

MANSFIELD ESTATES

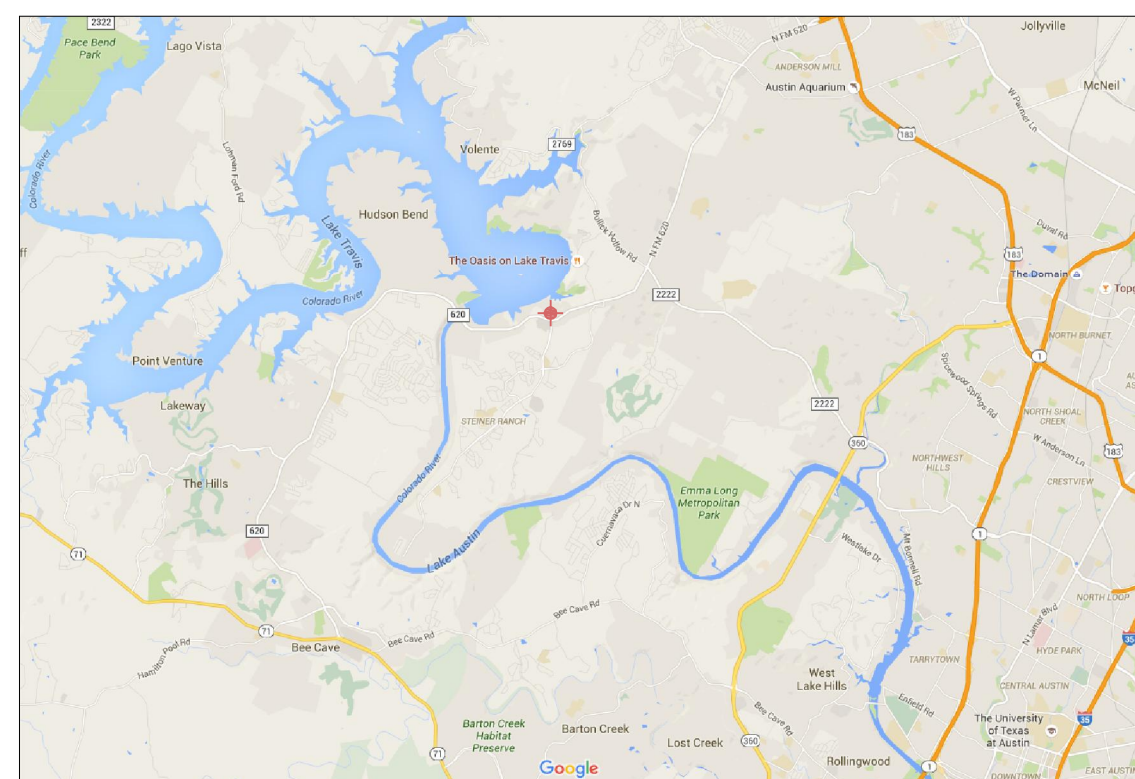
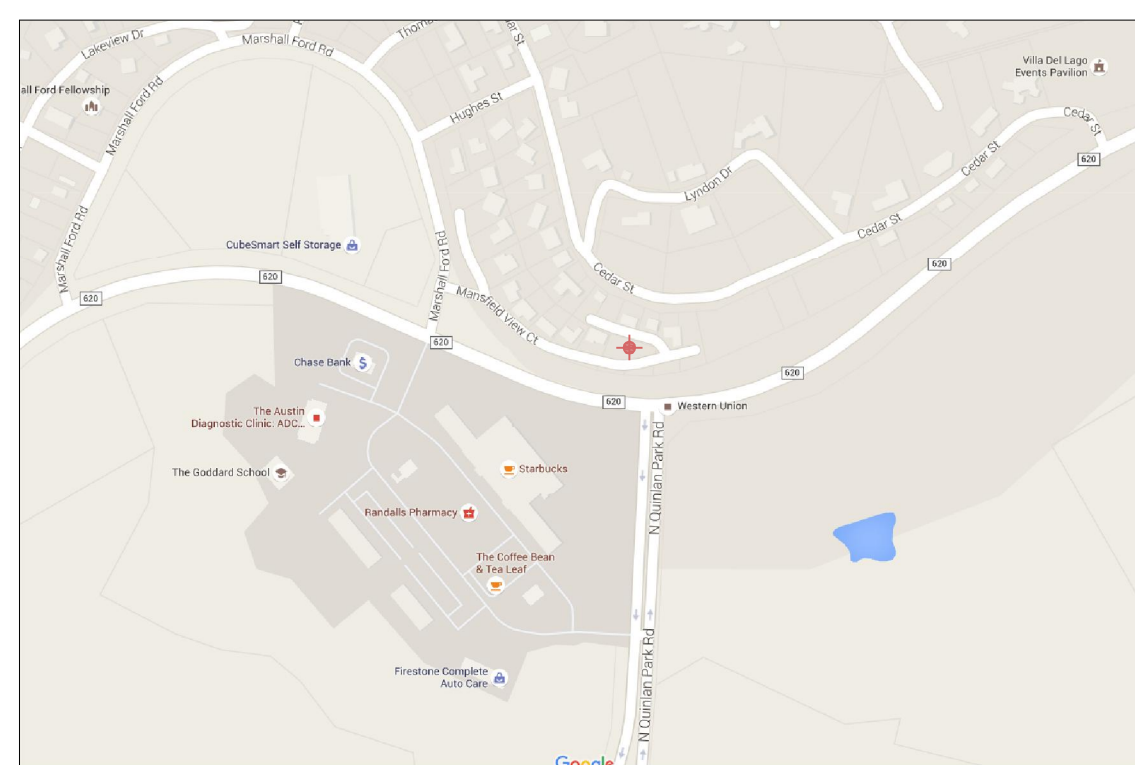
SWIMMING POOL AND BATH HOUSE DRAWINGS

MANSFIELD ESTATES HOA
 5134 MANSFIELD VIEW CT. AUSTIN, TX 78732
 LOT 153 HUGHES PARK LAKE SUB. 2 GEO# 0150400101

REYNA DESIGN, LLC
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JOB SITE LOCATION



SHEETS

COVER	COVER SHEET, SITE MAP AND LEGEND
C-01	OVERALL SITE LAYOUT AND NOTES
C-02	OVERALL UTILITIES LAYOUT AND NOTES
A-01	BATH HOUSE DIMENSIONS AND LAYOUT
A-02	BATH HOUSE ELEVATIONS
S-01	BATH HOUSE STRUCTURAL LAYOUT
S-02	BATH HOUSE AND SITE STRUCTURAL DETAILS
EP-01	BATH HOUSE ELECTRICAL AND PLUMBING LAYOUT
SP-N1	POOL CONSTRUCTION NOTES, SHEETS, SPECIFICATIONS
SP-N2	POOL SPECIFICATIONS SHEETS
SP-01	POOL LAYOUT AND DIMENSIONS
SP-02	POOL PLUMBING AND ELECTRICAL LAYOUT
SP-03	POOL SECTIONS AND SHOTCRETE DETAILS
SP-04	POOL EQUIPMENT LAYOUT
SP-05	POOL DECK AND ENCLOSURE LAYOUT/DETAILS

LEGEND

LINE TYPES:	
ELECTRICAL - BOND WIRE	
ELECTRICAL CONDUIT	
POOL WALL (SHOTCRETE)	
STEEL REINFORCEMENT (REBAR)	
POOL SUCTION LINES	
POOL RETURN LINES	
WATER LINE	
SYMBOLS:	
SKIMMER	
RETURN FITTING	
WALL LIGHT	
ANTI-ENTRAPMENT MAIN DRAIN	
AUTOFILL	
HANDRAIL	
2"x2" STEP / BENCH TILE	
6"x6" DEPTH AND "NO DIVING" MARKERS	
SECTION LINE AND ARROW	
MATERIAL LABEL	

FOR QUESTIONS ABOUT THESE DRAWINGS CONTACT



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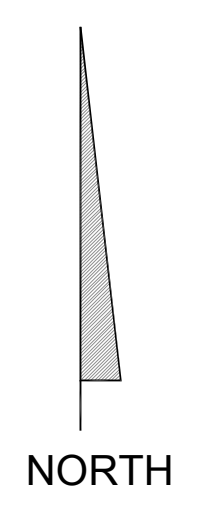
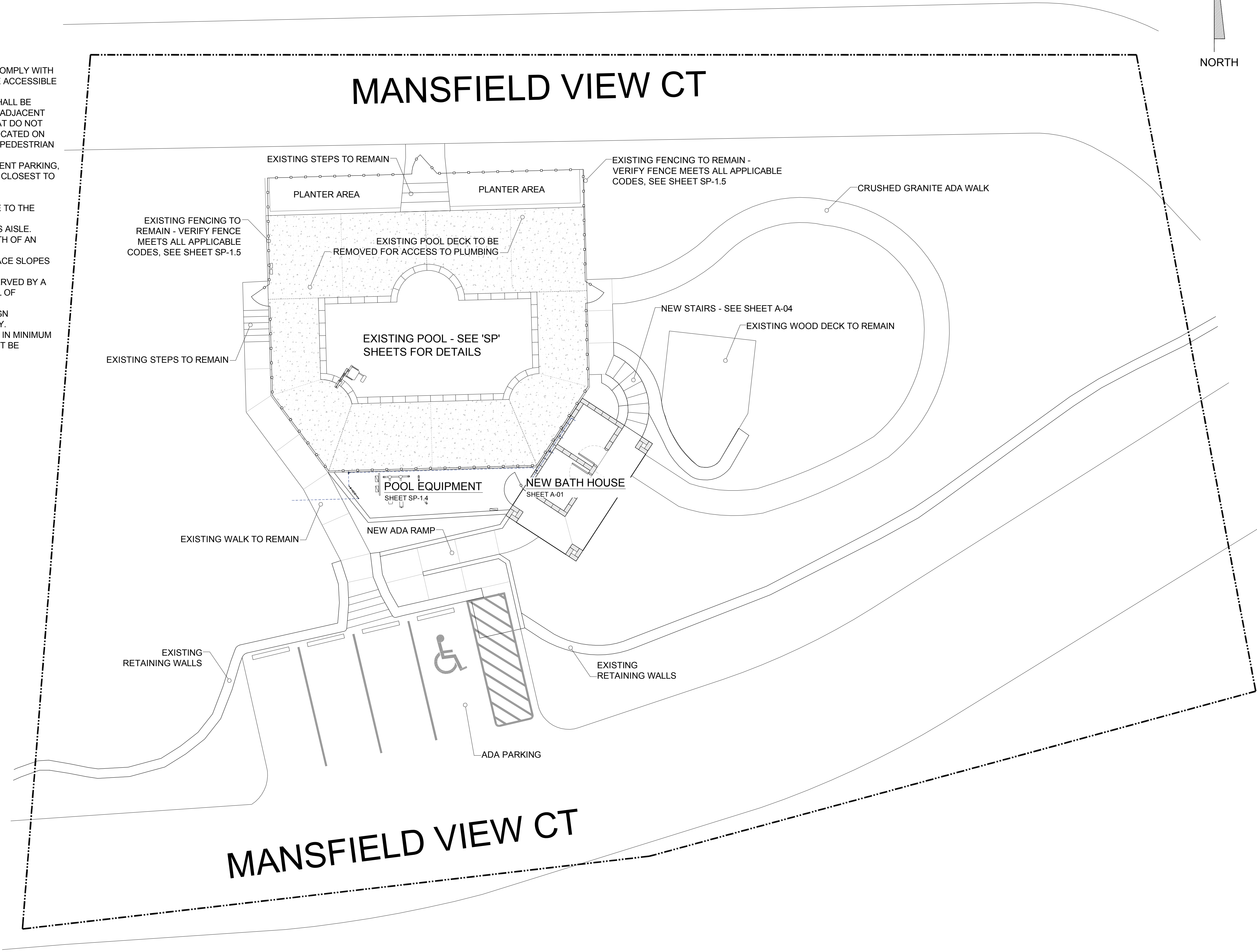
COVER SHEET
 SCALE: SHEET:
 N/A COVER

GENERAL NOTES:

ANY/ALL EXISTING STRUCTURES SHALL REMAIN UNDISTURBED UNLESS NECESSARY TO COMPLETE THE WORK AS DESCRIBED IN THESE PLANS. THESE PLANS ATTEMPT TO GIVE A REASONABLE DESCRIPTION OF THE WORK REQUIRED. IN NO WAY SHOULD IT BE ASSUMED THESE PLANS SHOW EVERY DETAIL OF THE WORK - IT IS ASSUMED THAT THE CONTRACTOR WILL BE RESPONSIBLE FOR PERFORMING THE WORK DESCRIBED TO SATISFY ALL APPLICABLE STATE, LOCAL, AND FEDERAL CODES.

ADA/PARKING NOTES:

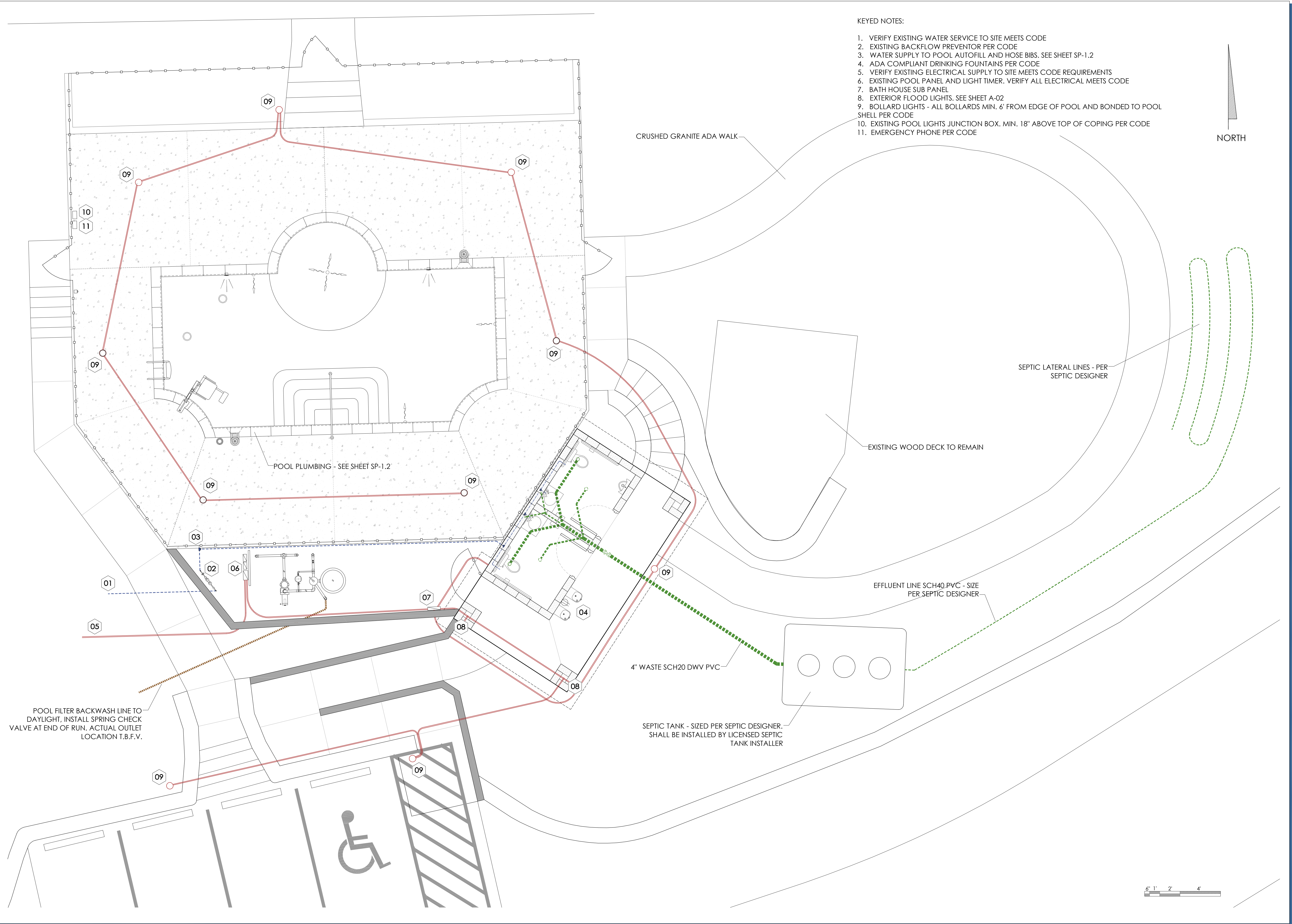
PARKING SPACES REQUIRED TO BE ACCESSIBLE BY 4.1 SHALL COMPLY WITH 4.6.2 THROUGH 4.6.5. PASSENGER LOADING ZONES REQUIRED TO BE ACCESSIBLE BY 4.1 SHALL COMPLY WITH 4.6.5 AND 4.6.6. ACCESSIBLE PARKING SPACES SERVING A PARTICULAR BUILDING SHALL BE LOCATED ON THE SHORTEST ACCESSIBLE ROUTE OF TRAVEL FROM ADJACENT PARKING TO AN ACCESSIBLE ENTRANCE. IN PARKING FACILITIES THAT DO NOT SERVE A PARTICULAR BUILDING, ACCESSIBLE PARKING SHALL BE LOCATED ON THE SHORTEST ACCESSIBLE ROUTE OF TRAVEL TO AN ACCESSIBLE PEDESTRIAN ENTRANCE OF THE PARKING FACILITY. IN BUILDINGS WITH MULTIPLE ACCESSIBLE ENTRANCES WITH ADJACENT PARKING, ACCESSIBLE PARKING SPACES SHALL BE DISPERSED AND LOCATED CLOSEST TO THE ACCESSIBLE ENTRANCES. ACCESSIBLE PARKING SPACES SHALL BE AT LEAST 96 IN WIDE. PARKING ACCESS AISLES SHALL BE PART OF AN ACCESSIBLE ROUTE TO THE BUILDING OR FACILITY ENTRANCE AND SHALL COMPLY WITH 4.3. TWO ACCESSIBLE PARKING SPACES MAY SHARE A COMMON ACCESS AISLE. PARKED VEHICLE OVERHANGS SHALL NOT REDUCE THE CLEAR WIDTH OF AN ACCESSIBLE ROUTE. PARKING SPACES AND ACCESS AISLES SHALL BE LEVEL WITH SURFACE SLOPES NOT EXCEEDING 1:50 (2%) IN ALL DIRECTIONS. EACH ACCESSIBLE PARKING SPACE SHALL BE DESIGNATED AS RESERVED BY A VERTICALLY MOUNTED OR SUSPENDED SIGN SHOWING THE SYMBOL OF ACCESSIBILITY. SPACES COMPLYING WITH 4.1.2(5)(b) SHALL HAVE AN ADDITIONAL SIGN "VAN-ACCESSIBLE" MOUNTED BELOW THE SYMBOL OF ACCESSIBILITY. CHARACTERS AND SYMBOLS ON SUCH SIGNS SHALL BE LOCATED 60 IN MINIMUM ABOVE THE GROUND, FLOOR, OR PAVING SURFACE SO THEY CANNOT BE OBSCURED BY A VEHICLE PARKED IN THE SPACE.



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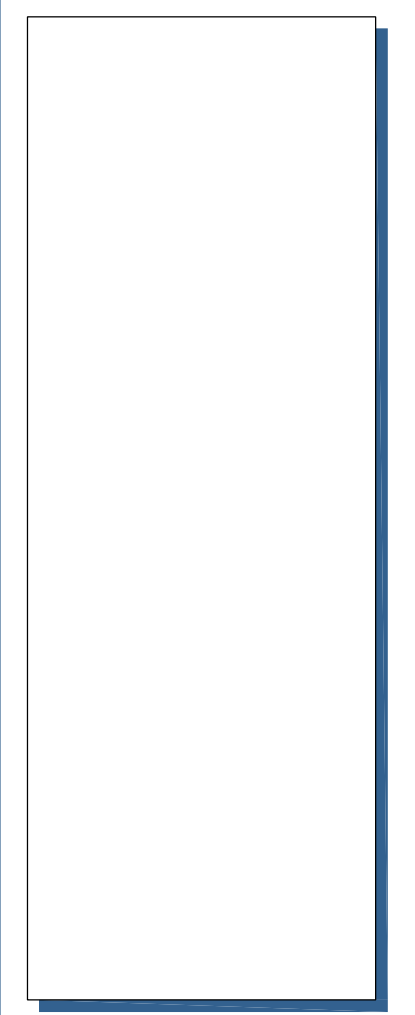
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ADA / SITE LAYOUT
 PERMIT SET 2016.04.29
 ADA / SITE LAYOUT
 SCALE: SHEET:
 1/8"=1'-0" C-01



- KEYED NOTES:
1. VERIFY EXISTING WATER SERVICE TO SITE MEETS CODE
 2. EXISTING BACKFLOW PREVENTOR PER CODE
 3. WATER SUPPLY TO POOL AUTOFILL AND HOSE BIBS. SEE SHEET SP-1.2
 4. ADA COMPLIANT DRINKING FOUNTAINS PER CODE
 5. VERIFY EXISTING ELECTRICAL SUPPLY TO SITE MEETS CODE REQUIREMENTS
 6. EXISTING POOL PANEL AND LIGHT TIMER. VERIFY ALL ELECTRICAL MEETS CODE
 7. BATH HOUSE SUB PANEL
 8. EXTERIOR FLOOD LIGHTS. SEE SHEET A-02
 9. BOLLARD LIGHTS - ALL BOLLARDS MIN. 6" FROM EDGE OF POOL AND BONDED TO POOL SHELL PER CODE
 10. EXISTING POOL LIGHTS JUNCTION BOX. MIN. 18" ABOVE TOP OF COPING PER CODE
 11. EMERGENCY PHONE PER CODE

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SITE UTILITIES

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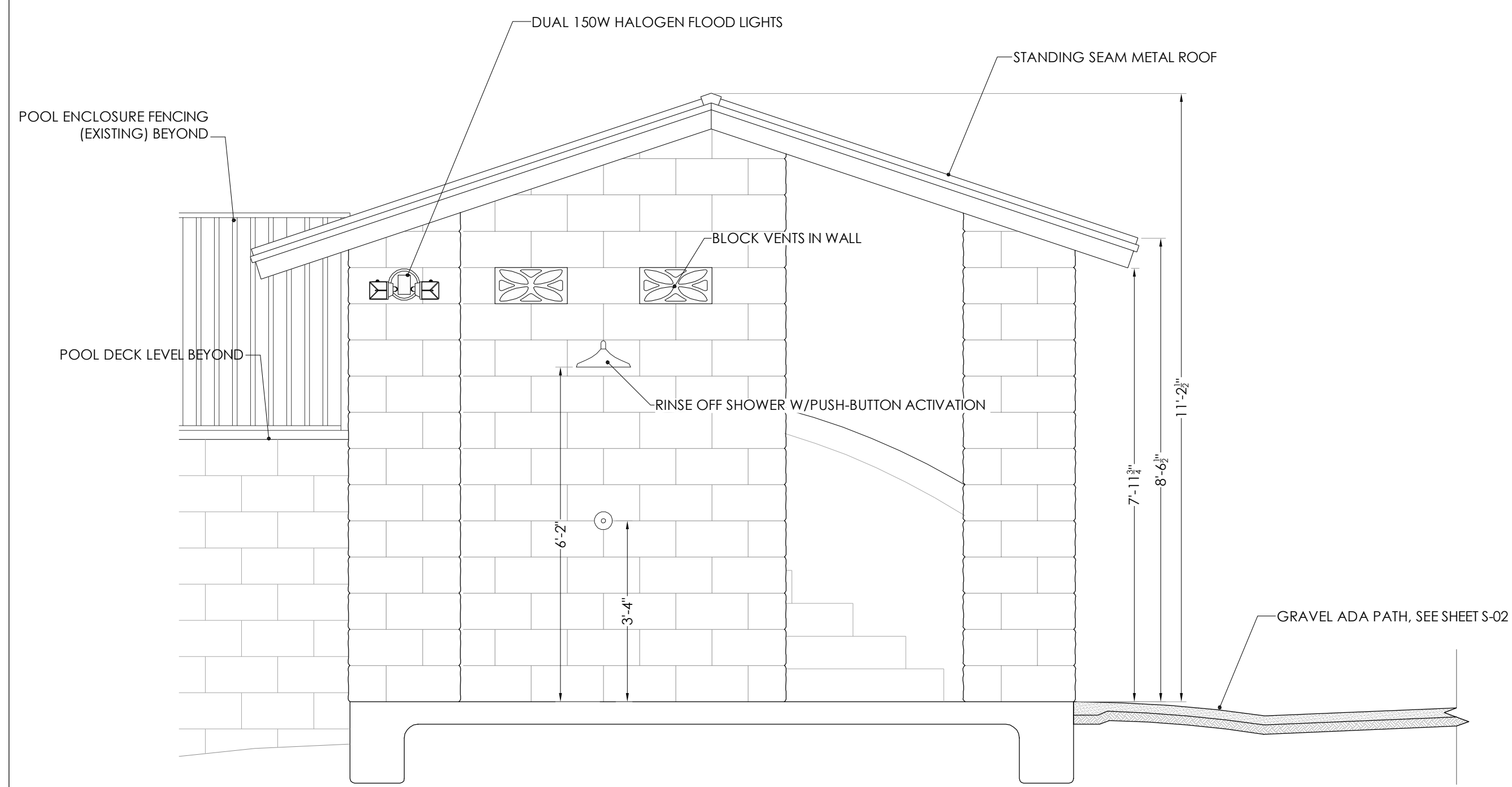
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SITE UTILITIES

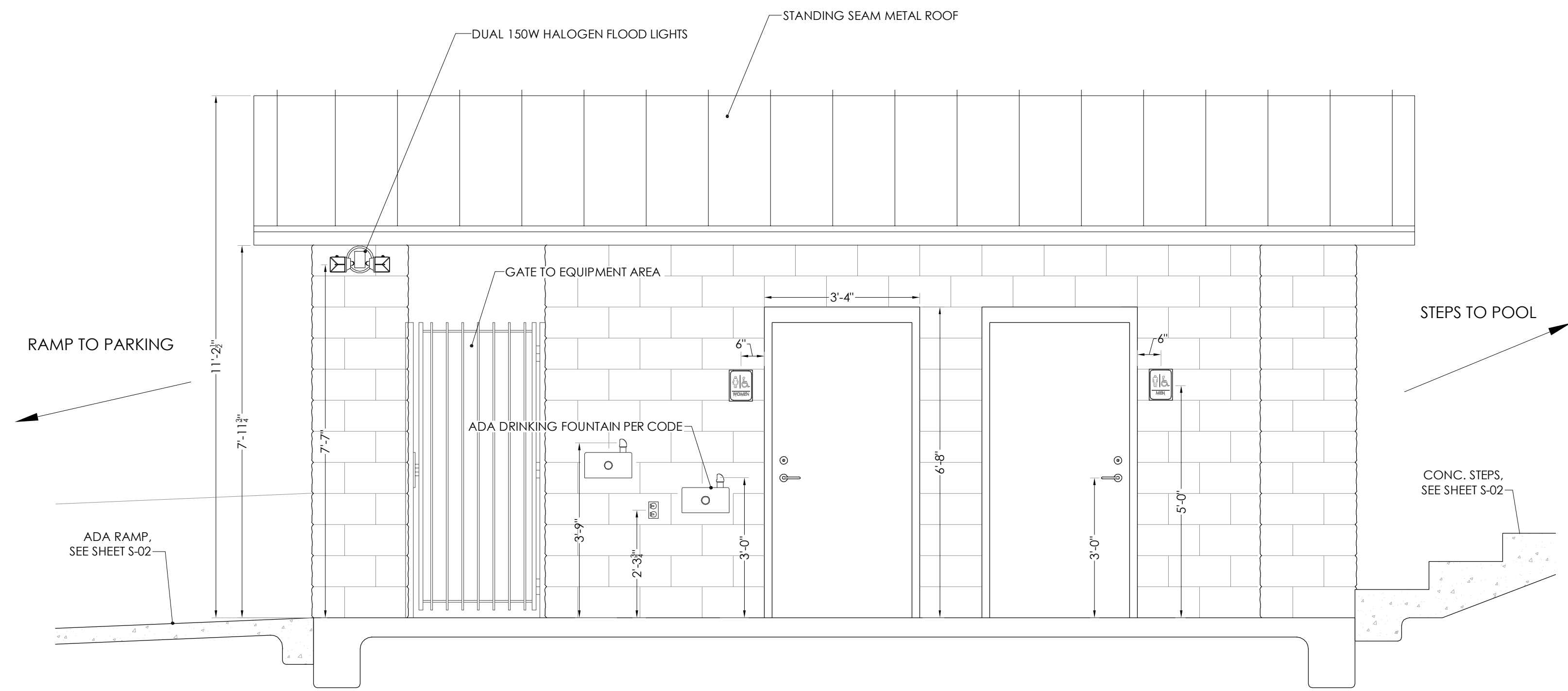
SCALE: 1/4"=1'-0"

SHEET: C-02

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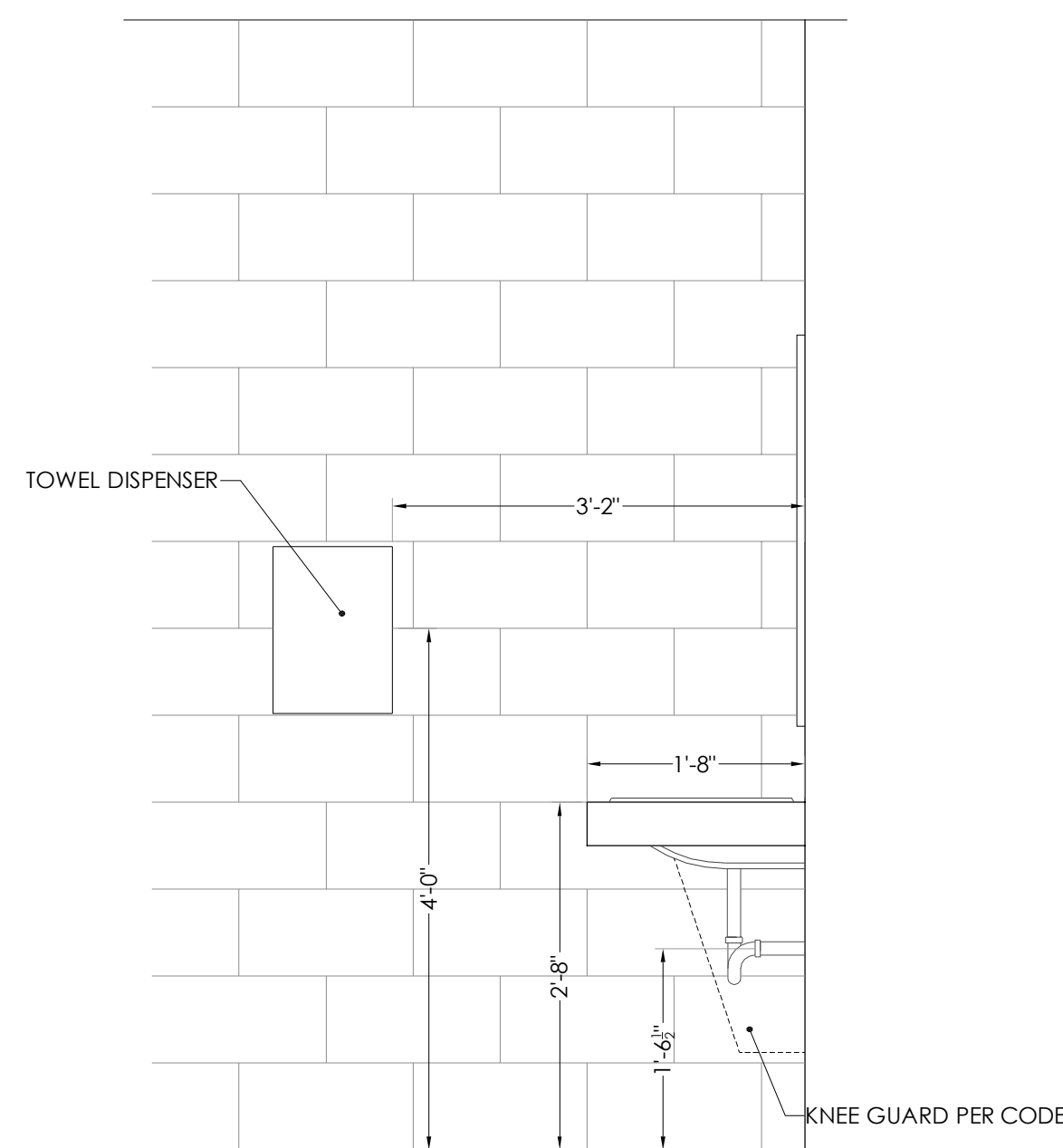
1 SOUTH ELEVATION
SCALE: 1/2" = 1' - 0"



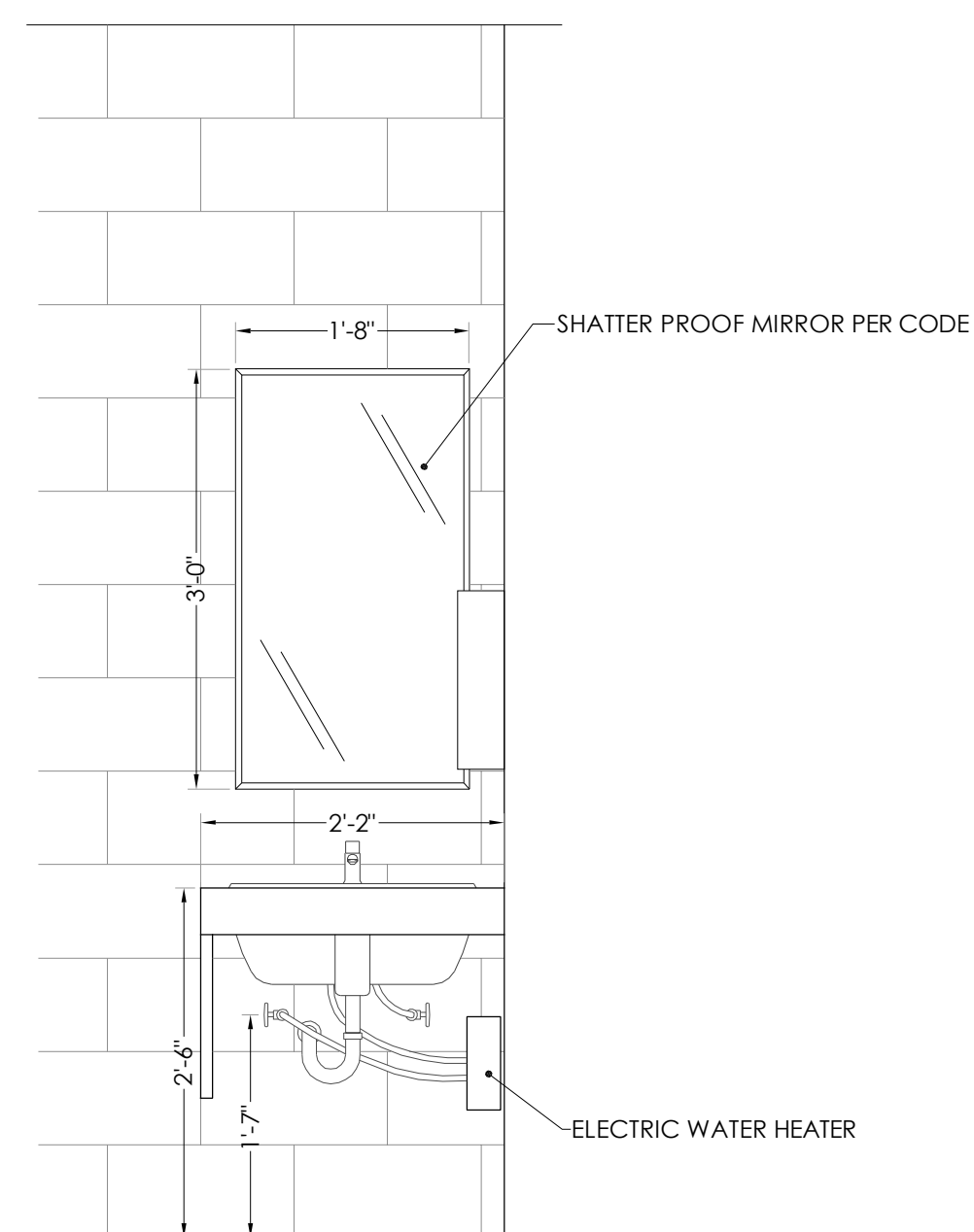
2 EAST ELEVATION
SCALE: 1/2" = 1' - 0"

NOTES:

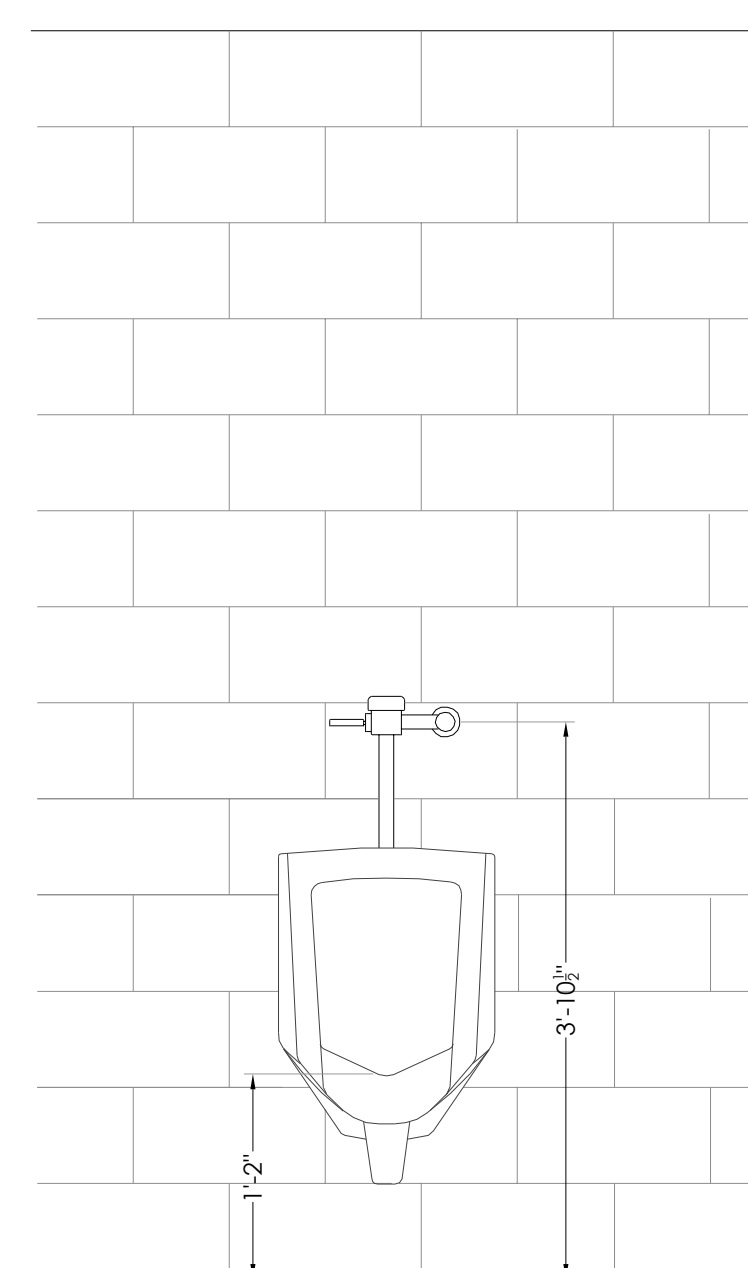
- SPLIT FACE CMU BY FEATHERLITE OR EQUAL, OWNER TO SELECT COLORS. PROVIDE COLOR SAMPLES FOR SELECTION
- INTERIOR WALLS TO BE PAINTED WITH EPOXY, BLOCK-FILLER PAINT, OWNER TO SELECT COLORS
- CMU BLOCK WALLS TO BE GROUTED EVERY OTHER CELL W/#4 VERT. REBARS EVERY FOURTH CELL AND IN ALL CORNERS
- BOND BEAM @ TOW (OR AT 8'-0") W/(2) #4 REBARS CONT.



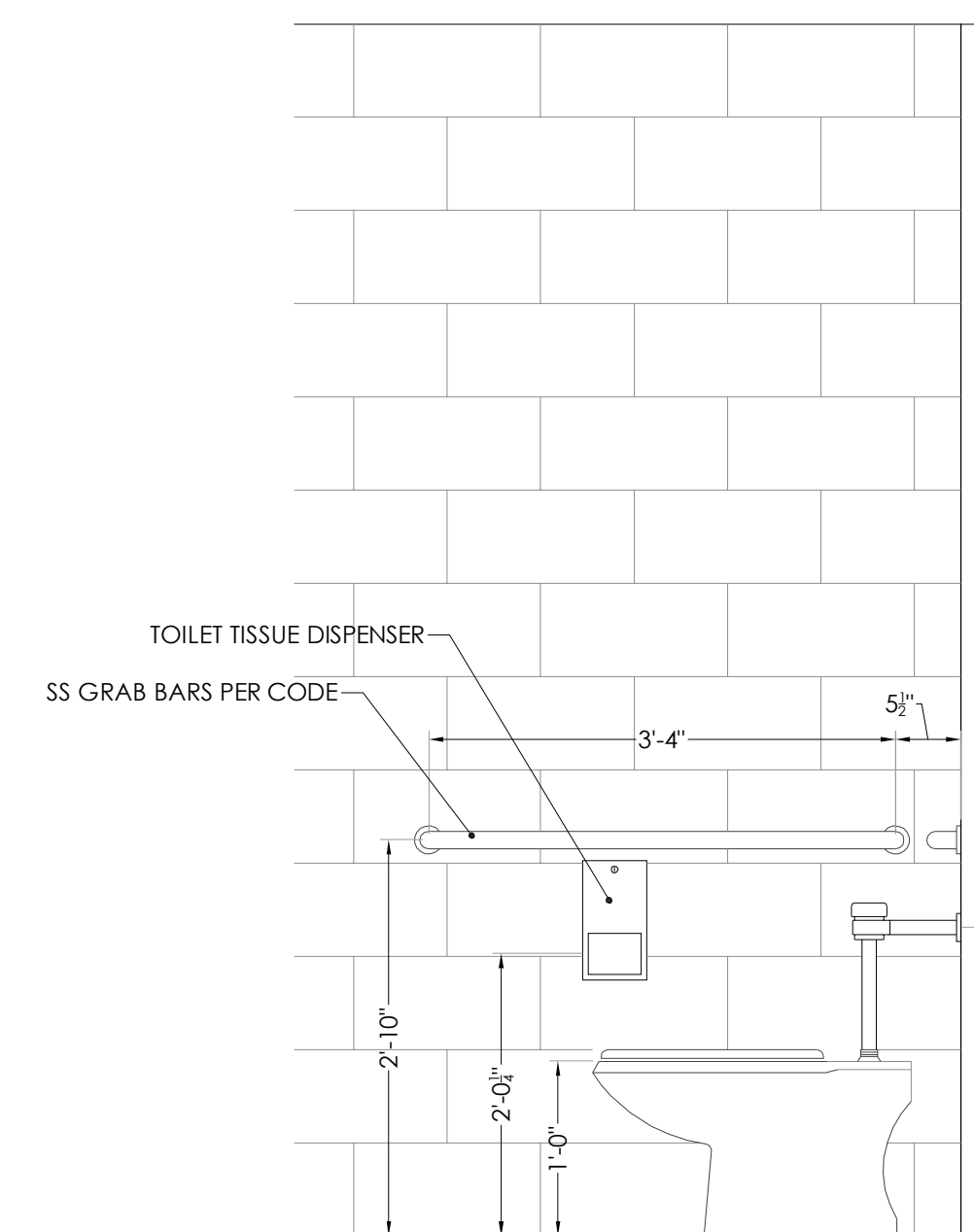
3 LAVATORY SIDE ELEVATION
SCALE: 3/4" = 1' - 0"



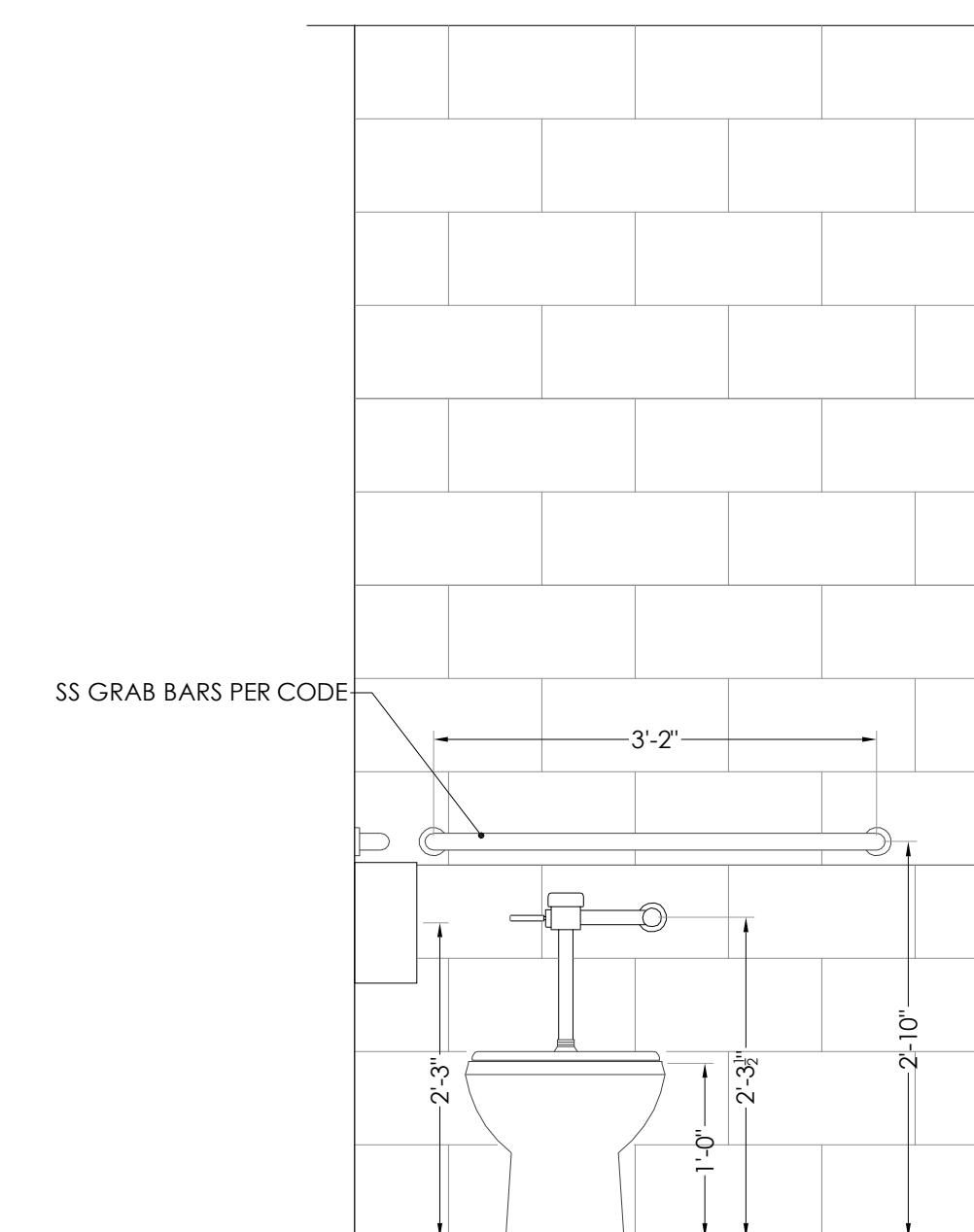
4 LAVATORY FRONT ELEVATION
SCALE: 3/4" = 1' - 0"



5 URINAL FRONT ELEVATION
SCALE: 3/4" = 1' - 0"



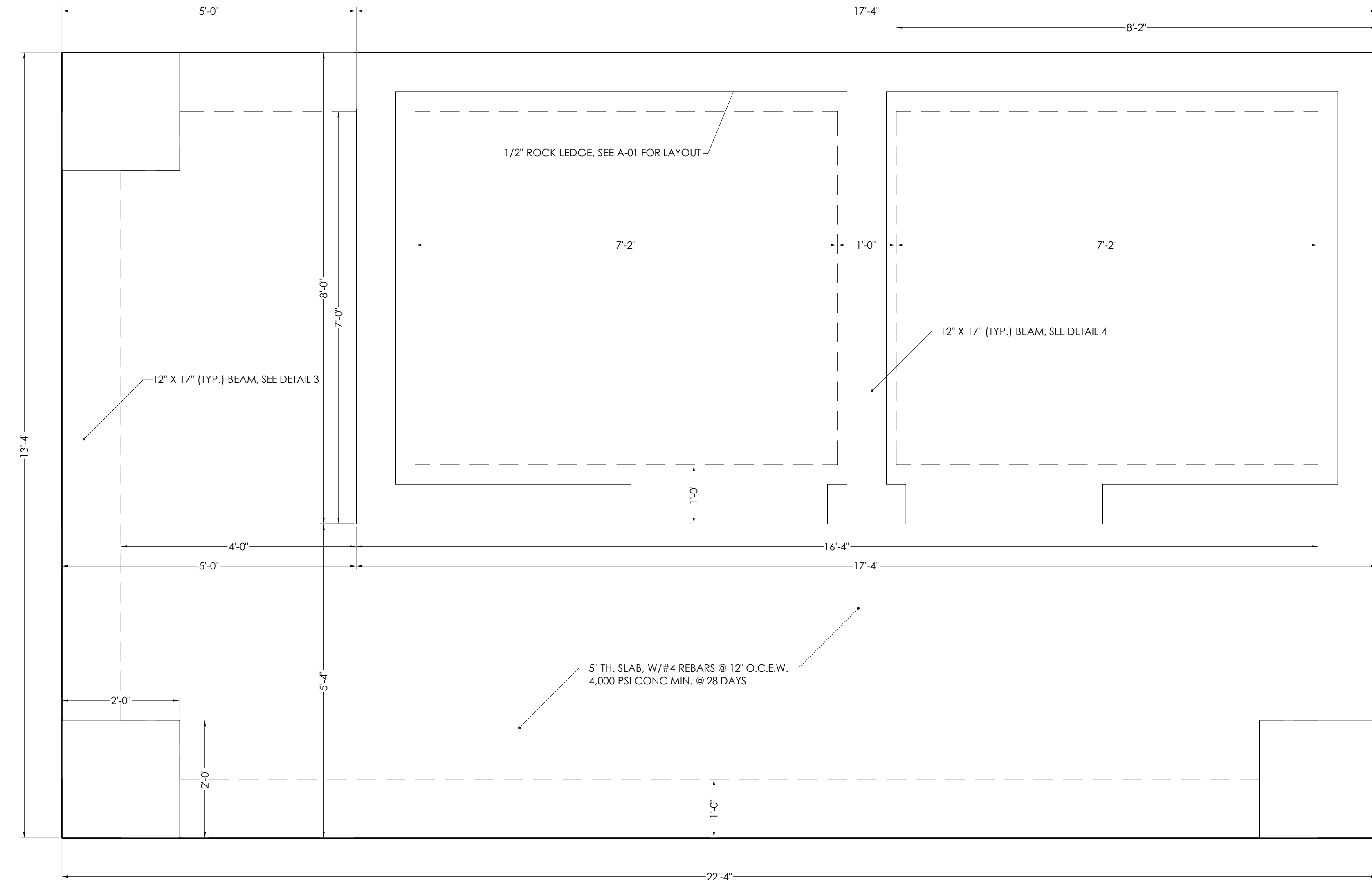
6 COMMODE SIDE ELEVATION
SCALE: 3/4" = 1' - 0"



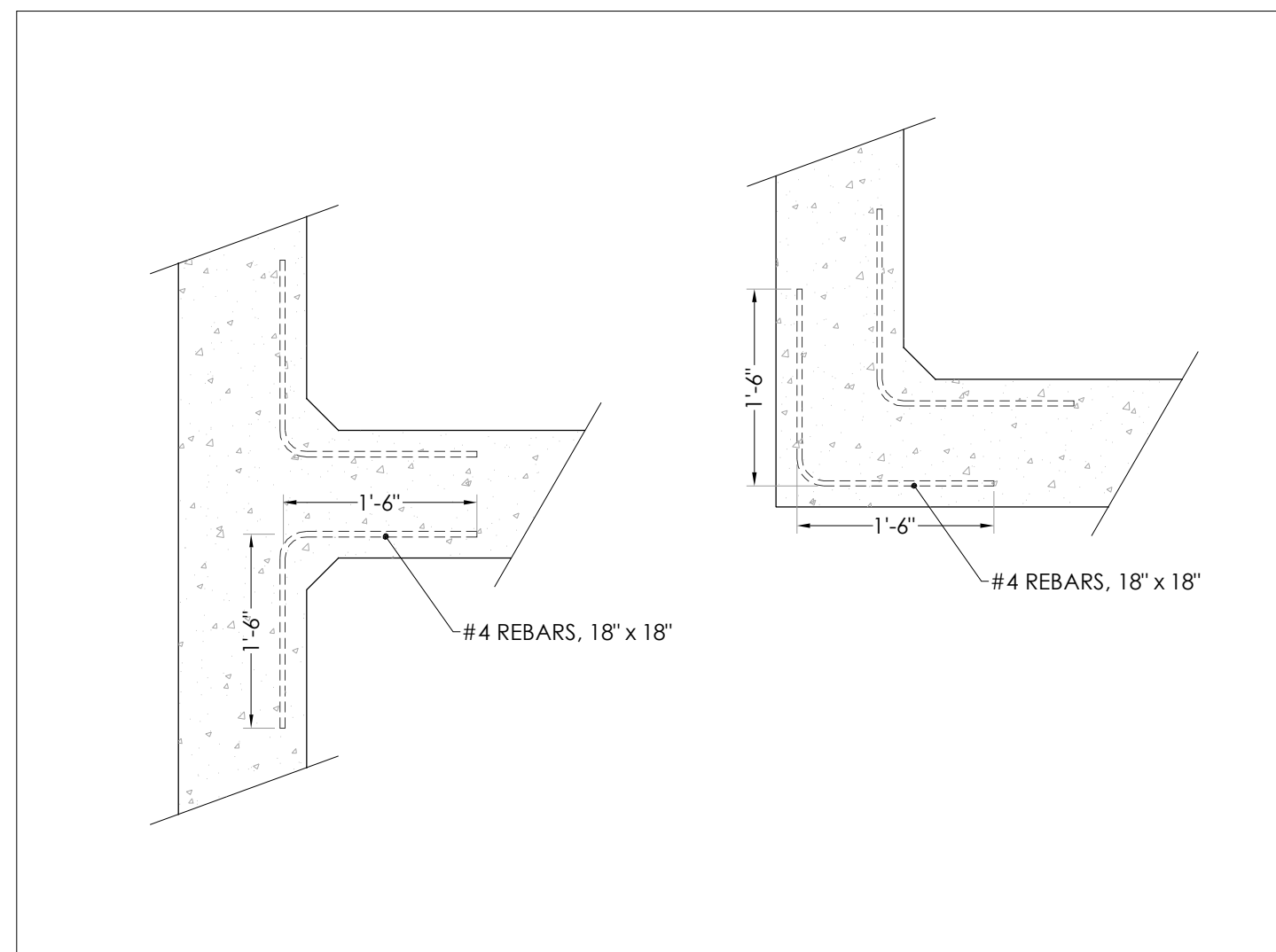
7 COMMODE FRONT ELEVATION
SCALE: 3/4" = 1' - 0"

*ALL SURFACES IN RESTROOMS SHALL BE NON-POROUS

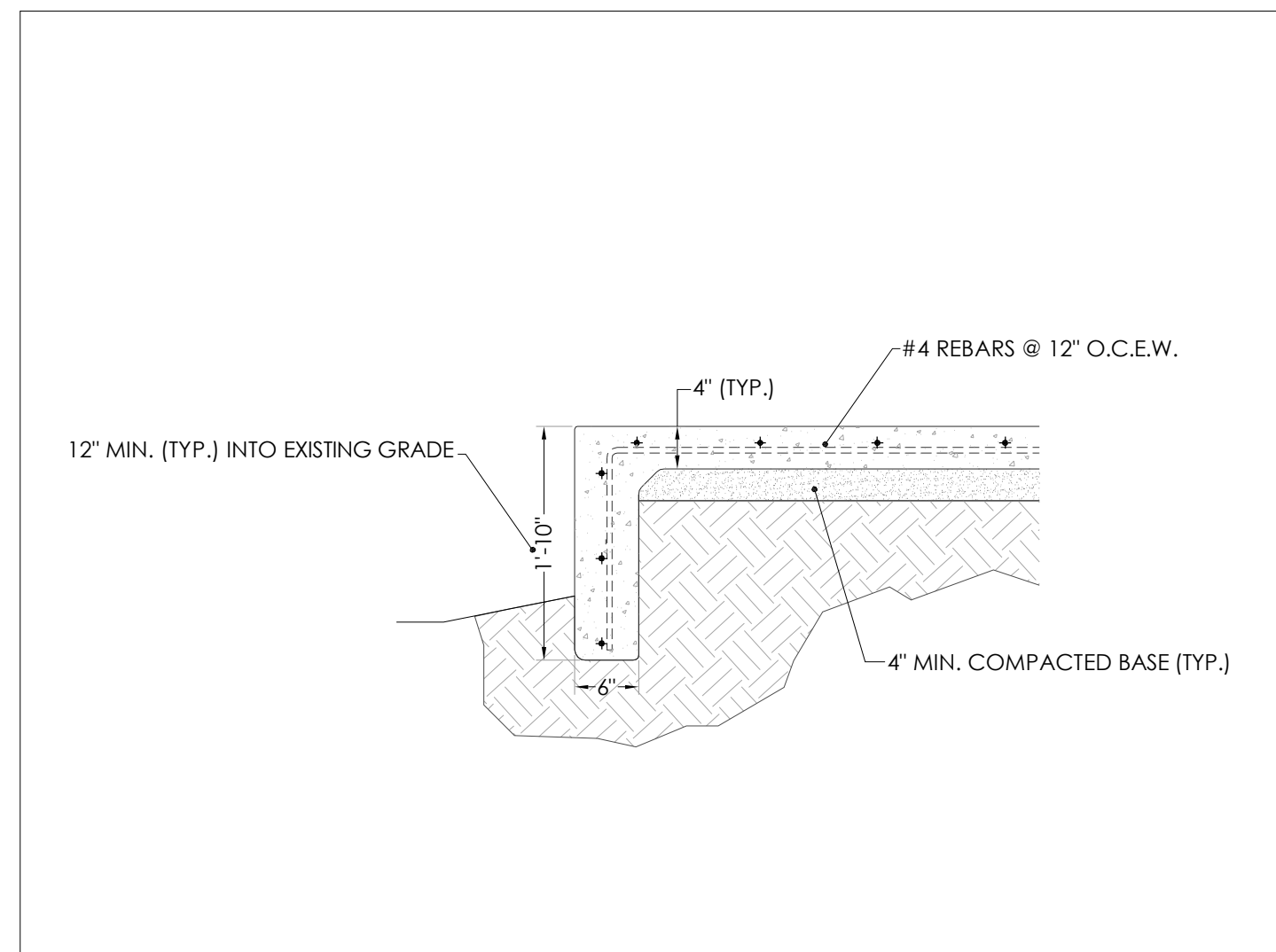




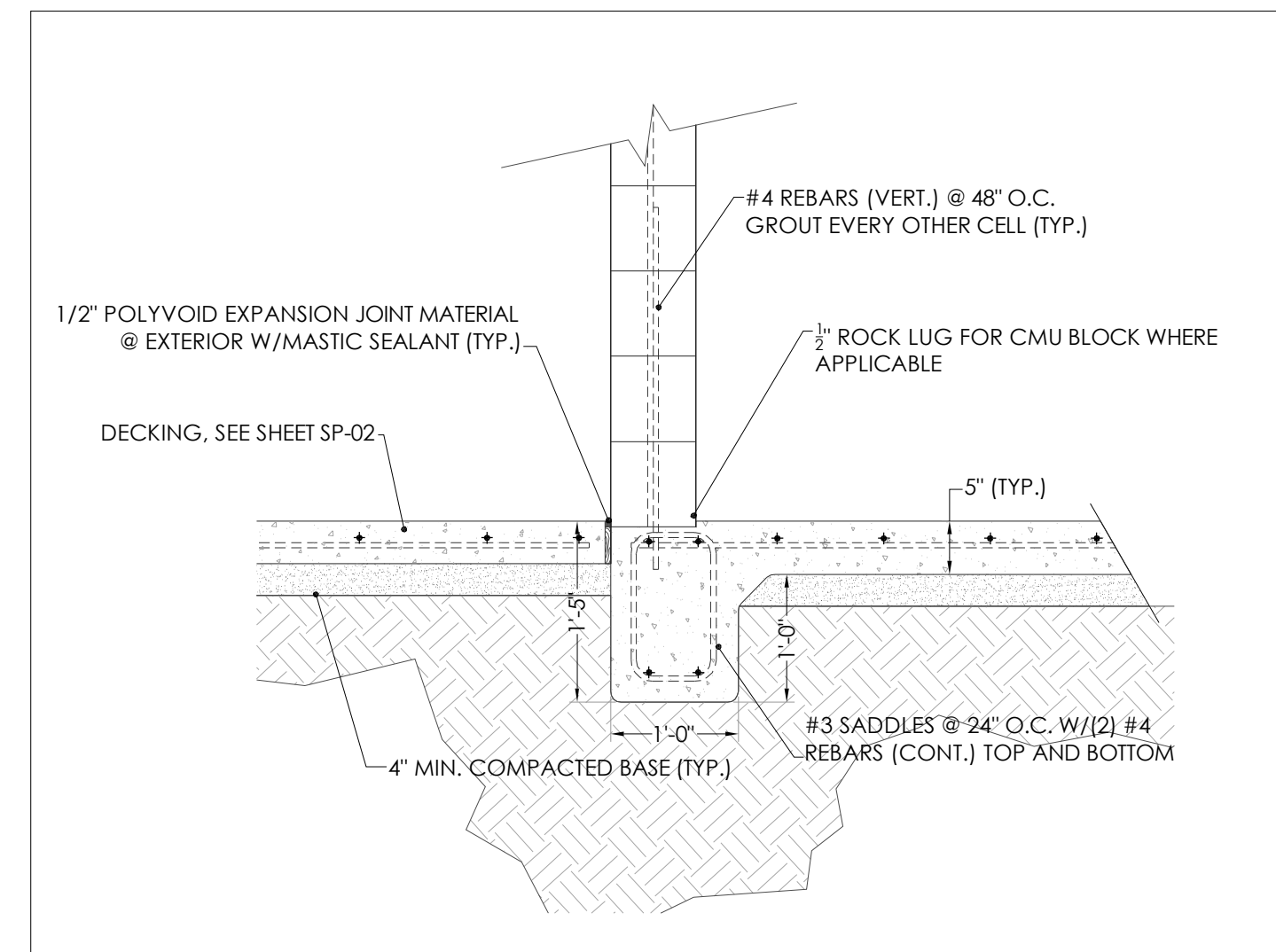
3 BATH HOUSE SLAB BEAM LAYOUT
 SCALE: 3/4" = 1' - 0"



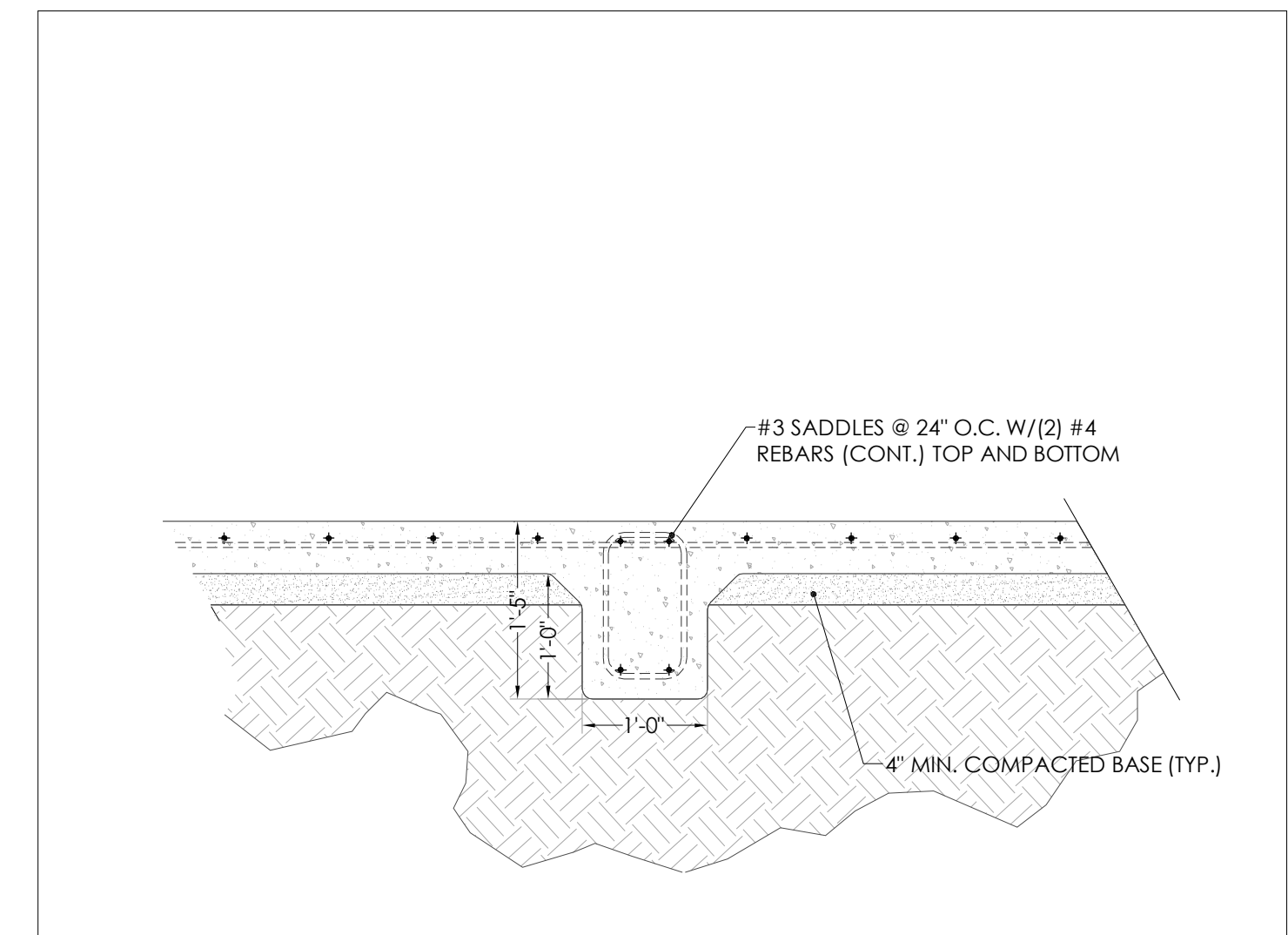
1 CORNER BARS DETAIL, TYP.
 SCALE: 3/4" = 1' - 0"



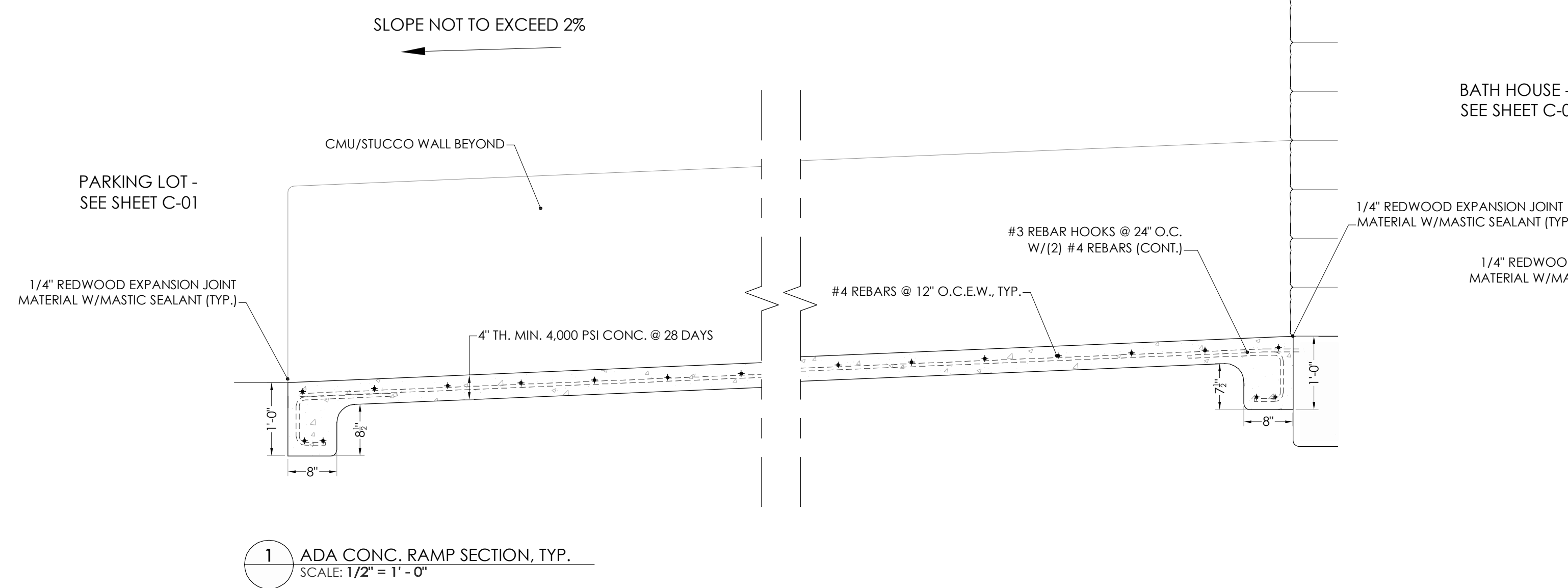
2 DECK FOOTING DETAIL, TYP.
 SCALE: 3/4" = 1' - 0"



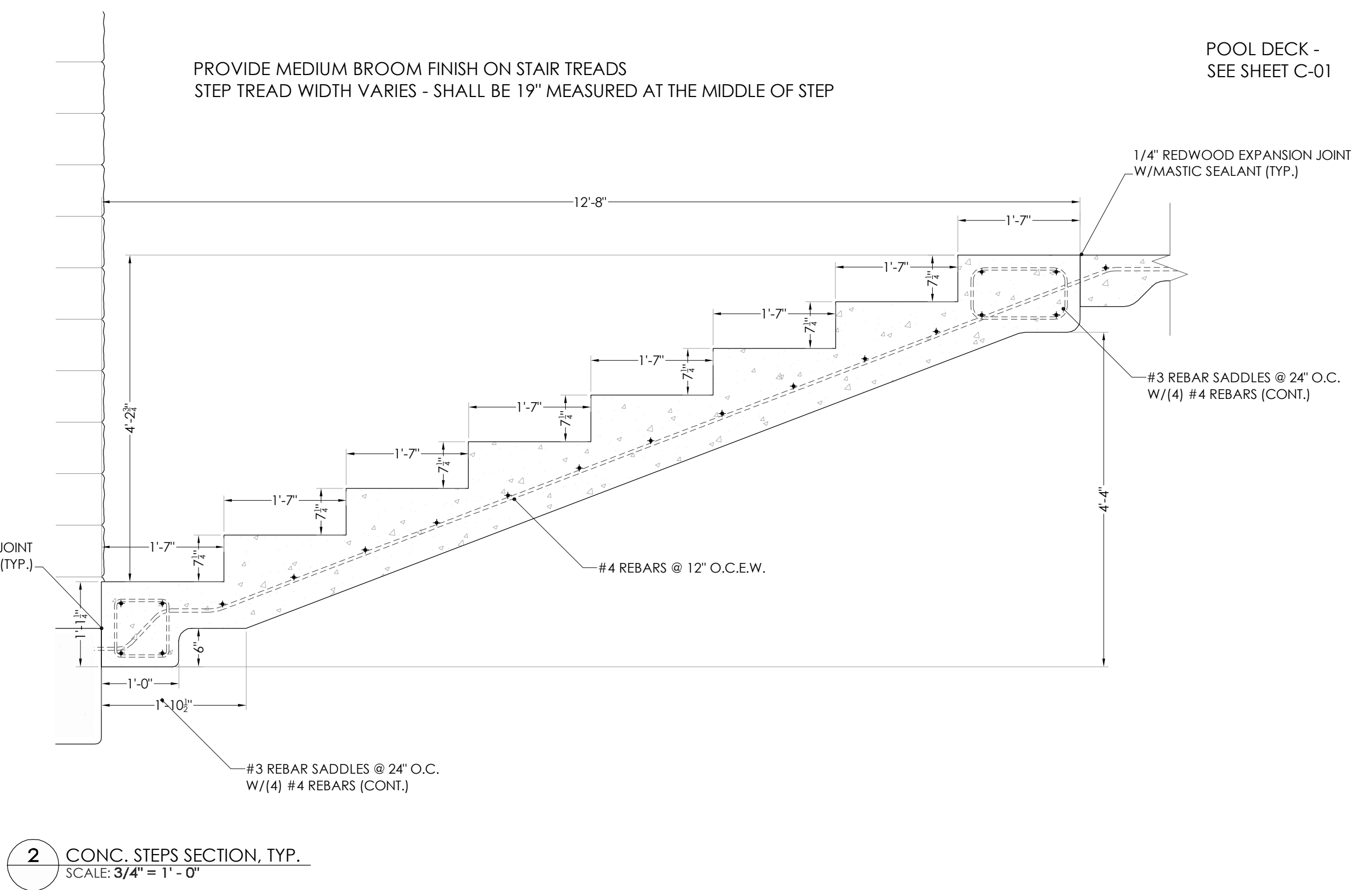
3 EXTERIOR BEAM DETAIL, TYP.
 SCALE: 3/4" = 1' - 0"



4 INTERIOR BEAM DETAIL
 SCALE: 3/4" = 1' - 0"

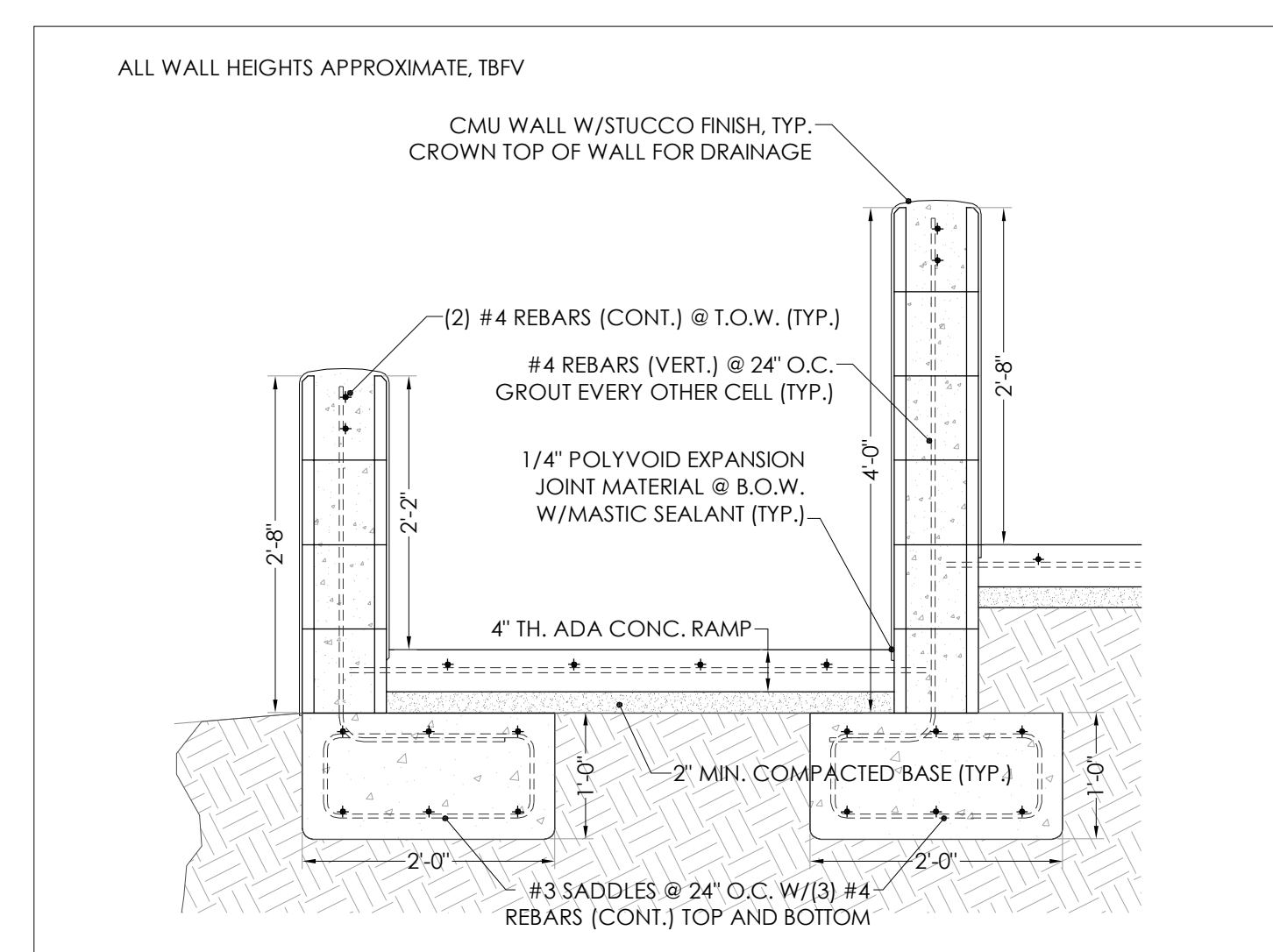


1 ADA CONC. RAMP SECTION, TYP.
 SCALE: 1/2" = 1'-0"

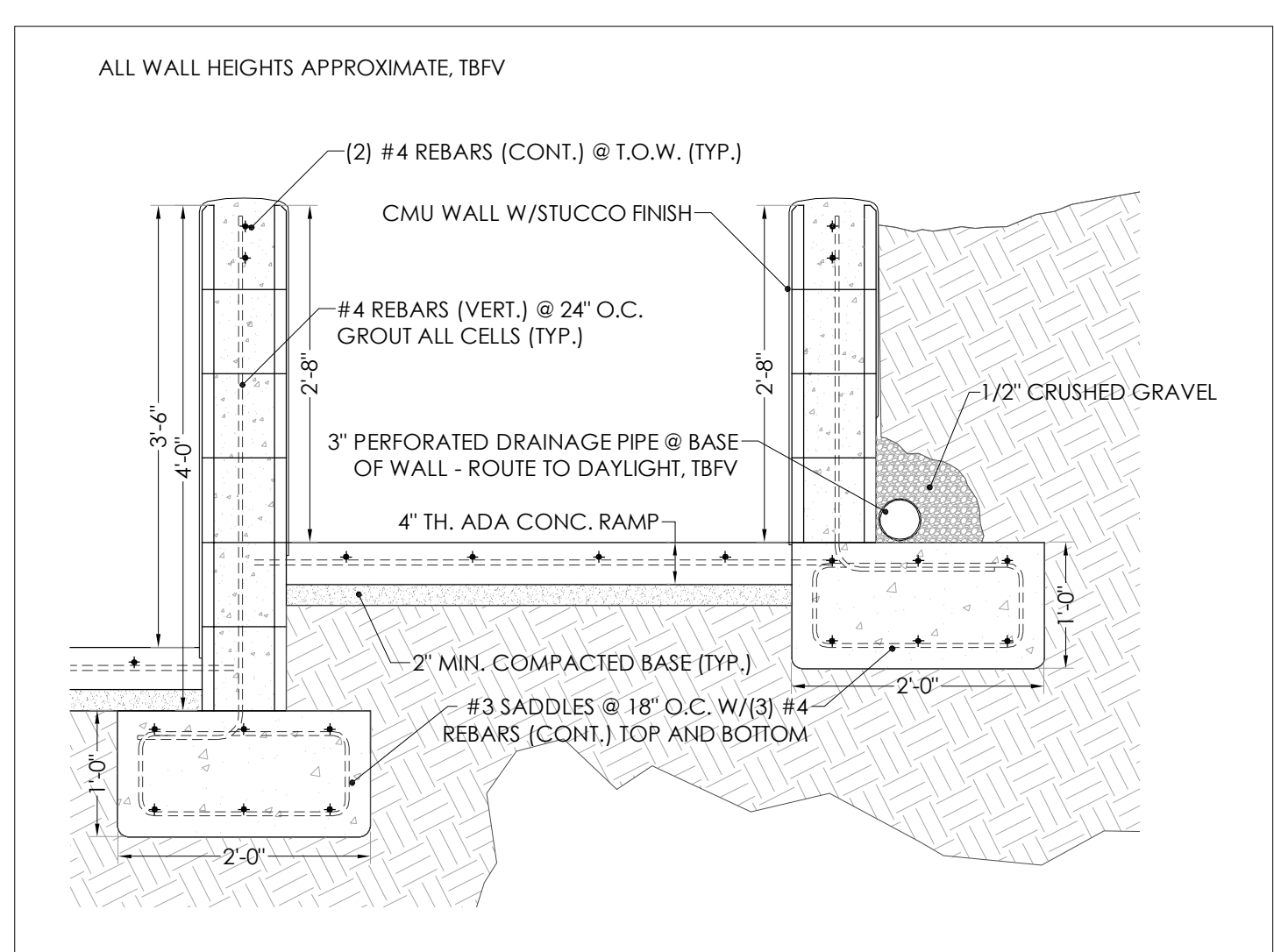


2 CONC. STEPS SECTION, TYP.
 SCALE: 3/4" = 1'-0"

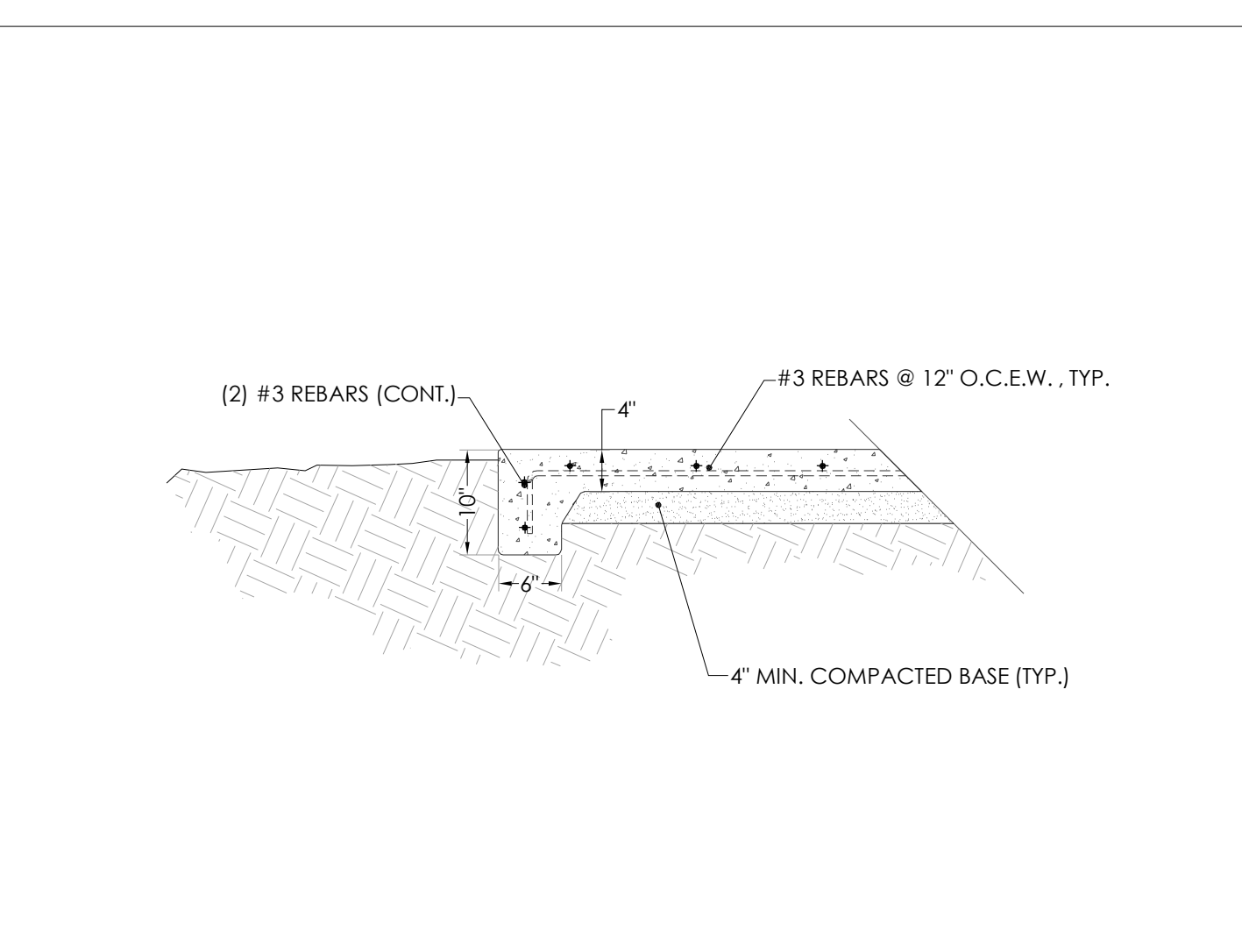
STRUCTURAL FOOTINGS SHALL BE 4,000 PSI CONCRETE @ 28 DAYS MIN. W/GRADE 60 REBARS



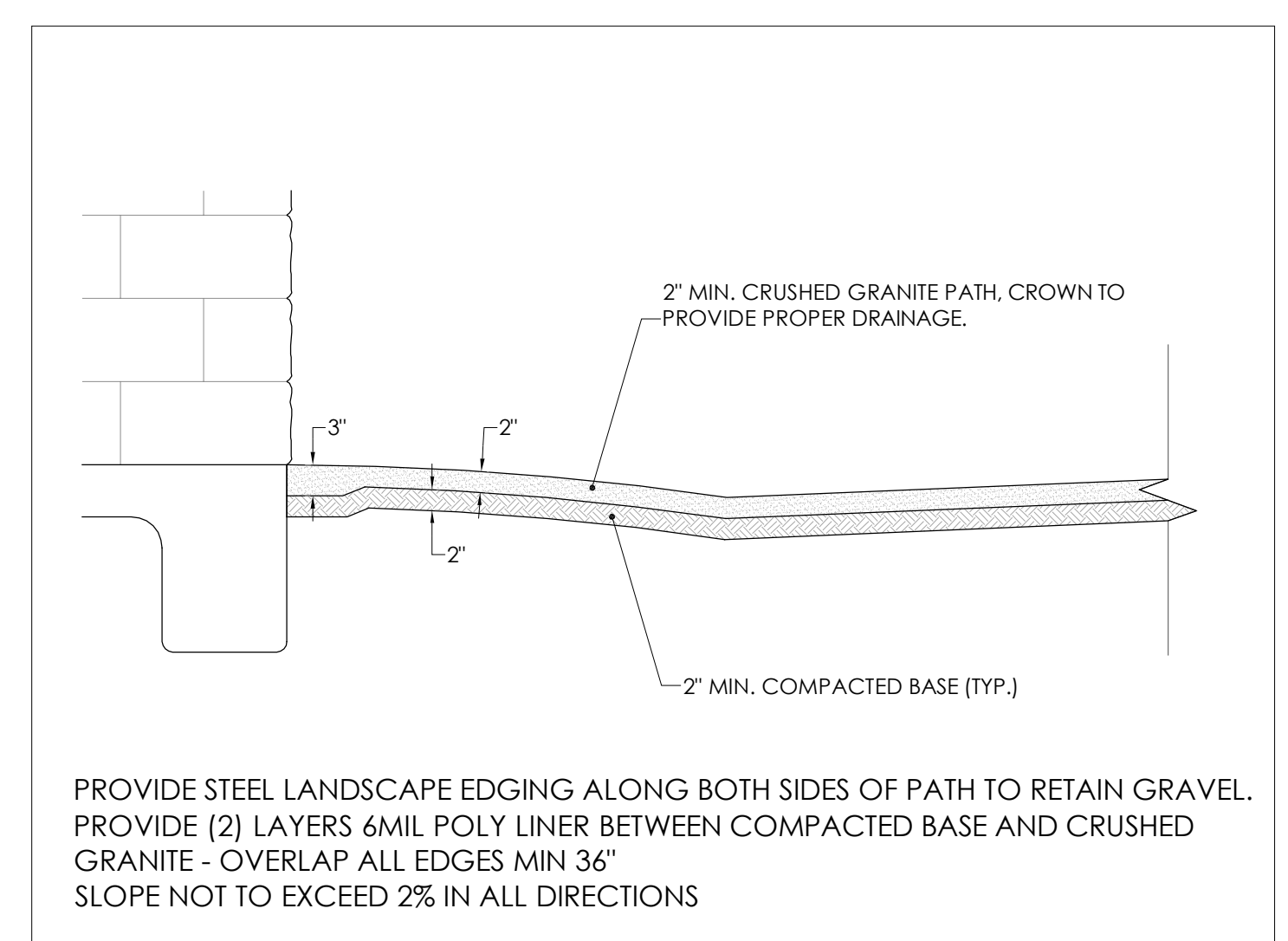
3 RETAINING WALL @ RAMP
 SCALE: 3/4" = 1'-0"



4 RETAINING WALL @ RAMP
 SCALE: 3/4" = 1'-0"



5 CONCRETE WALK TOE-DOWN FOOTING, TYP.
 SCALE: 3/4" = 1'-0"



6 CRUSHED GRAVEL RAMP, TYP.
 SCALE: 3/4" = 1'-0"

PROVIDE STEEL LANDSCAPE EDGING ALONG BOTH SIDES OF PATH TO RETAIN GRAVEL.
 PROVIDE (2) LAYERS 6MIL POLY LINER BETWEEN COMPACTED BASE AND CRUSHED GRANITE - OVERLAP ALL EDGES MIN 36"
 SLOPE NOT TO EXCEED 2% IN ALL DIRECTIONS

GENERAL NOTES:

FLOOR DRAINS SHALL BE PROVIDED WITH AUTOMATIC TRAP PRIMERS. FLOOR DRAINS TO CONFORM TO ASME A112.6.3, A112.3.1 OR CSA B79.

ALL EQUIPMENT USING CONNECTIONS TO THE POTABLE WATER SYSTEM THAT CAN CREATE A POSSIBLE CROSS-CONNECTION EFFECT ON HEALTH, REQUIRES BACKFLOW PROTECTION AS PER UPC SECT. 603. ALL BACKFLOW PREVENTION DEVICES SHALL BE 3RD PARTY CERTIFIED.

PROVIDE CLEANOUTS AS PER UNIFORM PLUMBING CODE SECTION 707, AT LOCATIONS REQUIRED PER 2009 IPC, SECTION 708.

NO PLUMBING VENT TO ROOF WITHIN 10 FEET FROM ANY AIR INTAKE.

ALL HOT AND COLD WATER & CONDENSATE LINES TO BE INSULATED. (REFER IECC.) INSTALL APPROVED PIPE WRAP OR INSULATION ON HOT WATER AND DRAIN PIPES ON ADA FIXTURES, AS PER 4.19.4 TEXAS ACCESSIBILITY STANDARDS. (TYP.)

EXACT LOCATIONS OF PIPING ENTRANCES/EXITS VARIES BUT THE BASIC DESIGN SIZES REMAIN. COORDINATE LAYOUT OF DOM WATER SUPPLY & WASTEWATER SERVICE TO BUILDINGS WITH EXISTING UTILITIES PRIOR TO STARTING WORK.

ENSURE NECESSARY HORIZONTAL & VERTICAL GRAB BARS FOR EACH ACCESSIBLE WATER CLOSET ARE INSTALLED IF REQUIRED BY CODE. (REFER 2009 IBC 1109).

PROTECT PLUMBING PIPES FROM CORROSION BY SHEATHING OR WRAPPING (PER CODE) AND WITH MIN BURIAL DEPTH OF 6" BELOW FROST LINE & MIN. OF 12" BELOW GRADE. (PER CODE)

PLUMBING PIPES (CONCEALED) SHALL BE PROTECTED AGAINST PHYSICAL DAMAGE BY #16 GAUGE STEEL PLATE (PER CODE).

PLUMBING PIPING SUPPORT SHALL COMPLY WITH SECTION 308 OF THE 2009 IPC.

INSTALL A WATER TEMPERATURE LIMITING DEVICE CONFORMING TO ASSE 1070 TO ALL PUBLIC-HANDWASHING FACILITIES REFER 2009 IPC SECTION 501.8.

ALL WATER HEATERS SHALL BE THIRD-PARTY CERTIFIED. (PER CHAPTER 5, 2009 IPC).

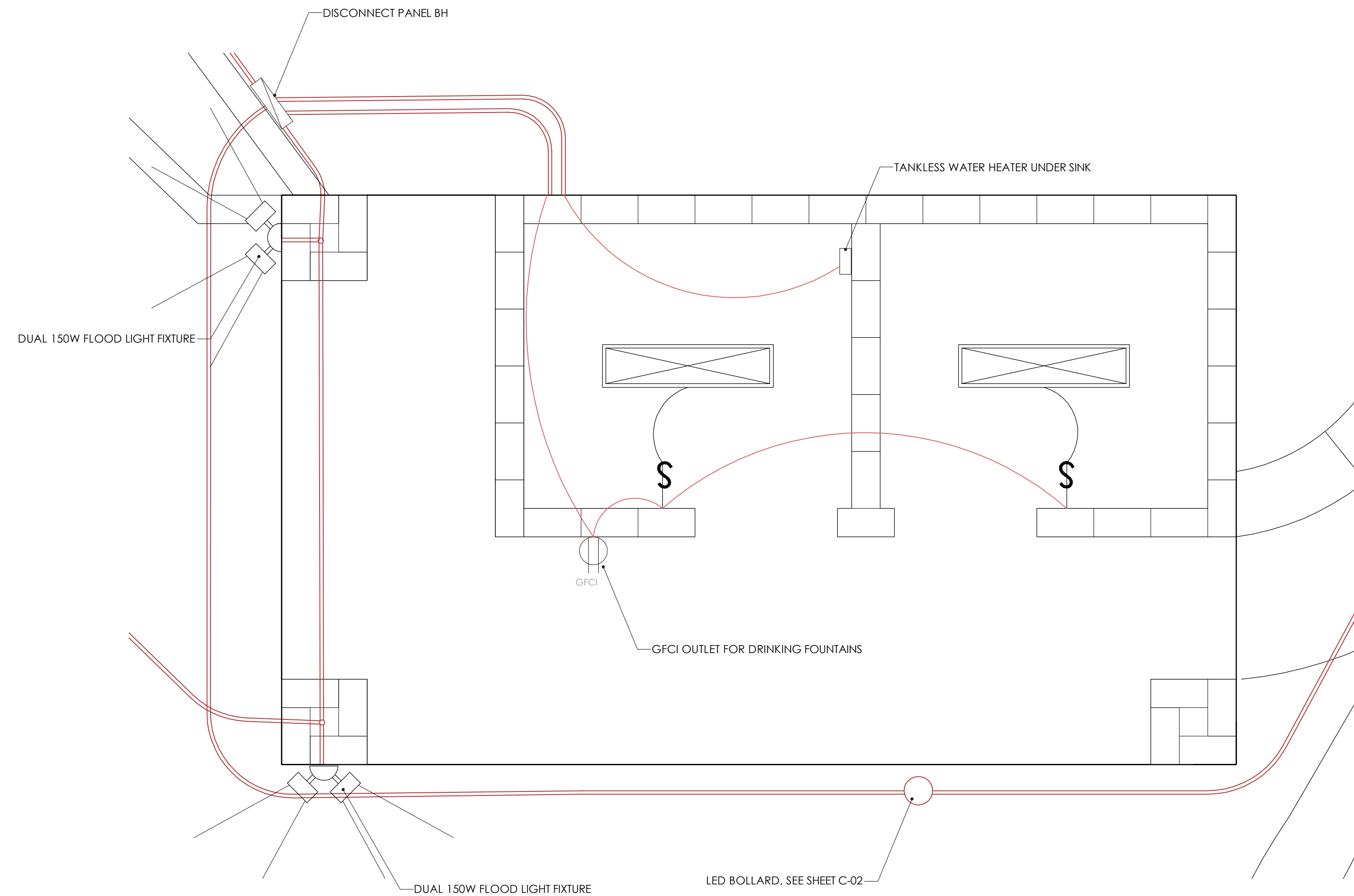
WATER HEATER RELIEF VALVES SHALL CONFORM TO ANSI Z21.22. (PER CHAPTER 5, 2009 IPC).

WATER HEATER RELIEF VALVES TO DISCHARGE TO EXTERIOR (PER CHAPTER 5, 2009 IPC).

WATER HEATER DRAIN PAN & PAN PIPING SHALL COMPLY WITH CHAPTER 5, 2009 IPC. MATERIALS AS PER CHAPTER 5, 2009 IPC. (COPPER/CPVC OR APPROVED ALTERNATE)

WATER SUPPLY SHUT-OFF VALVES INSTALLATION REQUIRED AS PER CHAPTER 5, 2009 IPC. (FIXTURE/APPLIANCE ISOLATION VALVES).

ALL VENT AND BRANCH PIPES SHALL BE GRADED SO AS TO DRAIN BACK TO MAIN DRAINAGE PIPE BY GRAVITY. (PER CODE)



PLUMBING KEYED NOTES:

- VERIFY EXISTING SHUTOFF VALVE FROM DOMESTIC WATER METER IS PER CODE AND IN PROPER WORKING ORDER. PROVIDE 1-1/2" DOM. WATER SERVICE LINE FOR NEW BUILDING. ROUTE NEW WATER LINE IN SLAB TO DISTRIBUTION LOCATIONS. INSTALL ONLY TYPE "L" COPPER PIPING FOR ABOVE GROUND USE & TYPE "K" SOFT COPPER PIPING (W/NO JOINTS) FOR BELOW GROUND/SLAB. ALL EXPOSED WATER PIPING (HOT, COLD & CONDENSATE) TO BE INSULATED.
- INSTALL NEW PLUMBING FIXTURES. COORDINATE LOCATIONS WITH ARCHITECTURE. ENSURE CODE COMPLIANT INSTALLATION. ROUTE REQUIRED HOT & COLD WATER SUPPLY LINES TO P-FIXTURES. INSTALL & ROUTE NEW WATER LINES ABOVE CEILING U.O.N. SUPPORT & INSULATE AS REQUIRED BY CODE. PROVIDE NECESSARY BACKFLOW PROTECTION WHERE REQUIRED. (TYP) REFER CODE & K.E.S. REQUIREMENTS. PROVIDE TRAP PRIMERS FOR ALL FLOOR/HUB DRAINS AND FL. SINKS.
120° F HOT WATER TO PUBLIC LAVATORIES & HAND WASHING P-FIXTURES(HAND SINKS).
- BACKFLOW PREVENTERS:
NOTE: ALL PLUMBING EQUIPMENT USING CONNECTIONS TO THE POTABLE WATER SYSTEM THAT CAN CREATE A POSSIBLE CROSS-CONNECTION EFFECT ON HEALTH (IF ANY) REQUIRES BACKFLOW PROTECTION AS PER CODE. PROVIDE NECESSARY BACKFLOW PREVENTERS. PROVIDE INDIRECT WASTE DISCHARGE LOCATIONS FOR BACKFLOW PREVENTERS WHERE REQUIRED.

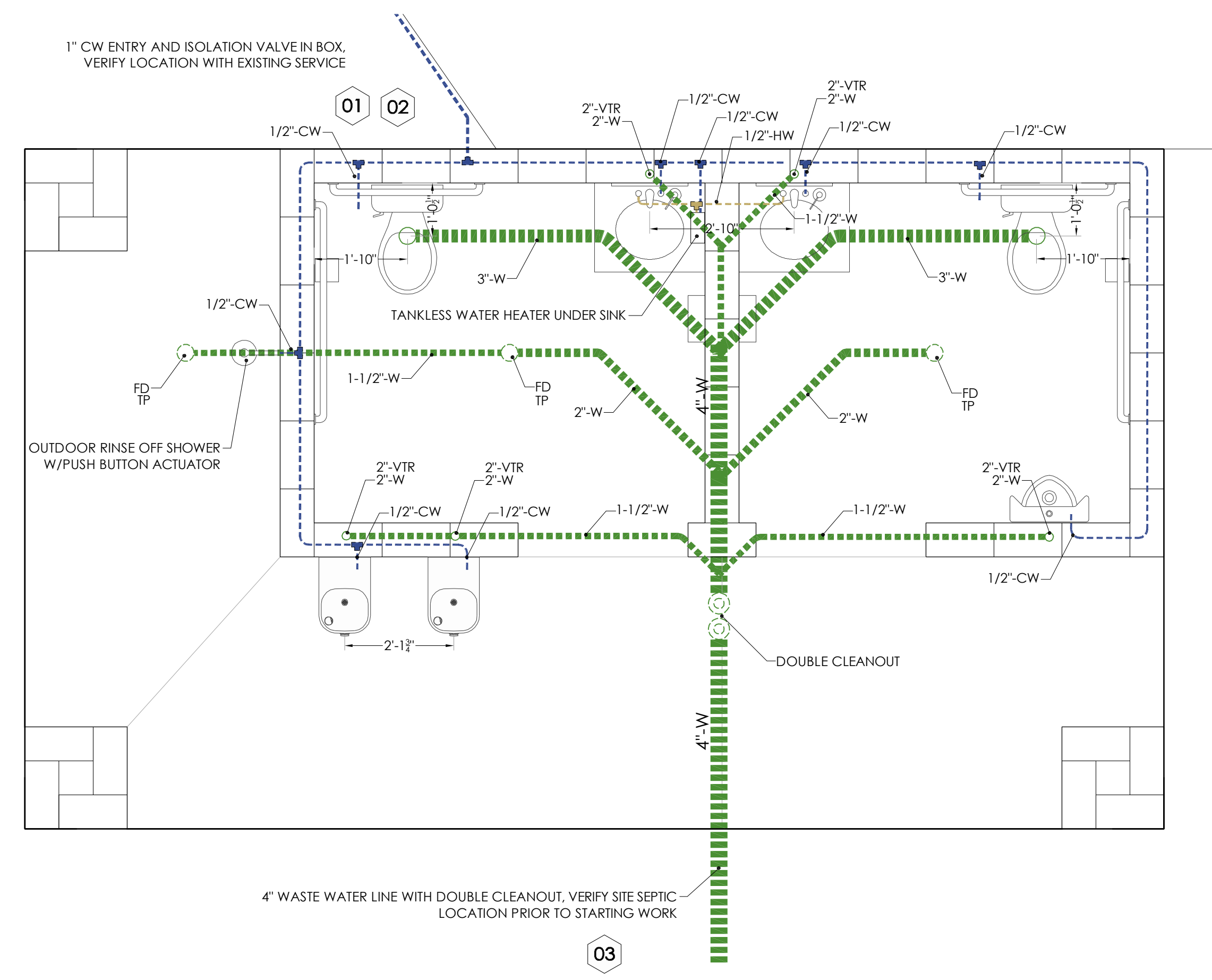
GENERAL ELECTRICAL NOTES:

ALL WIRING SHALL CONFORM TO 2011 NEC AND CITY OF AUSTIN CODES AND ORDINANCES.
ALL 15 AND 20 AMPERE RECEPTACLES SHALL BE TAMPER-RESISTANT TYPE, PER 2011 NEC, SECTION 406.11

ELECTRICAL PANEL SCHEDULE BH						
120/230V 1-PHASE 3-WIRE 60A						
CIRCUIT	DESCRIPTION	TRIP	VOLT AMPS		TRIP	DESCRIPTION
			L1	L2		
L1	EXT. LIGHTING	20	1364	4500	20	REC. & INT. LIGHTS
5	SPARE	N/A				
7	SPARE	N/A	4500		40	WATER HEATER
7	SPARE	N/A		0	N/A	SPARE
9	SPARE	N/A		0	N/A	SPARE
11	SPARE	N/A		0	N/A	SPARE
			KVA	5.86	4.50	
			AMPS	48.9	37.5	

SYMBOLS

- COOPER LIGHTING TMQ 150 300W DUAL HALOGEN FLOODLIGHT
- LITHONIA 2VTL4R 30L LP835 1'x4' LED FIXTURE, 32W
- LIGHT SWITCH SINGLE POLE
- OUTLET/RECEPTACLE
- GFCI OUTLET/RECEPTACLE



NOTES

GENERAL NOTES:

THESE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND SHOULD BE CONSIDERED CONCEPTUAL. IT IS THE BUILDER'S RESPONSIBILITY TO ASCERTAIN THE VALIDITY OF THE DESIGN. UNDER NO CIRCUMSTANCES SHOULD THE DESIGNER BE HELD RESPONSIBLE FOR ERRORS OR INCONSISTENCIES, OR FAILURE TO SHOW/DIAGRAM COMMONLY ACCEPTED CONSTRUCTION METHODS OR STANDARDS.

THESE DRAWINGS ATTEMPT TO PROVIDE THE INFORMATION REQUIRED TO MEET TRAVIS COUNTY HEALTH CODE. IT SHOULD BE UNDERSTOOD THAT THERE MAY BE ALTERNATIVES TO THE WORK DESCRIBED HEREIN. ULTIMATELY IT IS THE BUILDER'S RESPONSIBILITY TO DETERMINE THE BEST METHODS AND CONSIDERATIONS TO ACHIEVE THE REQUIREMENTS SET OUT IN THE HEALTH CODE.

REYNA DESIGN WILL NOT BE HELD RESPONSIBLE FOR DESIGN CHANGES/OMISSIONS, TO THESE DRAWINGS OR OTHERWISE, THAT ULTIMATELY AFFECT THE OVERALL SAFETY OR LEGALITY OF THE FACILITY/POOL.

STRUCTURAL NOTES:

SHOTCRETE SHALL MAINTAIN A MINIMUM COMPRESSIVE STRENGTH OF 4,500 PSI @ 28 DAYS.
 BATH HOUSE SLAB SHALL MAINTAIN A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI @ 28 DAYS.
 ALL OTHER CAST IN PLACE CONCRETE SHALL MAINTAIN A MINIMUM COMPRESSIVE STRENGTH OF 3,500 PSI @ 28 DAYS

REINFORCING STEEL TO BE:

#4 GRADE 60 PLACED @ 8" O.C.E.W. IN POOLS, UNLESS NOTED OTHERWISE.
 #4 GRADE 60 PLACED @ 12" O.C.E.W. IN SLABS/FOUNDATIONS, UNLESS NOTED OTHERWISE.
 #3 GRADE 60 PLACED @ 12" O.C.E.W. IN DECKS, UNLESS NOTED OTHERWISE.

GOVERNED BY THE LATEST EDITIONS OF THE FOLLOWING CODES OR SPECIFICATIONS: ASTM A615/A615M. NEW, DEFORMED BILLET STEEL BARS, GRADE 60. TIED WITH FS QQ-W-461, BLACK ANNEALED STEEL, 16 GA. (MIN). SPLICES IN ACCORDANCE WITH ACI 315, AND SPLICES SHALL BE 40x DIA. OF BAR SIZE (MIN).

ELECTRICAL NOTES:

ALL WORK IN POOL AREA SHALL BE IN ACCORDANCE WITH CURRENT NEC, ARTICLES 250 & 680, AS WELL AS AUSTIN CODE ORDINANCE # 20141211-199 SECTION 680.13 AND 680.23(A)(4)

A CLEARLY LABELED EMERGENCY SHUTOFF SWITCH SHALL BE INSTALLED TO DISCONNECT ALL UNGROUNDED CONDUCTORS FOR POOL EQUIPMENT AND UNDERWATER LIGHTING SYSTEMS, AS DEFINED IN THE NATIONAL ELECTRICAL CODE. THE SWITCH SHALL BE INSTALLED IN A PLACE THAT IS READILY ACCESSIBLE, WITHIN SIGHT, AND NOT LESS THAN 5 FEET FROM THE WATER'S EDGE. THE SIGN FOR THE SHUT-OFF SWITCH SHALL BE RED IN COLOR, WITH LETTERS CAPABLE OF BEING READ FROM A DISTANCE OF FIFTY (50) FEET. SIGN MATERIAL SHALL BE PLASTIC, METAL OR SIMILAR DURABLE MATERIAL. THE SIGN SHALL READ "EMERGENCY SHUT OFF." THE EMERGENCY SHUT OFF SWITCH SHALL BE RED IN COLOR AND OF THE MUSHROOM PUSH TO DE-ENERGIZE TYPE.

ELECTRICAL CONTRACTOR SHALL COMPLY WITH THE MOST RECENTLY REVISED VERSIONS OF ALL APPLICABLE REQUIREMENTS OF LAWS, RULES, REGULATIONS, CODES AND ORDINANCES OF FEDERAL, STATE, AND LOCAL AUTHORITIES HAVING JURISDICTION ALL EQUIPMENT AND MATERIALS SHALL COMPLY WITH SAID AUTHORITIES WHETHER INDICATED ON THE CONTRACT DOCUMENTS OR NOT ELECTRICAL CONTRACTOR SHALL PROVIDE A DISCONNECTING MEANS PER NEC, (I.E. BREAKERS) FOR ALL ELECTRICAL EQUIPMENT

THESE DRAWINGS ATTEMPT TO GIVE REASONABLE INDICATIONS OF THE LOCATIONS OF THE VARIOUS EQUIPMENT AND DEVICES - ELECTRICAL CONTRACTOR SHALL COORDINATE LOCATIONS WITH OTHER TRADES AND OWNER AS REQUIRED BY SITE CONDITIONS, AND ALL AUTHORITIES HAVING JURISDICTION

ELECTRICAL CONTRACTOR SHALL COORDINATE ALL CONDUIT ROUTING WITH THE STRUCTURE, PIPING, AND OTHER EXISTING CONDITIONS AS REQUIRED FOR A COMPLETE, CONFLICT FREE INSTALLATION

ALL CONDUIT SHALL RUN PARALLEL TO WALLS AND FLOORS - COORDINATE WITH OTHER TRADES PROVIDE EQUIPMENT GROUNDING CONDUCTOR SIZED PER NEC TABLE 250.122 IN ALL ELECTRICAL CONDUITS SERVING POOL EQUIPMENT, LIGHTING OR POWER IN POOL AREA A SEPARATE, GREEN GROUND CONDUCTOR SHALL BE PROVIDED WITH ALL BRANCH AND FEEDER CIRCUITS. SIZE PER NEC 250-95, UNLESS NOTED OTHERWISE ALL SINGLE POLE CIRCUITS SHALL CONTAIN A SEPARATE NEUTRAL CONDUCTOR

ELECTRICAL CONTRACTOR TO BOND ALL METAL WITHIN 15' OF SWIMMING POOLS, INCLUDING BUT NOT LIMITED TO, STEEL COLUMNS, WALLS, WINDOW FRAMES, DOORS, DOOR FRAMES, ALL METALLIC PLUMBING, ALL METALLIC POOL EQUIPMENT, AND REINFORCEMENT STEEL IN POOLS. BOND WIRE TO BE #8 BARE COPPER

SHEETS

COVER SHEET, SITE MAP AND LEGEND
 OVERALL SITE LAYOUT AND NOTES
 OVERALL UTILITIES LAYOUT AND NOTES
 BATH HOUSE DIMENSIONS AND LAYOUT
 BATH HOUSE ELEVATIONS
 BATH HOUSE STRUCTURAL LAYOUT
 BATH HOUSE AND SITE STRUCTURAL DETAILS
 BATH HOUSE ELECTRICAL AND PLUMBING LAYOUT
 BATH HOUSE ELECTRICAL AND PLUMBING NOTES

SP-N1 POOL CONSTRUCTION NOTES, SHEETS, SPECIFICATIONS
 SP-N2 POOL SPECIFICATIONS SHEETS
 SP-01 POOL LAYOUT AND DIMENSIONS
 SP-02 POOL PLUMBING AND ELECTRICAL LAYOUT
 SP-03 POOL SECTIONS AND SHOTCRETE DETAILS
 SP-04 POOL EQUIPMENT LAYOUT
 SP-05 POOL DECK AND ENCLOSURE LAYOUT/DETAILS

ABBREVIATIONS

@	AT
Ø	DIAMETER
(4x)	TOTAL QUANTITY OF ITEMS
A.D.A.	AMERICANS WITH DISABILITIES ACT
A	AMPS
B-	BACKWASH PLUMBING
C.I.P.	CAST IN PLACE
CL	CENTERLINE
C TO C	CENTER TO CENTER
CONT.	CONTINUOUS
C.J.	CONTROL JOINT
EA	EACH
EXCV.	EXCAVATION
E.J.	EXPANSION JOINT
GAL.	GALLONS
G.P.M.	GALLONS PER MINUTE
H.P.	HORSE POWER
LN. FT.	LINEAR FEET
M-	MAIN DRAIN PLUMBING
MAX.	MAXIMUM
MIN.	MINIMUM
O.C.	ON CENTER
O.C.E.W.	ON CENTER EACH WAY
R	RADIUS
R-	RETURN PLUMBING
REQ.	REQUIRED
S.V.R.S.	SAFETY VACUUM RELEASE SYSTEM
SQ. FT.	SQUARE FEET
S.S.	STAINLESS STEEL
S-	SUCTION (SKIMMER) PLUMBING
TH	THICKNESS
T.B.D.	TO BE DETERMINED
T.B.V.	TO BE FIELD VERIFIED
TOT.	TOTAL
T.D.H.	TOTAL DYNAMIC HEAD
T.O.W.	TOP OF WALL
v	VOLTS
w	WATTS
W.L.	WATER LINE
W.P.	WEATHER PROOF

POOL SPECIFICATIONS

TYPE / CLASS	C (SINGLE FAMILY)
DIMENSIONS	32'-10" x 19'-7"
WATER LINE PERIMETER	97'-0"
TOTAL PERIMETER IMPEDIMENT	0'-0" (0%)
DEPTH	3'-6" TO 4'-10"
VOLUME	15,800 GALLONS
WATER SURFACE AREA	600 SQ.FT.
TOTAL INTERNAL SURFACE AREA	908 SQ.FT.
MAX. BATHER LOAD	25 PERSONS
TURNOVER RATE	4.38 HOURS (60 GPM)
DECKING AREA	1,380 SQ. FT.
STEPS	37'
BENCH	0'

HANDRAILS - S.S. 1.9"Ø

64" S.R. SMITH CUSTOM 3-BEND (1x)
 S.R. SMITH DADE C FLORIDA 3-RUNG LADDER (1x)

ADA LIFT - PENTAIR AQUATRAM POOL LIFT

PLUMBING AND EQUIPMENT

WALL RETURNS - PENTAIR 3/4" DIRECTIONAL (3x)
 FLOOR RETURNS - PENTAIR/STARITE (1x)
 SKIMMERS - WATERWAY 2" SLIP (2x)
 MAIN DRAINS - WATERWAY 8" ROUND SUMP (2x)
 w/VGB APPROVED ANTI-VORTEX GRATE AND 1-1/2" HYDROSTATIC RELIEF VALVE
 68 GPM MAX. FLOW @ 1.5 FT/S VELOCITY
 MAKEUP WATER/AUTO FILL: PENTAIR FLUID MASTER
 LIGHTING: PENTAIR 5G LED 12V (300w EQ.) (2x)

FILTRATION:
 PENTAIR TRITON 2 SAND FILTER (1x)
 FILTRATION PUMP:
 PENTAIR WHISPERFLO (1 HP) 120v 1-PHASE, 60 GPM @ 67 FT. T.D.H.
 CHLORINATION:
 RAINBOW HC3330 OFFLINE 1" PVC SLIP STREAM SOLID TCCA TABLET FEED 90%
 AVAILABLE CL₂ BY WEIGHT TRICHLORO-S-TRIAZINETRIONE 15 LBS STORAGE

FINISHES -

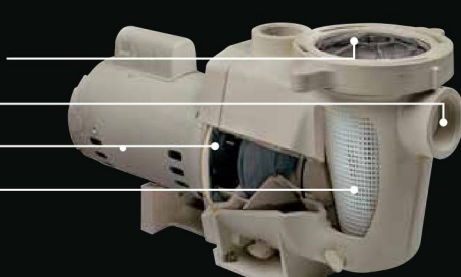
COPING - LUEDER STONE 12" x 24" - TAN 104'
 TILE - OWNER TO SELECT COLORS
 PLASTER - WHITE MARCITE BY SGM, PLASTER SHALL BE 3/8"-5/8" TH. (TYP.)
 WATERLINE - 6" BAND FROST-PROOF CERAMIC TILE BY NPT 70 SQ.FT.

DEPTH MARKERS, 6"x6" w/4" LETTERING PER CODE (9 LOCATIONS)
 "NO DIVING" MARKERS, NON-SKID 6" TILE w/4" LETTERING (10 LOCATIONS)
 STEP AND BENCH TRIM TILE - NON-SKID 2" x 2", HIGH CONTRAST, PER CODE

EQUIPMENT SPECIFICATIONS

WHISPERFLO® HIGH PERFORMANCE PUMP

Cam and Ramp™ Lid makes inspection and cleaning easy and quick
 Heavy-duty threading for dependable worry-free connections
 Durable, commercial-grade motor never needs lubrication
 Oversized strainer basket extends time between cleanings



QUIET, EFFICIENT, DURABLE.

The WhisperFlo pump delivers maximum circulation efficiency at the lowest operating cost, and long, trouble-free life with minimal maintenance. Our legendary hydraulic design has been refined over 40 years for superior performance. No wonder more than 2 million Pentair pumps have been selected by pool professionals.

- Advanced FunnelFlo™ Diffuser and high-efficiency impeller maximize water flow and energy efficiency while minimizing turbulence and noise.
- Energy-efficient motor with commercial-grade frame, rustproof stainless steel shaft and permanently lubricated, sealed bearings for long life.
- Available in single-speed and two-speed models.
- Ideal for pool and spa combinations and for operating in-floor cleaning systems.
- One-year limited warranty. See warranty for details.

AVAILABLE FROM:

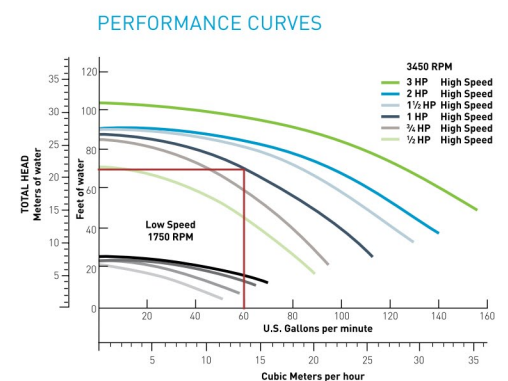
PENTAIR

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pumps • filters • heaters • heat pumps • automation • lighting • cleaners • sanitizers • water features • maintenance products

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TRITON® II FIBERGLASS SAND FILTER

Easy access, heavy-duty closure with built-in pressure relief valve makes inspection and maintenance fast, safer and easy
 Threaded bulkhead connectors for easier installation and service
 GlasLok™ Process creates a one-piece, fiberglass-reinforced tank with UV-resistant surface finish for years of unequalled strength and durability



Model Number	Filter Area Sq. Ft.	Vertical Clearance*	Filter Diameter	Required Sand† (lbs)	Flow Rate GPM (Comm.)	Turnover Capacity-Res. (Gallons)
						8 hrs. 10 hrs. 12 hrs.
TR 40	1.92	32.5"	19"	175	38	18,240 22,800 27,360
TR 50	2.46	36.75"	21"	225	49	23,520 29,400 35,280
TR 60	3.14	37.5"	24"	325	63	30,240 37,800 45,360
TR 100	4.91	41.75"	30"	600	74	35,520 44,400 53,280
TR 140	7.06	47.25"	36"	925	106	50,880 63,600 76,320

*Use standard #20 silica sand.
 †Required clearance to remove the closure.

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RAINBOW™ HIGH CAPACITY CHLORINE/ BROMINE FEEDERS

• Designed for ease of use and simple maintenance
 • Drain valve allows easier draining for safer recharging or winterizing
 • Standard threaded inlet and outlet fittings included for easy installation



HC-3340 40 lb. capacity
 HC-3330 30 lb. capacity
 HC-3315 15 lb. capacity

THE PERFORMANCE LEADER IN AUTOMATIC SANITIZATION FOR LARGE RESIDENTIAL AND COMMERCIAL POOLS

The INLET control valve side of the feeder connects to the plumbing on the discharge side of the pump, before the filter. The OUTLET side of the feeder connects to the pool return line after the filter and/or heater, pool cleaner, diverter valves, or any other installed equipment. Installation of a corrosion-resistant check valve such as #R172288 by Pentair between the feeder inlet and outlet and the equipment is strongly recommended to check backflow of chemicals. This helps ensure equipment longevity.

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MODELS & SPECIFICATIONS

Model	HC-3315	HC-3330	HC-3340
Part Number	R171215	R171230	R171240
Height	21.5"	39.125"	49.75"
Width	8"	8"	8"
Depth	15"	15"	15"
Maintenance Clearance	22.75"	40.375"	51"
Capacity (lbs.)	15	30	40
Flow rate (GPM)	34	34	11.5
Maximum Output Rate, Chlorine* (lbs./hr.)-Pool at listed flowrate	2.8	4.6	3.0
Maximum Output Rate, Chlorine* (lbs./hr.)-Spa at listed flowrate	4.8	7.9	5.7
Maximum Output Rate, Bromine* (lbs./hr.)-Pool at listed flowrate	1.3	2.7	1.7
Flow rate (GPM)	17.8	17.8	9.2
Output Rate, Chlorine* (lbs./hr.)-Pool at listed flowrate	2.1	3.4	2.6
Output Rate, Chlorine* (lbs./hr.)-Spa at listed flowrate	1.8	3.0	5.4
Output Rate, Bromine (lbs./hr.)-Pool at listed flowrate	1.0	2.0	1.5
Maximum Pool Size @ 34 GPM (Chlorine-Gals)	224,000	349,000	458,500
Maximum Pool Size @ 34 GPM (Bromine-Gals)	99,200	164,000	292,600

Maximum working pressure - 50 psi
 * Results based on use of 1" Trichlor tablets

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 O: 512.687.7869 C: 512.786.7814

CONSTRUCTION NOTES, SHEETS, SPECIFICATIONS

MANSFIELD ESTATES

SWIMMING POOL SHOP DRAWINGS
 5921 HI LINE DRIVE, AUSTIN, TX 78732

PERMIT SET 06.20.2016

NOTES, SHEETS, SPECS
 SCALE: SHEET:
 N/A SP-N1



Technical Specifications and Product Info Sheet
Phone: (800)404-5254 Fax: (386)454-1844

Part # NC6FWP-SYMRDRED
Flat 6x6 Smooth Round No Diving Symbol Red & Black

Part # NC2FDP-NODIVING
Flat 6x12 Skid Resistant w/4 inch NO DIVING



NO DIVING

Part # DC6FDP4-03
Flat 6x6 Skid Resistant w/4 inch #3



DECK TILES

Part # DC6FWP4-TOP06
Flat 6x6 Smooth w/4 inch #6 (At Top Of Tile)



POOL WATERLINE TILES

Part # DC6FWP4-TOPFT
Flat 6x6 Smooth w/4 inch FT (At Top Of Tile)



Technical Specifications - All Tiles

6x6 Flat Tiles

- Actual tile size: 5-13/16 in square x 3/16 in thick
- 14.9 cm square x 0.5 cm thick

Other Specs:

- Weight: 0.683 lbs
- Water absorption: <= 1.5% (EN 99)
- Breaking strength: >= 40 N/mm² (EN 100)
- Coefficient of friction (skid resistant only):
- Dry: >= 0.9 (ASTM C1028)
- Wet: >= 0.9 (ASTM C1028)

6x12 Flat Tiles

- Actual tile size: 5-13/16 in x 11-13/16 in x 9/32 in thick
- 14.9 cm x 30.0 cm x 0.75 cm thick

Other Specs:

- Weight: 1.4 lbs
- Water absorption: <= 1.5% (EN 99)
- Breaking strength: >= 40 N/mm² (EN 100)
- Coefficient of friction (skid resistant only):
- Dry: >= 0.9 (ASTM C1028)
- Wet: >= 0.9 (ASTM C1028)

Bullnose, Logo Signature & Step Tiles

6x6 bullnose tiles:

- Industry format A3602
- Weight: 0.75 lbs

Logo and Signature Tiles:

- 3-3/4" and 4-1/4" flat tiles
- Non frostproof
- Frostproof

Step Tiles: Industry format A4200, 2" x 6"

- Weight: 0.4 lbs
- Dry: >= 0.9 (ASTM C1028)
- Wet: >= 0.9 (ASTM C1028)

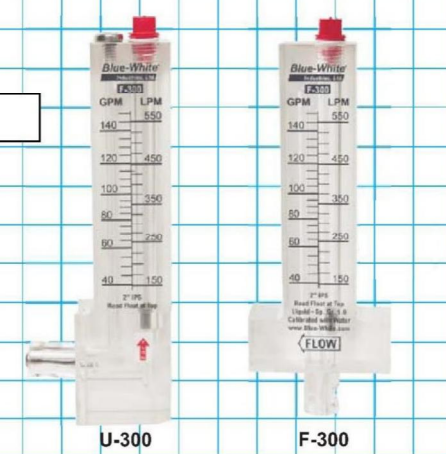
Blue-White Industries, Ltd.

Pitot Tube Insertion Meters
Engineering and Technical Data

F-300
U-300
D-300

Clamp-on Insertion Mount
Dual GPM / LPM scale

2.5" FLOW METER



Features:

- Dual GPM/LPM scale printed on both sides of the meter.
- 1" through 8" pipe sizes.
- Flow rates from 2 to 1900 GPM (8 to 7200 LPM).
- Corrosion resistant 316SS or Teflon internal float materials.
- One piece machined acrylic body.
- Mounts to existing pipe. No unions or adapters required.
- Models for mounting on horizontal or vertical pipe.
- Mounting clamps and gasket included.

Specifications:

Pipe Requirements: IPS inch pipe size (ASTM-D-1785)
Max. Psi (bar): 150 PSI (10.3 bar) @ 70° F (21° C)
Max. fluid temp.: 190° F (88° C) @ 0 PSI
Max. ambient temp.: 14" to 110° F / -10° to 43° C
Note: Temperature & Pressure ratings of meter only. Actual pipe rating may vary.

Full scale accuracy: +/- 10%
Power requirement: No power required
Enclosure: NEMA 4X (IP56)
Approximate shipping wt.: 1"-4" units: 1 lb. (.45 kg)
6"-8" units: 2 lb. (.91 kg)

Materials of Construction:

Meter Body: Cast Acrylic
Float: Standard range models = 316SS
Low range models = Teflon

Gasket: Neoprene
Pipe Clamp: 300 series Stainless Steel
Pitot screw: 1" thru 2" models only, 300 series stainless Steel

Installation Requirements:

Minimum Straight Pipe Length Requirements

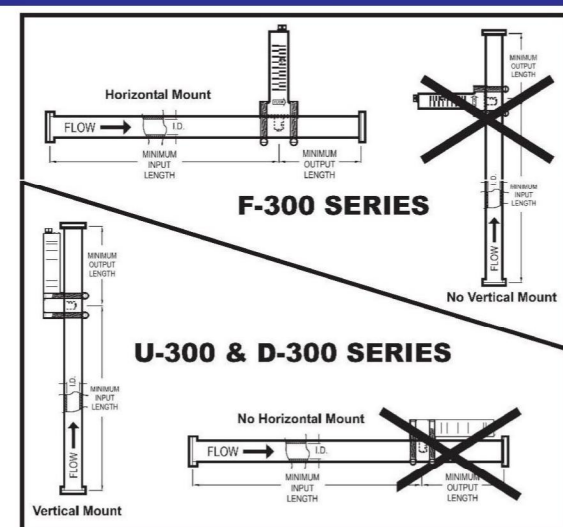
The meter's accuracy is affected by disturbances such as pumps, elbows, tees, valves, etc., in the flow stream. Install the meter in a straight run of pipe as far as possible from any disturbances. The distance required for accuracy is 10 times the nominal pipe diameter before the meter and 4 times the nominal pipe diameter after the meter.

Example of Minimum Straight Pipe Length Requirements

Nominal Pipe Diameter	Minimum Inlet Pipe Length	Minimum Outlet Pipe Length
3 inch	30 inch (10 X 3")	12 inch (4 X 3")
1-1/2 inch	15 inch (10 x 1.5")	6 inch (4 x 1.5")
6 inch	60 inch (10 x 6")	24 inch (4 x 6")

Mounting location

- The meter is designed to withstand outdoor conditions.
- F series meters must be mounted at the vertical (twelve o'clock) position on horizontal pipe only.
- U & D series meters must be mounted on vertical pipe only.
- The pipe must be completely full of water at all times.
- See the minimum straight length of pipe requirement chart above.
- The meter can accurately measure flow from one direction only.
- U-series meters measure upward flows only.
- D-series meters measure downward flows only.



Tru Flo Covers and Frames

Tru Flo 8" Covers and Frames

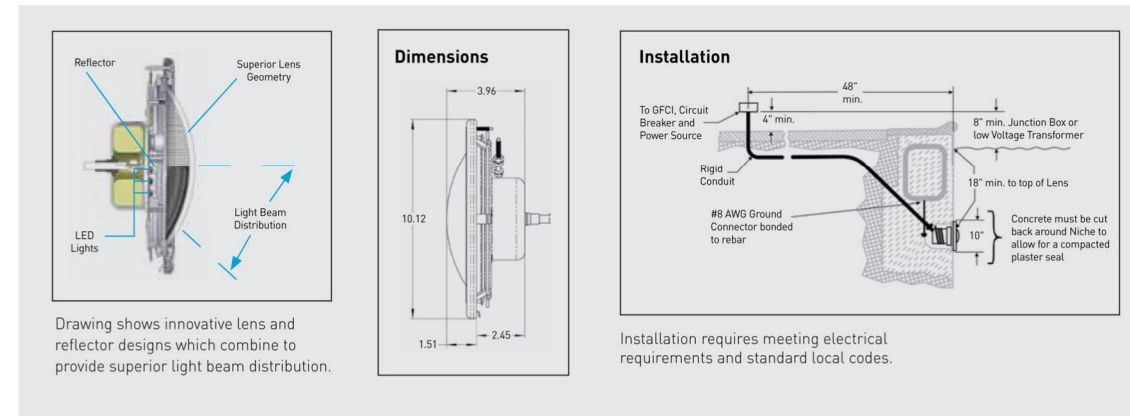
Part No.	Description	Case Weight	Case Quantity
640-18XV	8" Tru Flo Cover & Frame	17.67 lbs.	25

Concrete Sump Bodies & Assemblies

Concrete Bodies and Assemblies - Side x Bottom

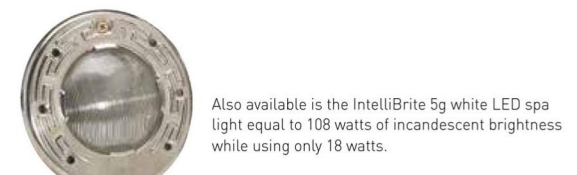
Part No.	Description	Case Quantity
672-2410	8" Sump Body - Concrete - 1 1/2" S	7
672-2500	8" Sump Body - Concrete - 2" FPT	7
672-2510	8" Sump Body - Concrete - 2" S	7
640-8300V	8" Sump Assembly - Concrete - 1 1/2" S - with 8" Tru Flo Drain Cover	8
640-8300S	8" Sump Assembly - Concrete - 2" S - with 8" Tru Flo Drain Cover	8
640-8700V	8" Sump Assembly - Concrete - 2" FPT - with 8" Tru Flo Drain Cover	8

INTELLIBRITE® 5G WHITE LED
COMMERCIAL WHITE LIGHTING



Available in 300, 400 and 500 watt incandescent light brightness equivalents.

Incandescent Light	IntelliBrite 5g White LED Light
300 Watts	40 Watts
400 Watts	48 Watts
500 Watts	55 Watts



Also available is the IntelliBrite 5g white LED spa light equal to 108 watts of incandescent brightness while using only 18 watts.

An Eco Select® Brand Product

LED (Light Emitting Diode) pool and spa lights are the most energy efficient pool and spa lighting option available. That's why IntelliBrite 5g white LED lights are an Eco Select brand product.

The Eco Select brand identifies our "greenest" and most efficient equipment choices. These products save energy, conserve water, eliminate noise, or otherwise contribute to a more environmentally responsible equipment system.

As the global leader in pool and spa equipment manufacturing, we strive to provide greener choices for our customers. We hope you will join us in embracing more eco-friendly pools/spas by choosing Eco Select branded products for your swimming pool.



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Specialty Controls

Need a Code-Compliant Transformer for your LEDs?
We've Got the Bright Ideas



PX50, PX100, PX300, & PX600 Series
Safety Transformers

- Supply 12 volts to pool/spa lights, submersible fixtures, and outdoor garden lights
- Mounting brackets on the top and bottom

3R Beige Steel Enclosure			
Model #	Input Voltage	Output Voltage	Watts
A. PX50	120 VAC, 1/2 Amp	12 or 13 VAC	50
PX100	120 VAC, 1 Amp	12 or 13 VAC	100
PX300	120 VAC, 3 Amp	12, 13, or 14 VAC	300
B. PX600	120 VAC, 6 Amp	12, 13, or 14 VAC	600
3R Stainless Steel Enclosure			
Model #	Input Voltage	Output Voltage	Watts
C. PX50S	120 VAC, 1/2 Amp	12 or 13 VAC	50
PX100S	120 VAC, 1 Amp	12 or 13 VAC	100
PX300S	120 VAC, 3 Amp	12, 13, or 14 VAC	300
D. PX600S	120 VAC, 6 Amp	12, 13, or 14 VAC	600

Rating:
PX50S, PX100S, PX300S
Size: 7 1/4" (18.4 cm) H x 5 1/2" (13.3 cm) W x 4 1/2" (11.4 cm) D
Knockouts:
Bottom: (4) combination 1/2" - 3/4"
Left: (2) combination 1/2" - 3/4"
Back: (2) combination 1/2" - 3/4"
Right: (2) combination 1/2" - 3/4"
PX600S
Size: 10" (25.4 cm) H x 10" (25.4 cm) W x 5" (12.7 cm) D
Knockouts:
Bottom: (2) combination 1/2" - 3/4", (4) combination 1/4" - 1"
Left: (2) combination 1/2" - 3/4"
Back: (2) combination 1/2" - 3/4"
Right: (2) combination 1/2" - 3/4"

INTERMATIC® T100 Series
Electromechanical Time Switches

Project: _____
Location: _____
Product Type: _____
Contact/Phone: _____
Model #: _____

- Features**
- Provides direct 24-Hour control of most loads
 - Control electrical loads up to 40 Amps
 - 1 to 12 ON/OFF operations each day
 - Minimum ON/OFF times of 1 hour
 - Manual override
 - All models equipped with one ON and one OFF tripper

- Ratings**
Enclosure Type: See table
Knockouts: Combination 1/2" - 3/4" nominal knockouts, one on back and on each side, and two on bottom
Switch Type: See table
Switch Rating: Each Pole
40 Amp Resistive, 120-480 VAC
40 Amp Tungsten, Inductive or 1000 VA Pilot Duty, 120-277 VAC
2 HP (24 FLA) 120 VAC
5 HP (28 FLA) 240 VAC single-phase
Power Input: 3 W Maximum
Operating Temperature: -40°F to 130°F (-40°C to 54°C)
Shipping Weight: Type 1 - 3 lbs. (1.4 kg)
Type 3R - 4 lbs. (1.8 kg)
Warranty: Limited 1 year



Model with Type 1 Steel Enclosure	Model with Type 3R Steel Enclosure	Model with Type 3R Plastic Enclosure	Model with Plastic Type 3R Enclosure with See Through Cover	Switch Type	Clock Motor Volts	Hz	Amps/ Pole	HP Rating
T101	T101R	T101P	T101PCD82	SPST	125	60	40	2
T102	T102R	T102P	-	SPST	208-277	60	40	5
T103	T103R	T103P	T103PCD82	DPST	125	60	40	2
T104	T104R	T104P	T104PCD82	DPST	208-277	60	40	5
T104-50	-	-	-	DPST	208-277	50	40	5
T101B**	-	-	-	SPST	125	60	40	2
T105	-	-	-	1NO/1NC*	125	60	40	2
N/A	T106R	-	-	1NO/1NC*	208-277	60	40	5

*Can be wired SPDT
**Separate Clock Motor Terminals



Energy Controls

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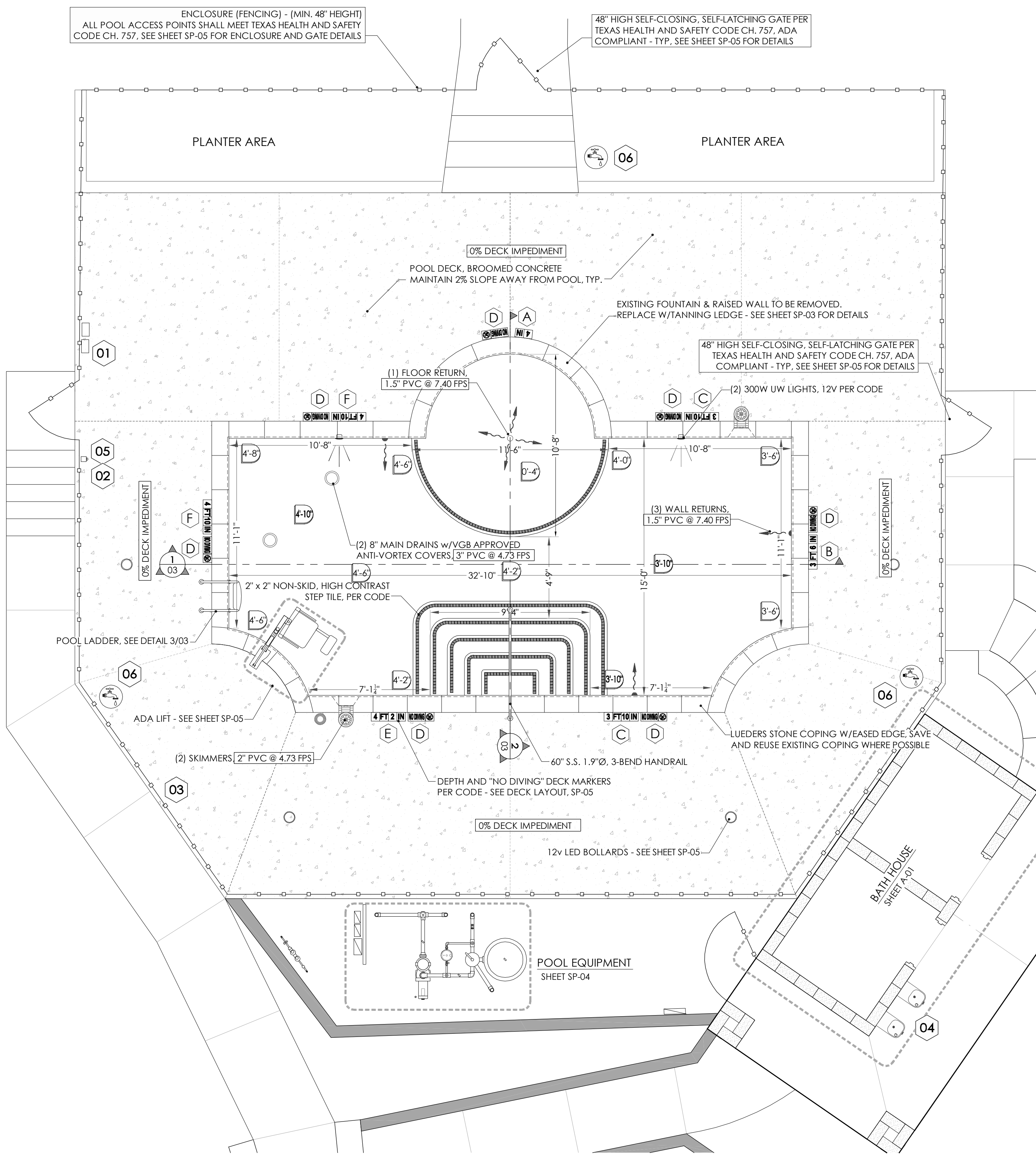
SPECIFICATION SHEETS
MANSFIELD ESTATES
SWIMMING POOL SHOP DRAWINGS

PERMIT SET 06.20.2016

SPECIFICATIONS
SCALE: N/A SHEET: SP-N2

ENCLOSURE (FENCING) - (MIN. 48" HEIGHT)
ALL POOL ACCESS POINTS SHALL MEET TEXAS HEALTH AND SAFETY
CODE CH. 757, SEE SHEET SP-05 FOR ENCLOSURE AND GATE DETAILS

48" HIGH SELF-CLOSING, SELF-LATCHING GATE PER
TEXAS HEALTH AND SAFETY CODE CH. 757, ADA
COMPLIANT - TYP, SEE SHEET SP-05 FOR DETAILS



- KEYED NOTES:
- 01 '911' EMERGENCY PHONE SHALL LOCATION - PHONE NEEDS TO IMMEDIATELY SUMMON EMERGENCY PERSONNEL, PER CODE
 - 02 "NO LIFEGUARD ON DUTY" SIGN, AND "NO DIVING" SIGN TO BE DISPLAYED, PER CODE
 - 03 SAFETY EQUIPMENT TO INCLUDE (1) BODY HOOK W/FIBERGLASS POLE AND (1) THROWING ROPE W/24" RING BUOY, PER CODE
 - 04 ADA COMPLIANT DRINKING FOUNTAIN SHALL BE PROVIDED, PER CODE
 - 05 EMERGENCY SHUT OFF SWITCH PER CODE MIN. 5' FROM POOL, PER CODE
 - 06 HOSE BIBS, PROVIDE BACKFLOW PREVENTION DEVICE TO ALL THREADED HOSE BIBS

ADDITIONAL NOTES:

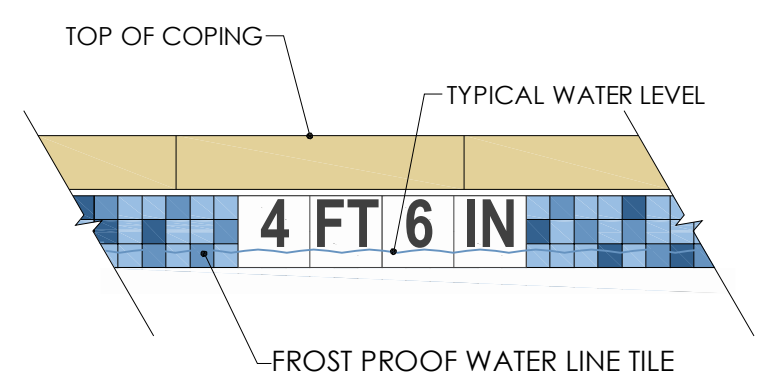
SWIMMING POOL STRUCTURE IS TO REMAIN, EXISTING FOUNTAIN FEATURE IS TO BE REMOVED AND TANNING LEDGE/SHELF IS TO BE ADDED. SEE SHEET SP-03 FOR DETAILS

EXISTING TOP OF COPING ELEVATION IS TO BE MAINTAINED

SURFACE AREA FOR POOL DECK - APPROXIMATELY 1,380 SQ.FT. SEE SHEETS C-02, SP-05 FOR DECK LIGHTING

MAIN DRAIN COVERS TO COMPLY WITH ANSI/ASME A112.19.8 - 2007 STANDARD, IN FULL EFFECTIVE DATE DECEMBER 19, 2008

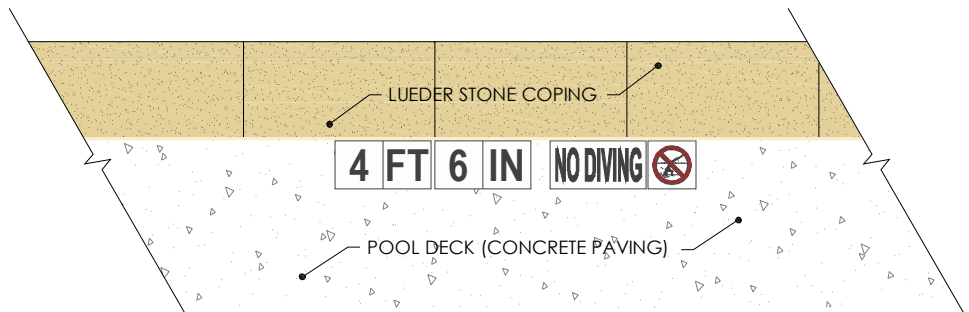
SEE SHEETS SP-03, SP-05 FOR ADDITIONAL DETAILS



VERTICAL WALL DEPTH MARKER TILES TO BE 6" TALL W/4" TALL LETTERING, HIGH CONTRAST, GLAZED CERAMIC TILE, SET INTO POOL WALL AT WATER LINE. QUANTITY AND LOCATION REQUIRED TO MEET ALL APPLICABLE CODES.

NON-SKID DECK TILES

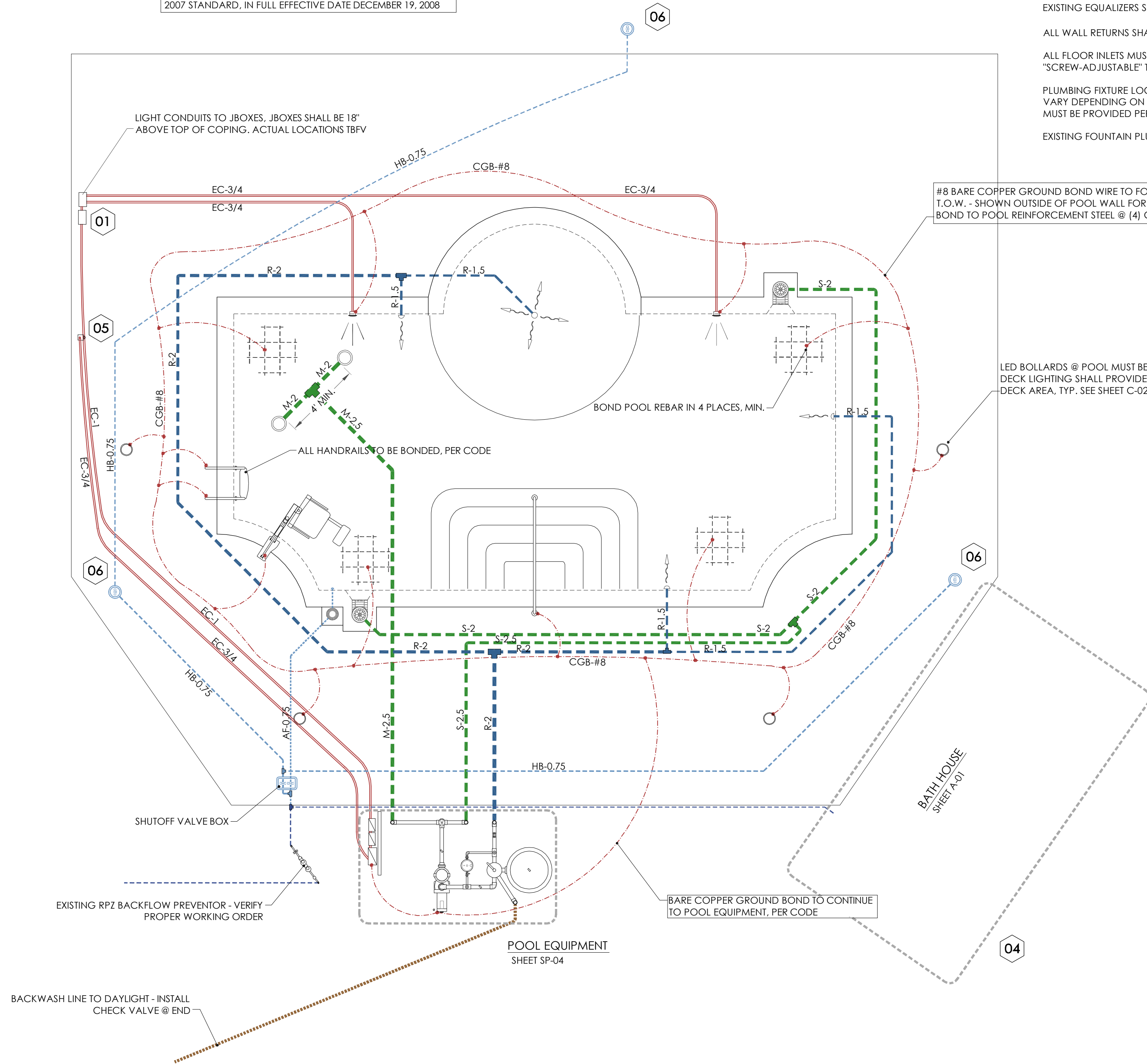
4 IN	A	1 LOCATION
3 FT 6 IN	B	1 LOCATION
3 FT 10 IN	C	2 LOCATIONS
4 FT 6 IN	E	1 LOCATIONS
4 FT 10 IN	F	2 LOCATIONS
NO DIVING	D	6 LOCATIONS



DEPTH AND "NO DIVING" SIGNAGE SHALL CONSIST OF 4" HIGH LETTERING, HIGH CONTRAST, NON-SKID TILES. QUANTITY AND LOCATION REQUIRED TO MEET ALL APPLICABLE CODES. DEPTHS SHOWN ON PLAN. DEPTH MARKERS ARE REQUIRED AT ALL CORRESPONDING LOCATIONS TO THOSE IN VERTICAL WALL OF POOL.

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MAIN DRAIN COVERS TO COMPLY WITH ANSI/ASME A112.19.8 - 2007 STANDARD, IN FULL EFFECTIVE DATE DECEMBER 19, 2008



NOTES:

UPON EXPLORATORY EXCAVATION/INSPECTION, IT MAY BE DETERMINED THAT SOME EXISTING PLUMBING LINES AND/OR FIXTURES ARE SUFFICIENT TO REMAIN IN USE. ALL PLUMBING MUST BE HYDRAULICALLY BALANCED, MUST NOT LEAK AND MUST BE CAPABLE OF HOLDING SUFFICIENT PRESSURE PER TDHHS STANDARDS.

MAIN DRAIN COVERS MUST COMPLY WITH ANSI/ASME A112.19.8 - 2007 STANDARD, IN FULL EFFECTIVE DATE DECEMBER 19, 2008 AND MUST BE STAMPED "2008 VGB APPROVED"

SKIMMERS MUST NOT HAVE EQUALIZER LINES. IF EXISTING SKIMMERS ARE TO REMAIN, ANY EXISTING EQUALIZERS SHALL BE PERMANENTLY PLUGGED/REMOVED.

ALL WALL RETURNS SHALL BE OF THE "DIRECTIONAL" TYPE, 3/4" EYEBALL OR SIMILAR

ALL FLOOR INLETS MUST BE FLUSH MOUNTED WITH POOL FLOOR AND SHALL BE OF THE "SCREW-ADJUSTABLE" TYPE PER POOL SPECIFICATION SHEET SP-N1.

PLUMBING FIXTURE LOCATIONS ARE DIAGRAMMATIC IN NATURE. ACTUAL LOCATIONS MAY VARY DEPENDING ON CONDITIONS IN THE FIELD. THE QUANTITY AND TYPE OF FITTINGS SHOWN MUST BE PROVIDED PER TDHHS STANDARDS.

EXISTING FOUNTAIN PLUMBING AND EQUIPMENT SHALL BE REMOVED/ABANDONED.

#8 BARE COPPER GROUND BOND WIRE TO FOLLOW PERIMETER OF POOL @ T.O.W. - SHOWN OUTSIDE OF POOL WALL FOR CLARITY PURPOSES ONLY - BOND TO POOL REINFORCEMENT STEEL @ (4) CORNERS AT A MINIMUM

LED BOLLARDS @ POOL MUST BE BONDED TO POOL DECK LIGHTING SHALL PROVIDE 0.5 WATTS PER SQ. FT. DECK AREA, TYP. SEE SHEET C-02 FOR LIGHTING LAYOUT

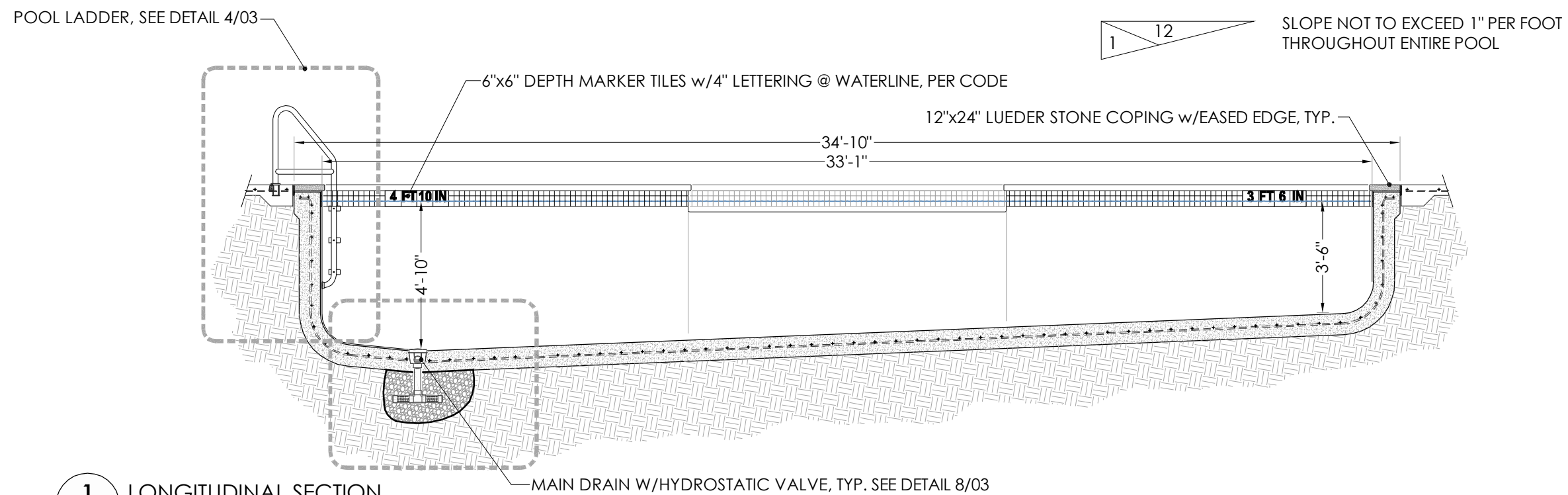
BOND POOL REBAR IN 4 PLACES, MIN.

ALL HANDRAILS TO BE BONDED, PER CODE

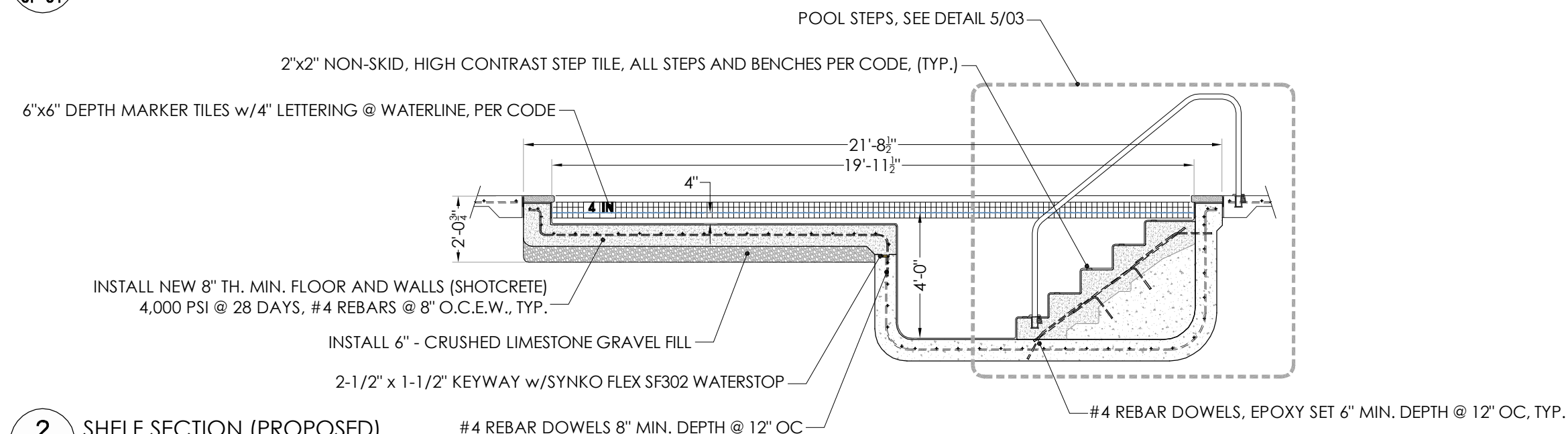
BARE COPPER GROUND BOND TO CONTINUE TO POOL EQUIPMENT, PER CODE

ALL POOL PLUMBING TO BE SCHEDULE 40 PVC UNLESS OTHERWISE SPECIFIED

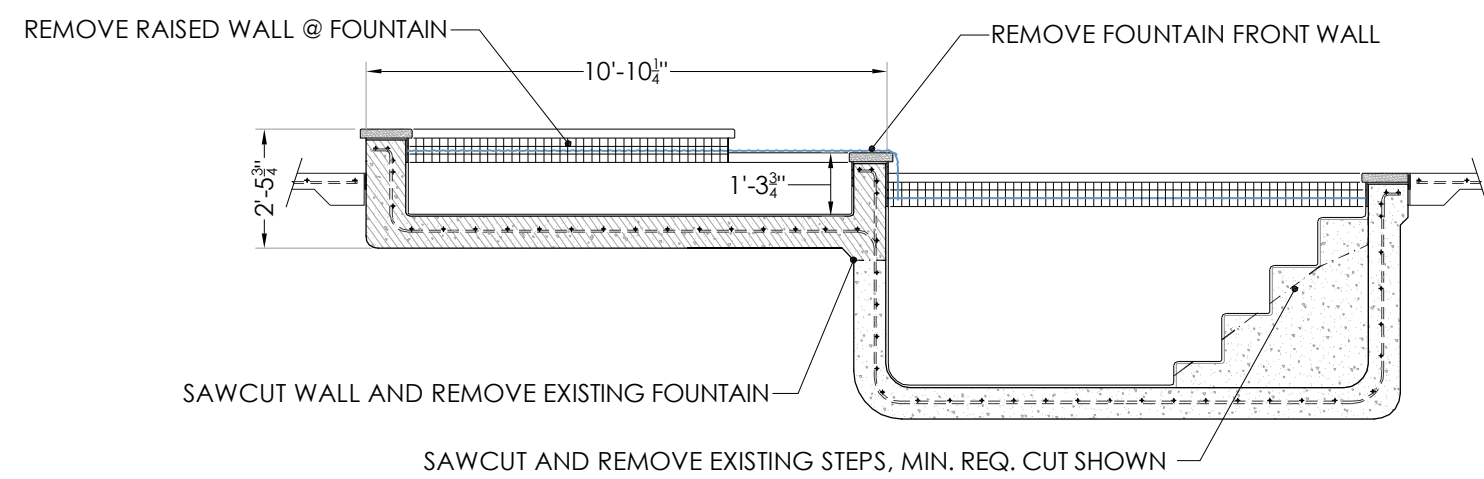
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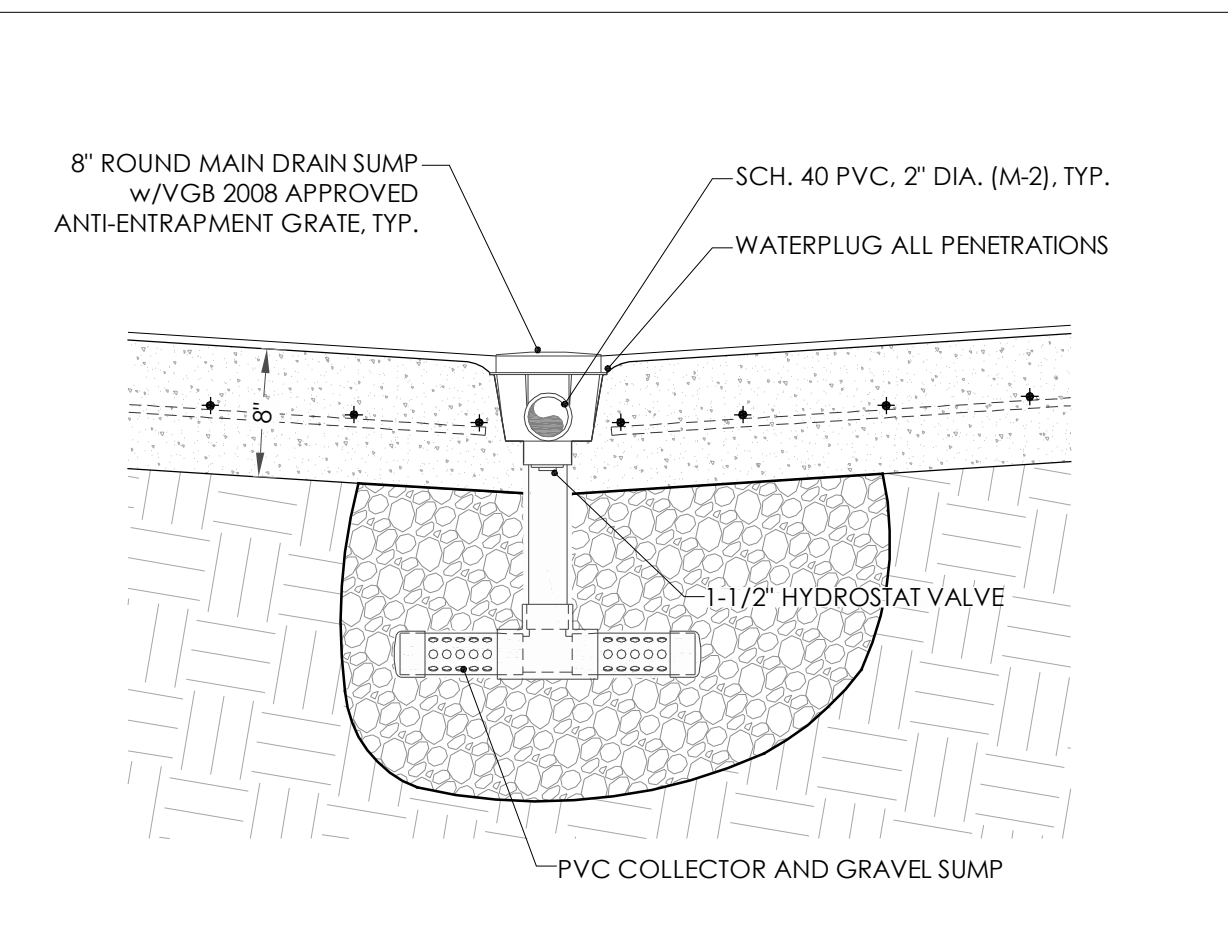
1 LONGITUDINAL SECTION
 SP-01 SCALE: 1/4" = 1'-0"



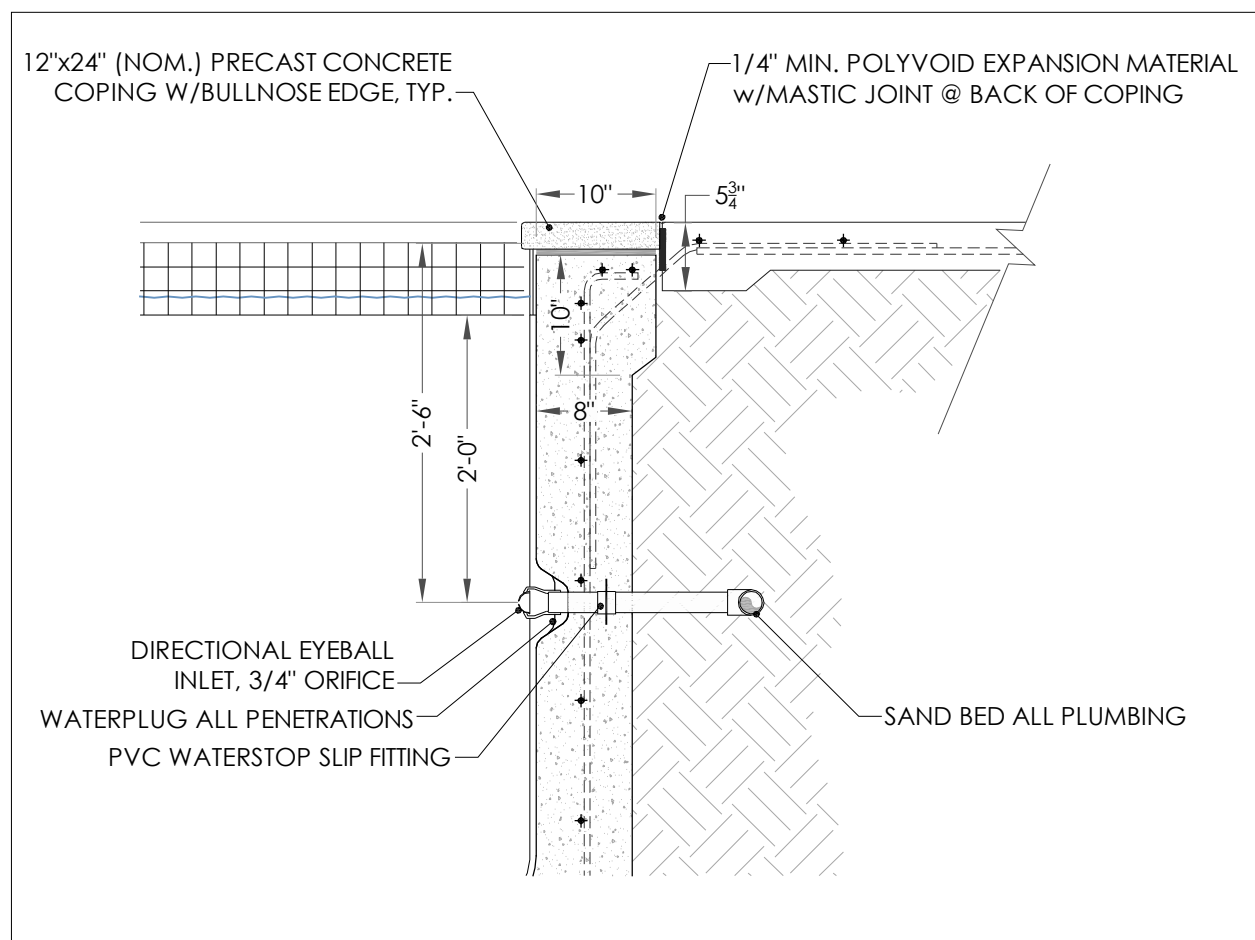
2 SHELF SECTION (PROPOSED)
 SP-01 SCALE: 1/4" = 1'-0"



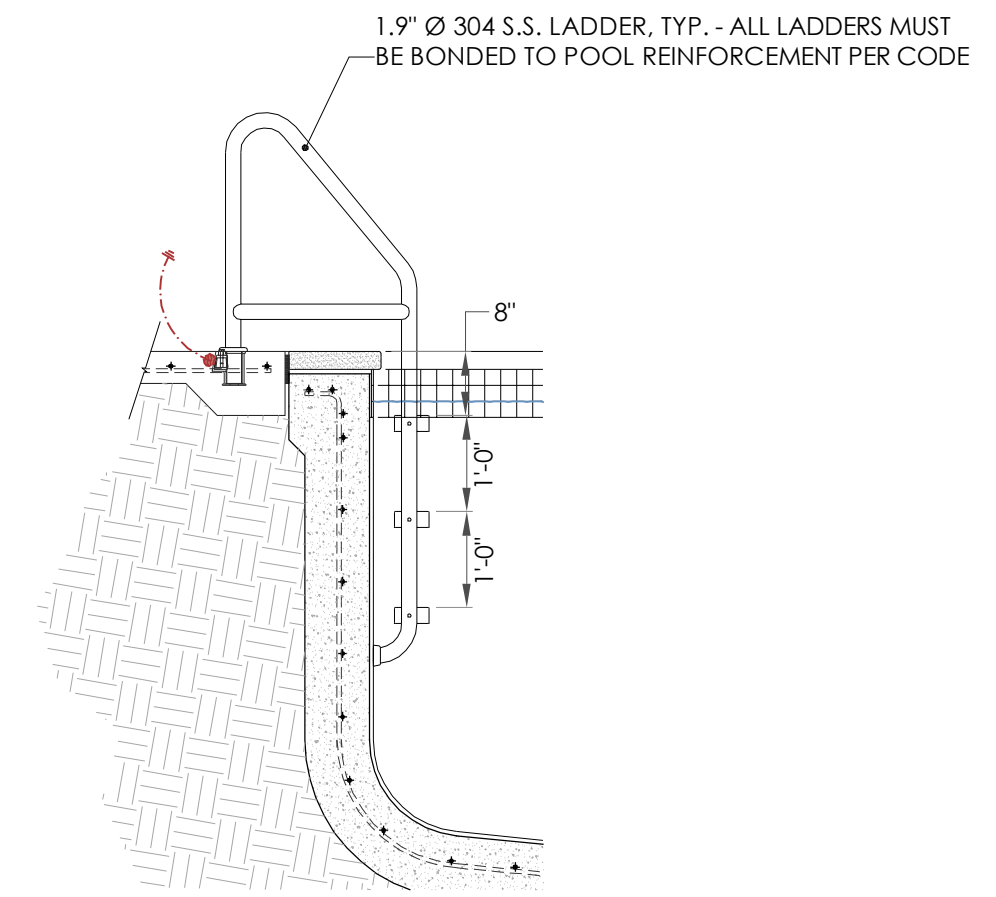
3 FOUNTAIN SECTION (EXISTING)
 SP-01 SCALE: 1/4" = 1'-0"



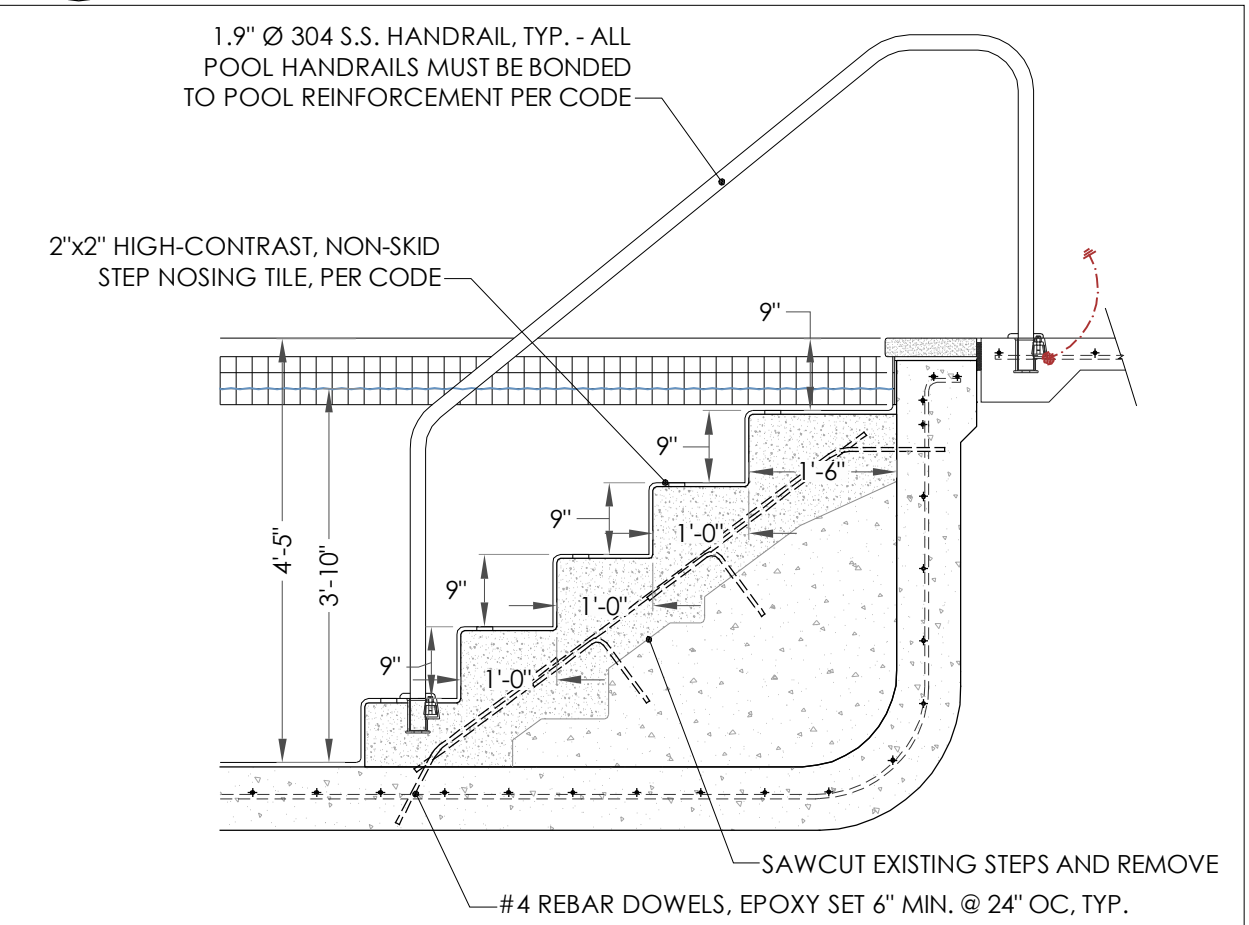
8 MAIN DRAIN SECTION
 03 SCALE: 1" = 1'-0"



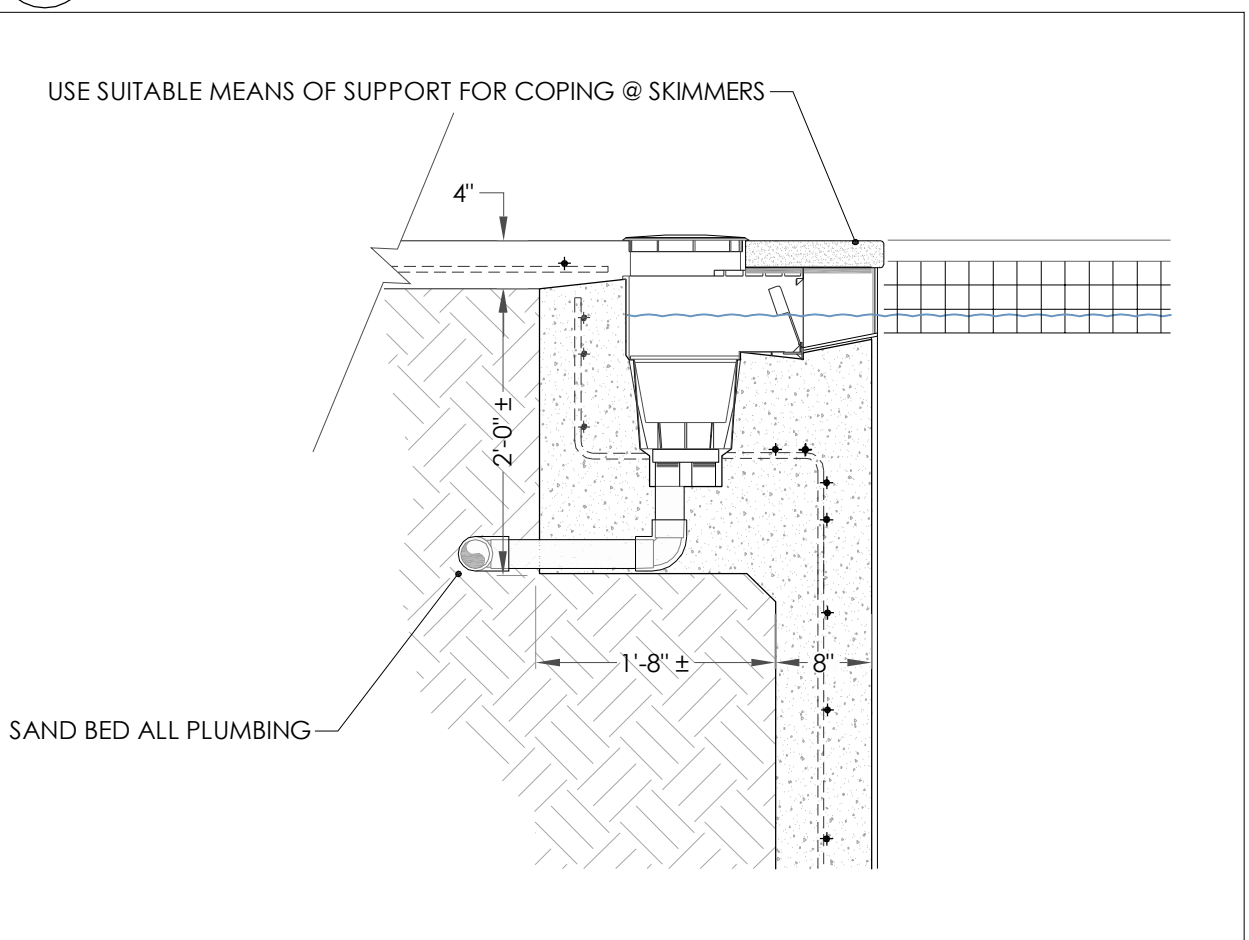
7 WALL RETURN
 03 SCALE: 3/4" = 1'-0"



4 LADDER DETAIL
 03 SCALE: 1/2" = 1'-0"



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



6 SKIMMER SECTION
 03 SCALE: 3/4" = 1'-0"

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POOL EQUIPMENT

NO.	DESCRIPTION		
P1	PENTAIR WHISPERFLO	FILTRATION PUMP	120v, 1-PHASE, 1HP, 12 AMPS
F1	PENTAIR TRITON 2	SAND FILTER	
C1	RAINBOW HC3330	CHLORINATOR	TRI-CHLOR TABLET FEEDER
FIG	FILTER INFLUENT PRESSURE GAUGE	(PROVIDED WITH FILTER)	
FEG	FILTER EFFLUENT PRESSURE GAUGE		
FM	(FLOW METER)	BLUE WHITE	
VG	(VACCUM GAUGE)		
PL	(POOL ELEC. PANELBOARD)	DISCONNECT PANEL FOR POOL EQUIPMENT	
TC	INTERMATIC T104	TIME CLOCK FOR POOL LIGHTS, 3-SPST	
TF	INTERMATIC PX300	TRANSFORMER FOR POOL LIGHTS, 120v 6 AMPS (SOURCE)	
RPZ	RPZ BACKFLOW PREVENTOR	REDUCED PRESSURE ZONE BACKFLOW PREVENTOR	

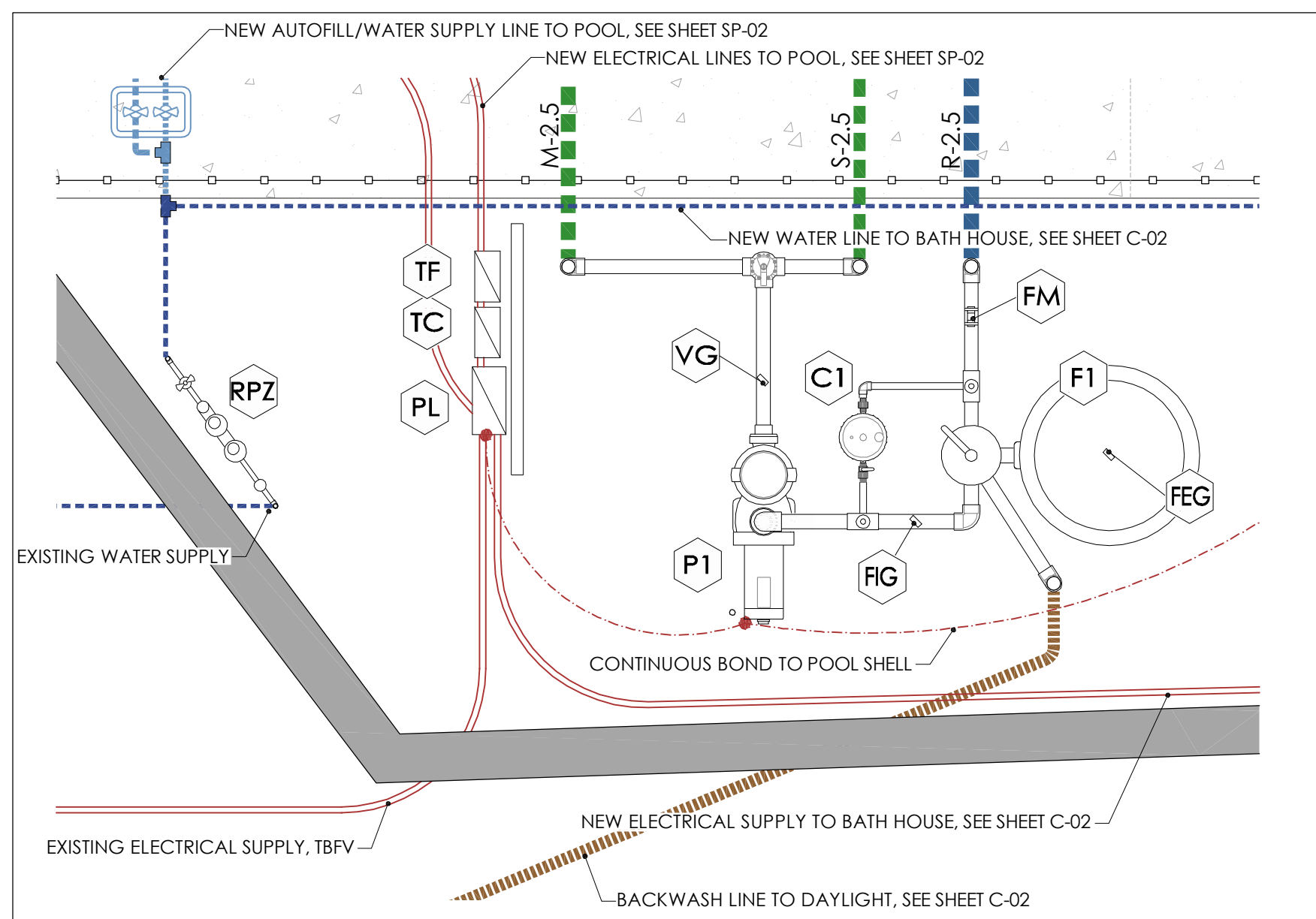
NOTES:

IT IS THE RESPONSIBILITY OF THE BUILDER TO VERIFY ALL EXISTING ELECTRICAL SYSTEMS AND WIRING TO REMAIN IN SERVICE IS PER NEC CODE AND DOES NOT POSE A SAFETY HAZARD. ALL ELECTRICAL WORK MUST BE PERFORMED BY A LICENSED ELECTRICIAN.

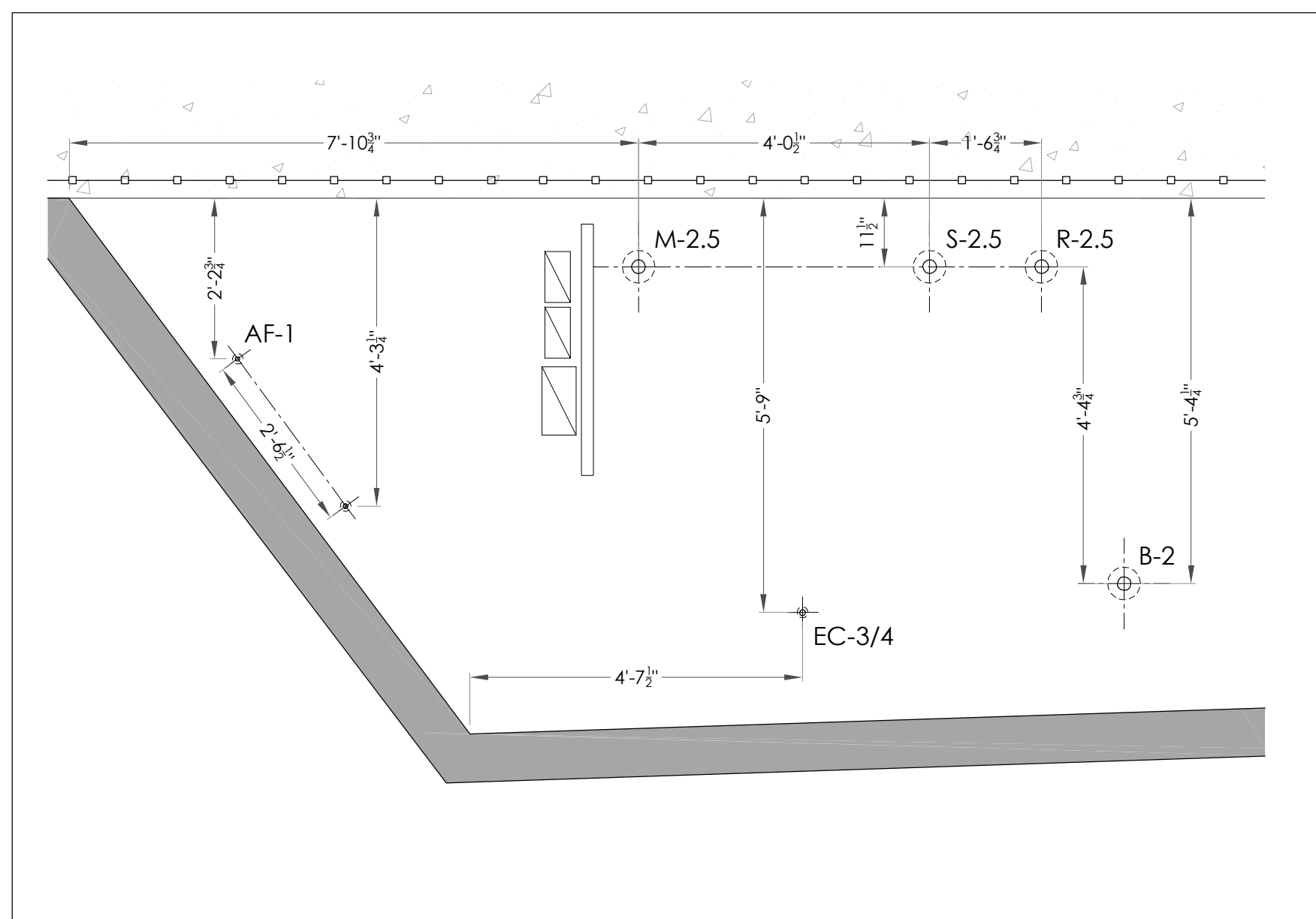
ALL ELECTRICAL PER NEC-250, 680 AND CITY OF AUSTIN ORDINANCE # 20111020-089
 ALL UNDERGROUND WIRING, REF. NEC-680.10
 MAINTENANCE DISCONNECTING MEANS, REF. NEC-680.12
 EMERGENCY SHUT-OFF SWITCH, REF. COA ORDINANCE 20141211-199 SECTION 680.13
 POOL MOTORS, REF. NEC-680.21
 GFCI PROTECTION, REF. NEC-680.21(C) AND 680.22(A)(4)
 VOLTAGE LIMITATIONS, REF. COA ORDINANCE 20141211-199 SECTION 680.23(A)(4)
 JUNCTION BOXES AND ELECTRICAL ENCLOSURES FOR TRANSFORMERS OR GFCI'S, REF. NEC-680.24
 EQUIPOTENTIAL BONDING, REF. NEC-680.26, SEE SHEET SP-02 FOR POOL PERIMETER BONDING LAYOUT/DIAGRAM

NO MORE THAN 25 LBS OF CHLORINE TABS OR 4 GALLONS OF MURATIC ACID SHALL BE STORED ON SITE AT ANY TIME, PER CODE.

BARE COPPER GROUND BOND TO CONNECT POOL PUMP TO COMMON GROUND AND CONTINUE TO POOL REINFORCEMENT STEEL, PER CODE.



EQUIPMENT LAYOUT
 SCALE: 1/2" = 1' - 0"



EQUIPMENT STUB-OUTS
 SCALE: 1/2" = 1' - 0"

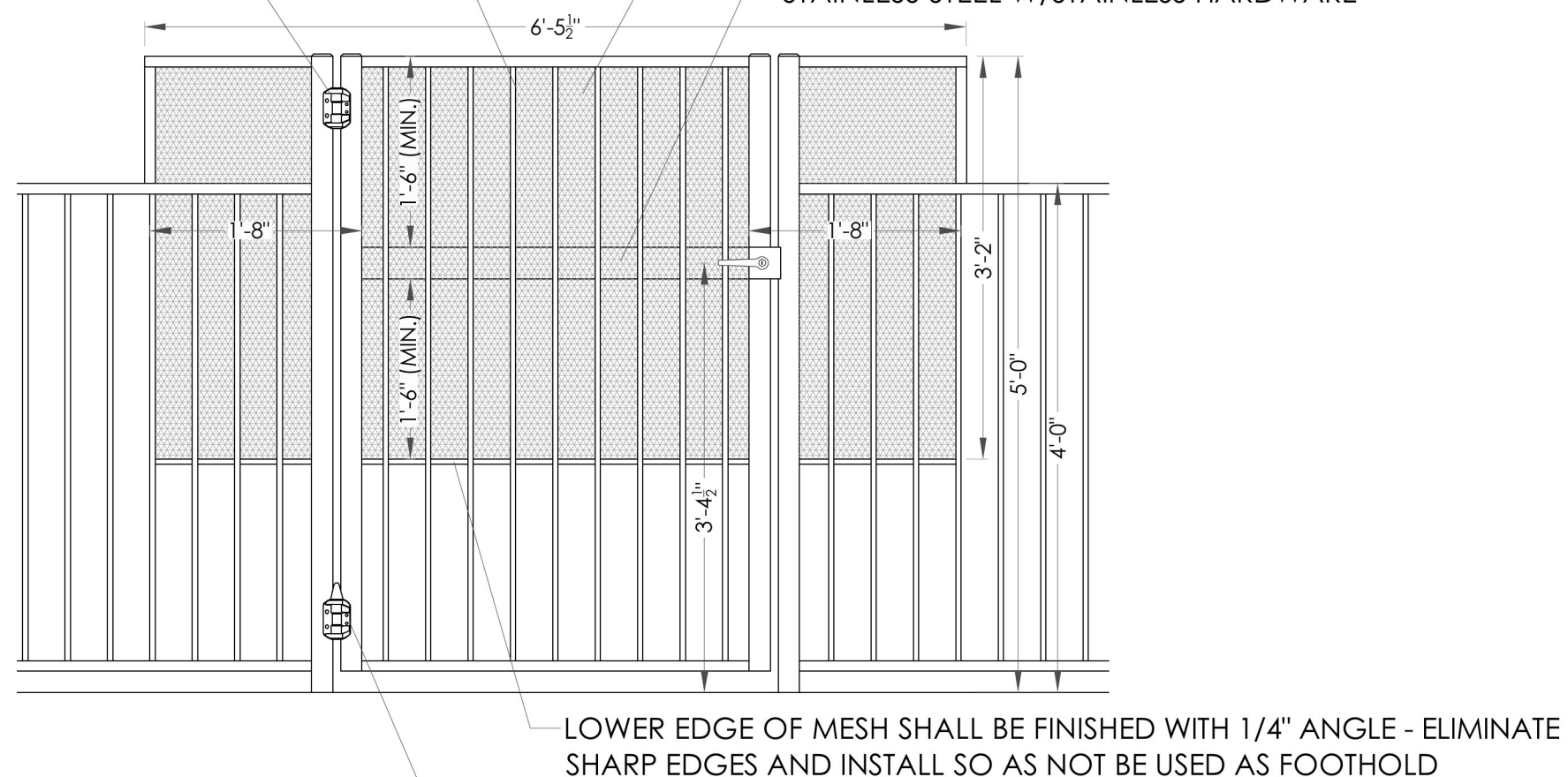
- ALL DIMENSIONS AND EQUIPMENT LOCATIONS ARE TO BE FIELD VERIFIED AND ARE SUBJECT TO CHANGE AT THE DISCRETION OF OWNER AND/OR CONTRACTOR

SELF-CLOSING, SELF-LATCHING GATE TO SWING OUT AWAY FROM POOL DECK TOWARD THE FLOW OF EGRESS

1/4" WIRE MESH TO EXTEND 18" MIN. FROM LATCH, (INSTALL MESH ON POOL SIDE)

3" TRU CLOSE OR EQUIVALENT SELF-CLOSING HINGE

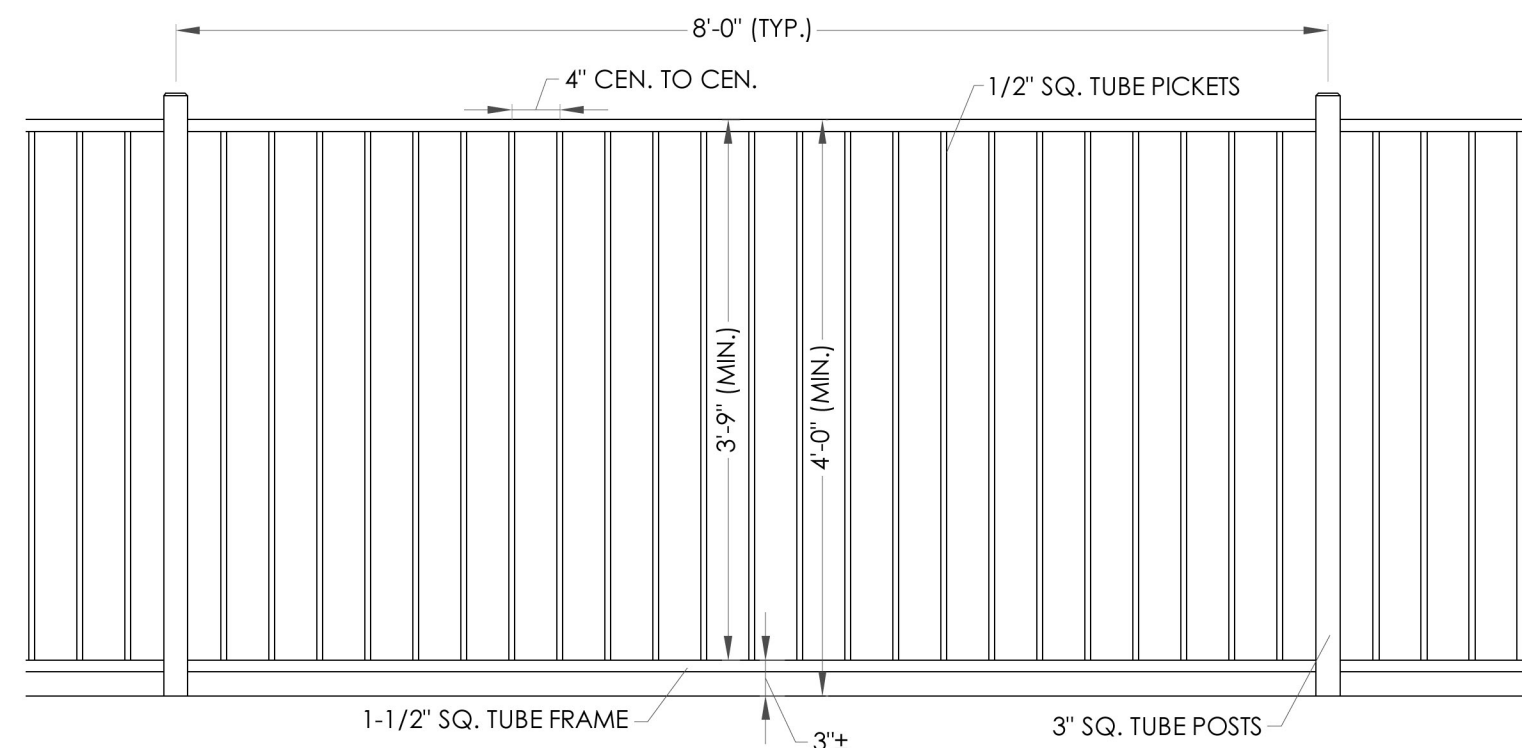
PANIC BAR (POOL SIDE), ALUMINUM OR STAINLESS STEEL W/STAINLESS HARDWARE



1 GATE DETAILS
05 SCALE: 3/4" = 1" - 0"

3" TRU-CLOSE OR EQUIVALENT SELF-CLOSING HINGE W/ SAFETY CAP TO PREVENT USING HINGE AS FOOTHOLD

DISTANCE BETWEEN HORIZONTALS SHALL BE NO LESS THAN 45"
DISTANCE BETWEEN VERTICALS SHALL BE NO MORE THAN 4"



2 TYPICAL FENCE ELEVATION
05 SCALE: 3/4" = 1" - 0"

ALL WELDS SHALL BE SMOOTHED, ALL BURRS/SHARP EDGES SHALL BE SANDED
ALL METAL FENCING, GATES, ETC. SHALL BE PAINTED. REFER TO ARCH. SPECS

CITY OF AUSTIN/TRAVIS COUNTY HEALTH CODE REFERENCES FOR ENCLOSURES:


SEC. 757.004 GATES.

(A) EXCEPT AS OTHERWISE PROVIDED BY SECTION 757.005, A GATE IN A FENCE OR WALL ENCLOSING A POOL YARD AS REQUIRED BY SECTION 757.003 MUST:

- (1) HAVE A SELF-CLOSING AND SELF-LATCHING DEVICE;
- (2) HAVE HARDWARE ENABLING IT TO BE LOCKED, AT THE OPTION OF WHOEVER CONTROLS THE GATE, BY A PADLOCK OR A BUILT-IN LOCK OPERATED BY KEY, CARD, OR COMBINATION; AND
- (3) OPEN OUTWARD AWAY FROM THE POOL YARD.

(B) EXCEPT AS OTHERWISE PROVIDED BY SUBSECTION (C) AND SECTION 757.005, A GATE LATCH MUST BE INSTALLED SO THAT IT IS AT LEAST 60 INCHES ABOVE THE GROUND, EXCEPT THAT IT MAY BE INSTALLED LOWER IF:

- (1) THE LATCH IS INSTALLED ON THE POOL YARD SIDE OF THE GATE ONLY AND IT IS AT LEAST THREE INCHES BELOW THE TOP OF THE GATE; AND
 - (2) THE GATE OR ENCLOSURE HAS NO OPENING GREATER THAN ONE-HALF INCH IN ANY DIRECTION WITHIN 18 INCHES FROM THE LATCH, INCLUDING THE SPACE BETWEEN THE GATE AND THE GATE POST TO WHICH THE GATE LATCHES.
- (C) A GATE LATCH MAY BE LOCATED 42 INCHES OR HIGHER ABOVE THE GROUND IF THE GATE CANNOT BE OPENED EXCEPT BY KEY, CARD, OR COMBINATION ON BOTH SIDES OF THE GATE.



D-Series LED Bollard

d-series

Specifications

Diameter: 8" Round (203.2 mm)

Height: 42" (106.7 cm)

Weight (max): 27 lbs (12.25 kg)

Performance Data

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Actual performance may differ as a result of end-user environment and application. Actual wattage may differ by +/- 8% when operating between 120-480V +/- 10%.

Light Output	Beam Spread	System Watts	3500 K			4000 K			5000 K			Limited Wavelength Amber		
			Lumens	LPW	U	Lumens	LPW	U	Lumens	LPW	U	Lumens	LPW	U
Asymmetric (12 LEDs)	350	16	1,194	75	1	1,283	80	1	1,291	81	1			
	530	22	1,719	78	1	1,847	84	1	1,859	85	1			
	700	31	2,173	70	1	2,335	75	1	2,349	76	1			
Symmetric (16 LEDs)	350	20	1,558	78	1	1,674	84	1	1,685	84	1	348	22	1
	530	28	2,232	80	2	2,397	86	2	2,412	86	2			
	700	39	2,802	72	2	3,009	77	2	3,028	78	2			

Note: Available with phosphor-converted amber LED's (nomenclature AMBPC). These LED's produce light with 97+% >530 nm. Output can be calculated by applying a 0.7 factor to 4000 K lumen values and photometric files.

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a 20°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate Lf, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.00	0.98	0.97	0.95

Electrical Load

Light Output	Beam Spread	System Watts	Current (A)			
			120	208	240	277
12C	350	16W	0.158	0.118	0.114	0.109
	530	22W	0.217	0.146	0.136	0.128
	700	31W	0.296	0.185	0.168	0.153
16C	350	20W	0.197	0.137	0.128	0.121
	530	28W	0.262	0.178	0.162	0.148
	700	39W	0.365	0.211	0.207	0.185

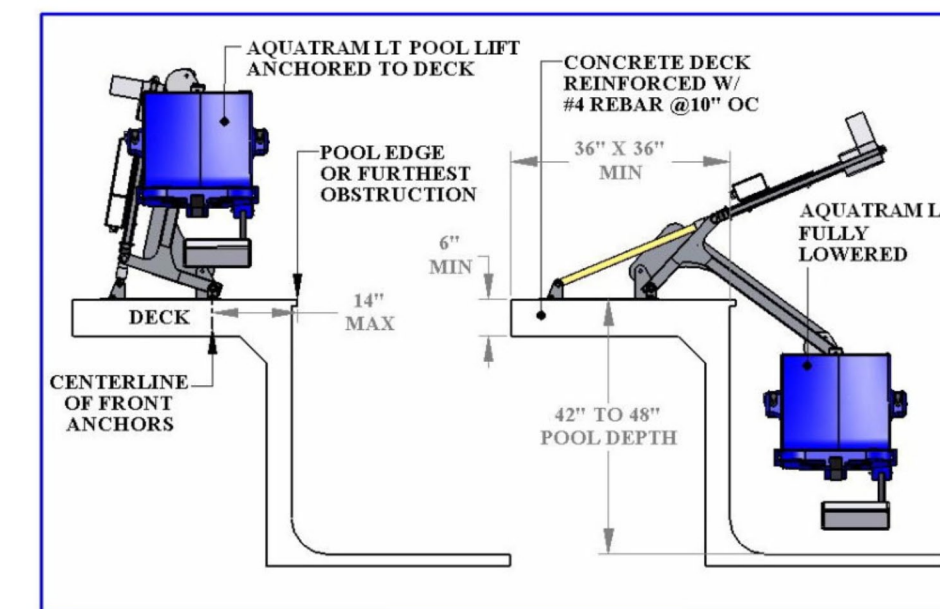
3 12v LED LIGHT BOLLARD
05 SCALE: N.T.S.

SITE & POOL DECK REQUIREMENTS

This lift is designed for commercial or residential use on in ground pools and spas. This lift is not designed to clear a wall or obstacle. The lift should be installed on the pool deck where a straight linear section of the pool wall is at least six (6) feet long. The lift should be installed at a pool depth (pool deck to pool floor) of no less than 42" but not more than 48 inches. If the edge of the pool deck curves the anchor system will need to be anchored differently than what these instructions outline; contact Pentair Water Commercial Pool and Aquatics for assistance in this case. The front anchors of the lift need to be mounted a maximum of 14 inches and no closer than 4 inches from the inside pool wall. If your pool or spa has hand rails or other extensions on the inside of the pool wall, the set back distance must take these into account. Contact Pentair Water Commercial Pool and Aquatics for assistance in these types of applications.

In order to properly install this anchor system into an existing pool deck, your pool deck MUST be at least 3 feet long, by three feet wide and 6 inches thick. It must also be reinforced with #4 rebar on 10 inch centers in both directions. There may be instances where your existing pool deck may not be structurally sound enough or does not meet the minimum requirements outlined above for the safe installation of this anchor system. In those circumstances it is recommended that you follow the Saw Cutting Retro-fit Instructions on page 9. If you are installing this lift in a new application where the pool deck has not been poured yet, then go to the New Construction instructions on page 10.

FIGURE 1



4 ADA LIFT DETAILS
05 SCALE: N.T.S.