansion index of 50 or less. Additionally, retaining walls and fill abutting the proposed pool shell should consist of granular, free draining, non-expansive materials.

In general, conventional shallow spread footings bearing entirely on compacted fill may be used for the support of the proposed structures. Proposed pole-type structures may be supported on Cast-In-Drilled-Hole (CIDH) deep foundations. Special care should be taken by the contractor to protect the existing retaining walls and foundation elements along the perimeter of the site and near proposed improvements during the demolition of existing improvements and construction of new improvements.

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ATTACHMENTS:

1.00 INTRODUCTION

In accordance with your request and authorization, MTGL, Inc. has completed a geotechnical investigation for the subject site. The following report presents a summary of our findings, conclusions and recommendations based on our field investigation, laboratory testing, and engineering analysis.

1.01 SITE DESCRIPTION

The project site is located within the central portion of the city of Laguna Beach, California. The site is comprised of one parcel, APN No. 641-363-10, at the address of 670 Park Avenue, which contains the existing parking lot area, pool and pool deck area, and tennis court area. The site is bounded by Manzanita Drive and single-family residences to the west and north, tennis courts and single-family residences to the east, and Park Avenue to the south. Currently, the existing improvements at the site, which will be replaced as part of the project, generally include a parking lot located in the southwestern part of the site, a pumphouse building situated between the parking lot and the existing pool, a pool house/restroom building to the south of the pool, the existing pool and pool deck, concrete hardscape, and storage areas. Existing improvements at the site that are anticipated to remain in place during the pool replacement project consist of various single and multi-tiered retaining walls around the perimeter of the existing pool area and parking lot, a school district-owned building north of the pool area, and tennis courts and retaining walls to the east of the pool area.

Topography at the parking lot and pool deck areas is relatively flat and gently descends towards the southwest. However, the perimeter of site is generally bounded on the north, west, and east by ascending retaining walls. Specifically, the northern perimeter of the existing parking lot area is bound by a tiered retaining wall that ascends approximately 10 to 15 feet in height to a private residence toward the north. The western portion of the existing pool area is bound by an approximate 7 foot high retaining wall that ascends to the backyard of a private residence toward the west. The northern perimeter of the existing pool area is bound by an existing retaining wall that ascends approximately 12 to 15 feet in height to the district-owned building toward the north. Additionally, a staircase at the northeastern perimeter of the pool deck area ascends approximately 20 feet to the district-owned annex building and Manzanita Drive toward the north. The eastern perimeter of the pool area is bound by an approximately 5 feet high retaining wall ascending to the tennis court area toward the east. Multi-tiered retaining walls and retaining structures are located north of the existing tennis courts, ascending approximately 20 to 30 feet in height toward Manzanita Drive to the north, however, these improvements are anticipated to remain in place during the pool replacement project.

Elevations at the pool deck and parking lot areas range from approximately 182½ feet above mean sea level (MSL) at the northeastern portion of the pool deck to approximately 163 feet MSL at the southwestern portion of the parking lot (Google Earth, 2024). Based on our review of historic aerial photographs, the site was developed to its existing configuration between 1993 and 1994. The approximate site location is shown on the Site Location Map (Figure 1). The topography within the vicinity of the site is shown on the Site Topography Map (Figure 2).

1.02 PLANNED CONSTRUCTION

Based on our review of the provided conceptual plan, project summary, and conversations with the project development team, we understand this project currently proposes demolishing the existing main pool facility building, pump house, pool, and pool deck, as well as the parking lot. The proposed design includes a new a two-story pool building, pool and pool deck, bleachers, parking lot, restrooms and showers, equipment storage areas, shade structures with solar panels, scoreboard, and light poles. Associated civil improvements may include new utilities, sidewalks, driveways, shallow storm water best management practices (BMPs), and other auxiliary features. The total square footage of the new pool building will be approximately 6,667 square feet, with the foundation level having a footprint on the order of 3,400 square feet. Proposed surface elevations of the new pool deck and parking lot areas are anticipated to be within approximately 18 inches of existing surface elevations.

1.03 SCOPE OF WORK

We conducted this investigation in general conformance with the scope of work presented in our proposal No. P-24-062. The scope of our geotechnical services included the following:

- Reviewing readily available literature and maps to obtain background information of regional geology, site development, seismicity, and groundwater.
- Preparing applications for and obtaining well drilling permits from the Orange County Environmental Health Division (EHD).
- Marking out boring locations on the site and contacting Underground Service Alert (USA) to locate onsite utility lines.
- Utilizing a private utility locator service to clear borings of potential underground utility conflicts.
- Drilling, logging, and sampling of six exploratory borings using hand tools and an 8 inch hollow stem auger drill rig to a maximum depth of 51½ feet below ground surface (BGS).
- Converting one shallow boring to a borehole percolation test.
- Performing one borehole percolation test.
- Performing laboratory testing of select samples.

- Performing geotechnical engineering review of compiled data and performing geotechnical engineering analyses.
- Preparing this report summarizing our findings and presenting our conclusions and recommendations for the proposed construction.

1.03.1 FIELD INVESTIGATION

Prior to performing our field investigation, a site reconnaissance was performed by an MTGL engineer to observe the existing surface conditions, mark the proposed boring locations, evaluate each location with respect to obvious subsurface structures and determine access for the drilling rig. USA was subsequently notified of the marked locations for utility clearance as required by law. In addition, a private utility locator, Advantage Geophysics, was subcontracted to locate and mark potential utility conflicts. A well drilling permit was obtained from the Orange County EHD prior to commencement of drilling activities.

Our subsurface investigation was performed between August 15th and 16th, 2024, and consisted of drilling six exploratory soil borings within areas of proposed improvements. The six borings (B-1, B-2, P-1, and HA-1 through HA-3) were drilled to depths ranging from approximately 8½ to 51½ feet BGS using hand tools and a truck mounted drilling rig equipped with an 8 inch hollow stem auger. See Appendix B for further discussion of the field exploration and logs of test borings. Figure 3 attached presents a Subsurface Exploration Map.

MTGL engineers logged the borings and collected samples of the encountered materials for geotechnical laboratory testing. Representative disturbed bulk soil samples were obtained from the borings in the upper five feet. In-situ testing, including driving Modified California (CAL) and Standard Penetration Test (SPT) samplers at selected depth intervals, was performed and relatively undisturbed samples were obtained. Samplers were driven into the bottom of the boring with successive drops of a 140-pound weight falling 30 inches. The energy-corrected number of blows per foot required to drive the CAL and SPT samplers are shown on the boring logs in the N_{60} column (Appendix B). A conversion factor of 0.65 was used to normalize N_{60} values obtained by Modified California samplers (Burmister, 1948). SPTs were performed in general accordance with the American Society for Testing and Materials (ASTM) D1586 standard test method.

Soil samples were inspected and described in general conformance with the Unified Soil Classification System (USCS). Samples were sealed and packaged for transportation to our geotechnical laboratory. After completion of drilling, the borings were backfilled with cement slurry in accordance with EHD requirements and patched where appropriate.

1.03.2 PERCOLATION TESTING

MTGL conducted a preliminary infiltration feasibility study at the site on August 16th, 2024. One shallow boring (P-1) was drilled to a depth of approximately 8½ feet BGS using hand tools and converted to a borehole percolation test to evaluate infiltration feasibility. The boring was prepared and tested by an MTGL engineer in general accordance with methods outlined in the Orange County BMP Design Manual and Technical Guidance Document (Santa Ana Regional Water Quality Control Board, 2013). To prevent caving, a 3-inch diameter perforated pipe with an annular gravel pack was placed in the borehole. The test results of the percolation test are summarized in Section 4.11 Preliminary Infiltration Feasibility and in Appendix F.

1.03.3 LABORATORY TESTING

Laboratory testing was performed on select samples to verify the field classification of the recovered samples and evaluate the geotechnical properties of the subsurface materials. Laboratory tests were performed in general conformance with applicable ASTM or State of California Department of Transportation (Caltrans) standard methods. The results of our laboratory tests are presented in Appendix C.

1.03.4 GEOTECHNICAL ANALYSIS AND REPORT PREPARATION

This report was prepared to present our geotechnical conclusions and recommendations based on the findings of the background review, field exploration, laboratory testing, and geotechnical analysis of the compiled data.

2.00 FINDINGS

The following sections present our findings of our office research, field investigation, and laboratory testing.

2.01 REVIEW OF HISTORIC AERIAL PHOTOGRAPHS

Our review of historic aerial photographs and historic topographic maps indicates that construction of the existing pool facility to be replaced was completed between 1992 and 1994. Prior to 1992, the site was occupied by two buildings that were constructed before 1938. The site remained relatively unchanged between 1938 and 1992, with the exception of the construction of the tennis courts to the east of the existing pool facility and the district-owned annex building to the north of the existing pool facility between 1972 and 1980.

2.02 GEOLOGIC SETTING

The site is located within the Peninsular Ranges Geomorphic Province of California, which stretches from the Los Angeles basin to the tip of Baja California in Mexico. This province is characterized as a series of northwest trending mountain ranges separated by subparallel fault zones, and a coastal plain of subdued landforms. The mountain ranges are underlain primarily by Mesozoic metamorphic rocks that were intruded by plutonic rocks of the southern California batholith, while the coastal plain is underlain by subsequently deposited marine and non-marine sedimentary formations. The site is located within the coastal plain portion of the province. Based on geologic mapping (Morton & Miller, 2006), the site is underlain by undocumented fill, colluvium, old paralic deposits, and Topanga Formation. Figure 4 presents a map of regional geology within the vicinity of the site.

2.03 SUBSURFACE CONDITIONS

As encountered in our borings, the site is underlain by undocumented fill (Qf), colluvium (Qoc) old paralic deposits (Qop), and Topanga Formation (Tt). Materials encountered in our borings are generally consistent with the mapped geologic units presented by Morton and Miller, (2006). Figures 5A and 5B present Geologic Cross Sections A-A’ and B-B’, respectively. Descriptions of the materials encountered in the borings are presented below. Additional descriptions of materials encountered are presented on the boring logs in Appendix B.

> **Undocumented Fill (Qf)** – Undocumented fill was encountered in each of the borings (excluding Boring P-1) beneath the pavement section and extended to depths ranging from approximately 2 to 7 feet BGS. As encountered, the fill generally consisted of various shades of brown, loose to medium dense, fine to coarse grained, silty to clayey sand, and stiff, sandy clay, with variable amounts of gravel, cobbles, rootlets, and debris.

No documentation regarding the placement of the existing fill underlying the site was available at the time of this report. Therefore, the fill is considered undocumented and unsuitable for the support of proposed structures.

Colluvium (Qoc) – Colluvium was encountered in each of the borings (excluding Boring HA-3) either beneath the pavement section or beneath the fill and extended to depths ranging from approximately 5 to 13 feet BGS. As encountered, the colluvium generally consisted of various shades of brown, loose to dense, fine to medium grained, silty to clayey sand.

Old paralic deposits (Qop) – Late to middle Pleistocene-age old paralic deposits were encountered beneath the fill and colluvium in each of the borings. These materials were observed to extend to the total depths explored in each of the borings, excluding Boring B-2, in which the deposits were observed to extend to a depth of approximately 40 feet BGS. As encountered, the old paralic deposits generally consisted of various shades of brown, gray and olive, medium dense to very dense, silty to clayey sands, and very stiff to hard clays. The deposits encountered were fine to coarse grained, oxidized, laminated, micaceous, and contained variable amounts of manganese nodules and calcium carbonate nodules.

Topanga Formation (Tt) – Miocene-age Topanga Formation was encountered beneath the old paralic deposits in Boring B-2 at a depth of approximately 40 feet BGS and extended to the maximum depth explored. As encountered, the Topanga Formation generally consisted of light gray to olive, moderately cemented, fine to medium grained, silty sandstone. The deposits encountered were oxidized and contained laminations.

A summary of boring locations and pertinent data for each boring are presented in the table below.

SUMMARY OF SUBSURFACE SOIL CONDITIONS

Boring No.	Drilled Depth (Feet)	Latitude (Degrees)	Longitude (Degrees)	Surface Conditions*	Existing Ground Elevation (Feet)**	Approximate Thickness of Fill (Feet)	Groundwater Depth Below Ground Surface (Feet)
B-1	21½	33.54229	-117.77630	AC	168½	2	Not Encountered
B-2	51½	33.54218	-117.77625	AC	171½	2½	Not Encountered
P-1	8½	33.54218	-117.77653	AC	165	Not Encountered	Not Encountered
HA-1	15	33.54257	-117.77580	PCC	182	6	Not Encountered
HA-2	15½	33.54253	-117.77606	PCC	182	7	Not Encountered
HA-3	10	33.54218	-117.77578	Soil	181½	6	Not Encountered

*PCC – Portland Cement Concrete, AT – Artificial Turf, AC – Asphalt Concrete, DG – Decomposed Granite
**Elevation data based on survey by JL Surveying (2022)

2.04 SURFACE AND GROUNDWATER CONDITIONS

Groundwater was not encountered in the borings. No areas of ponding or standing water were present at the time of our study. Further, no springs or areas of natural seepage were found. Additionally, no visible seepage was observed within the borehole after approximately one hour after drilling.

Based on our review of readily available data, historic groundwater in the immediate site vicinity is estimated to be at a depth greater than approximately 30 feet BGS (CGS, 1997). We do not anticipate groundwater to be encountered during the proposed construction. However, changes in rainfall, irrigation and local drainage may produce seepage or perched groundwater conditions below the site. These conditions are generally difficult to predict and typically mitigated if and when they occur.

2.05 GEOLOGIC HAZARDS

Geologic hazards are summarized and discussed with respect to the site and proposed development below.

2.05.1 STRONG GROUND MOTION AND MAPPED SEISMIC DESIGN PARAMETERS

A geologic hazard likely to affect the project is ground shaking as a result of movement along an active fault zone in the vicinity of the subject site (USGS, 2024). Based on the average field standard penetration resistance ($\bar{N}$) measured in Boring B-2, the site may be classified as Site Class D. The mapped site coefficients and maximum considered earthquake (MCER) spectral response acceleration parameters for this site class and location in accordance with the 2022 CBC are presented below:

2022 California Building Code – Mapped Site Coefficients

Site Coordinates	
Latitude	**Longitude**
33.5423°	-117.7762°
Site Coefficients and Spectral Response Acceleration Parameters	**Values**
Site Class	D
Site Coefficients, F_a	1.0
Site Coefficients, F_v	Null*
Mapped Spectral Response Acceleration at Short Period, S_s	1.319 g
Mapped Spectral Response Acceleration at 1-Second Period, S_1	0.468 g
Mapped Design Spectral Acceleration at Short Period, S_{DS}	0.879 g
Design Spectral Acceleration at 1-Second Period, S_{D1}	Null*
Peak Ground Acceleration, *PGA*	0.577 g
Site Modified Peak Ground Acceleration, PGA_m	0.635 g

* A site-specific seismic hazard analysis is required per Section 11.4.8 of ASCE 7-16 and should be performed for Site Class D sites with S_1 values greater than or equal to 0.2g unless exceptions are taken in which the values of S_{M1} and S_{D1} are

increased by 50%. If exceptions are taken, then an F_v value of 1.7 may be used in accordance with Table 11.4-2 of ASCE 7-16 Supplement 3 (per the 2022 CBC).

2.05.2 SITE SPECIFIC GROUND MOTION HAZARD ANALYSIS

For a site class D, a site-specific ground motion analysis is required to be performed in accordance with the requirements of 2022 CBC and ASCE 7-16. As part of the site-specific analysis, base ground motions were evaluated with both a Probabilistic Seismic Hazard Analysis (PSHA) and a Deterministic Seismic Hazard Analysis (DSHA) to characterize earthquake ground shaking that may occur at the site during future seismic events.

The PSHA is based on an assessment of the recurrence of earthquakes on potential seismic sources in the region and on ground motion prediction models of different seismic sources in the region. The United States Geological Survey (USGS) unified hazard analysis tool was used to develop a seismic hazard curve and the USGS risk targeted ground motion calculator was used to analyze ground motions for corresponding periods. Maximum directional scale factors were applied to the results.

The DSHA is represented by the 84th percentile of the spectral accelerations for different periods using Pacific Earthquake Engineering Research Center's (PEER) Next Generation Attenuation West-2, Ground Motion Prediction Equations (NGA West 2 GMPE) tool. Fault parameters including the magnitude and width required for the NGA West 2 GMPE tool were obtained from the USGS Uniform California Earthquake Rupture Forecast, Version 3 (UCERF3) model. After applying maximum directional scale factors appropriate for each period, the maximum directional deterministic model specific to the site was developed.
Based on the PSHA and DSHA models, the Site-Specific Risk-Targeted Maximum Considered Earthquake (MCER) was taken as the lesser of the spectral response accelerations from the PSHA and DSHA. The design response spectrum and design acceleration parameters were calculated in accordance with the procedures of ASCE 7-16. The site coefficients and maximum considered earthquake spectral response acceleration parameters are presented below. Tabulated values and graphical plots are included in Appendix E.

ASCE 7-16 SITE SPECIFIC SEISMIC PARAMETERS

Site Coefficients and Spectral Response Acceleration Parameters	Values
Site Class	D
Site Coefficient, F_a	1.0
Site Specific Site Coefficient, F_v	2.5
Site Specific Spectral Response Acceleration at Short Period, S_s	1.547 g
Site Specific Spectral Response Acceleration at 1-Second Period, S_1	0.526 g
Site Specific Design Spectral Acceleration at Short Period, S_{DS}	1.031 g
Site Specific Design Spectral Acceleration at 1-Second Period, S_{D1}	0.877 g
Site Specific Peak Ground Acceleration, PGA	0.628 g

2.05.3 HISTORIC EARTHQUAKES

The site is located in a seismically active area, as is the case throughout the majority of southern California. At this time, it is not possible to state with certainty when or where future large-magnitude earthquakes will occur, or what the magnitude or intensity of these events will be. Historic earthquakes that have occurred within approximately 60 miles (100 kilometers) of the site are summarized in the table below.

The nearest of these historic earthquakes was the magnitude 6.4 Long Beach earthquake of March 11th, 1933. Its epicenter was located approximately 15 miles northwest of the project site. The causative fault (Newport-Inglewood-Rose Canyon fault zone) is confirmed by the USGS. Our research of regional geologic and seismic data did not reveal any known instances of ground failure associated with regional seismic activity within the project site as a result of the earthquake.

HISTORIC SEISMICITY

Site Coordinates			
Latitude		Longitude	
33.5423°		-117.7762°	
Date	**Event/Location**	**Magnitude (M_W)**	**Epicentral Distance From Site (Miles)**
November 22nd, 1800	Catalina	6.3	45
July 11th, 1855	San Gabriel	6.0	43
December 8th, 1812	Wrightwood	7.5	58
December 16th, 1858	San Bernardino	6.0	51
July 30th, 1894	Lytle Creek	6.2	54
July 22nd, 1899	Cajon Pass	6.4	55
December 25th, 1899	San Jacinto	6.7	49
April 21st, 1918	Hemet	6.7	50
July 23rd, 1923	San Bernardino	6.2	49
March 11th, 1933	Long Beach	6.4	15

2.05.4 ACTIVE FAULTING AND FAULT-RUPTURE HAZARD

The closest known active fault is the Newport-Inglewood-Rose Canyon Fault zone (Dana Point Section) located approximately 2½ miles southwest of the project site (USGS, 2024). Other regional faults capable of generating seismic hazards include the Palos Verdes, Coronado Bank, San Diego Trough, Catalina Ridge, and San Clemente fault zones to the southwest and the San Joaquin Hills Thrust, Elsinore, San Jacinto, and San Andreas fault zones to the northeast. The site is not mapped as being located within an Alquist-Priolo Earthquake Fault Zone. Based on our review of the referenced fault data bases and geologic maps, no active faults are known to underlie or project toward the site; therefore, the probability of fault rupture at the site is considered low. The Temple Hills Fault is mapped as underlying the northern perimeter of the site; however, the Temple Hills Fault is not considered to be a Holocene-active fault by USGS.

2.05.5 LIQUEFACTION AND DYNAMIC SETTLEMENT

Liquefaction occurs when loose, saturated sands and silts are subjected to strong ground shaking. The soils lose shear strength and behave like a liquid, resulting in ground surface settlements. Additional effects of liquefaction include possible lateral spreading and liquefaction-induced bearing failure during an earthquake. Due to the relatively dense materials underlying the site and the lack of a shallow groundwater table, the potential for liquefaction to affect the site is considered low. Additionally, the site is not mapped as being located within a zone of required investigation for liquefaction hazard (CGS, 1998) (see Figure 7).

2.05.5.1 BEARING FAILURE

When liquefaction occurs, the soil can completely lose its shear strength and lose its capacity to support structures resulting in a foundation bearing failure. Lightweight structures which are embedded into liquefiable soil and extend below the groundwater table contain large void spaces which may “float” or lift up and out of the ground surface during or after an earthquake. Based on the low potential for liquefaction to affect the site, the potential for bearing capacity failure due to liquefaction is considered low.

2.05.5.2 LATERAL SPREADING (LATERAL DISPLACEMENT)

Lateral spreading is a condition where a relatively stiff block of soil moves laterally toward a free face or slope on a liquefied zone of subsurface soil. Lateral spreads generally develop along gentle slopes and move toward a free face such as an incised river channel. Lateral spreads can cause significant horizontal movement causing fissures, and scarps to develop at the surface. Lateral spreads have been observed to disrupt foundations located across a failure, to rupture sewers, pipelines and other utilities and compress or buckle structures at the toe of the spread. Due to the site being relatively flat, and the low potential for liquefaction to affect the site, the potential for lateral spreading is considered negligible.

2.05.5.3 LIFELINE HAZARDS

Liquefaction, lateral spreading, and seismically induced settlement of structures may also pose problems for streets and lifelines. Specifically, natural gas pipelines may break and catch fire during an earthquake and water lines may break preventing firefighters from accessing water. Therefore, consideration should be given to providing isolated and flexible connections for gas and water utility lines as a preventive measure.

2.05.6 TSUNAMIS, SEICHES, AND FLOODING

The site is not mapped as being located within an area mapped by the California Geological Survey as subject to inundation by tsunami (State of California, 2021). Therefore, the potential for a tsunami to affect the site is considered low.

Seiches are periodic oscillations in large bodies of water such as lakes, harbors, bays, or reservoirs. The site is not located adjacent to any confined bodies of water; therefore, the potential for a seiche to affect the site is considered low.

The site is not mapped as being located within a flood hazard area as identified by FEMA flood hazard maps. According to the Flood Insurance Rate Map (FIRM), the site is mapped as being located within an area designated as Zone X (FEMA, 2019). Zone X is defined as an area of minimal flood hazard.

2.05.7 LANDSLIDES AND SLOPE STABILITY

As described in Section 1.01 of this report, the perimeter of site is generally bound on the north, west, and east by ascending retaining walls that are anticipated to remain in place during the pool replacement project. Adequate setbacks from the face of wall and foundation elements at the locations described in Section 1.01 should be achieved at new building foundation bearing depths and pool excavation bottoms to mitigate potential slope and retaining wall instability.

Based on our review of available documentation, no landslides have been mapped within the project boundaries. No evidence of landslides was observed during our site reconnaissance and subsurface investigation. Additionally, the site is not mapped as being located within a zone of required investigation for landslide hazard (CGS, 1998) (see Figure 7). Therefore, the potential for landslides to affect the site is considered low.

2.05.8 SUBSIDENCE

The site is not mapped as being located in an area of known subsidence associated with fluid withdrawal (groundwater or petroleum) (USGS, 2024); therefore, the potential for subsidence due to the extraction of fluids is considered negligible.

2.05.9 HYDRO-CONSOLIDATION

Hydro-consolidation can occur in recently deposited sediments (less than 10,000 years old) that were deposited in a semi-arid environment. Examples of such sediments are aeolian sands, alluvial fan deposits, and mudflow sediments deposited during flash floods. The pore spaces between the particle grains can re-adjust when inundated by groundwater causing the material to consolidate. Loose and uncompacted fill materials can also be susceptible to collapse upon wetting. The relatively dense formational materials underlying the site are not considered susceptible to hydro-consolidation.

3.00 CONCLUSIONS

3.01 GENERAL CONCLUSIONS

Based on our geotechnical review of the planned construction, it is our opinion that the site is suitable for the proposed construction provided our conclusions and recommendations are taken into consideration during design, are incorporated into the project's plans and specifications, and are implemented during grading and construction. The recommendations presented herein may need to be updated once final plans are developed.

The main geotechnical considerations affecting the project are the potential for cut/fill transitions below the proposed pool, the presence of potentially compressible and expansive undocumented fill soils, and the presence of existing retaining walls near the proposed two-story building and pool. To reduce the potential for settlement, the existing undocumented fill and colluvium should be excavated in their entirety below buildings, pools, and other settlement sensitive improvements. Areas to receive proposed structures and the new pool area should be graded in a manner that removes any existing cut/fill transitions and reduces the potential for new cut/fill transitions to develop during grading.

To reduce the potential for expansive heave, shallow foundations, concrete slabs-on-grade, pool shells, pavements, and hardscapes, should be underlain by at least 2 feet of material with an expansion index of 50 or less. Additionally, retaining walls and fill abutting the proposed pool shell should consist of granular, free draining, non-expansive materials.

In general, conventional shallow spread footings bearing entirely on compacted fill may be used for the support of the proposed structures. Proposed pole-type structures may be supported on Cast-In-Drilled-Hole (CIDH) deep foundations. Special care should be taken by the contractor to protect the existing retaining walls and foundation elements along the perimeter of the site and near proposed improvements during the demolition of existing improvements and construction of new improvements.

4.00 RECOMMENDATIONS

The following recommendations are provided to address the geotechnical aspects of this project and are considered minimum. They may be superseded by more conservative requirements of the architect, structural engineer, building code, or governing agencies. In addition to the recommendations in this section, additional general earthwork and grading specifications are included in Appendix D.

4.01 EARTHWORK

4.01.1 SITE PREPARATION AND CLEARING

Site preparation should begin with the removal of existing structures or improvements, surface vegetation, trash, and debris. Abandoned underground improvements such as utility pipes and tanks should be removed from the site and capped or rerouted at the project perimeter. Resulting excavations should be backfilled and compacted in accordance with the recommendations provided in this report.

Removal of underground tanks is subject to state law as regulated by the County, City, and/or Fire Department. If storage tanks containing hazardous or unknown substances are encountered, the proper authorities must be notified prior to any attempts at removing such objects. If water wells are encountered during construction, they should be exposed and capped in accordance with the requirements of the regulating agencies.

4.01.2 EXCAVATION CHARACTERISTICS

Based on the materials encountered during our investigation, it is anticipated that excavations can be achieved with conventional heavy duty earthwork equipment in good working order. Difficult excavations should be anticipated in the existing parking lot where very dense and potential cemented aggregate base layers were encountered below the pavements. Additionally, difficult excavations may occur in very dense and/or cemented zones of the old paralic deposits and Topanga formation. Rock breakers, carbide tipped augers, or carbide/diamond tipped coring equipment may be required to excavate/drill very dense materials. Gravel and cobbles should also be anticipated. Contract documents should specify that the contractor mobilize equipment capable of excavating and compacting strongly cemented materials. Excavation sidewall instabilities or raveling may also develop in zones of low cohesion materials.

4.01.3 REMOVALS AND OVER-EXCAVATIONS

Recommendations for over-excavation of the existing materials are provided for the building areas supported on shallow foundations, pool areas, and non-structural areas. Structural plans were not available at the time of our investigation. Therefore, once formal plans are prepared and available for review, this office should review these plans from a geotechnical viewpoint, comment on any changes, and revise the recommendations of this report, if necessary.

4.01.3.1 STRUCTURES SUPPORTED ON CONVENTIONAL FOUNDATIONS

Existing undocumented fill and colluvium should be excavated in their entirety beneath the proposed buildings and other settlement sensitive structures to expose competent old paralic deposits. Over-excavations on the order of approximately 5 to 6 feet are anticipated below the proposed building areas. In addition, over-excavations should extend a minimum depth of 2 feet below proposed foundation bottoms. Over-excavations should extend a minimum lateral distance of 2 feet outside the planned structures and settlement-sensitive improvements, or up to existing improvements, whichever is less. Additionally, the proposed structures should not be underlain by cut/fill transitions.

4.01.3.2 SWIMMING POOL

Existing undocumented fill and colluvium below the proposed pool should be excavated in their entirety to expose competent old paralic deposits. Over-excavations should extend a minimum depth of 2 feet below the bottom of the proposed pool shell/foundation. Given the difference in size and depth between the existing and proposed pools, there is potential for cut/fill transitions to develop during future demolition and earthwork operations. To reduce the potential for differential settlement, the over-excavation for the new pool should provide a uniform thickness of compacted fill below new pool bottom. Over-excavations on the order of approximately 13 feet are anticipated in the swimming pool area. The horizontal limits of excavation should extend a minimum distance of 2 feet outside the new pool perimeter.

4.01.3.3 NON-STRUCTURAL AREAS

Non-structural areas such as pavements, sidewalks, and other miscellaneous flatwork areas will require a minimum depth of 1 foot of removal and re-compaction below the lowest adjacent grade or bottom of bearing elevation. Excavation for hardscape areas should extend a minimum distance of 2 feet outside the hardscape limits.

The exposed soils beneath over-excavation and in cut areas not otherwise requiring over-excavation should be scarified to a minimum depth of 8 inches, moisture conditioned and compacted to a minimum of 90% relative compaction.

The above recommendations are based on the assumption that soils encountered during field exploration are representative of soils throughout the site. Removal and over-excavation depths must be verified, and adjusted if necessary, at the time of grading.

4.01.4 FILL MATERIALS

Removed and/or over-excavated soils, except for expansive soils, roots, debris, and rocks greater than 4 inches, may be used as compacted fill. Fill materials within the upper 12 inches of the new pool bottom should not contain rocks, debris, or fragments of material greater than 3 inches in largest dimension. Concrete slabs, foundations, and pool bottoms should be underlain by at least 2 feet of material with an expansion index of 20 or less as determined by ASTM D4829. We anticipate that most of the predominantly granular materials onsite will meet this expansion index criteria. Onsite clays, such as those encountered in the upper portions of the existing parking lot, are not anticipated to meet the expansion index criteria.

Prior to placing fill, exposed surfaces at the bottom of the excavations should be scarified to a depth of 8 inches, moisture conditioned to near optimum moisture content, and compacted to at least 90% relative compaction. Fill should be placed in horizontal lifts at a thickness appropriate for the equipment spreading, mixing, and compacting the material, but generally should not exceed 8 inches in loose thickness. Fill should be moisture conditioned to near optimum moisture content and compacted to at least 90% relative compaction. The upper 2 feet of fill beneath the new pool bottom should be moisture conditioned to near optimum moisture content and compacted to at least 95% relative compaction. Fill should be benched into sloping ground inclined steeper than 5:1 (horizontal to vertical). The maximum dry density and optimum moisture content for evaluating relative compaction should be determined in accordance with ASTM D1557.

Utility trench backfill beneath structures, pavements and hardscape should be compacted to at least 90% relative compaction. The upper 12 inches of subgrade beneath pavements should be compacted to at least 95%.

4.01.5 EXPANSIVE SOILS

Laboratory test results indicate onsite soils have an expansion index of 61, classified as having a medium expansion potential. To reduce the potential for expansive heave, soils with an expansion index greater than 20 should be removed from the upper 2 feet of planned structures, pools, and hardscape areas. Predominantly granular material having an expansion index of 20 or less should be used as replacement fill. We anticipate that most of the predominantly granular materials onsite will meet this expansion index criteria. Onsite clays, such as those encountered in the upper portions of the existing parking lot, are not anticipated to meet the expansion index criteria.

4.01.6 IMPORTED SOILS

Imported fill material, if needed, should consist of predominantly granular soils, free of organic matter and rocks greater than 4 inches, with a very low expansion potential (i.e., an expansion index [EI] of 20 or less). Import fill material should be considered non-corrosive as defined by the Caltrans (2018) corrosion guidelines. Non-corrosive soils typically possess an electrical resistivity of more than 1,100 ohm-centimeters (ohm-cm), a chloride content less than 500 parts per million (ppm), less than 0.15% sulfates, and a pH more than 5.5. Materials for use as fill should be evaluated by MTGL's representative prior to filling or importing. MTGL should be afforded sufficient time to visually access, sample, and test proposed import materials prior to delivery on site. To reduce the potential of importing contaminated materials to the site, prior to delivery, soil materials obtained from offsite sources should be sampled and tested in accordance with governing standards of practice. Soils that exhibit a known risk to human health, the environment, or both, should not be imported to the site.

4.01.7 OVERSIZED MATERIALS

Excavations may generate oversized material. Oversized material is defined as rocks or cemented clasts greater than 4 inches in largest dimension. Oversized material should be broken down to no greater than 4 inches in largest dimension for use in engineered fill, used as landscape material, or disposed of off-site. Fill materials within the upper 12 inches of the new pool bottom should not contain rocks, debris, or fragments of material greater than 3 inches in largest dimension.

4.01.8 TEMPORARY EXCAVATIONS

Temporary excavations 4 feet deep or less can generally be made vertically. Deeper temporary excavations should be laid back no steeper than 1½:1 (horizontal: vertical), up to a maximum depth of 20 feet. The faces of temporary slopes should be inspected daily by the Contractor's Competent Person before personnel are allowed to enter the excavation. Zones of potential instability, sloughing, or raveling should be brought to the attention of the engineer and corrective action implemented before personnel begin working in the excavation. Excavated soils should not be stockpiled behind temporary excavations within a distance equal to the depth of the excavation. MTGL should be notified if other surcharge loads are anticipated so that lateral load criteria can be developed for the specific situation. If temporary slopes are to be maintained during the rainy season, berms and other runoff diverting measures are recommended along the tops of slopes to prevent runoff water from entering the excavation, eroding the slope faces, or causing seepage issues.

Temporary slopes and excavations should be made in conformance with applicable OSHA standards and requirements. Based on the results of our investigation, the subsurface materials can predominately be categorized as Type C soil.

Slopes steeper than those described above will require shoring. Additionally, temporary excavations that extend below a plane inclined at 1½:1 (horizontal:vertical) downward from the outside bottom edge of existing structures or improvements will require shoring. Soldier piles and lagging, internally braced shoring or trench boxes could be used. If trench boxes are used, the soil immediately adjacent to the trench box is not directly supported. Ground surface deformations immediately adjacent to the pit or trench could be greater where trench boxes are used compared to other methods of shoring that actively resist earth pressures.

4.01.9 EXCAVATIONS NEAR EXISTING STRUCTURES

Temporary excavations near existing structures should be performed with special care. Trench excavations, utility installation, and over-excavations for remedial grading should not be allowed within a 2:1 (horizontal: vertical) projection from 9 inches above the bottom of an existing or proposed foundation, as described in 2022 CBC 1809A.14, unless such case is reviewed by the project’s geotechnical engineer. Temporary excavations above such projections are anticipated to be acceptable provided they conform to the recommendations in Section 4.01.8. Instances where an excavation is planned to extend below the projections described above should be reviewed on a case-by-case basis by the project’s geotechnical engineer.

Where remedial grading operations may compromise the support of existing foundations, excavations may take place by making a series of adjacent slot-cut excavations perpendicular to the adjacent structure in a sequential A-B method. Subsequent sections (B sections) should not be excavated until the remedial earthwork of the adjacent sections (A sections) are complete. The applicability of slot-cuts will depend on the conditions encountered (such as the depth of excavation, the lateral distance from the adjacent structure, the depth of the adjacent foundations, etc.). In general, the length of slot-cuts should be limited to 4 feet or 1/3 of the adjacent footing’s width, whichever is less. Cuts deeper than 5 feet should be reviewed by MTGL prior to excavation. More stringent requirements may be necessary based on the observed site conditions at the time of excavation. The excavations should be no deeper than necessary to complete the work and should be completed as soon as possible. In no case should slot-cuts remain open for more than 24 hours. Backfill of slot-cut excavations should be compacted to a minimum of 95% relative compaction as determined by ASTM test method D1557.

4.01.10 TEMPORARY SHORING

For design of cantilevered shoring, an active soil pressure equal to a fluid weighing 40 pcf can be used for level retained ground or 60 pcf for 2:1 (horizontal:vertical) sloping ground. The surcharge loads on shoring from traffic and construction equipment adjacent to the excavation can be modeled by assuming an additional 2 feet of soil behind the shoring.

For design of soldier piles, an allowable passive pressure of 350 psf per foot of embedment over 2.5 times the pile diameter or the spacing of the piles, whichever is less, up to a maximum of 4,500 psf can be used for soil above the groundwater level. An allowable passive pressure of 175 psf per foot of embedment over 2.5 times the pile diameter or the spacing of the piles, whichever is less, up to a maximum of 2,250 psf can be used for soil below the groundwater level. Hydrostatic pressure should be applied below the groundwater level.

Soldier piles should be spaced at least three pile diameters, center to center. Continuous lagging will be required throughout. The soldier piles should be designed for the full-anticipated lateral pressure; however, the pressure on the lagging will be less due to arching in the soils. For design of lagging, the earth pressures can be limited to a maximum value of 400 psf.

Installation of soldier piles below groundwater (or dewatered soil) will require special construction techniques and equipment, such as temporary casing and/or drilling slurry. Other installation methods may be available. If soldier piles are anticipated to extend to a depth greater than approximately 30 feet, contract documents should specify that the contractor mobilize equipment capable of installing piles below groundwater (or dewatered soil) in order to reduce the potential for claims of delays or extra work to occur.

Piles should be filled with concrete immediately after drilling. The concrete should be pumped to the bottom of the drilled holes using the tremie method. If casing is used, the casing should be removed as the concrete is placed, keeping the level of the concrete at least 5 feet above the bottom of the casing at all times.

4.01.11 SLOPES

All permanent slopes should be constructed no steeper than 2:1 (horizontal: vertical). Faces of fill slopes should be compacted either by rolling with a sheepsfoot roller or other suitable equipment or by overfilling and cutting back to design grade. Fills should be benched into sloping ground when inclined steeper than 5:1 (horizontal: vertical). It is our opinion that cut slopes constructed no steeper than 2:1 (horizontal: vertical) will possess an adequate factor of safety. An engineering geologist should observe all cut slopes during grading to ascertain that no unforeseen adverse geologic conditions are encountered that require revised recommendations.

Where buildings are planned near the top of a slope steeper than 3:1 (horizontal to vertical), special foundations or stabilization measures are recommended. Footings located adjacent to or within existing slopes should be deepened to a depth such that a minimum horizontal distance of H/3 (where H is the height of the slope) exists between the lower outside footing edge and the face of the slope.

All slopes are susceptible to surficial slope failure and erosion. Water should not be allowed to flow over the top of slope. Additionally, slopes should be planted with vegetation that will reduce the potential for erosion.

4.01.12 TEMPORARY DEWATERING

Groundwater seepage may occur locally due to local irrigation or following heavy rain. Temporary dewatering can be accomplished by sloping the excavation bottom to a sump and pumping from the sump. A layer of gravel about 6 inches thick placed in the bottom of the excavation will facilitate groundwater flow and can be used as a working platform.

A specialty dewatering contractor should be contacted for additional project-specific dewatering recommendations.

4.02 FOUNDATIONS

In general, conventional shallow spread footings or mat foundations bearing entirely on compacted fill may be used for the support of the proposed structures. Proposed pole-type structures may be supported on Cast-In-Drilled-Hole (CIDH) deep foundations. Special care should be taken by the contractor to protect the existing retaining walls and foundation elements along the perimeter of the site during demolition of existing improvements and construction of new improvements.

Our recommendations are only minimum criteria based on geotechnical factors and should not be considered a structural design, or to preclude more restrictive criteria of governing agencies or by the structural engineer. The foundation system should be designed by the project's structural engineer, incorporating the geotechnical parameters described herein and the requirements of applicable building codes.

The foundation recommendations provided herein are considered generally consistent with methods typically used in southern California, however, other alternatives may be available. Based on the results of our geotechnical investigation, recommendations for various foundation systems are presented in the following sections.

4.02.1 CONVENTIONAL SHALLOW FOUNDATIONS

The planned structures can be supported on shallow conventional spread and/or continuous footings bearing entirely on compacted fill. Over-excavation and re-compaction of foundation subgrade should be performed as recommended in Section 4.01.3. An allowable bearing capacity of 2,000 psf may be used to design the foundations. The bearing capacity can be increased by 250 psf for each foot of depth below the minimums listed below, up to a maximum of 3,500 psf. The bearing value can be increased by ⅓ when considering the total of all loads, including wind or seismic forces. Footings located adjacent to or within slopes should be extended to a depth such that a minimum horizontal distance of 7 feet or H/3 (where H is the height of the slope), which ever is greater, exists between the lower outside footing edge and the face of the slope.

The recommended minimum footing width and embedment depth below the lowest adjacent grade are as follows:

CONVENTIONAL SHALLOW FOUNDATIONS

Foundation Type	Minimum Width	Minimum Depth
Continuous (Interior)	12 inches	18 inches
Continuous (Perimeter)	12 inches	24 inches
Spread Footings	24 inches	24 inches

Lateral loads will be resisted by friction between the bottoms of footings and passive pressure on the faces of footings and other structural elements below grade. An allowable coefficient of friction of 0.35 can be used. Passive pressure can be computed using an allowable lateral pressure of 350 psf per foot of depth below the ground surface for level ground conditions. When combining passive pressure and friction for lateral resistance, the passive pressure component should be reduced by one-third.

The passive pressure can be increased by one-third when considering the total of all loads, including wind or seismic forces. The upper 1 foot of soil should not be relied on for passive support unless the ground is covered with pavements or slabs.

4.02.2 CAST IN DRILLED HOLE (CIDH) POLES FOUNDATIONS

Based on our review of preliminary design schematics provided by the district, we understand that pole type foundations are proposed for the support of canopies, light poles, and signs. For preliminary design purposes, individual drilled, cast-in-place concrete piers may be designed using a unit skin friction of 250 psf. This value assumes a minimum pile depth of 10 feet and minimum pile diameter of 30 inches. The upper 2 feet of all piers should be neglected when evaluating allowable axial capacities. Total downward capacities estimated may be increased by one-third for short-term transient loads. Uplift resistance can be taken as the weight of the pole and foundation plus 2/3 of the downward axial capacity.

Lateral resistance on piles may be evaluated using Section 1806A of the 2022 CBC for a Class 4 material. Accordingly, a lateral soil bearing of 150 pounds per square foot, per foot, of embedment may be used to verify required embedment depth. This value can be doubled, provided the pole can tolerate at least a ½ inch deflection at the ground surface due to short term loading, per Section 1806A.3.4 of the 2022 CBC. The upper 18 inches of soil should be neglected in non-paved areas. Piles should be spaced at least 3 diameters apart, center to center.

These values are for isolated single piles. A group action reduction in capacity would apply for closely spaced piles. These recommendations also assume that the foundations will be embedded against firm and intact soils.

During excavation, layers of cohesionless soils may be encountered; therefore, caving of the pile shafts should be anticipated. Special care should be taken during construction to stabilize the sides of the CIDH piles, as required. The actual required depths must be field verified by the geotechnical engineer. The adequacy of the CIDH piles will depend heavily on construction methods and procedures. Large zones of disturbance around the CIDH piles can lead to lower skin friction due to excessive stress relief around the length of the piles. The piles should be constructed by qualified contractors experienced in this type of construction and monitored on a full-time basis by the geotechnical consultant.

Contract documents should specify that the contractor mobilize equipment capable of penetrating hard, cemented material to reduce the potential for claims, delays, or extra work to arise.

Foundation plans are not available at this time. On a preliminary basis, we estimate that post-construction single pile foundation settlements will be less than 1 inch. Once foundation plans are available, MTGL should review the plans and revise these recommendations, as necessary.

4.02.3 SETTLEMENT CONSIDERATIONS

Foundations should be designed for the anticipated settlements. Static settlement of an individual foundation member will vary depending on the plan dimensions of the foundation and the actual load supported.

We estimate maximum static settlement of foundations designed and constructed in accordance with the recommendations presented to be on the order of 1 inch. Differential settlement between similarly loaded and adjacent footings are expected to be less than ½ inch across 40 feet, provided footings are founded on similar materials. Static settlement of all foundations is expected to occur rapidly and should be essentially complete shortly after initial application of the loads.

4.03 INTERIOR SLABS ON GRADE

The project's structural engineer should design concrete slabs-on-grades for buildings. However, it is recommended that interior slabs be at least 5 inches thick and reinforced with at least No. 4 bars at 18 inches on center each way. The concrete should have a 28-day compressive strength of at least 3,000 psi, a water to cement ratio of 0.50 or less, and a slump of 4 inches or less.

Slabs should be provided with weakened plane joints. Joints should be placed in accordance with the American Concrete Institute (ACI) guidelines. The project's architect should select the final joint patterns. A 1 inch maximum size aggregate mix is recommended for concrete slabs. The corrosion potential of on-site soils with respect to reinforced concrete will need to be taken into account in concrete mix design. Coarse and fine aggregate in concrete should conform to the "Greenbook" Standard Specifications for Public Works Construction.

Moisture protection should be installed beneath slabs where moisture sensitive floor coverings will be used. The project's architect should review the tolerable moisture transmission rate of the proposed floor covering and specify an appropriate moisture protection system. Typically, a plastic vapor barrier (15-mil Stegowrap or equivalent) is used and should comply with ASTM E1745. The vapor barrier installation should comply with ASTM E1643 and ACI 302.1R. The floor covering manufacturer should be consulted to determine the volume of moisture vapor allowable and treatment needed to reduce moisture vapor emissions to acceptable limits for the particular type of floor covering installed.

4.04 HARDSCAPE

Hardscape and other exterior concrete slabs-on-grade not subject to vehicular loads should be underlain by at least 2 feet of material with an expansion index of 20 or less. Exterior slabs should be at least 4 inches thick and reinforced with at least No. 3 bars at 18 inches on center each way. Slabs should be provided with weakened plane joints. Joints should be placed in accordance with the American Concrete Institute (ACI) guidelines. The project's architect should select the final joint patterns. A 1 inch maximum size aggregate mix is recommended for concrete for exterior slabs. The corrosion potential of on-site soils with respect to reinforced concrete will need to be taken into account in concrete mix design. Coarse and fine aggregate in concrete should conform to the "Greenbook" Standard Specifications for Public Works Construction.

4.05 PREWETTING RECOMMENDATIONS

Prior to placing concrete slabs and flatwork, the underlying soils should be brought to within a minimum of 2% and a maximum of 4% above its optimum moisture content for a depth of 12 inches prior to the placement of concrete. The geotechnical consultant should perform in-situ moisture tests to verify that the appropriate moisture content has been achieved a maximum of 24 hours prior to the placement of concrete or moisture barriers.

Once the slab subgrade soil has been pre-wetted and compacted, the soil should not be allowed to dry prior to concrete placement. If the subgrade soil is dry, the moisture content of the soil should be restored prior to placement of concrete and re-tested.

Proper moisture conditioning and compaction of subgrade soils should be performed prior to placement of concrete. Even with proper site preparation, some soil moisture changes of the subgrade soils supporting the concrete flatwork due to edge effects (shrink/swell) may occur. Drying and/or wetting of subgrade soils adjacent to landscaped areas or open fields may increase the potential of shrink/swell effects beneath concrete flatwork areas. To help reduce edge effects, lateral cutoffs, such as inverted curbs are recommended. Control joints should be used to reduce the potential for flatwork panel cracks as a result of minor soil shrink/swell.

The recommendations are intended to reduce the potential for cracking of slabs; however, even with the incorporation of the recommendations presented herein, slabs may still exhibit some cracking. The occurrence of concrete shrinkage cracks is independent of the supporting soil characteristics.

4.06 CORROSIVITY

Soluble sulfate tests performed on sampled subgrade material suggest that concrete at the subject site will have a moderate exposure to water soluble sulfates in the soil. Accordingly recommend that the concrete be designed to resist a moderate exposure category (Class S1). Our recommendations for concrete exposed to sulfate-containing soils are presented below.

RECOMMENDATIONS FOR CONCRETE EXPOSED TO SULFATE CONTAINING SOILS

Sulfate Exposure Severity	Class	Water soluble sulfate (SO_4) in soil (% by wgt)	Sulfate (SO_4) in water (ppm)	Maximum Water to Cement Ratio by Weight	Minimum Compressive Strength (psi)	Cement Type	Calcium Chloride Admixture
Negligible	S0	0.00 - 0.10	0-150	---	2,500	---	No Restriction
Moderate	S1	0.10 - 0.20	150-1,500	0.50	4,000	II/V	No Restriction
Severe	S2	0.20 - 2.00	1,500-10,000	0.45	4,500	V	Not Permitted
Very Severe	S3	Over 2.00	Over 10,000	0.45	4,500	V Plus Pozzolan	Not Permitted

Corrosivity testing consisting of soils reactivity (pH) and resistivity (ohms-cm) were also tested on select soil samples. The test results indicate a soil reactivity of 7.7 and a resistivity of 965 ohms-cm. A neutral or non-corrosive soil has a reactivity value ranging from 5.5 to 8.4. Generally, soils that could be considered corrosive to metal have resistivities less than 3,000 ohms-cm. Soils with resistivity values of less than 1000 ohms-cm can be considered extremely corrosive.

Based on our test results, it is our opinion that the underlying soils at the site have a moderate to high corrosion potential. Protection of buried pipes utilizing coatings on all underground pipes; clean backfills and a cathodic protection system can be effective in controlling corrosion. A qualified corrosion engineer should be consulted to further assess the corrosive properties of the soil and provide mitigation measures appropriate to the improvements.

4.07 RETAINING STRUCTURES

Embedded structural walls and pool shells should be designed to resist the lateral earth pressures imposed by the adjacent soils. The magnitude of these earth pressures will depend on the amount of deformation that the wall or shell can yield under the load. If the wall can yield sufficiently to mobilize the full shear strength of the soils, it may be designed for the active condition. If the wall cannot yield under the applied load, then the shear strength of the soil cannot be mobilized, and the earth pressures will be higher. These walls, such as basement walls and swimming pools, should be designed for the at rest condition. If a structure moves towards the retained soils, the resulting resistance developed by the soil will be the passive resistance.

For design purposes, the recommended equivalent fluid pressure for each case for walls is provided below. These values assume the walls or pool shells will be constructed above the static groundwater table and backfilled with non-expansive soils. Additionally, retaining wall backfill should be compacted to at least 90% relative compaction based on the maximum density defined by ASTM D1557. Soils adjacent to pools should also be compacted to at least 90% relative compaction based on the maximum density defined by ASTM D1557. Retaining structures should be designed to resist the following lateral earth pressures for static conditions.

- Passive Earth Pressure – Same as for shallow foundations.
- At rest lateral earth pressure - 60 pcf.
- Active Earth Pressures (Equivalent Fluid Weights):

Slope of Retained Material	Equivalent Fluid Weight (pcf)
Level	40
2:1 (H:V)	60

It is recommended that retaining wall footings be embedded at least 24 inches below the lowest adjacent finish grade. In addition, the wall footings should be designed and reinforced as required for structural considerations. The wall areas should be over excavated to a minimum depth of 2 feet below the bottom of the proposed footings. The required horizontal limits of the over-excavation area shall be a minimum distance of 2 feet. Soil retaining structures may be designed using a soil unit weight of 120 pcf.

Lateral resistance parameters provided above are ultimate values. Therefore, a suitable factor of safety should be applied to these values for design purposes. The appropriate factor of safety will depend on the design condition and should be determined by the project’s structural engineer. These parameters do not include loading from adjacent structures. In addition to the above lateral forces due to retained earth, surcharge due to improvements, such as an adjacent structure or traffic loading, should be considered in the design of the retaining wall. Loads applied within a 1:1 projection from the surcharging structure on the stem of the wall should be considered in the design. If any super-imposed loads are anticipated, this office should be notified so that appropriate recommendations for earth pressures may be provided.

Retaining structures should be designed with effective drainage to prevent the accumulation of subsurface water behind the walls. Backdrains should be installed behind retaining walls exceeding 3 feet in height. Backdrains may consist of a 2 feet wide zone of ¾ inch crushed rock. The backdrain should be separated from the adjacent soils using a non-woven filter fabric, such as Mirafi 140N or equivalent. Weep holes should be provided, or a perforated pipe should be installed at the base of the back-drain and sloped to discharge to a suitable storm drain facility. As an alternative, a geo-composite drainage system such as Mira-drain 6000 or equivalent placed behind the wall and connected to a suitable storm drain facility can be used. The project's architect should provide waterproofing specifications and details. A typical detail for retaining wall backdrains is presented as Figure 8. Backdrains should outlet to suitable drainage devices. Additional construction considerations for pools are presented in Section 4.12 of this report.

4.08 SEISMIC EARTH PRESSURES

If required, the seismic earth pressure can be taken as equivalent to the pressure of a fluid weighing 22 pcf. This value is for level backfill and does not include a factor of safety. Appropriate factors of safety should be incorporated into the design. This pressure is in addition to the un-factored, static active earth pressure. The passive pressure and bearing capacity can be increased by ⅓ when determining the seismic stability of the wall.

4.09 PAVEMENT STRUCTURAL SECTIONS

Recommended pavement structural sections are based on the procedures outlined in "Design Procedures for Flexible Pavements" of the Highway Design Manual, California Department of Transportation. This procedure uses the principal that the pavement structural section must be of an adequate thickness to distribute the load from the design traffic (TI) to the subgrade soils in such a manner that the stresses from the applied loads do not exceed the strength of the soil (R value). Pavement sections were designed based on an R-Value of 10. As requested, structural pavement sections were designed based on Traffic Indexes of 4.0, 5.0 and 6.0. However, a minimum Traffic Index of 7 is recommended for the design of fire access lanes, if needed. The recommended structural sections are as follows:

ASPHALT PAVEMENT STRUCTURAL SECTIONS

Pavement Area	Traffic Index	Asphalt Thickness (inches)	Base Thickness (inches)
Light Traffic	4.0	3	6
Medium Traffic	5.0	3½	8
Heavy Traffic	6.0	4	12
Fire Access Lanes	7.0	5	12

PORTLAND CEMENT CONCRETE PAVEMENT STRUCTURAL SECTION

Pavement Area	Traffic Index	PCC Thickness (inches)	Base Thickness (inches)
Parking Areas & Driveways (min f'c = 4,500 psi)	5.0 – 6.0	6½	6
Fire Access Lanes (min f'c = 4,500 psi)	7.5 – 8.0	7½	6

The upper 12 inches of subgrade should be scarified, moisture conditioned to near optimum moisture content, and compacted to at least 95% relative compaction. Soft or yielding areas should be removed and replaced with compacted fill or aggregate base. Aggregate base and asphalt concrete should conform to the Caltrans Standard Specifications or the "Greenbook" and should be compacted to at least 95% relative compaction. Aggregate base should have an R-value of not less than 78. Materials and methods of construction should conform to good engineering practices.

4.10 UTILITY TRENCHES

Cal/OSHA construction safety orders should be observed during all underground work. Utility trench backfill within street right of way, utility easements, under or adjacent to sidewalks, driveways, or building pads should be observed and tested by the geotechnical consultant to verify proper compaction. Utility trenches which run parallel to footings and extend below a 1½:1 plane projected from the outside edge of the footing should be backfilled with structural fill soils and compacted to at least 90% of the ASTM D-1557 standard. The backfilled utility lines should also be capable of withstanding any surcharge loads imposed. Pea gravel backfill should not be used for these trenches. Trenches crossing perpendicular to foundations should be excavated and backfilled prior to the construction of the foundations. Pipes and trenches near existing footings or settlement sensitive improvements are subject to requirements set forth in the 2022 CBC Section 1809A.14 The excavations should be backfilled in the presence of the geotechnical engineer and tested to verify adequate compaction beneath the proposed footing.

4.10.1 THRUST BLOCKS

For level ground conditions, a passive earth pressure of 350 psf per foot of depth below the lowest adjacent final grade can be used to compute allowable thrust block resistance. A value of 175 psf per foot should be used below groundwater level, if encountered.

4.10.2 PIPELINE SUPPORT

It is anticipated that most of the materials along the pipeline alignments will provide adequate support for the pipes, although loose, soft, wet, and otherwise unsuitable materials may be encountered locally. Unsuitable materials encountered near trench bottom levels should be evaluated during construction by the geotechnical engineer. Unsuitable materials should be removed from the full width of the trench. The bottoms of the excavations should be observed by the geotechnical consultant prior to placement of pipe bedding. The use of a stabilizing fabric such as Mirafi® HP 570 can be used to stabilize the bottom of the excavations, if needed.

4.10.3 MODULUS OF SOIL REACTION

A modulus of soil reaction (E') of 2,000 psi can be used to evaluate the deflection of buried flexible pipelines. This value assumes that granular bedding material is placed adjacent to the pipe and is compacted to at least 90% relative compaction.

4.10.4 BEDDING

Pipe bedding as specified in the "Greenbook" Standard Specifications for Public Works Construction can be used. Bedding material should consist of clean sand having a sand equivalent not less than 30 and should extend to at least 12 inches above the top of pipe. Alternative materials meeting the intent of the bedding specifications are also acceptable. Samples of materials proposed for use as bedding should be provided to the engineer for inspection and testing before the material is imported for use on the project. The on-site materials are not expected to meet "Greenbook" bedding specifications. The pipe bedding material should be placed over the full width of the trench. After placement of the pipe, the bedding should be brought up uniformly on both sides of the pipe to reduce the potential for unbalanced loads. No voids or uncompacted areas should be left beneath the pipe haunches. Ponding or jetting the pipe bedding should not be allowed.

4.10.5 BACKFILL

Excavated material free of organic debris and rocks greater than 6 inches in any dimension are generally expected to be suitable for use as backfill outside of the "pipe zone". Imported material should not contain rocks greater than 4 inches in any dimension or organic debris. Imported material should have an expansion index of 20 or less. MTGL should observe and, if appropriate, test proposed imported materials before they are delivered to the site. Backfill should be placed in lifts 8 inches or less in loose thickness, moisture conditioned to optimum moisture content or slightly above optimum moisture content, and compacted to at least 90% relative compaction. The upper 12 inches of soil beneath pavement subgrade should be compacted to at least 95% relative compaction.

4.11 INFILTRATION FEASIBILITY

MTGL conducted an infiltration feasibility study at the site on August 16th, 2024. At this time, no preliminary BMP exhibits were available for review. Additionally, the project is in the planning phase. Our fieldwork consisted of converting one shallow geotechnical boring to a percolation test hole. The boring was prepared and tested by an MTGL engineer in general accordance with methods outlined in the Orange County BMP Design Manual and Technical Guidance Document (Santa Ana Regional Water Quality Control Board, 2013). Appendix F presents percolation test data and results. A summary of our results is presented in the following table.

INFILTRATION RATE TEST RESULTS

Test Location	Test Depth (Feet)	Material Type at Test Depth (USCS Classification)	Adjusted Infiltration Rate* (Inches/Hour)
P-1	8½	**Old Paralic Deposits (Qop)**: CLAYEY SAND (SC)	0.01

*The adjusted infiltration rate is calculated by applying a factor of safety of 2 to the tested infiltration rate.

Based on our observations, the feasibility screening category is "No Infiltration." BMP facilities should be lined with an impermeable geomembrane to reduce the potential for water-related distress to adjacent structures or improvements. A subdrain should be installed at the bottom of the BMP facilities. Foundations should be set back at least 10 feet from BMP facilities, or the foundations deepened to a depth that extends below the bottom of the BMPs.

4.12 SWIMMING POOL

The recommended bearing material for the proposed swimming pool bottom is a minimum of 2 feet of compacted engineered fill as discussed in Section 4.01.3.2 of this report, except the fill should be compacted to 95% relative compaction as evaluated by ASTM D1557. If any footings are planned, the foundations may be designed in accordance with the conventional foundation recommendations section of this report, except the upper 2 feet of material beneath the footings should be compacted to 95% relative compaction as evaluated by ASTM D1557. The sidewalls of the pool will act as retaining walls and may be designed in accordance with the retaining wall design parameters presented in this report.

The following recommendations for swimming pools should be considered during the design and construction of the pools.

- Positive surface drainage should be provided around the pool and deck. Water should not be allowed to pond. Surface water should be collected and directed to drainage devices.
- Decking around the swimming pool should be cast free of the pool. Water stops should be provided between any bond beams and deck slabs.
- A hydrostatic relief valve should be provided.

- The pool should be designed for any possible surcharge from nearby structures which fall within a 1:1 (Horizontal: Vertical) plane from the surcharging structure.
- A qualified design engineer should prepare a specific plan and details for the proposed swimming pool.
- Prior to placement of the reinforcing steel, the pool excavation should be observed by the geotechnical engineer.
- Leakage from any appurtenant plumbing may create a groundwater condition that could have adverse effects on the underlying soil. All plumbing and pool features must be leak free and watertight.

4.13 CONSTRUCTION CONSIDERATIONS

4.13.1 MOISTURE-SENSITIVE SOILS AND WEATHER-RELATED CONCERNS

The upper soils encountered at this site may be sensitive to disturbances caused by construction traffic and to changes in moisture content. During wet weather periods, increases in the moisture content of the soil can cause significant reduction in the soil strength and its support capabilities. In addition, soils that become excessively wet may be slow to dry and therefore significantly delay the progress of the grading operations. Therefore, it will be advantageous to perform earthwork and foundation construction activities during the dry season. Much of the on-site soils may be susceptible to erosion during periods of inclement weather. As a result, the project's Civil Engineer/Architect and Grading Contractor should take appropriate precautions to reduce the potential for erosion during and after construction.

4.13.2 DRAINAGE AND GROUNDWATER CONSIDERATIONS

Based on our investigation, groundwater is expected to be below the anticipated depths of grading and the installation of subdrains is not expected to be necessary. However, variations in the ground water table may result from fluctuation in the ground surface topography, subsurface stratification, precipitation, irrigation, and other factors such as impermeable and/or cemented formational materials overlain by fill soils. In addition, during retaining wall excavations, seepage may be encountered. Therefore, we recommend that a representative of MTGL, Inc. be present during grading operations to evaluate areas of seepage. Drainage devices for reduction of water accumulation can be recommended should these conditions occur.

Water should not be allowed to collect in the foundation excavation, on floor slab areas, or on prepared subgrades of the construction area either during or after construction. Undercut or excavated areas should be sloped to facilitate removal of any collected rainwater, groundwater, or surface runoff. Positive site drainage should be provided to reduce infiltration of surface water around the perimeter of the structure and beneath the floor slabs. The grades should be sloped away from the structure and surface drainage should be collected and discharged such that water is not permitted to infiltrate the backfill and floor slab areas.

4.13.3 SITE DRAINAGE

The site should be designed to provide for positive drainage away from structures in accordance with the building code and applicable local requirements. Unpaved areas should slope no less than 2% away from structure. Paved areas should slope no less than 1% away from structures. Concentrated roof and surface drainage from the site should be collected in engineered, non-erosive drainage devices and conducted to a safe point of discharge. The site drainage should be designed by a civil engineer.

4.14 PLAN REVIEW

MTGL should review the grading and foundation plans to verify that the intent of the recommendations presented in this report has been implemented and that revised recommendations are not necessary as a result of design changes after the date of this report.

5.00 GEOTECHNICAL OBSERVATION AND TESTING

The recommendations provided in this report are based on preliminary design information and subsurface conditions as interpreted from the investigation. Our preliminary conclusions and recommendations should be reviewed and verified during site grading and revised accordingly if exposed geotechnical conditions vary from our preliminary findings and interpretations. The geotechnical consultant should perform geotechnical observation and testing during the following phases of grading and construction:

- During site grading, remedial grading over-excavation, and slot-cut excavations.
- During foundation excavations and placement or deep and shallow foundations.
- Upon completion of retaining wall footing excavations, prior to placing concrete.
- During excavation and backfilling of public utility trenches; of private utility trenches, as directed.
- During processing and compaction of the subgrade for the access and parking areas and prior to construction of pavement sections.
- When any unusual or unexpected geotechnical conditions are encountered during any phase of construction.

6.00 LIMITATIONS

The findings, conclusions, and recommendations contained in this report are based on the site conditions as they existed at the time of our investigation, and further assume that the subsurface conditions encountered during our investigation are representative of conditions throughout the site. Should subsurface conditions be encountered during construction that are different from those described in this report, this office should be notified immediately so that our recommendations may be re-evaluated.

This report was prepared for the exclusive use and benefit of the owner, architect, and engineer for evaluating the design of the facilities as it relates to geotechnical aspects. It should be made available to prospective contractors for information on factual data only, and not as a warranty of subsurface conditions included in this report.

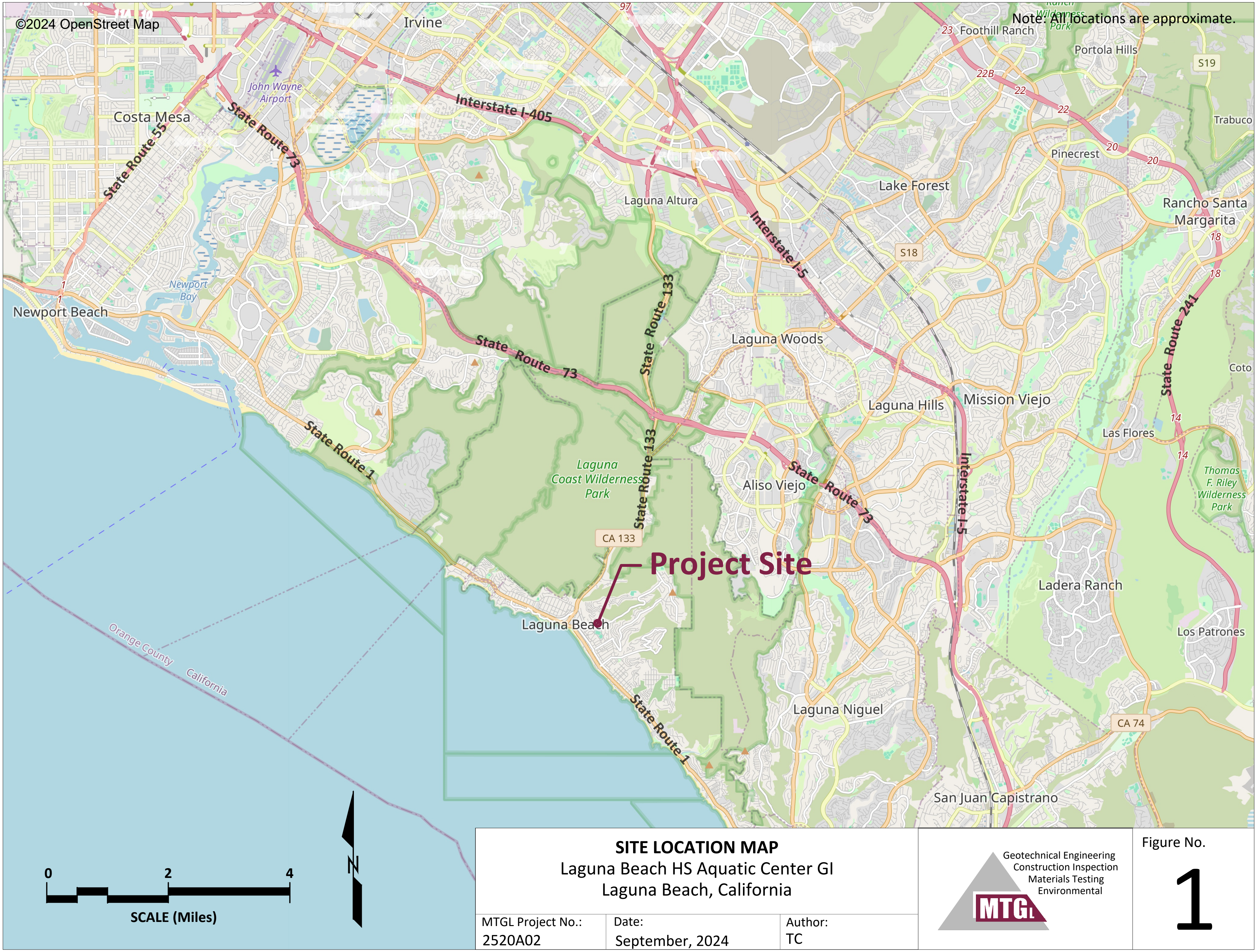
Our investigation was performed using the standard of care and level of skill ordinarily exercised under similar circumstances by reputable soil engineers and geologists currently practicing in this or similar localities. No warranty, express or implied, is made as to the conclusions and professional advice included in this report.

This firm does not practice or consult in the field of safety engineering. We do not direct the Contractor's operations, and we are not responsible for their actions. The contractor will be solely and completely responsible for working conditions on the job site, including the safety of all persons and property during performance of the work. This responsibility will apply continuously and will not be limited to our normal hours of operation.

The findings of this report are considered valid as of the present date. However, changes in the conditions of a site can occur with the passage of time, whether they are due to natural events or to human activities on this or adjacent sites. In addition, changes in applicable or appropriate codes and standards may occur, whether they result from legislation or the broadening of knowledge.

Accordingly, this report may become invalidated wholly or partially by changes outside our control. Therefore, this report is subject to review and revision as changed conditions are identified.

FIGURES

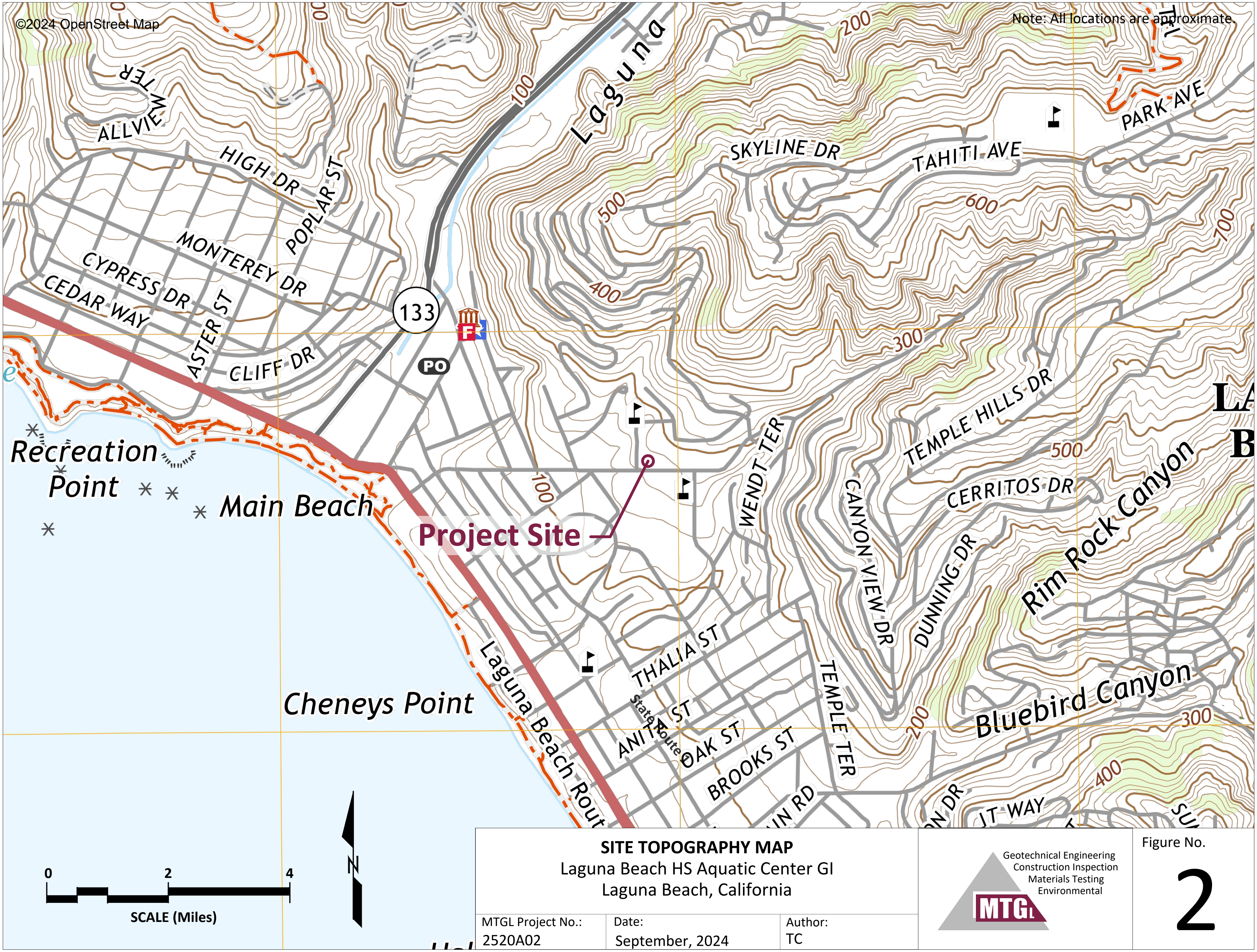


SITE LOCATION MAP
Laguna Beach HS Aquatic Center GI
Laguna Beach, California

MTGL Project No.:	Date:	Author:
2520A02	September, 2024	TC

Geotechnical Engineering
Construction Inspection
Materials Testing
Environmental
MTGL

Figure No.
1

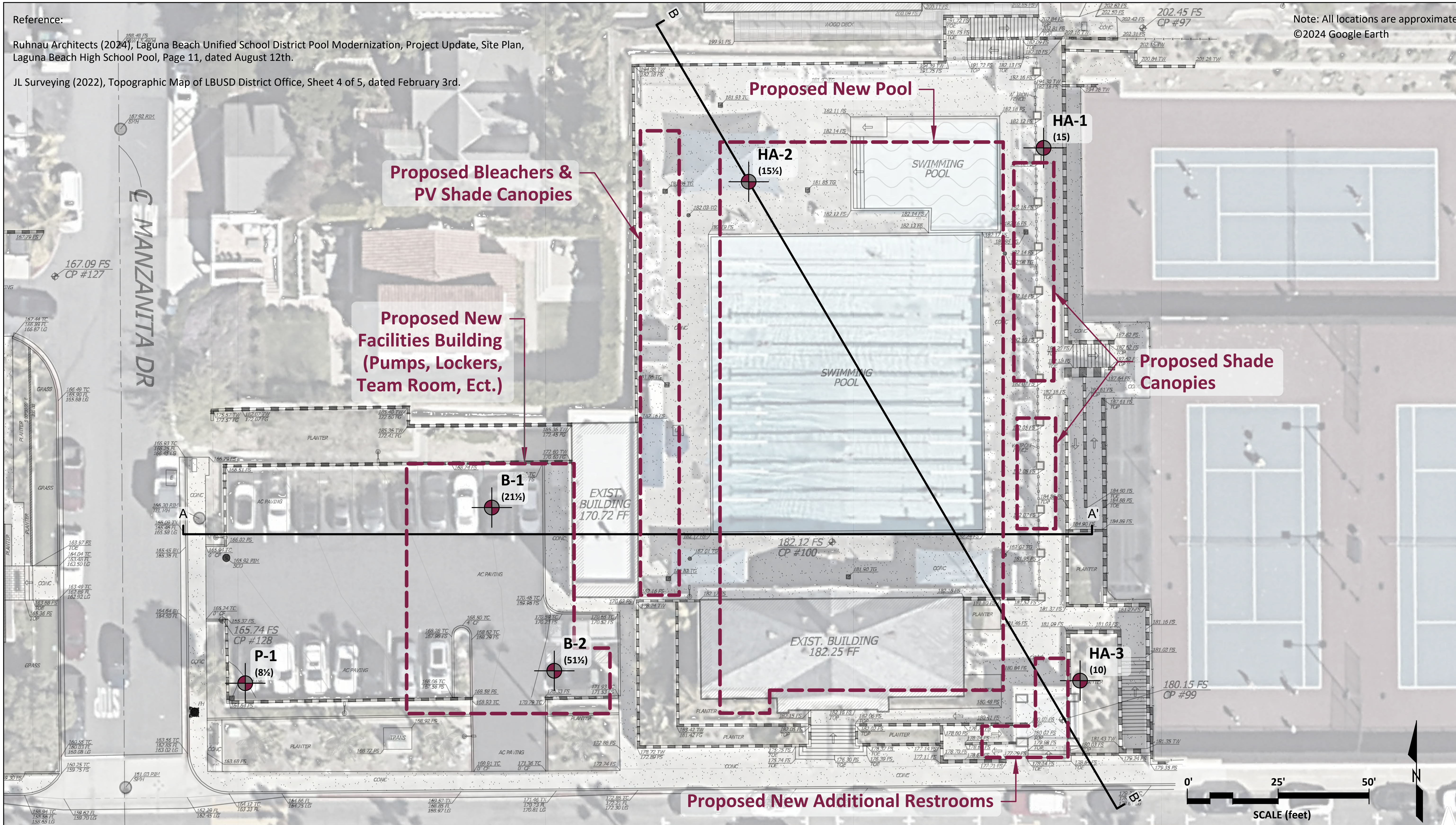


SITE TOPOGRAPHY MAP
Laguna Beach HS Aquatic Center GI
Laguna Beach, California

MTGL Project No.:	Date:	Author:
2520A02	September, 2024	TC

MTGL
Geotechnical Engineering
Construction Inspection
Materials Testing
Environmental

Figure No.
2



LEGEND

B-2 (51½) | P-1 (8½) | HA-3 (10) - Location of Boring
Hollow-Stem Auger | Percolation Test | Hand Auger
(Depth in Feet)

B B' - Geologic Cross Section

Approximate Limits of Proposed Improvements

SUBSURFACE EXPLORATION MAP
Laguna Beach HS Aquatic Center GI
Laguna Beach, California

MTGL Project No.:	Date:	Author:
2520A02	September, 2024	TC

Geotechnical Engineering
Construction Inspection
Materials Testing
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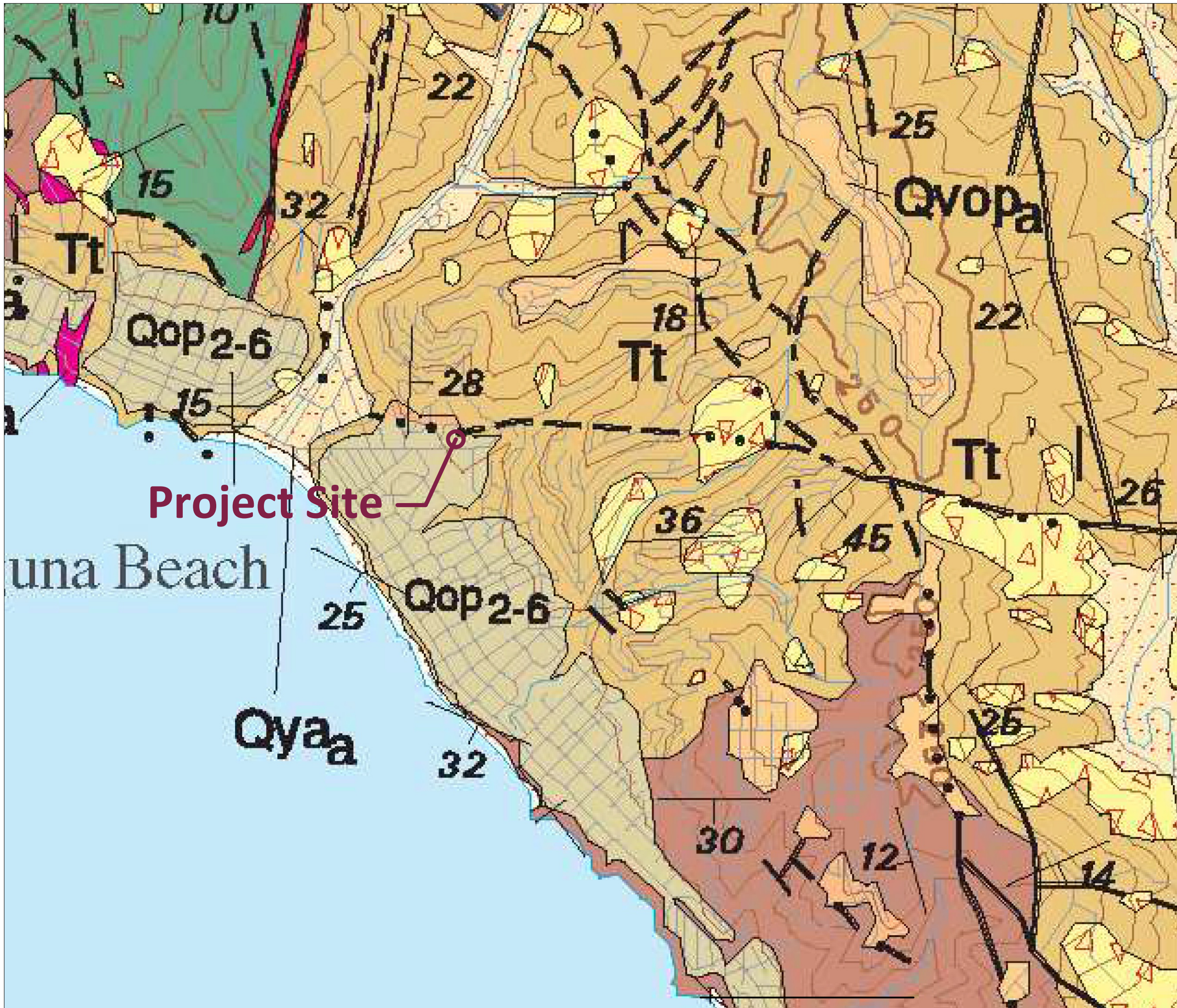
MTGL

Figure No.
3



EXPLANATION:

Qya_a	**Young axial-channel deposits -**Slightly to moderately consolidated silt, sand, and gravel deposits.
$Qop_{2\text{-}6}$	**Old paralic deposits, Units 2-6, undivided** - Paralic deposits consisting of poorly sorted, moderately permeable, reddish-brown, interfingered strandline, beach, estuarine and colluvial deposits composed of silt, sand and cobbles. These deposits rest on the 22-55m terraces.
Tt	**Topanga Formation (middle Miocene) -**Marine sandstone, siltstone, and shale.

Reference: Morton, D.M., and Miller, F.K. (2006), Geologic map of the San Bernardino and Santa Ana 30' x 60' Quadrangles, California, Scale: 1:100,000, Open-File Report OF-2006-1217, Sheet 1 of 4, Version 1.0.

0 ½ 1

SCALE (Mile)

Note: All locations are approximate.

N

REGIONAL GEOLOGY MAP

Laguna Beach HS Aquatic Center GI

Laguna Beach, California

MTGL Project No.:	Date:	Author:
2520A02	September, 2024	TC

Geotechnical Engineering
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Environmental

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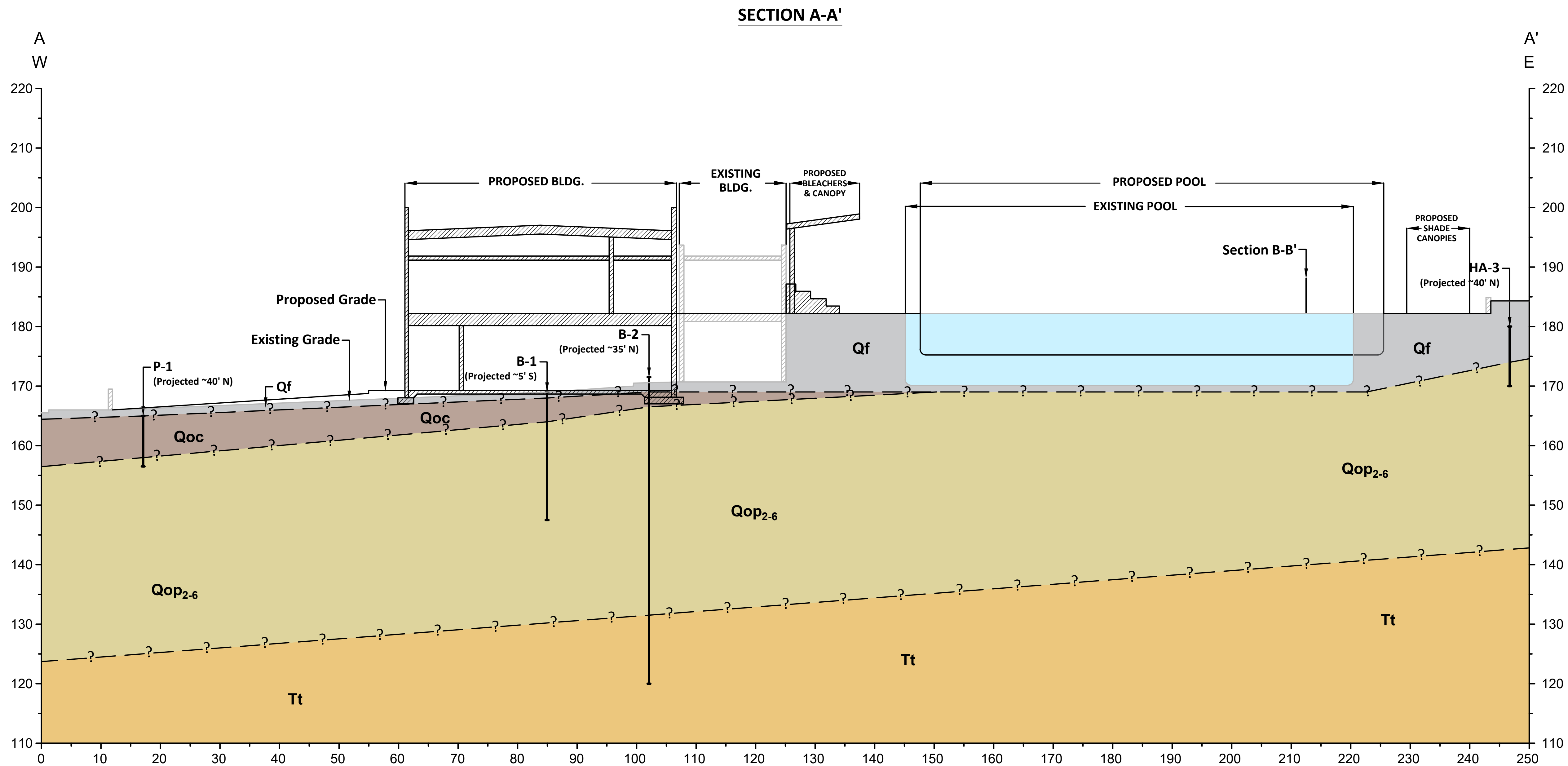
Figure No.

4

Note: All locations and elevations are approximate.



Reference:

Ruhnau Architects (2024), Laguna Beach Unified School District Pool Modernization, Project Update, Site Plan, Laguna Beach High School Pool, Page 11, dated August 12th.

JL Surveying (2022), Topographic Map of LBUSD District Office, Sheet 4 of 5, dated February 3rd.

0' 20' 40'

SCALE (feet)
1:1 Horizontal to Vertical

LEGEND

B-2 P-1 HA-3 Location of Boring

—?— Geologic Contact, Queried Where Uncertain or Inferred

Qf Fill

Qoc Colluvium

$Qop_{2\text{-}6}$ Old paralic deposits Unit 2-6, undivided

Tt Topanga Formation

GEOLOGIC CROSS SECTION
Laguna Beach HS Aquatic Center GI
Laguna Beach, California

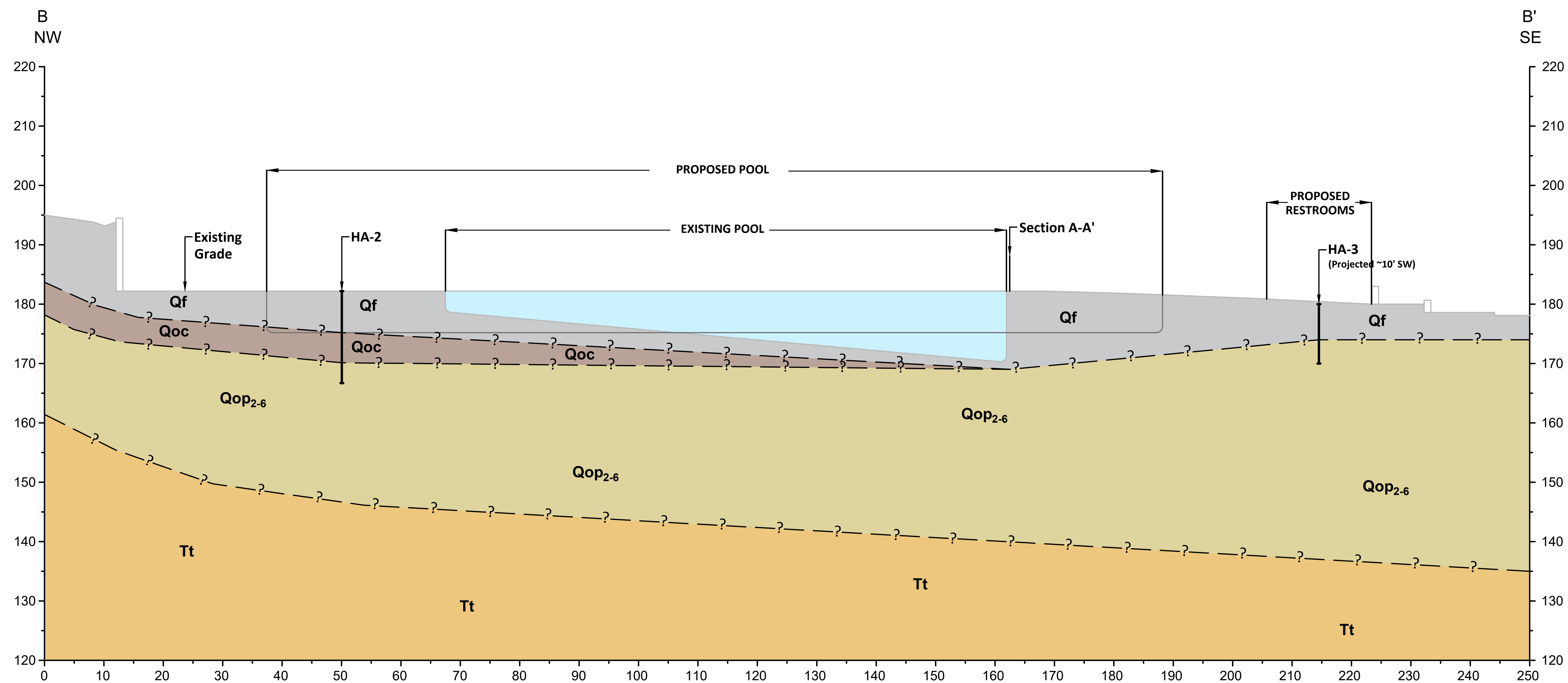
MTGL Project No.:	Date:	Author:
2520A02	September, 2024	TC

Geotechnical Engineering
Construction Inspection
Materials Testing
Environmental

Figure No.
5A

Note: All locations and elevations are approximate.

SECTION B-B'



Reference:

Ruhnau Architects (2024), Laguna Beach Unified School District Pool Modernization, Project Update, Site Plan, Laguna Beach High School Pool, Page 11, dated August 12th.

JL Surveying (2022), Topographic Map of LBUSD District Office, Sheet 4 of 5, dated February 3rd.

0' 20' 40'

SCALE (feet)
1:1 Horizontal to Vertical

LEGEND

HA-3 Location of Boring

—?— Geologic Contact, Queried Where Uncertain or Inferred

Qf Fill

Qoc Colluvium

$Qop_{2\text{-}6}$ Old paralic deposits Unit 2-6, undivided

Tt Topanga Formation

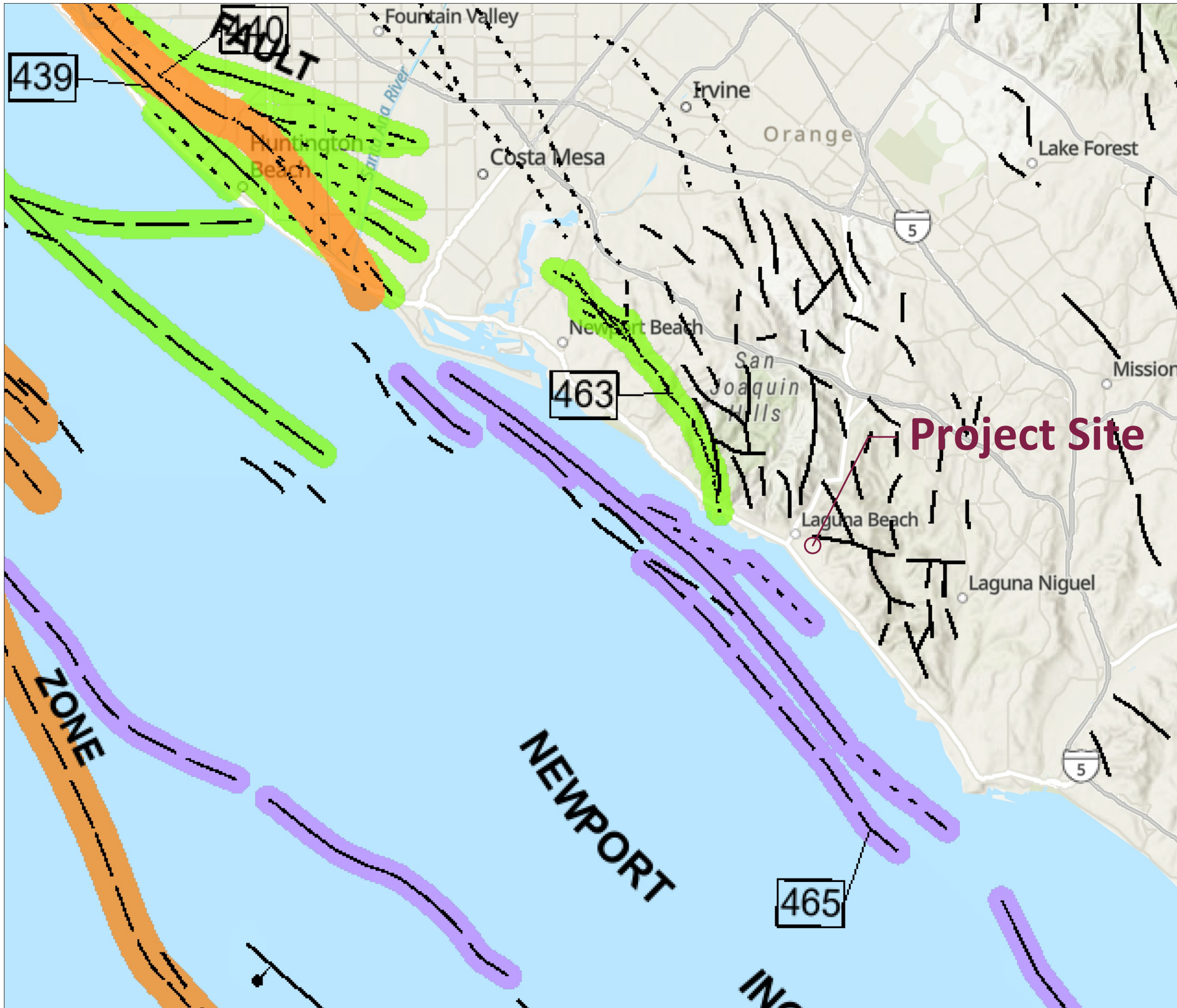
GEOLOGIC CROSS SECTION
Laguna Beach HS Aquatic Center GI
Laguna Beach, California

MTGL Project No.:	Date:	Author:
2520A02	September, 2024	TC

Geotechnical Engineering
Construction Inspection
Materials Testing
Environmental

Figure No.

5B



EXPLANATION:

Holocene fault displacement (during past 11,700 years) without historic record.

Late Quaternary fault displacement (during past 700,000 years).

Quaternary fault (age undifferentiated).

Pre-Quaternary fault (older that 1.6 million years) or fault without recognized Quaternary displacement.

ADDITIONAL FAULT SYMBOLS

Bar and ball on downthrown side (relative or apparent).

Arrows along fault indicate relative or apparent direction of lateral movement.

Arrow on fault indicates direction of dip.

JENNINGS ID NUMBER:

439	Newport-Inglewood, South Branch Fault
440	Newport-Inglewood, North Branch Fault
463	Pelican Hills Fault
465	Newport-Inglewood-Rose Canyon fault zone, Oceanside section

Reference:
California Geological Survey, 2010, Fault Activity Map, C.W. Jennings, W.A. Bryant, accessed on July 25, 2024, at https://gis.conservation.ca.gov/server/admin/CGS/Fault ActivityMapCA/MapServer

Fault traces on land are indicated by solid lines where well located, by dashed lines where approximately located or inferred, and by dotted lines where concealed by younger rocks or by lakes or bays. Fault traces are queried where continuation or existence is uncertain. All offshore faults based on seismic reflection profile records are shown as solid lines where well defined, dashed where inferred, queried where uncertain.

0 4 8

SCALE (Miles)

Note: All locations are approximate.

N

REGIONAL FAULT MAP

Laguna Beach HS Aquatic Center GI
Laguna Beach, California

MTGL Project No.:	Date:	Author:
2520A02	September, 2024	TC

Geotechnical Engineering
Construction Inspection
Materials Testing
Environmental

MTGL

Figure No.

6

EXPLANATION:

Liquefaction Zones
Areas where historical occurrence of liquefaction, or local geological, geotechnical and ground water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required.

Earthquake-Induced Landslide Zones
Areas where previous occurrence of landslide movement, or local topographic, geological, geotechnical and subsurface water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required.

This Map Shows Seismic Hazard Zones
Alquist-Priolo Earthquake Fault Zones Have Not Been Prepared For The Laguna Beach Quadrangle

This map shows the location of Seismic Hazard Zones, referred to here as Earthquake Zones of Required Investigation. The Geographic Information System (GIS) digital files of these regulatory zones released by the California Geological Survey (CGS) are the "Official Maps." GIS files are available at the GGS website

Reference:
California Geological Survey, Earthquake Zones of Required Investigation, Seismic Hazard Zones Laguna Beach Quadrangle, accessed from CGS Information Warehouse: Regulatory Maps on August 29th, 2024, at https://maps.conservation.ca.gov/cgs/informationwarehouse/regulatorymaps/

0 ½ 1
SCALE (Miles)
Note: All locations are approximate.

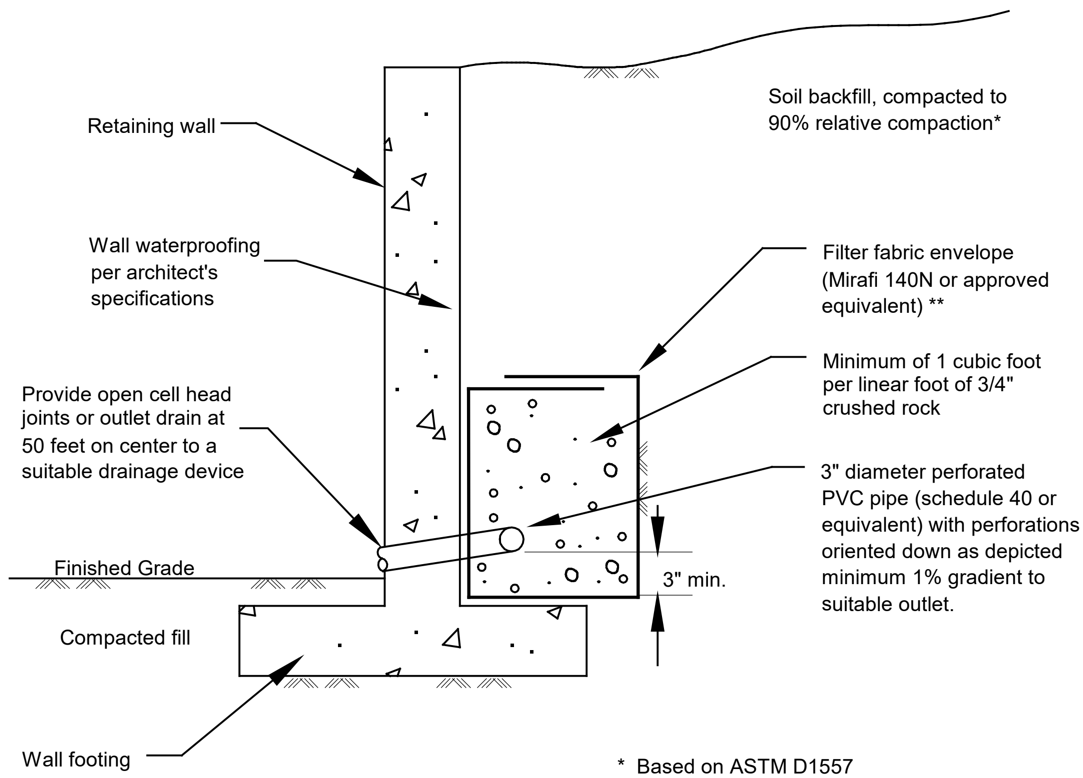
N

EARTHQUAKE ZONES OF REQUIRED INVESTIGATION MAP
Laguna Beach HS Aquatic Center GI
Laguna Beach, California

MTGL Project No.:	Date:	Author:
2520A02	September, 2024	TC

Geotechnical Engineering
Construction Inspection
Materials Testing
Environmental
MTGL

Figure No.
7



* Based on ASTM D1557

** If class 2 permeable material (See gradation to left) is used in place of 3/4" - 1 1/2" gravel. Filter fabric may be deleted. Class 2 permeable material compacted to 90% relative compaction. *

SPECIFICATIONS FOR CLASS 2
PERMEABLE MATERIAL
(CAL TRANS SPECIFICATIONS)

Sieve Size	% Passing
1"	100
3/4"	90-100
3/8"	40-100
No.4	25-40
No.8	18-33
No.30	5-15
No.50	0-7
No.200	0-3

RETAINING WALL DRAINAGE DETAIL

APPENDIX A

REFERENCES

APPENDIX A

REFERENCES

American Society of Civil Engineers, 2017, ASCE 7-16 Minimum Design Loads and Associated Criteria for Building and Other Structures.

Burmister, DM (1948). "Importance & Practical Use of Relative Density in Soil Mechanics," Proc., ASTM, 48, 1249-1268.

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APPENDIX B

FIELD EXPLORATION PROGRAM

APPENDIX B

FIELD EXPLORATION PROGRAM

The subsurface conditions for this Geotechnical Investigation were explored by excavating six exploratory borings with an 8 inch diameter hollow stem auger and hand tools. Driven samples were obtained by SPT or a Modified California Split Spoon Sampler. The approximate locations of the borings are shown on the Subsurface Exploration Map (Figure 3). The field exploration was performed under the supervision of our engineer and geologist who maintained a continuous log of the subsurface soils encountered and obtained samples for laboratory testing.

Subsurface conditions are summarized on the accompanying Logs of Borings. The logs contain descriptive information and interpretation of subsurface conditions based on the obtained samples. The stratum indicated on these logs represents the approximate boundary between earth units, however, transitions may be gradual. The logs show subsurface conditions at the dates and locations indicated and may not be representative of subsurface conditions at other locations and times.

Identification of the soils encountered during the subsurface exploration was made using the field identification procedure of the Unified Soils Classification System (ASTM D2488). A legend indicating the symbols and definitions used in this classification system and a legend defining the terms used in describing the relative compaction, consistency or firmness of the soil are attached in this appendix. Bag samples of the major earth units were obtained for laboratory inspection and testing, and the in-place density of the various strata encountered in the exploration was determined.

The exploratory borings were backfilled in general accordance with DEH requirements and patched where appropriate.

UNIFIED SOIL CLASSIFICATION SYSTEM					
No. 200 U.S. Standard Sieve is the smallest particle visible	Coarse-grained soils >1/2 of materials is larger than #200 sieve	GRAVELS are more than half of coarse fraction larger than #4 sieve	Clean Gravels (less than 5% fines)	GW	Well-graded gravels, gravel-sand mixtures, little or no fines
			Gravels with fines	GP	Poorly graded gravels, gravel-sand mixtures, little or no fines
		SANDS are more than half of coarse fraction larger than #4 sieve	Clean Sands (less than 5% fines)	GM	Silty Gravels, poorly graded gravel-sand-silt mixtures
			Sands with fines	GC	Clayey Gravels, poorly graded gravel-sand-clay mixtures
	Fine-grained Soils >1/2 of materials is smaller than #200 sieve	SILTS AND CLAYS Liquid Limit Less than 50		SW	Well-graded sands, gravelly sands, little or no fines
				SP	Poorly graded sands, gravelly sands, little or no fines
				SM	Silty Sands, poorly graded sands-gravel-clay mixtures
				SC	Clayey Sands, poorly graded sand-gravel-silt mixtures
				ML	Inorganic clays of low to med plasticity, gravelly, sandy, silty, or lean clays
		SILTS AND CLAYS Liquid Limit Greater than 50		CL	Inorganic clays of low to med plasticity, gravelly, sandy, silty, or lean clays
				OL	Organic silts and clays of low plasticity
				MH	Inorganic silts, micaceous or diatomaceous fine sands or silts
				CH	Inorganic clays of high plasticity, fat clays
				OH	Organic silts and clays of medium to high plasticity
Highly Organic Soils				PT	Peat, humus swamp soils with high organic content

GRAIN SIZE				
Description		Sieve Size	Grain Size	Approximate Size
Boulders		>12”	>12”	Larger than basketball-sized
Cobbles		3”- 12”	3”- 12”	Fist-sized to basketball-sized
Gravel	Coarse	¾”- 3”	¾”- 3”	Thumb-sized
	Fine	#4 - ¾”	0.19” - 0.75”	Peat-sized to thumb-sized
Sand	Coarse	#10 - #4	0.079” - 0.19”	Rock salt-sized to pea-sized
	Medium	#40 - #10	0.017” - 0.079”	Sugar-sized to rock salt-sized
	Fine	#200 - #40	0.0029” - 0.017”	Flour-sized to sugar-sized
Fines		Passing #200	<0.0029”	Flour-sized or smaller

SIZE PROPORTION
Trace – Less than 5%
Few – 5% to 10%
Little – 15% to 20%
Some – 30% to 45%
Mostly – 50% to 100%
MOISTURE CONTENT
Dry – Absence of moisture
Moist – Damp but not visible
Wet – Visible free water

Project: **Laguna Beach HS Aquatic Center GI**	Log of Boring B-1
Project Location: **670 Park Ave, Laguna Beach, CA 92651**	**Sheet 1 of 1**
Project Number: **2520A02**	

Date(s) Drilled **8/15/2024**	Logged By **THC**	Checked By **GSW**
Drilling Method **Hollow Stem Auger**	Drill Bit Size/Type **8-inch HSA**	Total Depth of Borehole **21½ Feet BGS**
Drill Rig Type **CME-75**	Drilling Contractor **Baja Exploration**	Approximate Surface Elevation **168½ Feet MSL**
Groundwater Level and Date Measured **Not Encountered**	Sampling Method(s) **Bulk, Modified California, SPT**	Hammer Data **140lb/30-inch drop (ETR: 71.9%)**
Borehole Backfill **Auger Cuttings**	Location **See Boring Location Map**	

Elevation (feet)	Depth (feet)	Sample Type	Sampling Resistance	N60	Material Type	Graphic Log	MATERIAL DESCRIPTION	Water Content, %	Dry Unit Weight, pcf	Lab Testing	REMARKS
	0				Asphalt Base		Approximately 3½ inches of Asphalt Concrete over 8 inches of Aggregate Base (Possibly Cement Treated Base).				
		Bulk			SC		**Fill (Qf):** CLAYEY SAND (SC), loose to medium dense, brown to light brown, moist, fine to medium grained, trace debris.				
		Bulk			SC		**Colluvium (Qoc):** CLAYEY SAND (SC), loose to medium dense, light brown, moist, fine to medium grained, trace manganese staining, trace white precipitates.			PD MAX DS	
	5	SPT	4 6 7	16	SC		**Old paralic deposits (Qop):** CLAYEY SAND (SC), medium dense, light brown to brown, moist, fine to medium grained, trace manganese staining.				
		Mod. Cal.	11 19 23	33			Dense, light brown to olive to brown.				
	10	SPT	8 11 17	34			Trace white precipitates.				
		Mod. Cal.	8 18 32	39	CL		SANDY CLAY (CL), hard, olive to light gray, moist, fine to medium grained sands, white precipitate nodules.			WA	
	15	SPT	15 15 11	31	SM		SILTY SAND (SM), dense, light brown, moist, fine to medium grained, trace clay.				
		Mod. Cal.	19 18 31	38	SC		CLAYEY SAND (SC), dense, light brown to olive, moist, fine to medium grained, trace manganese staining.				
	20	SPT	9 12 18	36			Thin interbeds of SILTY SAND (SM), and SANDY CLAY (CL).				
							Boring Terminated at 21½ Feet BGS.				

Project: **Laguna Beach HS Aquatic Center GI**	# Log of Boring B-2
Project Location: **670 Park Ave, Laguna Beach, CA 92651**	**Sheet 1 of 3**
Project Number: **2520A02**	

Date(s) Drilled **8/15/2024**	Logged By **THC**	Checked By **GSW**
Drilling Method **Hollow Stem Auger**	Drill Bit Size/Type **8-inch HSA**	Total Depth of Borehole **51½ Feet BGS**
Drill Rig Type **CME-75**	Drilling Contractor **Baja Exploration**	Approximate Surface Elevation **171½ Feet MSL**
Groundwater Level and Date Measured **Not Encountered**	Sampling Method(s) **Bulk, Modified California, SPT**	Hammer Data **140lb/30-inch drop (ETR: 71.9%)**
Borehole Backfill **Auger Cuttings**	Location **See Boring Location Map**	

Elevation (feet)	Depth (feet)	Sample Type	Sampling Resistance	N60	Material Type	Graphic Log	MATERIAL DESCRIPTION	Water Content, %	Dry Unit Weight, pcf	Lab Testing	REMARKS
	0				Asphalt Base		Approximately 4 inches of Asphalt Concrete over 8½ inches of Aggregate Base (Possibly Cement Treated Base).				
					CL		**Fill (Qf):** SANDY CLAY (CL), medium stiff, light brown to grayish brown, moist, fine to medium grained sands, trace debris and gravel.			RV EI COR	
					SC		**Colluvium (Qoc):** CLAYEY SAND (SC), medium dense, light brown, moist, fine to medium grained, trace manganese staining, trace white precipitates.				
							Brown, decreased fines content.				
	5		12 19 25	34	SC		**Old paralic deposits (Qop):** CLAYEY SAND (SC), dense, brown, moist, fine to medium grained, trace manganese staining, very thin interbeds of SILTY SAND (SM).	11.0	120.4	DS	
			6 7 7	17			Medium dense.				
	10		13 16 20	28			Brown to light brown.	10.3	114.6		
			8 9 13	26			Light brown to olive brown, fine grained, trace calcium carbonate nodules.				
	15		15 35 45	>50			Very dense, increased fines content.			WA	
			6 8 13	25	CL-ML		SANDY SILTY CLAY (CL-ML), very stiff, olive, moist, fine grained sands.			AL	
	20		12 18 24	33			Hard, thin interbeds of light brown, fine grained CLAYEY SAND (SC) and SILTY SAND (SM), trace manganese staining, laminated, slightly micaceous.				

Project: **Laguna Beach HS Aquatic Center GI**
Project Location: **670 Park Ave, Laguna Beach, CA 92651**
Project Number: **2520A02**

Log of Boring B-2
Sheet 2 of 3

Elevation (feet)	Depth (feet)	Sample Type	Sampling Resistance	N60	Material Type	Graphic Log	MATERIAL DESCRIPTION	Water Content, %	Dry Unit Weight, pcf	Lab Testing	REMARKS
							Old paralic deposits (Qop): SANDY SILTY CLAY (CL-ML), hard, olive, moist, fine grained sands, thin interbeds of light brown, fine grained CLAYEY SAND (SC) and SILTY SAND (SM), trace manganese staining, laminated, slightly micaceous. *(Continued)*				
	25		5 9 12	25	SC		CLAYEY SAND (SC), medium dense, olive, moist, fine to medium grained, thin interbeds of SANDY CLAY (CL), trace rootlets, manganese staining, calcium carbonate nodules.				
	30		15 30 33	49			Dense, thin interbeds of SILTY CLAY (CL-ML), fine grained Poorly graded SAND with SILT (SP-SM), few rounded gravel, oxidized.				
	35		7 8 12	24	CL		CLAY (CL), very stiff, olive to grayish brown, moist, some silt, trace coarse grained sand, calcium carbonate nodules.				
	40		40 50/4"	>50			**Topanga Formation (Tt):** SILTY SANDSTONE, moderately cemented, light gray to olive, moist, fine to medium grained, trace clay, trace manganese staining. Breaks down to SILTY SAND (SM).				

Project: **Laguna Beach HS Aquatic Center GI**	Log of Boring B-2
Project Location: **670 Park Ave, Laguna Beach, CA 92651**	**Sheet 3 of 3**
Project Number: **2520A02**	

Elevation (feet)	Depth (feet)	Sample Type	Sampling Resistance	N60	Material Type	Graphic Log	MATERIAL DESCRIPTION	Water Content, %	Dry Unit Weight, pcf	Lab Testing	REMARKS
							Topanga Formation (Tt): SILTY SANDSTONE, moderately cemented, light gray to olive, moist, fine to medium grained, trace clay, trace manganese staining. Breaks down to SILTY SAND (SM). *(Continued).*				
	45		37 50/6"	>50			Fine grained, laminated, oxidized.				
	50		16 24 25	>50			Slight increase in fines content.				
							Boring Terminated at 51½ Feet BGS. No Groundwater Encountered. Boring Backfilled 8/15/2024 with Cement Bentonite Grout.				
	55										
	60										
	65										

Project: **Laguna Beach HS Aquatic Center GI**	# Log of Boring P-1
Project Location: **670 Park Ave, Laguna Beach, CA 92651**	**Sheet 1 of 1**
Project Number: **2520A02**	

Date(s) Drilled **8/15/2024**	Logged By **THC**	Checked By **GSW**
Drilling Method **Hollow Stem Auger**	Drill Bit Size/Type **8-inch HSA**	Total Depth of Borehole **8½ Feet BGS**
Drill Rig Type **CME-75**	Drilling Contractor **Baja Exploration**	Approximate Surface Elevation **165 Feet MSL**
Groundwater Level and Date Measured **Not Encountered**	Sampling Method(s) **Bulk, Modified California, SPT**	Hammer Data **140lb/30-inch drop (ETR: 71.9%)**
Borehole Backfill **Auger Cuttings**	Location **See Boring Location Map**	

Elevation (feet)	Depth (feet)	Sample Type	Sampling Resistance	N60	Material Type	Graphic Log	MATERIAL DESCRIPTION	Water Content, %	Dry Unit Weight, pcf	Lab Testing	REMARKS
165	0				Asphalt Base		Approximately 3 inches of Asphalt Concrete over 9 inches of Aggregate Base (Possibly Cement Treated Base).				
					SC		**Colluvium (Qoc):** CLAYEY SAND (SC), loose to medium dense, brown, moist, fine to medium grained, trace manganese staining.				
							Medium dense, increasingly moist.				
160	5		4 5 6	13			Brown to light brown, increasingly moist.	17.0			
			8 13 15	22	SC		**Old paralic deposits (Qop):** CLAYEY SAND (SC), medium dense, brown, moist, fine to medium grained, trace manganese staining.			PD	
							Boring Terminated at 8½ Feet BGS. No Groundwater Encountered. Boring Converted to Borehole Percolation Test 8/15/204. Boring Backfilled 8/16/2024.				
155	10										
150	15										
145	20										

Project: **Laguna Beach HS Aquatic Center GI**	# Log of Boring HA-1
Project Location: **670 Park Ave, Laguna Beach, CA 92651**	**Sheet 1 of 1**
Project Number: **2520A02**	

Date(s) Drilled **8/15/2024**	Logged By **JR**	Checked By **GSW**
Drilling Method **Hand Auger**	Drill Bit Size/Type **4-inch**	Total Depth of Borehole **15 Feet BGS**
Drill Rig Type **Hand Auger**	Drilling Contractor **Strongarm Environmental Field Services, Inc.**	Approximate Surface Elevation **182 Feet MSL**
Groundwater Level and Date Measured **Not Encountered**	Sampling Method(s) **Bulk**	Hammer Data **N/A**
Borehole Backfill **Auger Cuttings**	Location **See Boring Location Map**	

Elevation (feet)	Depth (feet)	Sample Type	Sampling Resistance	N60	Material Type	Graphic Log	MATERIAL DESCRIPTION	Water Content, %	Dry Unit Weight, pcf	Lab Testing	REMARKS
182	0				Concrete		Approximately 8 inches of Portland Cement Concrete (PCC).				
					SC		**Fill (Qf):** CLAYEY SAND (SC), medium dense, brown to grayish brown, moist, fine to coarse grained, trace debris.				
					SM		SILTY SAND (SM), medium dense, light brown to yellowish brown, moist, fine to medium grained, trace clay.			PD	
177	5										
					SM		**Colluvium (Qoc):** SILTY SAND (SM), dense, yellowish brown, moist, fine to coarse grained, trace gravel, micaceous.				
							Medium dense, brown, trace gravel, micaceous.				
							Brown to light grayish brown.				
172	10										
					SC		**Old paralic deposits (Qop):** CLAYEY SAND (SC), medium dense, light grayish brown to olive brown, moist, fine to medium grained, trace silt, manganese staining, micaceous.				
167	15						Boring Terminated at Approximately 15 Feet BGS. No Groundwater Encountered. Boring Backfilled on 8/15/2024.				
162	20										

Project: **Laguna Beach HS Aquatic Center GI**	# Log of Boring HA-2
Project Location: **670 Park Ave, Laguna Beach, CA 92651**	**Sheet 1 of 1**
Project Number: **2520A02**	

Date(s) Drilled **8/15/2024**	Logged By **JR**	Checked By **GSW**
Drilling Method **Hand Auger**	Drill Bit Size/Type **4-inch**	Total Depth of Borehole **15½ Feet BGS**
Drill Rig Type **Hand Auger**	Drilling Contractor **Strongarm Environmental Field Services, Inc.**	Approximate Surface Elevation **182 Feet MSL**
Groundwater Level and Date Measured **Not Encountered**	Sampling Method(s) **Bulk**	Hammer Data **N/A**
Borehole Backfill **Auger Cuttings**	Location **See Boring Location Map**	

Elevation (feet)	Depth (feet)	Sample Type	Sampling Resistance	N60	Material Type	Graphic Log	MATERIAL DESCRIPTION	Water Content, %	Dry Unit Weight, pcf	Lab Testing	REMARKS
182	0				Concrete		Approximately 8 inches of Portland Cement Concrete (PCC).				
					SC		**Fill (Qf):** CLAYEY SAND (SC), medium dense, brown to grayish brown, moist, fine to coarse grained, trace gravel.				
					SM		SILTY SAND (SM), medium dense, brown to grayish brown, moist, fine to coarse grained, micaceous, trace clay.				
		Bulk					Yellowish brown to light brown.				
177	5	Bulk			SC		CLAYEY SAND (SC), medium dense, light brown, moist, fine to medium grained, slightly micaceous.				
		Bulk			SM		**Colluvium (Qoc):** SILTY SAND (SM), medium dense, brown, moist, fine to medium grained, micaceous, trace gravel.				
172	10										
		Bulk			SM		**Old paralic deposits (Qop):** SILTY SAND (SM), medium dense, brown, moist, fine to medium grained.				
167	15						Boring Terminated at 15½ Feet BGS. No Groundwater Encountered. Boring Backfilled on 8/15/2024.				
162	20										

Project: **Laguna Beach HS Aquatic Center GI**	Log of Boring HA-3
Project Location: **670 Park Ave, Laguna Beach, CA 92651**	**Sheet 1 of 1**
Project Number: **2520A02**	

Date(s) Drilled **8/15/2024**	Logged By **JR**	Checked By **GSW**
Drilling Method **Hand Auger**	Drill Bit Size/Type **4-inch**	Total Depth of Borehole **10 Feet BGS**
Drill Rig Type **Hand Auger**	Drilling Contractor **Strongarm Environmental Field Services, Inc.**	Approximate Surface Elevation **181½ Feet MSL**
Groundwater Level and Date Measured **Not Encountered**	Sampling Method(s) **Bulk**	Hammer Data **N/A**
Borehole Backfill **Auger Cuttings**	Location **See Boring Location Map**	

Elevation (feet)	Depth (feet)	Sample Type	Sampling Resistance	N60	Material Type	Graphic Log	MATERIAL DESCRIPTION	Water Content, %	Dry Unit Weight, pcf	Lab Testing	REMARKS
	0				Grass		Approximately 3 inches of topsoil and vegetation.				
					SM		**Fill (Qf):** SILTY SAND (SM), medium dense, brown to light brown, moist, fine to coarse grained, trace gravel, trace cobbles, few rootlets and organics from landscaping.				
					SC		CLAYEY SAND (SC), medium dense, brown, moist, fine to coarse grained, trace debris.				
					SM		SILTY SAND (SM), medium dense, light brown to grayish brown, moist, fine to coarse grained, slightly micaceous, trace clay.				
	5										
					SC		**Old paralic deposits (Qop):** CLAYEY SAND (SC), medium dense, light brown to olive brown, moist, fine to medium grained, micaceous, manganese staining, trace silt.				
							Medium dense to dense, oxidized.				
	10						Boring Terminated at 10 Feet BGS. No Groundwater Encountered. Boring Backfilled on 8/15/2024.				
	15										
	20										

Project: **Laguna Beach HS Aquatic Center GI**	# Key to Log of Boring
Project Location: **670 Park Ave, Laguna Beach, CA 92651**	**Sheet 1 of 1**
Project Number: **2520A02**	

Elevation (feet)	Depth (feet)	Sample Type	Sampling Resistance	N60	Material Type	Graphic Log	MATERIAL DESCRIPTION	Water Content, %	Dry Unit Weight, pcf	Lab Testing	REMARKS
1	2	3	4	5	6	7	8	9	10	11	12

COLUMN DESCRIPTIONS

1 Elevation (feet): Elevation (MSL, feet).
2 Depth (feet): Depth in feet below the ground surface.
3 Sample Type: Type of soil sample collected at the depth interval shown.
4 Sampling Resistance: Number of blows to advance driven sampler one foot (or distance shown) beyond seating interval using the hammer identified on the boring log.
5 N60: Energy corrected SPT blow count per foot.
6 Material Type: Type of material encountered.
7 Graphic Log: Graphic depiction of the subsurface material encountered.
8 MATERIAL DESCRIPTION: Description of material encountered. May include consistency, moisture, color, and other descriptive text.
9 Water Content, %: Water content of the soil sample, expressed as percentage of dry weight of sample.
10 Dry Unit Weight, pcf: Dry weight per unit volume of soil sample measured in laboratory, in pounds per cubic foot.
11 Lab Testing : Laboratory Testing
12 REMARKS : Comments and observations regarding drilling or sampling made by driller or field personnel.

FIELD AND LABORATORY TEST ABBREVIATIONS

COR: Corrosive Series Tests (CTM-643,417,422)
MAX: Maximum Dry Density and Optimum Moisture (ASTM D1557)
DS: Direct Shear Test (ASTM, D3080)
EI: Expansion Index, (ASTM, D4829)
AL: Atterberg Limits (ASTM, D4318)
PD: Particle-Size Distribution using Sieve Analysis (ASTM D6913)
WA: Wash sieve (percent passing No. 200 Sieve)

MATERIAL GRAPHIC SYMBOLS

Clayey SAND (SC)
Silty SAND (SM)
Lean CLAY, CLAY w/SAND, SANDY CLAY (CL)
SILTY CLAY (CL-ML)
Silty SANDSTONE, degrades to SILTY SAND (SM).

SURFACE GRAPHIC SYMBOLS

Portland Cement Concrete (PCC)
Asphaltic Concrete (AC)
Aggregate Base (AB)

TYPICAL SAMPLER GRAPHIC SYMBOLS

2-inch-OD unlined split spoon (SPT)
2.5-inch-OD Modified California
Bulk Sample

OTHER GRAPHIC SYMBOLS

Water level (at time of drilling, ATD)
Water level (after waiting, AW)
Minor change in material properties within a stratum
Inferred/gradational contact between strata
? Queried contact between strata

GENERAL NOTES

1: Soil classifications are based on the Unified Soil Classification System. Descriptions and stratum lines are interpretive, and actual lithologic changes may be gradual. Field descriptions may have been modified to reflect results of lab tests.
2: Descriptions on these logs apply only at the specific boring locations and at the time the borings were advanced. They are not warranted to be representative of subsurface conditions at other locations or times.

Figure B-1

APPENDIX C

LABORATORY TESTING PROCEDURES & RESULTS

APPENDIX C

LABORATORY TESTING PROCEDURES

1. Particle Size Analysis
   Particle size analysis on representative soil samples were determined using the standard test method of the ASTM D6913.

2. Atterberg Limits
   The liquid limit, plastic limit, and the plasticity index of the major soil types encountered were determined using the standard test methods of the ASTM D4318.

3. Percent Finer
   Determining the amount of material finer than No. 200 sieve in soils by washing was performed on soil samples using the standard test methods of the ASTM D1140.

4. Expansion Index
   Expansion index of materials encountered was determined using the standard test methods of the ASTM D4829.

5. Maximum Density
   Maximum density tests were performed on a representative bag sample of the near surface soils in accordance with ASTM D1557.

6. Direct Shear
   Direct Shear Tests were performed on in-place samples of site soils in accordance with ASTM D3080.

7. Resistance Value Testing
   R-Value testing was completed in substantial compliance with Caltrans Test Method 301. Graphical plots of our tests are included in this appendix.

8. Corrosion
   Chemical testing was performed on representative samples to determine the corrosion potential of the onsite soils. Testing consisted of pH, chlorides (CTM 422), soluble sulfates (CTM 417), and resistivity (CTM 643).

Particle Size Distribution Report

% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.5	10.0	54.7	34.8	

SIEVE SIZE	PERCENT FINER		
1-1/2"	100.0		
1"	100.0		
3/4"	100.0		
1/2"	100.0		
3/8"	100.0		
#4	100.0		
#8	99.6		
#16	98.7		
#30	94.3		
#50	81.2		
#100	55.1		
#200	34.8		

Material Description

Light Brown, CLAYEY SAND (SC)

Classification

USCS=SC

Location: B-1 at 2 to 5 Feet
Sample Number: 24-8319

Date: 08/15/24

MTGL, Inc.

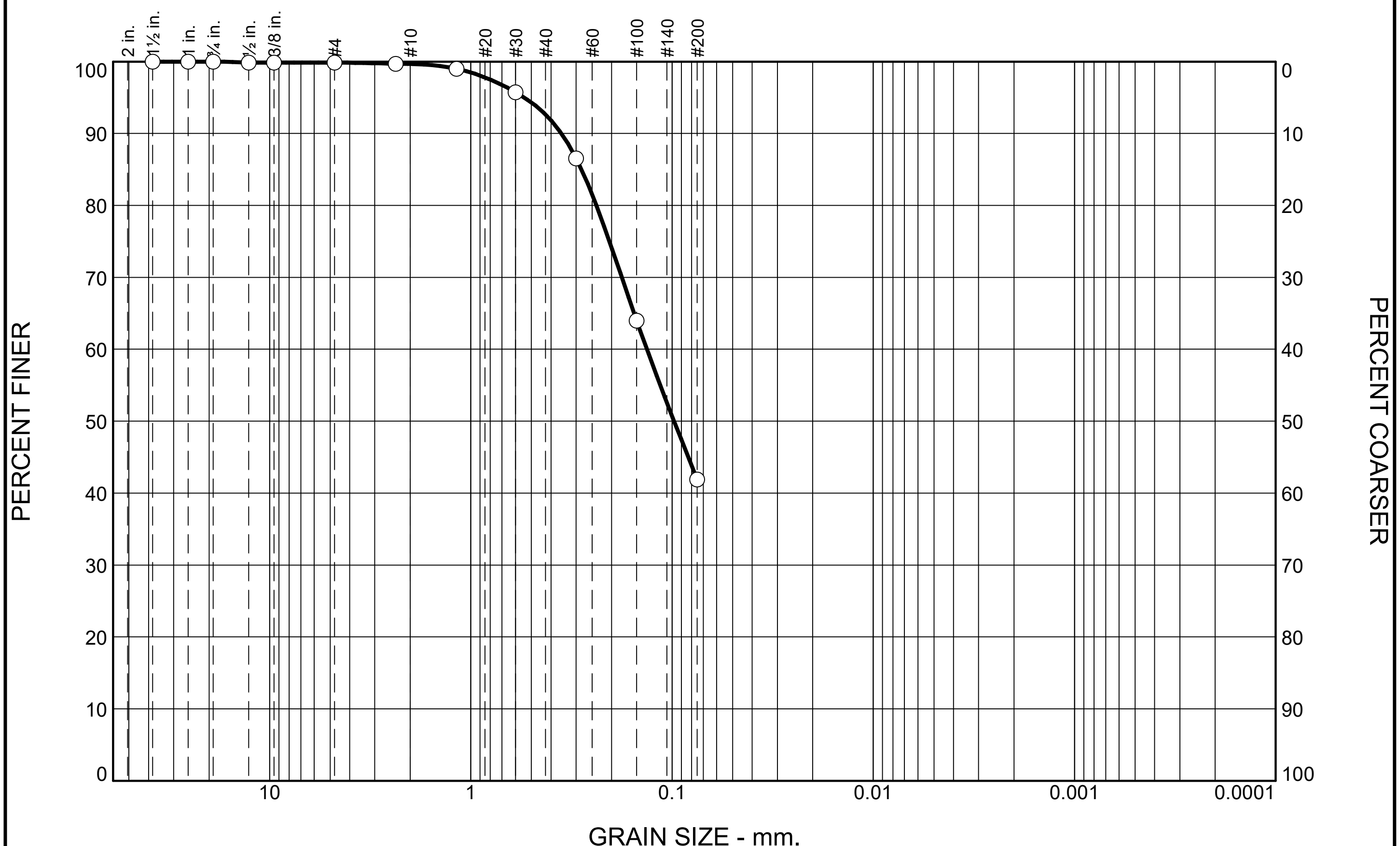
Anaheim, CA

Client: Laguna Beach Unified School District
Project: Laguna Beach HS Pool Modernization GI

Project No: 2520A02 **Figure** C-1

Tested By: J. ALVAREZ

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.1	0.2	7.1	50.7	41.9	

SIEVE SIZE	PERCENT FINER		
1-1/2"	100.0		
1"	100.0		
3/4"	100.0		
1/2"	99.9		
3/8"	99.9		
#4	99.9		
#8	99.7		
#16	99.0		
#30	95.7		
#50	86.5		
#100	64.0		
#200	41.9		

Material Description

Light brown to yellowish brown, SILTY SAND (SM)

Classification

USCS=SM

Location: HA-1 at 1 to 3½ Feet
Sample Number: 24-8319

Date: 08/15/24

MTGL, Inc.

Anaheim, CA

Client: Laguna Beach Unified School District
Project: Laguna Beach HS Pool Modernization GI

Project No: 2520A02 **Figure** C-2

Tested By: J. ALVAREZ

Particle Size Distribution Report

% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.4	10.1	49.7	39.8	

SIEVE SIZE	PERCENT FINER		
1-1/2"	100.0		
1"	100.0		
3/4"	100.0		
1/2"	100.0		
3/8"	100.0		
#4	100.0		
#8	99.7		
#16	98.8		
#30	94.3		
#50	81.7		
#100	58.4		
#200	39.8		

Material Description

Brown, CLAYEY SAND (SC)

Classification

USCS=SC

Location: P-1 at 8 to 8½ Feet
Sample Number: 24-8319

Date: 08/15/24

MTGL, Inc.

Anaheim, CA

Client: Laguna Beach Unified School District
Project: Laguna Beach HS Pool Modernization GI

Project No: 2520A02 **Figure** C-3

Tested By: J. ALVAREZ

R-VALUE

CALIFORNIA TEST 301

SAMPLE	DESCRIPTION	R-VALUE
B-2 at 1 to 2½ Feet	SANDY CLAY (CL)	10

MAXIMUM DRY DENSITY AND OPTIMUM MOISTURE CONTENT

ASTM D1557

SAMPLE	DESCRIPTION	MAXIMUM DRY DENSITY (pcf)	OPTIMUM MOISTURE (%)
B-1 at 2 to 5 Feet	CLAYEY SAND (SC)	124.9	9.7

EXPANSION INDEX

ASTM D4829

SAMPLE	DESCRIPTION	EXPANSION INDEX
B-2 at 1 to 2½ Feet	SANDY CLAY (CL)	61

Classification of Expansive Soil [1]

Expansion Index	Expansion Potential
1-20	Very Low
21-50	Low
51-90	Medium
91-130	High
Above 130	Very High

1. ASTM - D4829

RESISTIVITY, pH, SOLUBLE CHLORIDE and SOLUBLE SULFATE

Resitivity (CT.643), Soluble Sulfates (CT.417) Soluble Chlorides (CT.442)

SAMPLE	pH	RESISTIVITY (Ω-cm)	SULFATE (ppm)	CHLORIDE (ppm)
B-2 at 1 to 2½ Feet	7.7	965	279	69

ATTERBERG LIMITS

ASTM D4318

SAMPLE	FINES CLASSIFICATION	Liquid Limit	Plastic Limit	Plastic Index
B-2 at 18 to 19 Feet	SANDY SILTY CLAY (CL-ML)	25	18	7

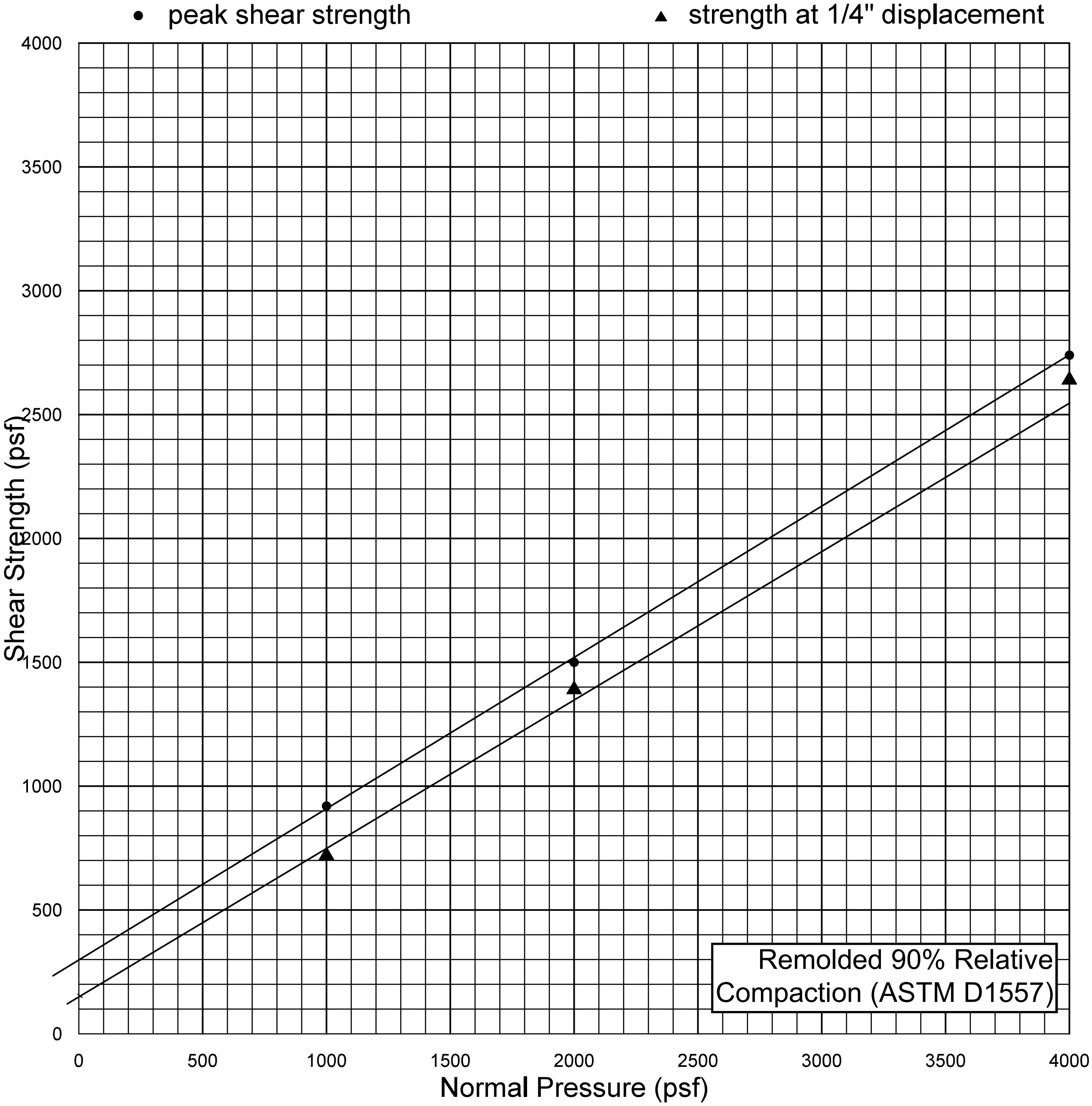
* NP indicates non plastic

PERCENT FINER

ASTM D1140

SAMPLE	DESCRIPTION	% Finer
B-1 at 13½ to 14 Feet	SANDY CLAY (CL)	53.3
B-2 at 16 to 16½ Feet	CLAYEY SAND (SC)	46.6

DIRECT SHEAR TEST - ASTM D-3080



Strain Rate: 0.0084 in. / min.

Sample Location	Material Description	Dry Density (pcf)	Initial W.C (%)	Final W.C (%)
B-1 at 2 to 5 Feet	Recompacted Fill / Colluvium: CLAYEY SAND (SC)	112.4 (90% RC)	10.0	16.4

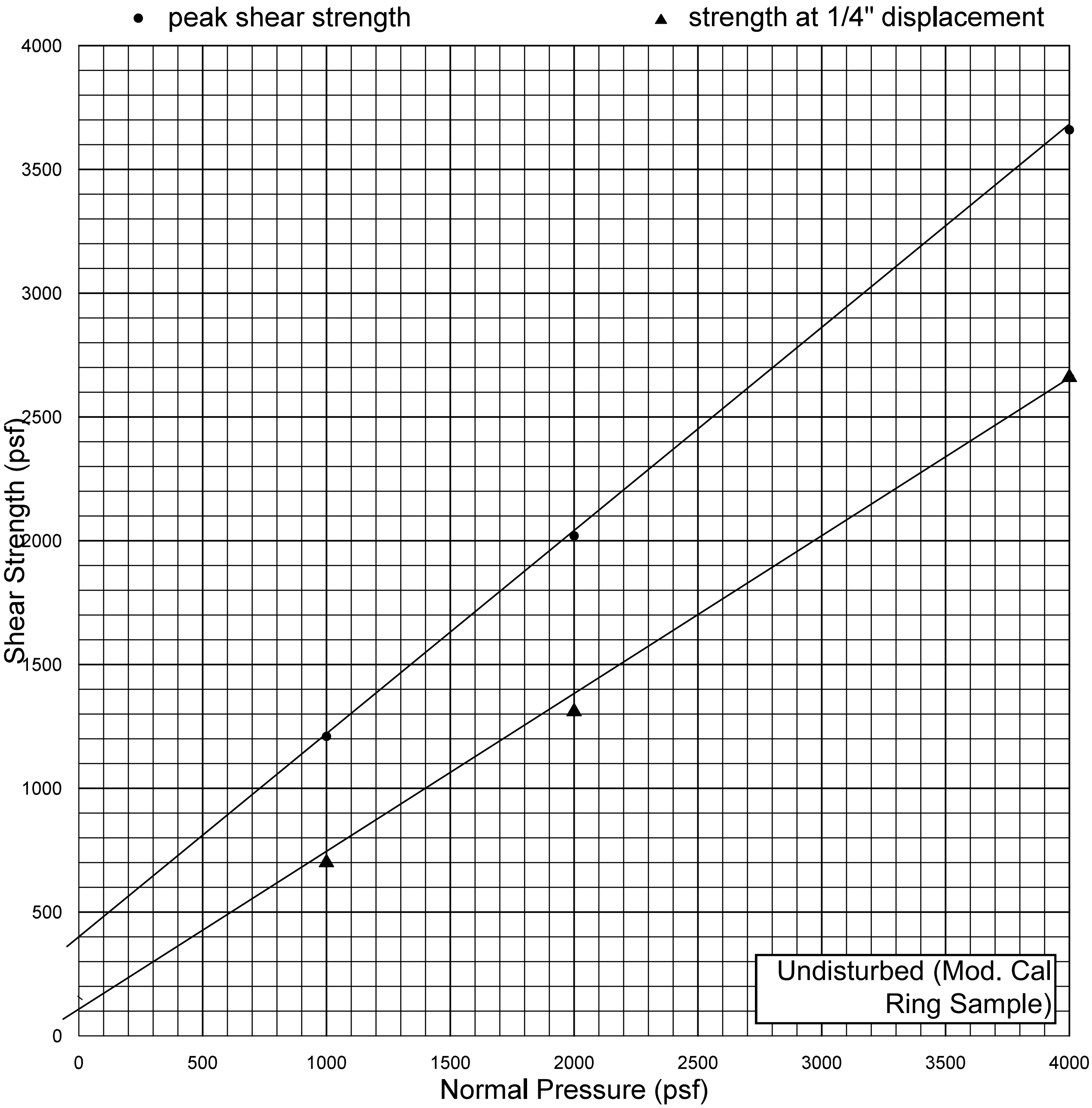
Normal Pressure (psf)	Peak Shear strength (psf)	Ultimate Shear Strength (psf)
1000	920 @ 0.0550"	720
2000	1500 @ 0.0605"	1390
4000	2640 @ 0.1405"	2640
	C = 300 psf	C = 150 psf
	ϕ = 31.5 deg.	ϕ = 31.5 deg.

Date: 08-28-2024

Geo**L**ogic **A**ssociates

Figure C-5

DIRECT SHEAR TEST - ASTM D-3080



Strain Rate: 0.0084 in. / min.

Sample Location	**Material Description**	**Dry Density (pcf)**	**Initial W.C (%)**	**Final W.C (%)**
B-2 at 6 to 6½ Feet	Old Paralic Deposits: CLAYEY SAND (SC)	120.4	11.0	13.4

Normal Pressure (psf)	Peak Shear strength (psf)	Ultimate Shear Strength (psf)
1000	1210 @ 0.1050"	700
2000	2020 @ 0.1105"	1310
4000	3660 @ 0.1400"	2660
	C = 400 psf	C = 100 psf
	ϕ = 40 deg.	ϕ = 33.5 deg.

APPENDIX D

GENERAL EARTHWORK AND GRADING SPECIFICATIONS

APPENDIX D

GENERAL EARTHWORK AND GRADING SPECIFICATIONS

GENERAL

These specifications present general procedures and requirements for grading and earthwork as shown on the approved grading plans, including preparation of areas to be filled, placement of fill, installation of subdrains, and excavations. The recommendations contained in the attached geotechnical report are a part of the earthwork and grading specifications and shall supersede the provisions contained herein in the case of conflict. Evaluations performed by the Consultant during the course of grading may result in new recommendations, which could supersede these specifications, or the recommendations of the geotechnical report.

EARTHWORK OBSERVATION AND TESTING

Prior to the start of grading, a qualified Geotechnical Consultant (Geotechnical Engineer and Engineering Geologist) shall be employed for the purpose of observing earthwork procedures and testing the fills for conformance with the recommendations of the geotechnical report and these specifications. It will be necessary that the Consultant provide adequate testing and observation so that he may determine that the work was accomplished as specified. It shall be the responsibility of the Contractor to assist the Consultant and keep them apprised of work schedules and changes so that he may schedule his personnel accordingly.

It shall be the sole responsibility of the Contractor to provide adequate equipment and methods to accomplish the work in accordance with applicable grading codes or agency ordinances, these specifications, and the approved grading plans.

Maximum dry density tests used to determine the degree of compaction will be performed in accordance with the American Society for Testing and Materials Test Method (ASTM) D1557.

PREPARATION OF AREAS TO BE FILLED

Clearing and Grubbing: All brush, vegetation and debris shall be removed or piled and otherwise disposed of.

Processing: The existing ground which is determined to be satisfactory for support of fill shall be scarified to a minimum depth of 8 inches. Existing ground, which is not satisfactory, shall be over-excavated as specified in the following section.

Over-excavation: Soft, dry, spongy, highly fractured, or otherwise unsuitable ground, extending to such a depth that surface processing cannot adequately improve the condition, shall be over-excavated down to firm ground, approved by the Consultant.

Moisture conditioning: Over-excavated and processed soils shall be watered, dried-back, blended, and mixed as required to have a relatively uniform moisture content near the optimum moisture content as determined by ASTM D1557.

Re-compaction: Over-excavated and processed soils, which have been mixed, and moisture conditioned uniformly shall be recompacted to a minimum relative compaction of 90% of ASTM D1557.

Benching: Where soils are placed on ground with slopes steeper than 5:1 (horizontal to vertical), the ground shall be stepped or benched. Benches shall be excavated in firm material for a minimum width of 4 feet.

FILL MATERIAL

General: Material to be placed as fill shall be free of organic matter and other deleterious substances and shall be approved by the Consultant.

Oversize: Oversized material defined as rock, or other irreducible material with a maximum dimension greater than 6 inches, shall not be buried or placed in fill, unless the location, material, and disposal methods are specifically approved by the Consultant. Oversize disposal operations shall be such that nesting of oversized material does not occur, and such that the oversize material is completely surrounded by compacted or densified fill. Oversize material shall not be placed within 10 feet vertically of finish grade or within the range of future utilities or underground construction, unless specifically approved by the Consultant.

Import: If the importing of fill material is required for grading, the import material shall meet the general requirements.

FILL PLACEMENT AND COMPACTION

Fill Lifts: Approved fill material shall be placed in areas prepared to receive fill in near-horizontal layers not exceeding 8 inches in compacted thickness. The Consultant may approve thicker lifts if testing indicates the grading procedures are such that adequate compaction is being achieved with lifts of greater thickness. Each layer shall be spread evenly and shall be thoroughly mixed during spreading to attain uniformity of material and moisture in each layer.

Fill Moisture: Fill layers at a moisture content less than optimum shall be watered and mixed, and wet fill layers shall be aerated by scarification or shall be blended with drier material. Moisture conditioning and mixing of fill layers shall continue until the fill material is at uniform moisture content at or near optimum.

Compaction of Fill: After each layer has been evenly spread, moisture conditioned, and mixed, it shall be uniformly compacted to not less than 90% of maximum dry density in accordance with ASTM D1557. Compaction equipment shall be adequately sized and shall be either specifically designed for soil compaction or of proven reliability, to efficiently achieve the specified degree of compaction.

Fill Slopes: Compacting on slopes shall be accomplished, in addition to normal compacting procedures, by backrolling of slopes with sheepsfoot rollers at frequent increments of 2 to 3 feet as the fill is placed, or by other methods producing satisfactory results. At the completion of grading, the relative compaction of the slope out to the slope face shall be at least 90% in accordance with ASTM D1557.

Compaction Testing: Field tests to check the fill moisture and degree of compaction will be performed by the consultant. The location and frequency of tests shall be at the consultant's discretion. In general, these tests will be taken at an interval not exceeding 2 feet in vertical rise, and/or 1,000 cubic yards of fill placed. In addition, on slope faces, at least one test shall be taken for each 5,000 square feet of slope face and/or each 10 feet of vertical height of slope.

SUBDRAIN INSTALLATION

Subdrain systems, if required, shall be installed in approved ground to conform to the approximate alignment and details shown on the plans or herein. The subdrain location or materials shall not be changed or modified without the approval of the Consultant. The Consultant, however, may recommend and, upon approval, direct changes in subdrain line, grade, or materials. All subdrains should be surveyed for line and grade after installation and sufficient time shall be allowed for the surveys, prior to commencement of fill over the subdrain.

EXCAVATION

Excavations and cut slopes will be examined during grading. If directed by the Consultant, further excavation or over-excavation and refilling of cut areas, and/or remedial grading of cut slopes shall be performed. Where fill over cut slopes are to be graded, unless otherwise approved, the cut portion of the slope shall be made and approved by the Consultant prior to placement of materials for construction of the fill portion of the slope.

APPENDIX E

SITE-SPECIFIC GROUND MOTION ANALYSIS RESULTS

SITE-SPECIFIC GROUND MOTION ANALYSIS (ASCE 7-16)

Project:	Laguna Beach HS Aquatic Center	**Latitude:**	33.5423	deg	**Calculated By:**	THC	
Client:	LBSD	**Longitude:**	-117.7762	deg	**Checked By:**	IC	
Job No:	2520A02	**Vs_{30}:**	260 (Assumed)	m/s	**Date:**	August, 2024	

Period T (sec)	PROBABILISTIC (RISK-TARGETED) GROUND MOTION ANALYSIS				DETERMINISTIC (84TH-PERCENTILE) GROUND MOTION ANALYSIS			CODE-BASED (LOWER LIMIT) ASCE 7-16 SECTION 11.4.6		SITE-SPECIFIC DESIGN RESPONSE		
	Uniform Hazard Ground Motion (g)	Risk Targeted Ground Motion (g)	Maximum Direction Scale Factor	Maximum Directional Probabilistic Sa (g)	84th Percentile Spectral Accelaration (g)	Maximum Direction Scale Factor	Maximum Directional Deterministic Sa (g)	Code Based S_a (g)	80% of Code Based S_a (g)	Design S_{aM} (g)	Design S_a (g)	T x S_a (T>1s)
PGA	0.628	0.595	1.1	0.655	0.893	1.1	0.983	0.352	0.281	0.655	0.436	---
0.10	1.061	1.027	1.1	1.130	1.448	1.1	1.593	0.757	0.606	1.130	0.753	---
0.20	1.440	1.391	1.1	1.530	1.891	1.1	2.080	0.879	0.703	1.530	1.020	---
0.30	1.600	1.528	1.125	1.719	2.303	1.125	2.590	0.879	0.703	1.719	1.146	---
0.50	1.528	1.436	1.175	1.687	2.493	1.175	2.929	0.879	0.703	1.687	1.125	---
0.75	1.226	1.149	1.2375	1.422	2.152	1.2375	2.663	0.762	0.610	1.422	0.948	---
1.00	1.001	0.933	1.3	1.213	1.760	1.3	2.288	0.572	0.457	1.213	0.809	0.809
2.00	0.524	0.487	1.35	0.657	0.878	1.35	1.185	0.286	0.229	0.657	0.438	0.877
3.00	0.330	0.307	1.4	0.430	0.471	1.4	0.659	0.191	0.152	0.430	0.287	0.860
4.00	0.228	0.212	1.45	0.307	0.319	1.45	0.462	0.143	0.114	0.307	0.205	0.820
5.00	0.170	0.157	1.5	0.236	0.227	1.5	0.340	0.114	0.091	0.236	0.157	0.785

INPUT PARAMETERS - SEAOC (https://seismicmaps.org/)

Site Class=	D	
F_a=	1.0	Short Period Site Coefficient
S_S=	1.319	Mapped MCE_R, 5% Damped at T=0.2s
S_1=	0.468	Mapped MCE_R, 5% Damped at T=1s
S_{DS}=	0.879	Design, 5% Damped at Short Periods
S_{MS}=	1.319	The MCE_R, 5% Damped at Short Periods
T_L (sec)=	8.0	Long Period Transition (Sect 11.4.6)
F_{PGA} (g)=	1.1	Site Coefficient for PGA
PGA_M (g)=	0.635	
F_v=	1.832	Used Only for Calculation of T_o and T_s
S_{M1}=	0.857	
S_{D1}=	0.572	Design, 5% Damped at T=1s
T_o (sec)=	0.130	Defined in ASCE 7-16 Sect 11.4.6
T_S (sec)=	0.650	Defined in ASCE 7-16 Sect 11.4.6

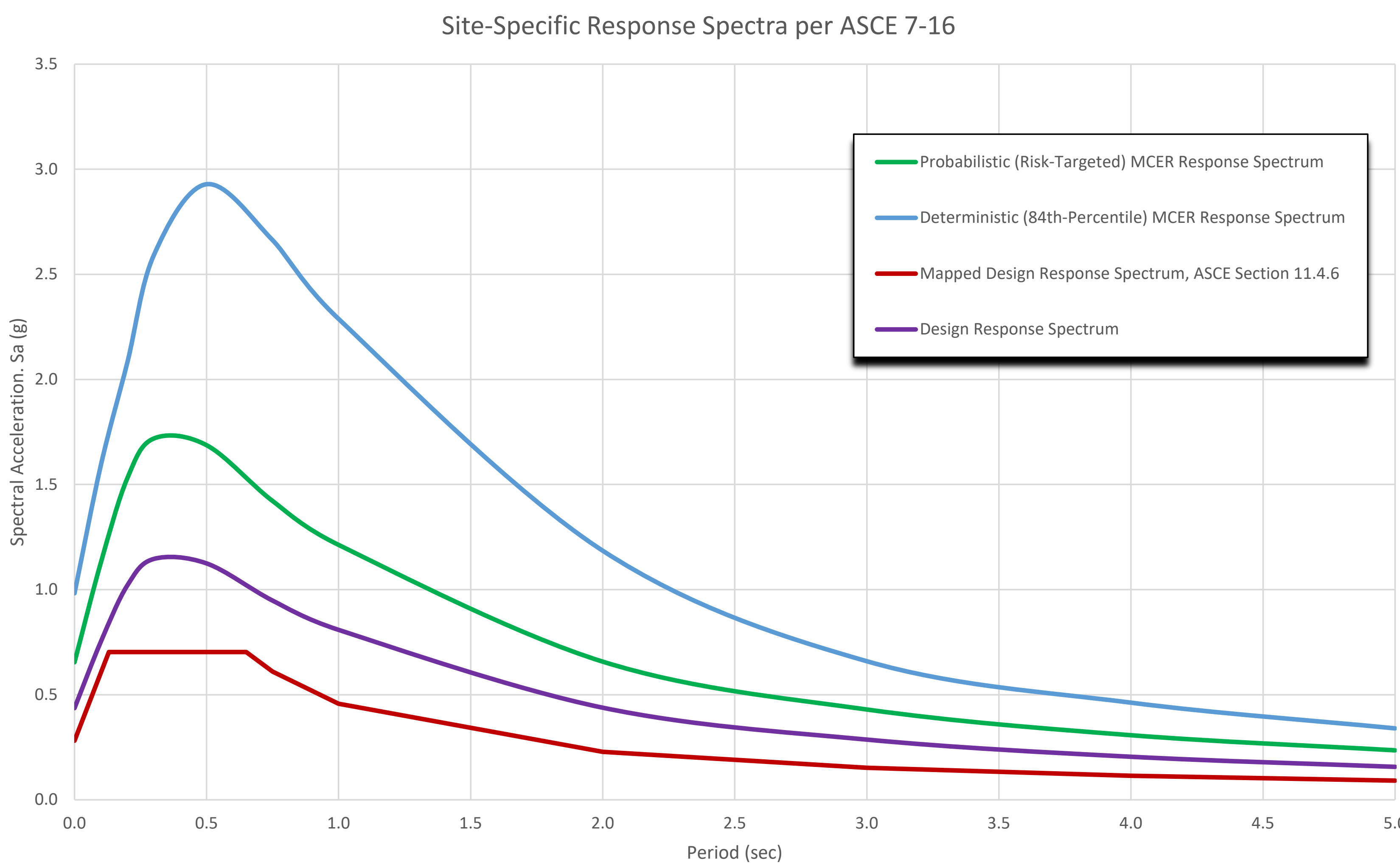
SITE-SPECIFIC DESIGN PARAMETERS

S_{DS}=	**1.031**	90% of max S_a (ASCE 7-16 Sect 21.4)
S_{MS}=	**1.547**	MCE_R, 5% Damped, adjusted for Site Class
S_{D1}=	**0.877**	Design, 5% Damped, at T=1s (Sect 11.4.5)
S_{M1}=	**1.315**	MCE_R, 5% Damped, at T=1s, adjusted for Site
F_a=	**1.000**	Short Period Site Coefficient (7-16 Sect 21.3)
F_v=	**2.500**	Long Period Site Coefficient (7-16 Sect 21.3)
S_S=	**1.547**	MCE_R, 5% Damped at T=0.2s
S_1=	**0.526**	MCE_R, 5% Damped at T=1s
$PGA_{Probabilistic}$ (g)=	**0.628**	Peak Ground Acceleration, Probabilistic
$PGA_{Deterministic}$ (g)=	**0.893**	Peak Ground Acceleration, Deterministic
F_{PGA} (g)=	**1.1**	Site Coefficient for PGA, when PGA = 0.5g
$0.5*F_{PGA}$ (g)=	**0.550**	OK (Check $PGA_{Deterministic}$ > 0.5 x F_{PGA})
$0.8*PGA_M$ (g)=	**0.508**	PGA_M (g) (Determined from ASCE 7-16 Eq. 11.8-1)
Site Specific PGA (g) =	**0.628**	(Check $PGA_{Site\ Specific}$> 0.8 x PGA_M)

DETERMINISTIC (84TH-PERCENTILE) GROUND MOTION ANALYSIS											
	PGA	0.10	0.20	0.30	0.50	0.75	1.00	2.00	3.00	4.00	5.00
Newport-Inglewood (M=7.15)	0.711	1.073	1.464	1.723	1.784	1.518	1.304	0.724	0.471	0.319	0.227
San Joaquin Hills (M=7.02)	0.893	1.448	1.891	2.303	2.493	2.152	1.760	0.878	0.469	0.274	0.182
Palos Verdes (M=7.38)	0.314	0.527	0.737	0.805	0.747	0.590	0.477	0.255	0.168	0.120	0.089
84th Percentile Spectral Accelaration	**0.893**	**1.448**	**1.891**	**2.303**	**2.493**	**2.152**	**1.760**	**0.878**	**0.471**	**0.319**	**0.227**

MTGL

Laguna Beach HS Aquatic Center Laguna Beach, California			
By:	THC	Date:	August, 2024
Job Number:	2520A02	Figure:	E-2



Laguna Beach HS Aquatic Center Laguna Beach, California			
By:	THC	Date:	August, 2024
Job Number:	2520A02	Figure:	E-3

APPENDIX F

INFILTRATION TEST RESULTS

PERCOLATION TEST DATA			
Project Name:	Laguna Beach HS Aquatic Center	Project No:	2520A02

Test Information

Test Hole No.:	P-1	Tested by:	T. Carter	Date:	8/16/2024	Gravel Pack: Yes
Depth of Hole (in), D_T:	103	USCS Soil Classification:	CLAYEY SAND (SC)			Gravel Size: 3/4 inch
Test Hole Dimensions (in):	Circle	Square / Rectangle				Perferated Pipe Diameter (in): 3
	Diameter	Length		Width		
	8	N/A		N/A		

Sandy Soil Criteria Test*

Trial No.	Start Time	Stop Time	Time Interval, (min.)	Initial Depth to Water (in)	Final Depth to Water (in)	Change in Water Level (in)	Greater than or Equal to 6" (y/n)	Pass/Fail
1	12:35 PM	1:00 PM	25	80.6	80.8	0.2	No	Fail

Note: Sandy soil criteria test perfomred on 8/15/2024.

*If two consecutive measurements show that six inches of water seeps away in less than 25 minutes, the test shall be run for an additional hour with measurements taken every 10 minutes. Otherwise, pre-soak (fill) overnight. Obtain at least twelve measurement sper hole over at least six hours (approximately 30 minute intervals) with a precision of at least 0.25".

Trial No.	Start Time	Stop Time	Dt Time Interval (min)	D_o Initial Depth to Water (in)	D_f Final Depth to Water (in)	DD Change in Water Level (in)	Percolation Rate (min/in)	Tested Infiltration Rate (in/hr)	*Reliable Infiltration Rate (in/hr)
1	7:33 AM	8:03 AM	30	83.2	83.2	0.0	∞	0.00	0.00
2	8:03 AM	8:33 AM	30	83.2	83.4	0.2	125.00	0.04	0.02
3	8:33 AM	9:03 AM	30	83.4	83.6	0.1	250.00	0.02	0.01
4	9:05 AM	9:35 AM	30	80.6	80.8	0.2	125.00	0.04	0.02
5	9:35 AM	10:05 AM	30	80.8	80.9	0.1	250.00	0.02	0.01
6	10:06 AM	10:36 AM	30	80.9	81.0	0.1	250.00	0.02	0.01
7	10:36 AM	11:06 AM	30	81.0	81.3	0.2	125.00	0.04	0.02
8	11:06 AM	11:36 AM	30	81.3	81.4	0.1	250.00	0.02	0.01
9	11:39 AM	12:09 PM	30	79.24	79.24	0.0	∞	0.00	0.00
10	12:09 PM	12:39 PM	30	79.24	79.36	0.1	250.00	0.02	0.01
11	12:39 PM	1:09 PM	30	79.36	79.48	0.1	250.00	0.02	0.01
12	1:09 PM	1:39 PM	30	79.48	79.60	0.1	250.00	0.02	0.01

*The reliable infiltration rate is calculated by applying a factor of safety of 2 to the tested infiltration rate.

Remarks: Approximatly 2 inches of water remaining in test hole following presoak.

Porchet Method

$$I_t = \frac{\Delta H\ (60r)}{\Delta t\ (r + 2H_{avg})}$$

Where: ΔH = Change in height over time
Δt = Time interval
r = Test hole radius
H_{avg} = Average head over time interval
I_t = Tested infiltration rate

APPENDIX E2

PALEONTOLOGICAL RECORDS SEARCH

Natural History Museum
of Los Angeles County
900 Exposition Boulevard
Los Angeles, CA 90007

tel 213.763.DINO
www.nhm.org

Research & Collections

e-mail: paleorecords@nhm.org

March 31, 2024

UltraSystems Environmental
Attn: Megan Black Doukakis

re: Paleontological resources for the Laguna Beach High School Pool Modernization Project

Dear Megan:

I have conducted a thorough search of our paleontology collection records for the locality and specimen data for proposed development at the Laguna Beach High School Pool Modernization project area as outlined on the portion of the Laguna Beach USGS topographic quadrangle map that you sent to me via e-mail on March 18, 2024. We do not have any fossil localities that lie directly within the proposed project area, but we do have fossil localities nearby from the same sedimentary deposits that may occur in the proposed project area, either at the surface or at depth.

The following table shows the closest known localities in the collection of the Natural History Museum of Los Angeles County (NHMLA).

Locality Number	Location	Formation	Taxa	Depth
LACM IP 24374	In sea cliffs near Cheney's Point	Topanga Formation (Gray to brown sandstone)	Invertebrates (unspecified)	Unknown
LACM IP 3289	Laguna Beach (more specific location not available)	Tejon Formation	Invertebrates (unspecified)	Unknown
LACM IP 2951	Near Laguna Beach (more precise location information not available)	Unknown formation (Miocene)	Invertebrates (unspecified)	Unknown
LACM IP 12	Hills near Laguna Beach	Unknown formation (Pleistocene)	Invertebrates (*Neobemaya spadicea*)	Unknown
LACM VP 4007	In the head of Rim Rock Canyon south of Temple Hill Drive & west of Top of the World on Temple Hill	Topanga Formation	Marine mammal (*Desmostylus*)	Unknown

VP, Vertebrate Paleontology; IP, Invertebrate Paleontology; bgs, below ground surface

This records search covers only the records of the NHMLA. It is not intended as a paleontological assessment of the project area for the purposes of CEQA or NEPA. Potentially fossil-bearing units are present in the project area, either at the surface or in the subsurface. As such, NHMLA recommends that a full paleontological assessment of the project area be conducted by a paleontologist meeting Federal (43 Code of Federal Regulations Part 49.110) or Society of Vertebrate Paleontology standards.

Sincerely,

Alyssa Bell

Alyssa Bell, Ph.D.
Natural History Museum of Los Angeles County

enclosure: invoice

APPENDIX F

ENVIRONMENTAL RADIUS REPORT

Site Name: Laguna Beach High School
Location: 625 Park Avenue Laguna Beach, CA 92651
Prepared for: UltraSystems Environmental, Inc.
Ref: Project 7265 LBHS Swimming Pool Modernization
Center Coordinates: 33.541815,-117.775968
Prepared Date: Mon Dec 02 2024 18:59:28 GMT+0000 (Coordinated Universal Time)

ENVIRONMENTAL RADIUS REPORT

ASTM E1527-21

NETROnline

2055 E. Rio Salado Pkwy, Tempe, AZ 85381 | 480-967-6752

Summary

Federal

Federal	< 1/4	1/4 - 1/2	1/2 - 1
Lists of Federal NPL (Superfund) sites	0	0	0
Lists of Federal Delisted NPL sites	0	0	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders	0	0	0
Lists of Federal CERCLA sites with NFRAP	0	0	0
Lists of Federal RCRA facilities undergoing Corrective Action	0	0	0
Lists of Federal RCRA TSD facilities	0	0	0
Lists of Federal RCRA generators	0	0	0
Federal institutional control/engineering control registries	0	0	0
Federal ERNS list	0	0	0

State

State	< 1/4	1/4 - 1/2	1/2 - 1
Lists of state and tribal Superfund equivalent sites	0	0	0
Lists of state and tribal hazardous waste facilities	0	0	0
Lists of state and tribal landfills and solid waste disposal facilities	0	0	0
Lists of state and tribal leaking storage tanks	0	10	0
Lists of state and tribal registered storage tanks	0	0	0
State and tribal institutional control/engineering control registries	0	0	0
Lists of state and tribal voluntary cleanup sites	0	6	0
Lists of state and tribal brownfields sites	0	0	0

Other

Other	< 1/4	1/4 - 1/2	1/2 - 1
State and/or tribal lists of sites requiring further investigation / remediation	0	0	0
State list of Significant Environmental Hazards (SEH)	0	0	0
Lists of state and tribal mine sites requiring further investigation and/or remediation	0	0	0
State and/or tribal lists of spills and spill responses	0	61	0
State and/or tribal lists of emergency responses	0	0	0
State and/or tribal lists of dry cleaners	0	0	0
State and/or tribal lists of clandestine laboratory cleanups	0	1	0
State and/or tribal lists of scrap/used tire processing facilities	0	0	0
State and/or tribal lists of underground injection control sites	0	0	0
State and/or tribal listings of permitted drywells	0	0	0
Automobile salvage yards	0	0	0
Livestock Waste Control sites	0	0	0
Controlled Animal Feeding Operations (CAFOs)	0	0	0
State and/or tribal lists of registered aboveground storage tanks (ASTs)	0	0	0
C.A.A. Permitted Facilities	0	0	0
NPDES Permitted Facilities	0	0	0
Onsite Wastewater Treatment sites	0	0	0
State and/or tribal lists of permitted facilities	0	0	0
U.S. EPA Enforcement, Compliance History Online (ECHO)	0	0	0
Resource Conservation and Recovery Act Information (RCRAInfo)	5	34	0
U.S. EPA Underground Storage Tanks (UST)	0	0	0
U.S. EPA Toxic Substances Control Act (TSCA) database	0	0	0
U.S. EPA Toxic Release Inventory System (TRIS)	0	0	0

Lists of Federal NPL (Superfund) sites

The National Priorities List (NPL) is the list of sites of national priority among the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States and its territories. The NPL is intended primarily to guide the EPA in determining which sites warrant further investigation. The NPL is updated periodically, as mandated by CERCLA.
There were no Federal NPL sites found within a one-mile radius of the target property.

Lists of Federal Delisted NPL sites

The EPA may delete a final NPL site if it determines that no further response is required to protect human health or the environment. Under Section 300.425(e) of the NCP (55 FR 8845, March 8, 1990), a site may be deleted when no further response is appropriate if EPA determines that one of the following criteria has been met: 1) EPA, in conjunction with the state, has determined that responsible parties have implemented all appropriate response action required, 2) EPA, in consultation with the state, has determined that all appropriate Superfund-financed responses under CERCLA have been implemented and that no further response by responsible parties is appropriate, 3) A remedial investigation/feasibility study (RI/FS) has shown that the release poses no significant threat to public health or the environment and, therefore, remedial measures are not appropriate.
There were no Federal Delisted NPL sites found within a half-mile radius of the target property.

Lists of Federal sites subject to CERCLA removals and CERCLA orders

CERCLA identifies the classes of parties liable under CERCLA for the cost of responding to releases of hazardous substances. In addition, CERCLA contains provisions specifying when Federal installations must report releases of hazardous substances and the cleanup procedures they must follow. Executive Order No. 12580, Superfund Implementation, delegates response authorities to EPA and the Coast Guard. Generally, the head of the Federal agency has the delegated authority to address releases at the Federal facilities in its jurisdiction.

There were no Federal sites subject to CERCLA removals and/or orders found within a half-mile radius of the target property.

Lists of Federal CERCLA sites with NFRAP

No Further Remedial Action Planned (NFRAP) is a decision made as part of the Superfund remedial site evaluation process to denote that further remedial assessment activities are not required and that the facility/site does not pose a threat to public health or the environment sufficient to qualify for placement on the National Priorities List (NPL) based on currently available information. These facilities/sites may be re-evaluated if EPA receives new information or learns that site conditions have changed. A NFRAP decision does not mean the facility/site is free of contamination and does not preclude the facility/site from being addressed under another federal, state or tribal cleanup program.

There were no Federal CERCLA sites with No Further Remedial Action Planned (NFRAP) decisions found within a half-mile radius of the target property.

Lists of Federal RCRA facilities undergoing Corrective Action

Corrective action is a requirement under the Resource Conservation and Recovery Act (RCRA) that facilities that treat, store or dispose of hazardous wastes investigate and cleanup hazardous releases into soil, ground water, surface water and air. Corrective action is principally implemented through RCRA permits and orders. RCRA permits issued to TSDFs must include provisions for corrective action as well as financial assurance to cover the costs of implementing those cleanup measures. In addition to the EPA, 44 states and territories are authorized to run the Corrective Action program.

There were no Federal RCRA facilities undergoing corrective action(s) found within a one-mile radius of the target property.

Lists of Federal RCRA TSD facilities

The final link in RCRA's cradle-to-grave concept is the treatment, storage, and disposal facility (TSDF) that follows the generator and transporter in the chain of waste management activities. The regulations pertaining to TSDFs are more stringent than those that apply to generators or transporters. They include general facility standards as well as unit-specific design and operating criteria.

There were no Federal RCRA treatment, storage and disposal facilities (TSDFs) found within a half-mile radius of target property.

Lists of Federal RCRA generators

A generator is any person who produces a hazardous waste as listed or characterized in part 261 of title 40 of the Code of Federal Regulations (CFR). Recognizing that generators also produce waste in different quantities, EPA established three categories of generators in the regulations: very small quantity generators, small quantity generators, and large quantity generators. EPA regulates hazardous waste under the Resource Conservation and Recovery Act (RCRA) to ensure that these wastes are managed in ways that protet human health and the environment. Generators of hazardous waste are regulated based on the amount of hazardous waste they generate in a calendar month, not the size of their business or facility.

There were no Federal RCRA generators found at the target property and/or adjoining properties.

Federal institutional control/engineering control registries

Institutional Controls (IC) are defined as non-engineered and/or legal controls that minimize the potential human exposure to contamination by limiting land or resource use. Whereas, Engineering Controls (EC) consist of engineering measures (e.g, caps, treatment systems, etc.) designed to minimize the potential for human exposure to contamination by either limiting direct contact with contaminated areas or controlling migration of contaminants through environmental media.

There were no Federal institutional or engineering controls found at the target property.

Federal ERNS list

The Emergency Response Notification System (ERNS) is a database used to store information on notification of oil discharges and hazardous substances releases. The ERNS program is a cooperative data sharing effort encompassing the National Response Center (NRC), operated by the US Coast Guard, EPA HQ and EPA regional offices. ERNS data is used to analyze release notifications, track EPA responses and compliance to environmental laws, support emergency planning efforts, and assist decision-makers in developing spill prevention programs.

There were no Federally recorded releases of oil and/or hazardous substances at the target property.

Lists of state and tribal Superfund equivalent sites

In order to maintain close coordination with the states and tribes in the NPL listing decision process, the EPA's policy is to determine the position of states and tribes on sites that EPA is considering for listing. Consistent with this policy, since 1996, it has been the EPA's general practice to seek the state or tribe's position on sites under consideration for NPL listing by submitting a written requiest to the governor/state environmental agency or tribe. Various states may have their own program for identifying, investigating and cleaning up sites where consequential amounts of hazardous waste may have been disposed that work in conjunction with the EPA's Superfund remedial program.
There were no State and/or tribal Superfund equivalent sites found within a one-mile radius of target property.

Lists of state and tribal hazardous waste facilities

EPA established basic hazardous waste management standards for businesses who produce hazardous waste and categorized three businesses based on the volume of hazardous waste produced in a calendar month. On the federal level, there are three generator categories: large quantity generator, small quantity generator, and conditionally exempt small quantity generator. Some states are authorized to establish generator categories that are different from those that federal EPA set up. State regulatory requirements for generators of hazardous waste may be more stringent than the federal program.

There were no State and/or tribal hazardous waste facilities found within a half-mile radius of the target property.

Lists of state and tribal landfills and solid waste disposal facilities

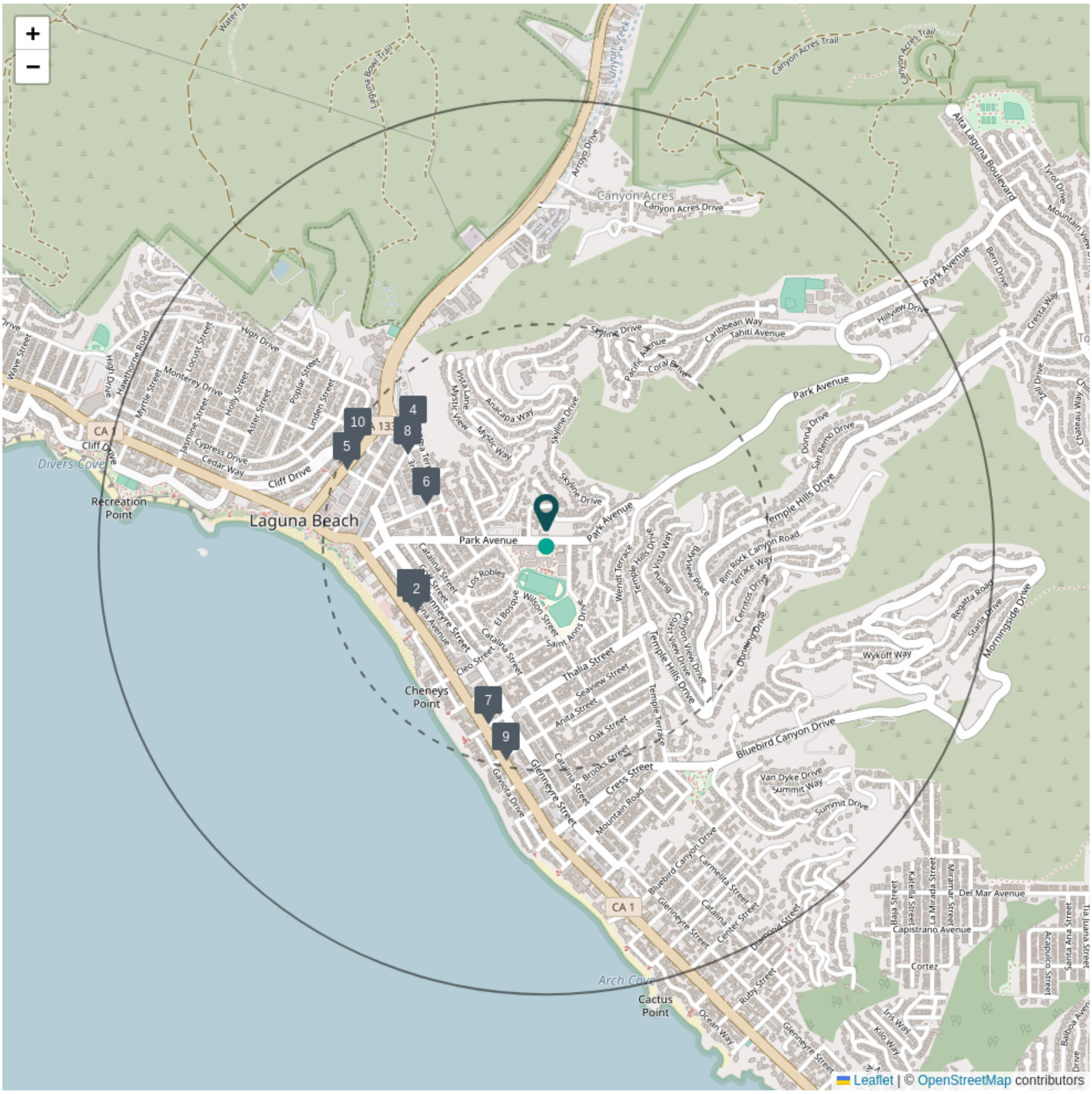
Title 40 of the CFR parts 239 through 259 contain the regulations for non-hazardous solid waste programs set up by the states. EPA has requirements for state solid waste permit programs, guidelines for the processing of solid waste, guidelines for storage and collection of commercial, residential and institutional solid waste, and the criteria for municipal solid waste landfills. State solid waste programs may be more stringent than the federal code requires.

There were no State and/or tribal landfills or solid waste disposal facilities found within a half-mile radius of the target property.

Lists of state and tribal leaking storage tanks

SWRCB - LEAKING UNDERGROUND STORAGE TANK (LUST) SITES

In the event of a UST leak, the owner and operator (Responsible Party) must notify the local regulatory agency. The lead regulatory agency may require an assessment of soil and/or groundwater. The cleanup and assessment process is regulated by the Porter Cologne Water Quality Control Act (Water Code) and Chapter 16 (Article 11) of the Underground Storage Tank Regulations. This data was retrieved from the State Water Resources Control Board (SWRCB) GeoTracker database, where all records within a half-mile of the target property were searched.



center: 33.541815,-117.775968

---- 0.5 Miles —— 1.0 Miles

1

CHEVRON #11-1787

590

Global ID: T0605902360
Business Name: CHEVRON #11-1787
Street Number: 590
City: LAGUNA BEACH
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 2015-06-30 00:00:00
CUF Case: YES
Lead Agency: ORANGE COUNTY LOP
Local Agency:
RB Case Number: 9UT104
LOC Case Number: 85UT038
Contaminants of Concern: Gasoline
Quantity Released: 0
Media of Concern: Aquifer used for drinking water supply
Site History: Please refer to recent Site Documents or Monitoring Reports in GeoTracker for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.
Leak Reported Date: 1985-04-08 00:00:00
Discovery:
Discharge Source:
No Further Action Date: 2015-06-30 00:00:00
Watershed Name: San Juan - Laguna - Laguna Beach (901.12)
EnviroScreen Score: 1-5% (lowest scores)
Military DOD Site: No
Distance From Center (Miles): 0.3336
Site Source: last updated 06-22-2023 from CA-SWRCB-GEOTRACKER

2

CHEVRON #9-1966

604

Global ID: T0605902417
Business Name: CHEVRON #9-1966
Street Number: 604
City: LAGUNA BEACH
Case Type: LUST Cleanup Site
Status: Open - Eligible for Closure
Status Date: 2021-10-05 00:00:00
CUF Case: YES
Lead Agency: SAN DIEGO RWQCB (REGION 9)
Local Agency:
RB Case Number: 9UT1697
LOC Case Number:
Contaminants of Concern: Gasoline
Quantity Released: 0
Media of Concern: Aquifer used for drinking water supply, Other Groundwater (uses other than drinking water)
Site History: Please refer to recent Site Documents or Monitoring Reports in GeoTracker for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.
Leak Reported Date: 1985-04-08 00:00:00
Discovery:
Discharge Source:
No Further Action Date:
Watershed Name: San Juan - Laguna - Laguna Beach (901.12)
EnviroScreen Score: 11-15%
Military DOD Site: No
Distance From Center (Miles): 0.3306
Site Source: last updated 06-22-2023 from CA-SWRCB-GEOTRACKER

3

CHEVRON USA

590

Global ID: T0605902492
Business Name: CHEVRON USA
Street Number: 590
City: LAGUNA BEACH
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 1985-11-01 00:00:00
CUF Case: NO
Lead Agency: ORANGE COUNTY LOP
Local Agency: ORANGE COUNTY LOP
RB Case Number: 9UT2497
LOC Case Number: 85UT073
Contaminants of Concern: Gasoline
Quantity Released: 0
Media of Concern: Under Investigation
Site History:
Leak Reported Date: 1965-01-01 00:00:00
Discovery:
Discharge Source:
No Further Action Date: 1985-11-01 00:00:00
Watershed Name: San Juan - Laguna - Laguna Beach (901.12)
EnviroScreen Score: 1-5% (lowest scores)
Military DOD Site: No
Distance From Center (Miles): 0.3336
Site Source: last updated 06-22-2023 from CA-SWRCB-GEOTRACKER

4

CITY OF LAGUNA BEACH

505

Global ID: T0605902385
Business Name: CITY OF LAGUNA BEACH
Street Number: 505
City: LAGUNA BEACH
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 1990-12-06 00:00:00
CUF Case: NO
Lead Agency: ORANGE COUNTY LOP
Local Agency: ORANGE COUNTY LOP
RB Case Number: 9UT1461
LOC Case Number: 88UT136
Contaminants of Concern: Gasoline
Quantity Released: 0
Media of Concern: Soil
Site History:
Leak Reported Date: 1988-06-09 00:00:00
Discovery:
Discharge Source:
No Further Action Date: 1990-12-06 00:00:00
Watershed Name: San Juan - Laguna - Laguna Beach (901.12)
EnviroScreen Score: 11-15%
Military DOD Site: No
Distance From Center (Miles): 0.3941
Site Source: last updated 06-22-2023 from CA-SWRCB-GEOTRACKER

5

GENERAL TELEPHONE CO

295

Global ID: T0605902447
Business Name: GENERAL TELEPHONE CO
Street Number: 295
City: LAGUNA BEACH
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 1990-02-27 00:00:00
CUF Case: NO
Lead Agency: ORANGE COUNTY LOP
Local Agency: ORANGE COUNTY LOP
RB Case Number: 9UT195
LOC Case Number: 88UT008
Contaminants of Concern: Diesel
Quantity Released: 0
Media of Concern: Soil
Site History:
Leak Reported Date: 1986-04-07 00:00:00
Discovery:
Discharge Source:
No Further Action Date: 1990-02-27 00:00:00
Watershed Name: San Juan - Laguna - Laguna Beach (901.12)
EnviroScreen Score: 1-5% (lowest scores)
Military DOD Site: No
Distance From Center (Miles): 0.4818
Site Source: last updated 06-22-2023 from CA-SWRCB-GEOTRACKER

6

GTE LAGUNA BEACH TFC

480

Global ID: T0605902608
Business Name: GTE LAGUNA BEACH TFC
Street Number: 480
City: LAGUNA BEACH
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 1992-08-03 00:00:00
CUF Case: YES
Lead Agency: ORANGE COUNTY LOP
Local Agency: ORANGE COUNTY LOP
RB Case Number: 9UT761
LOC Case Number: 87UT141
Contaminants of Concern: Diesel
Quantity Released: 0
Media of Concern: Other Groundwater (uses other than drinking water)
Site History:
Leak Reported Date: 1987-06-27 00:00:00
Discovery:
Discharge Source:
No Further Action Date: 1992-08-03 00:00:00
Watershed Name: San Juan - Laguna - Laguna Beach (901.12)
EnviroScreen Score: 1-5% (lowest scores)
Military DOD Site: No
Distance From Center (Miles): 0.2877
Site Source: last updated 06-22-2023 from CA-SWRCB-GEOTRACKER

7

JIFFY GAS STATION

890

Global ID: T0605902361
Business Name: JIFFY GAS STATION
Street Number: 890
City: LAGUNA BEACH
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 2012-07-03 00:00:00
CUF Case: YES
Lead Agency: ORANGE COUNTY LOP
Local Agency:
RB Case Number: 9UT1123
LOC Case Number: 88UT178
Contaminants of Concern: Gasoline
Quantity Released: 0
Media of Concern: Aquifer used for drinking water supply
Site History: Please refer to recent Site Documents or Monitoring Reports in GeoTracker for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party. CASE CLOSED PURSUANT TO STATE WATER RESOURCES CONTROL BOARD ORDER.
Leak Reported Date: 1988-11-01 00:00:00
Discovery:
Discharge Source: Tank
No Further Action Date: 2012-07-03 00:00:00
Watershed Name: San Juan - Laguna - Laguna Beach (901.12)
EnviroScreen Score: 1-5% (lowest scores)
Military DOD Site: No
Distance From Center (Miles): 0.4206
Site Source: last updated 06-22-2023 from CA-SWRCB-GEOTRACKER

8

JOHN HEDGES INC

477

Global ID: T0605902484
Business Name: JOHN HEDGES INC
Street Number: 477
City: LAGUNA BEACH
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 1998-12-22 00:00:00
CUF Case: NO
Lead Agency: ORANGE COUNTY LOP
Local Agency: ORANGE COUNTY LOP
RB Case Number: 9UT2478
LOC Case Number: 92UT066
Contaminants of Concern: Stoddard solvent / Mineral Spriits / Distillates
Quantity Released: 0
Media of Concern: Soil
Site History:
Leak Reported Date: 1992-05-22 00:00:00
Discovery:
Discharge Source:
No Further Action Date: 1998-12-22 00:00:00
Watershed Name: San Juan - Laguna - Laguna Beach (901.12)
EnviroScreen Score: 1-5% (lowest scores)
Military DOD Site: No
Distance From Center (Miles): 0.3761
Site Source: last updated 06-22-2023 from CA-SWRCB-GEOTRACKER

9

LAGUNA BMW

1009

Global ID: T0605902413
Business Name: LAGUNA BMW
Street Number: 1009
City: LAGUNA BEACH
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 2004-05-07 00:00:00
CUF Case: NO
Lead Agency: ORANGE COUNTY LOP
Local Agency: ORANGE COUNTY LOP
RB Case Number: 9UT1693
LOC Case Number: 90UT125
Contaminants of Concern: Gasoline
Quantity Released: 0
Media of Concern: Other Groundwater (uses other than drinking water)
Site History:
Leak Reported Date: 1990-03-21 00:00:00
Discovery:
Discharge Source: Tank
No Further Action Date: 2004-05-07 00:00:00
Watershed Name: San Juan - Laguna - Laguna Beach (901.12)
EnviroScreen Score: 1-5% (lowest scores)
Military DOD Site: No
Distance From Center (Miles): 0.4879
Site Source: last updated 06-22-2023 from CA-SWRCB-GEOTRACKER

10

SAIL AUTO CENTER

350

Global ID: T0605902483
Business Name: SAIL AUTO CENTER
Street Number: 350
City: LAGUNA BEACH
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 1992-12-18 00:00:00
CUF Case: NO
Lead Agency: ORANGE COUNTY LOP
Local Agency: ORANGE COUNTY LOP
RB Case Number: 9UT2477
LOC Case Number: 92UT100
Contaminants of Concern: Waste Oil / Motor / Hydraulic / Lubricating
Quantity Released: 0
Media of Concern: Soil
Site History:
Leak Reported Date: 1992-08-21 00:00:00
Discovery:
Discharge Source:
No Further Action Date: 1992-12-18 00:00:00
Watershed Name: San Juan - Laguna - Laguna Beach (901.12)
EnviroScreen Score: 1-5% (lowest scores)
Military DOD Site: No
Distance From Center (Miles): 0.482
Site Source: last updated 06-22-2023 from CA-SWRCB-GEOTRACKER

Lists of state and tribal registered storage tanks

EPA initially issued UST regulations in 1988. In 2015, EPA modified the UST regulation, which was effective October 13, 2015 in Indian Country and states without State Program Approval. EPA recognizes that, because of the size and diversity of the regulated community, state and local governments are in the best position to oversee USTs: 1) State and local authorities are closer to the situation in their domain and are in the best position to set priorities, 2) Subtitle I of the Solid Waste Disposal Act allows state UST programs approved by EPA to operate in lieu of the federal program, 3) the state program approval (SPA) regulations set criteria for states to obtain the authority to operate in lieu of the federal program. State programs must be at least as stringent as EPA's. A complete version of the law that governs USTs can be found in U.S. Code, Title 42, Chapter 82, Subchapter IX.
There were no State and/or tribal registered storage tanks found at subject and adjoining properties.

State and tribal institutional control/engineering control registries

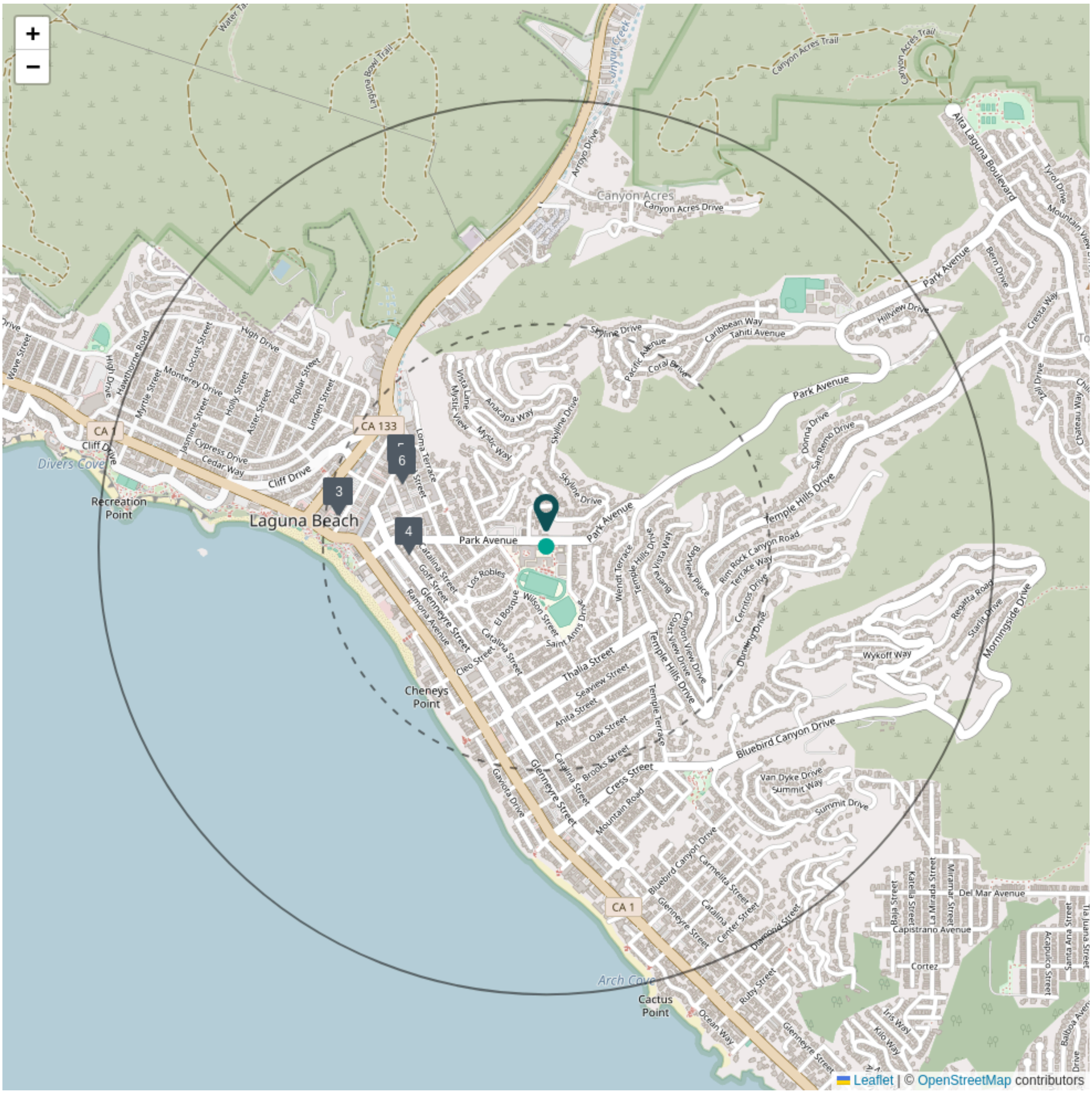
Institutional controls are non-engineered instruments such as administrative and legal controls that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy. Engineering controls consist of engineering measures (e.g, caps, treatment systems, etc.) designed to minimize the potential for human exposure to contamination by either limiting direct contact with contaminated areas or controlling migration of contaminants through environmental media. It is EPA's expectation that treatment or engineering controls will be used to address principal threat wastes and that groundwater will be returned to its beneficial use whenever practicable.

There were no State and/or tribal institutional and/or engineering controls found filed against the target property.

Lists of state and tribal voluntary cleanup sites

SWRCB - SITE CLEANUP PROGRAM

The Site Cleanup Program (SCP) oversees the examination and remediation of sites not federally owned, where there have been recent or historical unauthorized pollutant discharges into the environment, affecting soil, groundwater, surface water, and sediment. The sites included in the program are diverse, encompassing, but not limited to, pesticide and fertilizer facilities, rail yards, ports, equipment supply centers, metal processing facilities, industrial manufacturing and maintenance locations, dry cleaners, bulk transfer stations, refineries, and certain brownfields. These discharges typically do not originate solely from petroleum underground storage tanks (USTs). Funding for SCP sites is categorized into five primary types: (1) voluntary cleanups carried out and financed by the discharger, (2) cleanups conducted under a "Cleanup and Abatement Order" also executed and funded by the discharger, (3) cleanups initiated by the Regional Board or another public entity—be it a county, municipality, or city—funded by the State through the Cleanup and Abatement Account (CAA), (4) Site Cleanup Subaccount Program (SCAP), and (5) brownfield remediation utilizing available grants and loans. This data was sourced from the SWRCB's GeoTracker database, which was queried to retrieve all records within a half-mile radius of the target property.



center: 33.541815,-117.775968

0.5 Miles 1.0 Miles

1

CITY CLEANERS

224

Global ID: SL0605959158
Business Name: CITY CLEANERS
Street Number: 224
City: LAGUNA BEACH
Case Type: Cleanup Program Site
Status: Completed - Case Closed
Status Date: 2013-06-25 00:00:00
CUF Case: NO
Lead Agency: SAN DIEGO RWQCB (REGION 9)
Local Agency: ORANGE COUNTY
RB Case Number: 2090043
LOC Case Number:
Contaminants of Concern: Tetrachloroethylene (PCE), Trichloroethylene (TCE)
Quantity Released:
Media of Concern: Other Groundwater (uses other than drinking water), Soil
Site History: City Cleaners is a garment dry-cleaning and laundry business that has been in operation since 1974. The existing dry-cleaning equipment was installed in 1992. A limited soil assessment conducted in 2002 indicated that soil containing tetrachloroethylene (PCE), a dry cleaning solvent and tetrachloroethyene (TCE), a breakdown product of PCE, were present in soils at concentrations exceeding action levels based on vapor risk.
Leak Reported Date: 2005-07-05 00:00:00
Discovery: CASE REFERRAL BY COUNTY OF ORANGE HEALTH CARE AGENCY LETTER DATED JUNE 29, 2005.
Discharge Source:
No Further Action Date: 2013-06-25 00:00:00
Watershed Name: San Juan - Laguna - Laguna Beach (901.12)
EnviroScreen Score: 11-15%
Military DOD Site: No
Distance From Center (Miles): 0.4762
Site Source: last updated 06-22-2023 from CA-SWRCB-GEOTRACKER

2

CITY CLEANERS

224

Global ID: T10000018352
Business Name: CITY CLEANERS
Street Number: 224
City: LAGUNA BEACH
Case Type: Cleanup Program Site
Status: Completed - Case Closed
Status Date: 1996-11-21 00:00:00
CUF Case: NO
Lead Agency: ORANGE COUNTY LOP
Local Agency: ORANGE COUNTY
RB Case Number:
LOC Case Number: 96IC041
Contaminants of Concern:
Quantity Released:
Media of Concern:
Site History: Please refer to recent Site Documents or Monitoring Reports for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.
Leak Reported Date:
Discovery:
Discharge Source:
No Further Action Date: 1996-11-21 00:00:00
Watershed Name:
EnviroScreen Score:
Military DOD Site: No
Distance From Center (Miles): 0.4729
Site Source: last updated 06-22-2023 from CA-SWRCB-GEOTRACKER

3

CITY CLEANERS

224

Global ID: T10000018490
Business Name: CITY CLEANERS
Street Number: 224
City: LAGUNA BEACH
Case Type: Cleanup Program Site
Status: Completed - Case Closed
Status Date: 2005-06-29 00:00:00
CUF Case: NO
Lead Agency: ORANGE COUNTY LOP
Local Agency: ORANGE COUNTY
RB Case Number:
LOC Case Number: 02IC015
Contaminants of Concern:
Quantity Released:
Media of Concern:
Site History: Please refer to recent Site Documents or Monitoring Reports for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.
Leak Reported Date:
Discovery:
Discharge Source:
No Further Action Date: 2005-06-29 00:00:00
Watershed Name:
EnviroScreen Score:
Military DOD Site: No
Distance From Center (Miles): 0.4729
Site Source: last updated 06-22-2023 from CA-SWRCB-GEOTRACKER

4

FORMER AHIMSA CARE FACILITY

450

Global ID: T10000017873
Business Name: FORMER AHIMSA CARE FACILITY
Street Number: 450
City: LAGUNA BEACH
Case Type: Cleanup Program Site
Status: Completed - Case Closed
Status Date: 2003-09-04 00:00:00
CUF Case: NO
Lead Agency: ORANGE COUNTY LOP
Local Agency: ORANGE COUNTY
RB Case Number:
LOC Case Number: 02IC024
Contaminants of Concern:
Quantity Released:
Media of Concern:
Site History: Please refer to recent Site Documents or Monitoring Reports for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.
Leak Reported Date:
Discovery:
Discharge Source:
No Further Action Date: 2003-09-04 00:00:00
Watershed Name:
EnviroScreen Score:
Military DOD Site: No
Distance From Center (Miles): 0.3111
Site Source: last updated 06-22-2023 from CA-SWRCB-GEOTRACKER

5

LIVE WIRE CLEANERS

439

Global ID: SL0605977728
Business Name: LIVE WIRE CLEANERS
Street Number: 439
City: LAGUNA BEACH
Case Type: Cleanup Program Site
Status: Open - Assessment & Interim Remedial Action
Status Date: 2017-11-02 00:00:00
CUF Case: YES
Lead Agency: SAN DIEGO RWQCB (REGION 9)
Local Agency:
RB Case Number: 31002
LOC Case Number:
Contaminants of Concern: * Chlorinated Hydrocarbons, Tetrachloroethylene (PCE), Trichloroethylene (TCE)
Quantity Released:
Media of Concern: Other Groundwater (uses other than drinking water)
Site History: Live Wire Cleaners has operated at the site since 1937 but the dry cleaning facility has been in existence since circa 1928. The current layout of Live Wire Cleaners consists of a clothes storage area and a drop-off and pick-up area. The rear portion of the building, which was built in the mid-1950s, contained the dry cleaning machine, presses, spot cleaning areas, storage areas, and laundry areas. Soil and groundwater investigations were completed as part of the source characterization in 2012.
Leak Reported Date: 2008-04-02 00:00:00
Discovery:
Discharge Source:
No Further Action Date:
Watershed Name: San Juan - Laguna - Laguna Beach (901.12)
EnviroScreen Score: 11-15%
Military DOD Site: No
Distance From Center (Miles): 0.3553
Site Source: last updated 06-22-2023 from CA-SWRCB-GEOTRACKER

6

LIVE WIRE CLEANERS

439

Global ID: T10000017750
Business Name: LIVE WIRE CLEANERS
Street Number: 439
City: LAGUNA BEACH
Case Type: Cleanup Program Site
Status: Completed - Case Closed
Status Date: 2016-11-21 00:00:00
CUF Case: NO
Lead Agency: ORANGE COUNTY LOP
Local Agency: ORANGE COUNTY
RB Case Number:
LOC Case Number: 07IC022
Contaminants of Concern:
Quantity Released:
Media of Concern:
Site History: Please refer to recent Site Documents or Monitoring Reports for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.
Leak Reported Date:
Discovery:
Discharge Source:
No Further Action Date: 2016-11-21 00:00:00
Watershed Name:
EnviroScreen Score:
Military DOD Site: No
Distance From Center (Miles): 0.3677
Site Source: last updated 06-22-2023 from CA-SWRCB-GEOTRACKER

Lists of state and tribal brownfields sites

Since its inception in 1995, EPA's Brownfields and Land Revitalization Program has grown into a proven, results-oriented program that has changed the way communities address and manage contaminated property. The program is designed to empower states, tribes, communities, and other stakeholders to work together to prevent, assess, safely clean up, and sustainably reuse brownfields. Beginning in the mid-1990s, EPA provided small amounts of seed money to local governments that launched hundreds of two-year Brownfields pilot projects and developed guidance and tools to help states, communities and other stakeholders in the cleanup and redevelopment of brownfields sites.

There were no State and/or tribal brownfields sites found within a half-mile radius of the target property.

State and/or tribal lists of sites requiring further investigation / remediation

No records found

State list of Significant Environmental Hazards (SEH)

No records found

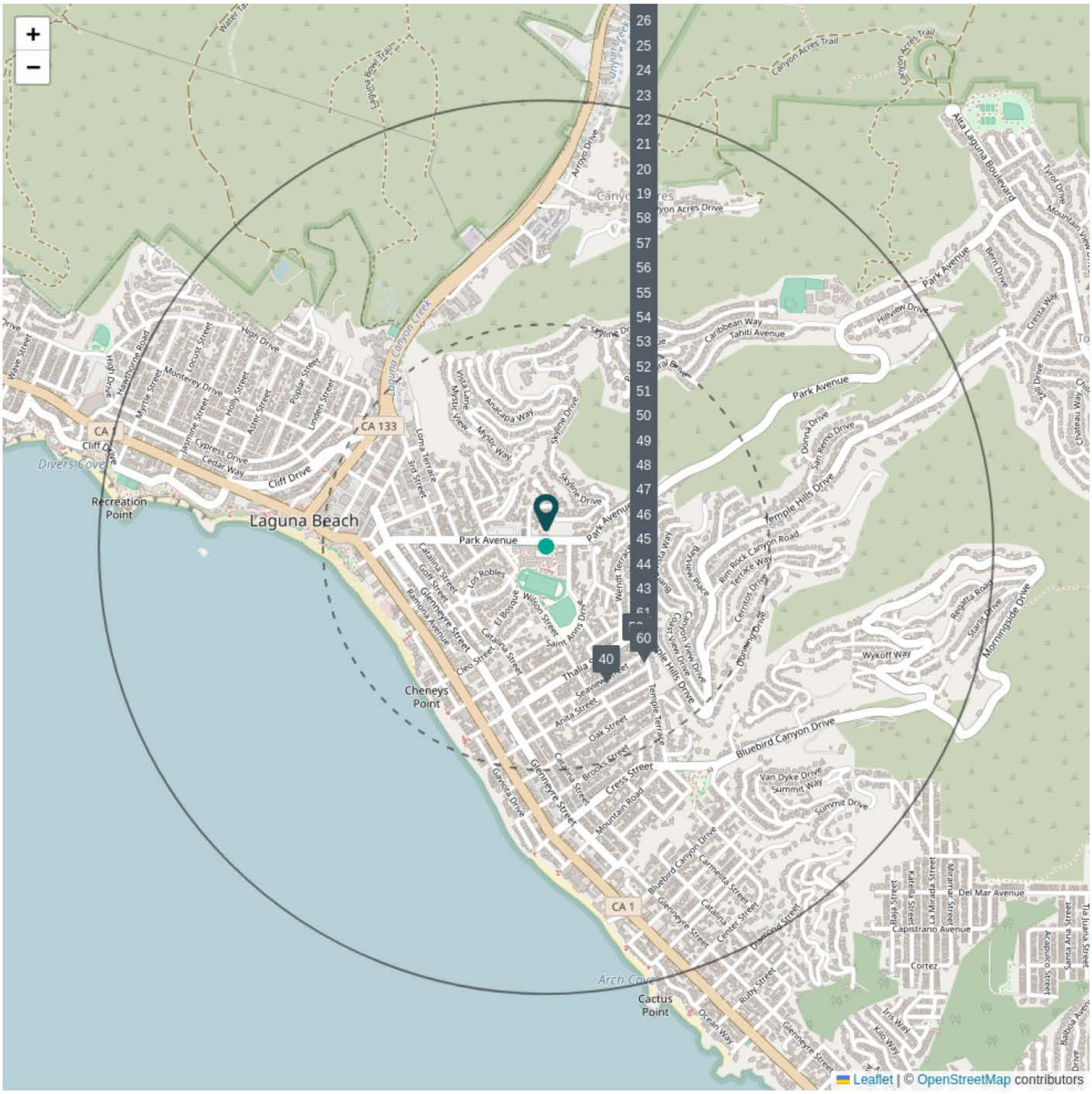
Lists of state and tribal mine sites requiring further investigation and/or remediation

No records found

State and/or tribal lists of spills and spill responses

CT-DEEP - SPILL INCIDENT TRACKING SYSTEM DATABASE

This dataset contains information reported to DEEP about releases of substances into the environment, typically due to accidental spills. According to Connecticut General Statutes (CGS) Section 22a-450, anyone responsible for discharges, spills, uncontrolled losses, seepage, or filtration of oil, petroleum, chemical liquids, solid liquids, gaseous products, or hazardous wastes that might endanger human health or the environment is required to notify DEEP. The dataset was searched to retrieve all records located within a half-mile radius of the target property.



center: 33.541815,-117.775968

0.5 Miles (dashed) 1.0 Miles (solid)

1

Site Title Not Available

690 SEAVIEW AVE

Case No.: 200504099
Location of Reported Release: 690 SEAVIEW AVE
Town of Release: BRIDGEPORT
Release Date: 06/28/2005 12:00:00 AM
Date Reported: 06/28/2005 04:49:00 AM
Year: 2005
Reported By: JEROME WEST
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: RAW SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: BYPASS
Waterbodies Affected: LIS
Cause Info.: Other (RAIN)
Media Info.: Surface Water
Distance From Center (Miles): 0.307
Site Source: last updated 03-22-2022 from CTDEEP-SITS

2

Site Title Not Available

695 seaview avenue (on east side plant)

Case No.: 200703858
Location of Reported Release: 695 seaview avenue (on east side plant)
Town of Release: BRIDGEPORT
Release Date: 06/16/2007 12:00:00 AM
Date Reported: 06/16/2007 06:47:00 PM
Year: 2007
Reported By: peter
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: SEWAGE BYPASS
Total Qty. (Gallons): 0.00
Emergency Measures: Sewage bypass untreated rain water.
Waterbodies Affected: LIS
Cause Info.: Other (sewage bypass)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

3

Site Title Not Available

695 Seaview Ave

Case No.: 200607455
Location of Reported Release: 695 Seaview Ave
Town of Release: BRIDGEPORT
Release Date: 11/23/2006 11:00:00 AM
Date Reported: 11/23/2006 01:38:00 PM
Year: 2006
Reported By: Carlos Paiva
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: SEWAGE BYPASS
Total Qty. (Gallons): 0.00
Emergency Measures:
Waterbodies Affected: LIS
Cause Info.: Other (bypass)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

4

Site Title Not Available

695 seaview ave

Case No.: 201403225
Location of Reported Release: 695 seaview ave
Town of Release: Bridgeport
Release Date: 07/02/2014 07:45:00 PM
Date Reported: 07/02/2014 07:47:00 PM
Year: 2014
Reported By: peter ferko
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: PARTIALLY TREATED SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures:
Waterbodies Affected: LIS
Cause Info.: Other (rain event)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

5

Site Title Not Available

695 SEAVIEW AVE

Case No.: 200407254
Location of Reported Release: 695 SEAVIEW AVE
Town of Release: BRIDGEPORT
Release Date: 10/19/2004 12:00:00 AM
Date Reported: 10/19/2004 05:18:00 AM
Year: 2004
Reported By: JEROME WEST
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: RAW SEWAGE
Total Qty. (Gallons): 10000000.0
Emergency Measures: BYPASS
Waterbodies Affected: LIS
Cause Info.: Other (RAIN)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

6

Site Title Not Available

695 seaview ave

Case No.: 200708285
Location of Reported Release: 695 seaview ave
Town of Release: BRIDGEPORT
Release Date: 12/29/2007 05:15:00 AM
Date Reported: 12/29/2007 06:28:00 AM
Year: 2007
Reported By: dorth mackensie
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: sewage bypass due to heavy rains
Waterbodies Affected:
Cause Info.: Other (weather related)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

7

Site Title Not Available

695 seaview ave

Case No.: 201406056
Location of Reported Release: 695 seaview ave
Town of Release: Bridgeport
Release Date: 11/26/2014 12:00:00 AM
Date Reported: 11/26/2014 01:03:00 PM
Year: 2014
Reported By: lawerance
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: PRIMARY TREATED SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: to LIS
Waterbodies Affected: LIS
Cause Info.: Other (bypass)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

8

Site Title Not Available

695 seaview avenue

Case No.: 200607259
Location of Reported Release: 695 seaview avenue
Town of Release: BRIDGEPORT
Release Date: 11/13/2006 08:55:00 PM
Date Reported: 11/13/2006 09:43:00 PM
Year: 2006
Reported By: carlos paiva
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: RAW SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: unknown amount of gallons, bypassed at 8:55 due to overflow-rain. Dumping into long island sound.
Waterbodies Affected: LIS
Cause Info.: Other (sewage bypass)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

9

Site Title Not Available

695 SEAVIEW AVE

Case No.: 200304400
Location of Reported Release: 695 SEAVIEW AVE
Town of Release: BRIDGEPORT
Release Date: 06/13/2003 12:00:00 AM
Date Reported: 06/13/2003 01:21:00 AM
Year: 2003
Reported By: GEORGE MIHAI
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: RAW SEWAGE
Total Qty. (Gallons): 10000.00
Emergency Measures: BYPASS 11MGD
Waterbodies Affected: LIS
Cause Info.: Natural, and Other (RAIN)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

10

Site Title Not Available

695 Seaview Ave- East Side

Case No.: 200406741
Location of Reported Release: 695 Seaview Ave- East Side
Town of Release: BRIDGEPORT
Release Date: 09/28/2004 05:50:00 PM
Date Reported: 09/28/2004 07:12:00 PM
Year: 2004
Reported By: Edward Valderrama
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: RAW SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: unknown quantity, east side will call with an update as soon as meters are working again
Waterbodies Affected: LIS
Cause Info.: Other (bypass)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

11

Site Title Not Available

695 seaview ave (east side)

Case No.: 200408785
Location of Reported Release: 695 seaview ave (east side)
Town of Release: BRIDGEPORT
Release Date: 12/23/2004 12:00:00 AM
Date Reported: 12/23/2004 07:34:00 PM
Year: 2004
Reported By: manual chicone
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: RAW SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: unk flow rate
Waterbodies Affected:
Cause Info.: Natural
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

12

Site Title Not Available

695 seaview ave

Case No.: 201503203
Location of Reported Release: 695 seaview ave
Town of Release: Bridgeport
Release Date: 06/28/2015 12:00:00 AM
Date Reported: 06/28/2015 07:52:00 AM
Year: 2015
Reported By: george
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: ongoing rain event since 0530
Waterbodies Affected: LIS
Cause Info.: Other (rain)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

13

Site Title Not Available

695 SEAVIEW AVE

Case No.: 201006895
Location of Reported Release: 695 SEAVIEW AVE
Town of Release: BRIDGEPORT
Release Date: 11/17/2010 12:00:00 AM
Date Reported: 11/17/2010 02:19:00 AM
Year: 2010
Reported By: MARK THOMAS
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: BYPASS
Waterbodies Affected: LIS
Cause Info.: Other (RAIN)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

14

Site Title Not Available

695 seaview

Case No.: 201405870
Location of Reported Release: 695 seaview
Town of Release: Bridgeport
Release Date: 11/17/2014 03:25:00 PM
Date Reported: 11/17/2014 03:28:00 PM
Year: 2014
Reported By: peter
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: PARTIALLY TREATED SEWAGE BYPASS
Total Qty. (Gallons): 0.00
Emergency Measures: Bypass due to rain event started 1525 hrs.
Waterbodies Affected: LIS
Cause Info.: Other (rain event)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

15

Site Title Not Available

695 SEAVIEW AVE

Case No.: 200307505
Location of Reported Release: 695 SEAVIEW AVE
Town of Release: BRIDGEPORT
Release Date: 10/15/2003 12:00:00 AM
Date Reported: 10/15/2003 01:54:00 AM
Year: 2003
Reported By: JEROME WEST
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: RAW SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: BYPASS
Waterbodies Affected: LIS
Cause Info.: Other (RAIN)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

16

Site Title Not Available

695 SEAVIEW AVE

Case No.: 200702597
Location of Reported Release: 695 SEAVIEW AVE
Town of Release: BRIDGEPORT
Release Date: 04/27/2007 12:00:00 AM
Date Reported: 04/27/2007 06:58:00 AM
Year: 2007
Reported By: DORIS MCKENZIE
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: BYPASS
Waterbodies Affected: LIS
Cause Info.: Other (RAIN)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

17

Site Title Not Available

695 seaview ave

Case No.: 201002918
Location of Reported Release: 695 seaview ave
Town of Release: BRIDGEPORT
Release Date: 05/18/2010 12:00:00 AM
Date Reported: 05/18/2010 07:24:00 PM
Year: 2010
Reported By: george mehigh
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: SEWER
Total Qty. (Gallons): 0.00
Emergency Measures: BYPASS.
Waterbodies Affected: LIS
Cause Info.: Other (rain fall)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

18

Site Title Not Available

695 SEAVIEW AVE

Case No.: 201102578
Location of Reported Release: 695 SEAVIEW AVE
Town of Release: BRIDGEPORT
Release Date: 05/18/2011 12:00:00 AM
Date Reported: 05/18/2011 02:22:00 AM
Year: 2011
Reported By: MARK THOMAS
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: BYPASS
Waterbodies Affected: LIS
Cause Info.: Other (RAIN)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

19

Site Title Not Available

695 seaview avenue

Case No.: 201104728
Location of Reported Release: 695 seaview avenue
Town of Release: BRIDGEPORT
Release Date: 08/14/2011 12:00:00 AM
Date Reported: 08/14/2011 08:34:00 AM
Year: 2011
Reported By: thomas
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: started at 0830 and ongoing
Waterbodies Affected: LIS
Cause Info.: Natural, and Other (rain event)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

20

Site Title Not Available

695 seaview avenue

Case No.: 201104624
Location of Reported Release: 695 seaview avenue
Town of Release: BRIDGEPORT
Release Date: 08/09/2011 12:00:00 AM
Date Reported: 08/09/2011 06:08:00 PM
Year: 2011
Reported By: carlos davis
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: BYPASS
Total Qty. (Gallons): 0.00
Emergency Measures: started at 17:50 and ongoing
Waterbodies Affected: LIS, and Sanitary Sewer
Cause Info.: Natural, and Other (rain event)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

21

Site Title Not Available

695 Seaview Ave. - East Side Treatment Plant

Case No.: 200905519
Location of Reported Release: 695 Seaview Ave. - East Side Treatment Plant
Town of Release: BRIDGEPORT
Release Date: 09/28/2009 12:00:00 AM
Date Reported: 09/28/2009 09:04:00 PM
Year: 2009
Reported By: Carlos
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: BYPASS
Total Qty. (Gallons): 0.00
Emergency Measures: BYPASS
Waterbodies Affected: LIS
Cause Info.: Natural, and Other (RAIN)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

22

Site Title Not Available

695 seaview ave

Case No.: 200304670
Location of Reported Release: 695 seaview ave
Town of Release: BRIDGEPORT
Release Date: 06/22/2003 12:00:00 AM
Date Reported: 06/22/2003 06:50:00 PM
Year: 2003
Reported By: ron tores
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: POTW BYPASS
Total Qty. (Gallons): 0.00
Emergency Measures: 8.36mgd started at 18:30
Waterbodies Affected: LIS
Cause Info.: Other (bypass)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

23

Site Title Not Available

695 SEAVIEW AVE

Case No.: 201201949
Location of Reported Release: 695 SEAVIEW AVE
Town of Release: Bridgeport
Release Date: 04/23/2012 12:00:00 AM
Date Reported: 04/23/2012 06:14:00 AM
Year: 2012
Reported By: DORIS MCKENZIE
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: BYPASS
Waterbodies Affected: LIS
Cause Info.: Other (RAIN)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

24

Site Title Not Available

695 SEAVIEW AVE

Case No.: 201501743
Location of Reported Release: 695 SEAVIEW AVE
Town of Release: Bridgeport
Release Date: 04/21/2015 12:00:00 AM
Date Reported: 04/21/2015 02:05:00 AM
Year: 2015
Reported By: MARK THOMAS
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: BYPASS
Waterbodies Affected: LIS
Cause Info.: Other (RAIN)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

25

Site Title Not Available

695 Seaview Avenue, East Side

Case No.: 200804999
Location of Reported Release: 695 Seaview Avenue, East Side
Town of Release: BRIDGEPORT
Release Date: 08/07/2008 07:00:00 PM
Date Reported: 08/07/2008 07:43:00 PM
Year: 2008
Reported By: Peter Ferko
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: RAW SEWAGE BYPASS
Total Qty. (Gallons): 0.00
Emergency Measures:
Waterbodies Affected: LIS
Cause Info.: Other (Weather)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

26

Site Title Not Available

695 seaview ave

Case No.: 200600702
Location of Reported Release: 695 seaview ave
Town of Release: BRIDGEPORT
Release Date: 02/03/2006 12:00:00 AM
Date Reported: 02/03/2006 07:55:00 AM
Year: 2006
Reported By: frank woods
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: RAW SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: bypass
Waterbodies Affected:
Cause Info.: Natural
Media Info.: Ground Surface
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

27

Site Title Not Available

695 seaview ave

Case No.: 201404470
Location of Reported Release: 695 seaview ave
Town of Release: Bridgeport
Release Date: 09/06/2014 05:45:00 PM
Date Reported: 09/06/2014 06:08:00 PM
Year: 2014
Reported By: george
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: BYPASS DISINFECTED PARTIALLY TREATED SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: Bypass due to rain event
Waterbodies Affected: LIS
Cause Info.: Natural
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

28

Site Title Not Available

695 Seaview Ave. - Eastside

Case No.: 201105018
Location of Reported Release: 695 Seaview Ave. - Eastside
Town of Release: BRIDGEPORT
Release Date: 08/27/2011 08:30:00 PM
Date Reported: 08/27/2011 10:18:00 PM
Year: 2011
Reported By: Carlos Taiva
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: Bypass.
Waterbodies Affected: LIS
Cause Info.: Natural, and Other (Rain Event)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

29

Site Title Not Available

695 SEAVIEW AVE

Case No.: 200305828
Location of Reported Release: 695 SEAVIEW AVE
Town of Release: BRIDGEPORT
Release Date: 08/07/2003 12:00:00 AM
Date Reported: 08/07/2003 11:16:00 PM
Year: 2003
Reported By: JEROME WEST
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: POTW BYPASS
Total Qty. (Gallons): 23000000.0
Emergency Measures: 23MGD 23:05 START TIME
Waterbodies Affected: LIS
Cause Info.: Other (POTW BYPASS HEAVY RAIN)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

30

Site Title Not Available

695 SEAVIEW AVE

Case No.: 200507269
Location of Reported Release: 695 SEAVIEW AVE
Town of Release: BRIDGEPORT
Release Date: 10/25/2005 12:00:00 AM
Date Reported: 10/25/2005 05:54:00 AM
Year: 2005
Reported By: JEROME WEST
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: BYPASS
Waterbodies Affected: LIS
Cause Info.: Other (RAIN)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

31

Site Title Not Available

625 SEAVIEW AVE

Case No.: 9604661
Location of Reported Release: 625 SEAVIEW AVE
Town of Release: BRIDGEPORT
Release Date: 06/22/1996 12:00:00 AM
Date Reported: 06/22/1996 08:06:00 AM
Year: 1996
Reported By: FRANK WOOD
Assigned: Emanuelson, Brian
Responsible Party:
Release Type: hazardous waste
Release Substance: UNKNOWN SUBSTANCE INFILTRATING SEWAGE PLANT TANKS
Total Qty. (Gallons): 0.00
Emergency Measures:
Waterbodies Affected:
Cause Info.:
Media Info.:
Distance From Center (Miles): 0.3325
Site Source: last updated 03-22-2022 from CTDEEP-SITS

32

Site Title Not Available

695 seaview ave

Case No.: 200402576
Location of Reported Release: 695 seaview ave
Town of Release: BRIDGEPORT
Release Date: 04/26/2004 12:00:00 AM
Date Reported: 04/26/2004 08:02:00 AM
Year: 2004
Reported By: frank wood
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: RAW SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: 2.5mgd REFERRED TO AQUACULTURE
Waterbodies Affected:
Cause Info.: Natural
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

33

Site Title Not Available

695 SEAVIEW AVE

Case No.: 201202293
Location of Reported Release: 695 SEAVIEW AVE
Town of Release: Bridgeport
Release Date: 05/10/2012 12:00:00 AM
Date Reported: 05/10/2012 02:07:00 AM
Year: 2012
Reported By: MARK THOMAS
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: BYPASS
Waterbodies Affected: LIS
Cause Info.: Other (RAIN)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

34

Site Title Not Available

695 seaview ave

Case No.: 201603569
Location of Reported Release: 695 seaview ave
Town of Release: Bridgeport
Release Date: 07/07/2016 05:00:00 PM
Date Reported: 07/07/2016 05:01:00 PM
Year: 2016
Reported By: peter ferko
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: PARTIALLY TREATED SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: Bypass due to train event
Waterbodies Affected: LIS
Cause Info.: Natural
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

35

Site Title Not Available

695 Seaview Ave (Eastside Treatment Plant)

Case No.: 200706791
Location of Reported Release: 695 Seaview Ave (Eastside Treatment Plant)
Town of Release: BRIDGEPORT
Release Date: 10/19/2007 12:00:00 AM
Date Reported: 10/19/2007 09:23:00 PM
Year: 2007
Reported By: Peter Ferko
Assigned: NO Response
Responsible Party: saa
Release Type: sewage related
Release Substance: WASTE WATER
Total Qty. (Gallons): 0.00
Emergency Measures: A 3.77 million gallon has been released.
Waterbodies Affected: LIS
Cause Info.: Natural
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

36

Site Title Not Available

695 SEAVIEW AVE

Case No.: 200301743
Location of Reported Release: 695 SEAVIEW AVE
Town of Release: BRIDGEPORT
Release Date: 02/23/2003 12:00:00 AM
Date Reported: 02/23/2003 07:43:00 AM
Year: 2003
Reported By: FRANK WOOD
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: SEWAGE OVERFLOW
Total Qty. (Gallons): 25000000.0
Emergency Measures: CHLORINATED SEWAGE
Waterbodies Affected:
Cause Info.: Natural, and Other (HEAVY RAIN)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

37

Site Title Not Available

695 seaview

Case No.: 200501873
Location of Reported Release: 695 seaview
Town of Release: BRIDGEPORT
Release Date: 04/02/2005 12:00:00 AM
Date Reported: 04/02/2005 08:04:00 AM
Year: 2005
Reported By: lawrence weller
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: RAW SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: 13 mgd
Waterbodies Affected: LIS
Cause Info.: Other (bypass)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

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Site Title Not Available

695 SEAVIEW AVE

Case No.: 201207410
Location of Reported Release: 695 SEAVIEW AVE
Town of Release: Bridgeport
Release Date: 12/18/2012 12:00:00 AM
Date Reported: 12/18/2012 04:22:00 AM
Year: 2012
Reported By: MARK THOMAS
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures:
Waterbodies Affected: LIS
Cause Info.: Other (RAIN)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

39

Site Title Not Available

695 SEAVIEW AVE

Case No.: 200303441
Location of Reported Release: 695 SEAVIEW AVE
Town of Release: BRIDGEPORT
Release Date: 05/08/2003 12:00:00 AM
Date Reported: 05/08/2003 02:35:00 AM
Year: 2003
Reported By: CHUCK TERRY
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: RAW SEWAGE
Total Qty. (Gallons): 100.00
Emergency Measures: BYPASS
Waterbodies Affected: LIS
Cause Info.: Other (RAIN)
Media Info.: Ground Surface
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

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Site Title Not Available

695 seaview ave

Case No.: 201403445
Location of Reported Release: 695 seaview ave
Town of Release: Bridgeport
Release Date: 07/14/2014 08:15:00 PM
Date Reported: 07/14/2014 08:43:00 PM
Year: 2014
Reported By: mark thomas
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: PARTIALLY SEWAGE BYPASS
Total Qty. (Gallons): 0.00
Emergency Measures: Placed in bypass at 2015 hrs., 07/14/2014
Waterbodies Affected: LIS
Cause Info.: Natural, and Other (rain event)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

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Site Title Not Available

695 seaview ave

Case No.: 200701234
Location of Reported Release: 695 seaview ave
Town of Release: BRIDGEPORT
Release Date: 03/02/2007 12:00:00 AM
Date Reported: 03/02/2007 03:33:00 AM
Year: 2007
Reported By: carlos paivei
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: BYPASS
Waterbodies Affected: LIS
Cause Info.: Other (RAIN)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

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Site Title Not Available

695 SEAVIEW AVE

Case No.: 200405111
Location of Reported Release: 695 SEAVIEW AVE
Town of Release: BRIDGEPORT
Release Date: 07/28/2004 12:00:00 AM
Date Reported: 07/28/2004 02:31:00 AM
Year: 2004
Reported By: JEROME WEST
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: RAW SEWAGE
Total Qty. (Gallons): 3000000.00
Emergency Measures: BY PASS
Waterbodies Affected: LIS
Cause Info.: Other (RAIN)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

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Site Title Not Available

695 SEAVIEW AVENUE

Case No.: 200405029
Location of Reported Release: 695 SEAVIEW AVENUE
Town of Release: BRIDGEPORT
Release Date: 07/24/2004 04:59:00 AM
Date Reported: 07/24/2004 04:59:00 AM
Year: 2004
Reported By: JEROME WEST
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: RAW SEWAGE
Total Qty. (Gallons): 8000000.00
Emergency Measures: REFERRED TO 912
Waterbodies Affected: Other (HARBOR)
Cause Info.: Other (WEATHER RELATED)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

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Site Title Not Available

695 seaview avenue

Case No.: 200807264
Location of Reported Release: 695 seaview avenue
Town of Release: BRIDGEPORT
Release Date: 11/15/2008 12:00:00 AM
Date Reported: 11/15/2008 01:30:00 PM
Year: 2008
Reported By: doris
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: RAW SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: Bypass.
Waterbodies Affected:
Cause Info.: Natural
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

45

Site Title Not Available

695 SEAVIEW AVE

Case No.: 200507838
Location of Reported Release: 695 SEAVIEW AVE
Town of Release: BRIDGEPORT
Release Date: 11/17/2005 12:00:00 AM
Date Reported: 11/17/2005 03:54:00 AM
Year: 2005
Reported By: JEROME WEST
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: RAW SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: BY PASS 9 MILLION GALLONS
Waterbodies Affected: LIS
Cause Info.: Other (RAIN)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

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Site Title Not Available

695 SEAVIEW AVE

Case No.: 201603499
Location of Reported Release: 695 SEAVIEW AVE
Town of Release: Bridgeport
Release Date: 07/05/2016 12:00:00 AM
Date Reported: 07/05/2016 03:09:00 AM
Year: 2016
Reported By: MARK THOMAS
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: BYPASS
Waterbodies Affected: LIS
Cause Info.: Other (RAIN)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

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Site Title Not Available

695 SEAVIEW AVE

Case No.: 200401954
Location of Reported Release: 695 SEAVIEW AVE
Town of Release: BRIDGEPORT
Release Date: 04/01/2004 12:00:00 AM
Date Reported: 04/01/2004 02:17:00 AM
Year: 2004
Reported By: JEROME WEST
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: RAW SEWAGE
Total Qty. (Gallons): 9000000.00
Emergency Measures: BYPASS
Waterbodies Affected: LIS
Cause Info.: Other (HEAVY RAIN)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

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Site Title Not Available

695 SEAVIEW AVE

Case No.: 201302520
Location of Reported Release: 695 SEAVIEW AVE
Town of Release: Bridgeport
Release Date: 05/24/2013 12:00:00 AM
Date Reported: 05/24/2013 03:01:00 AM
Year: 2013
Reported By: BRIDGEPORT EAST SIDE TREATMENT PLANT
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: BYPASS
Waterbodies Affected: LIS
Cause Info.: Other (RAIN)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

49

Site Title Not Available

695 SEAVIEW AVENUE

Case No.: 200804642
Location of Reported Release: 695 SEAVIEW AVENUE
Town of Release: BRIDGEPORT
Release Date: 07/24/2008 12:00:00 AM
Date Reported: 07/24/2008 01:33:00 AM
Year: 2008
Reported By: GEORGE MIHAI
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: Bypass.
Waterbodies Affected: LIS
Cause Info.: Other (RAIN)
Media Info.: Ground Surface
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

50

Site Title Not Available

695 SEAVIEW AVE

Case No.: 200706590
Location of Reported Release: 695 SEAVIEW AVE
Town of Release: BRIDGEPORT
Release Date: 10/12/2007 12:00:00 AM
Date Reported: 10/12/2007 01:39:00 AM
Year: 2007
Reported By: PETER
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: BYPASS
Waterbodies Affected: LIS
Cause Info.: Other (RAIN)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

51

Site Title Not Available

695 SEAVIEW AVE

Case No.: 201401127
Location of Reported Release: 695 SEAVIEW AVE
Town of Release: Bridgeport
Release Date: 03/20/2014 12:00:00 AM
Date Reported: 03/20/2014 12:43:00 AM
Year: 2014
Reported By: MARK THOMAS
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: BYPASS
Waterbodies Affected: LIS
Cause Info.: Other (RAIN)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

52

Site Title Not Available

695 SEAVIEW AVE

Case No.: 200506860
Location of Reported Release: 695 SEAVIEW AVE
Town of Release: BRIDGEPORT
Release Date: 10/12/2005 12:00:00 AM
Date Reported: 10/12/2005 02:28:00 AM
Year: 2005
Reported By: JERMOE WEST
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: BY PASS 11.4 MGD
Waterbodies Affected: LIS
Cause Info.: Other (RAIN)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

53

Site Title Not Available

695 seaview ave

Case No.: 200307103
Location of Reported Release: 695 seaview ave
Town of Release: BRIDGEPORT
Release Date: 09/28/2003 12:00:00 AM
Date Reported: 09/28/2003 02:26:00 PM
Year: 2003
Reported By: larry weller
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: RAW SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: 15mgd, primary treated
Waterbodies Affected:
Cause Info.: Other (rain)
Media Info.: Ground Surface
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

54

Site Title Not Available

695 SEAVIEW AVENUE

Case No.: 200604388
Location of Reported Release: 695 SEAVIEW AVENUE
Town of Release: BRIDGEPORT
Release Date: 07/19/2006 07:52:00 AM
Date Reported: 07/19/2006 07:52:00 AM
Year: 2006
Reported By: DAVID
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: RAW SEWAGE
Total Qty. (Gallons): 100000.00
Emergency Measures:
Waterbodies Affected: Sanitary Sewer
Cause Info.: Other (WEATHER RELATED)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

55

Site Title Not Available

695 seaview ave

Case No.: 201007153
Location of Reported Release: 695 seaview ave
Town of Release: BRIDGEPORT
Release Date: 12/01/2010 04:25:00 PM
Date Reported: 12/01/2010 04:52:00 PM
Year: 2010
Reported By: carlos paiva
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: SEWAGE BYPASS
Total Qty. (Gallons): 0.00
Emergency Measures:
Waterbodies Affected:
Cause Info.: Other (storm)
Media Info.: Ground Surface
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

56

Site Title Not Available

695 SEAVIEW AVE

Case No.: 201005835
Location of Reported Release: 695 SEAVIEW AVE
Town of Release: BRIDGEPORT
Release Date: 09/27/2010 12:00:00 AM
Date Reported: 09/27/2010 12:21:00 AM
Year: 2010
Reported By: MARK THOMAS
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: BYPASS
Waterbodies Affected: LIS
Cause Info.: Other (RAIN)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

57

Site Title Not Available

695 seaview ave

Case No.: 201205724
Location of Reported Release: 695 seaview ave
Town of Release: Bridgeport
Release Date: 10/19/2012 12:00:00 AM
Date Reported: 10/19/2012 05:04:00 AM
Year: 2012
Reported By: mark thomas
Assigned: NO Response
Responsible Party: saa
Release Type: sewage related
Release Substance: BYPASS PARTIALLY TREATED SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: unknown amount. Caller instructed to contact DEEP Water Pollution Ctrl
Waterbodies Affected: LIS
Cause Info.: Other (overflow)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

58

Site Title Not Available

695 SEAVIEW AVE

Case No.: 201302971
Location of Reported Release: 695 SEAVIEW AVE
Town of Release: Bridgeport
Release Date: 06/13/2013 12:00:00 AM
Date Reported: 06/13/2013 11:21:00 PM
Year: 2013
Reported By: MARK THOMAS
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: BYPASS
Waterbodies Affected: LIS
Cause Info.: Other (RAIN)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

59

Site Title Not Available

695 SEAVIEW AVE

Case No.: 200605391
Location of Reported Release: 695 SEAVIEW AVE
Town of Release: BRIDGEPORT
Release Date: 08/28/2006 12:00:00 AM
Date Reported: 08/28/2006 02:39:00 AM
Year: 2006
Reported By: CARLOS PAIVA
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: RAW SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: BYPASS
Waterbodies Affected: LIS
Cause Info.: Other (RAIN)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

60

Site Title Not Available

695 seaview ave

Case No.: 201103121
Location of Reported Release: 695 seaview ave
Town of Release: BRIDGEPORT
Release Date: 06/09/2011 07:00:00 PM
Date Reported: 06/09/2011 07:00:00 PM
Year: 2011
Reported By: peter furko
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: SEWAGE BYPASS
Total Qty. (Gallons): 0.00
Emergency Measures:
Waterbodies Affected: LIS
Cause Info.: Other (sewage bypass)
Media Info.: Surface Water, and Ground Surface
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

61

Site Title Not Available

695 SEAVIEW AVE

Case No.: 201001693
Location of Reported Release: 695 SEAVIEW AVE
Town of Release: BRIDGEPORT
Release Date: 03/23/2010 12:00:00 AM
Date Reported: 03/23/2010 12:26:00 AM
Year: 2010
Reported By: MARK THOMAS
Assigned: NO Response
Responsible Party:
Release Type: sewage related
Release Substance: SEWAGE
Total Qty. (Gallons): 0.00
Emergency Measures: BYPASS.
Waterbodies Affected: LIS
Cause Info.: Other (RAIN)
Media Info.: Surface Water
Distance From Center (Miles): 0.3356
Site Source: last updated 03-22-2022 from CTDEEP-SITS

State and/or tribal lists of emergency responses

No records found

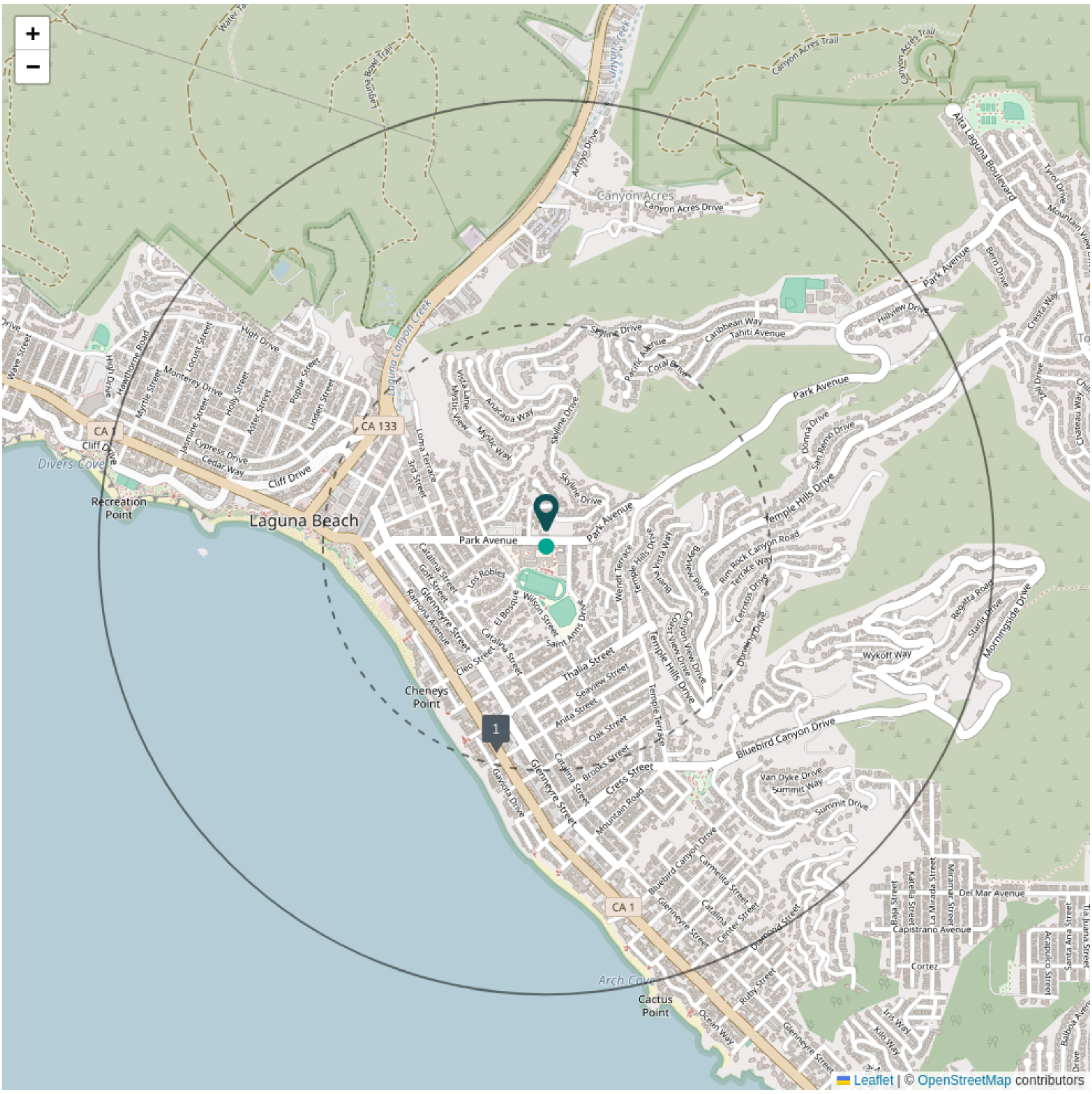
State and/or tribal lists of dry cleaners

No records found

State and/or tribal lists of clandestine laboratory cleanups

CLANDESTINE DRUG LABS

The United States Drug Enforcement Administration (DEA) keeps the National Clandestine Laboratory Register Data, which is a record of addresses where law enforcement has reported discovering chemicals or items suggesting the existence of clandestine drug labs or dumpsites.



center: 33.541815,-117.775968

---- 0.5 Miles —— 1.0 Miles

1

Site Title Not Available

985 Pacific Coast N Hwy

Distance From Center (Miles): 0.4759

Site Source: last updated 11-02-2020 from CLANDESTINE DRUG LABS

State and/or tribal lists of scrap/used tire processing facilities

No records found

State and/or tribal lists of underground injection control sites

No records found

State and/or tribal listings of permitted drywells

No state and/or tribal permitted drywells were found within a half-mile radius of the target property.

Automobile salvage yards

No records found

Livestock Waste Control sites

No records found

Controlled Animal Feeding Operations (CAFOs)

No records found

State and/or tribal lists of registered aboveground storage tanks (ASTs)

No records found

C.A.A. Permitted Facilities

No records found

NPDES Permitted Facilities

No records found

Onsite Wastewater Treatment sites

No records found

State and/or tribal lists of permitted facilities

No State and/or tribal permitted facilities found within a half-mile of the target property.

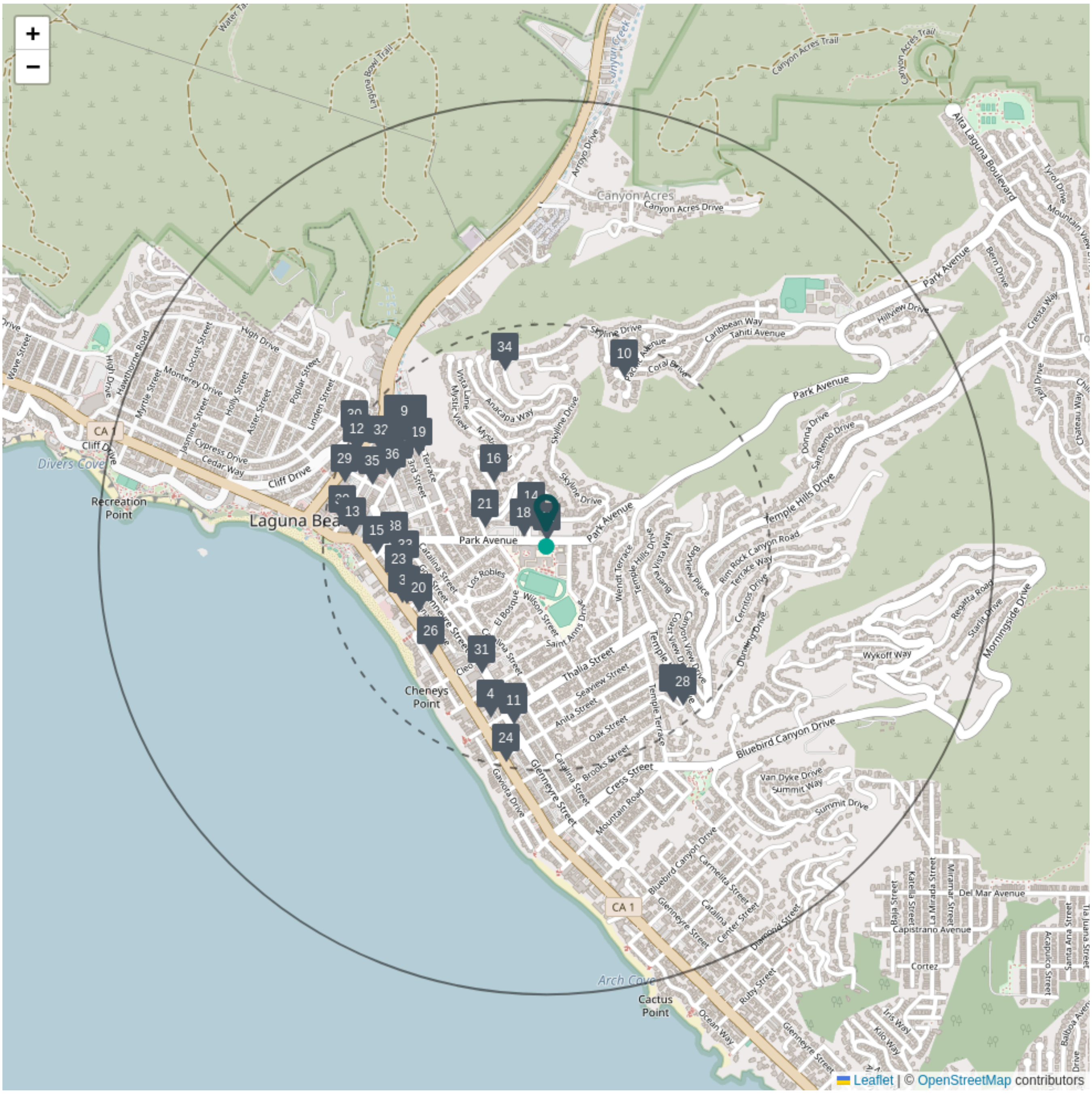
U.S. EPA Enforcement, Compliance History Online (ECHO)

No records found

Resource Conservation and Recovery Act Information (RCRAInfo)

RESOURCE CONSERVATION AND RECOVERY ACT INFORMATION SYSTEM

RCRAInfo is the Environmental Protection Agency's (EPA) comprehensive information system that supports the Resource Conservation and Recovery Act (RCRA) of 1976, as well as the Hazardous and Solid Waste Amendments (HSWA) of 1984. It facilitates monitoring events and activities related to facilities that generate, transport, treat, store, or dispose of hazardous waste.
Furthermore, it is important to note that RCRAInfo includes all hazardous waste handlers, treatment, Storage, and Disposal Facilities (TSDFs), generators, and facilities currently undergoing RCRA corrective action. Users may encounter duplicate records pertaining to the TSDFs, generators, and/or sections concerning RCRA corrective action. This source has been searched for all records located within a half-mile radius of the target property.



center: 33.541815,-117.775968

0.5 Miles 1.0 Miles

1

55 INC DBA LAGUNA TIRE AND SERVICE

350 BROADWAY ST

Registry ID: 110070414644
Name: 55 INC DBA LAGUNA TIRE AND SERVICE
Address: 350 BROADWAY ST
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAL000405874
Interest Type: OTHER HAZARDOUS WASTE ACTIVITIES
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 31-DEC-18
Date Updated:
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.4773
Site Source: last updated from FACILITY REGISTRY SERVICE

2

ALICE HARMON

725 OAK ST

Registry ID: 110070579570
Name: ALICE HARMON
Address: 725 OAK ST
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAC003015112
Interest Type: OTHER HAZARDOUS WASTE ACTIVITIES
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 20-AUG-19
Date Updated:
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.4457
Site Source: last updated from FACILITY REGISTRY SERVICE

3

AMTECH ELEVATOR- LAGUNA BEACH

540 S COAST HWY

Registry ID: 110070399730
Name: AMTECH ELEVATOR- LAGUNA BEACH
Address: 540 S COAST HWY
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAC002963871
Interest Type: OTHER HAZARDOUS WASTE ACTIVITIES
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 31-DEC-18
Date Updated:
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.3429
Site Source: last updated from FACILITY REGISTRY SERVICE

4

AUTO REPAIR OF LAGUNA BEACH

890 SOUTH COAST HWY

Registry ID: 110070591841
Name: AUTO REPAIR OF LAGUNA BEACH
Address: 890 SOUTH COAST HWY
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAL000445193
Interest Type: OTHER HAZARDOUS WASTE ACTIVITIES
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 20-AUG-19
Date Updated:
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.4033
Site Source: last updated from FACILITY REGISTRY SERVICE

5

C P CORNELL III DDS

920 GLENNEYRE ST

Registry ID: 110070589120
Name: C P CORNELL III DDS
Address: 920 GLENNEYRE ST
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAL000115497
Interest Type: OTHER HAZARDOUS WASTE ACTIVITIES
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 20-AUG-19
Date Updated:
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.3983
Site Source: last updated from FACILITY REGISTRY SERVICE

6

CHEVRON STATION 61787

590 S COAST HWY

Registry ID: 110002899105
Name: CHEVRON STATION 61787
Address: 590 S COAST HWY
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAD983668245
Interest Type: SQG
Point of Reference Description: PLANT ENTRANCE (GENERAL)
Date Created: 01-MAR-00
Date Updated: 26-JAN-12
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.3509
Site Source: last updated from FACILITY REGISTRY SERVICE

7

CHEVRON STATION 91966

604 S COAST HWY

Registry ID: 110012538245
Name: CHEVRON STATION 91966
Address: 604 S COAST HWY
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: HWTS-DATAMART:CAR000117457, RCRAINFO:CAR000117457
Interest Type: SQG, STATE MASTER
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 28-AUG-02
Date Updated: 26-JAN-12
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.3234
Site Source: last updated from FACILITY REGISTRY SERVICE

8

CITY OF LAGUNA BEACH - PUBLIC WORKS

505 FOREST AVE

Registry ID: 110070409442
Name: CITY OF LAGUNA BEACH - PUBLIC WORKS
Address: 505 FOREST AVE
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAH111001265
Interest Type: OTHER HAZARDOUS WASTE ACTIVITIES
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 31-DEC-18
Date Updated:
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.3941
Site Source: last updated from FACILITY REGISTRY SERVICE

9

CITY OF LAGUNA BEACH ADMINISTRATIVE OFFICES

505 FOREST AVENUE

Registry ID: 110013689945
Name: CITY OF LAGUNA BEACH ADMINISTRATIVE OFFICES
Address: 505 FOREST AVENUE
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: CA-ENVIROVIEW:180470, CA-ENVIROVIEW:19708, HWTS-DATAMART:CAD982034803, ICIS:2656528, RCRAINFO:CAD982034803
Interest Type: FORMAL ENFORCEMENT ACTION, SQG, STATE MASTER
Point of Reference Description: CENTER OF A FACILITY OR STATION
Date Created: 10-FEB-03
Date Updated: 14-OCT-15
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.4066
Site Source: last updated from FACILITY REGISTRY SERVICE

10

EL MORO LAGUNA BEACH COUNTY WATER DISTRICT

8601 PACIFIC BEACH HWY

Registry ID: 110070419795
Name: EL MORO LAGUNA BEACH COUNTY WATER DISTRICT
Address: 8601 PACIFIC BEACH HWY
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAL000418154
Interest Type: OTHER HAZARDOUS WASTE ACTIVITIES
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 31-DEC-18
Date Updated:
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.414
Site Source: last updated from FACILITY REGISTRY SERVICE

11

FIRST TEAM ESTATE

900 GLENNEYRE STREET

Registry ID: 110070573455
Name: FIRST TEAM ESTATE
Address: 900 GLENNEYRE STREET
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAC003008121
Interest Type: OTHER HAZARDOUS WASTE ACTIVITIES
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 20-AUG-19
Date Updated:
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.4053
Site Source: last updated from FACILITY REGISTRY SERVICE

12

GOOD YEAR AT LAGUNA INC

350 BROADWAY ST

Registry ID: 110070591334
Name: GOOD YEAR AT LAGUNA INC
Address: 350 BROADWAY ST
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAL000444540
Interest Type: OTHER HAZARDOUS WASTE ACTIVITIES
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 20-AUG-19
Date Updated:
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.4773
Site Source: last updated from FACILITY REGISTRY SERVICE

13

JACOBUS GOLDSMITH

278 S COAST HWY

Registry ID: 110070448179
Name: JACOBUS GOLDSMITH
Address: 278 S COAST HWY
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAL000174763
Interest Type: OTHER HAZARDOUS WASTE ACTIVITIES
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 02-JAN-19
Date Updated:
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.4378
Site Source: last updated from FACILITY REGISTRY SERVICE

14

JESSICA COSTA

739 MANZANITA

Registry ID: 110070581390
Name: JESSICA COSTA
Address: 739 MANZANITA
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAC003017168
Interest Type: OTHER HAZARDOUS WASTE ACTIVITIES
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 20-AUG-19
Date Updated:
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.0716
Site Source: last updated from FACILITY REGISTRY SERVICE

15

JOYCE GOERTZEN

459

Registry ID: 110070465697
Name: JOYCE GOERTZEN
Address: 459
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAC002977235
Interest Type: OTHER HAZARDOUS WASTE ACTIVITIES
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 02-JAN-19
Date Updated:
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.3847
Site Source: last updated from FACILITY REGISTRY SERVICE

16

JOYCE GORTZEN

459 HILLEDGE DRIVE

Registry ID: 110070441151
Name: JOYCE GORTZEN
Address: 459 HILLEDGE DRIVE
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAC002988822
Interest Type: OTHER HAZARDOUS WASTE ACTIVITIES
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 02-JAN-19
Date Updated:
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.1875
Site Source: last updated from FACILITY REGISTRY SERVICE

17

LAGUNA BEACH ANIMAL HOSPITAL

460 FOREST AVE.

Registry ID: 110070489766
Name: LAGUNA BEACH ANIMAL HOSPITAL
Address: 460 FOREST AVE.
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAL923033990
Interest Type: OTHER HAZARDOUS WASTE ACTIVITIES
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 03-JAN-19
Date Updated:
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.4204
Site Source: last updated from FACILITY REGISTRY SERVICE

18

LAGUNA BEACH CITY POOL

670 PARK AVE

Registry ID: 110070581527
Name: LAGUNA BEACH CITY POOL
Address: 670 PARK AVE
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAC003017327
Interest Type: OTHER HAZARDOUS WASTE ACTIVITIES
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 20-AUG-19
Date Updated:
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.0586
Site Source: last updated from FACILITY REGISTRY SERVICE

19

LAGUNA BEACH COUNTY WATER DISTRICT

306 3RD ST

Registry ID: 110070444614
Name: LAGUNA BEACH COUNTY WATER DISTRICT
Address: 306 3RD ST
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAL000088725
Interest Type: OTHER HAZARDOUS WASTE ACTIVITIES
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 02-JAN-19
Date Updated:
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.3534
Site Source: last updated from FACILITY REGISTRY SERVICE

20

LAGUNA BEACH OIL INC

604 S COAST HWY

Registry ID: 110070447123
Name: LAGUNA BEACH OIL INC
Address: 604 S COAST HWY
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAL000181958
Interest Type: OTHER HAZARDOUS WASTE ACTIVITIES
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 02-JAN-19
Date Updated:
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.3234
Site Source: last updated from FACILITY REGISTRY SERVICE

21

LAGUNA BEACH UNIFIED SCHOOL DISTRICT

550 BLUMONT STREET

Registry ID: 110013688358
Name: LAGUNA BEACH UNIFIED SCHOOL DISTRICT
Address: 550 BLUMONT STREET
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: ICIS:2656483, NCDB:D09#T-09-2002-0004, RCRAINFO:CAC002971702
Interest Type: COMPLIANCE ACTIVITY, FORMAL ENFORCEMENT ACTION, OTHER HAZARDOUS WASTE ACTIVITIES
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 10-FEB-03
Date Updated: 03-MAY-15
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.1479
Site Source: last updated from FACILITY REGISTRY SERVICE

22

LAGUNA BEACH UNIFIED SCHOOL DISTRICT

625 PARK AVENUE

Registry ID: 110070402006
Name: LAGUNA BEACH UNIFIED SCHOOL DISTRICT
Address: 625 PARK AVENUE
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAC002974500
Interest Type: OTHER HAZARDOUS WASTE ACTIVITIES
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 31-DEC-18
Date Updated:
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.0133
Site Source: last updated from FACILITY REGISTRY SERVICE

23

LAGUNA COLLECTION, LLC

540 S. COAST HIGHWAY

Registry ID: 110070400039
Name: LAGUNA COLLECTION, LLC
Address: 540 S. COAST HIGHWAY
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAC002964371
Interest Type: OTHER HAZARDOUS WASTE ACTIVITIES
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 31-DEC-18
Date Updated:
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.3429
Site Source: last updated from FACILITY REGISTRY SERVICE

24

LAGUNA MBZ SERVICE DBA LAGUNA MOTOR WERKS

1009 S COAST HWY

Registry ID: 110070474769
Name: LAGUNA MBZ SERVICE DBA LAGUNA MOTOR WERKS
Address: 1009 S COAST HWY
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAL000349979
Interest Type: OTHER HAZARDOUS WASTE ACTIVITIES
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 02-JAN-19
Date Updated:
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.4913
Site Source: last updated from FACILITY REGISTRY SERVICE

25

LAGUNA PRESBYTERIAN CHURCH

439 FOREST AVE

Registry ID: 110070423656
Name: LAGUNA PRESBYTERIAN CHURCH
Address: 439 FOREST AVE
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAL000421843
Interest Type: OTHER HAZARDOUS WASTE ACTIVITIES
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 31-DEC-18
Date Updated:
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.3763
Site Source: last updated from FACILITY REGISTRY SERVICE

26

LIFTECH ELEVATOR SERVICES

647 S. COAST HIGHWAY

Registry ID: 110070442014
Name: LIFTECH ELEVATOR SERVICES
Address: 647 S. COAST HIGHWAY
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAC002988532
Interest Type: OTHER HAZARDOUS WASTE ACTIVITIES
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 02-JAN-19
Date Updated:
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.3558
Site Source: last updated from FACILITY REGISTRY SERVICE

27

LIVE WIRE CLEANERS

439 FOREST AVE

Registry ID: 110002735568
Name: LIVE WIRE CLEANERS
Address: 439 FOREST AVE
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: CA-ENVIROVIEW:209795, HWTS-DATAMART:CAD981640790, RCRAINFO:CAD981640790
Interest Type: LQG, STATE MASTER
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 01-MAR-00
Date Updated: 14-OCT-15
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.3777
Site Source: last updated from FACILITY REGISTRY SERVICE

28

MASARIK, CHARLOTTE

760 OAK STREET

Registry ID: 110070437093
Name: MASARIK, CHARLOTTE
Address: 760 OAK STREET
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAC002980053
Interest Type: OTHER HAZARDOUS WASTE ACTIVITIES
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 31-DEC-18
Date Updated:
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.4652
Site Source: last updated from FACILITY REGISTRY SERVICE

29

MRS GOOCH'S NATURAL FOODS MARKET INC DBA WHOLE FOODS MARKET LAG 52

283 BROADWAY ST.

Registry ID: 110066089271
Name: MRS GOOCH'S NATURAL FOODS MARKET INC DBA WHOLE FOODS MARKET LAG 52
Address: 283 BROADWAY ST.
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: CA-ENVIROVIEW:171699, RCRAINFO:CAL000400000
Interest Type: OTHER HAZARDOUS WASTE ACTIVITIES, STATE MASTER
Point of Reference Description: CENTER OF A FACILITY OR STATION
Date Created: 14-OCT-15
Date Updated:
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.4773
Site Source: last updated from FACILITY REGISTRY SERVICE

30

PACIFICDIVERSIFIED

100 CLIFF DRIVE

Registry ID: 110070584266
Name: PACIFICDIVERSIFIED
Address: 100 CLIFF DRIVE
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAC003020490
Interest Type: OTHER HAZARDOUS WASTE ACTIVITIES
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 20-AUG-19
Date Updated:
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.4965
Site Source: last updated from FACILITY REGISTRY SERVICE

31

RALPHS GROCERY #4

700 S COAST HWY

Registry ID: 110070468810
Name: RALPHS GROCERY #4
Address: 700 S COAST HWY
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAL000320340
Interest Type: OTHER HAZARDOUS WASTE ACTIVITIES
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 02-JAN-19
Date Updated:
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.3194
Site Source: last updated from FACILITY REGISTRY SERVICE

32

SLEEPY HOLLOW MEDICAL GRP

364 OCEAN AVE

Registry ID: 110070443632
Name: SLEEPY HOLLOW MEDICAL GRP
Address: 364 OCEAN AVE
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAL000084216
Interest Type: OTHER HAZARDOUS WASTE ACTIVITIES
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 02-JAN-19
Date Updated:
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.4272
Site Source: last updated from FACILITY REGISTRY SERVICE

33

SNYDER'S CLEANERS

506 GLEENNEYRE ST

Registry ID: 110002735675
Name: SNYDER'S CLEANERS
Address: 506 GLEENNEYRE ST
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAD981641095, RCRAINFO:CAL000263701
Interest Type: SQG, UNSPECIFIED UNIVERSE
Point of Reference Description: PLANT ENTRANCE (GENERAL)
Date Created: 01-MAR-00
Date Updated: 29-DEC-14
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.3217
Site Source: last updated from FACILITY REGISTRY SERVICE

34

STEVEN WILLIAMS

1255 SKYLINE DR

Registry ID: 110070401259
Name: STEVEN WILLIAMS
Address: 1255 SKYLINE DR
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAC002969306, RCRAINFO:CAC003062652, RCRAINFO:CAC003178742, RCRAINFO:CAC003190958
Interest Type: OTHER HAZARDOUS WASTE ACTIVITIES, UNSPECIFIED UNIVERSE
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 31-DEC-18
Date Updated:
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.4048
Site Source: last updated from FACILITY REGISTRY SERVICE

35

SUPER COLOR

230 BEACH STREET

Registry ID: 110002793095
Name: SUPER COLOR
Address: 230 BEACH STREET
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAD982319626
Interest Type: SQG
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 01-MAR-00
Date Updated: 29-DEC-14
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.4176
Site Source: last updated from FACILITY REGISTRY SERVICE

36

SYMRISE INC

332 FOREST AVE STE 25

Registry ID: 110070663900
Name: SYMRISE INC
Address: 332 FOREST AVE STE 25
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAL000414797
Interest Type: VSQG
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 26-NOV-19
Date Updated:
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.3805
Site Source: last updated from FACILITY REGISTRY SERVICE

37

TESORO 63388

590 S COAST HWY

Registry ID: 110070592655
Name: TESORO 63388
Address: 590 S COAST HWY
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAL000446225
Interest Type: OTHER HAZARDOUS WASTE ACTIVITIES
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 20-AUG-19
Date Updated:
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.3421
Site Source: last updated from FACILITY REGISTRY SERVICE

38

VERIZON WIRELESS

401 GLENNEYRE STREET

Registry ID: 110070572700
Name: VERIZON WIRELESS
Address: 401 GLENNEYRE STREET
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAC003007280
Interest Type: OTHER HAZARDOUS WASTE ACTIVITIES
Point of Reference Description: ENTRANCE POINT OF A FACILITY OR STATION
Date Created: 20-AUG-19
Date Updated:
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.3443
Site Source: last updated from FACILITY REGISTRY SERVICE

39

WESTPAC LAGUNA

222 OCEAN AVE

Registry ID: 110044280220
Name: WESTPAC LAGUNA
Address: 222 OCEAN AVE
City: LAGUNA BEACH
Site Type: STATIONARY
Program Acronyms: RCRAINFO:CAR000222281
Interest Type: SQG
Point of Reference Description: CENTER OF A FACILITY OR STATION
Date Created: 14-DEC-11
Date Updated: 28-MAR-14
FRS Facility Detail Report URL: Link
Distance From Center (Miles): 0.4638
Site Source: last updated from FACILITY REGISTRY SERVICE

U.S. EPA Underground Storage Tanks (UST)

No records found

U.S. EPA Toxic Substances Control Act (TSCA) database

No records found

U.S. EPA Toxic Release Inventory System (TRIS)

No records found

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APPENDIX G

AMBIENT NOISE MEASUREMENT DATA

Session Report

11/6/2024

Information Panel

Name	S001_BGI070014_06112024_090023
Start Time	11/6/2024 6:13:23 AM
Stop Time	11/6/2024 6:28:23 AM
Device Name	BGI070014
Model Type	SoundPro DL
Device Firmware Rev	R.13H
Comments	

Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	58.6 dB	L90	1	43.9 dB
Lmax	1	73.9 dB	Lmin	1	40.6 dB
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	SLOW	Bandwidth	1	OFF
Exchange Rate	2	5 dB	Weighting	2	A
Response	2	FAST			

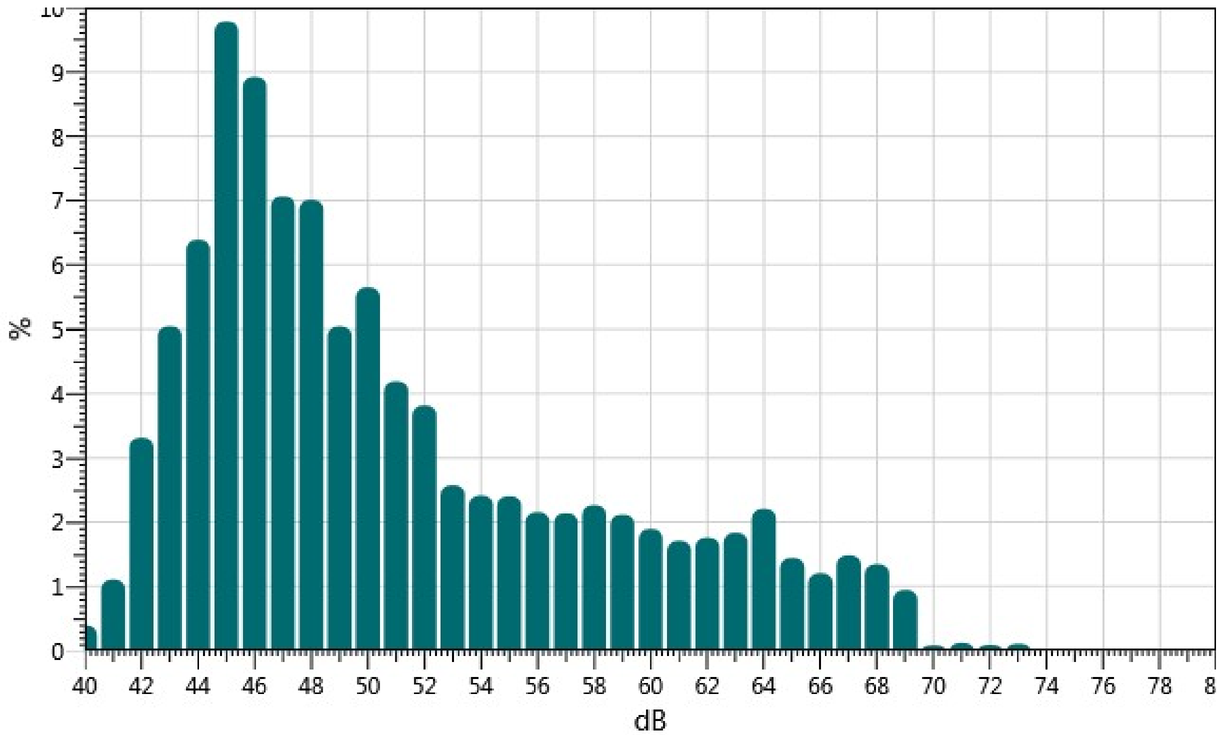
Statistics Table

dB:	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	%
40:	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.08	0.12	0.14	0.39
41:	0.11	0.13	0.12	0.09	0.09	0.12	0.13	0.11	0.10	0.11	1.10
42:	0.14	0.13	0.16	0.21	0.25	0.37	0.66	0.55	0.49	0.36	3.31
43:	0.32	0.55	0.68	0.61	0.54	0.57	0.42	0.39	0.48	0.47	5.04
44:	0.49	0.57	0.43	0.60	0.49	0.65	0.73	0.73	0.88	0.81	6.39
45:	0.96	0.83	0.91	1.17	0.94	1.03	1.00	0.88	1.11	0.96	9.78
46:	0.67	0.86	0.76	1.03	0.95	0.95	0.82	1.16	0.87	0.85	8.92
47:	0.91	0.94	0.49	0.61	0.70	0.88	0.70	0.62	0.60	0.61	7.06
48:	0.53	0.62	0.67	0.87	0.80	0.84	0.97	0.64	0.58	0.50	7.01
49:	0.61	0.54	0.60	0.55	0.42	0.47	0.48	0.47	0.42	0.48	5.04
50:	0.63	0.70	0.51	0.58	0.68	0.54	0.49	0.55	0.53	0.42	5.65
51:	0.41	0.42	0.47	0.42	0.43	0.35	0.35	0.42	0.46	0.46	4.19
52:	0.45	0.47	0.35	0.44	0.38	0.38	0.31	0.33	0.34	0.37	3.81

53:	0.31	0.29	0.22	0.24	0.29	0.28	0.23	0.23	0.24	0.23	2.57
54:	0.32	0.29	0.27	0.26	0.22	0.22	0.20	0.22	0.22	0.20	2.41
55:	0.21	0.23	0.22	0.22	0.25	0.26	0.26	0.24	0.24	0.28	2.40
56:	0.28	0.28	0.17	0.22	0.20	0.21	0.20	0.20	0.20	0.20	2.15
57:	0.19	0.20	0.28	0.21	0.22	0.23	0.20	0.20	0.20	0.20	2.14
58:	0.18	0.21	0.22	0.24	0.28	0.23	0.25	0.22	0.21	0.21	2.26
59:	0.25	0.25	0.18	0.20	0.22	0.24	0.23	0.18	0.20	0.17	2.12
60:	0.18	0.20	0.16	0.17	0.20	0.20	0.19	0.19	0.20	0.19	1.89
61:	0.18	0.18	0.17	0.17	0.15	0.17	0.17	0.16	0.18	0.18	1.71
62:	0.17	0.23	0.18	0.11	0.17	0.18	0.18	0.17	0.18	0.18	1.76
63:	0.17	0.19	0.17	0.16	0.16	0.16	0.21	0.23	0.22	0.17	1.84
64:	0.17	0.20	0.17	0.20	0.24	0.23	0.20	0.20	0.30	0.30	2.20
65:	0.18	0.17	0.20	0.09	0.13	0.13	0.16	0.15	0.12	0.12	1.44
66:	0.12	0.12	0.15	0.13	0.11	0.11	0.12	0.11	0.12	0.12	1.21
67:	0.11	0.12	0.16	0.17	0.14	0.17	0.16	0.15	0.14	0.17	1.48
68:	0.18	0.16	0.13	0.11	0.13	0.13	0.14	0.12	0.11	0.13	1.35
69:	0.10	0.09	0.10	0.06	0.09	0.11	0.11	0.11	0.12	0.05	0.94
70:	0.02	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.09
71:	0.01	0.01	0.02	0.01	0.02	0.01	0.03	0.01	0.00	0.01	0.13
72:	0.00	0.02	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.09
73:	0.01	0.01	0.02	0.03	0.01	0.01	0.01	0.01	0.01	0.00	0.11

Statistics Chart

S001_BGI070014_06112024_090023: Statistics Chart

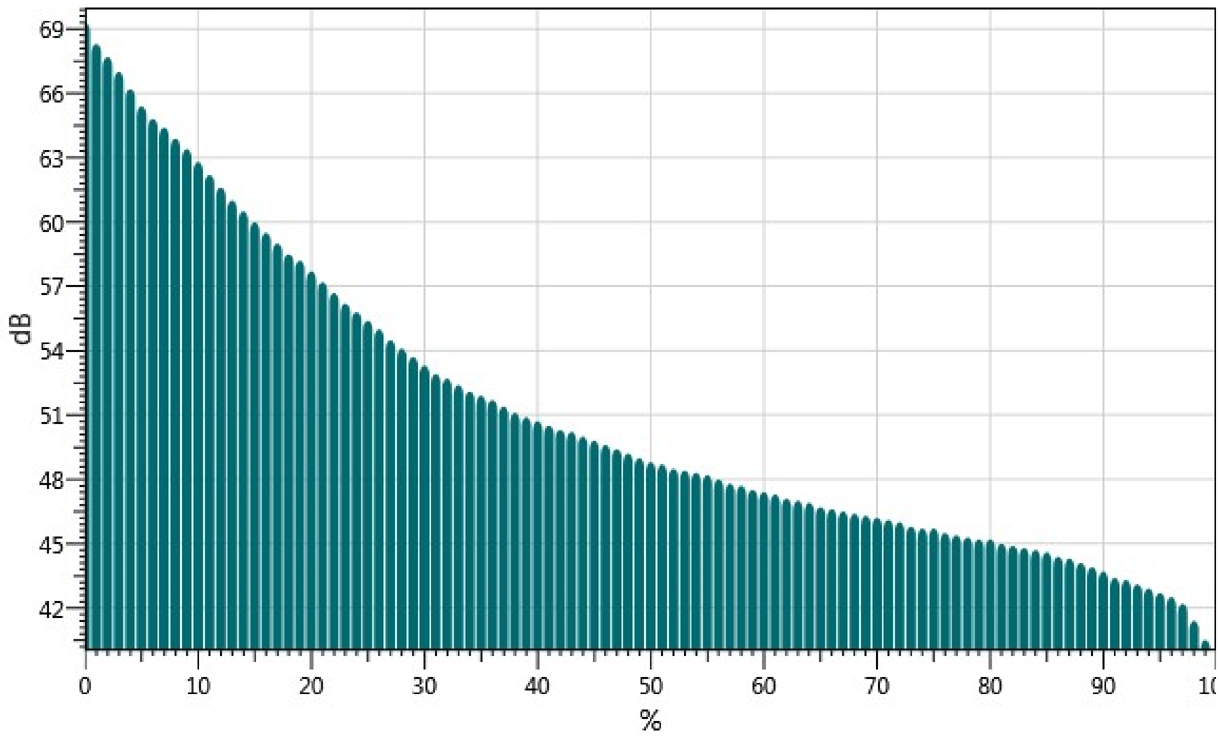


Exceedance Table

.	0%	1%	2%	3%	4%	5%	6%	%7	%8	%9
0%:		69.3	68.3	67.7	67.0	66.2	65.4	64.8	64.4	63.9
10%:	63.4	62.8	62.2	61.6	61.0	60.5	60.0	59.5	59.0	58.5
20%:	58.2	57.7	57.2	56.7	56.2	55.8	55.4	55.0	54.5	54.1
30%:	53.7	53.3	52.9	52.7	52.4	52.1	51.9	51.7	51.4	51.1
40%:	50.9	50.7	50.5	50.3	50.2	50.0	49.8	49.6	49.4	49.2
50%:	49.0	48.8	48.7	48.5	48.4	48.3	48.2	48.0	47.8	47.7
60%:	47.5	47.4	47.3	47.1	47.0	46.9	46.7	46.6	46.5	46.4
70%:	46.3	46.2	46.1	46.0	45.8	45.7	45.7	45.5	45.4	45.3
80%:	45.2	45.2	45.0	44.9	44.8	44.7	44.6	44.4	44.3	44.1
90%:	43.9	43.7	43.4	43.3	43.1	42.9	42.7	42.5	42.2	41.4
100%:	40.5									

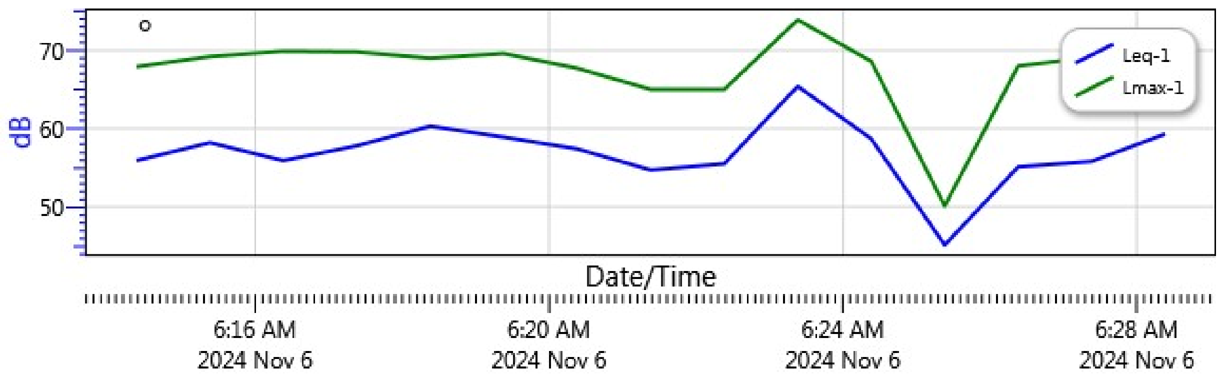
Exceedance Chart

S001_BGI070014_06112024_090023: Exceedance Chart



Logged Data Chart

S001_BGI070014_06112024_090023: Logged Data Chart



Session Report

11/6/2024

Information Panel

Name	S002_BGI070014_06112024_090041
Start Time	11/6/2024 6:39:22 AM
Stop Time	11/6/2024 6:54:22 AM
Device Name	BGI070014
Model Type	SoundPro DL
Device Firmware Rev	R.13H
Comments	

Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	52.7 dB	L90	1	39.4 dB
Lmax	1	70.5 dB	Lmin	1	37.1 dB
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	SLOW	Bandwidth	1	OFF
Exchange Rate	2	5 dB	Weighting	2	A
Response	2	FAST			

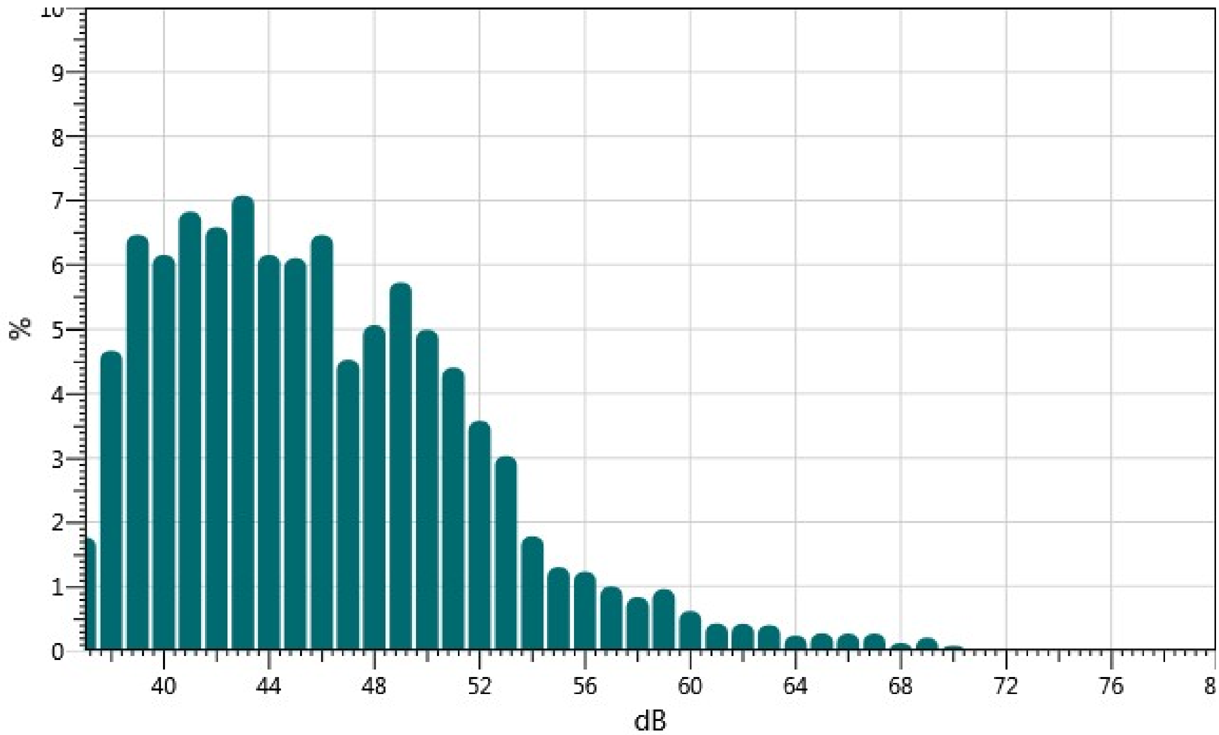
Statistics Table

dB:	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	%
37:	0.00	0.04	0.08	0.09	0.13	0.26	0.20	0.24	0.19	0.54	1.76
38:	0.49	0.39	0.24	0.19	0.33	0.42	0.49	0.69	0.72	0.72	4.66
39:	0.67	0.63	0.69	0.71	0.84	0.85	0.65	0.54	0.48	0.41	6.47
40:	0.49	0.59	0.66	0.59	0.60	0.62	0.76	0.63	0.64	0.58	6.15
41:	0.70	0.65	0.48	0.66	0.64	0.58	0.67	0.66	0.84	0.96	6.83
42:	0.78	0.53	0.53	0.66	0.66	0.64	0.64	0.69	0.74	0.71	6.58
43:	0.74	0.68	0.74	0.59	0.65	0.74	0.76	0.74	0.76	0.67	7.08
44:	0.66	0.66	0.39	0.56	0.76	0.62	0.62	0.61	0.60	0.68	6.15
45:	0.66	0.55	0.60	0.70	0.64	0.64	0.54	0.55	0.58	0.64	6.10
46:	0.76	0.72	0.71	0.65	0.67	0.61	0.65	0.62	0.57	0.52	6.47
47:	0.52	0.61	0.40	0.45	0.45	0.41	0.39	0.41	0.45	0.43	4.53
48:	0.36	0.38	0.40	0.49	0.51	0.61	0.59	0.61	0.55	0.55	5.06
49:	0.56	0.55	0.55	0.60	0.53	0.62	0.61	0.54	0.50	0.66	5.73

50:	0.62	0.66	0.41	0.49	0.48	0.44	0.52	0.51	0.43	0.44	4.99
51:	0.46	0.40	0.49	0.50	0.45	0.47	0.44	0.43	0.39	0.37	4.40
52:	0.41	0.39	0.40	0.36	0.39	0.31	0.32	0.35	0.30	0.35	3.57
53:	0.30	0.35	0.28	0.30	0.31	0.32	0.33	0.29	0.36	0.20	3.03
54:	0.23	0.18	0.18	0.21	0.17	0.18	0.16	0.15	0.15	0.17	1.78
55:	0.15	0.11	0.13	0.12	0.12	0.11	0.14	0.13	0.16	0.14	1.30
56:	0.15	0.15	0.10	0.13	0.17	0.14	0.11	0.09	0.10	0.09	1.23
57:	0.09	0.09	0.10	0.10	0.12	0.13	0.11	0.10	0.07	0.08	1.00
58:	0.09	0.10	0.10	0.07	0.09	0.07	0.08	0.08	0.07	0.08	0.83
59:	0.09	0.11	0.08	0.09	0.09	0.11	0.11	0.11	0.10	0.07	0.96
60:	0.06	0.07	0.08	0.06	0.06	0.06	0.09	0.06	0.05	0.03	0.62
61:	0.05	0.04	0.04	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.43
62:	0.05	0.05	0.05	0.02	0.05	0.05	0.05	0.04	0.03	0.03	0.42
63:	0.05	0.04	0.07	0.07	0.04	0.02	0.03	0.02	0.03	0.02	0.40
64:	0.03	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.24
65:	0.03	0.03	0.04	0.02	0.02	0.03	0.02	0.02	0.02	0.03	0.27
66:	0.02	0.03	0.03	0.03	0.02	0.03	0.02	0.02	0.04	0.03	0.27
67:	0.03	0.04	0.06	0.05	0.03	0.01	0.01	0.01	0.01	0.01	0.27
68:	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.12
69:	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.05	0.01	0.20
70:	0.01	0.01	0.01	0.01	0.02	0.02	0.00	0.00	0.00	0.00	0.08

Statistics Chart

S002_BGI070014_06112024_090041: Statistics Chart

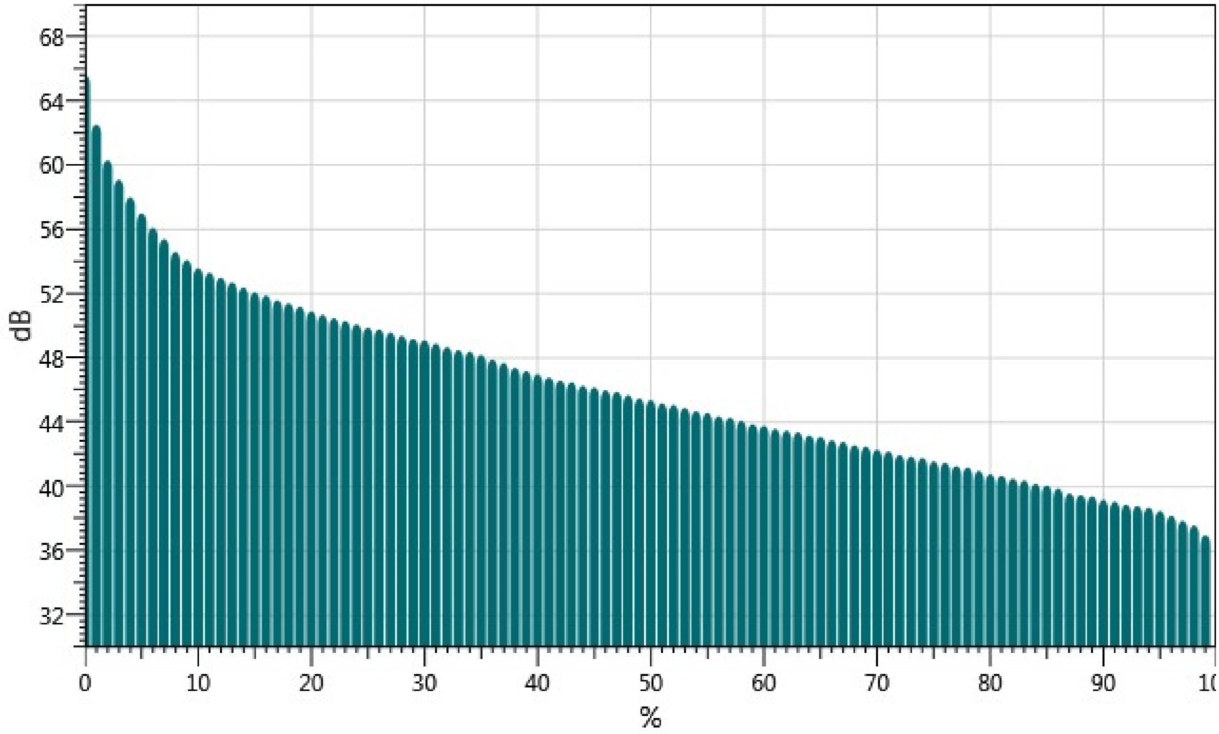


Exceedance Table

.	0%	1%	2%	3%	4%	5%	6%	%7	%8	%9
0%:		65.6	62.5	60.3	59.1	58.0	57.0	56.1	55.4	54.6
10%:	54.1	53.6	53.3	53.0	52.7	52.4	52.1	51.9	51.6	51.4
20%:	51.2	50.9	50.7	50.5	50.3	50.1	49.9	49.8	49.6	49.4
30%:	49.2	49.1	48.9	48.7	48.5	48.4	48.2	47.9	47.7	47.4
40%:	47.2	47.0	46.8	46.6	46.5	46.3	46.2	46.0	45.9	45.7
50%:	45.5	45.4	45.2	45.1	44.9	44.7	44.6	44.4	44.3	44.1
60%:	43.9	43.8	43.6	43.5	43.4	43.2	43.1	42.9	42.8	42.6
70%:	42.5	42.3	42.2	42.0	41.9	41.8	41.6	41.5	41.3	41.2
80%:	41.0	40.8	40.7	40.5	40.4	40.2	40.1	39.9	39.6	39.5
90%:	39.4	39.2	39.1	38.9	38.8	38.7	38.5	38.2	37.9	37.6
100%:	37.0									

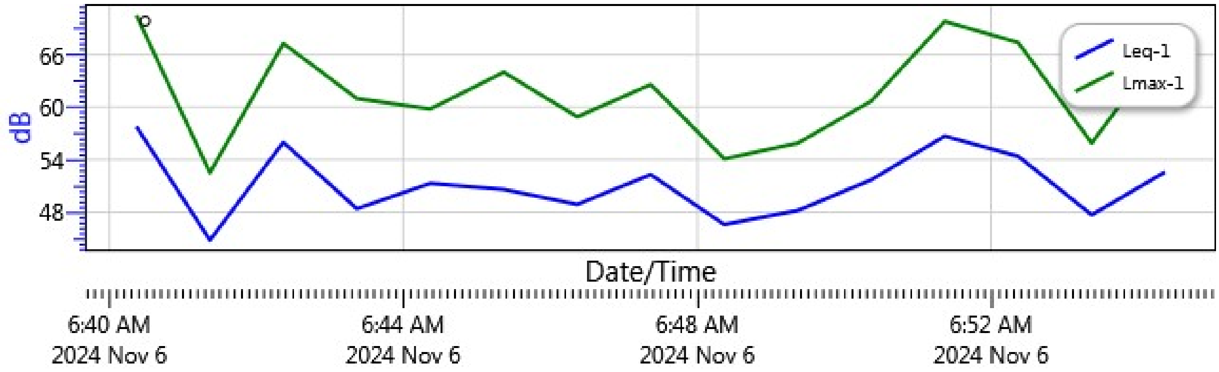
Exceedance Chart

S002_BGI070014_06112024_090041: Exceedance Chart



Logged Data Chart

S002_BGI070014_06112024_090041: Logged Data Chart



Session Report

11/6/2024

Information Panel

Name	S003_BGI070014_06112024_090050
Start Time	11/6/2024 7:06:49 AM
Stop Time	11/6/2024 7:21:49 AM
Device Name	BGI070014
Model Type	SoundPro DL
Device Firmware Rev	R.13H
Comments	

Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	50.5 dB	L90	1	41.5 dB
Lmax	1	66.3 dB	Lmin	1	39.1 dB
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	SLOW	Bandwidth	1	OFF
Exchange Rate	2	5 dB	Weighting	2	A
Response	2	FAST			

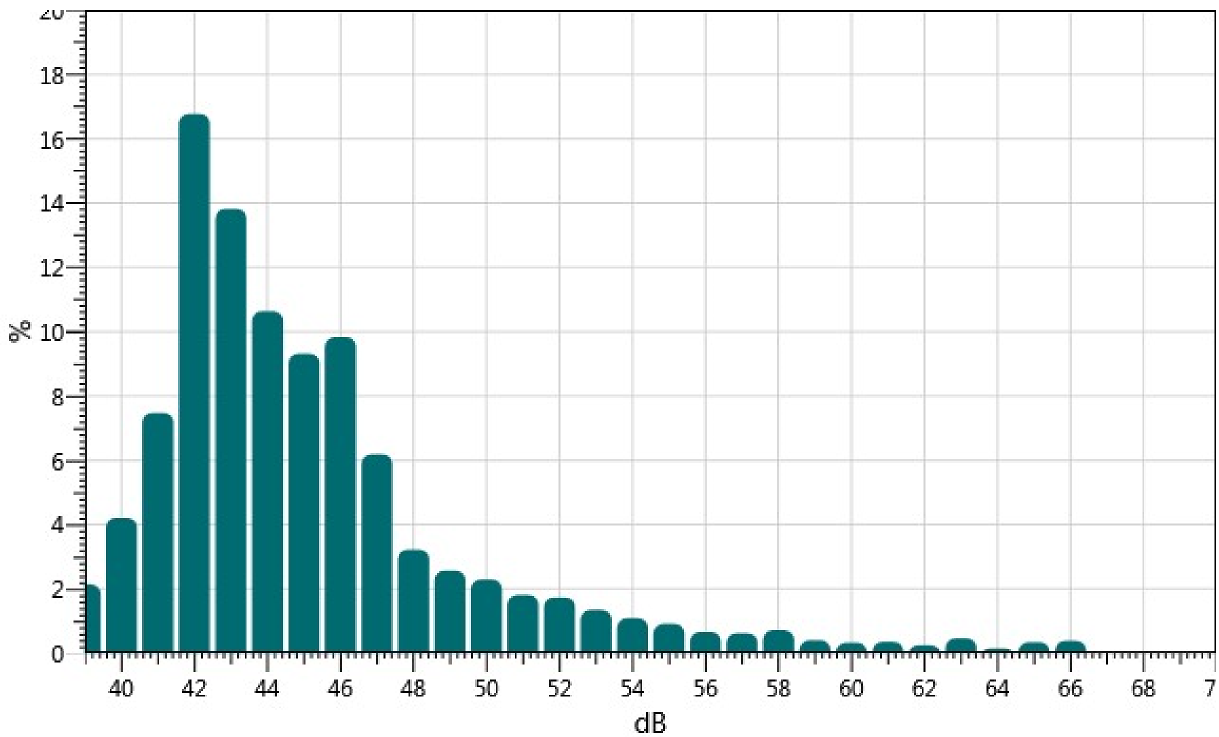
Statistics Table

dB:	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	%
39:	0.00	0.02	0.06	0.20	0.16	0.18	0.24	0.39	0.45	0.43	2.14
40:	0.40	0.45	0.38	0.43	0.46	0.32	0.37	0.48	0.32	0.60	4.21
41:	0.50	0.59	0.40	0.64	0.48	0.67	0.59	0.90	1.15	1.55	7.48
42:	1.51	1.50	1.54	1.61	1.82	1.86	1.79	2.00	1.51	1.63	16.76
43:	1.72	1.71	1.74	1.20	1.28	1.15	1.08	1.19	1.35	1.38	13.82
44:	1.30	1.34	0.82	1.16	1.13	1.28	1.07	0.81	0.89	0.84	10.63
45:	0.85	0.82	1.00	1.04	0.93	0.82	0.92	0.98	1.04	0.90	9.32
46:	0.95	1.12	1.07	1.05	0.99	1.01	0.91	0.90	0.92	0.90	9.83
47:	0.85	0.79	0.49	0.71	0.62	0.64	0.57	0.60	0.50	0.41	6.18
48:	0.39	0.40	0.33	0.31	0.30	0.25	0.31	0.34	0.31	0.30	3.23
49:	0.28	0.26	0.26	0.28	0.24	0.23	0.25	0.23	0.24	0.29	2.57
50:	0.31	0.31	0.16	0.23	0.24	0.22	0.21	0.20	0.23	0.19	2.29
51:	0.21	0.20	0.21	0.17	0.16	0.18	0.18	0.18	0.16	0.16	1.81

52:	0.18	0.18	0.18	0.22	0.18	0.17	0.16	0.15	0.15	0.18	1.73
53:	0.18	0.15	0.10	0.14	0.12	0.11	0.13	0.13	0.13	0.15	1.35
54:	0.13	0.12	0.13	0.13	0.11	0.10	0.10	0.10	0.09	0.07	1.08
55:	0.10	0.11	0.09	0.11	0.08	0.09	0.08	0.07	0.08	0.10	0.91
56:	0.08	0.09	0.05	0.06	0.06	0.07	0.06	0.06	0.06	0.06	0.66
57:	0.06	0.05	0.06	0.06	0.06	0.06	0.08	0.08	0.05	0.06	0.62
58:	0.11	0.07	0.06	0.07	0.09	0.07	0.09	0.08	0.04	0.04	0.72
59:	0.04	0.05	0.03	0.03	0.04	0.05	0.04	0.05	0.03	0.04	0.40
60:	0.03	0.03	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.33
61:	0.04	0.04	0.09	0.02	0.02	0.02	0.02	0.03	0.04	0.03	0.35
62:	0.02	0.04	0.02	0.01	0.03	0.02	0.03	0.02	0.03	0.02	0.25
63:	0.06	0.06	0.08	0.03	0.03	0.02	0.03	0.05	0.06	0.04	0.46
64:	0.03	0.03	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.15
65:	0.01	0.01	0.01	0.01	0.02	0.02	0.08	0.07	0.07	0.04	0.34
66:	0.07	0.16	0.13	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.38

Statistics Chart

S003_BGI070014_06112024_090050: Statistics Chart



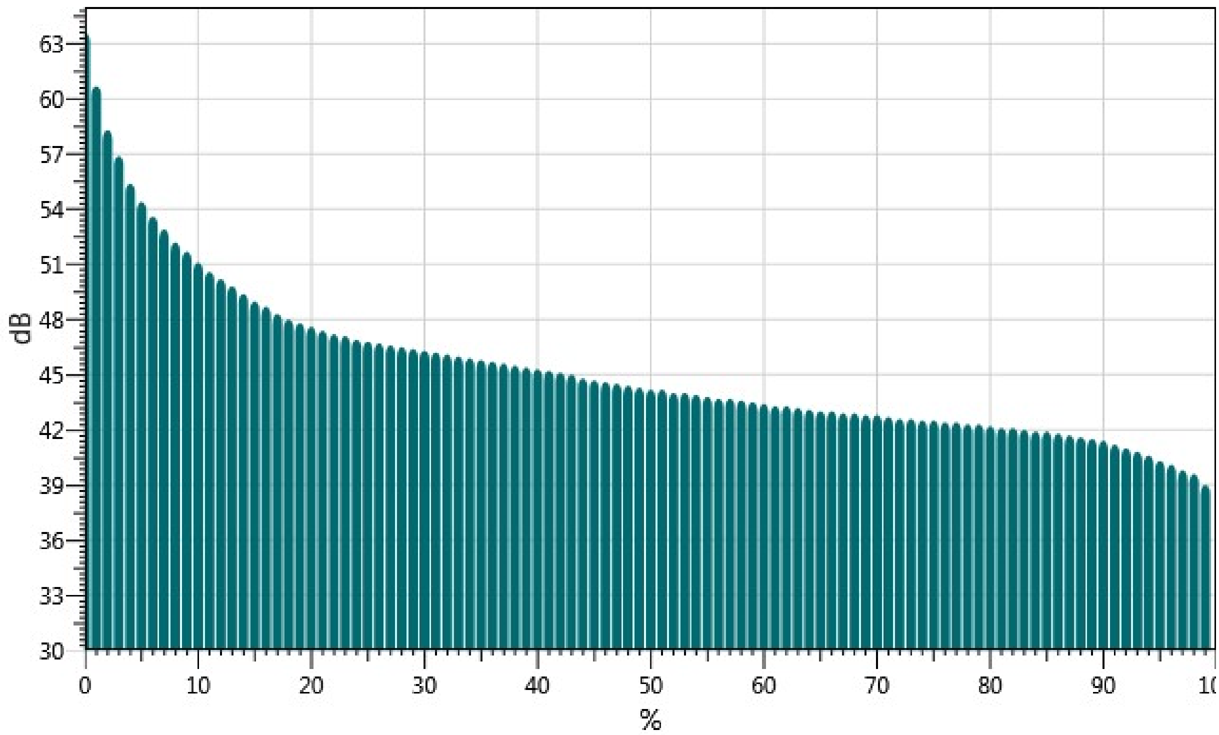
Exceedance Table

.	0%	1%	2%	3%	4%	5%	6%	%7	%8	%9

0%:		63.6	60.7	58.3	56.9	55.4	54.4	53.6	52.9	52.2
10%:	51.7	51.1	50.6	50.2	49.8	49.4	49.0	48.7	48.3	48.0
20%:	47.8	47.6	47.4	47.2	47.1	46.9	46.8	46.7	46.6	46.5
30%:	46.4	46.3	46.2	46.1	46.0	45.9	45.8	45.7	45.6	45.5
40%:	45.4	45.3	45.2	45.1	45.0	44.8	44.7	44.6	44.5	44.4
50%:	44.3	44.2	44.2	44.0	44.0	43.9	43.8	43.7	43.7	43.6
60%:	43.5	43.4	43.3	43.3	43.2	43.1	43.0	43.0	42.9	42.9
70%:	42.8	42.8	42.7	42.6	42.6	42.5	42.5	42.4	42.4	42.3
80%:	42.3	42.2	42.1	42.1	42.0	41.9	41.9	41.8	41.7	41.6
90%:	41.5	41.4	41.2	41.0	40.8	40.6	40.3	40.1	39.8	39.6
100%:	39.0									

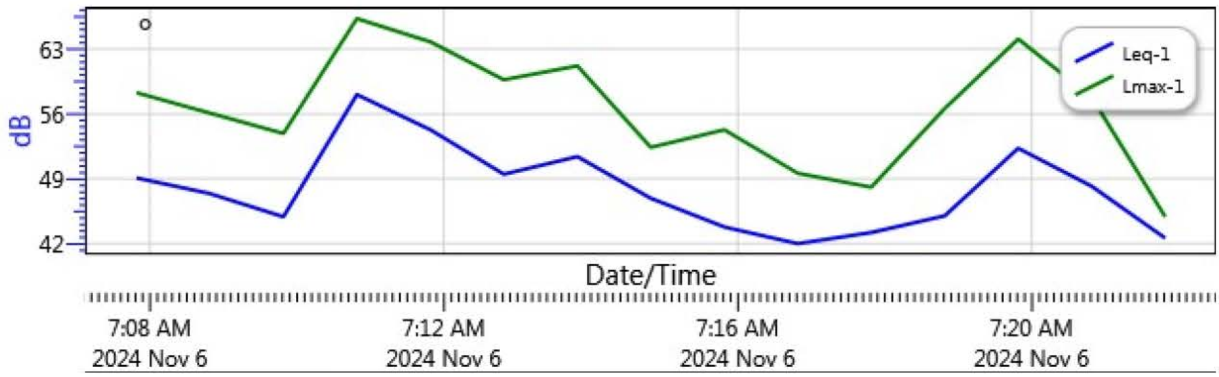
Exceedance Chart

S003_BGI070014_06112024_090050: Exceedance Chart



Logged Data Chart

S003_BGI070014_06112024_090050: Logged Data Chart



Session Report

11/6/2024

Information Panel

Name	S004_BGI070014_06112024_090058
Start Time	11/6/2024 7:30:43 AM
Stop Time	11/6/2024 7:45:43 AM
Device Name	BGI070014
Model Type	SoundPro DL
Device Firmware Rev	R.13H
Comments	

Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	62.4 dB	L90	1	47.7 dB
Lmax	1	81.1 dB	Lmin	1	40 dB
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	SLOW	Bandwidth	1	OFF
Exchange Rate	2	5 dB	Weighting	2	A
Response	2	FAST			

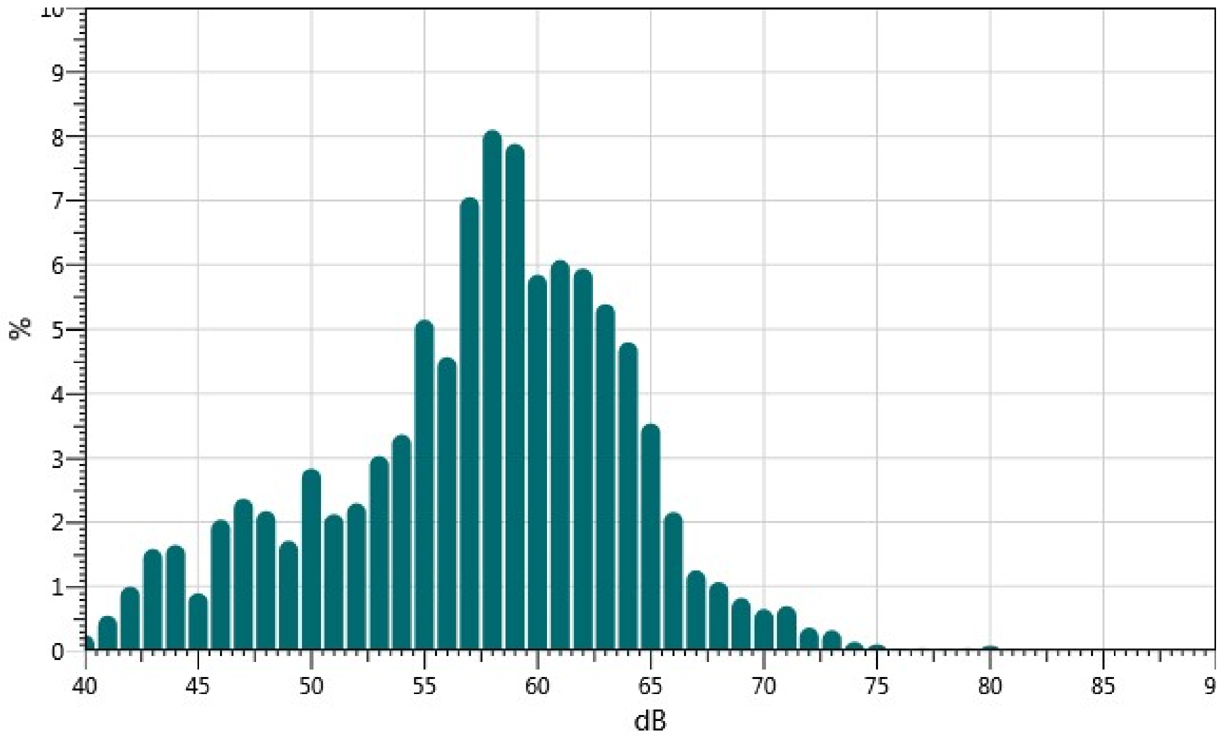
Statistics Table

dB:	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	%
40:	0.01	0.02	0.01	0.01	0.01	0.01	0.02	0.03	0.04	0.08	0.24
41:	0.05	0.07	0.07	0.04	0.06	0.05	0.06	0.03	0.05	0.06	0.55
42:	0.06	0.16	0.14	0.10	0.07	0.08	0.07	0.10	0.10	0.10	1.00
43:	0.14	0.11	0.19	0.19	0.18	0.17	0.15	0.18	0.18	0.10	1.58
44:	0.16	0.16	0.13	0.18	0.15	0.18	0.20	0.16	0.19	0.13	1.65
45:	0.10	0.12	0.12	0.09	0.08	0.10	0.06	0.09	0.07	0.07	0.90
46:	0.10	0.17	0.09	0.13	0.27	0.28	0.27	0.24	0.25	0.24	2.04
47:	0.20	0.21	0.17	0.27	0.25	0.25	0.25	0.32	0.24	0.20	2.36
48:	0.21	0.17	0.29	0.33	0.23	0.19	0.23	0.14	0.17	0.21	2.17
49:	0.18	0.17	0.16	0.17	0.14	0.12	0.15	0.16	0.20	0.26	1.71
50:	0.31	0.36	0.22	0.31	0.34	0.26	0.24	0.28	0.25	0.27	2.83
51:	0.21	0.20	0.18	0.21	0.21	0.18	0.22	0.22	0.23	0.27	2.13
52:	0.24	0.22	0.18	0.15	0.30	0.22	0.19	0.22	0.27	0.30	2.30

53:	0.36	0.35	0.15	0.27	0.31	0.29	0.33	0.37	0.30	0.30	3.03
54:	0.27	0.26	0.31	0.25	0.28	0.33	0.34	0.37	0.33	0.63	3.36
55:	0.45	0.40	0.53	0.39	0.44	0.42	0.68	0.66	0.56	0.63	5.15
56:	0.45	0.45	0.37	0.44	0.42	0.41	0.48	0.49	0.53	0.53	4.57
57:	0.58	0.51	0.54	0.52	0.69	0.82	0.85	0.76	0.91	0.85	7.05
58:	0.76	0.80	0.80	0.88	0.79	0.85	0.67	0.80	0.82	0.93	8.10
59:	0.73	0.91	0.66	0.80	0.98	0.79	0.89	0.82	0.68	0.62	7.89
60:	0.59	0.55	0.55	0.64	0.64	0.60	0.57	0.66	0.53	0.52	5.85
61:	0.52	0.50	0.60	0.58	0.50	0.47	0.67	0.70	0.79	0.74	6.08
62:	0.75	0.69	0.67	0.37	0.59	0.62	0.50	0.59	0.58	0.59	5.94
63:	0.67	0.73	0.57	0.51	0.48	0.46	0.50	0.49	0.52	0.46	5.39
64:	0.49	0.47	0.48	0.33	0.33	0.45	0.56	0.64	0.49	0.56	4.80
65:	0.37	0.38	0.37	0.29	0.40	0.36	0.35	0.35	0.32	0.34	3.53
66:	0.33	0.32	0.25	0.26	0.19	0.19	0.15	0.16	0.16	0.14	2.16
67:	0.14	0.13	0.14	0.15	0.14	0.14	0.10	0.10	0.11	0.11	1.25
68:	0.12	0.14	0.13	0.08	0.12	0.11	0.12	0.08	0.10	0.09	1.07
69:	0.10	0.12	0.08	0.09	0.07	0.07	0.13	0.07	0.05	0.06	0.82
70:	0.07	0.07	0.06	0.05	0.05	0.07	0.05	0.06	0.10	0.07	0.65
71:	0.06	0.07	0.12	0.05	0.12	0.11	0.04	0.04	0.04	0.04	0.69
72:	0.04	0.05	0.03	0.03	0.03	0.04	0.03	0.04	0.03	0.03	0.36
73:	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.02	0.02	0.04	0.32
74:	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.03	0.01	0.01	0.14
75:	0.02	0.01	0.01	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.10
76:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
77:	0.01	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.04
78:	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.03
79:	0.01	0.00	0.01	0.00	0.01	0.00	0.00	0.01	0.00	0.01	0.04
80:	0.01	0.01	0.02	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.08
81:	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02

Statistics Chart

S004_BGI070014_06112024_090058: Statistics Chart

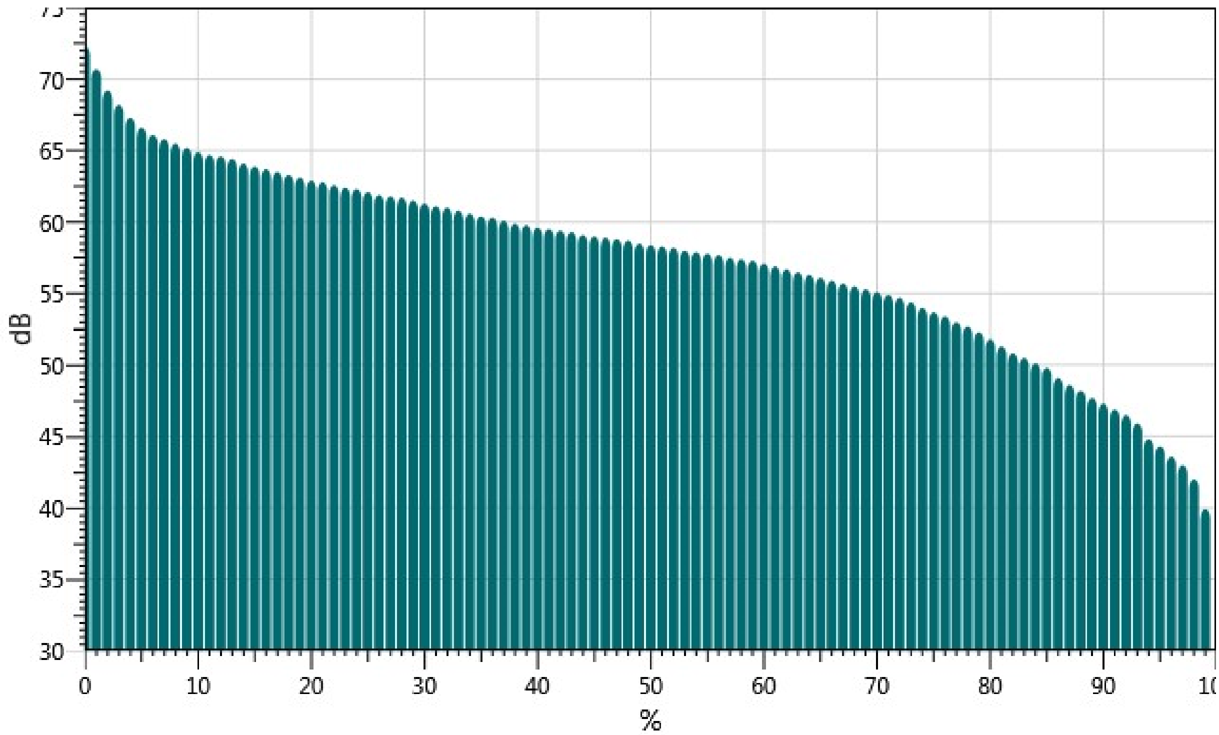


Exceedance Table

.	0%	1%	2%	3%	4%	5%	6%	%7	%8	%9
0%:		72.3	70.7	69.2	68.2	67.3	66.6	66.1	65.8	65.5
10%:	65.2	64.9	64.7	64.6	64.4	64.1	63.9	63.7	63.5	63.3
20%:	63.1	62.9	62.8	62.6	62.4	62.3	62.1	61.9	61.8	61.7
30%:	61.5	61.3	61.1	61.0	60.8	60.6	60.4	60.3	60.1	59.9
40%:	59.8	59.6	59.5	59.4	59.3	59.1	59.0	58.9	58.8	58.7
50%:	58.5	58.4	58.3	58.2	58.0	57.9	57.8	57.7	57.5	57.4
60%:	57.3	57.1	56.9	56.7	56.5	56.3	56.1	55.9	55.7	55.5
70%:	55.3	55.1	54.9	54.7	54.4	54.0	53.7	53.4	53.0	52.7
80%:	52.3	51.8	51.3	50.8	50.5	50.1	49.8	49.1	48.6	48.2
90%:	47.7	47.3	46.9	46.5	45.9	44.8	44.3	43.6	43.0	42.0
100%:	39.9									

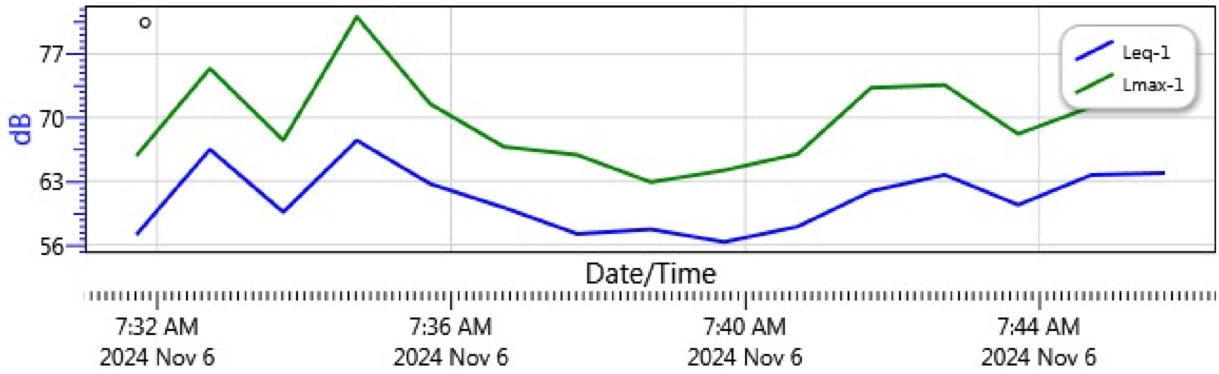
Exceedance Chart

S004_BGI070014_06112024_090058: Exceedance Chart



Logged Data Chart

S004_BGI070014_06112024_090058: Logged Data Chart



Session Report

11/7/2024

Information Panel

Name	S001_BLH080004_07112024_094029
Start Time	11/6/2024 6:13:27 AM
Stop Time	11/6/2024 6:28:27 AM
Device Name	BLH080004
Model Type	SoundPro DL
Device Firmware Rev	R.13J
Comments	

Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	60.1 dB	L90	1	53.1 dB
Lmax	1	63.9 dB	Lmin	1	48.7 dB
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	SLOW	Bandwidth	1	OFF
Exchange Rate	2	3 dB	Weighting	2	C
Response	2	FAST			

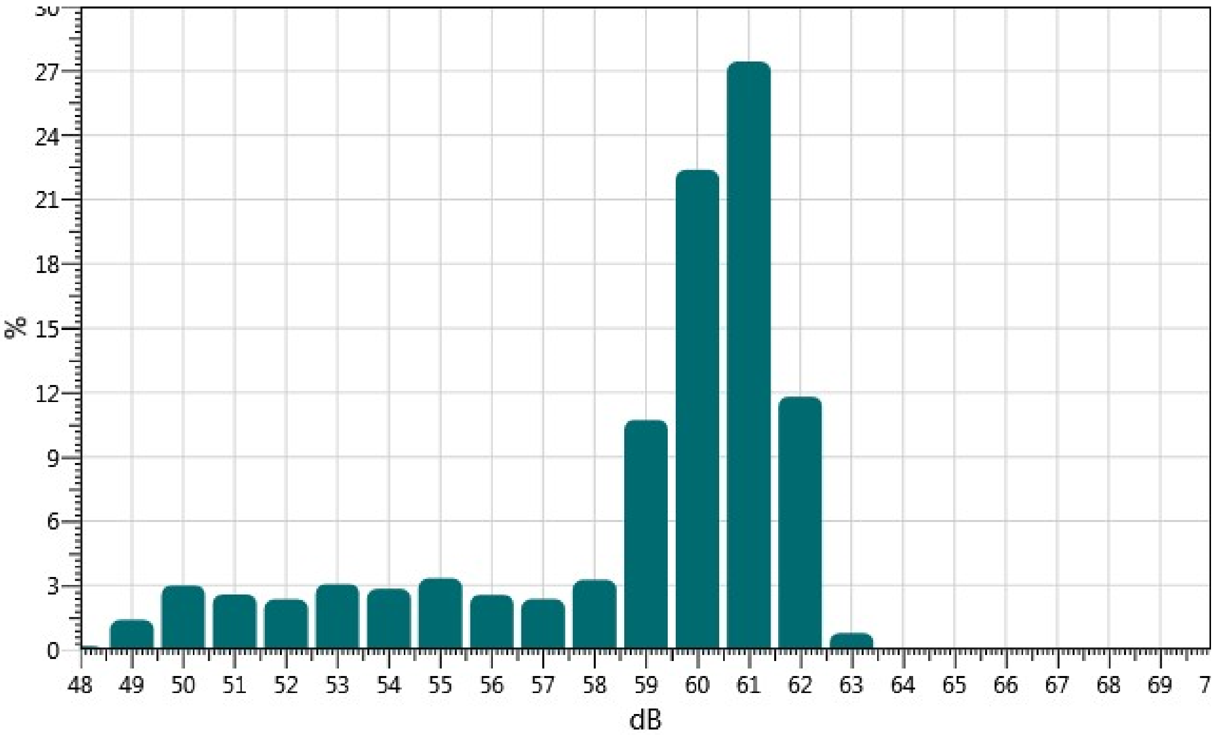
Statistics Table

dB:	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	%
48:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.09	0.02	0.16
49:	0.05	0.10	0.08	0.07	0.12	0.17	0.10	0.12	0.25	0.32	1.39
50:	0.37	0.37	0.26	0.38	0.28	0.25	0.29	0.26	0.28	0.26	2.99
51:	0.29	0.25	0.15	0.31	0.32	0.34	0.23	0.30	0.25	0.15	2.58
52:	0.23	0.30	0.27	0.26	0.19	0.27	0.22	0.22	0.23	0.18	2.35
53:	0.21	0.18	0.32	0.41	0.32	0.34	0.30	0.27	0.33	0.38	3.06
54:	0.38	0.27	0.17	0.25	0.20	0.30	0.39	0.30	0.33	0.25	2.84
55:	0.23	0.33	0.41	0.42	0.42	0.27	0.28	0.33	0.34	0.29	3.32
56:	0.28	0.32	0.27	0.20	0.20	0.27	0.28	0.29	0.22	0.23	2.56
57:	0.21	0.22	0.13	0.17	0.19	0.24	0.33	0.34	0.29	0.23	2.36
58:	0.26	0.32	0.43	0.29	0.27	0.27	0.33	0.31	0.32	0.46	3.26
59:	0.61	0.56	0.56	0.74	0.73	1.20	1.55	1.53	1.57	1.67	10.72
60:	1.99	1.86	1.40	2.00	2.23	2.41	2.58	2.66	2.60	2.66	22.38

61:	2.97	3.04	3.02	3.23	2.87	2.77	2.52	2.18	2.65	2.19	27.43
62:	2.00	1.78	1.59	1.47	1.29	1.21	0.91	0.72	0.44	0.38	11.80
63:	0.33	0.16	0.06	0.07	0.06	0.06	0.01	0.01	0.01	0.01	0.78

Statistics Chart

S001_BLH080004_07112024_094029: Statistics Chart

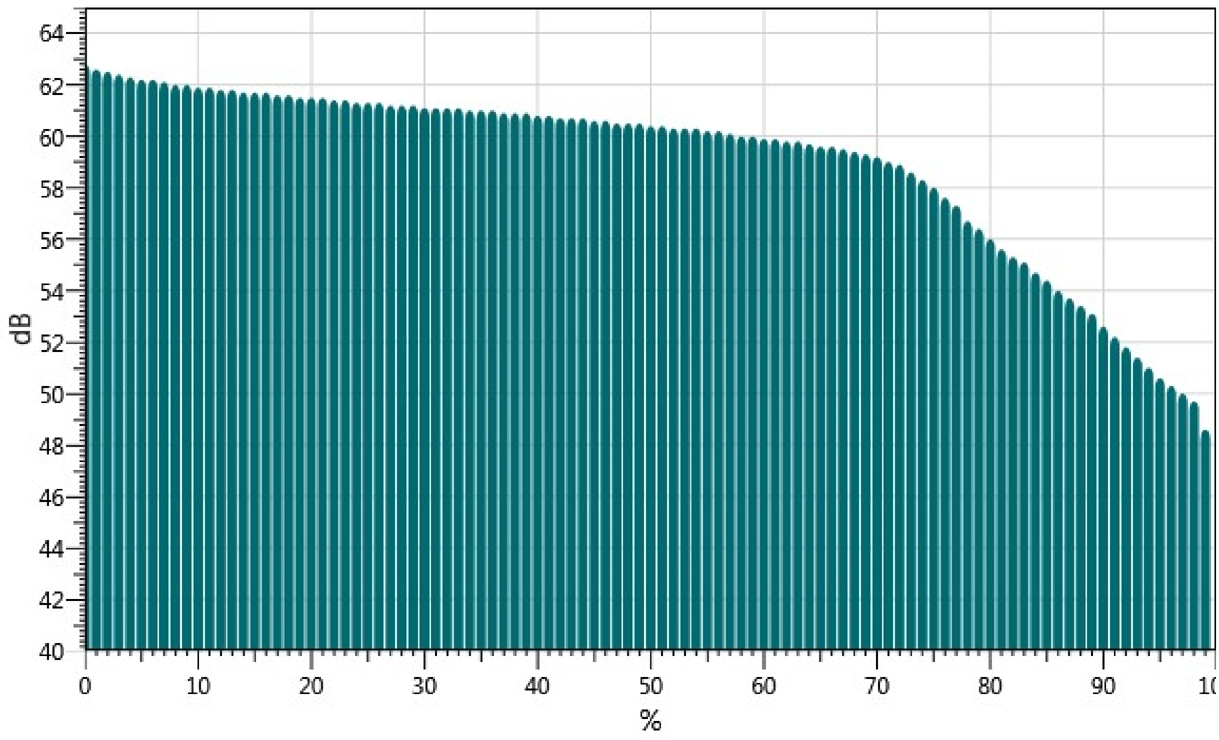


Exceedance Table

.	0%	1%	2%	3%	4%	5%	6%	%7	%8	%9
0%:		62.8	62.6	62.5	62.4	62.3	62.2	62.2	62.1	62.0
10%:	62.0	61.9	61.9	61.8	61.8	61.7	61.7	61.7	61.6	61.6
20%:	61.5	61.5	61.5	61.4	61.4	61.3	61.3	61.3	61.2	61.2
30%:	61.2	61.1	61.1	61.1	61.1	61.0	61.0	61.0	60.9	60.9
40%:	60.9	60.8	60.8	60.7	60.7	60.7	60.6	60.6	60.5	60.5
50%:	60.5	60.4	60.4	60.3	60.3	60.3	60.2	60.2	60.1	60.0
60%:	60.0	59.9	59.9	59.8	59.8	59.7	59.6	59.6	59.5	59.4
70%:	59.3	59.2	59.0	58.9	58.6	58.3	58.0	57.6	57.3	56.7
80%:	56.4	56.0	55.6	55.3	55.1	54.7	54.4	54.0	53.7	53.4
90%:	53.1	52.6	52.2	51.8	51.4	51.0	50.6	50.3	50.0	49.7
100%:	48.6									

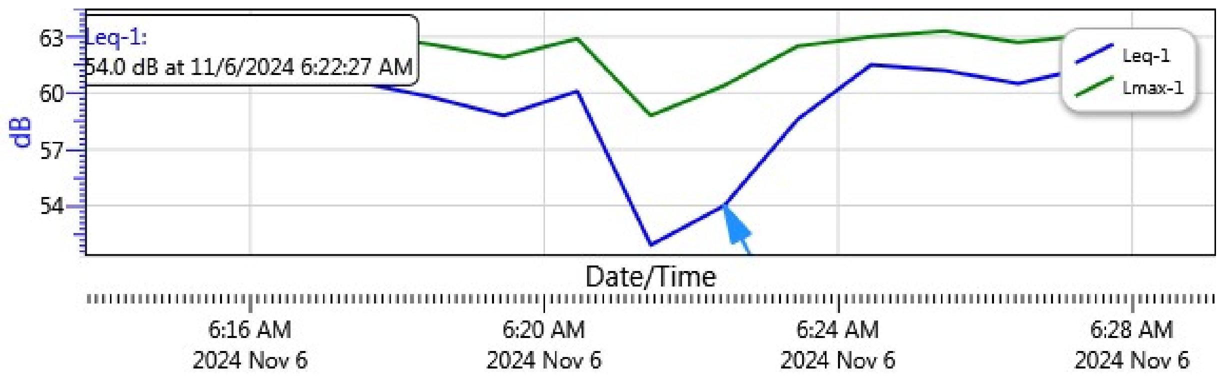
Exceedance Chart

S001_BLH080004_07112024_094029: Exceedance Chart



Logged Data Chart

S001_BLH080004_07112024_094029: Logged Data Chart



Session Report

11/7/2024

Information Panel

Name	S002_BLH080004_07112024_094045
Start Time	11/6/2024 6:39:26 AM
Stop Time	11/6/2024 6:54:26 AM
Device Name	BLH080004
Model Type	SoundPro DL
Device Firmware Rev	R.13J
Comments	

Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	60.2 dB	L90	1	55.7 dB
Lmax	1	68.3 dB	Lmin	1	51.8 dB
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	SLOW	Bandwidth	1	OFF
Exchange Rate	2	3 dB	Weighting	2	C
Response	2	FAST			

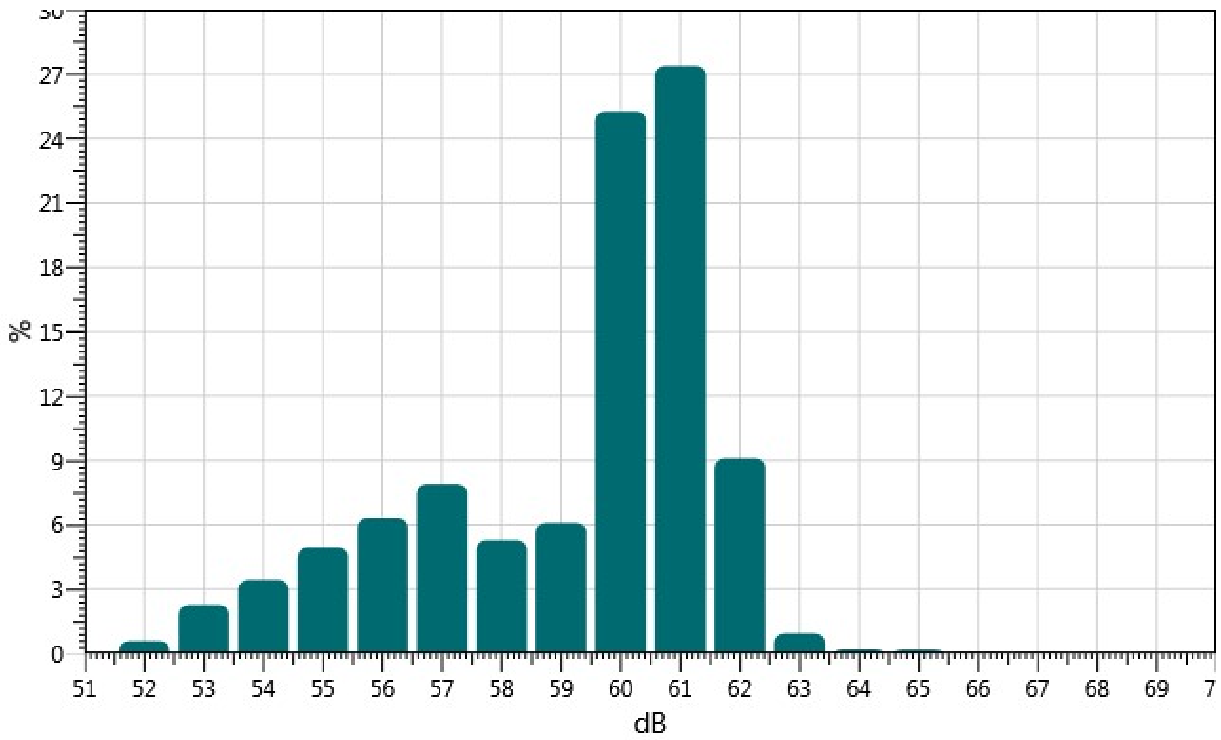
Statistics Table

dB:	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	%
51:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.03
52:	0.04	0.09	0.04	0.01	0.01	0.04	0.05	0.09	0.13	0.07	0.58
53:	0.14	0.12	0.22	0.25	0.19	0.24	0.13	0.26	0.35	0.36	2.26
54:	0.34	0.34	0.19	0.29	0.35	0.50	0.37	0.40	0.34	0.30	3.42
55:	0.45	0.32	0.45	0.54	0.60	0.48	0.43	0.43	0.59	0.65	4.94
56:	0.58	0.70	0.60	0.60	0.57	0.70	0.64	0.69	0.64	0.61	6.32
57:	0.74	0.72	0.51	0.73	0.81	0.92	0.93	0.86	0.86	0.82	7.89
58:	0.74	0.70	0.56	0.58	0.57	0.56	0.43	0.43	0.38	0.32	5.28
59:	0.35	0.47	0.43	0.47	0.48	0.43	0.62	0.73	0.92	1.18	6.09
60:	1.68	2.13	1.41	1.86	2.23	2.96	2.87	3.14	3.26	3.73	25.27
61:	3.62	4.04	3.38	2.78	2.85	2.75	2.50	1.98	1.80	1.68	27.39
62:	1.67	1.53	1.53	1.19	1.00	0.77	0.48	0.33	0.37	0.23	9.10
63:	0.28	0.27	0.09	0.08	0.07	0.05	0.03	0.03	0.02	0.02	0.93

64:	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.19
65:	0.02	0.02	0.01	0.02	0.02	0.01	0.03	0.01	0.01	0.02	0.18
66:	0.01	0.02	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.07
67:	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.05
68:	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.03

Statistics Chart

S002_BLH080004_07112024_094045: Statistics Chart



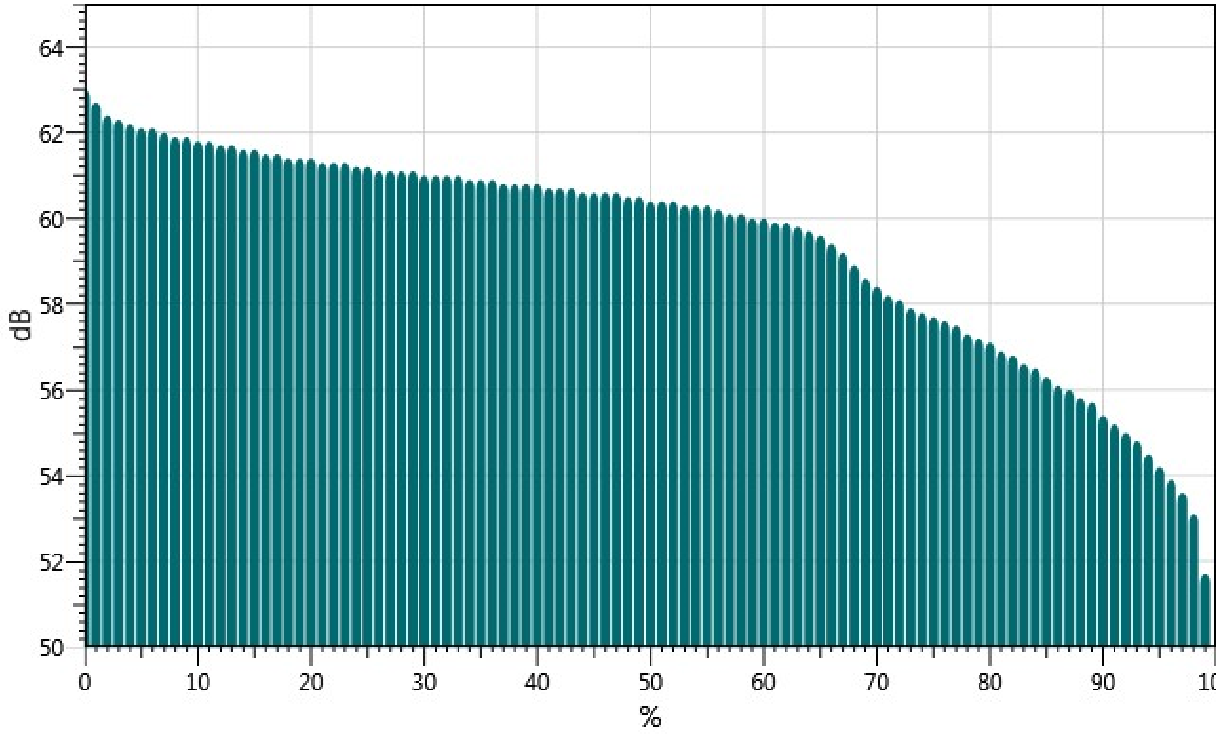
Exceedance Table

.	0%	1%	2%	3%	4%	5%	6%	%7	%8	%9
0%:		63.0	62.7	62.4	62.3	62.2	62.1	62.1	62.0	61.9
10%:	61.9	61.8	61.8	61.7	61.7	61.6	61.6	61.5	61.5	61.4
20%:	61.4	61.4	61.3	61.3	61.3	61.2	61.2	61.1	61.1	61.1
30%:	61.1	61.0	61.0	61.0	61.0	60.9	60.9	60.9	60.8	60.8
40%:	60.8	60.8	60.7	60.7	60.7	60.6	60.6	60.6	60.6	60.5
50%:	60.5	60.4	60.4	60.4	60.3	60.3	60.3	60.2	60.1	60.1
60%:	60.0	60.0	59.9	59.9	59.8	59.7	59.6	59.4	59.2	58.9
70%:	58.6	58.4	58.2	58.1	57.9	57.8	57.7	57.6	57.5	57.3
80%:	57.2	57.1	56.9	56.8	56.6	56.5	56.3	56.1	56.0	55.8
90%:	55.7	55.4	55.2	55.0	54.8	54.5	54.2	53.9	53.6	53.1

100%: 51.7

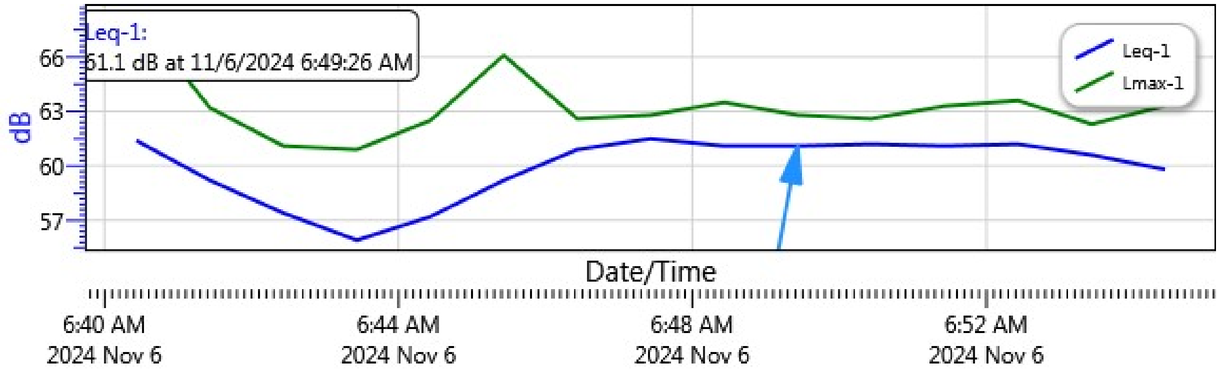
Exceedance Chart

S002_BLH080004_07112024_094045: Exceedance Chart



Logged Data Chart

S002_BLH080004_07112024_094045: Logged Data Chart



Session Report

11/7/2024

Information Panel

Name	S003_BLH080004_07112024_094054
Start Time	11/6/2024 7:06:52 AM
Stop Time	11/6/2024 7:21:52 AM
Device Name	BLH080004
Model Type	SoundPro DL
Device Firmware Rev	R.13J
Comments	

Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	55.6 dB	L90	1	52.9 dB
Lmax	1	64.8 dB	Lmin	1	50.9 dB
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	SLOW	Bandwidth	1	OFF
Exchange Rate	2	3 dB	Weighting	2	C
Response	2	FAST			

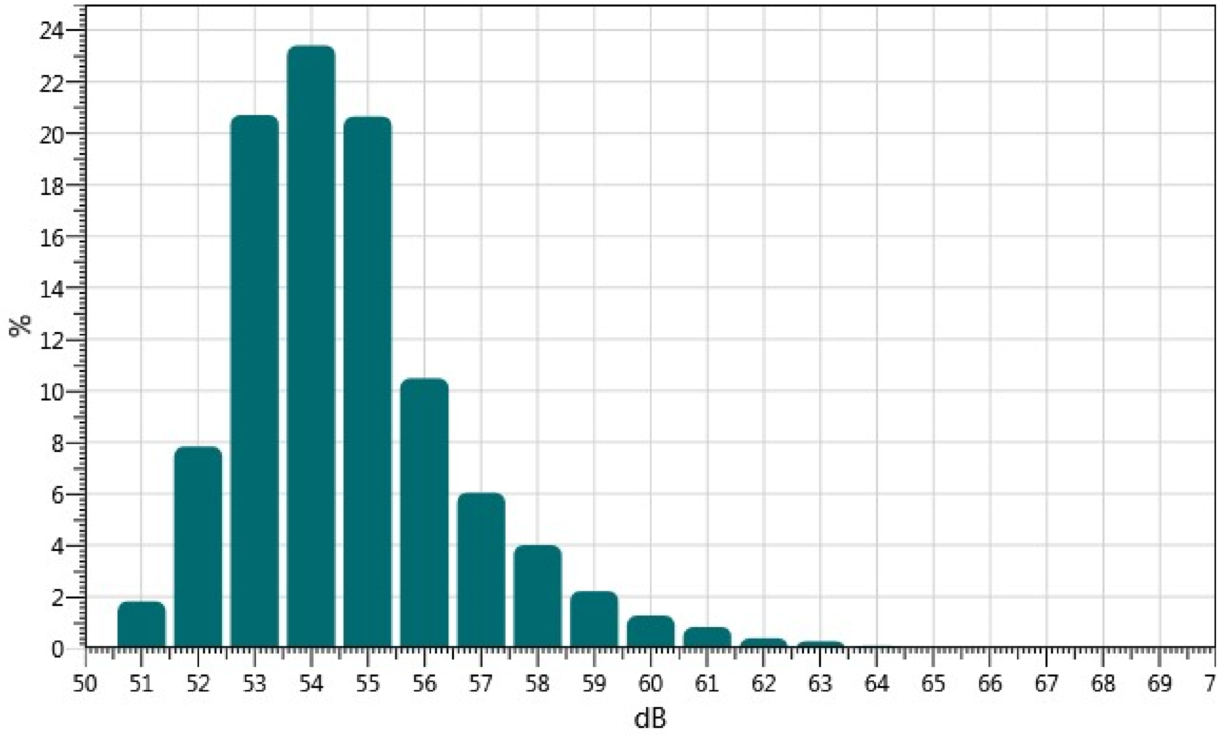
Statistics Table

dB:	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	%
50:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
51:	0.10	0.17	0.08	0.09	0.15	0.21	0.20	0.16	0.29	0.35	1.81
52:	0.34	0.32	0.47	0.77	0.72	0.77	0.73	0.94	1.35	1.43	7.83
53:	1.42	1.93	1.86	1.64	1.83	2.19	2.40	2.57	2.24	2.64	20.72
54:	2.77	2.49	1.58	2.20	2.40	2.49	2.53	2.40	2.45	2.11	23.42
55:	2.31	1.99	2.36	2.15	2.27	2.09	2.08	1.95	1.93	1.54	20.65
56:	1.53	1.23	0.95	1.07	1.06	0.96	0.96	0.99	0.83	0.90	10.48
57:	0.81	0.77	0.45	0.64	0.65	0.60	0.55	0.50	0.47	0.58	6.03
58:	0.49	0.47	0.39	0.41	0.37	0.40	0.41	0.39	0.40	0.27	4.00
59:	0.23	0.27	0.26	0.23	0.22	0.18	0.23	0.21	0.20	0.20	2.22
60:	0.18	0.21	0.14	0.19	0.11	0.10	0.09	0.09	0.08	0.06	1.26
61:	0.08	0.08	0.10	0.13	0.07	0.07	0.08	0.07	0.07	0.07	0.82
62:	0.04	0.04	0.03	0.03	0.02	0.02	0.04	0.05	0.05	0.05	0.39

63:	0.04	0.03	0.03	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.27
64:	0.01	0.01	0.02	0.01	0.01	0.01	0.00	0.01	0.00	0.00	0.09

Statistics Chart

S003_BLH080004_07112024_094054: Statistics Chart

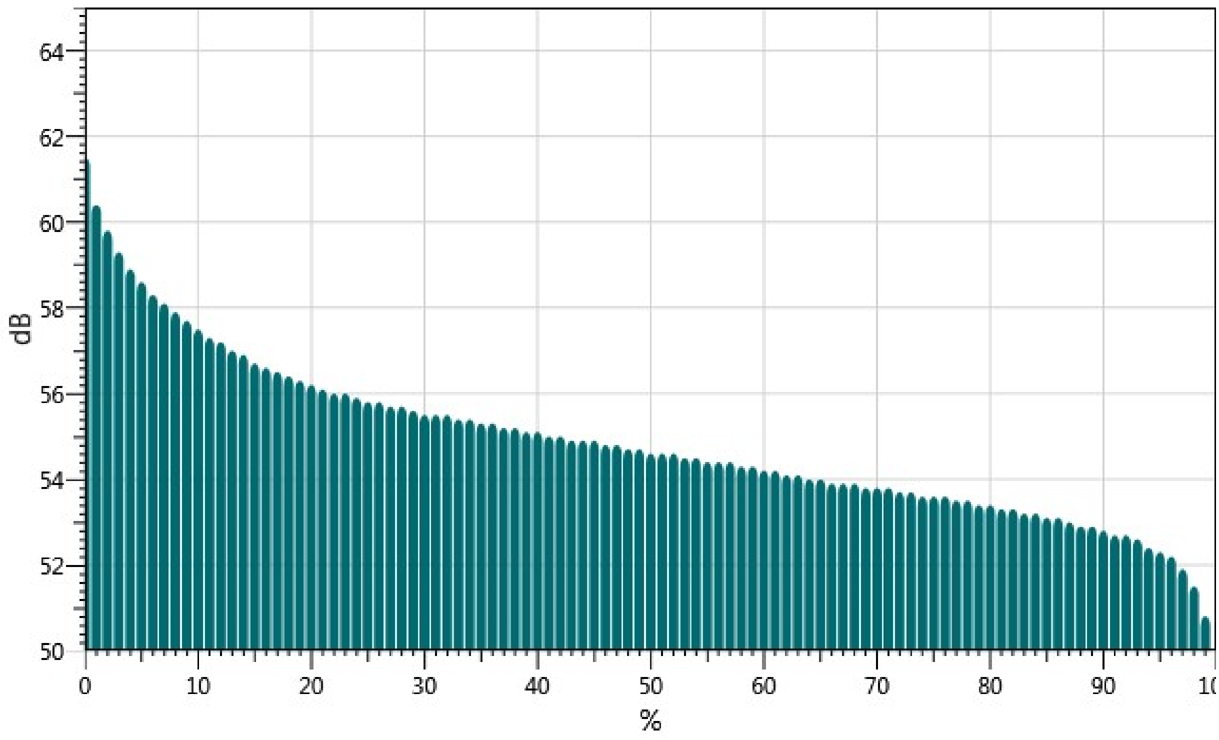


Exceedance Table

.	0%	1%	2%	3%	4%	5%	6%	%7	%8	%9
0%:		61.5	60.4	59.8	59.3	58.9	58.6	58.3	58.1	57.9
10%:	57.7	57.5	57.3	57.2	57.0	56.9	56.7	56.6	56.5	56.4
20%:	56.3	56.2	56.1	56.0	56.0	55.9	55.8	55.8	55.7	55.7
30%:	55.6	55.5	55.5	55.5	55.4	55.4	55.3	55.3	55.2	55.2
40%:	55.1	55.1	55.0	55.0	54.9	54.9	54.9	54.8	54.8	54.7
50%:	54.7	54.6	54.6	54.6	54.5	54.5	54.4	54.4	54.4	54.3
60%:	54.3	54.2	54.2	54.1	54.1	54.0	54.0	53.9	53.9	53.9
70%:	53.8	53.8	53.8	53.7	53.7	53.6	53.6	53.6	53.5	53.5
80%:	53.4	53.4	53.3	53.3	53.2	53.2	53.1	53.1	53.0	52.9
90%:	52.9	52.8	52.7	52.7	52.6	52.4	52.3	52.2	51.9	51.5
100%:	50.8									

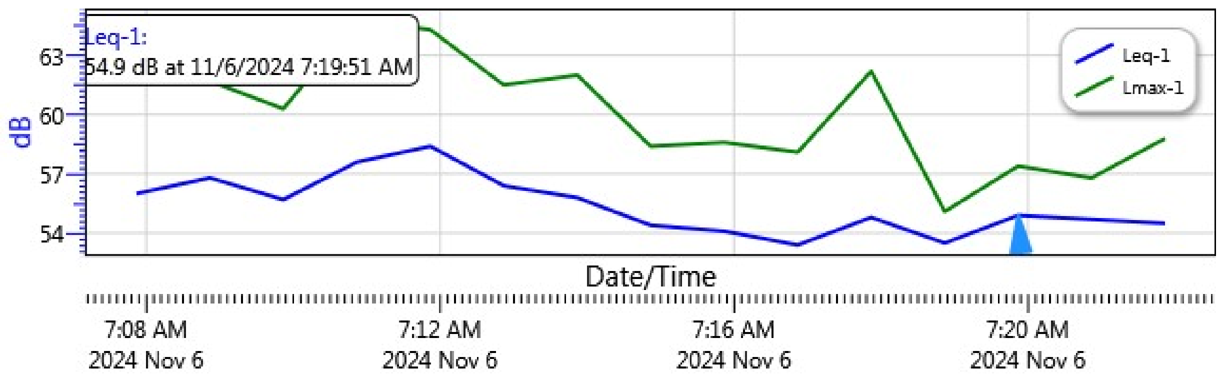
Exceedance Chart

S003_BLH080004_07112024_094054: Exceedance Chart



Logged Data Chart

S003_BLH080004_07112024_094054: Logged Data Chart



Session Report

11/7/2024

Information Panel

Name	S004_BLH080004_07112024_094103
Start Time	11/6/2024 7:30:47 AM
Stop Time	11/6/2024 7:45:47 AM
Device Name	BLH080004
Model Type	SoundPro DL
Device Firmware Rev	R.13J
Comments	

Summary Data Panel

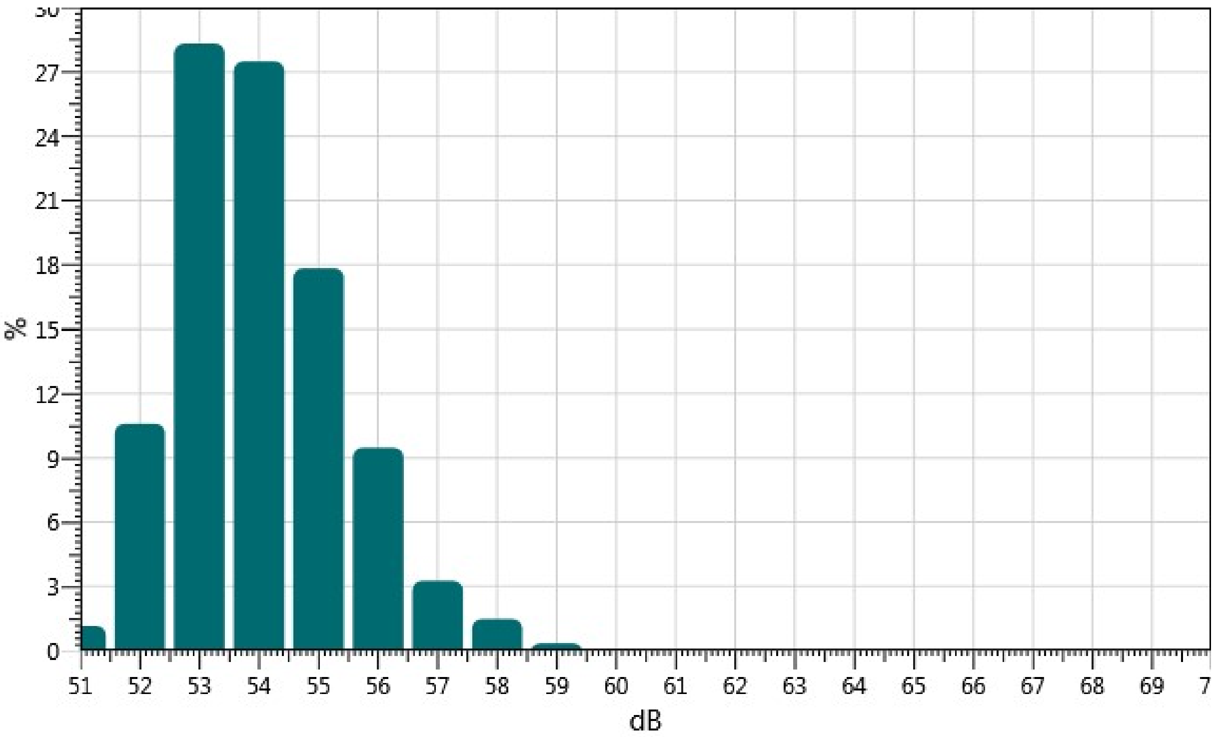
Description	Meter	Value	Description	Meter	Value
Leq	1	54.6 dB	L90	1	52.8 dB
Lmax	1	60.5 dB	Lmin	1	51 dB
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	SLOW	Bandwidth	1	OFF
Exchange Rate	2	3 dB	Weighting	2	C
Response	2	FAST			

Statistics Table

dB:	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	%
51:	0.01	0.12	0.09	0.13	0.18	0.12	0.11	0.09	0.13	0.21	1.17
52:	0.33	0.38	0.66	0.74	0.73	0.90	1.28	1.67	1.90	2.01	10.59
53:	2.00	2.18	2.48	2.60	2.86	3.13	3.06	2.88	3.82	3.29	28.31
54:	3.23	3.40	2.20	3.11	2.89	2.88	2.77	2.59	2.21	2.23	27.49
55:	2.13	2.02	2.05	2.08	1.86	1.76	1.73	1.48	1.39	1.34	17.84
56:	1.45	1.42	1.24	1.07	0.87	0.84	0.81	0.72	0.58	0.47	9.47
57:	0.54	0.40	0.25	0.26	0.36	0.35	0.36	0.26	0.22	0.26	3.26
58:	0.24	0.20	0.16	0.13	0.17	0.18	0.09	0.12	0.10	0.09	1.47
59:	0.08	0.09	0.05	0.05	0.03	0.02	0.02	0.01	0.01	0.01	0.36
60:	0.02	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.04

Statistics Chart

S004_BLH080004_07112024_094103: Statistics Chart

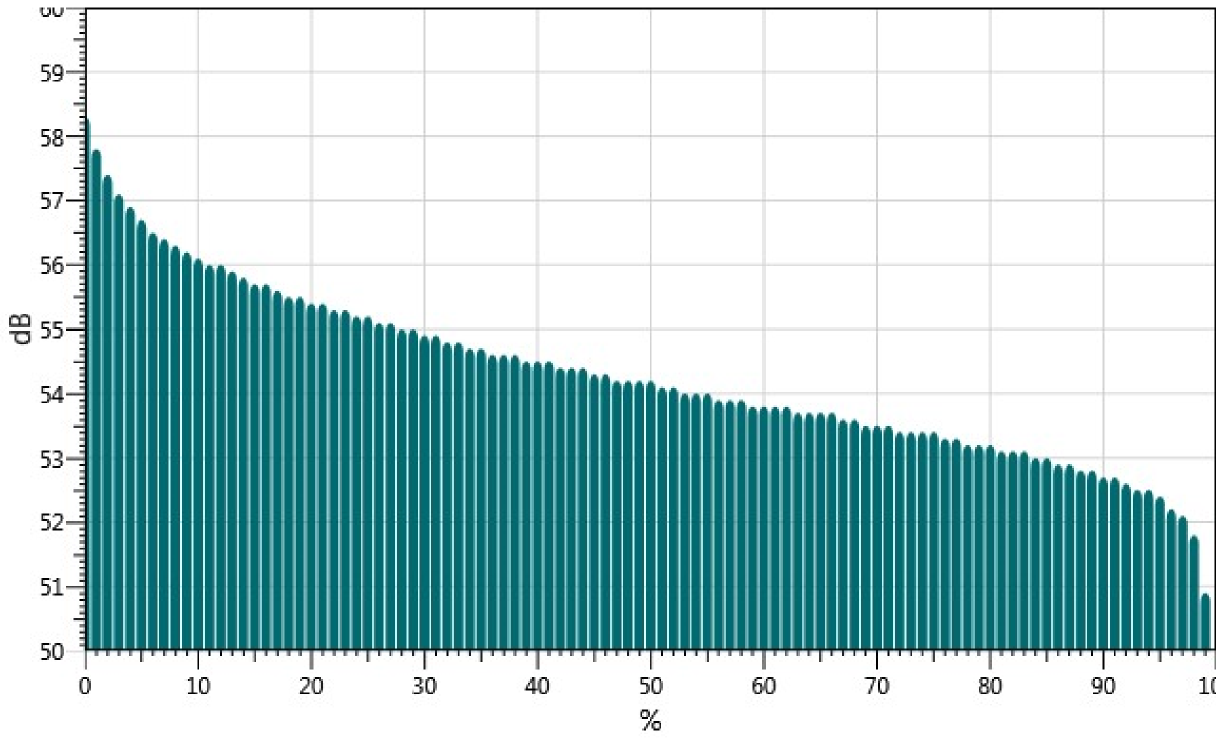


Exceedance Table

.	0%	1%	2%	3%	4%	5%	6%	%7	%8	%9
0%:		58.3	57.8	57.4	57.1	56.9	56.7	56.5	56.4	56.3
10%:	56.2	56.1	56.0	56.0	55.9	55.8	55.7	55.7	55.6	55.5
20%:	55.5	55.4	55.4	55.3	55.3	55.2	55.2	55.1	55.1	55.0
30%:	55.0	54.9	54.9	54.8	54.8	54.7	54.7	54.6	54.6	54.6
40%:	54.5	54.5	54.5	54.4	54.4	54.4	54.3	54.3	54.2	54.2
50%:	54.2	54.2	54.1	54.1	54.0	54.0	54.0	53.9	53.9	53.9
60%:	53.8	53.8	53.8	53.8	53.7	53.7	53.7	53.7	53.6	53.6
70%:	53.5	53.5	53.5	53.4	53.4	53.4	53.4	53.3	53.3	53.2
80%:	53.2	53.2	53.1	53.1	53.1	53.0	53.0	52.9	52.9	52.8
90%:	52.8	52.7	52.7	52.6	52.5	52.5	52.4	52.2	52.1	51.8
100%:	50.9									

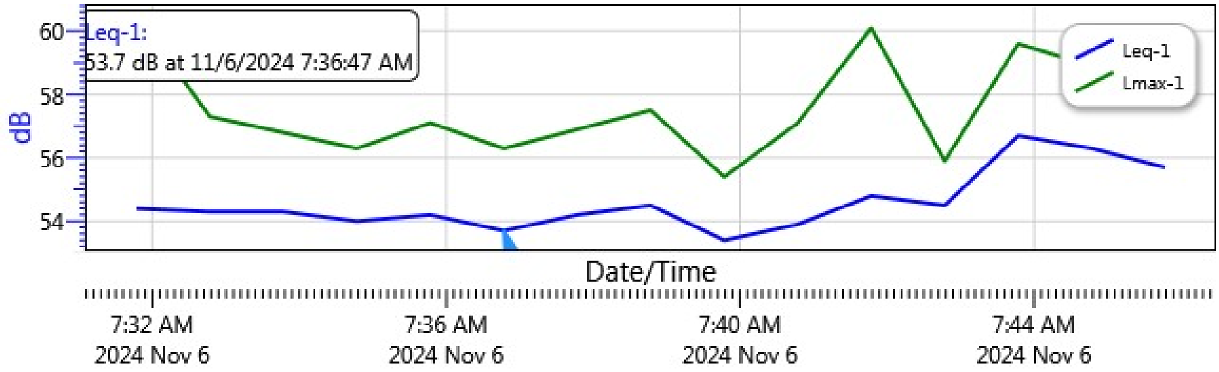
Exceedance Chart

S004_BLH080004_07112024_094103: Exceedance Chart



Logged Data Chart

S004_BLH080004_07112024_094103: Logged Data Chart



APPENDIX H

LIMITED VMT ANALYSIS

To: Robert Reichner, Senior Project Manager
Ultrasystems Environmental, Inc.

From: Weston Pringle, P.E.
Transportation Engineering Consultant

Date: November 15, 2024

Subject: **TECHNICAL ANALYSIS AND VEHICLE MILES TRAVELED (VMT) SCREENING FOR THE LAGUNA BEACH HIGH SCHOOL POOL FACILITY RENOVATION PROJECT LOCATED IN THE CITY OF LAGUNA BEACH, CALIFORNIA**

I have conducted a screening of the potential Vehicle Miles Traveled (VMT) for the Laguna Beach High School Pool Facility renovation project located at 720 Park Avenue in Laguna Beach, California. The analysis was performed to provide a screening assessment to determine the need for a VMT Impact Analysis per the California Environmental Quality Act (CEQA) guidelines.

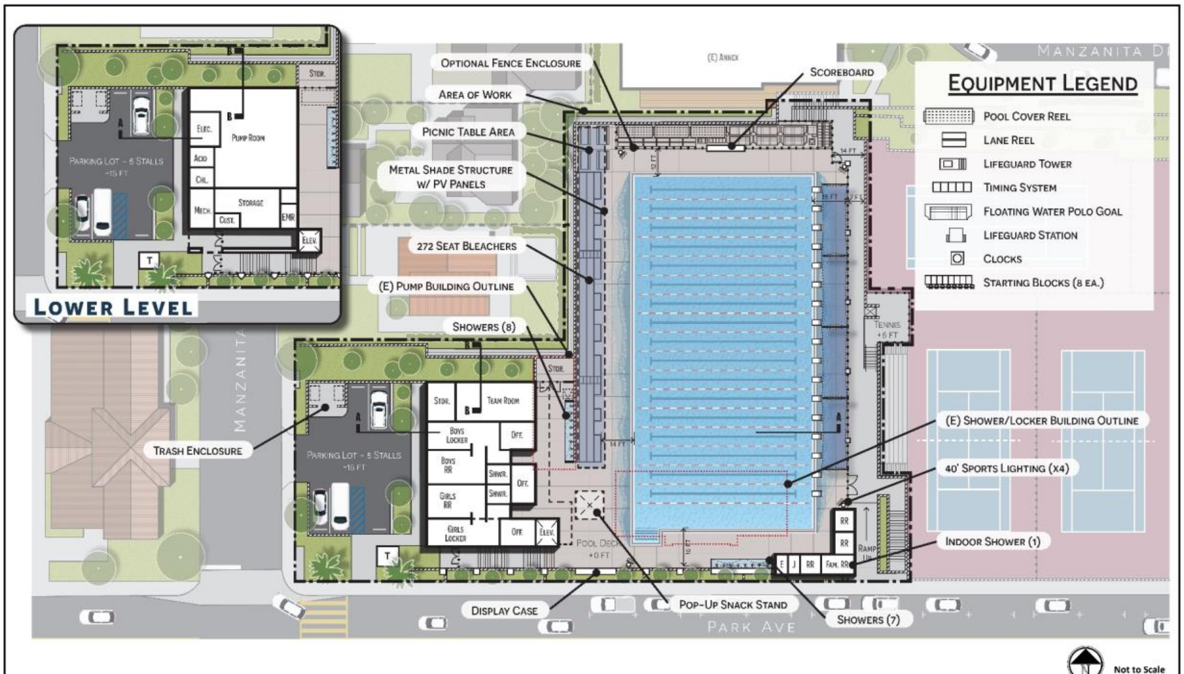
PROJECT DESCRIPTION

The proposed project will demolish the existing high school's pool facility, located north of the high school campus, and construct a renovated swimming pool including replacement of the existing storage/pump building, as well as construction of concrete bleachers and ancillary site improvements. Project access will be provided by a full-service driveway on Manzanita Drive. The project will provide 7 vehicle parking spaces. **Figure 1** shows the project's proposed site plan.

PROJECT LOCATION

The proposed project is located on Park Avenue north of Laguna Beach High School. The existing site is occupied by the current pool facility which will be renovated by the project. The area is urban with mostly residential units surrounding the project site. A map of the project location is contained in **Figure 2**.

Figure 1
Project Site Plan



Disclaimer: Illustration provided by Ruhnau Clarke Architects, who has indicated that the information is true and correct. No other warranties are expressed or implied.

Source: Ruhnau Clarke Architects, October 10, 2024.

Laguna Beach High School and Community Pool Modernization

Site Plan

Figure 2
Project Location

Existing Street System

Park Avenue is an east-west running Restricted Collector with residential units and the Laguna Beach High School bordering each side of the roadway within the project vicinity. Park Avenue has one lane in each direction. The posted speed limit is 30 m.p.h. with 25 m.p.h. signed for school hours. Parking is allowed in the vicinity of the project.

Manzanita Drive is generally north-south running Local Street bordered with residential uses. Manzanita Drive has one lane in each direction. There is no posted speed limit. Parking is allowed in the vicinity of the project.

PROPOSED PROJECT TRIP GENERATION

Trip Generation

One determination of the potential impact that a proposed development may have on the street and freeway network is based on the estimated number of trips to be generated by the project. The project's trips are the contribution to the forecasted future operation of the circulation system within an area of influence surrounding the project. The change in operation with the addition of the project trips results in the level of significance of the impact of the new project.

Trip generation estimates are based on the type of land use and the unit of measure that relates to the appropriate trip generation factor. For example, an apartment trip rate is usually per room, a school is per student, and a restaurant is per 1,000 square-feet. Typically, the trip generation for three time periods is calculated. The trips are calculated for a typical day (24 hours), the AM peak hour, and the PM peak hour.

Except in rare cases, most trip generation numbers are calculated using the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, *11th Edition*. Using statistical data gathered in the field across the United States for numerous land use categories, trip rate factors are derived to be used to estimate the potential trip generation. The resulting net trip generation can be modified by applicable trip credits (i.e. for transit use, internal capture, etc.) and trips accounted for because the site may already have an existing land use. Any credits are applied with the approval of the lead agency for the jurisdiction the project is located in.

Project Trip Generation

The proposed project will modernize and improve an existing pool facility that is an ancillary use that is part of Laguna Beach High School. Typically, the trip generation for a school facility is based on the enrollment. Laguna Beach High School offers grades 9 through 12 and the current enrollment is 888 students. This enrollment is projected to decrease in the future. The proposed project will not cause the enrollment to increase.

As a result, this project does not change the existing trip generation of the site. Therefore, the project will not create any new trips.

VEHICLE MILES TRAVELED (VMT) ANALYSIS

The State of California has adopted a new California Environmental Quality Act (CEQA) that took effect with the passage of Senate Bill (SB) 743 in January 2014. Senate Bill 743 tasked the Office of Planning and Research (OPR) with developing new guidelines for evaluating transportation impacts under CEQA using methods that no longer focus on measuring automobile delay and level of service (LOS). Senate Bill 743 directed lead agencies to revise transportation assessment guidelines to include a transportation performance metric that promotes: the reduction of greenhouse gas emissions, the development of multimodal networks, and access to diverse land uses.

In April 2018, OPR issued the Technical Advisory on Evaluating Transportation Impacts in CEQA. Section E of that report discuses evaluating impacts under VMT. Under this guidance a project that is expected to generate less than 110 daily new daily trips is considered a small project and can be assumed to have a less than significant impact on the VMT. In addition, the discussion includes local-serving developments. While this usually lends itself to small retail projects, this does pertain to a school that, by definition, is meant to serve the local community. OPR instructs that lead agencies generally may presume such developments create less-than-significant VMT impacts. Finally, the proposed project is classified as an institutional land use and these are typically exempt from further VMT analysis.

It can therefore be concluded that the proposed project would not cause a substantial increase in VMT and would not have a significant VMT impact under CEQA.

CONCLUSION

The proposed project will demolish the existing high school's pool facility, located north of the high school campus, and construct a renovated swimming pool including replacement of the existing storage/pump building, as well as construction of concrete bleachers and ancillary site improvements. Project access will be provided by a full-service driveway on Manzanita Drive. The VMT screening assessment determined the following:

- The project will not generate any new trips.
- The threshold to require further VMT analysis is not met because the project will not generate new trips and the project is a local-serving use.
- The project will have a less than significant VMT impact and a further VMT analysis is not required.

If you have any questions, please contact me at 562-233-2951.