

COVINA VALLEY HIGH SCHOOL

SWIMMING POOL REPLACEMENT

463 SOUTH HOLLENBECK AVE, COVINA, CA 91723

DSA SUBMITTED SET

12/19/2022

DSA APPLICATION # 03-122700

DSA FILE # 19-H8



COVINA VALLEY HS POOL REPLACEMENT
COVINA VALLEY UNIFIED SCHOOL DISTRICT
463 SOUTH HOLLENBECK AVENUE COVINA, CA 91723

DSA SUBMITTAL SET_V2
04/28/2023 REVISIONS

75-22616-00
DSA # 03-122700
DSA FILE # 19-H8

COVER SHEET

G0.1

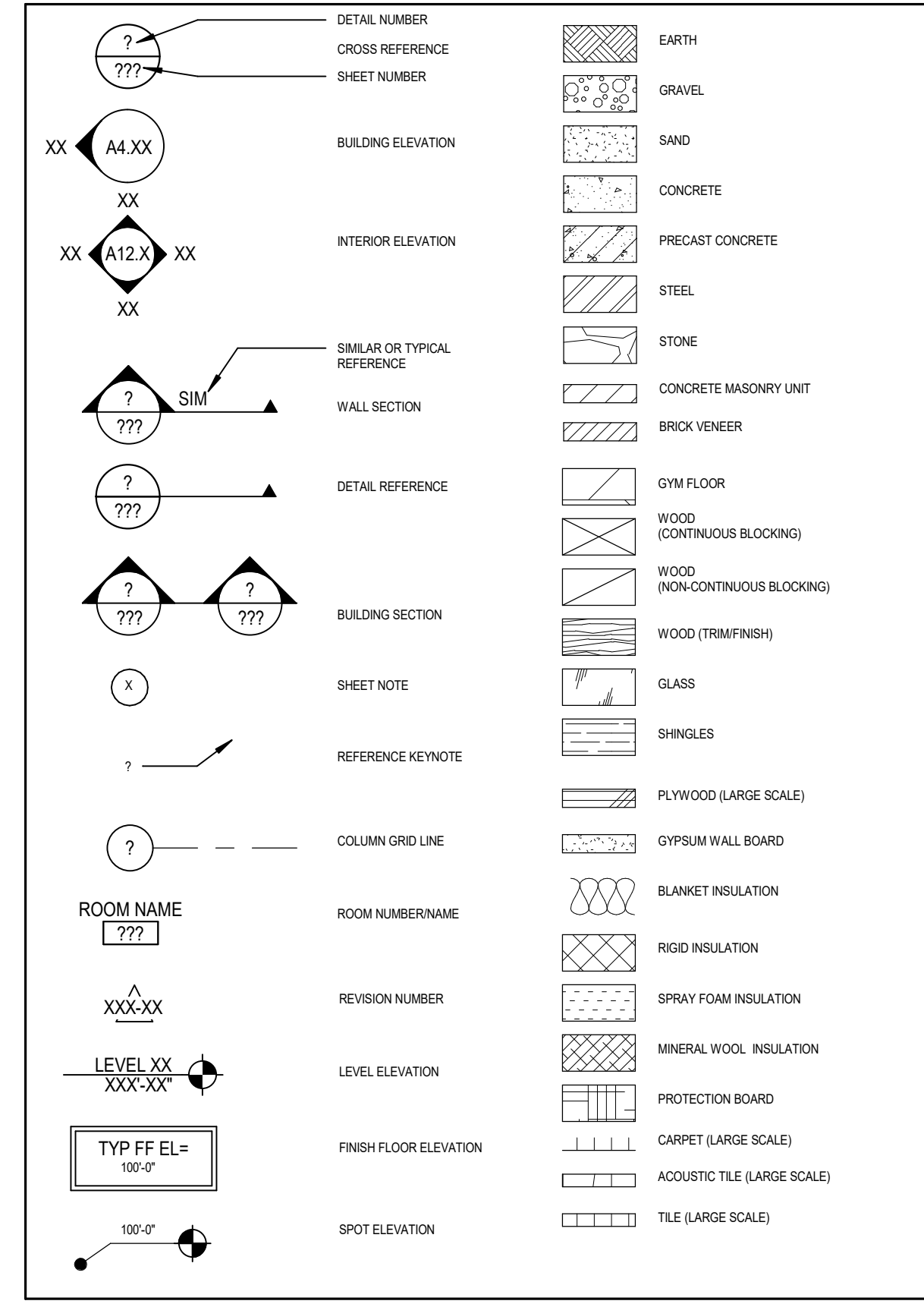
SCOPE OF WORK	PROJECT INFORMATION	PROJECT TEAM	DSA REQUIREMENTS	SHEET LIST																																																																																																																																																														
<p>CONSTRUCTION OF NEW SWIMMING POOL AND DECK TO INCLUDE A NEW 35 METER X 25 YARD POOL, LIGHTING, SITE FENCING, CONCRETE POOL DECK, SCOREBOARD, POOL BUILDING R, (2) 20'X60' SHADE STRUCTURES, EXISTING POOL BUILDING R1 MODERNIZATION, AND ASSOCIATED SITE WORK FOR PATH OF TRAVEL IMPROVEMENTS.</p>	<p>BUILDING ADDRESS: 463 S HOLLENBECK AVE, COVINA, CA 91723 OCCUPANCY: N/A NUMBER OF STORIES: 1 CONSTRUCTION TYPE: IIA - Non sprinkled SPRINKLERED: NOT SPRINKLED</p>	<p>CLIENT NAME COVINA VALLEY UNIFIED SCHOOL DISTRICT 519 E. BADILLO STREET, COVINA, CA 91723</p> <p>ARCHITECT DLR GROUP 1650 SPRUCE STREET, SUITE 300 RIVERSIDE, CA 92507</p> <p>AQUATICS AQUATIC DESIGN GROUP 2226 FARADAY AVENUE, CARLSBAD, CA 92008</p> <p>CIVIL FPL AND ASSOCIATES, INC. 30 CORPORATE PARK, SUITE 401 IRVINE, CA 92606</p> <p>MECHANICAL/PLUMBING DCGA ENGINEERS 4750 ONTARIO MILLS PKWY, ONTARIO, CA 91764</p> <p>ELECTRICAL DCGA ENGINEERS 4750 ONTARIO MILLS PKWY, ONTARIO, CA 91764</p> <p>STRUCTURAL RTM ENGINEERING CONSULTANTS 9931 MUIRLANDS BOULEVARD IRVINE, CA 92618</p> <p>SHADE STRUCTURE USA SHADE 1085 N. MAIN, STE. C ORANGE, CA 92667</p> <p>CONTACT: KEITH KOVACH (626) 277-9861 KKOVACH@CVUSD.ORG JESSE MILLER (951) 682-0470 JMILLER@DLRGROUP.COM DENNIS BERKSHIRE (760) 444-8303 DBERKSHIRE@AQUATICDESIGNGROUP.COM RON CANEDY (949) 252-1688 X 203 RON.CANEDY@FPLASSOCIATES.COM WBLESTHER GAMA (909) 987-0017 WBLESTHER.GAMA@DCGAENGINEERS.COM CHEN FANG (909) 987-0017 CHEN.FANG@DCGAENGINEERS.COM JOSH RANDALL (949) 462-3200 JOSH.RANDALL@RTMEC.COM CHRISTINA BENNETT (714) 241-5542 CHRISTINA.BENNETT@USA-SHADE.COM</p>	<p>THE INTENT OF THIS DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CCR, SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CHANGE DOCUMENT (CCD), OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK. (SECTION 4-317(c), PART 1, TITLE 24, CCR)</p> <p>CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS OR A CONSTRUCTION CHANGE DOCUMENT SHALL BE MADE BY ADDENDUM OR A CONSTRUCTION CHANGE DOCUMENT, (CCD) APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CALIFORNIA CODE OF REGULATIONS. NOTWITHSTANDING OTHER PROVISIONS OF THE PROJECT SPECIFICATIONS, COMPLY WITH ALL PROVISIONS OF THE CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE (PART 1, TITLE 24, CCR), SECTION 4-338, FOR ALL ADDENDA AND CONSTRUCTION CHANGE DOCUMENTS.</p> <p>CONSTRUCTION CHANGE DOCUMENTS MUST BE SIGNED BY ALL OF THE FOLLOWING: ARCHITECT OR ENGINEER HAVING GENERAL RESPONSIBLE CHARGE OF PROJECT, AND STRUCTURAL ENGINEER OF RECORD OR DELEGATED PROFESSIONAL ENGINEER (WHEN APPLICABLE).</p> <p>SUBSTITUTIONS AFFECTING DSA REGULATED ITEMS (ACCESSIBILITY, STRUCTURAL ENGINEERING, AND FIRE/LIFE/SAFETY) SHALL BE CONSIDERED AS A CONSTRUCTION CHANGE DOCUMENT, AND SHALL BE APPROVED BY DSA PRIOR TO FABRICATION AND INSTALLATION IN ACCORDANCE WITH DSA IR A-6 AND SECTION 4-338(D), PART 1, TITLE 24, CCR.</p> <p>A CLASS 2 "DSA CERTIFIED" PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CALIFORNIA CODE OF REGULATIONS.</p> <p>A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT. THE DSA-CERTIFIED PROJECT INSPECTOR AND DSA-ACCEPTED TESTING LAB SHALL BE EMPLOYED AND PAID BY THE OWNER (DISTRICT) AND APPROVED BY ALL OF THE FOLLOWING: ARCHITECT OR ENGINEER HAVING GENERAL RESPONSIBLE CHARGE OF THE PROJECT, STRUCTURAL ENGINEER OF RECORD, AND DIVISION OF THE STATE ARCHITECT (DSA).</p> <p>GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.</p> <p>COMPLY WITH ALL PROVISIONS OF THE CALIFORNIA BUILDING STANDARDS CODE, TITLE 24, CCR, INCLUDING PARTS 1 THROUGH 6 AND PART 9. CONTRACTOR SHALL KEEP A COPY OF TITLE 24, CCR, PARTS 1 THROUGH 6 AND PART 9 ON SITE DURING CONSTRUCTION. ALL WORK SHALL CONFORM TO 2019 EDITION TITLE 24, CALIFORNIA CODE OF REGULATIONS.</p> <p>CUTTING, BORING, SAWCUTTING OR DRILLING THROUGH THE NEW OR EXISTING STRUCTURAL ELEMENTS TO BE DONE ONLY WHEN SO DETAILED IN THE DRAWINGS OR ACCEPTED BY THE ARCHITECT AND STRUCTURAL ENGINEER WITH THE APPROVAL OF DSA REPRESENTATIVE</p> <p>SWIMMING POOL SHALL COMPLY WITH ALL LOCAL HEALTH DEPARTMENT REQUIREMENTS</p> <p>DRINKING WATER WELL SHALL COMPLY WITH ALL LOCAL HEALTH DEPARTMENT REQUIREMENTS</p>	<table border="1"> <thead> <tr> <th>GENERAL</th> <th>STRUCTURAL</th> </tr> </thead> <tbody> <tr> <td>G0.1 COVER SHEET</td> <td>*S0.1 GENERAL NOTES</td> </tr> <tr> <td>G0.3 GENERAL NOTES, SYMBOLS AND ABBREVIATIONS</td> <td>*S0.2 GENERAL NOTES</td> </tr> <tr> <td>G1.1 FIRE ACCESS SITE PLAN</td> <td>*S0.3 TYPICAL CONCRETE DETAILS</td> </tr> <tr> <td>G1.3 FEMA FLOOD MAP</td> <td>*S0.4 TYPICAL MASONRY DETAILS</td> </tr> <tr> <td></td> <td>*S0.5 TYPICAL STEEL DETAILS</td> </tr> <tr> <td></td> <td>*S0.6 TYPICAL METAL STUD FRAMING</td> </tr> <tr> <td></td> <td>*S0.7 TYPICAL METAL STUD FRAMING</td> </tr> <tr> <td></td> <td>*S0.8 TYPICAL METAL STUD FRAMING</td> </tr> <tr> <td></td> <td>*S0.9 TYPICAL METAL DECK DETAILS</td> </tr> <tr> <td>CP0.1 ENLARGED SITE PLAN - EXISTING/ CODE ANALYSIS</td> <td>*S2.1 FOUNDATION AND ROOF FRAMING PLAN</td> </tr> <tr> <td>CP0.1A EXISTING PARTIAL SITE PLAN - (E) TOILET FACILITIES</td> <td>*S3.1 FOUNDATION DETAILS</td> </tr> <tr> <td></td> <td>*S3.2 FOUNDATION DETAILS</td> </tr> <tr> <td></td> <td>*S4.1 ROOF FRAMING DETAILS</td> </tr> <tr> <th>CODE</th> <th>ELECTRICAL</th> </tr> <tr> <td>CP0.1 ENLARGED SITE PLAN - EXISTING/ CODE ANALYSIS</td> <td>*E0.1 ELECTRICAL GENERAL NOTES</td> </tr> <tr> <td>CP0.1A EXISTING PARTIAL SITE PLAN - (E) TOILET FACILITIES</td> <td>*E0.2 ELECTRICAL SYMBOLS LIST AND ABBREVIATIONS</td> </tr> <tr> <td></td> <td>*E0.3 LIGHTING FIXTURE SCHEDULE AND NOTES</td> </tr> <tr> <td></td> <td>*E0.4 SINGLE LINE DIAGRAM & BRANCH CIRCUIT VOLTAGE DROP CALCULATIONS</td> </tr> <tr> <td></td> <td>*E0.5 ELECTRICAL SITE PLAN</td> </tr> <tr> <td></td> <td>*E1.1 ENLARGED ELECTRICAL POOL PLAN</td> </tr> <tr> <td></td> <td>*E1.2 ELECTRICAL DEMOLITION, LIGHTING & POWER PLANS</td> </tr> <tr> <td></td> <td>*E2.1 COMMUNICATION, FIRE ALARM & ELECTRICAL ROOF PLANS</td> </tr> <tr> <td></td> <td>*E2.2 COMMUNICATION RISER DIAGRAM</td> </tr> <tr> <td></td> <td>*E3.1 FIRE ALARM SYMBOLS AND NOTES</td> </tr> <tr> <td></td> <td>*E3.2 FIRE ALARM WIRING DIAGRAM DETAILS</td> </tr> <tr> <td></td> <td>*E3.3 FIRE ALARM WIRING DIAGRAM DETAILS</td> </tr> <tr> <td></td> <td>*E3.4 FIRE ALARM RISER DIAGRAM</td> </tr> <tr> <td></td> <td>*E4.1 ELECTRICAL DETAILS</td> </tr> <tr> <td></td> <td>*E4.2 ELECTRICAL DETAILS</td> </tr> <tr> <td></td> <td>*E4.3 ELECTRICAL DETAILS</td> </tr> <tr> <td></td> <td>*E5.1 PANEL SCHEDULES</td> </tr> <tr> <td></td> <td>*E6.1 TITLE 24</td> </tr> <tr> <td></td> <td>*E6.2 TITLE 24</td> </tr> <tr> <td></td> <td>*E6.3 TITLE 24</td> </tr> <tr> <th>AQUATICS</th> <th>MECHANICAL</th> </tr> <tr> <td>*DP.1 SWIMMING POOL DECK PLAN</td> <td>*M0.1 MECHANICAL GENERAL NOTES, SYMBOLS AND ABBREVIATIONS</td> </tr> <tr> <td>*SP.1 SWIMMING POOL LAYOUT PLAN</td> <td>*M0.2 MECHANICAL SCHEDULES AND DETAILS</td> </tr> <tr> <td>*SP.2 SWIMMING POOL PIPING PLAN</td> <td>*M0.3 TITLE 24</td> </tr> <tr> <td>*SP.3 SWIMMING POOL UNDERWATER LIGHT/TIMING SYSTEM PLAN</td> <td>*M0.4 TITLE 24</td> </tr> <tr> <td>*SP.4 SWIMMING POOL SECTIONS</td> <td>*M2.1 MECHANICAL DEMOLITION, REMODEL & MECHANICAL ROOF PLANS</td> </tr> <tr> <td>*SP.5 DETAILS</td> <td></td> </tr> <tr> <td>*SP.6 DETAILS</td> <td></td> </tr> <tr> <td>*SP.7 DETAILS</td> <td></td> </tr> <tr> <td>*SP.8 DETAILS</td> <td></td> </tr> <tr> <td>*SP.9 DETAILS</td> <td></td> </tr> <tr> <td>*SP.10 DETAILS</td> <td></td> </tr> <tr> <td>*SP.11 DETAILS</td> <td></td> </tr> <tr> <td>*MR.1 MECHANICAL ROOM LAYOUT PLAN</td> <td></td> </tr> <tr> <td>*MR.2 MECHANICAL ROOM SECTIONS</td> <td></td> </tr> <tr> <td>*MR.3 DETAILS</td> <td></td> </tr> <tr> <td>*MR.4 DETAILS</td> <td></td> </tr> <tr> <td>*MR.5 DETAILS</td> <td></td> </tr> <tr> <td>*MR.6 DETAILS</td> <td></td> </tr> <tr> <td>*MR.7 DETAILS</td> <td></td> </tr> <tr> <td>*MR.8 DETAILS</td> <td></td> </tr> <tr> <th>ARCHITECTURAL - SITE</th> <th>PLUMBING</th> </tr> <tr> <td>AS1.0 EXISTING SITE PLAN</td> <td>*P0.1 PLUMBING GENERAL NOTES, SYMBOLS AND ABBREVIATIONS</td> </tr> <tr> <td>AS1.1 OVERALL SITE PLAN</td> <td>*P0.2 PLUMBING SCHEDULES AND DETAILS</td> </tr> <tr> <td>AS1.2 DEMO ENLARGED SITE PLAN</td> <td>*P1.1 PLUMBING SITE PLAN</td> </tr> <tr> <td>AS1.3 ENLARGED REMODEL SITE PLAN</td> <td>*P2.1 PLUMBING DEMOLITION, REMODEL & PLUMBING ROOF PLANS</td> </tr> <tr> <td></td> <td>SHADE STRUCTURE USING DSA PC04-119455</td> </tr> <tr> <th>ARCHITECTURAL - BUILDING</th> <th>MECHANICAL</th> </tr> <tr> <td>A2.1 FLOOR PLAN, REFLECTED CEILING PLAN & ROOF PLAN</td> <td>*P.C.T-1.0 P.C. 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*SP.3 SWIMMING POOL UNDERWATER LIGHT/TIMING SYSTEM PLAN	*M0.4 TITLE 24																																																																																																																																																																	
*SP.4 SWIMMING POOL SECTIONS	*M2.1 MECHANICAL DEMOLITION, REMODEL & MECHANICAL ROOF PLANS																																																																																																																																																																	
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A2.1 FLOOR PLAN, REFLECTED CEILING PLAN & ROOF PLAN	*P.C.T-1.0 P.C. TITLE SHEET																																																																																																																																																																	
A2.2 ENLARGED FLOOR PLAN AND INTERIOR ELEVATIONS	*P.C.T-3.0 DSA 103 SAMPLE FORMS																																																																																																																																																																	
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A2.5 ENLARGED CANOPY PLAN & DETAILS	*10.2-2000 REACTIONS																																																																																																																																																																	
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A6.3 PARTITION TYPES, EXTERIOR WALL ASSEMBLIES AND ROOF TYPES																																																																																																																																																																		
A11.1 FINISH, DOOR, AND WINDOW SCHEDULES AND DETAILS																																																																																																																																																																		
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A12.1 FINISH PLAN																																																																																																																																																																		
<p>VICINITY MAP</p>	<p>PROJECT ADDRESS: 463 SOUTH HOLLENBECK AVE, COVINA, CA 91723</p>	<p>APPLICABLE CODES</p> <p>PARTIAL LIST OF APPLICABLE CODES 2022 California Administrative Code (CAC), Part 1, Title 24 CCR* 2022 California Building Code (CBC), Part 2, Title 24 CCR (2021 International Building Code, Vol. 1 & 2, and 2019 California amendments) 2022 California Electrical Code (CEC), Part 3, Title 24 CCR (2017 National Electrical Code and 2019 California Amendments) 2022 California Mechanical Code (CMC), Part 4, Title 24 CCR (2021 IAPMO Uniform Mechanical Code and 2019 California amendments) 2022 California Plumbing Code (CPC), Part 5, Title 24 CCR (2021 IAPMO Uniform Plumbing Code and 2019 California amendments) 2022 California Energy Code (CEC), Part 6, Title 24 CCR 2022 California Fire Code (CFC), Part 9, Title 24 CCR (2021 International Fire Code and 2019 California Amendments) 2022 California Existing Building Code (CEBC), Part 10, Title 24 CCR (2021 International Existing Building Code and 2019 California Amendments) 2022 California Green Building Standards Code (CALGreen), Part 11, Title 24 CCR 2022 California Referenced Standards Code, Part 12, Title 24 CCR Title 19 CCR, Public Safety, State Fire Marshal Regulations 2010 ADA Standards for Accessible Design</p>	<p>STATEMENT OF GENERAL CONFORMANCE</p> <p>FOR ARCHITECTS/ENGINEERS WHO UTILIZE PLANS, INCLUDING BUT NOT LIMITED TO SHOP DRAWINGS, PREPARED BY OTHER LICENSED DESIGN PROFESSIONALS AND/OR CONSULTANTS.</p> <p>FOR THE FOLLOWING DRAWINGS OR SHEETS:</p> <p>ALL DRAWINGS PER "SHEET INDEX" ON SHEET G0.1 MARKED WITH AN ASTERISK "*" HAVE BEEN PREPARED BY OTHER DESIGN PROFESSIONALS OR CONSULTANTS WHO ARE LICENSED AND/OR AUTHORIZED TO PREPARE SUCH DRAWINGS IN THIS STATE. THESE DRAWINGS OR SHEETS HAVE BEEN EXAMINED BY ME FOR:</p> <ol style="list-style-type: none"> DESIGN INTENT AND APPEARS TO MEET THE APPROPRIATE REQUIREMENTS OF TITLE 24, CCR, AND THE PROJECT SPECIFICATIONS PREPARED BY ME, AND COORDINATION WITH MY PLANS AND SPECIFICATIONS AND IS ACCEPTABLE FOR INCORPORATION INTO THE CONSTRUCTION OF THIS PROJECT. <p>THIS STATEMENT OF GENERAL CONFORMANCE SHALL NOT BE CONSTRUED AS RELIEVING ME OF MY RIGHTS, DUTIES, AND RESPONSIBILITIES UNDER SECTION 17302 AND 81138 OF THE EDUCATION CODE AND SECTIONS 4-306, 4-341, AND 4-344 OF TITLE 24, PART 1, (TITLE 24, PART 1, SECTION 4-317(B)).</p> <p>I FIND THAT ALL DRAWINGS OR SHEETS INDICATED IN THIS STATEMENT OF GENERAL CONFORMANCE ARE IN GENERAL CONFORMANCE WITH THE PROJECTS DESIGN, AND HAVE BEEN COORDINATED WITH THE PROJECT PLANS AND SPECIFICATIONS.</p> <p>12/19/2022</p> <p>SIGNATURE: JESSE MILLER DATE: 10-31-2023 PRINT NAME: JESSE MILLER LICENSE NUMBER: C-32306 EXPIRATION DATE: 10-31-2023</p>																																																																																																																																																															
<p>LOCATION MAP</p>	<p>PROJECT SITE</p>	<p>PARTIAL LIST OF APPLICABLE STANDARDS</p> <p>NFPA 14 - Standard for the Installation of Standpipe and Hose Systems (CA amended).....2019 Edition NFPA 17 - Standard for Dry Chemical Extinguishing Systems.....2021 Edition NFPA 17A - Standard for Wet Chemical Extinguishing Systems.....2021 Edition NFPA 20 - Standard for the Installation of Stationary Pumps for Fire Protection.....2022 Edition NFPA 22 - Standard for Water Tanks for Private Fire Protection.....2023 Edition NFPA 24 - Standard for the Installation of Private Fire Service Mains and Their Appurtenances (CA amended).....2016 Edition NFPA 72 - National Fire Alarm and Signaling Code (CA amended).....2016 Edition NFPA 80 - Standard for Fire Doors and Other Opening Protectives.....2016 Edition NFPA 2001 - Standard for Clean Agent Fire Extinguishing Systems (CA amended).....2015 Edition UL 464 - Audible Signaling Devices for Fire Alarm and Signaling Systems.....2017 Edition UL 521 - Standard for Heat Detectors for Fire Protective Signaling Systems.....2023 Edition UL 1971 - Standard for Signaling Devices for the Hearing Impaired.....2021 (R2010) ICC 300 - Standard for Bleachers, Folding and Telescopic Seating, and Grandstands.....2017 Edition</p> <p>For a complete list of applicable NFPA standards refer to 2022 CBC (SFM) Chapter 35 and California Fire Code Chapter 80. See California Building Code Chapter 35 for State of California amendments to the NFPA Standards.</p>																																																																																																																																																																

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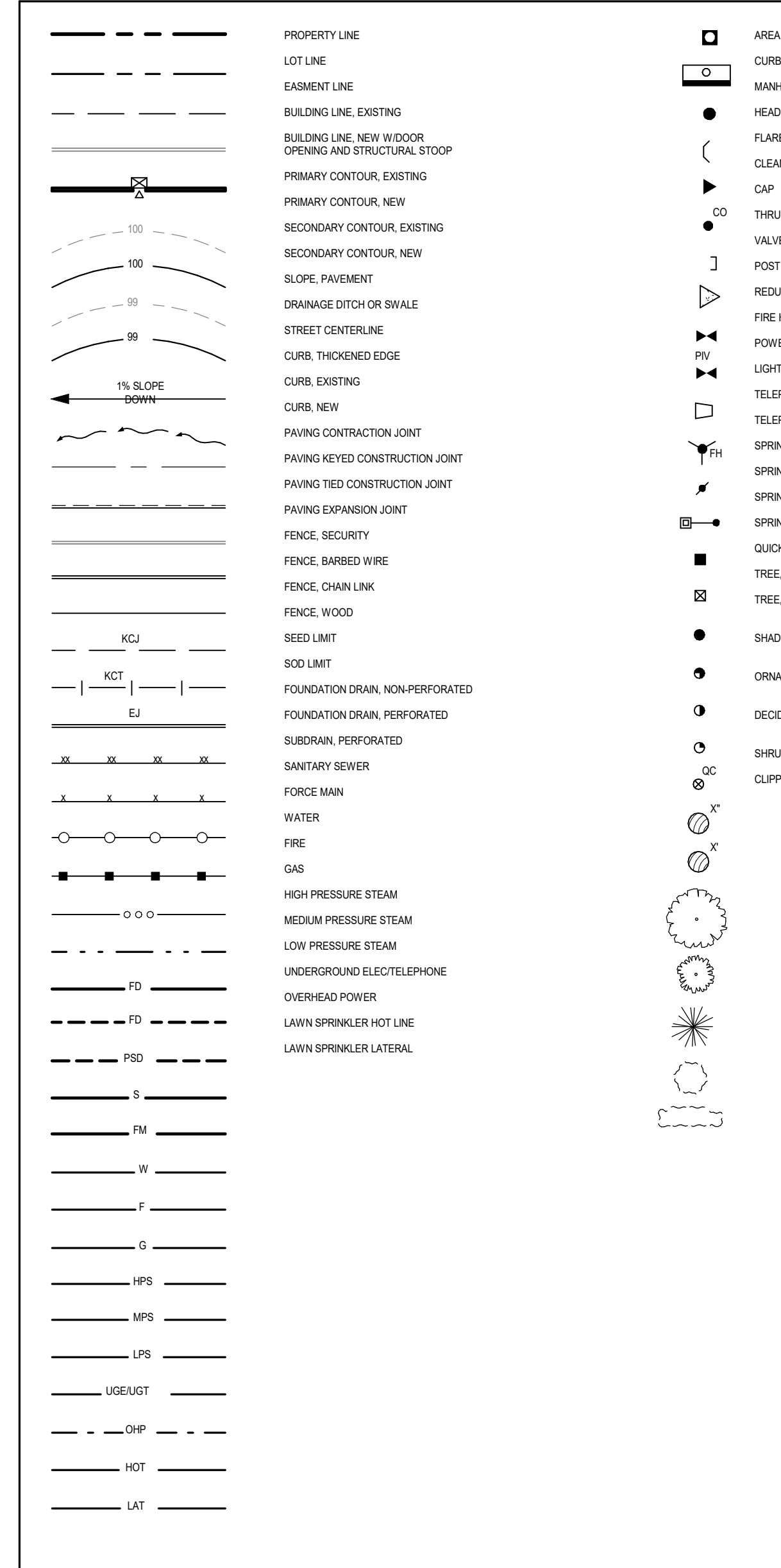
GENERAL ABBREVIATIONS

Table listing general abbreviations such as ADA, ADA, AFF, AHJ, ALT, ANS, APPROX, ARCH, BLDG, BSMT, CL, CLG, CM, CONC, CONNS, CONST, CONT, CONTR, CTR, D, DEG, DEMO, DIA, DIM, DIV, DNL, DWG(S), E, EA, ELEC, EL, ELEC, ENG, EQ, EQUIP, EQUIV, EXST, EXT, FN, FL, FT, FUT, GC, GOVT, H, HORIZ, HT, IBC, IN, INT, LB(S), M, MAX, MC, MECH, MEZZ, MFR, MIN, MISC, MM, N, N/A, NC, NIC, NT, O, OPP, OPH, PAR, PENT, PLYWD, QTY, REQ(D), REV, RM, RND, S, SCHED, SECT, SHEET, SIM, SPC, STD, STL, STOR, STRUC, SYM, TEMP, TYP, UNEX, UNFN, UNO, VERT, VIF, W, W/O, etc.

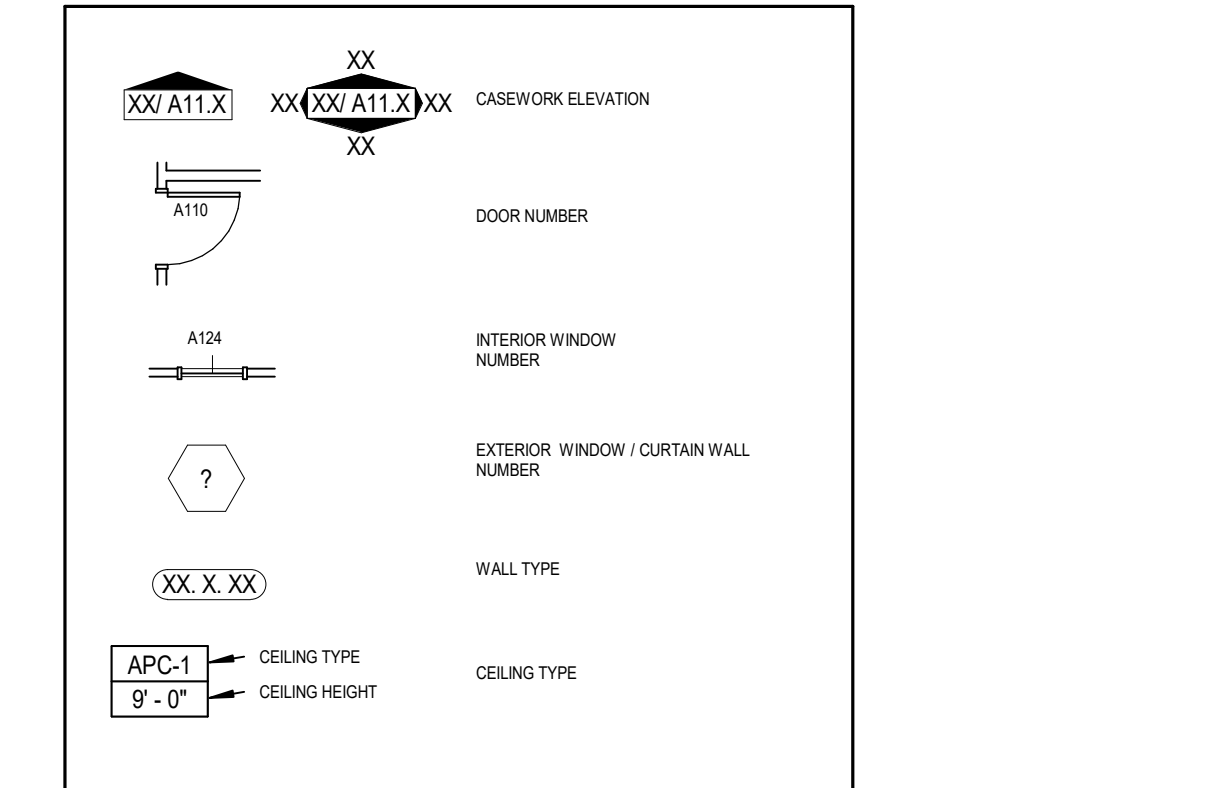
GENERAL SYMBOLS



SITE SYMBOLS



ARCHITECTURAL SYMBOLS



ARCHITECTURAL ABBREVIATIONS

Table listing architectural abbreviations for various materials and components, such as A/E (Architect/Engineer), AB (Air Barrier), ABS (Asbestos), ACC (Accessible), ACR (Acrylic), ACT (Acoustic Ceiling Tile), ADJ (Adjustable), ADM (Administration), AEC (Automated External Defibrillator), AL (Aluminum), ALUM (Aluminum), AMP (Access Panel), APC (Acoustic Panel Ceiling), ASPH (Asphalt), AUTO (Automatic), AVG (Average), BWP (Acoustic Wall Panel), etc.

APPENDIX A5--NONRESIDENTIAL VOLUNTARY MEASURES

Table for Appendix A5, Nonresidential Voluntary Measures, showing section title, code, year, N/A, and plan sheet reference for measures like Commissioning plan, Environmental assessment, etc.

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

GENERAL NOTES

General notes text including: A. GENERAL NOTES APPLY TO ALL SHEETS; B. DIMENSIONS ARE ACTUAL AND ARE TO FACE UNLESS NOTED OTHERWISE; C. THE OWNER SHALL FURNISH AND INSTALL THE FOLLOWING ITEMS...



GENERAL ARCHITECTURAL NOTES

General architectural notes text including: 1. ALL INTERIOR WALLS SHALL BE 8 INCHES NOMINAL THICKNESS UNLESS NOTED OTHERWISE; 2. PARTITION TYPES ARE DESIGNATED ON FLOOR PLANS; 3. ALL WINDOW WALLS AND INTERIOR STEEL WALLS SHALL EXTEND TO UNDERSIDE OF FLOOR OR ROOF DECK ABOVE UNLESS NOTED OTHERWISE...

APPENDIX A5--NONRESIDENTIAL VOLUNTARY MEASURES

Table for Appendix A5, Nonresidential Voluntary Measures, showing section title, code, year, N/A, and plan sheet reference for measures like Wall-mounted urinals, Floor-mounted urinals, etc.

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

APPENDIX A5--NONRESIDENTIAL VOLUNTARY MEASURES

Table for Appendix A5, Nonresidential Voluntary Measures, showing section title, code, year, N/A, and plan sheet reference for measures like Commissioning plan, Functional performance testing, etc.

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

APPENDIX A5--NONRESIDENTIAL VOLUNTARY MEASURES

Table for Appendix A5, Nonresidential Voluntary Measures, showing section title, code, year, N/A, and plan sheet reference for measures like Filtered backwash, Filtered backwash, etc.

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

COVINA VALLEY HS POOL REPLACEMENT
COVINA VALLEY UNIFIED SCHOOL DISTRICT
483 SOUTH HOLLEBECK AVENUE COVINA, CA 91723

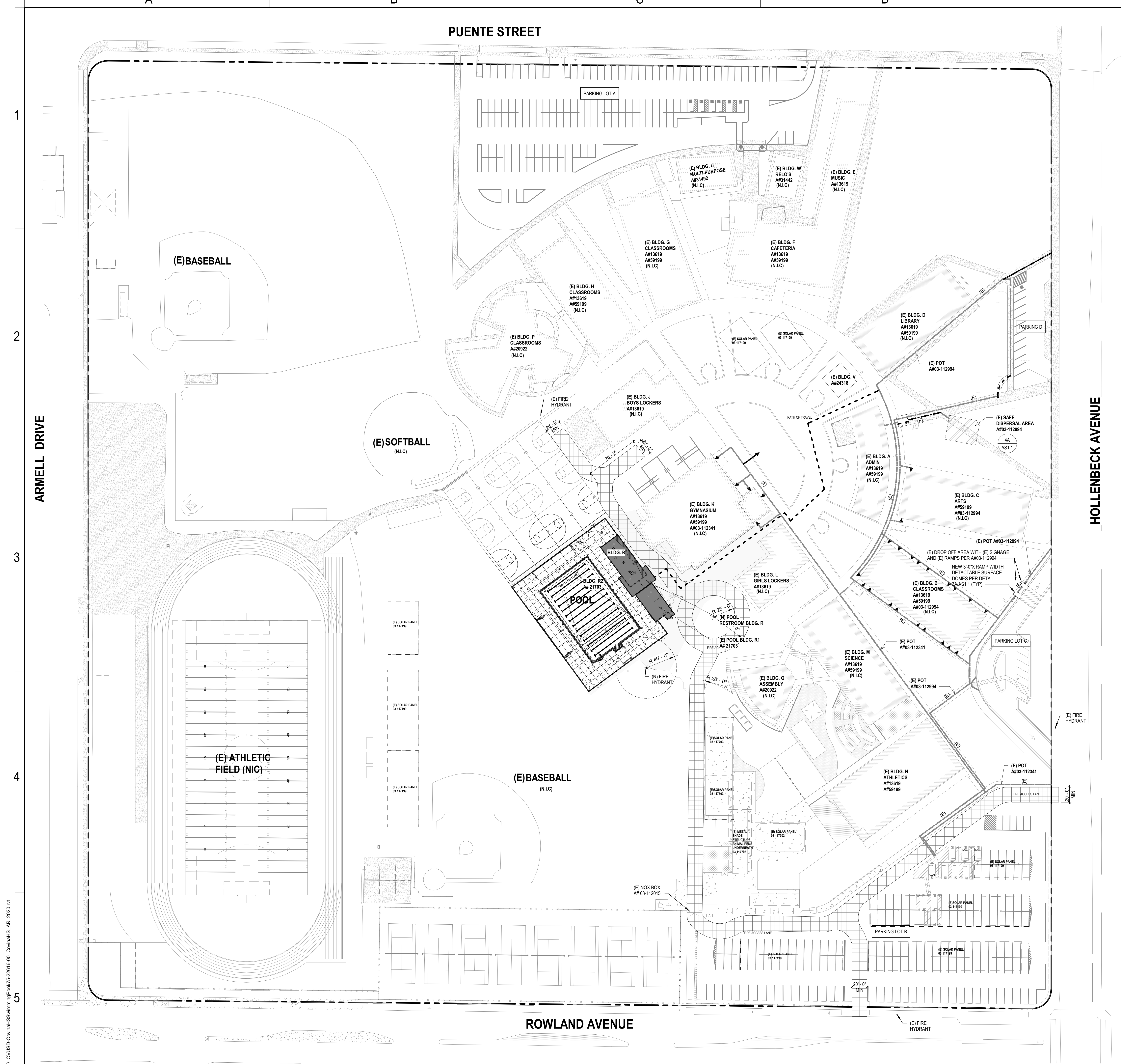
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04/28/2023
REVISIONS

75-22616-00
DSA # 03-122700
DSA FILE # 19-48

GENERAL NOTES, SYMBOLS AND ABBREVIATIONS

GO.3



DSA 810 FIRE & LIFE SAFETY

810 FIRE & LIFE SAFETY SITE CONDITIONS SUBMITTAL

Division of the State Architect (DSA) documents referenced within this publication are available on the DSA Forms or DSA Publications webpages.

To facilitate the Division of the State Architect's (DSA) fire and life safety plan review of project site conditions, DSA requires the design professional to provide the following information at time of project submittal for projects consisting of construction of a new building, addition to existing building, and fire suppression water supply information associated with compliance items 1 through 3 below is to be provided for all project types indicated above. Information associated with items 4 through 7 is to be completed when an alternate means is utilized. Acknowledgement by the school district and signature from the Local Fire Authority (LFA) is only required when an alternate design means is being requested.

The Project Information and Fire & Life Safety Information sections are to be completed for all projects and stamped onto the fire access site plan. When an alternate design means is proposed, all sections on pages 1 and 2 are to be completed and stamped onto the fire access site plan.

For additional information refer to the instructions at the end of this form and DSA Policy PL 09-01: Fire Flow for Buildings.

DSR DSA 810 (Revised 12/20/20) DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA Page 1 of 4

DSA 810 FIRE & LIFE SAFETY SITE CONDITIONS SUBMITTAL

CONDITION MEANS AND METHODS RESOLUTION	ALTERNATE ACCEPTED			
	YES	NO	N/A	NOT
4. Emergency vehicle access roadways do not meet CFC requirements.				
4a. Acceptable Alternative: Emergency vehicle and personnel access as proposed by the project architect is acceptable for providing the suppression and protection of life and property.	<input checked="" type="checkbox"/>			
5. Fire Hydrants: Number and spacing does not meet CFC requirements.				
5a. Acceptable Alternative: Number of fire hydrants and spacing as proposed by the project architect is acceptable for the suppression and protection of life and property.	<input checked="" type="checkbox"/>			
6. Fire Hydrants: Water flow and pressure are less than CFC minimum.				
6a. Acceptable Alternative: The available flow and pressure is acceptable for providing fire suppression and protection of life and property.	<input checked="" type="checkbox"/>			
7. Location of the department connection(s) serving fire sprinkler systems or standpipe systems does not meet CFC requirements.				
7a. Acceptable Alternative: The location of the department connection serving the fire sprinkler system and/or standpipe system is acceptable for providing the suppression and protection of life and property.	<input checked="" type="checkbox"/>			

Signature: *[Signature]* Date: 12-5-22

FIRE FLOW TEST

Information on Fire Flow Availability for Building Permit
For All Buildings Other Than One and Two Family Dwellings (R-3), Townhomes, and Accessory Dwelling Units

INSTRUCTIONS:
Complete parts I & II.
Verify fire flow, fire hydrant location and fire hydrant size.

PART I
Building Address: 463 S Hollenbeck Avenue
City or Area: Covina
APN: 8843-013-900
Nearest Cross Street: Rowland Street
Distance of Nearest Cross Street to Property Line: 40 feet
Applicant: Covina-Valley USD
Address: 519 E Badillo Street
City: Covina
Occupancy (Use of Building): Mixed (B, S-1, S-2) Fire Sprinklered: Yes No
Type of Construction: II-B (non-sprinklered)
Square Footage: 3,830 SF Number of Stories: 1

PART II
Information on Fire Flow Availability (To be completed by Water Purveyor)
Location of hydrant: 463 S Hollenbeck Ave (Rowland Street)
Hydrant Number: H1694
Distance from Nearest Property Line: 50' Size of Hydrant: 6" x 26" Water main: 8"
Static PSI: 104 Residual PSI: 98 Orifice size: 2 1/2" Flow: 500
Fire Flow at 20 PSI: 1981 Duration: 15min Flow Test Date: 10/10/22
 (Check box if Simultaneous Dual flow test was performed) Combined flow at 20 psi: _____

SITE SYMBOLS

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DSA APPLICATION NUMBER CLOSED AND CERTIFIED

- A#13619 DSA CLOSED AND CERTIFIED 04/08/1959
- A#24318 DSA CLOSED AND CERTIFIED 08/17/1964
- A#31442 DSA CLOSED AND CERTIFIED 01/15/1970
- A#31492 DSA CLOSED AND CERTIFIED 08/12/1969
- A#59199 DSA CLOSED AND CERTIFIED 09/12/2008
- A#03-108214 DSA CLOSED AND CERTIFIED 07/16/2009
- A#03-112341 DSA CLOSED AND CERTIFIED 06/16/2020
- A#03-112994 DSA CLOSED AND CERTIFIED 06/30/2014
- A#03-117199 DSA CLOSED AND CERTIFIED 09/06/2017

BUILDING DESCRIPTION

	POOL FACILITY	TOTAL	TOTAL ALLOWABLE
OCCUPANCY GROUP	MIXED B & S-1		
NUMBER OF STORIES	1 STORY		
TOTAL AREA MODERNIZED	25,790 SF		
AUTOMATIC FIRE SPRINKLERS	NONE		
CONSTRUCTION TYPE	II-B		
ALLOWABLE FRONTAGE INCREASE (BLDG)	NOT REC'D		
TOTAL BLDG AREA WITH OVERHANG	2,450 SQFT	2,450 SQFT	26,000 SQFT
OCCUPANT LOAD	1,221 REFER TO 0515 FOR DETAILS OCCUPANT LOAD CALLS	1,221 OCCUPANT	
HEIGHT IN FEET	13'-4"		55'-0"

Signature: *[Signature]* Date: 10/10/22

City of Covina
Water Purveyor
Phone Number: 626-394-5245

This information is considered valid for Twenty Four Months

Fire Department approval of building area shall be required prior to the issuance of a Building Permit for the Substantial Building. Any additional water systems will need to be reviewed by the Fire Department. Design and construction of water systems will need to be reviewed by the Fire Department. Design and construction of water systems will need to be reviewed by the Fire Department.

DLR GROUP

JESSE MILLER
No. C-32306
10/31/2023
STATE OF CALIFORNIA

COVINA VALLEY HS POOL REPLACEMENT
COVINA VALLEY UNIFIED SCHOOL DISTRICT
463 SOUTH HOLLENBECK AVENUE COVINA, CA 91723

DSA SUBMITTAL SET_V2
04/28/2023 REVISIONS

75-22616-00
DSA AH 03-122700
DSA FILE # 19-48

FIRE ACCESS SITE PLAN

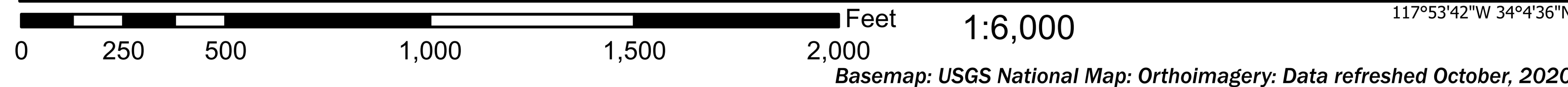
G1.1

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National Flood Hazard Layer FIRMette



117°54'19"W 34°5'6"N



Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) <i>Zone A, V, A99</i>
		With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i>
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile <i>Zone X</i>
		Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i>
		Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i>
		Area with Flood Risk due to Levee <i>Zone D</i>
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard <i>Zone X</i>
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard <i>Zone D</i>
		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance
		17.5 Water Surface Elevation
		8 Coastal Transect
		513 Base Flood Elevation Line (BFE)
		Limit of Study
MAP PANELS		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
		Digital Data Available
		No Digital Data Available
		Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/26/2022 at 5:56 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

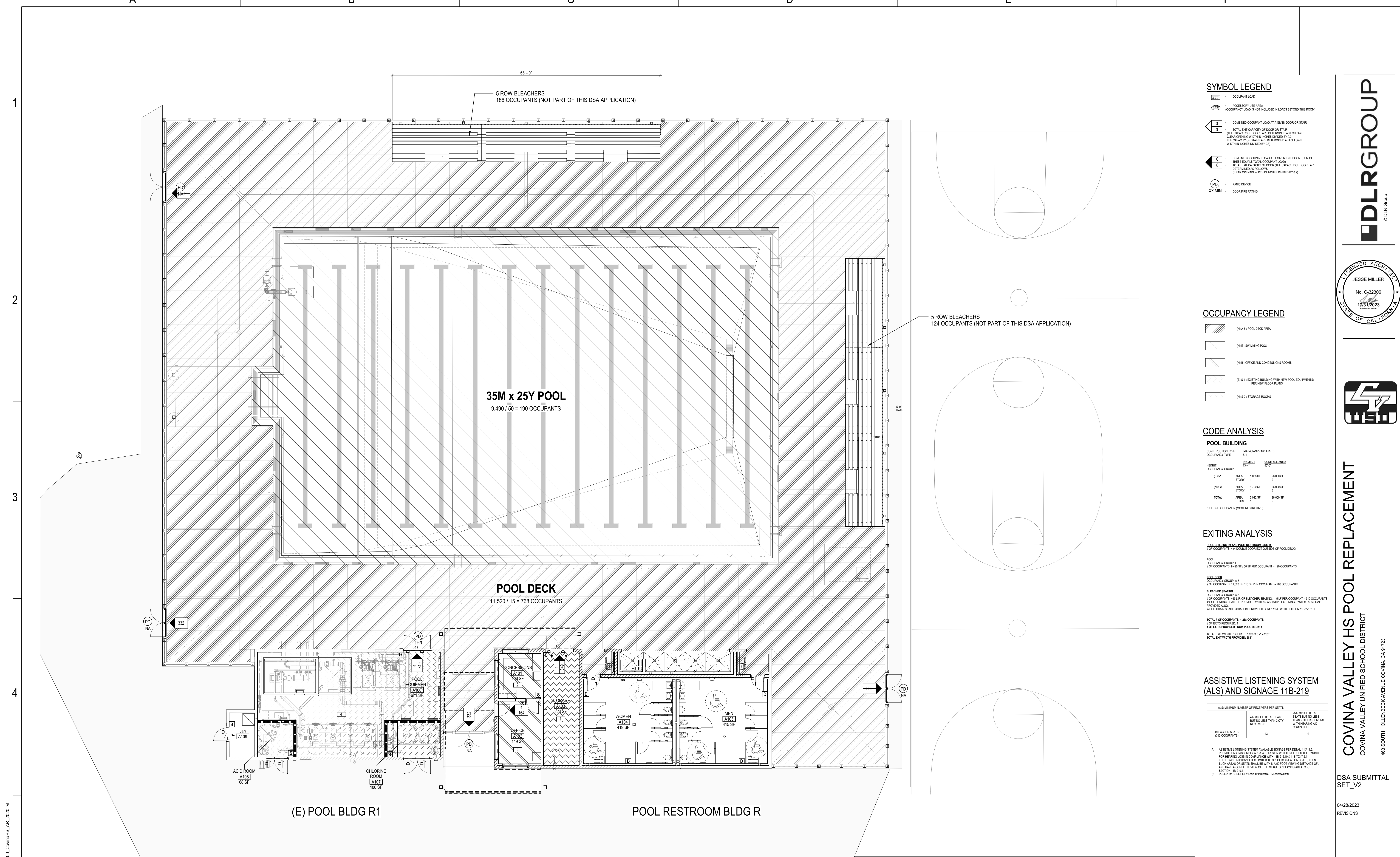


COVINA VALLEY HS POOL REPLACEMENT
COVINA VALLEY UNIFIED SCHOOL DISTRICT
483 SOUTH HOLLENBECK AVENUE COVINA, CA 91723

DSA SUBMITTAL SET_V2

04/28/2023 REVISIONS

75-22616-00
DSA # 03-122700
DSA FILE # 19-HB
FEMA FLOOD MAP



SYMBOL LEGEND

- [Hatched Box] OCCUPANT LOAD
- [Dotted Box] ACCESSORY USE AREA (OCCUPANT LOAD IS NOT INCLUDED IN LOADS BEYOND THIS ROOM)
- [Circle with 0] COMBINED OCCUPANT LOAD AT A GIVEN DOOR OR STAIR (TOTAL EXIT CAPACITY OF DOOR OR STAIR (THE CAPACITY OF DOORS ARE DETERMINED AS FOLLOWS: CLEAR OPENING WIDTH IN INCHES DIVIDED BY 1.1) THE CAPACITY OF STAIRS ARE DETERMINED AS FOLLOWS: CLEAR OPENING WIDTH IN INCHES DIVIDED BY 0.3)
- [Circle with 0] COMBINED OCCUPANT LOAD AT A GIVEN EXIT DOOR (SUM OF THESE EQUALS TOTAL OCCUPANT LOAD) (TOTAL EXIT CAPACITY OF DOOR (THE CAPACITY OF DOORS ARE DETERMINED AS FOLLOWS: CLEAR OPENING WIDTH IN INCHES DIVIDED BY 1.1)
- [Circle with PD] PANE DEVICE
- [Circle with XX MIN] DOOR FIRE RATING

OCCUPANCY LEGEND

- [Hatched Box] (N) A-5: POOL DECK AREA
- [Hatched Box] (N) E: SWIMMING POOL
- [Hatched Box] (N) B: OFFICE AND CONCESSIONS ROOMS
- [Hatched Box] (E) S-1: EXISTING BUILDINGS WITH NEW POOL EQUIPMENTS PER NEW FLOOR PLANS
- [Hatched Box] (N) S-2: STORAGE ROOMS

CODE ANALYSIS

POOL BUILDING

CONSTRUCTION TYPE: 4-8 (NON-SPRINKLERED)
OCCUPANCY TYPE: S-1

FLOOR	AREA	PROJECT	CODE ALLOWED
BLDG #1	1,099 SF	1	26,000 SF
STORY 1	1,700 SF	1	26,000 SF
STORY 2	3,012 SF	2	26,000 SF
TOTAL	5,811 SF		52,000 SF

*USE S-1 OCCUPANCY (MOST RESTRICTIVE)

EXITING ANALYSIS

POOL BUILDING #1 AND POOL RESTROOM BLDG #2

OF OCCUPANTS = 4 (IF DOUBLE DOOR EXIT OUTSIDE OF POOL DECK)

POOL	OCCUPANCY GROUP	# OF OCCUPANTS	# OF EXITS
POOL	OCCUPANCY GROUP E	1,900	2
POOL DECK	OCCUPANCY GROUP A-5	1,120	3
POOL RESTROOM BLDG #2	OCCUPANCY GROUP B	150	2

BLEACHER SEATING
OCCUPANCY GROUP A-5
OF OCCUPANTS: 188
OF BLEACHER SEATING: 188
OF SEATING SHALL BE PROVIDED WITH AN ASSISTIVE LISTENING SYSTEM. ALSO SIGNS PROVIDED.
WHEELCHAIR SPACES SHALL BE PROVIDED COMPLYING WITH SECTION 11B-211.2.1

TOTAL # OF OCCUPANTS: 1,288 OCCUPANTS
OF EXITS PROVIDED FROM POOL DECK: 4
TOTAL EXIT WIDTH REQUIRED: 1,288 X 0.2' = 258'
TOTAL EXIT WIDTH PROVIDED: 342'

ASSISTIVE LISTENING SYSTEM (ALS) AND SIGNAGE 11B-219

ALS MINIMUM NUMBER OF RECEIVERS PER SEAT	AN MIN OF TOTAL SEATS BUT NOT LESS THAN 2 QTY RECEIVERS	25% MIN OF TOTAL SEATS BUT NOT LESS THAN 2 QTY RECEIVERS WITH HEARING AID COMPATIBLE
BLEACHER SEATS (110 OCCUPANTS)	13	4

A. ASSISTIVE LISTENING SYSTEM AVAILABLE SIGNAGE PER DETAIL 11B111.2
B. PROVIDE SCHEDULED AREA WITH A SIGN WHICH INCLUDES THE SYMBOL FOR HEARING LOSS IN COMPLIANCE WITH 11B-210 (8) & 11B-210.7.2.4
C. IF THE OFFERED SEATING IS LIMITED TO SPECIFIC AREAS OR SEATS, THEN SIGNAGE FOR SEATING SHALL BE WITHIN 30' (9.1M) TRAVEL DISTANCE OF, AND HAVE A COMPLETE VIEW OF, THE STAGE OR PLAYING AREA. SEE SECTION 11B-214
D. REFER TO SHEET E22 FOR ADDITIONAL INFORMATION

PLUMBING FIXTURE COUNTS

POOL TOTAL WATER SURFACE AREA: 9,490 SF
TOTAL BATHER LOAD: 9,490/15 = 632
BATHERS, MEN: 316
BATHERS, WOMEN: 316

	MALE FIXTURES REQUIRED	MALE FIXTURES PROVIDED	FEMALE FIXTURES REQUIRED	FEMALE FIXTURES PROVIDED
WATER CLOSETS	4	(N) 3 / (E) 2	5	(N) 4 / (E) 4
URINALS	4	(N) 1 / (E) 5		
LAVATORIES	4	(N) 2 / (E) 4	4	(N) 2 / (E) 3
DRINKING FOUNTAINS (EITHER)	3	(N) 4		
SHOWER (EITHER)	12	(N) 5 / (E) 40 BOYS		(E) 44 GIRLS

PER SECTION 3116B.1 PUBLIC TOILET FACILITIES (SHOWERS / LOCKERS) WHEN POOL USERS HAVE EXISTING ACCESS TO FACILITIES LOCATED NOT MORE THAN 300 FEET IN TRAVEL DISTANCE THE EXISTING FACILITIES CAN BE USE FOR THE POOL USERS. SEE SITE PLAN SHEET AS-1.1 NOTES 'A' AND 'B' FOR EXISTING TRAVEL DISTANCE TO BOTH BOYS AND GIRLS LOCKER / SHOWER BUILDINGS.

DLR GROUP
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REGISTERED ARCHITECT
JESSE MILLER
No. C-32306
10/31/2023
STATE OF CALIFORNIA

CSIO

COVINA VALLEY HS POOL REPLACEMENT
COVINA VALLEY UNIFIED SCHOOL DISTRICT
483 SOUTH HOLLENBECK AVENUE COVINA, CA 91723

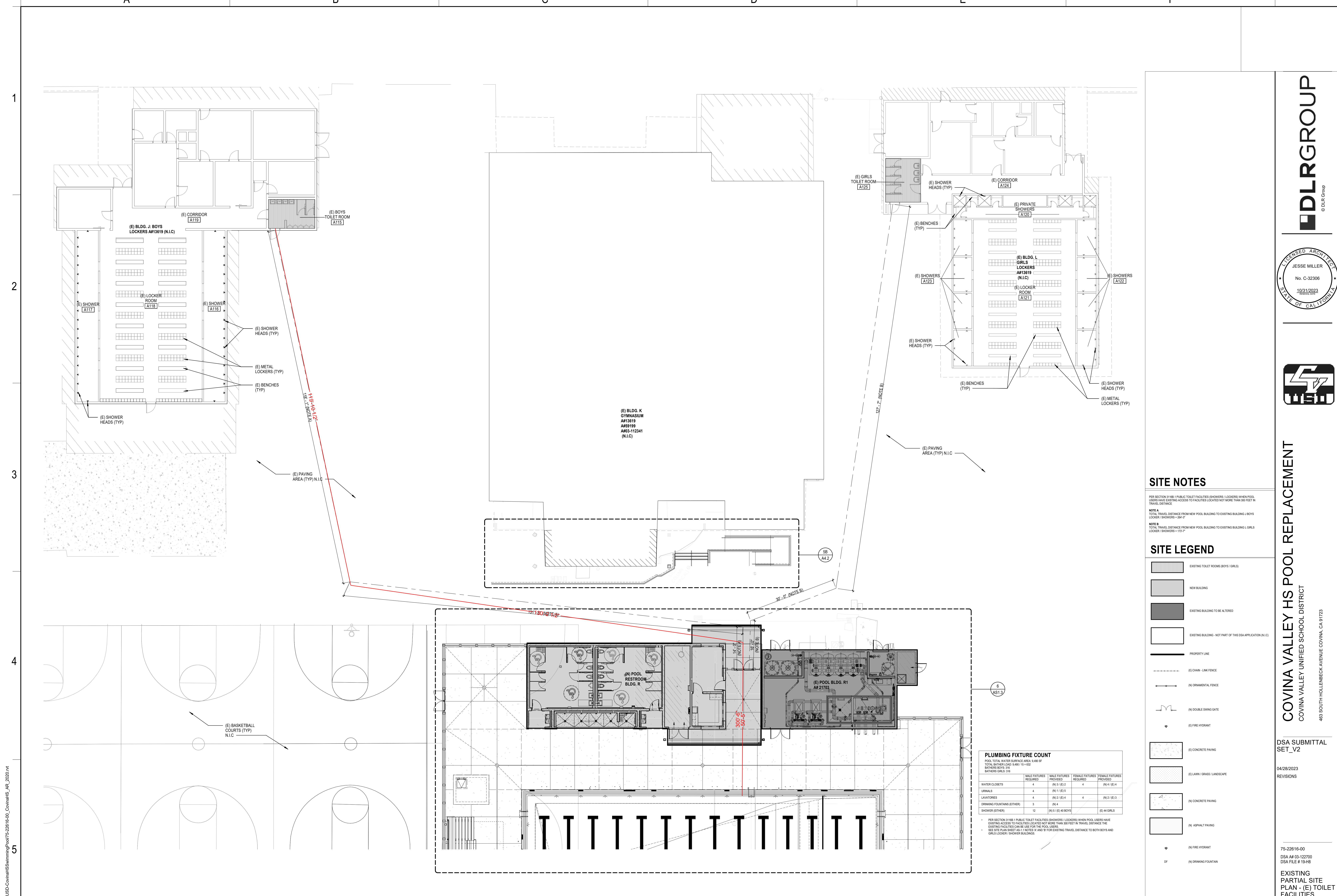
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ENLARGED SITE PLAN - EXITING / CODE ANALYSIS

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PARTIAL SITE PLAN - EXISTING FACILITIES
 SCALE: 3/32" = 1'-0"

SITE NOTES

PER SECTION 31168.1 PUBLIC TOILET FACILITIES (SHOWERS / LOCKERS) WHEN POOL USERS HAVE EXISTING ACCESS TO FACILITIES LOCATED NOT MORE THAN 300 FEET IN TRAVEL DISTANCE
NOTE A:
 TOTAL TRAVEL DISTANCE FROM NEW POOL BUILDING TO EXISTING BUILDING J BOYS LOCKER / SHOWERS = 264'-3"
NOTE B:
 TOTAL TRAVEL DISTANCE FROM NEW POOL BUILDING TO EXISTING BUILDING L GIRLS LOCKER / SHOWERS = 175'-7"

SITE LEGEND

- EXISTING TOILET ROOMS (BOYS / GIRLS)
- NEW BUILDING
- EXISTING BUILDING TO BE ALTERED
- EXISTING BUILDING - NOT PART OF THIS DSA APPLICATION (N.I.C.)
- PROPERTY LINE
- (E) CHAIN-LINK FENCE
- (N) ORNAMENTAL FENCE
- (N) DOUBLE BARRING GATE
- (E) FIRE HYDRANT
- (E) CONCRETE PAVING
- (E) LAWN / GRASS / LANDSCAPE
- (N) CONCRETE PAVING
- (N) ASPHALT PAVING
- (N) FIRE HYDRANT
- (N) DRINKING FOUNTAIN

PLUMBING FIXTURE COUNT

POOL TOTAL WATER SURFACE AREA: 9,460 SF
 TOTAL BATHING: 14,840' x 10'-0"
 BATHING BOYS: 316
 BATHING GIRLS: 316

	MALE FIXTURES		FEMALE FIXTURES	
	REQUIRED	PROVIDED	REQUIRED	PROVIDED
WATER CLOSETS	4	(N) 3 / (E) 2	4	(N) 4 / (E) 4
URINALS	4	(N) 1 / (E) 5		
LAVATORIES	4	(N) 2 / (E) 4	4	(N) 2 / (E) 3
DRINKING FOUNTAINS (ETHER)	3	(N) 4		
SHOWER (ETHER)	12	(N) 5 / (E) 40 BOYS		(E) 44 GIRLS

PER SECTION 31168.1 PUBLIC TOILET FACILITIES (SHOWERS / LOCKERS) WHEN POOL USERS HAVE EXISTING ACCESS TO FACILITIES LOCATED NOT MORE THAN 300 FEET IN TRAVEL DISTANCE THE EXISTING FACILITIES CAN BE USED FOR THE POOL USERS.
 SEE SITE PLAN SHEETS A-11, NOTES "A" AND "B" FOR EXISTING TRAVEL DISTANCE TO BOTH BOYS AND GIRLS LOCKER / SHOWER BUILDINGS.

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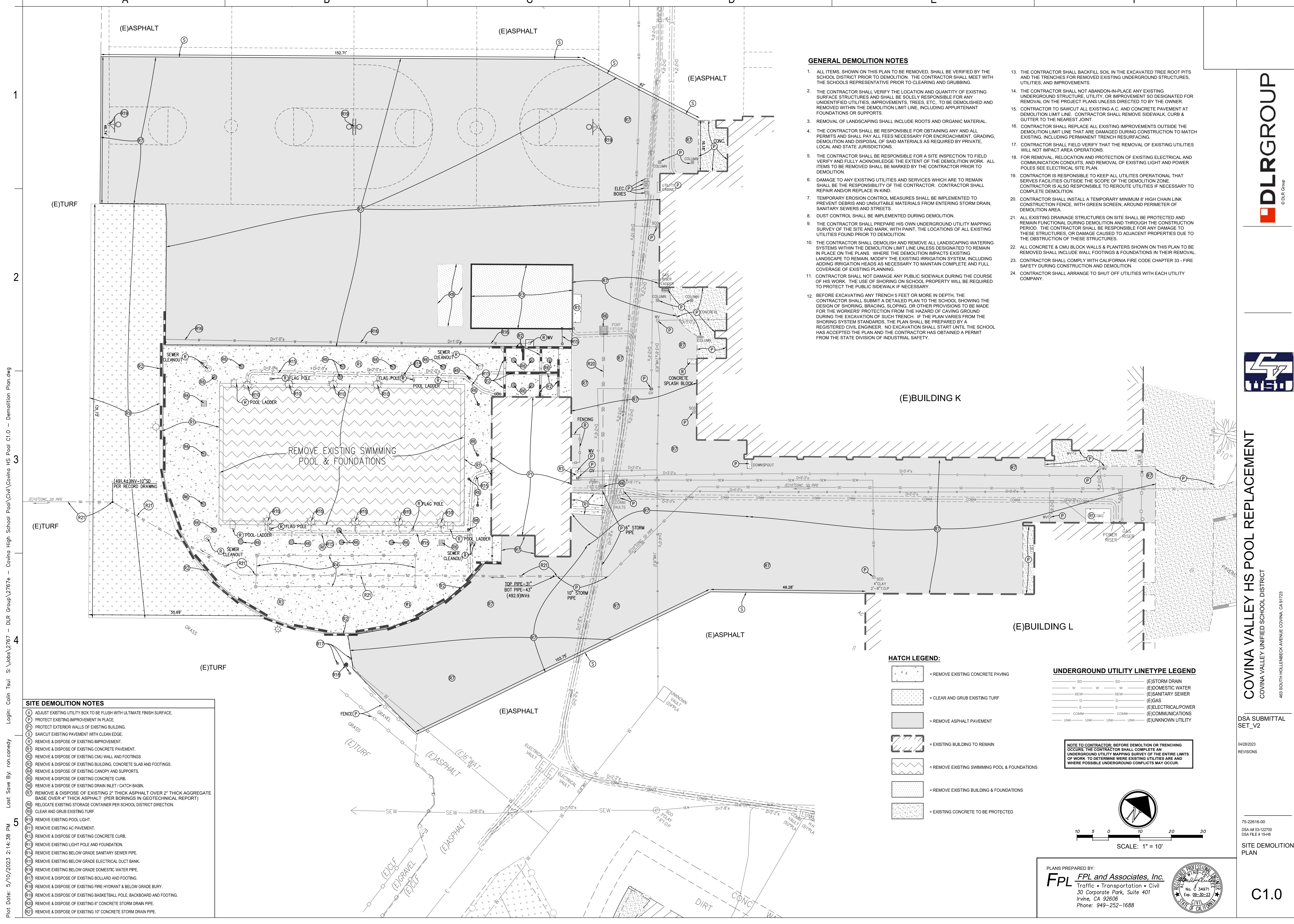
LICENSED ARCHITECT
 JESSE MILLER
 No. C-32306
 10/31/2023
 STATE OF CALIFORNIA

COVINA VALLEY HS POOL REPLACEMENT
 COVINA VALLEY UNIFIED SCHOOL DISTRICT
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EXISTING PARTIAL SITE PLAN - (E) TOILET FACILITIES
CP0.1A



GENERAL DEMOLITION NOTES

- ALL ITEMS, SHOWN ON THIS PLAN TO BE REMOVED, SHALL BE VERIFIED BY THE SCHOOL DISTRICT PRIOR TO DEMOLITION. THE CONTRACTOR SHALL MEET WITH THE SCHOOL'S REPRESENTATIVE PRIOR TO CLEARING AND GRUBBING.
- THE CONTRACTOR SHALL VERIFY THE LOCATION AND QUANTITY OF EXISTING SURFACE STRUCTURES AND SHALL BE SOLELY RESPONSIBLE FOR ANY UNIDENTIFIED UTILITIES, IMPROVEMENTS, TREES, ETC., TO BE DEMOLISHED AND REMOVED WITHIN THE DEMOLITION LIMIT LINE, INCLUDING APPURTENANT FOUNDATIONS OR SUPPORTS.
- REMOVAL OF LANDSCAPING SHALL INCLUDE ROOTS AND ORGANIC MATERIAL.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY AND ALL PERMITS AND SHALL PAY ALL FEES NECESSARY FOR ENCROACHMENT, GRADING, DEMOLITION AND DISPOSAL OF SAID MATERIALS AS REQUIRED BY PRIVATE, LOCAL AND STATE JURISDICTIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR A SITE INSPECTION TO FIELD VERIFY AND FULLY ACKNOWLEDGE THE EXTENT OF THE DEMOLITION WORK. ALL ITEMS TO BE REMOVED SHALL BE MARKED BY THE CONTRACTOR PRIOR TO DEMOLITION.
- DAMAGE TO ANY EXISTING UTILITIES AND SERVICES WHICH ARE TO REMAIN SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL REPAIR AND/OR REPLACE IN KIND.
- TEMPORARY EROSION CONTROL MEASURES SHALL BE IMPLEMENTED TO PREVENT DEBRIS AND UNSUITABLE MATERIALS FROM ENTERING STORM DRAIN, SANITARY SEWERS AND STREETS.
- DUST CONTROL SHALL BE IMPLEMENTED DURING DEMOLITION.
- THE CONTRACTOR SHALL PREPARE HIS OWN UNDERGROUND UTILITY MAPPING SURVEY OF THE SITE AND MARK, WITH PAINT, THE LOCATIONS OF ALL EXISTING UTILITIES FOUND PRIOR TO DEMOLITION.
- THE CONTRACTOR SHALL DEMOLISH AND REMOVE ALL LANDSCAPING WATERING SYSTEMS WITHIN THE DEMOLITION LIMIT LINE UNLESS DESIGNATED TO REMAIN IN PLACE ON THE PLANS. WHERE THE DEMOLITION IMPACTS EXISTING LANDSCAPE TO REMAIN, MODIFY THE EXISTING IRRIGATION SYSTEM, INCLUDING ADDING IRRIGATION HEADS AS NECESSARY TO MAINTAIN COMPLETE AND FULL COVERAGE OF EXISTING PLANNING.
- CONTRACTOR SHALL NOT DAMAGE ANY PUBLIC SIDEWALK DURING THE COURSE OF HIS WORK. THE USE OF SHORING ON SCHOOL PROPERTY WILL BE REQUIRED TO PROTECT THE PUBLIC SIDEWALK IF NECESSARY.
- BEFORE EXCAVATING ANY TRENCH 5 FEET OR MORE IN DEPTH, THE CONTRACTOR SHALL SUBMIT A DETAILED PLAN TO THE SCHOOL SHOWING THE DESIGN OF SHORING, BRACING, SLOPING, OR OTHER PROVISIONS TO BE MADE FOR THE WORKERS' PROTECTION FROM THE HAZARD OF GIVING GROUND DURING THE EXCAVATION OF SUCH TRENCH. IF THE PLAN VARIES FROM THE SHORING SYSTEM STANDARDS, THE PLAN SHALL BE PREPARED BY A REGISTERED CIVIL ENGINEER. NO EXCAVATION SHALL START UNTIL THE SCHOOL HAS ACCEPTED THE PLAN AND THE CONTRACTOR HAS OBTAINED A PERMIT FROM THE STATE DIVISION OF INDUSTRIAL SAFETY.
- THE CONTRACTOR SHALL BACKFILL SOIL IN THE EXCAVATED TREE ROOT PITS AND THE TRENCHES FOR REMOVED EXISTING UNDERGROUND STRUCTURES, UTILITIES, AND IMPROVEMENTS.
- THE CONTRACTOR SHALL NOT ABANDON-IN-PLACE ANY EXISTING UNDERGROUND STRUCTURE, UTILITY, OR IMPROVEMENT SO DESIGNATED FOR REMOVAL ON THE PROJECT PLANS UNLESS DIRECTED TO BY THE OWNER.
- CONTRACTOR TO SAWCUT ALL EXISTING A.C. AND CONCRETE PAVEMENT AT DEMOLITION LIMIT LINE. CONTRACTOR SHALL REMOVE SIDEWALK, CURB & GUTTER TO THE NEAREST JOINT.
- CONTRACTOR SHALL REPLACE ALL EXISTING IMPROVEMENTS OUTSIDE THE DEMOLITION LIMIT LINE THAT ARE DAMAGED DURING CONSTRUCTION TO MATCH EXISTING, INCLUDING PERMANENT TRENCH RESURFACING.
- CONTRACTOR SHALL FIELD VERIFY THAT THE REMOVAL OF EXISTING UTILITIES WILL NOT IMPACT AREA OPERATIONS.
- FOR REMOVAL, RELOCATION AND PROTECTION OF EXISTING ELECTRICAL AND COMMUNICATION CONDUITS, AND REMOVAL OF EXISTING LIGHT AND POWER POLES SEE ELECTRICAL SITE PLAN.
- CONTRACTOR IS RESPONSIBLE TO KEEP ALL UTILITIES OPERATIONAL THAT SERVES FACILITIES OUTSIDE THE SCOPE OF THE DEMOLITION ZONE. CONTRACTOR IS ALSO RESPONSIBLE TO REROUTE UTILITIES IF NECESSARY TO COMPLETE DEMOLITION.
- CONTRACTOR SHALL INSTALL A TEMPORARY MINIMUM 8' HIGH CHAIN LINK CONSTRUCTION FENCE, WITH GREEN SCREEN, AROUND PERIMETER OF DEMOLITION AREA.
- ALL EXISTING DRAINAGE STRUCTURES ON SITE SHALL BE PROTECTED AND REMAIN FUNCTIONAL DURING DEMOLITION AND THROUGH THE CONSTRUCTION PERIOD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THESE STRUCTURES OR DAMAGE CAUSED TO ADJACENT PROPERTIES DUE TO THE OBSTRUCTION OF THESE STRUCTURES.
- ALL CONCRETE & CMU BLOCK WALLS & PLANTERS SHOWN ON THIS PLAN TO BE REMOVED SHALL INCLUDE WALL FOOTINGS & FOUNDATIONS IN THEIR REMOVAL.
- CONTRACTOR SHALL COMPLY WITH CALIFORNIA FIRE CODE CHAPTER 33 - FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION.
- CONTRACTOR SHALL ARRANGE TO SHUT OFF UTILITIES WITH EACH UTILITY COMPANY.

- SITE DEMOLITION NOTES**
- (A) ADJUST EXISTING UTILITY BOX TO BE FLUSH WITH ULTIMATE FINISH SURFACE.
 - (B) PROTECT EXISTING IMPROVEMENT IN PLACE.
 - (C) PROTECT EXTERIOR WALLS OF EXISTING BUILDING.
 - (D) SAWCUT EXISTING PAVEMENT WITH CLEAN EDGE.
 - (E) REMOVE & DISPOSE OF EXISTING IMPROVEMENT.
 - (F) REMOVE & DISPOSE OF EXISTING CONCRETE PAVEMENT.
 - (G) REMOVE & DISPOSE OF EXISTING CMU WALL AND FOOTINGS.
 - (H) REMOVE & DISPOSE OF EXISTING BUILDING, CONCRETE SLAB AND FOOTINGS.
 - (I) REMOVE & DISPOSE OF EXISTING CANOPY AND SUPPORTS.
 - (J) REMOVE & DISPOSE OF EXISTING CONCRETE CURB.
 - (K) REMOVE & DISPOSE OF EXISTING DRAIN INLET / CATCH BASIN.
 - (L) REMOVE & DISPOSE OF EXISTING 2" THICK ASPHALT OVER 2" THICK AGGREGATE BASE OVER 4" THICK ASPHALT (PER BORINGS IN GEOTECHNICAL REPORT)
 - (M) RELOCATE EXISTING STORAGE CONTAINER PER SCHOOL DISTRICT DIRECTION.
 - (N) CLEAR AND GRUB EXISTING TURF.
 - (O) REMOVE EXISTING POOL LIGHT.
 - (P) REMOVE EXISTING AC PAVEMENT.
 - (Q) REMOVE & DISPOSE OF EXISTING CONCRETE CURB.
 - (R) REMOVE EXISTING LIGHT POLE AND FOUNDATION.
 - (S) REMOVE EXISTING BELOW GRADE SANITARY SEWER PIPE.
 - (T) REMOVE EXISTING BELOW GRADE ELECTRICAL DUCT BANK.
 - (U) REMOVE EXISTING BELOW GRADE DOMESTIC WATER PIPE.
 - (V) REMOVE & DISPOSE OF EXISTING BOLLARD AND FOOTING.
 - (W) REMOVE & DISPOSE OF EXISTING FIRE HYDRANT & BELOW GRADE BURY.
 - (X) REMOVE & DISPOSE OF EXISTING BASKETBALL POLE, BACKBOARD AND FOOTING.
 - (Y) REMOVE & DISPOSE OF EXISTING 6" CONCRETE STORM DRAIN PIPE.
 - (Z) REMOVE & DISPOSE OF EXISTING 10" CONCRETE STORM DRAIN PIPE.

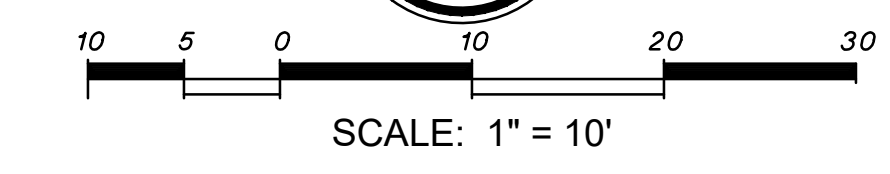
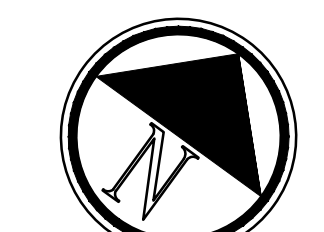
HATCH LEGEND:

- = REMOVE EXISTING CONCRETE PAVING
- = CLEAR AND GRUB EXISTING TURF
- = REMOVE ASPHALT PAVEMENT
- = EXISTING BUILDING TO REMAIN
- = REMOVE EXISTING SWIMMING POOL & FOUNDATIONS
- = REMOVE EXISTING BUILDING & FOUNDATIONS
- = EXISTING CONCRETE TO BE PROTECTED

UNDERGROUND UTILITY LINETYPE LEGEND

- SD (E)STORM DRAIN
- W (E)DOMESTIC WATER
- SEW (E)SANITARY SEWER
- G (E)GAS
- E (E)ELECTRICAL/POWER
- COMM (E)COMMUNICATIONS
- UNKR (E)UNKNOWN UTILITY

NOTE TO CONTRACTOR: BEFORE DEMOLITION OR TRENCHING OCCURS, THE CONTRACTOR SHALL COMPLETE AN UNDERGROUND UTILITY MAPPING SURVEY OF THE ENTIRE LIMITS OF WORK TO DETERMINE WHERE EXISTING UTILITIES ARE AND WHERE POSSIBLE UNDERGROUND CONFLICTS MAY OCCUR.



PLANS PREPARED BY:
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SITE DEMOLITION PLAN

C1.0

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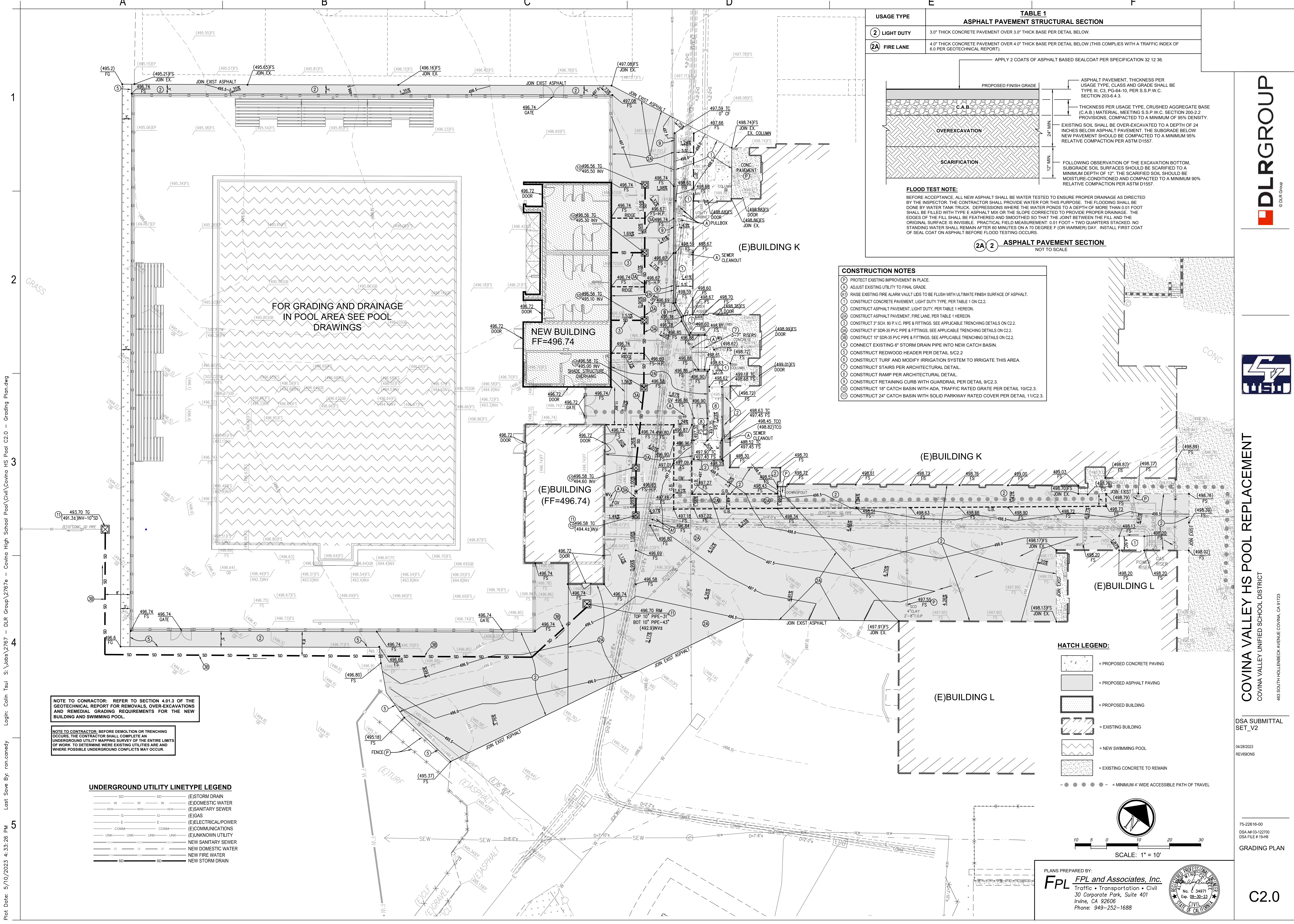
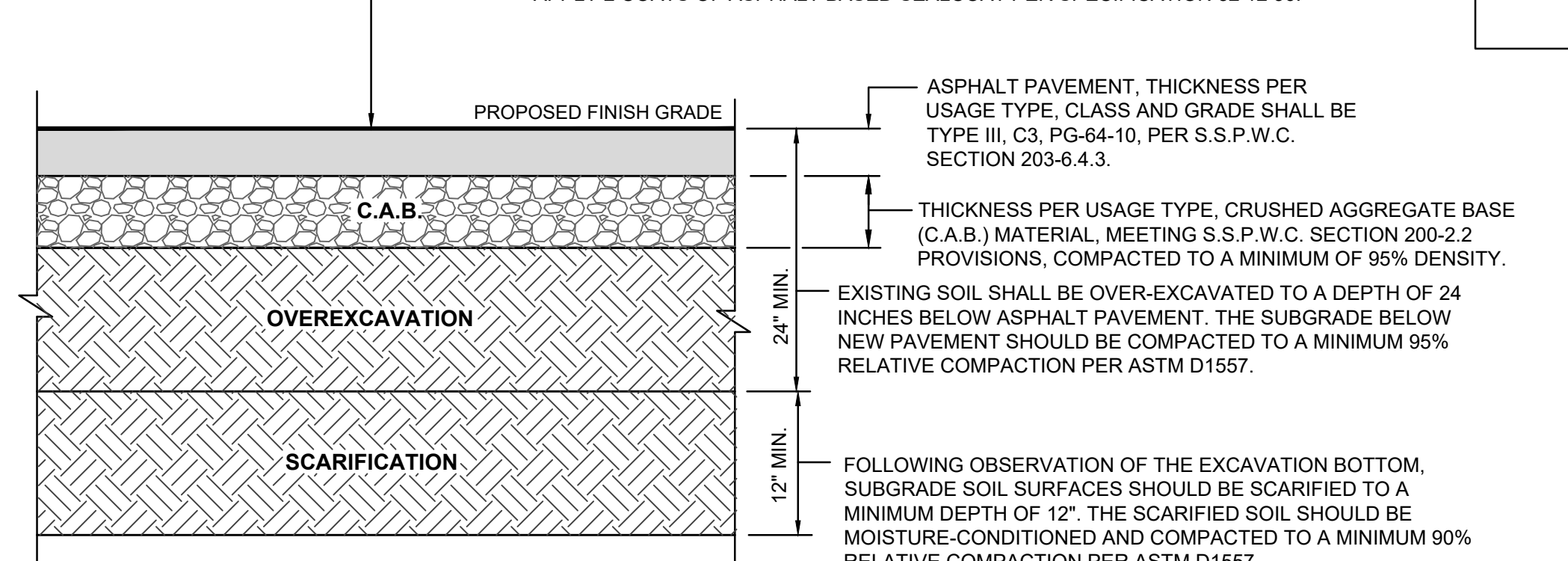


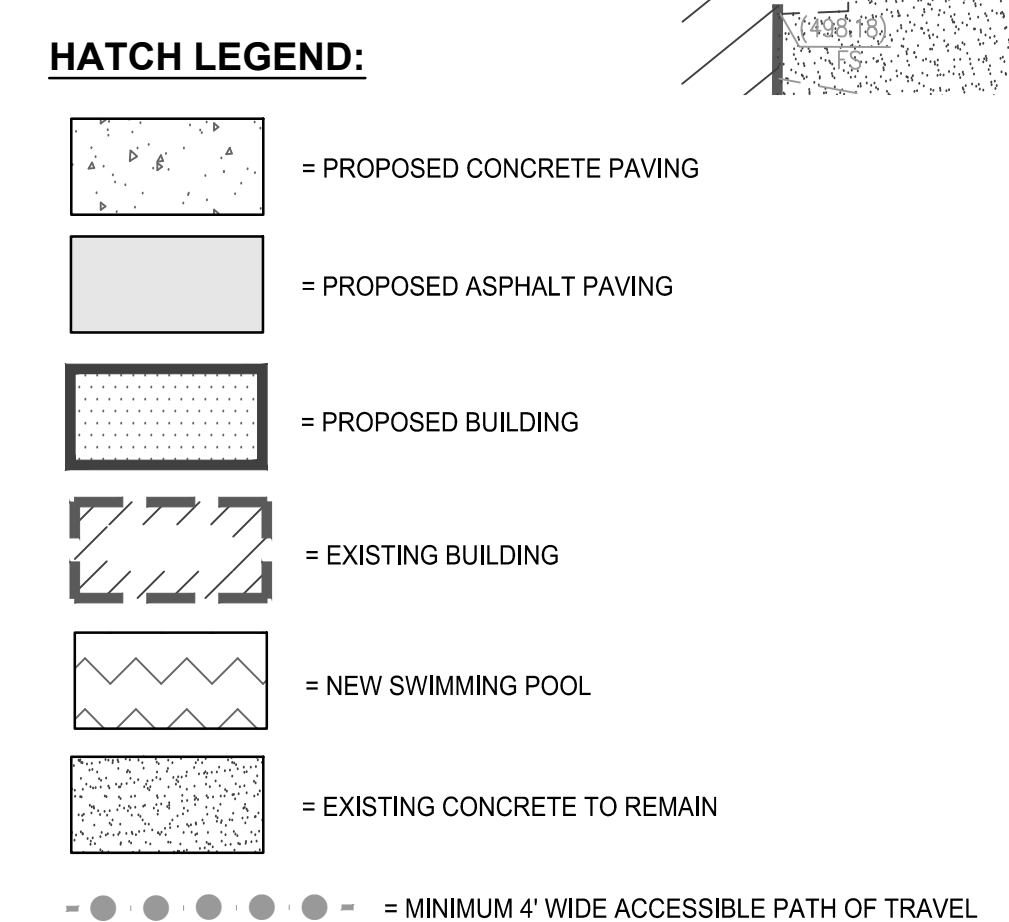
TABLE 1 ASPHALT PAVEMENT STRUCTURAL SECTION	
② LIGHT DUTY	3.0" THICK CONCRETE PAVEMENT OVER 3.0" THICK BASE PER DETAIL BELOW.
②A FIRE LANE	4.0" THICK CONCRETE PAVEMENT OVER 4.0" THICK BASE PER DETAIL BELOW (THIS COMPLIES WITH A TRAFFIC INDEX OF 6.0 PER GEOTECHNICAL REPORT).



FLOOD TEST NOTE:
BEFORE ACCEPTANCE, ALL NEW ASPHALT SHALL BE WATER TESTED TO ENSURE PROPER DRAINAGE AS DIRECTED BY THE INSPECTOR. THE CONTRACTOR SHALL PROVIDE WATER FOR THIS PURPOSE. THE FLOODING SHALL BE DONE BY WATER TANK TRUCK. DEPRESSIONS WHERE THE WATER PONDS TO A DEPTH OF MORE THAN 0.01 FOOT SHALL BE FILLED WITH TYPE I ASPHALT MIX OR THE SLOPE CORRECTED TO PROVIDE PROPER DRAINAGE. THE EDGES OF THE FILL SHALL BE FEATHERED AND SMOOTHED SO THAT THE JOINT BETWEEN THE FILL AND THE ORIGINAL SURFACE IS INVISIBLE. PRACTICAL FIELD MEASUREMENT: 0.01 FOOT = TWO QUARTERS STACKED, NO STANDING WATER SHALL REMAIN AFTER 60 MINUTES ON A 70 DEGREE F (OR WARMER) DAY. INSTALL FIRST COAT OF SEAL COAT ON ASPHALT BEFORE FLOOD TESTING OCCURS.

② ② ASPHALT PAVEMENT SECTION
NOT TO SCALE

- CONSTRUCTION NOTES**
- (P) PROTECT EXISTING IMPROVEMENT IN PLACE.
 - (A) ADJUST EXISTING UTILITY TO FINAL GRADE.
 - (1) RAISE EXISTING FIRE ALARM VAULT LIDS TO BE FLUSH WITH ULTIMATE FINISH SURFACE OF ASPHALT.
 - (1) CONSTRUCT CONCRETE PAVEMENT, LIGHT DUTY TYPE, PER TABLE 1 ON C2.2.
 - (2) CONSTRUCT ASPHALT PAVEMENT, LIGHT DUTY TYPE, PER TABLE 1 HEREON.
 - (2A) CONSTRUCT ASPHALT PAVEMENT, FIRE LANE, PER TABLE 1 HEREON.
 - (3) CONSTRUCT 3" SCH. 80 P.V.C. PIPE & FITTINGS. SEE APPLICABLE TRENCHING DETAILS ON C2.2.
 - (3A) CONSTRUCT 6" SDR-35 PVC PIPE & FITTINGS. SEE APPLICABLE TRENCHING DETAILS ON C2.2.
 - (3B) CONSTRUCT 10" SDR-35 PVC PIPE & FITTINGS. SEE APPLICABLE TRENCHING DETAILS ON C2.2.
 - (4) CONNECT EXISTING 6" STORM DRAIN PIPE INTO NEW CATCH BASIN.
 - (5) CONSTRUCT REDWOOD HEADER PER DETAIL 5/C2.2
 - (6) CONSTRUCT TURF AND MODIFY IRRIGATION SYSTEM TO IRRIGATE THIS AREA.
 - (7) CONSTRUCT STAIRS PER ARCHITECTURAL DETAIL.
 - (8) CONSTRUCT RAMP PER ARCHITECTURAL DETAIL.
 - (9) CONSTRUCT RETAINING CURB WITH GUARDRAIL, PER DETAIL 9/C2.3.
 - (10) CONSTRUCT 18" CATCH BASIN WITH ADA, TRAFFIC RATED GRATE PER DETAIL 10/C2.3.
 - (11) CONSTRUCT 24" CATCH BASIN WITH SOLID PARKWAY RATED COVER PER DETAIL 11/C2.3.

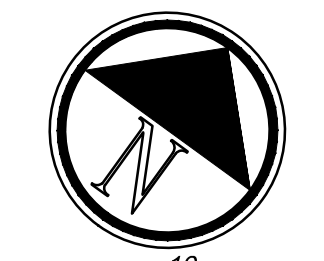


NOTE TO CONTRACTOR: REFER TO SECTION 4.01.3 OF THE GEOTECHNICAL REPORT FOR REMOVALS, OVER-EXCAVATIONS AND REMEDIAL GRADING REQUIREMENTS FOR THE NEW BUILDING AND SWIMMING POOL.

NOTE TO CONTRACTOR: BEFORE DEMOLITION OR TRENCHING OCCURS, THE CONTRACTOR SHALL COMPLETE AN UNDERGROUND UTILITY MAPPING SURVEY OF THE ENTIRE LIMITS OF WORK TO DETERMINE WHERE EXISTING UTILITIES ARE AND WHERE POSSIBLE UNDERGROUND CONFLICTS MAY OCCUR.

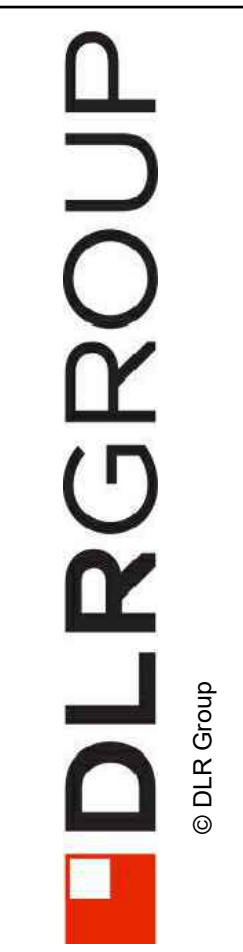
UNDERGROUND UTILITY LINETYPE LEGEND

SD	(E)STORM DRAIN
W	(E)DOMESTIC WATER
SEW	(E)SANITARY SEWER
G	(E)GAS
E	(E)ELECTRICAL/POWER
COMM	(E)COMMUNICATIONS
UNK	(E)UNKNOWN UTILITY
NEW SANITARY SEWER	NEW SANITARY SEWER
NEW DOMESTIC WATER	NEW DOMESTIC WATER
NEW FIRE WATER	NEW FIRE WATER
NEW STORM DRAIN	NEW STORM DRAIN



SCALE: 1" = 10'

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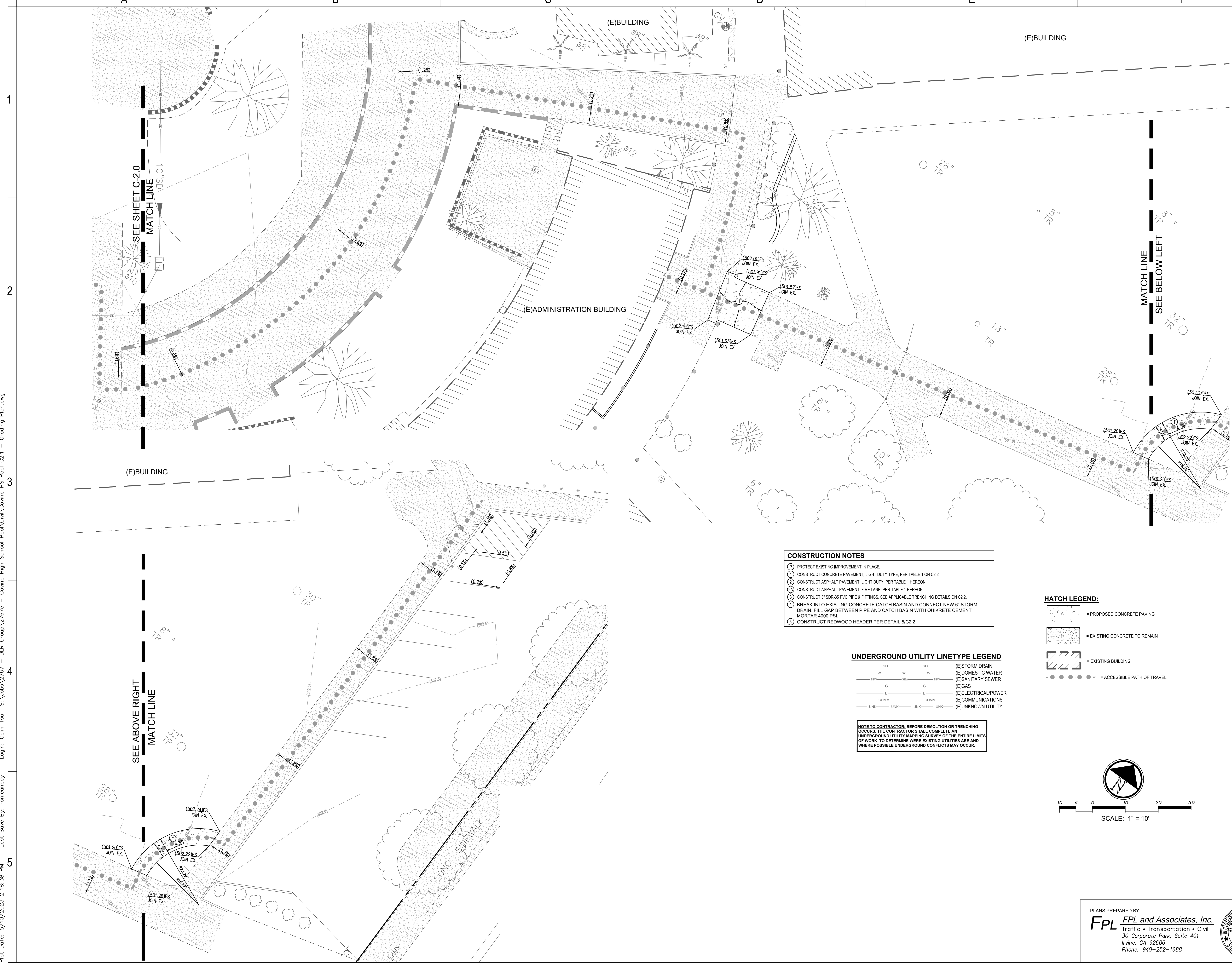
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GRADING PLAN

C2.0

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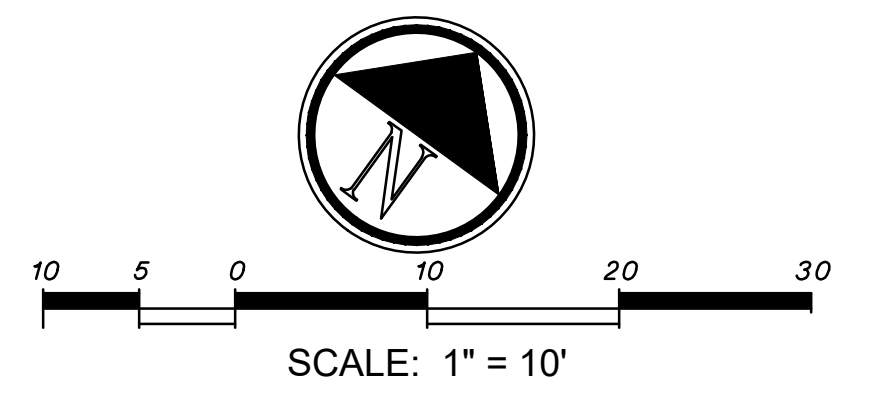
- CONSTRUCTION NOTES**
- 1. PROTECT EXISTING IMPROVEMENT IN PLACE.
 - 2. CONSTRUCT CONCRETE PAVEMENT, LIGHT DUTY TYPE, PER TABLE 1 ON C2.2.
 - 3. CONSTRUCT ASPHALT PAVEMENT, LIGHT DUTY, PER TABLE 1 HEREON.
 - 4. CONSTRUCT ASPHALT PAVEMENT, FIRE LANE, PER TABLE 1 HEREON.
 - 5. CONSTRUCT 3\"/>

UNDERGROUND UTILITY LINETYPE LEGEND

SD	SD	(E)STORM DRAIN
W	W	(E)DOMESTIC WATER
SSW	SSW	(E)SANITARY SEWER
G	G	(E)GAS
E	E	(E)ELECTRICAL/POWER
COMM	COMM	(E)COMMUNICATIONS
UNK	UNK	(E)UNKNOWN UTILITY

NOTE TO CONTRACTOR: BEFORE DEMOLITION OR TRENCHING OCCURS, THE CONTRACTOR SHALL COMPLETE AN UNDERGROUND UTILITY MAPPING SURVEY OF THE ENTIRE LIMITS OF WORK TO DETERMINE WHERE EXISTING UTILITIES ARE AND WHERE POSSIBLE UNDERGROUND CONFLICTS MAY OCCUR.

- HATCH LEGEND:**
- = PROPOSED CONCRETE PAVING
 - = EXISTING CONCRETE TO REMAIN
 - = EXISTING BUILDING
 - = ACCESSIBLE PATH OF TRAVEL



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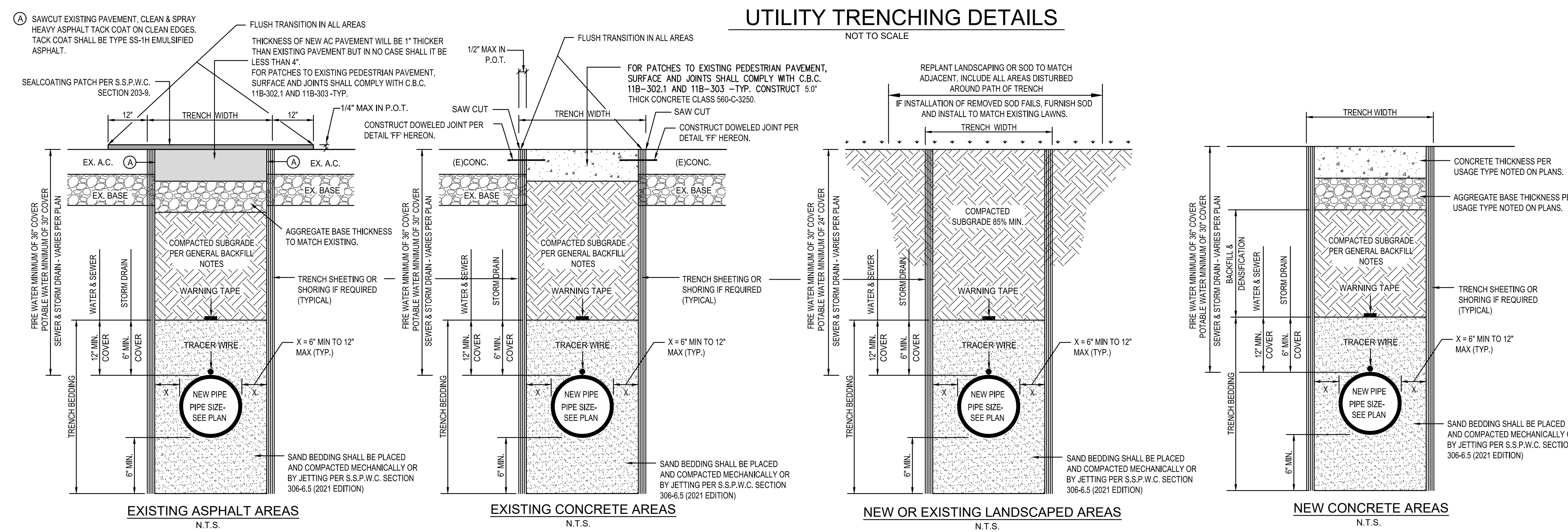


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 DSA FILE # 194-H8
 GRADING PLAN

C2.1



TRENCH EXCAVATION, BEDDING, & BACKFILL NOTES:

EXCAVATION NOTE: THE 2019 CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH REGULATIONS (CAL/OSHA) WILL REQUIRE A PERMIT FOR THE CONSTRUCTION OF TRENCHES OR EXCAVATIONS WHICH ARE FIVE (5) FEET OR DEEPER AND INTO WHICH A PERSON IS REQUIRED TO DESCEND. FOR PERMIT PURPOSES, "DESCEND" MEANS TO ENTER ANY PART OF THE TRENCH OR EXCAVATION ONCE THE EXCAVATION HAS ATTAINED A DEPTH OF 5 FEET OR MORE. FOR REGULATIONS RELATING TO PERMITS FOR EXCAVATIONS AND TRENCHES, REFER TO THE CALIFORNIA CODE OF REGULATIONS TITLE 8, CHAPTER 3.2, ARTICLE 2, SECTION 341 OF THE CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH REGULATIONS (CAL/OSHA).

THE CONTRACTOR SHALL SUBMIT A DETAIL SHOWING THE DESIGN OR SHORING, BRACING, SLOPING OR OTHER PROVISIONS TO BE MADE FOR WORKER PROTECTION FROM THE HAZARDS OF CAVING GROUND DURING THE EXCAVATION. THE PLAN SUBMITTED SHALL BE SIGNED BY A REGISTERED CIVIL OR STRUCTURAL ENGINEER CERTIFIED THAT THE PLAN COMPLIES WITH ALL OSHA CONSTRUCTION SAFETY ORDERS.

BEDDING MATERIAL SHALL BE COARSE SAND WITH SAND EQUIVALENT OF 35 OR GREATER, NO ANGULAR STONES OR PEA GRAVELS WILL BE ALLOWED IN PIPE BEDDING.

COMPACTION METHODS: ALL BEDDING & BACKFILL COMPACTION SHALL BE BY HAND-OPERATED, PLATE-TYPE, VIBRATORY, OR OTHER SUITABLE HAND-TAMPERS IN AREAS NOT ACCESSIBLE TO LARGER ROLLERS OR COMPACTORS. EXTREME CARE SHALL BE TAKEN TO AVOID DAMAGE TO CONDUITS, PIPES, AND ANY APPURTENANCES. BACKFILL DENSIFICATION BY INUNDATION OR JETTING SHALL NOT BE PERMITTED WITHOUT PRIOR WRITTEN APPROVAL FROM CIVIL ENGINEER. SAND BEDDING SHALL BE PLACED AND COMPACTED MEETING S.S.P.W.C. SECTION 306-6.5 PLACEMENT AND COMPACTION, 2021 EDITION.

SHEETING: WHEN EXCAVATION DEPTHS OR SOIL CONDITIONS REQUIRE SHORING OR USE OF A TRENCH BOX, THE BOTTOM OF THE SHORING OR TRENCH BOX SHOULD BE PLACED NO LOWER THAN THE TOP OF THE PIPE. THIS PREVENTS DISRUPTION OF THE BACKFILL ENVELOPE WHEN REMOVING THE SHORING OR TRENCH BOX. IF THIS PRACTICE CANNOT BE FOLLOWED, CONSIDERATION SHOULD BE GIVEN TO LEAVING THE SHORING IN PLACE.

GENERAL BACKFILL NOTES:

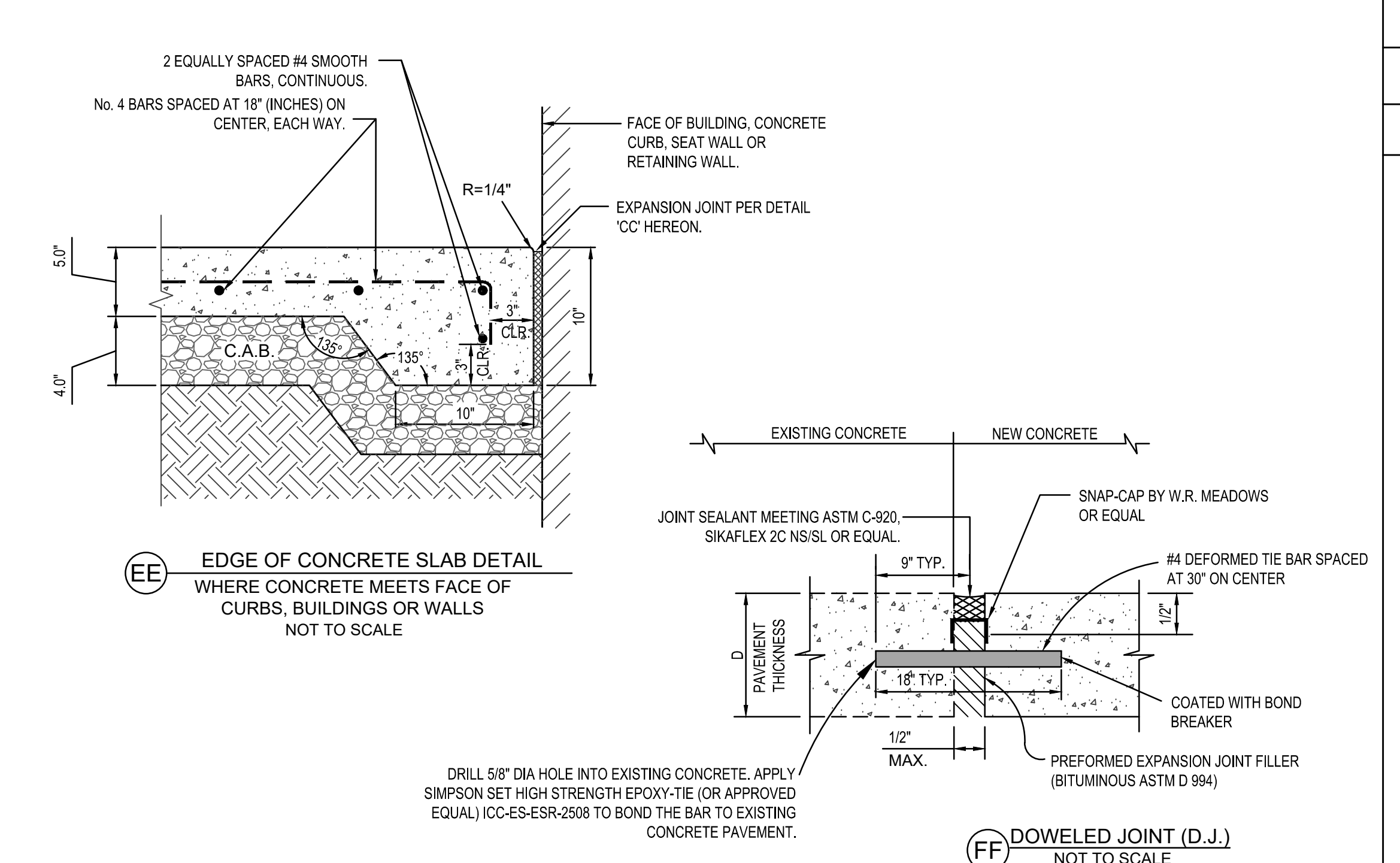
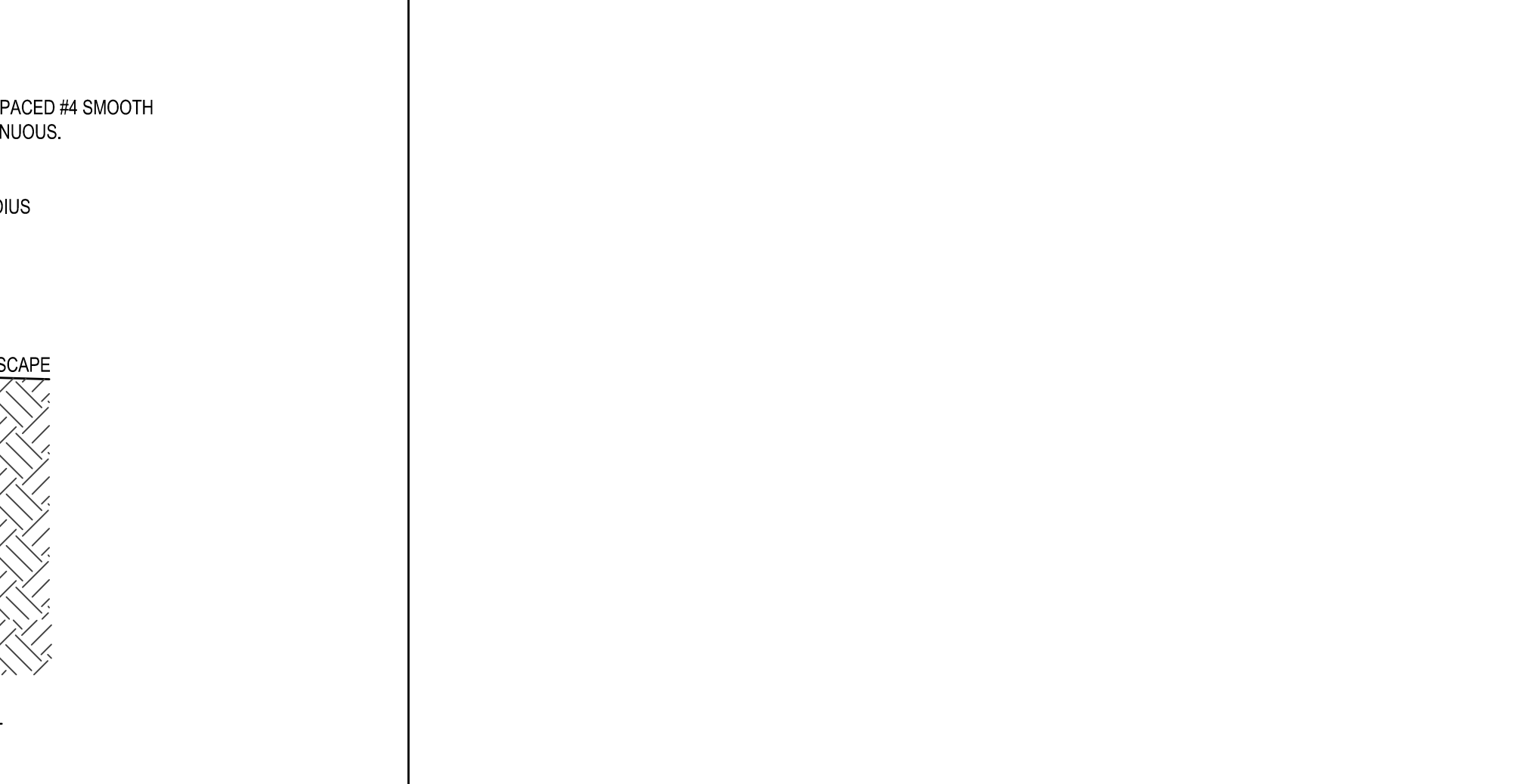
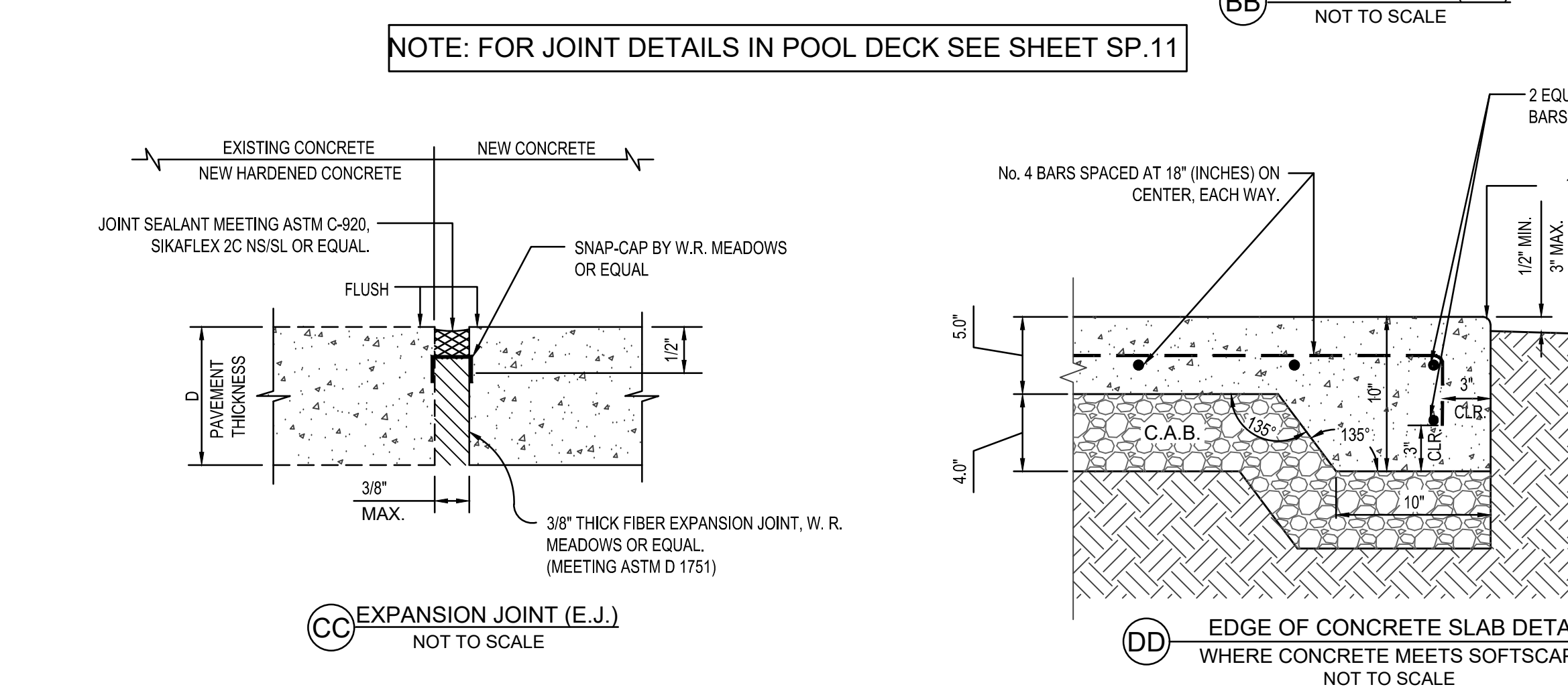
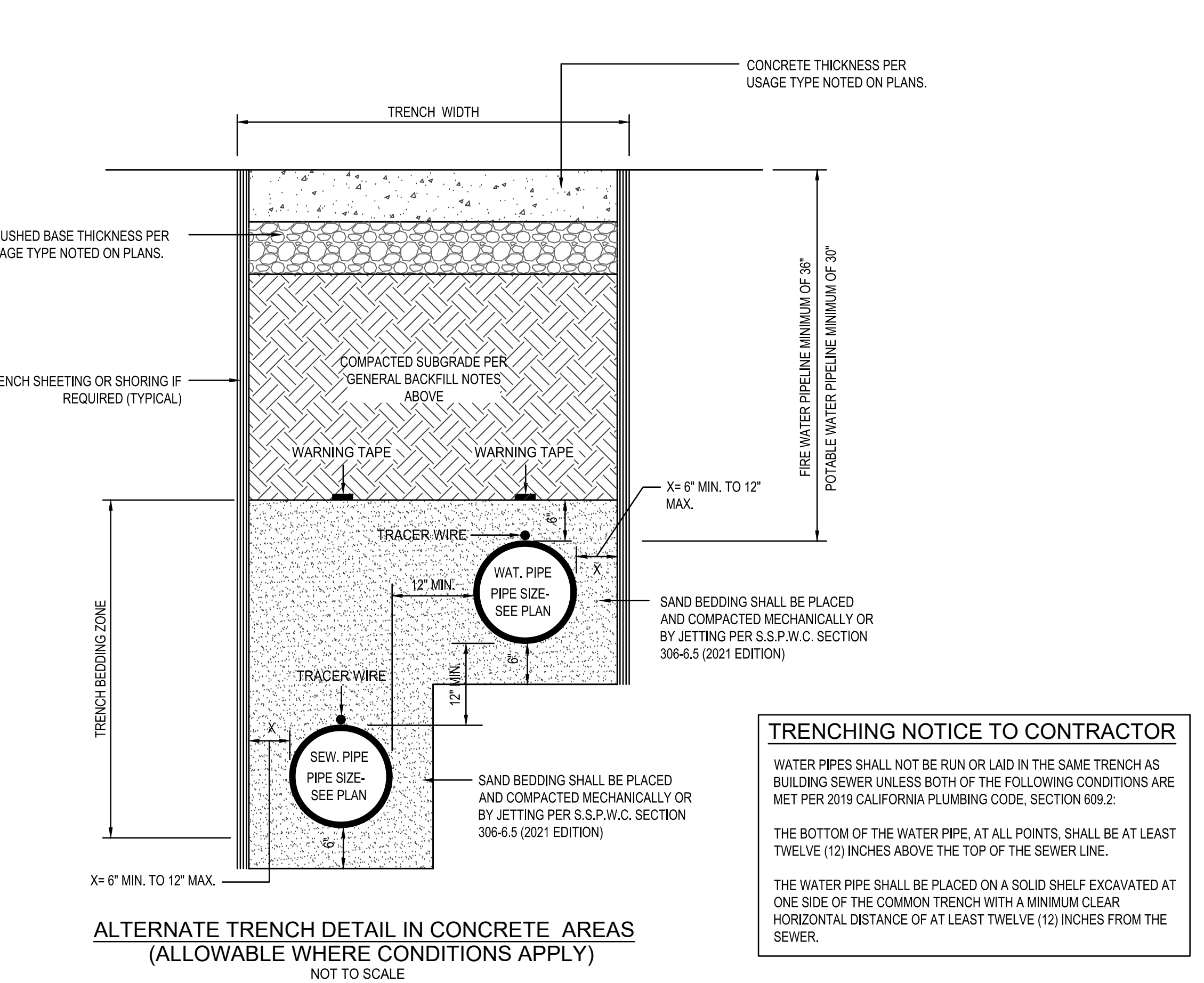
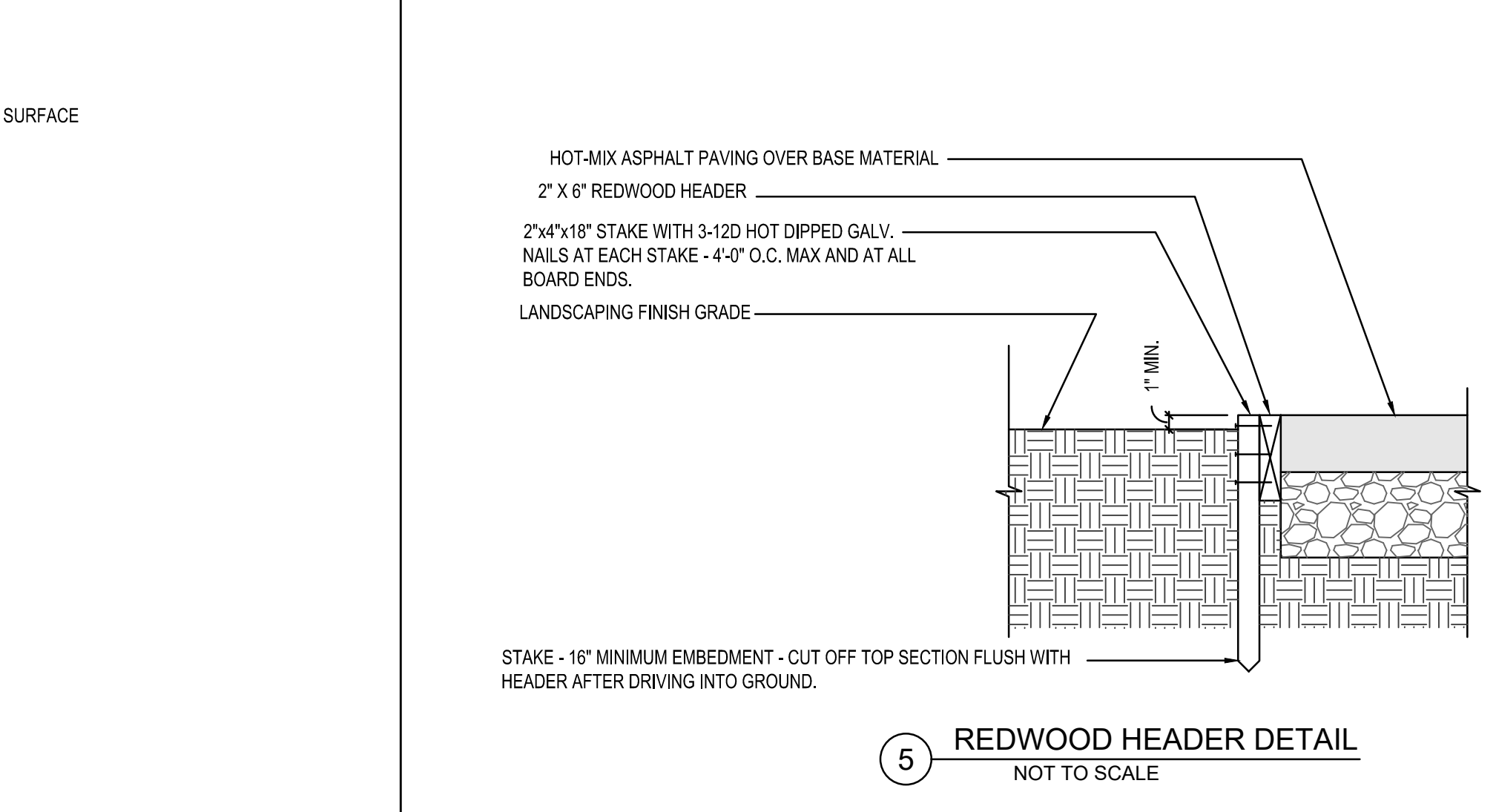
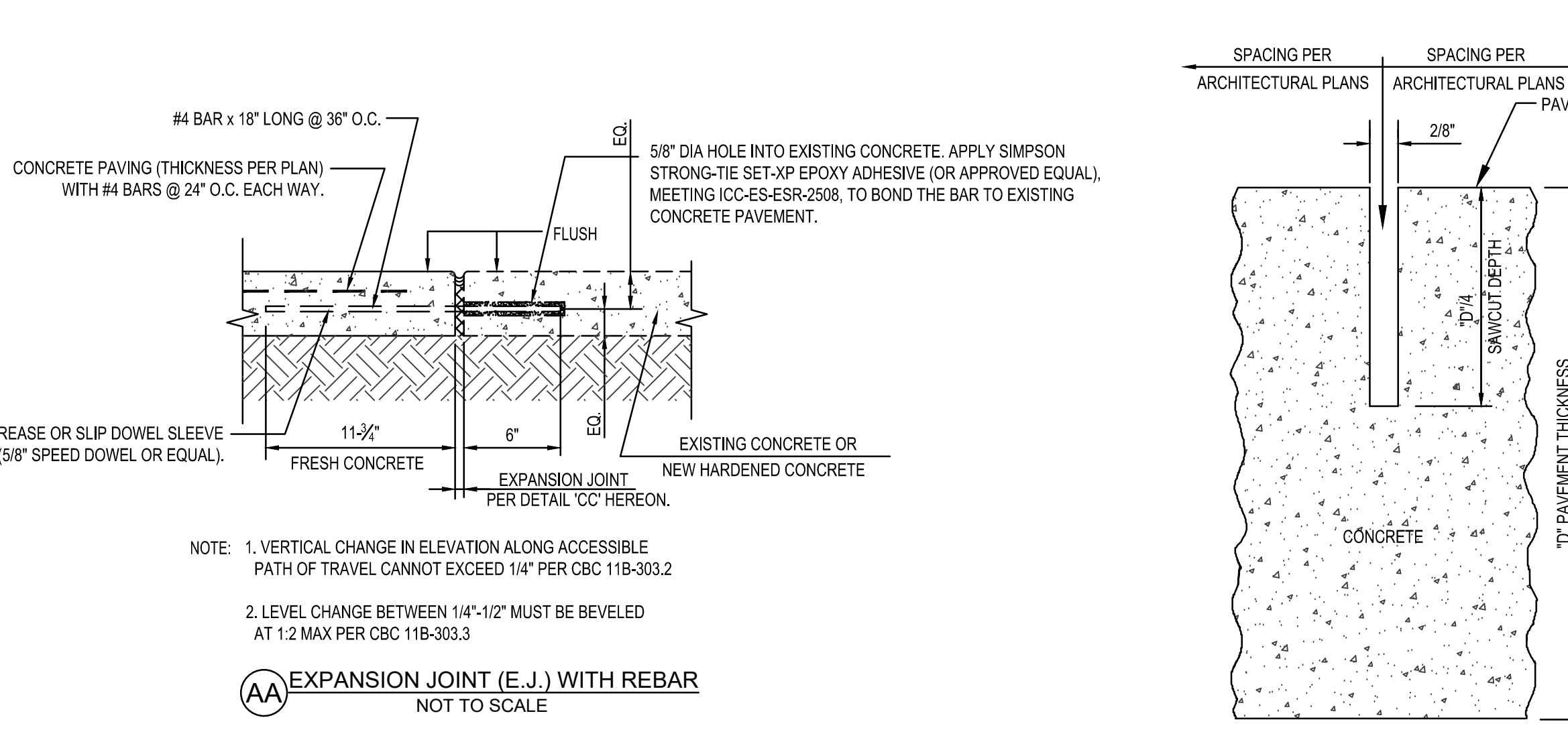
EXCAVATED TRENCH MATERIAL TO BE INSTALLED FOR BACKFILLING SHALL BE CLEAN, FREE OF LARGE CLODS AND STONES LARGER THAN 3-INCHES IN ANY DIMENSION. INSTALL BACKFILL MATERIALS IN LAYERS NOT TO EXCEED 8 TO 10-INCHES IN THICKNESS. IN PAVED AREAS, THE SUBGRADE BELOW NEW PAVEMENT SHOULD BE COMPACTED TO A MINIMUM 95% RELATIVE COMPACTION IN THE UPPER 12-INCHES AND A MINIMUM 90% COMPACTION BELOW THAT. IN UNPAVED/LANDSCAPE AREAS, THE SUBGRADE SHOULD BE COMPACTED TO A MINIMUM 90% RELATIVE COMPACTION PER ASTM D1557. IN LIEU OF USING NATIVE MATERIAL, IN PAVED AREAS, THE USE OF A SLURRY BACKFILL MAY BE SUBSTITUTED. SAND SLURRY SHALL CONSIST OF 2 SACK PORTLAND CEMENT (CLASS 200-6-200) PER CUBIC YARD OF SAND SLURRY MIX. THE CONTRACTOR IS RESPONSIBLE FOR DISPOSAL OF ANY EXCESS BACKFILL MATERIAL FROM THE SITE.

WARNING TAPE NOTES (FIRE WATER):
A METALLIC LINED TAPED FOR UNDERGROUND PIPES, MARKED "CAUTION BURIED FIRE WATER LINE BELOW", IN POLYETHYLENE FILM COLOR RED, INSTALLED ABOVE PIPE, MINIMUM 2" WIDE.

WARNING TAPE NOTES (POTABLE WATER):
A METALLIC LINED TAPED FOR UNDERGROUND PIPES, MARKED "CAUTION BURIED WATER LINE BELOW", IN POLYETHYLENE FILM COLOR BLUE, INSTALLED ABOVE PIPE, MINIMUM 2" WIDE.

WARNING TAPE NOTES (STORM DRAIN):
A METALLIC LINED TAPED FOR UNDERGROUND PIPES, MARKED "CAUTION STORM DRAIN LINE BELOW", IN POLYETHYLENE FILM COLOR GREEN, INSTALLED ABOVE PIPE, 6" WIDE.

WARNING TAPE NOTES (SANITARY SEWER):
A METALLIC LINED TAPED FOR UNDERGROUND PIPES, MARKED "CAUTION BURIED SEWER LINE BELOW", IN POLYETHYLENE FILM COLOR GREEN, INSTALLED ABOVE PIPE, 6" WIDE.



USAGE TYPE	CONCRETE PAVEMENT STRUCTURAL SECTIONS
① LIGHT DUTY	5.0" THICK CONCRETE PAVEMENT OVER 4.0" THICK BASE OVER COMPACTED ENGINEERED FILL PER DETAIL BELOW.
①A POOL DECK	6.0" THICK CONCRETE PAVEMENT OVER 6.0" THICK BASE OVER COMPACTED ENGINEERED FILL PER DETAIL BELOW.

IN LIGHT DUTY CONCRETE AREAS: PROVIDE MEDIUM BROOM FINISH ON SURFACES UP TO SIX PERCENT SLOPE BY STRIATING SURFACE 1/32 TO 3/64 INCH DEEP WITH A SOFT BRISTLE BROOM ACROSS CONCRETE SURFACE TO PROVIDE A UNIFORM FINE LINE TEXTURE. PROVIDE HEAVY BROOM FINISH ON SURFACES OVER SIX PERCENT BY STRIATING SURFACE 1/16 INCH TO 1/8 INCH DEEP WITH A STIFF-BRISTLED BROOM.

IN LIGHT DUTY AREAS: MINIMUM CLASS 560-C-3250 CONCRETE PER S.S.P.W.C. SECTION 201-1 REQUIREMENTS (MINIMUM STRENGTH OF 3,250 PSI AT 28 DAYS).

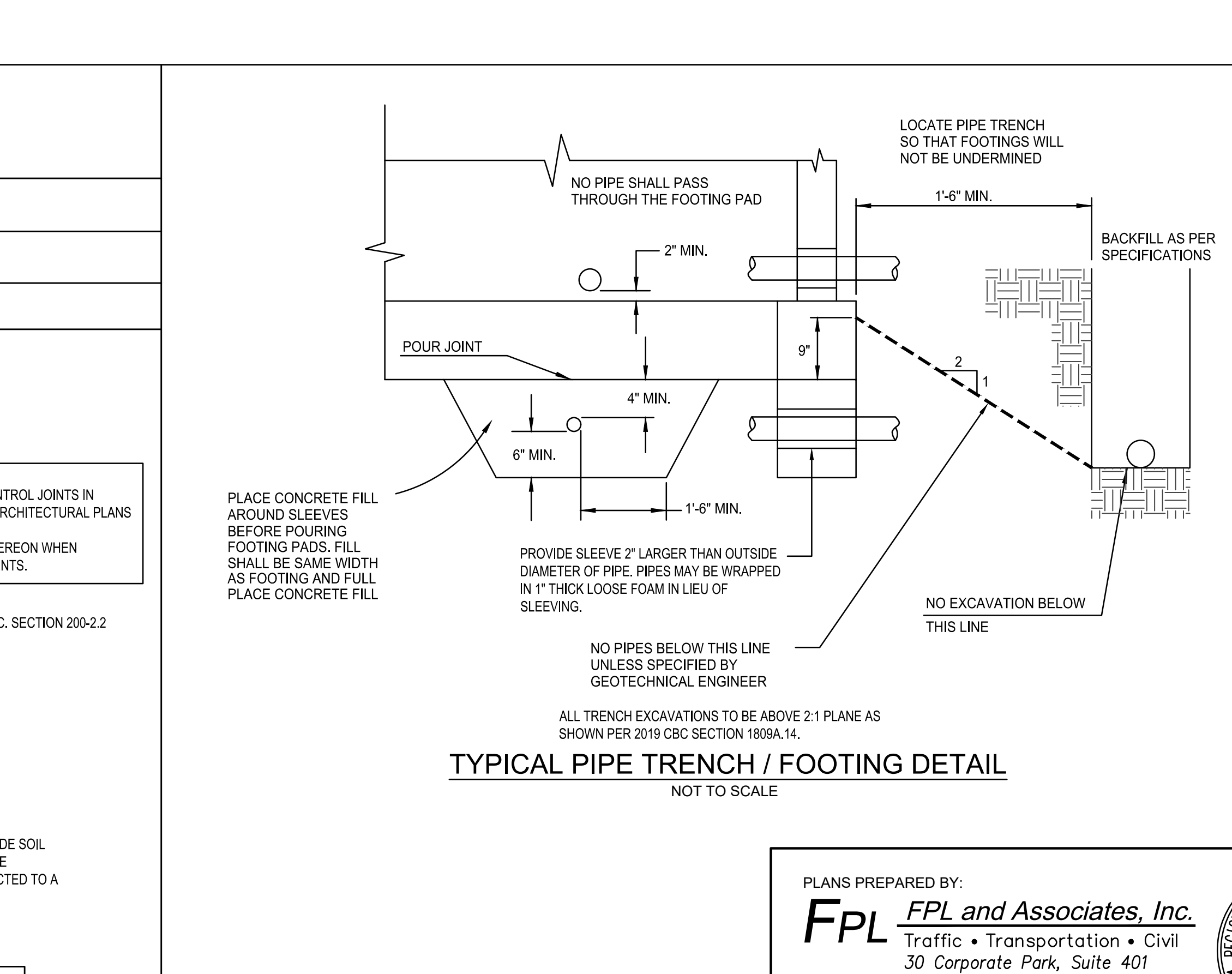
NOTE TO CONTRACTOR:
A. THE CONTRACTOR SHALL INSTALL EXPANSION AND CONTROL JOINTS IN CONCRETE FLATWORK AT LOCATIONS NOTED ON THE ARCHITECTURAL PLANS FOLLOWING DETAILS "AA" THRU "CC" HEREON.
B. CONTRACTOR SHALL FOLLOW DETAILS "DD" THRU "FF" HEREON WHEN CONSTRUCTING CONCRETE FLATWORK EDGE TREATMENTS.

CRUSHED AGGREGATE BASE (C.A.B.) MATERIAL: MEETING S.S.P.W.C. SECTION 200-2.2 PROVISIONS, COMPACTED TO A MINIMUM OF 95% DENSITY.

EXISTING SOIL: SHALL BE OVER-EXCAVATED TO A DEPTH OF 24 INCHES BELOW CONCRETE PAVEMENT. THE SUBGRADE BELOW NEW PAVEMENT SHOULD BE COMPACTED TO A MINIMUM 95% RELATIVE COMPACTION PER ASTM D1557.

FLOOD TEST NOTE:
BEFORE ACCEPTANCE, ALL NEW CONCRETE SHALL BE WATER TESTED TO ENSURE PROPER DRAINAGE AS DIRECTED BY THE INSPECTOR. THE CONTRACTOR SHALL PROVIDE WATER FOR THIS PURPOSE. THE FLOODING SHALL BE DONE BY WATER TANK TRUCK. DEPRESSIONS WHERE THE WATER POUNDS TO A DEPTH OF MORE THAN 1/8-INCH SHALL BE FILLED OR THE SLOPE CORRECTED TO PROVIDE PROPER DRAINAGE. THE EDGES OF THE FILL SHALL BE FEATHERED AND SMOOTHED SO THAT THE JOINT BETWEEN THE FILL AND THE ORIGINAL SURFACE IS INVISIBLE. NO STANDING WATER SHALL REMAIN AFTER 60 MINUTES ON A 70 DEGREE F (OR WARMER) DAY.

NOTE: FOR JOINT DETAILS IN POOL DECK SEE SHEET SP.11

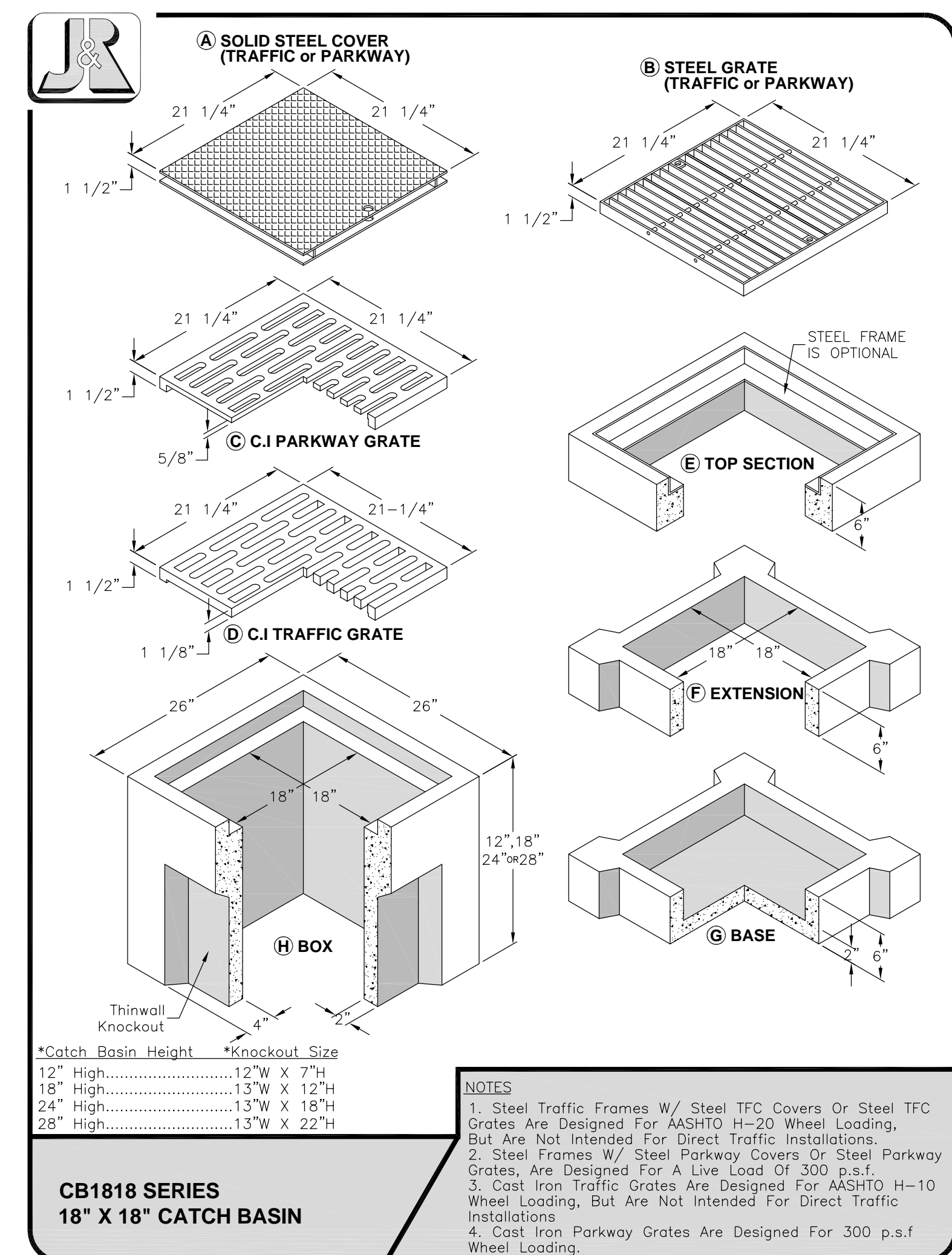


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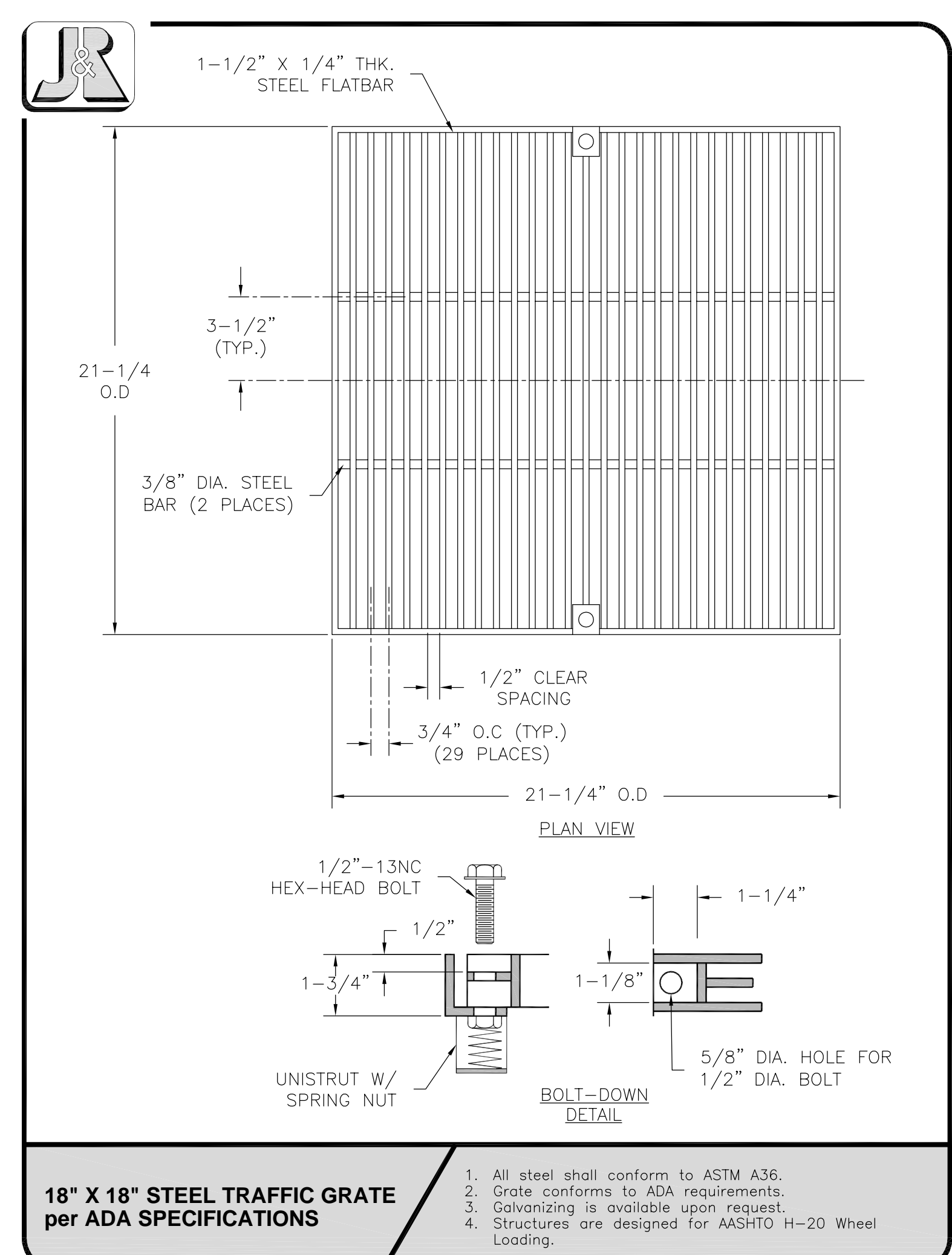
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ALL GRATES MUST BE HOT-DIPPED GALVANIZED



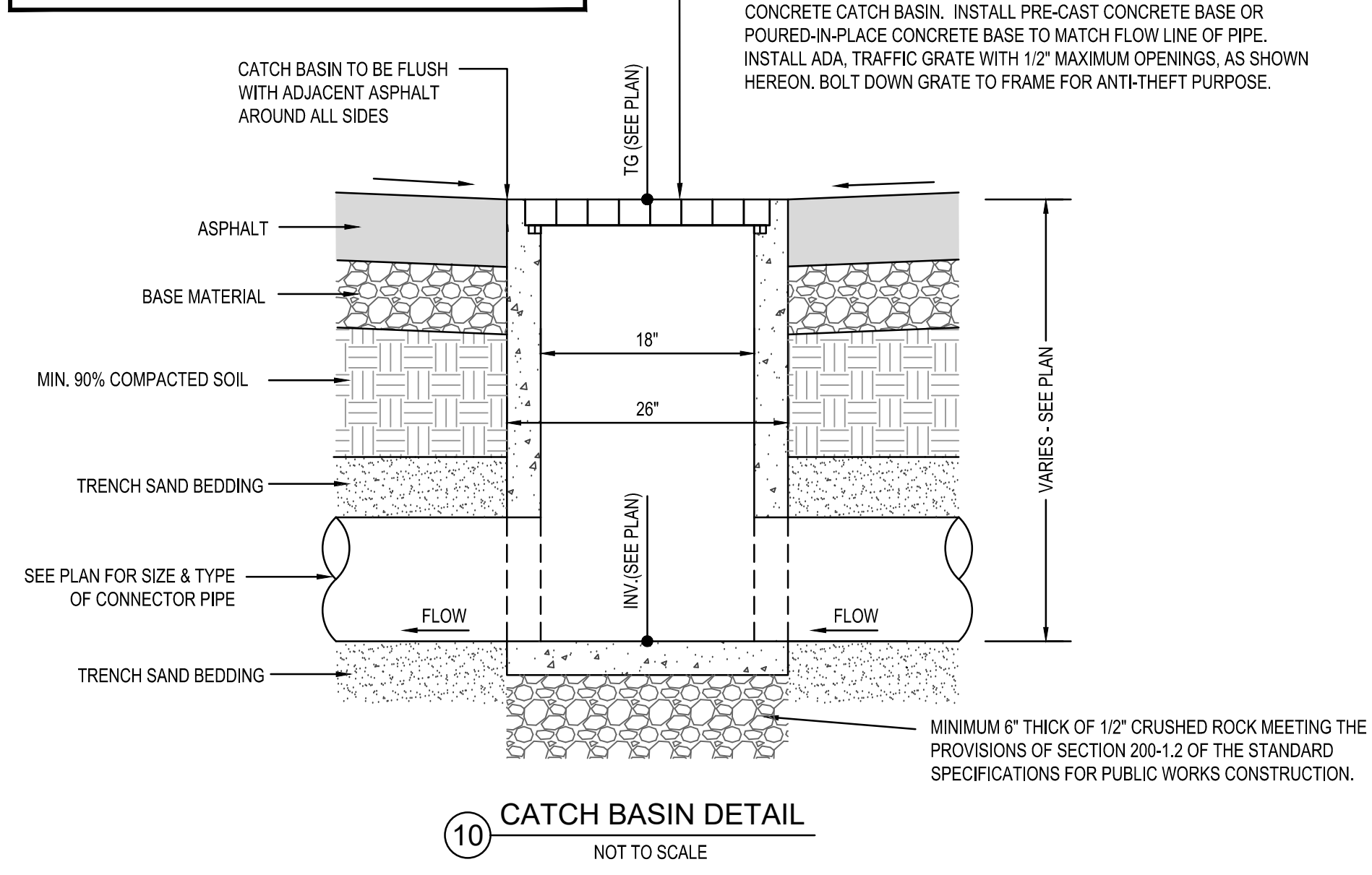
10 18" x 18" CATCH BASIN DETAIL
NOT TO SCALE

ALL GRATES MUST BE HOT-DIPPED GALVANIZED



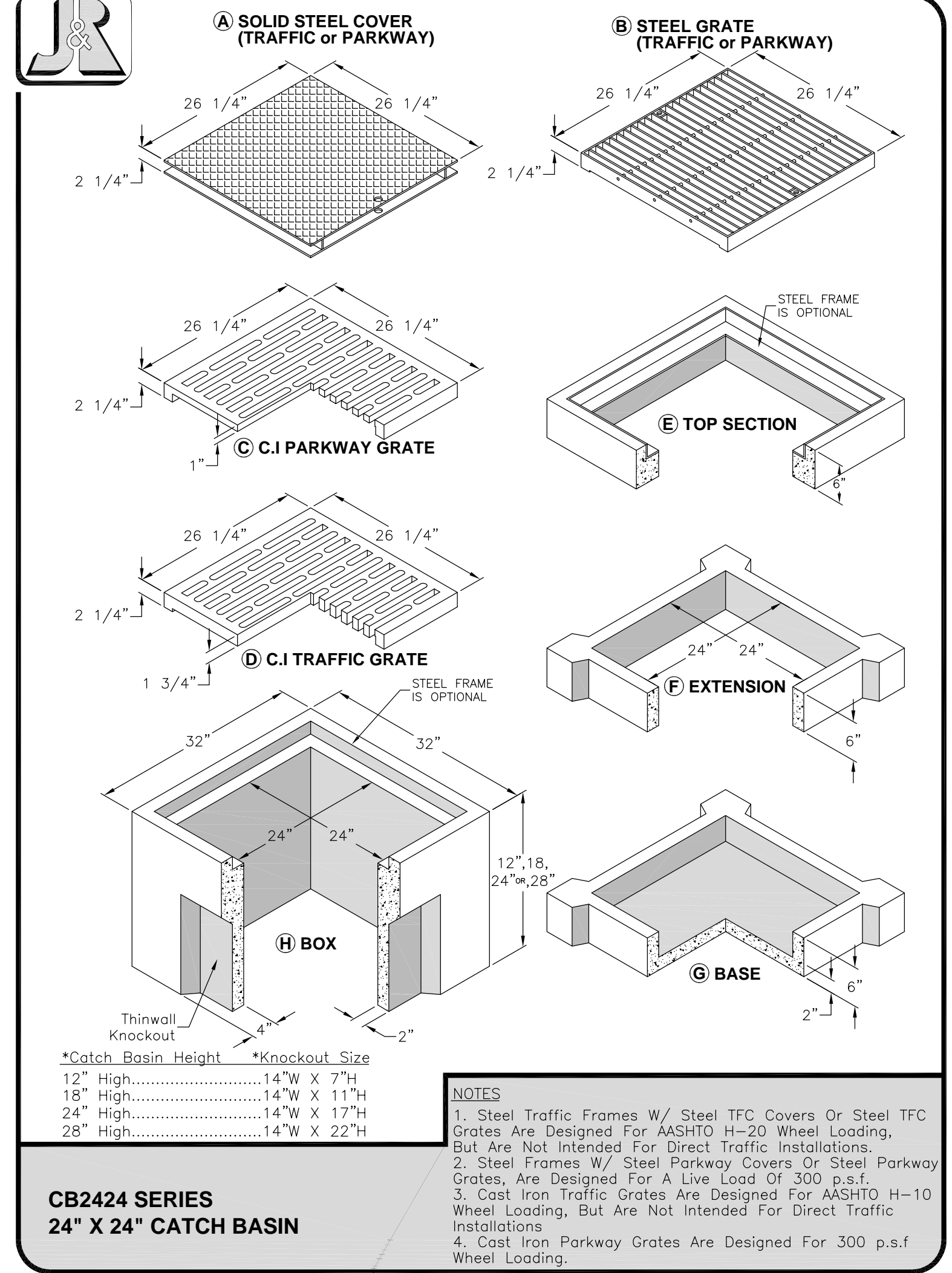
10 18" ADA TRAFFIC GRATE DETAIL
NOT TO SCALE

GRATE OPENING NOTICE TO CONTRACTOR:
 GRATES SHALL HAVE OPENINGS NOT EXCEEDING 1/2 INCH IN ANY DIRECTION IN MULTI-DIRECTIONAL PLAZA AREAS WHERE PEDESTRIAN TRAFFIC FLOWS IN ALL DIRECTIONS. IN AREAS WHERE PEDESTRIAN FLOW IS DETERMINED TO TRAVEL IN THE EAST/WEST OR NORTH/SOUTH DIRECTION, ELONGATED GRATE OPENINGS ARE ACCEPTABLE PROVIDED THESE OPENINGS ARE LIMITED TO 1/2 INCH MAXIMUM IN THE DIRECTION OF TRAVEL.

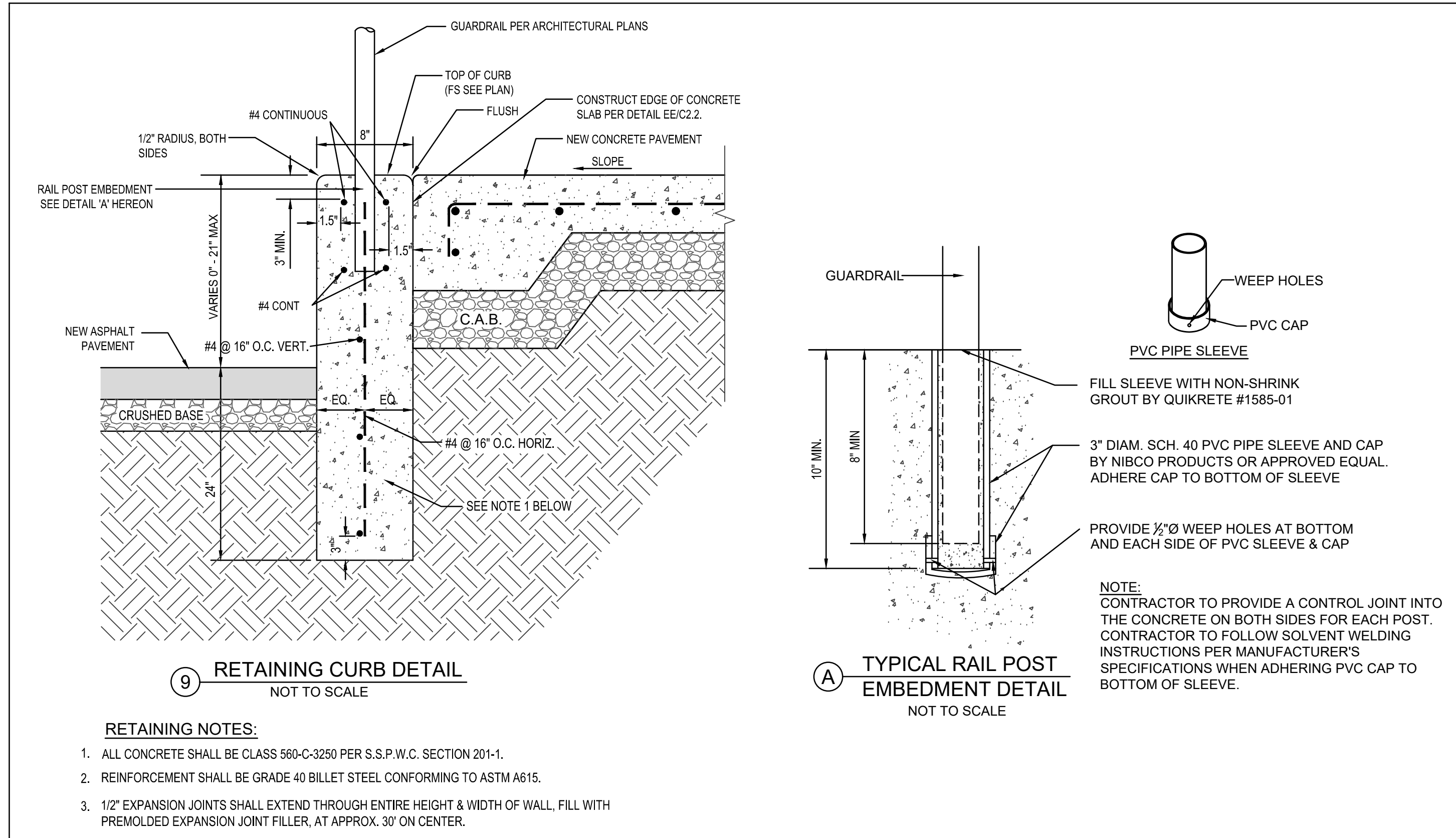


10 CATCH BASIN DETAIL
NOT TO SCALE

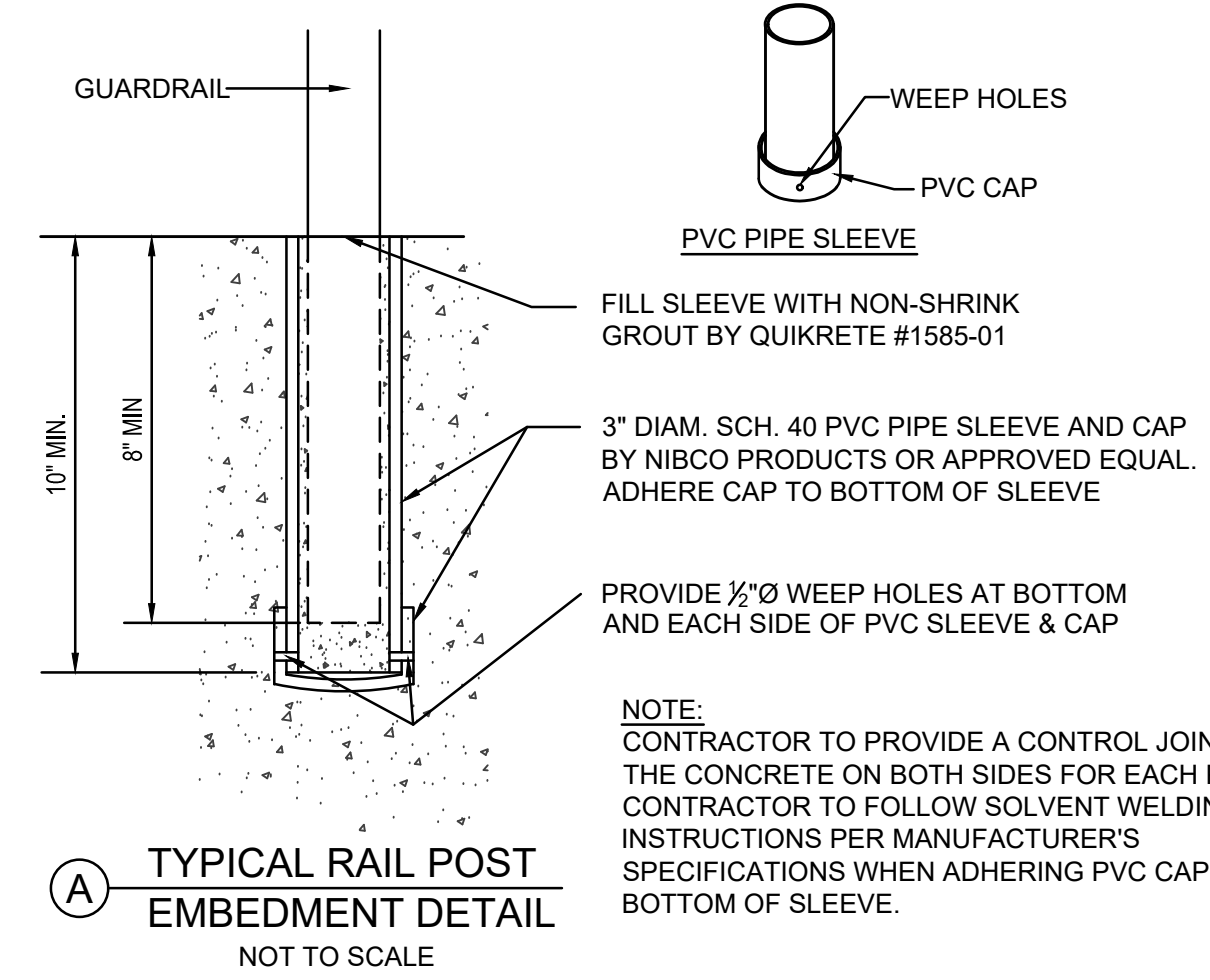
ALL SOLID COVERS MUST BE HOT-DIPPED GALVANIZED



11 24" x 24" CATCH BASIN DETAIL
NOT TO SCALE



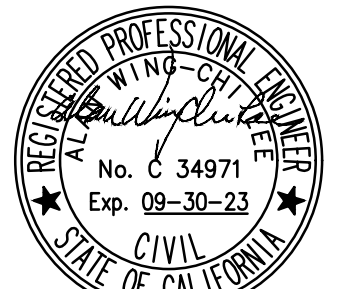
9 RETAINING CURB DETAIL
NOT TO SCALE



A TYPICAL RAIL POST EMBEDMENT DETAIL
NOT TO SCALE

RETAINING NOTES:
 1. ALL CONCRETE SHALL BE CLASS 560-C-3250 PER S.S.P.W.C. SECTION 201-1.
 2. REINFORCEMENT SHALL BE GRADE 40 BILLET STEEL CONFORMING TO ASTM A615.
 3. 1/2" EXPANSION JOINTS SHALL EXTEND THROUGH ENTIRE HEIGHT & WIDTH OF WALL, FILL WITH PREMOULDED EXPANSION JOINT FILLER, AT APPROX. 30' ON CENTER.

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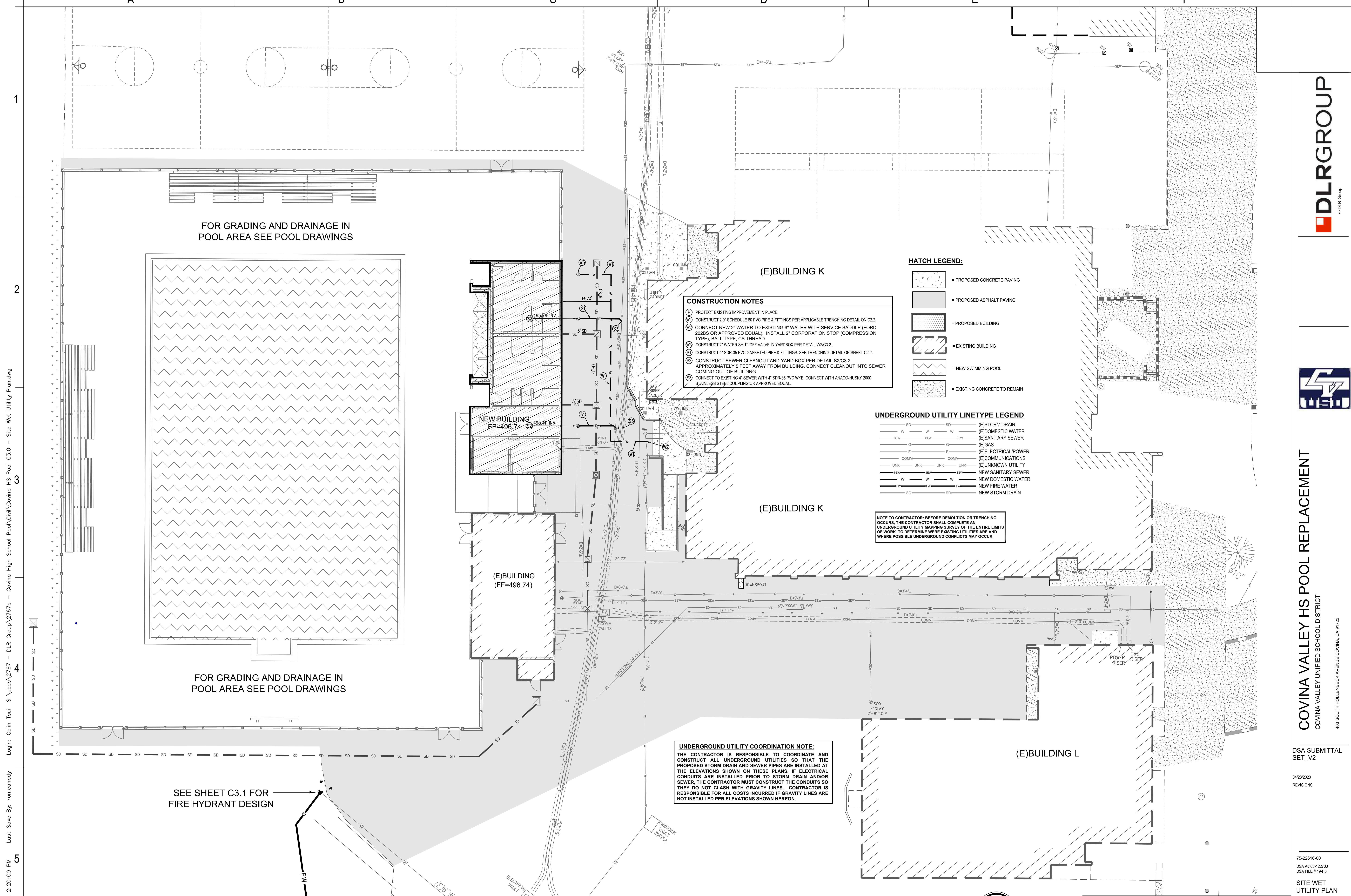


COVINA VALLEY HS POOL REPLACEMENT
 COVINA VALLEY UNIFIED SCHOOL DISTRICT
 483 SOUTH HOLLERBECK AVENUE COVINA, CA 91723

DSA SUBMITTAL SET_V2
 04/28/2023
 REVISIONS

75-22616-00
 DSA # 03-122700
 DSA FILE # 194-H8
 GRADING DETAILS

C2.3



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COVINA VALLEY HS POOL REPLACEMENT
 COVINA VALLEY UNIFIED SCHOOL DISTRICT
 483 SOUTH HOLLERBECK AVENUE COVINA, CA 91723

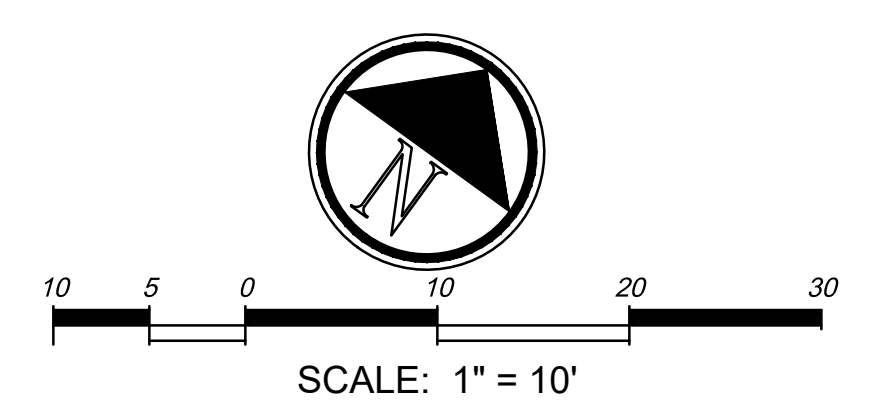
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 04/28/2023 REVISIONS

75-22616-00
 DSA A# 03-122700
 DSA FILE # 194-H8

SITE WET UTILITY PLAN

C3.0

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 Irvine, CA 92606
 Phone: 949-252-1688



NOTES TO CONTRACTOR:
A. FIRE SERVICE NOTE: INSTALLATION, INSPECTION, AND TESTING SHALL CONFORM TO 2016 N.F.P.A. 13 AND 2016 N.F.P.A. 24.
B. ALL BOLTED JOINT ACCESSORIES ON FIRE SERVICE LINES AND FIRE SPRINKLER LATERALS SHALL BE CLEANED AND THOROUGHLY COATED WITH CORROSION RETARDING MATERIAL PER NFPA 24, 10.4.1.1. PER PROJECT SPECIFICATION 33 11 16, ALL DUCTILE IRON PIPE AND FITTINGS BURIED UNDERGROUND SHALL BE PROTECTED WITH DOUBLE WRAPPED PLASTIC FILM IN ACCORDANCE WITH AWWA C105 "AMERICAN NATIONAL STANDARD FOR POLYETHYLENE ENCASUREMENT FOR DUCTILE-IRON PIPE SYSTEMS". EACH WRAP SHALL BE A MINIMUM THICKNESS OF 8-MIL. GATE VALVES AND MECHANICAL RESTRAINT DEVICES SHALL BE WRAPPED WITH 3 LAYERS OF 8-MIL POLYETHYLENE.

UNDERGROUND UTILITY LINETYPE LEGEND

SD	SD	(E)STORM DRAIN
W	W	(E)DOMESTIC WATER
SEW	SEW	(E)SANITARY SEWER
G	G	(E)GAS
E	E	(E)ELECTRICAL/POWER
COM	COM	(E)COMMUNICATIONS
UNK	UNK	(E)UNKNOWN UTILITY
FW	FW	NEW FIRE WATER

CONSTRUCTION NOTES ON SCHOOL PROPERTY

- ① CONSTRUCT 6" PVC C-900, DR-14, CLASS 305, P.V.C. PIPE PER APPLICABLE TRENCHING DETAIL ON C2.2.
- ② CONSTRUCT CONCRETE THRUST BLOCK PER DETAIL F2/C3.2.
- ③ CONSTRUCT 6" SHUT-OFF VALVE IN YARD BOX PER DETAIL F3/C3.2.
- ④ CONSTRUCT FIRE HYDRANT PER DETAIL F4/C3.2 AT EXISTING FIRE HYDRANT LOCATION.
- ⑤ CONSTRUCT 6" DOUBLE CHECK DETECTOR ASSEMBLY PER CITY OF COVINA STD. PLAN W-220 ON C3.3.
- ⑥ CONSTRUCT 4" DIAMETER FIRE HYDRANT BARRICADE PER DETAIL F6/C3.2.

CONSTRUCTION NOTES IN THE PUBLIC RIGHT-OF-WAY

- ① CONSTRUCT THRUST BLOCK PER CITY OF COVINA STD. PLAN NUMBER W-140 & W-142.
- ② CONSTRUCT 8"x6" TAPPING SLEEVE AND 6" GATE VALVE PER CITY OF COVINA STD. PLAN W-150 AND SPECIFICATIONS.
- ③ REMOVE AND REPLACE CITY ROADWAY PAVEMENT DUE TO UTILITY TRENCHING PER CITY OF COVINA STD. PLAN W-180.
- ④ TRENCH, BACKFILL, AND CONSTRUCT 6" A.W.W.A. C900, DR-14, CLASS 305, P.V.C. PIPE PER CITY OF COVINA STANDARDS AND SPECIFICATIONS.
- ⑤ REMOVE AND REPLACE CURB AND GUTTER DUE TO UTILITY TRENCHING PER CITY OF COVINA STD. PLAN W-180. MATCH ADJACENT CURB HEIGHT.
- ⑥ REMOVE AND REPLACE SIDEWALK DUE TO UTILITY TRENCHING PER CITY OF COVINA STD. PLAN W-180.

HATCH LEGEND:

	= EXISTING BUILDING
	= EXISTING CONCRETE

NOTE TO CONTRACTOR: BEFORE TRENCHING FOR THE NEW FIRE WATER OCCURS, THE CONTRACTOR SHALL COMPLETE AN UNDERGROUND UTILITY MAPPING SURVEY ALONG THE PROPOSED PATHWAY TO DETERMINE WHERE EXISTING UTILITIES ARE AND WHERE POSSIBLE UNDERGROUND CONFLICTS MAY OCCUR.

CALCULATED FLOW AT NEW HYDRANT:
1,500 GPM AT 38 PSI
1,850 GPM AT 20 PSI

10/20/2022 HYDRANT FLOW TEST DATA:
104 PSI STATIC / 98 PSI RESIDUAL PRESSURE
TAKEN AT FIRE HYDRANT. CALCULATED FLOW AT 20 PSI = 4,921 GPM



SCALE: 1" = 20'

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COVINA VALLEY HS POOL REPLACEMENT
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75-22616-00
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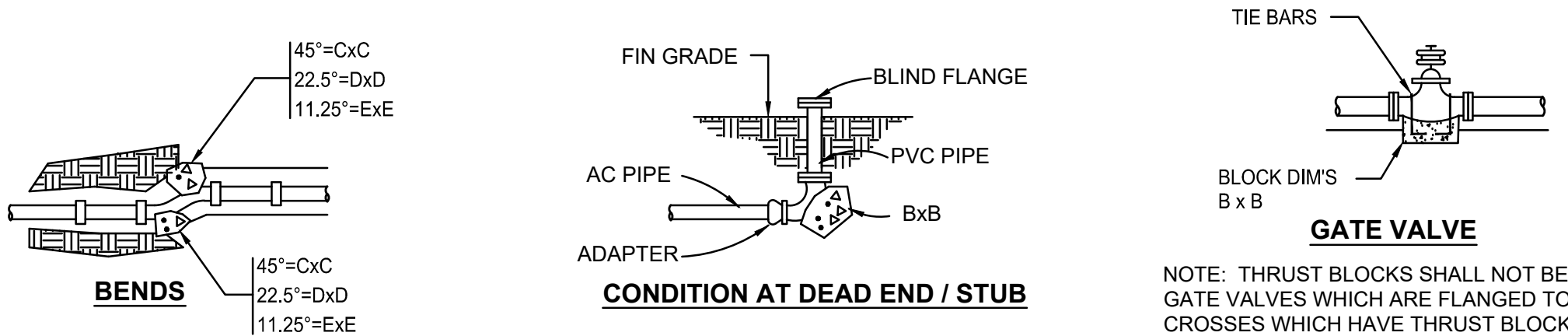
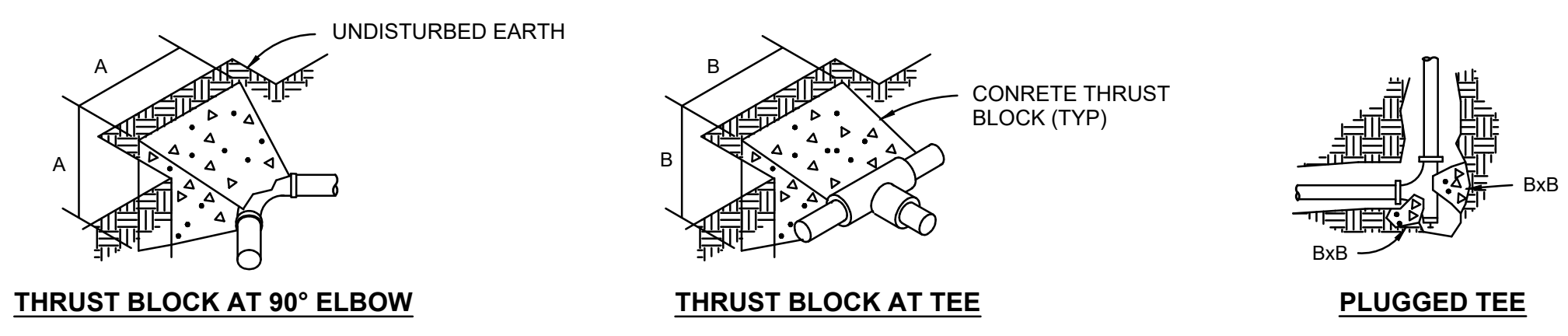
FIRE HYDRANT INSTALLATION PLAN

C3.1

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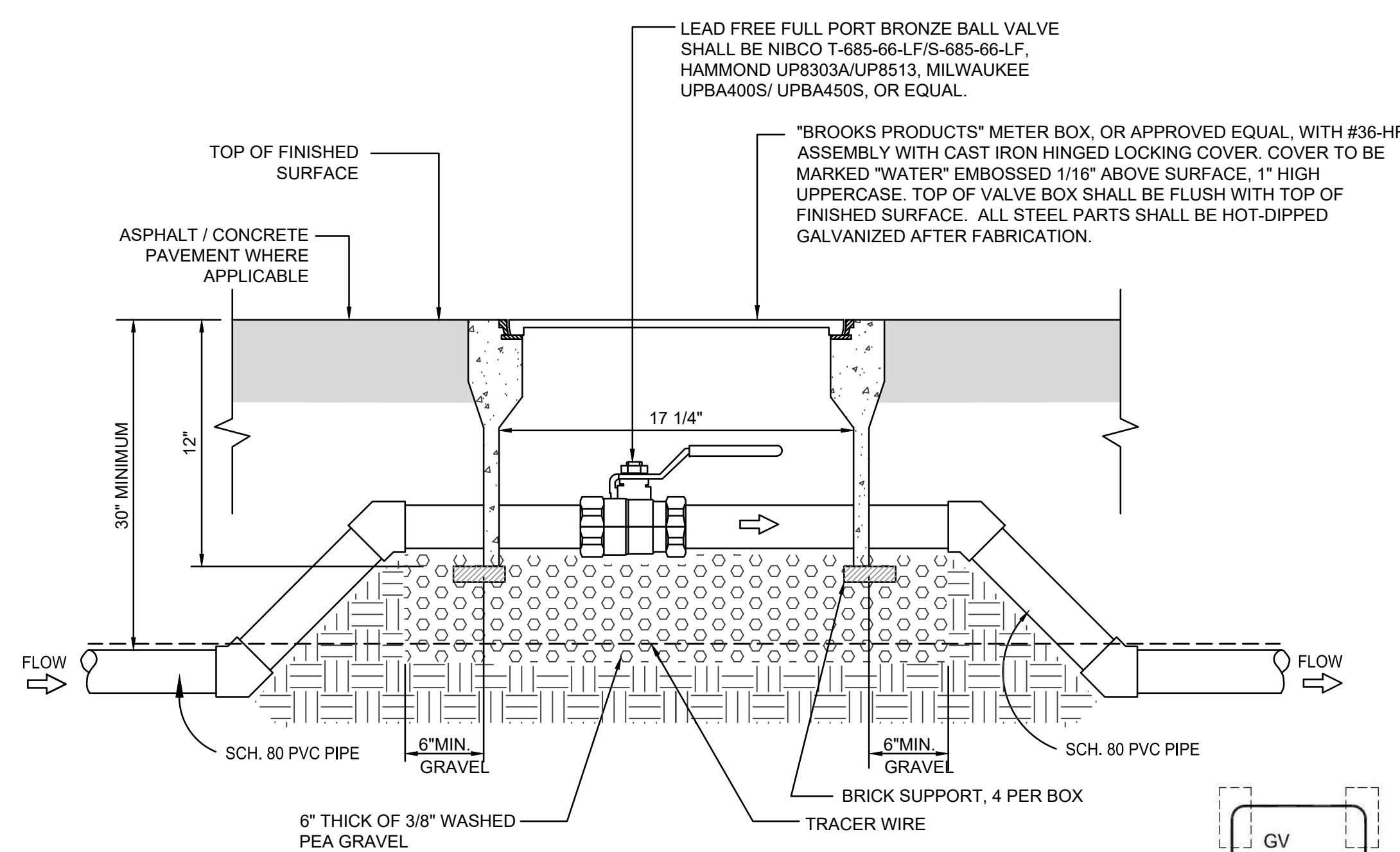
THRUST BLOCK GENERAL NOTES:

- ALL DUCTILE IRON FITTINGS BURIED UNDERGROUND SHALL BE PROTECTED WITH PLASTIC FILM WRAP IN ACCORDANCE WITH AWWA C105. WRAP SHALL BE A LOOSE 8-MIL-THICK POLYETHYLENE TUBE. ALL JOINTS BETWEEN PLASTIC TUBES SHALL BE WRAPPED WITH 2-INCH-WIDE POLYETHYLENE ADHESIVE TAPE, POLYKEN 900, SCOTCH WRAP 50, OR APPROVED EQUAL.
- THRUST BLOCK AREAS ARE BASED ON 200 PSI PRESSURE AND 1,500 PSF ALLOWABLE SOIL BEARING PRESSURE & SIZED PER N.F.P.A. 24, TABLES A.10.6.1(a) and A.10.6.1(b), 2016 EDITION.
- ALL BOLTS AND STUDS SHALL BE TYPE 316 STAINLESS STEEL PER ASTM A193 GRADE B8M. NUTS AND WASHERS SHALL BE TYPE 316 STAINLESS STEEL PER ASTM A194 GRADE 8M.
- THRUST BLOCKS SHALL BE INSTALLED AT EVERY CHANGE OF DIRECTION.
- ALL THRUST BLOCKS SHOULD, WHERE POSSIBLE, BE PLACED AGAINST UNDISTURBED SOIL. WHERE IT IS NOT POSSIBLE TO PLACE THE BEARING SURFACE AGAINST UNDISTURBED SOIL, THE FILL BETWEEN THE BEARING SURFACE AND UNDISTURBED SOIL MUST BE COMPACTED TO AT LEAST 90% STANDARD PROCTOR DENSITY PER N.F.P.A. 24, ANNEX A.10.6.1, 2016 EDITION. THEY SHALL BE CENTERED VERTICALLY AND HORIZONTALLY ABOUT THE DIRECTION OF THE THRUST.
- THRUST BLOCKS SHALL BE CONCRETE CLASS 520-C-2500 PER THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 2021 EDITION, SECTION 201-1 WITH TYPE II CEMENT.
- WHERE WATER MAIN DEAD ENDS ARE BLIND FLANGED OR CAPPED, THE THRUST BLOCK SHALL EXTEND A MINIMUM DISTANCE OF 6' INTO BOTH SIDES OF THE TRENCH.
- CONCRETE POURED AGAINST PIPE FITTINGS SHALL BE PLACED SO THAT VALVES AND FITTINGS ARE ACCESSIBLE FOR REPAIR.
- TIE BARS SHALL BE #4 REBAR (PER ASTM 767 AND D3963) OR STAINLESS STEEL WITH ACI HOOKED ENDS. WHEN TIE BARS ARE NOT EMBEDDED IN CONCRETE THEY SHALL BE COATED WITH KOPPERS CO. BITUMASTIC NO. 50 OR EQUIVALENT.
- ALL EXPOSED FLANGES AND OTHER METAL SURFACES AND ALL DAMAGED COATINGS SHALL BE COATED AFTER ASSEMBLY WITH A MASTIC, PER SPECIFICATIONS.
- CONCRETE SHALL HAVE 3" MINIMUM CLEARANCE AROUND ALL JOINTS.

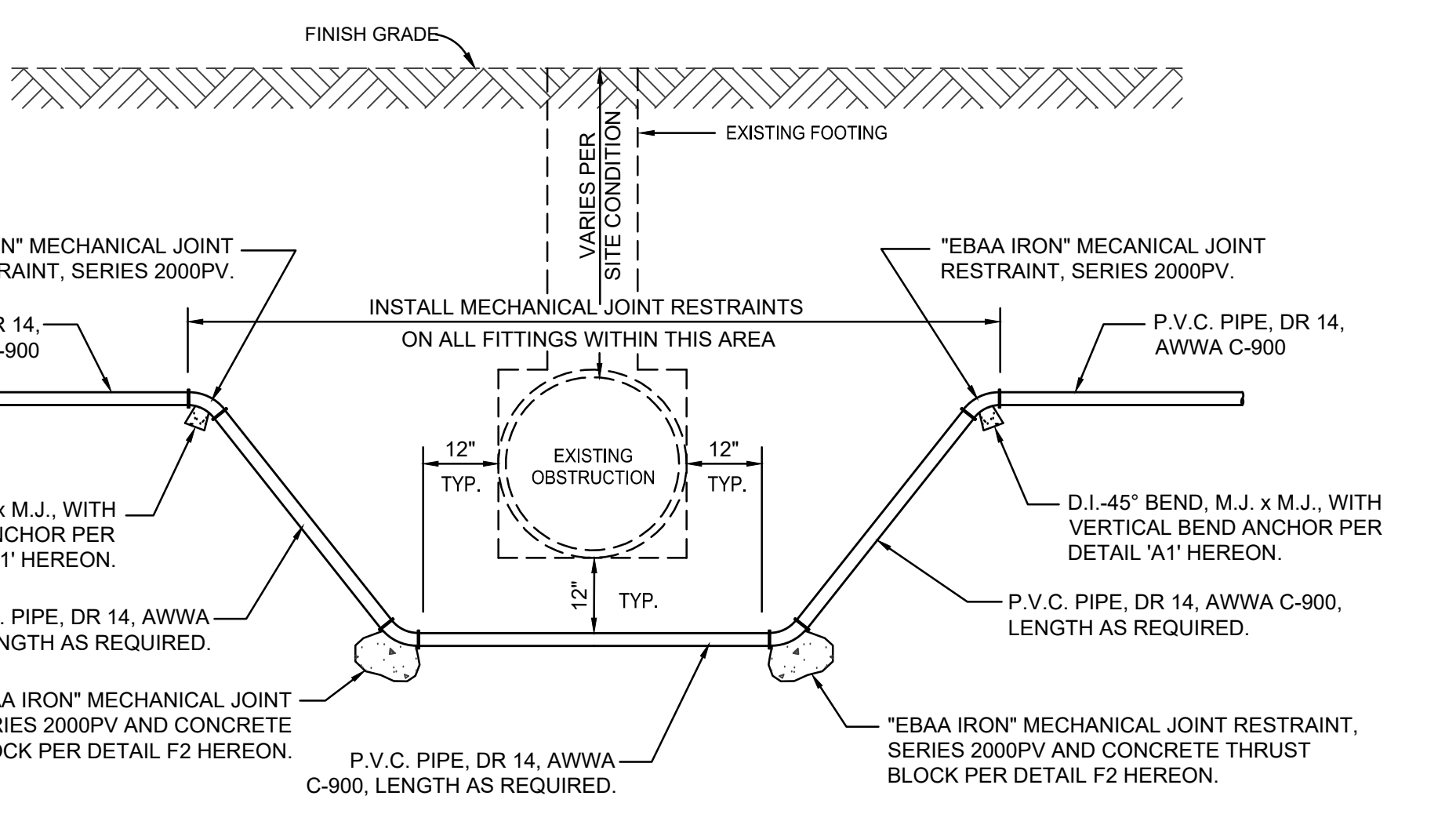
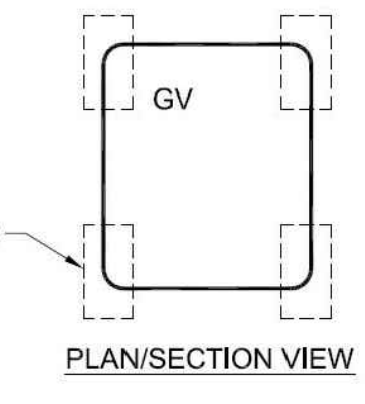


(F2) CONCRETE THRUST BLOCK DETAILS
NOT TO SCALE

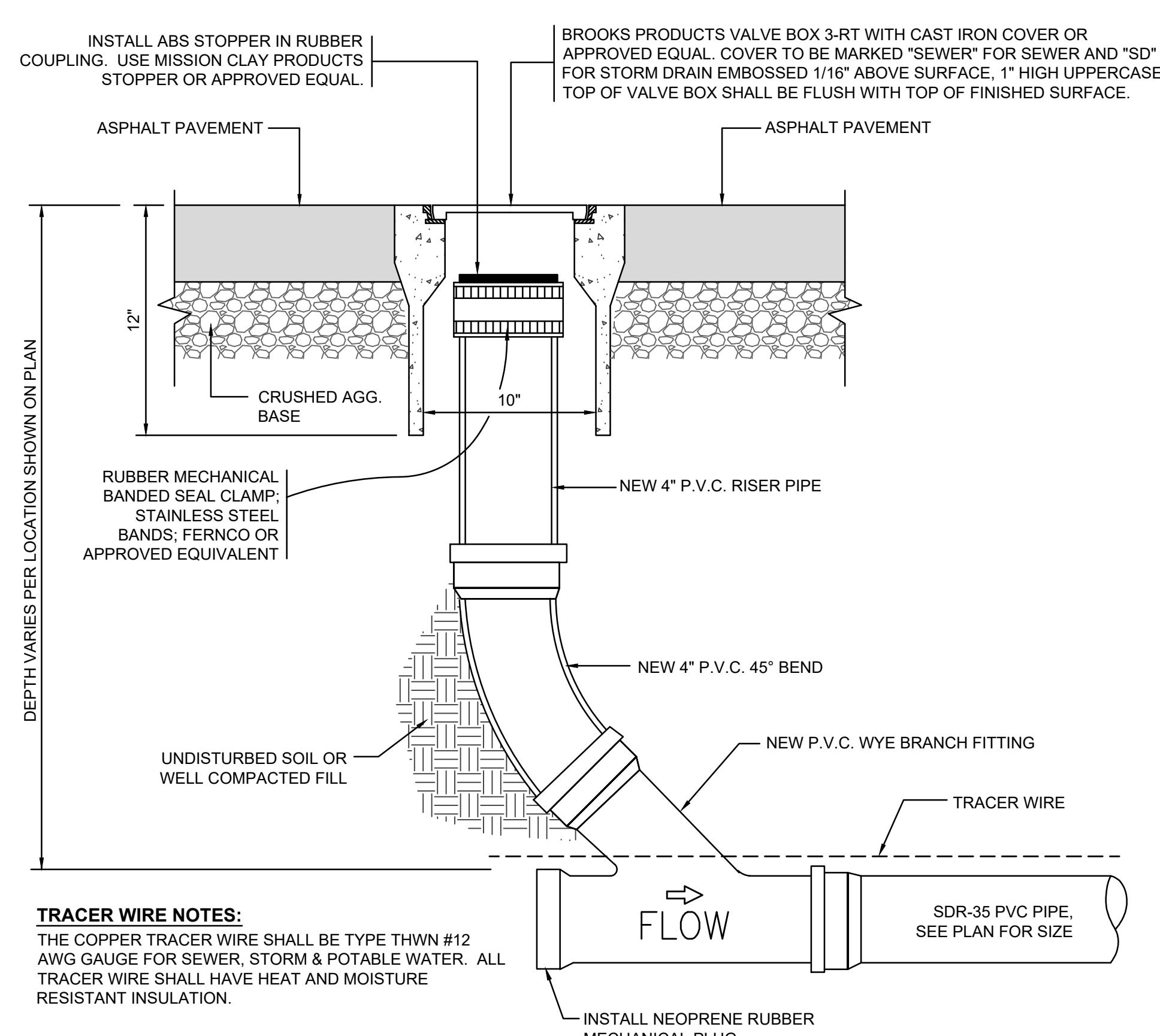
PIPE SIZE (INCHES)	90° ELBOW	TEE / STUB	45° BEND	22.5° BEND	11.25° BEND
2	14"	12"	10"	8"	6"
3	20"	17"	15"	11"	8"
4	28"	23"	20"	15"	10"
6	39"	33"	29"	21"	15"



(W3) SHUT-OFF VALVE IN YARDBOX
2" AND BELOW
NOT TO SCALE



WATER MAIN VERTICAL OFFSET
NOT TO SCALE



(S2) CLEAN OUT & YARD BOX DETAIL
NOT TO SCALE

TRACER WIRE NOTES:
THE COPPER TRACER WIRE SHALL BE TYPE THWN #12 AWG GAUGE FOR SEWER, STORM & POTABLE WATER. ALL TRACER WIRE SHALL HAVE HEAT AND MOISTURE RESISTANT INSULATION.

COUNTY OF LOS ANGELES FIRE DEPARTMENT
FIRE PREVENTION DIVISION

REV 04/03

STANDARD FIRE HYDRANT BARRICADE

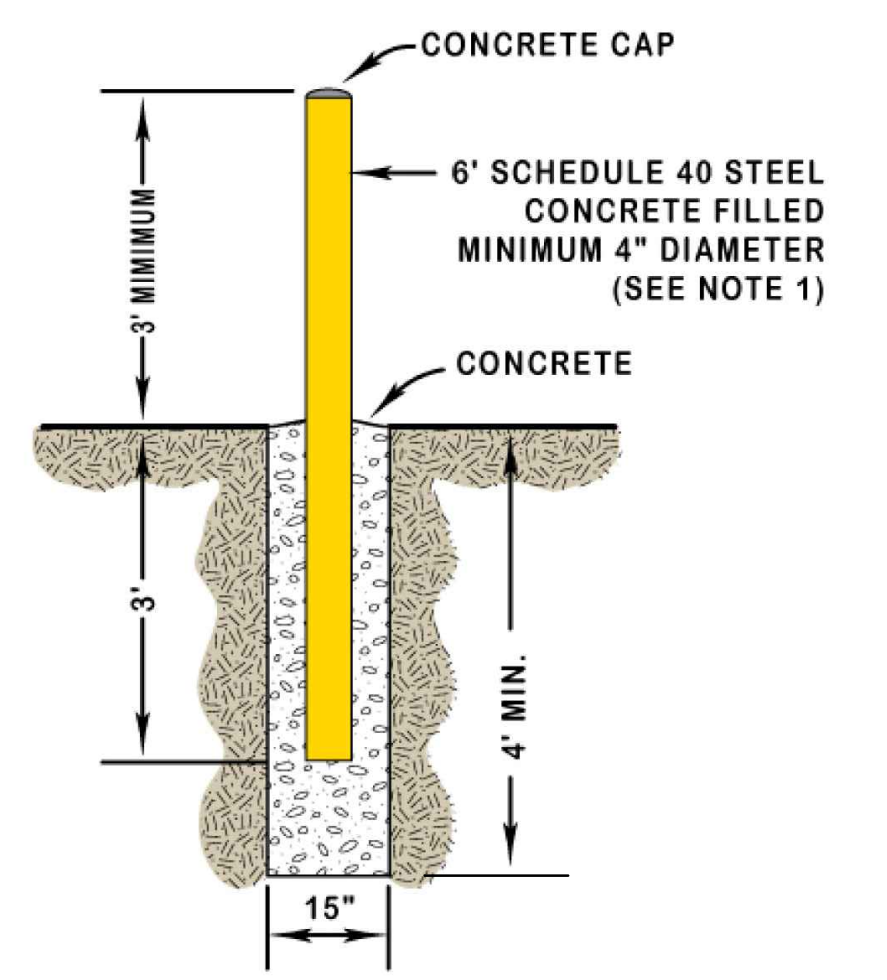


Figure 1
BARRICADE DETAILS

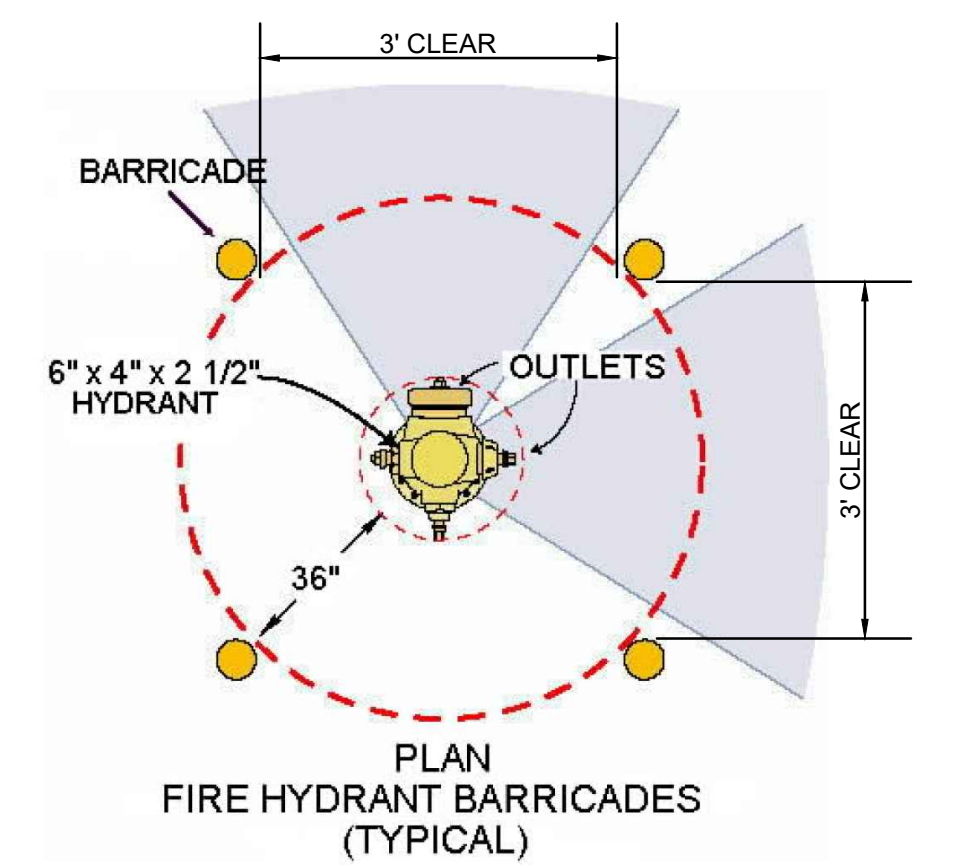


Figure 2
FIRE HYDRANT BARRICADES (TYPICAL)

Notes:

- Figure 1: 6 inch diameter pipe if heavy truck traffic is anticipated. Schedule 40 steel and concrete filled. (560-c-3250)
- Posts, fences, vehicles, growth, trash storage and other materials or things shall not be placed or kept near fire hydrants in a manner that would prevent fire hydrants from being immediately discernable. If hydrant to be barricaded; no barricade shall be constructed in front of hydrant outlets. (Figure 2, shaded area)
- The exact location of barricades may be changed by the Fire Inspector in the field.
- The steel pipe above ground shall be painted a minimum of two field coats of primer.
- Two finish coats of "Traffic Signal Yellow" shall be used for Fire Hydrant Barricades.
- Figure 3 shows hydrant hook up during fire ground operations. Notice apparatus (Hydra-Assist Valve) connected to hydrant and the required area. Figure 3 shows the importance of not constructing Barricades or other obstructions in front of hydrant outlets.

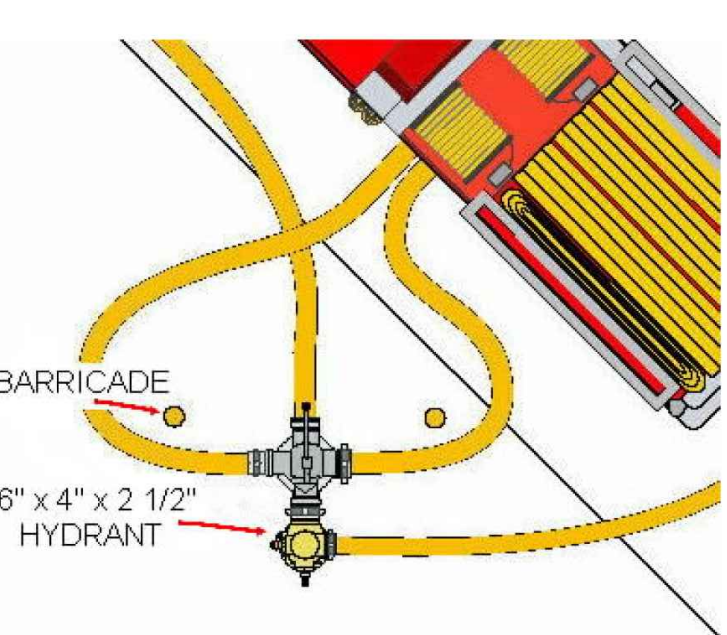
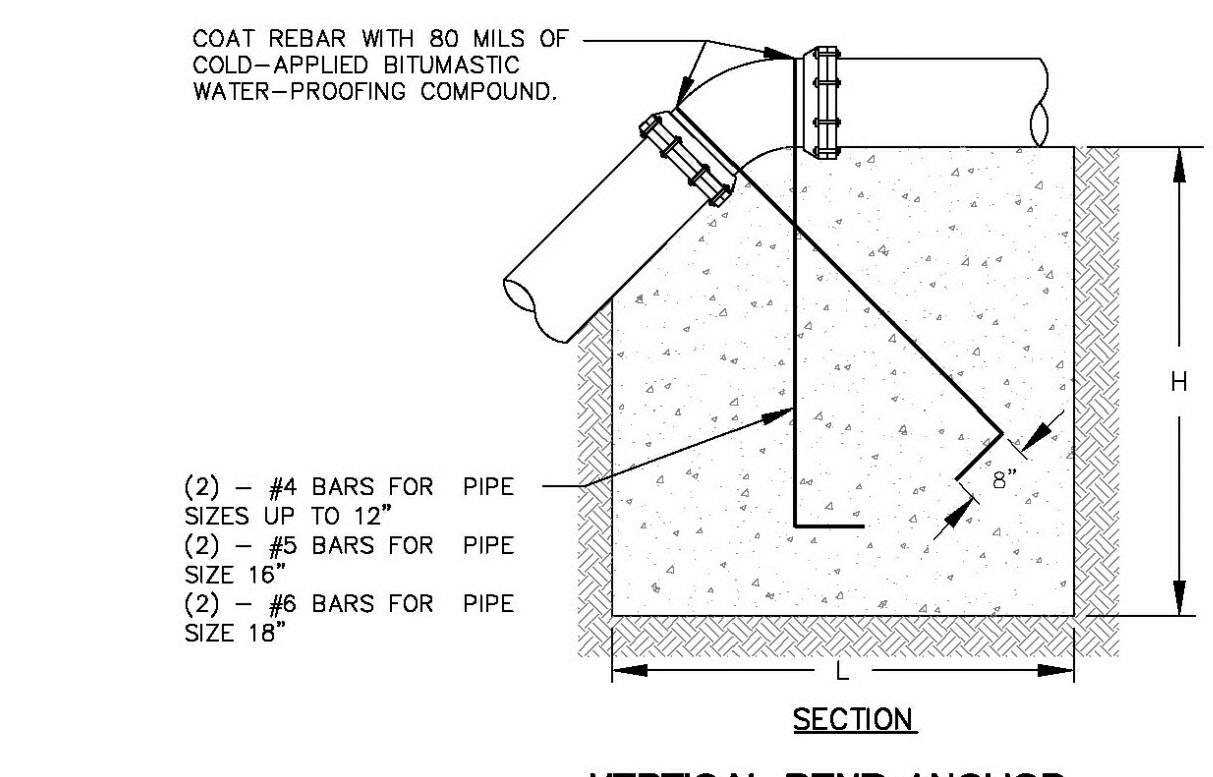


Figure 3

(F3) FIRE HYDRANT BARRICADE DETAIL
NOT TO SCALE



VERTICAL BEND ANCHOR

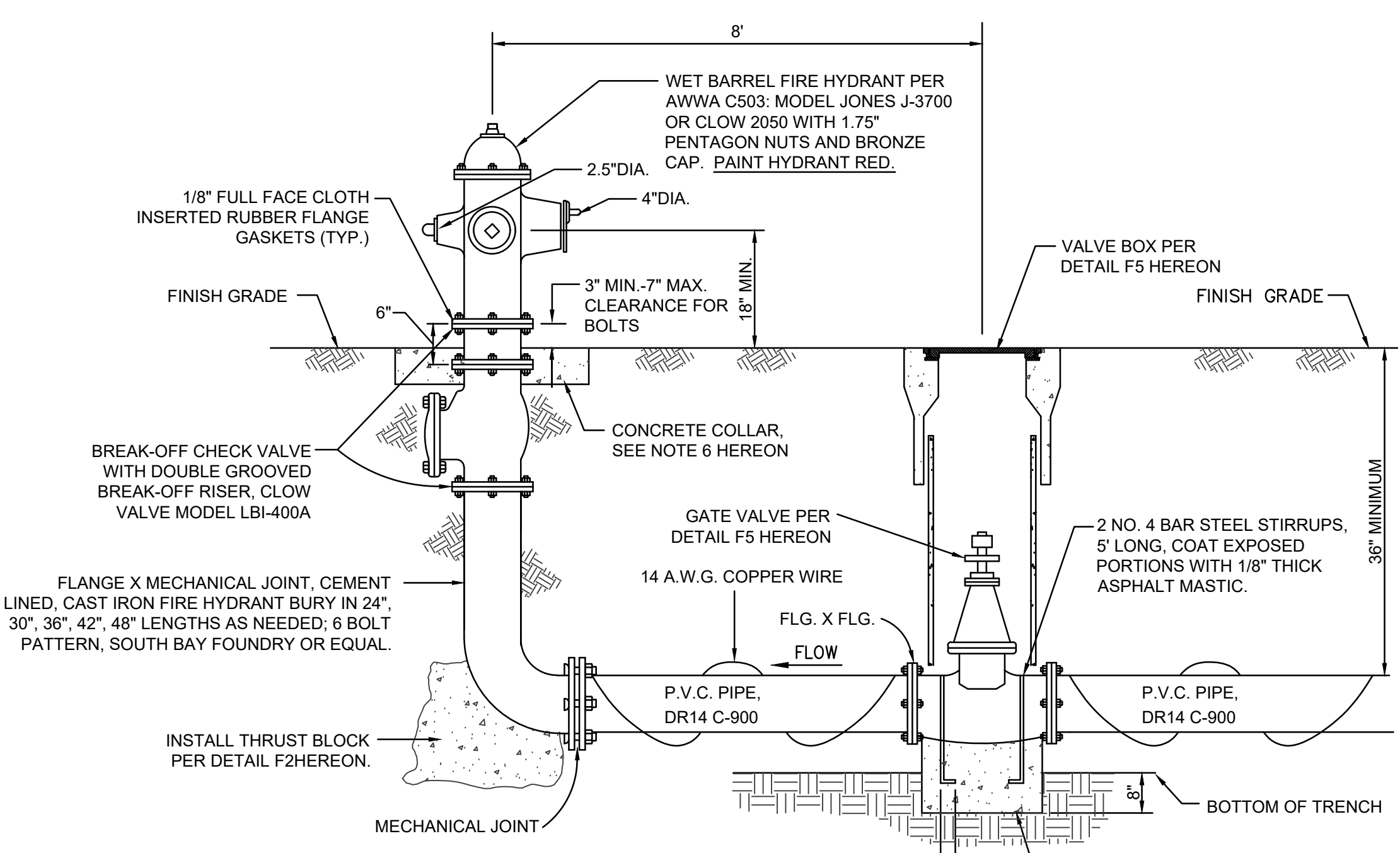
(A1) VERTICAL BEND ANCHOR DETAIL
NOT TO SCALE

PIPE SIZE (L/H, AND W(IN))	VOLUME (YD³)	THRUST (LBS)	45° BEND (L/H, AND W(IN))	VOLUME (YD³)	THRUST (LBS)
4"	26	0.4	1104	32	0.7
6"	34	0.8	2483	42	1.6
8"	41	1.5	4414	51	2.8
10"	47	2.2	6897	59	4.4
12"	53	3.2	9932	67	6.4
16"	64	5.6	17657	81	11.4
18"	70	7.4	22347	87	14.1

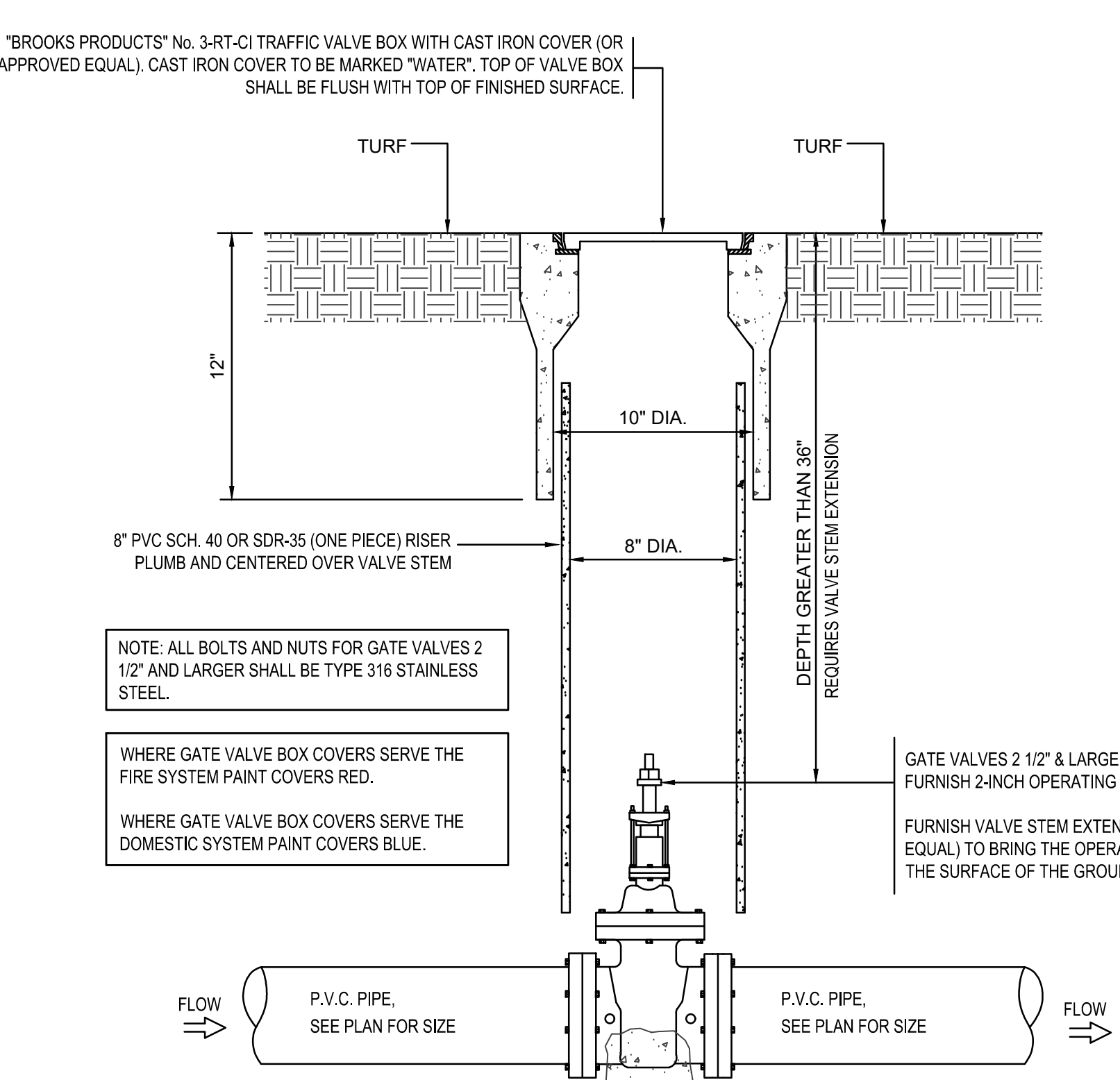
* W = WIDTH OF VERTICAL BEND ANCHOR

FIRE HYDRANT GENERAL NOTES:

- FIRE HYDRANT SUPPLY PIPING SHALL BE A MINIMUM OF SIX INCHES IN DIAMETER. THE LOWEST OPERATING NUT SHALL BE A MINIMUM OF 18" ABOVE GRADE AND THE HYDRANT FLANGE SHALL BE A MINIMUM OF 2" ABOVE GRADE.
- ALL MECHANICAL JOINTS ON FIRE SERVICE LINES AND FIRE SPRINKLER LATERALS SHALL BE CLEANED AND THOROUGHLY COATED WITH CORROSION RETARDING MATERIAL. NFPA 24, 10.4.1.1.
- ALL OUTLETS SHALL BE PROVIDED WITH NATIONAL STANDARD THREADS (NTS).
- BREAK-AWAY FEATURES OTHER THAN BOLTS WILL NOT BE ACCEPTED.
- ALL UNDERGROUND BOLTS TO BE COATED WITH KOPPERS BITUMASTIC #50 OR EQUAL.
- IN SOFTSCAPE AREAS, INSTALL 6" THICK BY 2' X 2' CONCRETE COLLAR.
- ALL FIRE HYDRANTS SHALL HAVE A 3-FOOT CIRCUMFERENCE OF CLEAR SPACE AND AN 18 INCH CLEARANCE FROM THE CENTER OF THE 4" DISCHARGE TO FINISHED GRADE LEVEL. CFC 507.5.5.
- ALL FIRE HYDRANTS SHALL BE INSTALLED WITH BREAK-OFF BOLTS AND/OR BREAK-OFF SPOOLS.



(F1) FIRE HYDRANT DETAIL
NOT TO SCALE



(F3) SHUT-OFF VALVE IN YARDBOX
2-1/2" AND ABOVE
NOT TO SCALE

GATE VALVES 2 1/2" AND ABOVE SHALL HAVE THRUST BLOCK INTO UNDISTURBED SOIL PER DETAIL F2 HEREON.

PLANS PREPARED BY:
FPL FPL and Associates, Inc.
Traffic • Transportation • Civil
30 Corporate Park, Suite 401
Irvine, CA 92606
Phone: 949-252-1688



COVINA VALLEY HS POOL REPLACEMENT
COVINA VALLEY UNIFIED SCHOOL DISTRICT
483 SOUTH HOLLERBECK AVENUE COVINA, CA 91723

DSA SUBMITTAL SET_V2

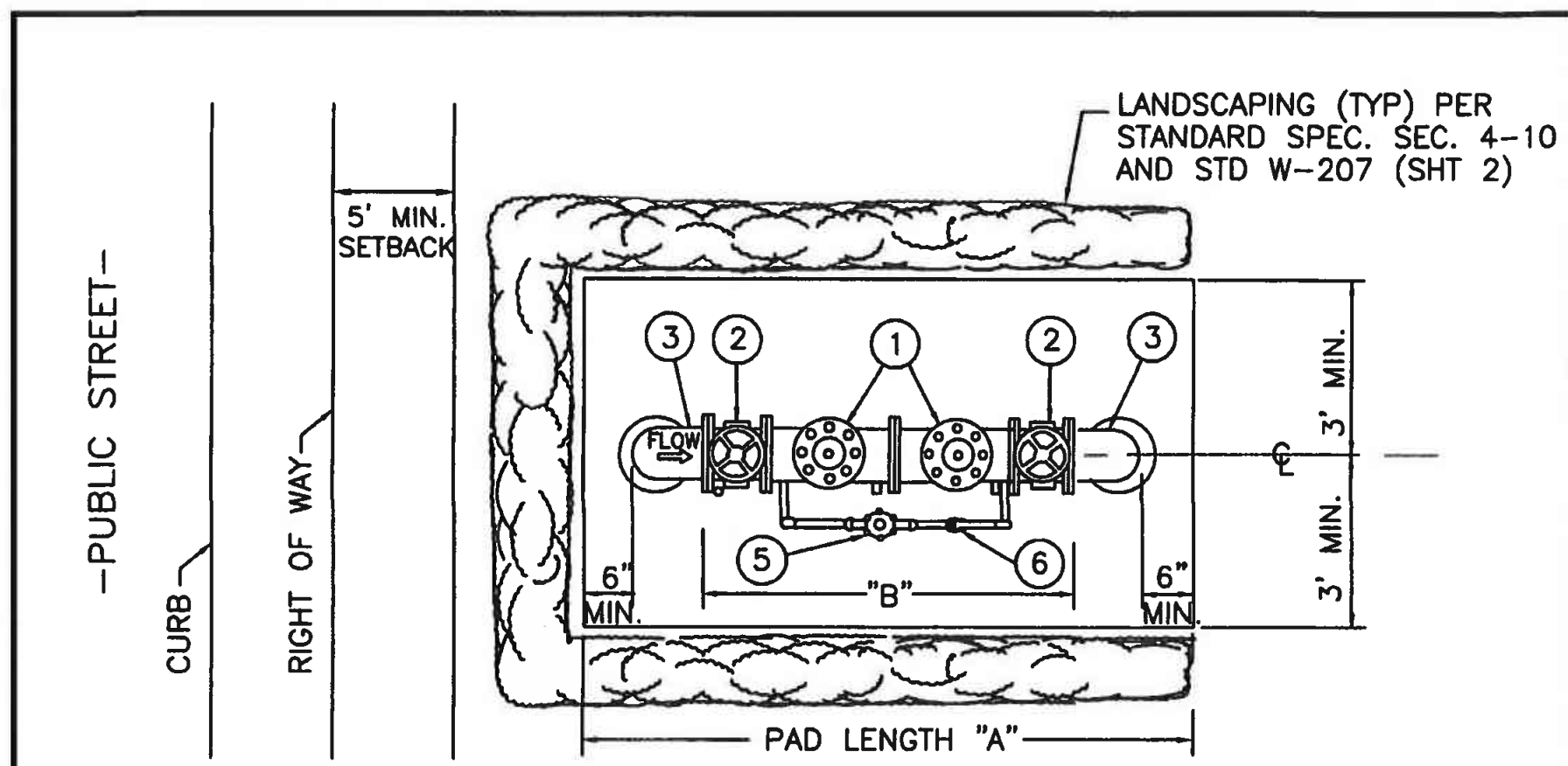
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REVISIONS

75-22616-00
DSA #03-122700
DSA FILE # 194-H8

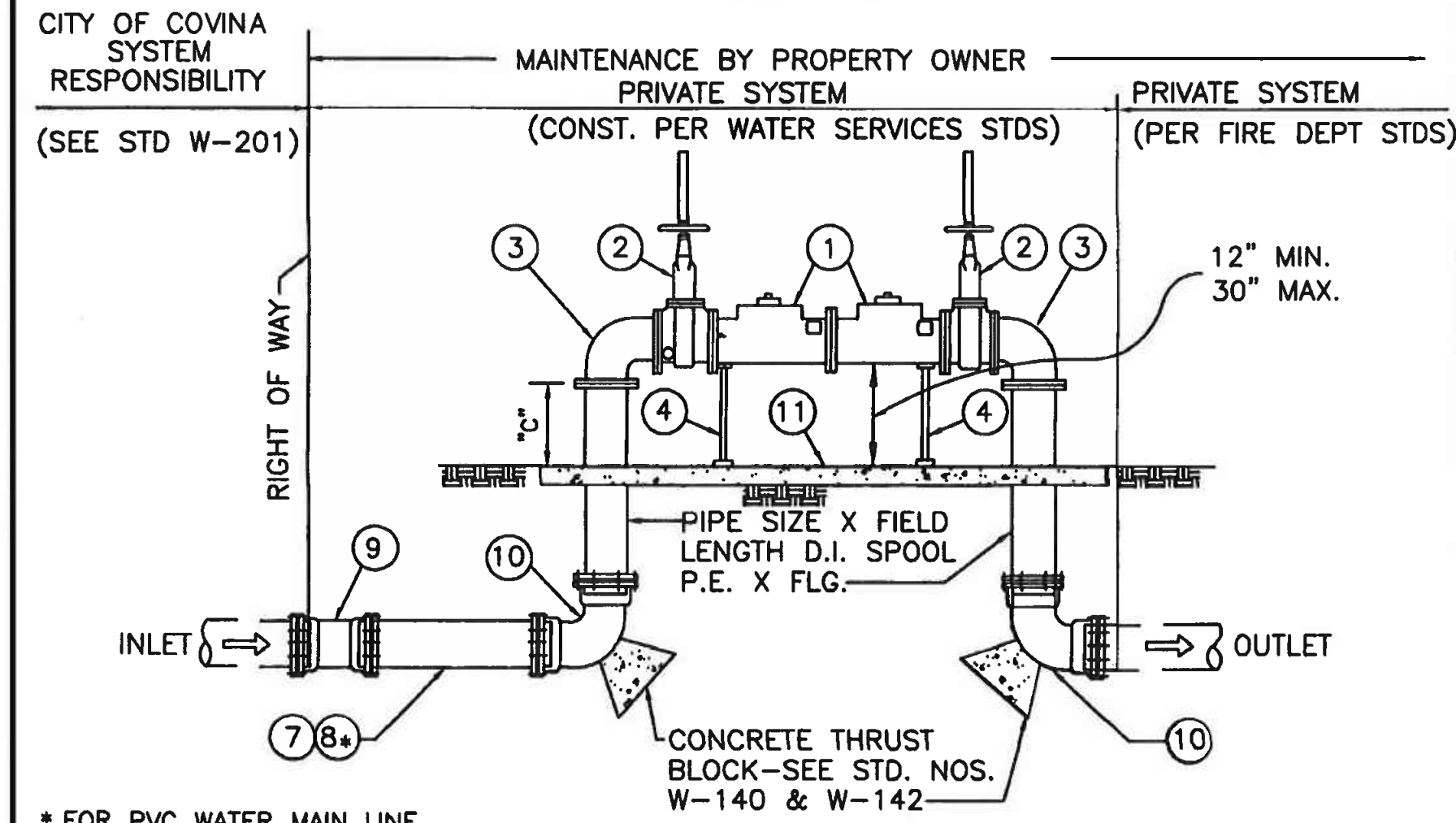
SITE WET UTILITY DETAILS

C3.2

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Last Save By: ron.conedy
Login: Colin Tsui
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PLAN VIEW



ELEVATION VIEW

* FOR PVC WATER MAIN LINE CONSTRUCTION ONLY - SEE ITEM 8* AND NOTES 10 AND 11 ON SHEET 2

	CITY OF COVINA PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION	APPROVED: CITY ENGINEER	DOUBLE CHECK DETECTOR ASSEMBLY FIRELINE ONLY	
		DATE: 10/06/20	STANDARD DRAWING NO. W-220	SHEET 1 OF 2

ITEM	DESCRIPTION
1	DOUBLE CHECK DETECTOR ASSEMBLY SEE SPECIFICATIONS SECTION 5-01.
2	RESILIENT WEDGE VALVE, O.S.&Y., SEE SPECIFICATIONS SECTION 2-05.
3	SR 90° BEND, FLG X FLG, D.I., CEMENT MORTAR LINED.
4	SUPPORT, ADJUSTABLE PIPE, FLAT SUPPORT (SEE STD. NO. W-270).
5	BYPASS METER SEE SPECIFICATIONS SECTION 4-06.
6	BYPASS METER DOUBLE CHECK VALVE.
7	PIPE SIZE X FIELD LENGTH D.I. SPOOL, P.E. X P.E. (CLASS 52).
8*	N/A.
9	D.I. SOLID SLEEVE M.J. X M.J., (SEE NOTE 9); MJ'S SHALL BE RESTRAINED AS PER SECTION 2-12.01.
10	D.I. 90° BEND, M.J. X M.J. (2 TYP.); M.J.'S SHALL BE RESTRAINED PER SECT. 2-12.01.
11	CONCRETE PAD 4" THICK, SIZE AS INDICATED HEREIN; CLASS 520-C-2500 CONCRETE.

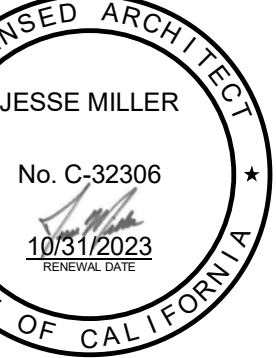
NOTES:

- FIRE DEPT. CONNECTIONS CANNOT BE PLACED ON THE ASSEMBLY WITHOUT PRIOR APPROVAL. CONTACT FIRE DEPT. STATION 154 AT (626) 974-8331. WHERE APPROVED BY FIRE DEPT., A FLG X FLG X FLG, D.I., CEMENT MORTAR LINED TEE MAY BE SUBSTITUTED FOR THE TOP 90° BEND ON FIRELINES.
- O.S.&Y. VALVES SHALL BE LOCKED IN OPEN POSITION WITH CHAIN AND OWNER'S PADLOCK(S). PADLOCK(S) SHALL BE BREAKAWAY TYPE.
- ALL PIPE SHALL BE DUCTILE IRON.
- ALL FITTINGS AND APPURTENANCES (GASKET, NUTS, BOLTS, RESTRAINTS) SHALL COMPLY WITH SECTION 2-08 & 2-12 OF THESE SPECIFICATIONS.
- SEE STANDARD DRAWING W-207 (SHEET 2) FOR ABOVE GROUND ASSEMBLY INSTALLATION REQUIREMENTS.
- THE COMPLETED ASSEMBLY SHALL BE PAINTED PER DIRECTION OF WATER DIVISION SUPERVISOR.
- PROVIDE A MINIMUM OF 18 INCHES OF CLEAR SPACE FROM THE BYPASS METER TO THE EDGE OF CONCRETE PAD.
- BACKFLOW DEVICE SIZE SHALL BE EQUAL TO OR GREATER THAN PIPE SIZE.
- ITEM 9 IS REQUIRED IF THE FIRELINE ASSEMBLY IS NOT INSTALLED AT THE SAME TIME OF LATERAL INSTALLATION.
- CONTRACTOR TO PROVIDE A SIGN ON THE D.C.D.A. DESIGNATING WHAT IT SERVES AS NOTED BELOW.
- DCDA SHALL BE MONITORED BY CAMPUS FIRE ALARM SYSTEM, SEE SHEET ES1.1.

D.C.D.A. SIGNAGE NOTES

- THE SIGN SHALL BE METAL, PAINTED WHITE WITH ENGRAVED RED LETTERS 1" HIGH.
- THE SIGN SHALL INDICATE WHAT IT SERVES, "FIRE HYDRANT SOUTH OF POOL".
- SIGN SHALL BE PERMANENTLY BANNED TO THE VALVE WITH U-BOLTS.

	CITY OF COVINA PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION	APPROVED: CITY ENGINEER	DOUBLE CHECK DETECTOR ASSEMBLY FIRELINE ONLY	
		DATE: 10/06/20	STANDARD DRAWING NO. W-220	SHEET 2 OF 2



COVINA VALLEY HS POOL REPLACEMENT
 COVINA VALLEY UNIFIED SCHOOL DISTRICT
 483 SOUTH HOLLENBECK AVENUE COVINA, CA 91723

DSA SUBMITTAL SET_V2

04/28/2023 REVISIONS

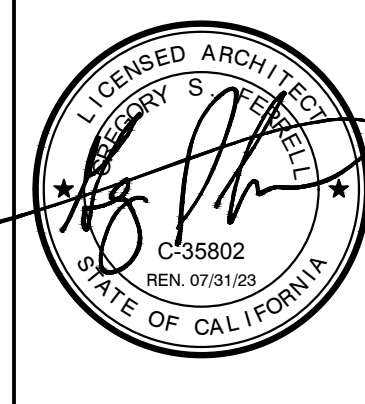
75-22616-00
 DSA #8 03-122700
 DSA FILE # 194H8

SITE WET UTILITY DETAILS

PLANS PREPARED BY:
FPL FPL and Associates, Inc.
 Traffic • Transportation • Civil
 30 Corporate Park, Suite 401
 Irvine, CA 92606
 Phone: 949-252-1688



C3.3



SWIMMING POOL DATA

SURFACE AREA	=	8,686 SQ. FT.
PERIMETER	=	390 FT.
DEPTHS	=	3'-6" TO 7'-3"
VOLUME	=	423,547 GAL.
6 HR TURNOVER	=	1,177 GPM

LEGEND

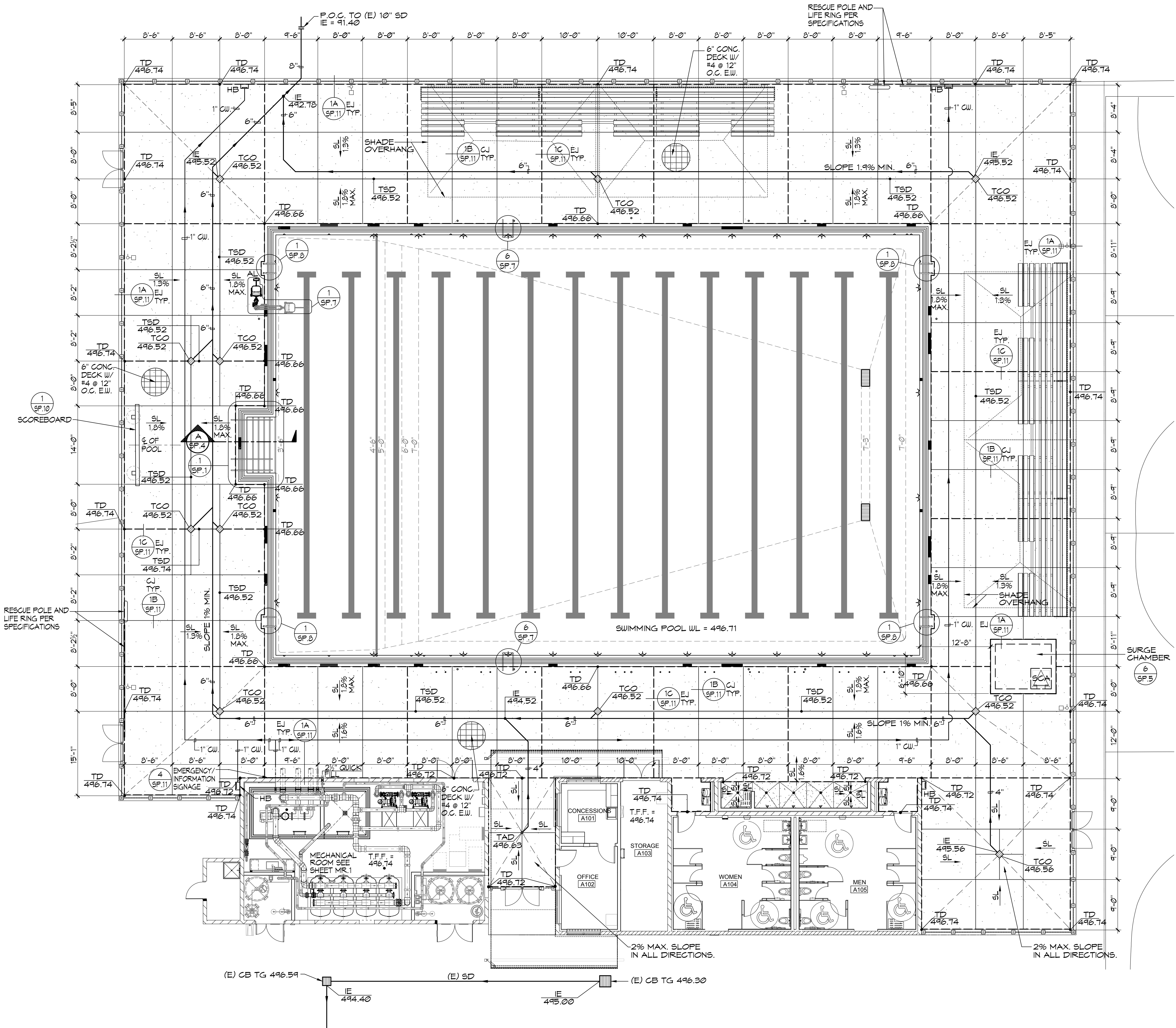
— EJ —	=	EXPANSION JOINT	(1A) (1C) (SP.11)
— CJ —	=	CONTROL JOINT	(1B) (SP.11)
— TSD —	=	TOP OF SLOT DRAIN	(2) (SP.11)
— TCO —	=	TOP OF CLEAN-OUT	(3) (SP.11)
— TAD —	=	TOP OF AREA DRAIN	(5) (SP.11)
— HB —	=	HOSE BIBBS	(3) (SP.11)
— AL —	=	ACCESSIBLE LIFT	(1) (SP.7)
— SCA —	=	SURGE CHAMBER ACCESS COVER	(7) (SP.5)
— CW —	=	COLD WATER	
— SL —	=	SLOPE DIRECTION	
— WL —	=	WATERLEVEL	
— TFF —	=	TOP OF FINISHED FLOOR	
— TD —	=	TOP OF DECK	
— I.E. —	=	INVERT ELEVATION	
— P.O.C. —	=	POINT OF CONNECTION	
— SD —	=	STORM DRAIN	
— CB —	=	CATCH BASIN	

NOTES:

- COORDINATE SIGNAGE PLACEMENT PER (4) (SP.11) AND COLOR SCHEME WITH OWNER PRIOR TO INSTALLATION.
- DECKS SHALL HAVE 1% MIN. SLOPE AND 1.6% MAX. SLOPE TO DRAINS.
- ALL POOL DECKING SHALL BE NON-SLIP AND NON-ABRASIVE MEDIUM BROOM FINISH WITH NATURAL GRAY CONCRETE UNLESS OTHERWISE NOTED.
- REFER TO ARCHITECTURAL PLANS FOR LOCATIONS AND QUANTITY OF REQUIRED EXITS, DRINKING FOUNTAINS, AND SANITARY FIXTURES.
- THE POOL CANNOT BE WITHOUT AN APPROVED POOL ENCLOSURE AT ANY TIME INCLUDING DURING CONSTRUCTION AND INSTALLATION OF THE NEW POOL ENCLOSURE.

COUNTY OF LOS ANGELES - DEPARTMENT OF PUBLIC HEALTH
 ENVIRONMENTAL HEALTH - RECREATIONAL WATERS PROGRAM
 THE PROPOSED CONSTRUCTION/EQUIPMENT INSTALLATION IS
 TYPE OF POOL: Swimming pool (SP.11) 0320681
 APPROVED 08/11/2023 BY: Bharat Dugrand (C338802)
 DATE: PLAN CHECK INSPECTOR
 THIS APPROVAL DOES NOT AUTHORIZE THE VIOLATION OF ANY
 LAW, ORDINANCE, OR REGULATION.
 (SEE PLAN APPROVAL SHEET, ATTACHED)

LOS ANGELES COUNTY
 DEPARTMENT OF PUBLIC HEALTH
 RECREATIONAL WATERS PLAN CHECK
 5050 COMMERCE DRIVE
 BALDWIN PARK, CA 91706
 626-430-5360 MAIN LINE



SWIMMING POOL DECK PLAN

1/8"=1'-0"



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SWIMMING POOL DATA

SURFACE AREA	=	8,886 SQ. FT.
PERIMETER	=	390 FT.
DEPTHS	=	3'-6" TO 7'-3"
VOLUME	=	423,547 GAL.
6 HR TURNOVER	=	1,177 GPM

LEGEND

MD	=	MAIN DRAIN	2
GR	=	GRABRAIL	1
DM	=	DEPTH MARKER	5
NR	=	'NO RUNNING'	6
ND	=	'NO DIVING'	6,7
RA	=	ROPE ANCHOR	1
RP	=	RACING PLATFORM	9
BS	=	BACKSTROKE STANCHION	3
WP	=	WATER POLO GOALS (STATIONARY)	2
UL	=	UNDERWATER LIGHT	4
MGC	=	MOVEABLE GUARD CHAIR	4
AL	=	ACCESSIBLE LIFT	1
FWP	=	FLOATING WATER POLO GOALS	5
HR	=	HANDBRAIL	8
LAD	=	LADDER	6
SA	=	STANCHION ANCHOR	3
15M	=	15 METER MARKER	2

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. (ALLOW FOR TOUGH PADS AT ONE END) 75'-0" 5/16" MIN.; 75'-1" 3/16" MAX.

TOLERANCE AGAINST LENGTH SHALL EXTEND IN A VERTICAL PLANE 0.3M (12") ABOVE AND 0.3M (12") 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.

POOL DESIGN CRITERIA

POOL DESIGN CODES
CALIFORNIA BUILDING CODE 2019
ASCE 7-16

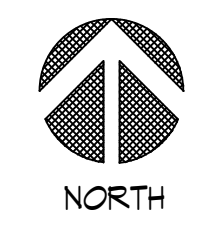
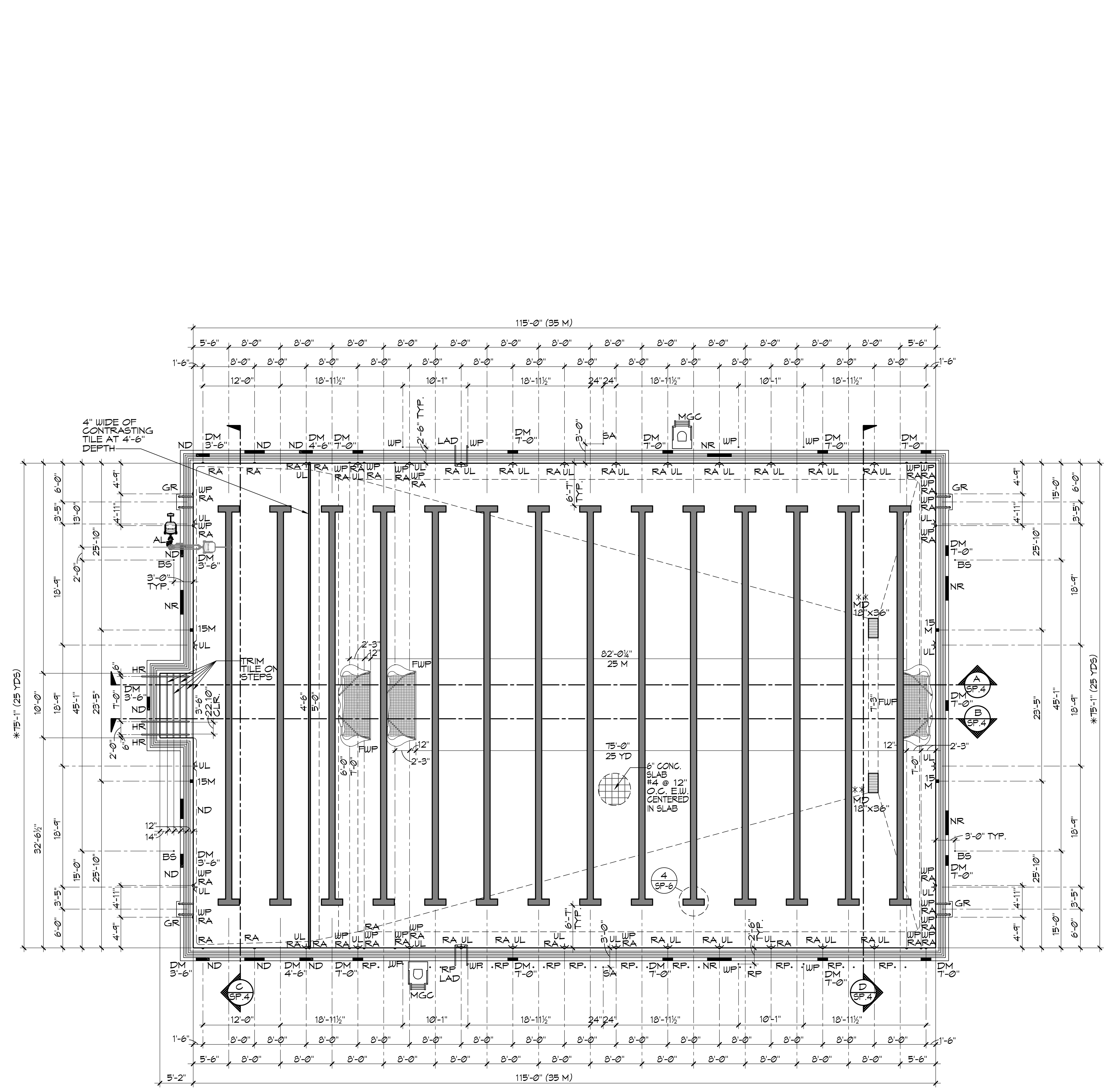
POOL DESIGN CRITERIA
PER GEOTECHNICAL ENGINEERING INVESTIGATION BY: MTGL, INC.
DATED NOVEMBER 28, 2022, MTGL PROJECT NO. 2460A27

DRAINED CONDITIONS (PER SOIL REPORT)
ACTIVE PRESSURE: 40 pcf
AT-REST PRESSURE: 60 pcf
APPROX. SOIL UNIT WT.: 120 pcf
BEARING PRESSURE: 2,000 psf
PASSIVE PRESSURE: 350 pcf (USE 150 pcf FOR SCOREBOARD COLUMNS)
COEFF. OF FRICTION: 0.35
SEISMIC PRESSURE: 23 pcf (FOR WALLS > 6'-0")

SURCHARGE AT DECK
1) ASSUME 50% OF VERTICALLY APPLIED SURCHARGE TO ACT AS HORIZONTAL UNIFORM LOAD ON POOL WALL.
2) DL = WEIGHT OF 8" MAX. CONCRETE DECK SLAB ABOVE.
3) LL DESIGN CASE = POOL EMPTY DURING CONSTRUCTION OR FOR SHORT TERM MAINTENANCE. NO 100 psf LL FOR FULL CROWD OPERATING CONDITION WHEN EMPTY.

CONCRETE DESIGN
F_c = 4,000 psi MIN.
F_y = 60 KSI

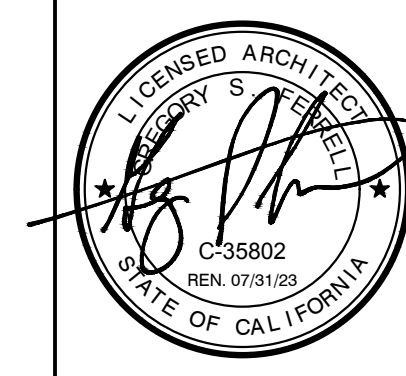
NOTE:
1. HYDROSTATIC PRESSURE RELIEF VALVES ARE PROVIDED IN POOL FLOOR SLABS TO ESTABLISH A "DRAINED CONDITION" (WHEN THE POOL IS EMPTY) IN THE PRESENCE OF A GROUND WATER TABLE, A PERCHED GROUND WATER CONDITION, OR POOR SITE DRAINAGE.



SWIMMING POOL LAYOUT PLAN

1/8"=1'-0"

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SWIMMING POOL DATA

SURFACE AREA	=	8,686 SQ. FT.
PERIMETER	=	390 FT.
DEPTHS	=	3'-6" TO 7'-3"
VOLUME	=	423,547 GAL.
6 HR TURNOVER	=	1,177 GPM

SWIMMING POOL SURGE DATA

REQUIRED SURGE CAPACITY	=	8,686 GAL.
SURGE IN PERIMETER GUTTER	=	4,382 GAL.
SURGE IN GUTTER PIPING	=	1,086 GAL.
8' x 10'-0" SURGE IN SURGE CHAMBER	=	3,245 GAL.
TOTAL SUPPLIED SURGE	=	8,763 GAL.
∴ 8,763 GAL. > 8,686 GAL. OK		

LEGEND

MD	=	MAIN DRAIN	2	SP.8
FI	=	FLOOR INLET	5	SP.8
GO	=	GUTTER OUTLET	6	SP.8
AV	=	AIR VENT	3	SP.8
SCA	=	SURGE CHAMBER ACCESS	1	SP.5
BFV	=	BUTTERFLY VALVE	2	SP.9
FV	=	FLOAT VALVE		
A.F.F.	=	ABOVE FINISH FLOOR		

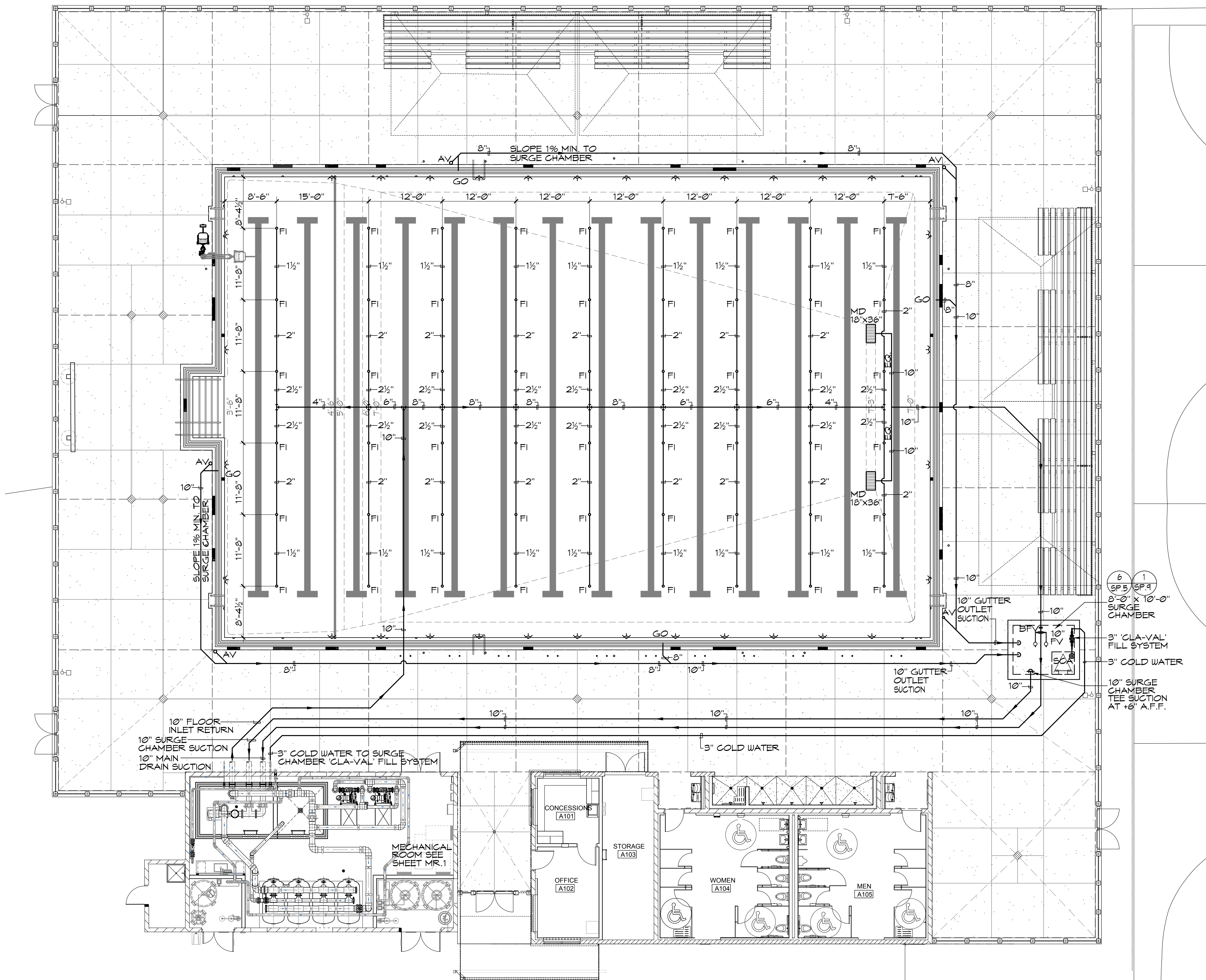
NOTES:

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

COUNTY OF LOS ANGELES - DEPARTMENT OF PUBLIC HEALTH
ENVIRONMENTAL HEALTH - RECREATIONAL WATERS PROGRAM
THE PROPOSED CONSTRUCTION REQUIREMENT INSTALLATION IS
TYPE OF POOL: Swimming pool, SWS 0320681

APPROVED: 08/11/2023
DATE: 08/11/2023
Bhavat Durgaraj
PLAN CHECK INSPECTOR
THIS APPROVAL DOES NOT AUTHORIZE THE VIOLATION OF ANY
LAW, ORDINANCE, OR REGULATION.
(SEE PLAN APPROVAL SHEET, ATTACHED)

LOS ANGELES COUNTY
DEPARTMENT OF PUBLIC HEALTH
RECREATIONAL WATERS PLAN CHECK
3090 COMMERCIAL DRIVE
BAYVIEW PARK, CA 90240
626-438-5360 MAIN LINE



SWIMMING POOL PIPING PLAN

1/8"=1'-0"

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A

B

C

D

E

F

LEGEND

- UL = UNDERWATER LIGHT
- JB = JUNCTION BOX
- RP = RACING PLATFORM
- WP = WALL PLATE
- DP = DECK PLATE

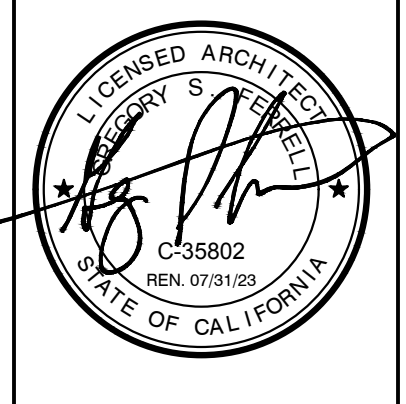
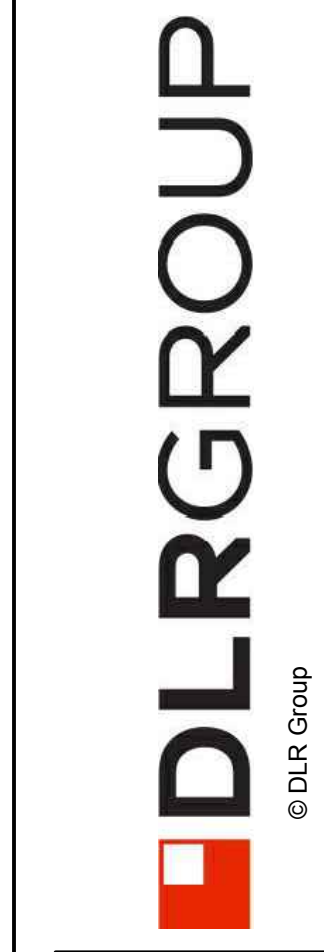
KEY NOTES

- ETHERNET DROP-BY OTHERS
- WALL PLATE FIBER CONNECTION
- WALL PLATE TIMER NODE
- TIMING DECK NODE (4"x4"x6" PVC BOX)
- START DECK NODE (4"x4"x6" PVC BOX)
- SCOREBOARD DECK NODE (4"x4"x6" PVC BOX)
- TIMING SYSTEM WALL INTERFACE WPI W/ 12"x12"x6" PVC BOX

TIMING SYSTEM NOTES/EQUIPMENT

NOTE: THE CONTRACTOR SHALL SUPPLY AND INSTALL DECK PLATE BOXES, WALL PLATE BOXES, WALL PLATE JUNCTION BOXES, CONDUIT, WIRING, SCOREBOARD AND ALL TIMING EQUIPMENT AS SHOWN FOR THE 'COLORADO' TIME SYSTEM OR EQUAL.

- TIMING SYSTEM**
- | QTY | MODEL | DESCRIPTION |
|-----|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | GEN-TMR | INTUITIVE SOFTWARE INTERFACE WITH MODERN WINDOWS USER INTERFACE AND TOUCHSCREEN FRIENDLY. FLEXIBLE USER INTERFACE OPTIONS WITH ETHERNET CONNECTIVITY TO THE TIMER. ADVANCED DIAGNOSTICS. INTELLIGENT BUS SYSTEM, ROBUST SAFEGUARDS. TIMER WILL CONTINUE TO RUN AND FINISH RACE WITHOUT USER INTERFACE. WET-PLUGGABLE TITANIUM CONNECTIONS. INTEGRATED 2.4 GHZ WIRELESS TO SCOREBOARDS, FACILITY NETWORK CONNECTIVITY. |
- START SYSTEM**
- | QTY | MODEL | DESCRIPTION |
|-----|-----------|--------------|
| 1 | R-600-302 | GEN T LAPTOP |
- START SYSTEM**
- | QTY | MODEL | DESCRIPTION |
|-----|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | SS | CHAMPION SERIES START SYSTEM WITH WIRED MICROPHONE, VOLUME CONTROL ON EACH MICROPHONE INPUT, EXTERNAL CONNECTIONS FOR ADDITIONAL STROBE LIGHTS, LED BATTERY INDICATION LIGHT, AC/DC POWER CAPABILITIES AND AN EXTERNAL 360° STROBE. TRIP OD OR TABLE TOP OPTIONS. |
| 1 | START-FRM-2 | FLAG POLE MOUNTING KIT FOR STARTER |
| 10 | SP-6/45 | 6 WATT INDIVIDUAL BLOCK SPEAKER |
- TOUCHPADS**
- | QTY | MODEL | DESCRIPTION |
|-----|-----------|---------------------------------------------------------------------------------------------|
| 10 | TP-40G | AQUAGRIP GUTTERHUNG TOUCHPADS (90" X 22") US PATENT 5,102,199 |
| 1 | CAD-TP96 | TOUCHPAD CADDY FOR GUTTERHUNG TOUCHPADS. HOLDS UP TO TEN TOUCHPADS. SOME ASSEMBLY REQUIRED. |
| 10 | 4000-0040 | SPECIAL SIZE TOUCHPAD BRACKETS |
- GEN T TOUCHPAD SYSTEM**
- | QTY | MODEL | DESCRIPTION |
|-----|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | TP-GEN-T-10 | TEN-LANE TOUCHPAD SYSTEM FOR THE GEN T TIMING SYSTEM (SERIAL) INCLUDES AN TEN-LANE CABLE HARNESS, ONE PUSHBUTTON PER LANE, ONE SPARE, VACUUM PUMP AND TOUCHPAD METER. |
- GEN T CABLE**
- | QTY | MODEL | DESCRIPTION |
|-----|--------------|---------------------------|
| 1 | R-015-101-8 | SCOREBOARD CABLE, 8 METER |
| 1 | R-015-115-8 | TIMER CABLE, 8 METER |
| 1 | R-015-106-8 | STARTER CABLE, 8 METER |
| 1 | R-015-115-15 | TIMER CABLE, 15 METER |
- GEN T DECK**
- | QTY | MODEL | DESCRIPTION |
|-----|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10 | TDPI-D | TITANIUM DOMED DECK PLATE-INTELLIGENT TITANIUM DECK PLATES REQUIRE A 4" SQUARE OR 4.125" DIAMETER CIRCULAR OPENING AT A MINIMUM. WRITTEN VERIFICATION AND SIGN OFF REQUIRED FROM CUSTOMER. NOTE: INCLUDES 5 YEAR WARRANTY. CTS IS THE ONLY MANUFACTURER OF TITANIUM DECK PLATE. |
| 1 | TDPI-S2 | START DECK NODE |
| 1 | TDPI-S3 | SCOREBOARD DECK NODE |
| 2 | R-1004-0549 | GEN T WALL PLATE (12X12) |
| 1 | TDPI-K1 | KIT-SCOREBOARD BUS HEAD & TAIL NODE INSTALLATION |
| 1 | TDPI-K1 | KIT-TIMING BUS HEAD & TAIL NODE INSTALLATION |
| 1 | WPI-F4 | WPI-YDS FIBER & LEGACY CONNECT |
- GEN T CABLE**
- | QTY | MODEL | DESCRIPTION |
|-------|-----------|-----------------------------------|
| 1200' | R-015-131 | TIMING BUS CABLE- 7 CONDUCTOR |
| 1200' | R-015-126 | SCOREBOARD BUS CABLE- 4 CONDUCTOR |
- PAGE CLOCK**
- | QTY | MODEL | DESCRIPTION |
|-----|----------|----------------------------------------|
| 1 | PC-PRO-R | PAGE CLOCK - PRO/WATER POLO SHOT CLOCK |
- PAGE CLOCK**
- | QTY | MODEL | DESCRIPTION |
|-----|---------|--------------------|
| 1 | DC-1500 | 4 DIGIT PAGE CLOCK |
- FUNCTIONS:**
- SIMPLE PAGE CLOCK
 - CUMULATIVE SPLIT DISPLAY
 - LAP SPLIT DISPLAY
 - LAP COUNTER
 - LAP SPLIT DISPLAY WITH TURN SPEED
 - RELAY EXCHANGES DISPLAY
 - START REACTION DISPLAY
 - HAND TURN SPEED
 - BREAK OUT SPEED DISPLAY
 - BREAK OUT SPEED DISPLAY WITH START REACTION
 - TIME DISPLAY FOR REPETITIVE SETS
 - SINGLE LANE TIMER
 - MID-RACE TIMING DISPLAY
 - WATERPOLO SHOT CLOCK
 - WATERPOLO GAME CLOCK
- NOTE: MOST FUNCTIONS REQUIRE ADDITIONAL INPUT DEVICES, I.E. TOUCHPAD, RELAY JUDGING PLATFORM, START SYSTEM, PUSHBUTTON**
- CONTROLLER**
- | QTY | MODEL | DESCRIPTION |
|-----|-----------|--------------------------------------------|
| 1 | WTTG-2 | WIRELESS TABLE TOP CONTROLLER |
| 1 | CASE-WTTG | CASE FOR THE WIRELESS TABLE TOP CONTROLLER |
| 1 | WHC-1 | WIRELESS HANDHELD CONTROLLER |
- ADAPTER**
- | QTY | MODEL | DESCRIPTION |
|-----|-------|---------------------------|
| 1 | WA-3 | WIRELESS ADAPTER, 2.4 GHZ |
- RELAY JUDGING PLATFORM**
- | QTY | MODEL | DESCRIPTION |
|-----|------------|--------------------------------------------------------------------|
| 10 | RJPL-24x32 | CTS RELAY JUDGING PLATFORM 24"x32" W/ BUILT-IN LED LIGHT FOR START |
| 1 | CAD-RJPL-2 | CADDY- 24" WIDTH RELAY JUDGING PLATFORMS (HOLDS 10) |
- FULL COLOR VIDEO DISPLAY**
- | QTY | MODEL | DESCRIPTION |
|-----|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | SP-10 | US PROVIDE LED MATRIX DISPLAY SCOREBOARD INCLUDING ALL POWER REQUIREMENTS, BONDING AND STRUCTURAL SUPPORTS. THE SCOREBOARD SHALL HAVE FULL COLOR AND VIDEO CAPABILITIES. 12mm 205 x 352 FULL COLOR OUTDOOR ACTIVE AREA: 8.10(H) x 13.54(W) WILL SHOW 18 LINES OF 4.2 CHARACTERS VIEWABLE FROM 184', 44 PER LINE WILL SHOW 16 LINES OF 5.14' CHARACTERS VIEWABLE FROM 201', 35 PER LINE WILL SHOW 13 LINES OF 6.1' CHARACTERS VIEWABLE FROM 244', 24 PER LINE COMPLETE SUBMITTAL REQUIRED 'COLORADO TIME SYSTEM' OR EQUAL. |
- US PROVIDE LED MATRIX DISPLAY SCOREBOARD INCLUDING ALL POWER REQUIREMENTS, BONDING AND STRUCTURAL SUPPORTS. THE SCOREBOARD SHALL HAVE FULL COLOR AND VIDEO CAPABILITIES. 12mm 205 x 352 FULL COLOR OUTDOOR ACTIVE AREA: 8.10(H) x 13.54(W) WILL SHOW 18 LINES OF 4.2 CHARACTERS VIEWABLE FROM 184', 44 PER LINE WILL SHOW 16 LINES OF 5.14' CHARACTERS VIEWABLE FROM 201', 35 PER LINE WILL SHOW 13 LINES OF 6.1' CHARACTERS VIEWABLE FROM 244', 24 PER LINE COMPLETE SUBMITTAL REQUIRED 'COLORADO TIME SYSTEM' OR EQUAL.**
- PROVIDE SIX (6) DEDICATED 20 AMP CIRCUIT TO BE TERMINATED INTO SCOREBOARD LOAD CENTER**
- MASTER ON/OFF SCOREBOARD SWITCH WITH PILOT LIGHT W/ LOCKABLE ENCLOSURE**
- SCOREBOARD DATA CONNECTION BOX CONNECT TO TIMING/WALL BOX LOCATION W/ 1" PVC CONDUIT**
- ID PANEL**
- | QTY | MODEL | DESCRIPTION |
|-----|----------|-------------------------------------------------------------|
| 1 | ID PANEL | NON-ILLUMINATED FACILITY IDENTIFICATION PANEL WITH ARTWORK. |



COVINA VALLEY HS POOL REPLACEMENT
 COVINA VALLEY UNIFIED SCHOOL DISTRICT
 483 SOUTH HOLLERBECK AVENUE COVINA, CA 91723

DSA SUBMITTAL SET_V2
 Issue Date 04-28-2023
 REVISIONS

75-22616-00
 DSA A# 03-122700
 DSA FILE # 15148

SWIMMING POOL UNDERWATER LIGHT / TIMING SYSTEM PLAN

SP.3

1

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4

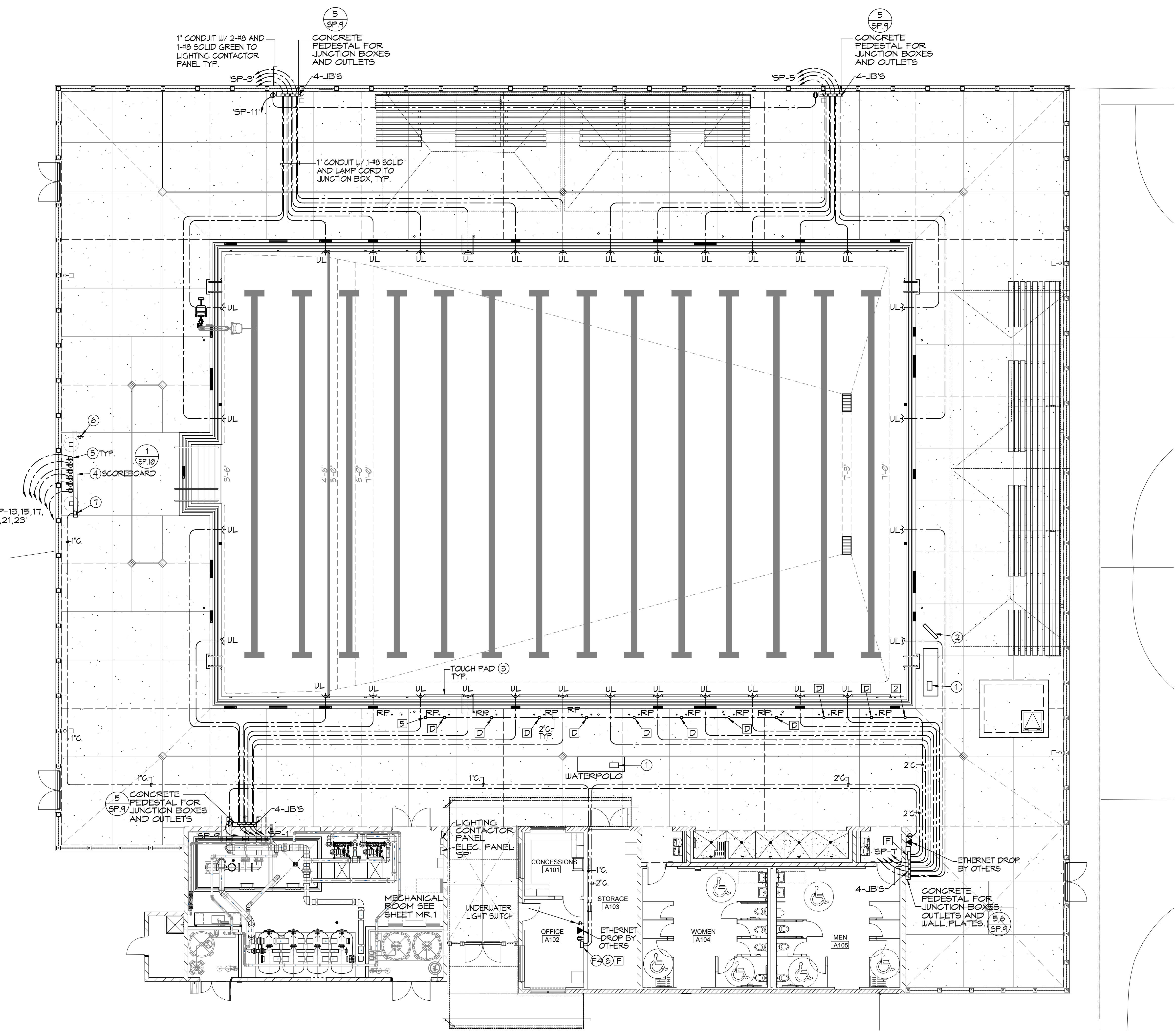
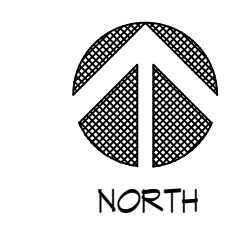
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SWIMMING POOL UNDERWATER LIGHT / TIMING SYSTEM PLAN

1/8"=1'-0"



COUNTY OF LOS ANGELES - DEPARTMENT OF PUBLIC HEALTH
 ENVIRONMENTAL HEALTH - RECREATIONAL WATER PROGRAM
 THE PROPOSED CONSTRUCTION/EQUIPMENT INSTALLATION IS

TYPE OF POOL: Swimming Pool
 APPROVED: 08/11/2023 BY: Bharat Durgam
 DATE: PLAN CHECK INSPECTOR

THIS APPROVAL DOES NOT AUTHORIZE THE VIOLATION OF ANY
 LAW, ORDINANCE, OR REGULATION.
 (SEE PLAN APPROVAL SHEET, ATTACHED)

LOS ANGELES COUNTY
 DEPARTMENT OF PUBLIC HEALTH
 RECREATIONAL WATER PLAN CHECK
 400 COMMERCIAL DRIVE
 BALDWIN PARK, CA 91706
 626-430-5360 MAIN LINE



1224 Fendley Ave, Carlsbad, CA 92008
 AquaticDesignGroup.com
 760.438.4400

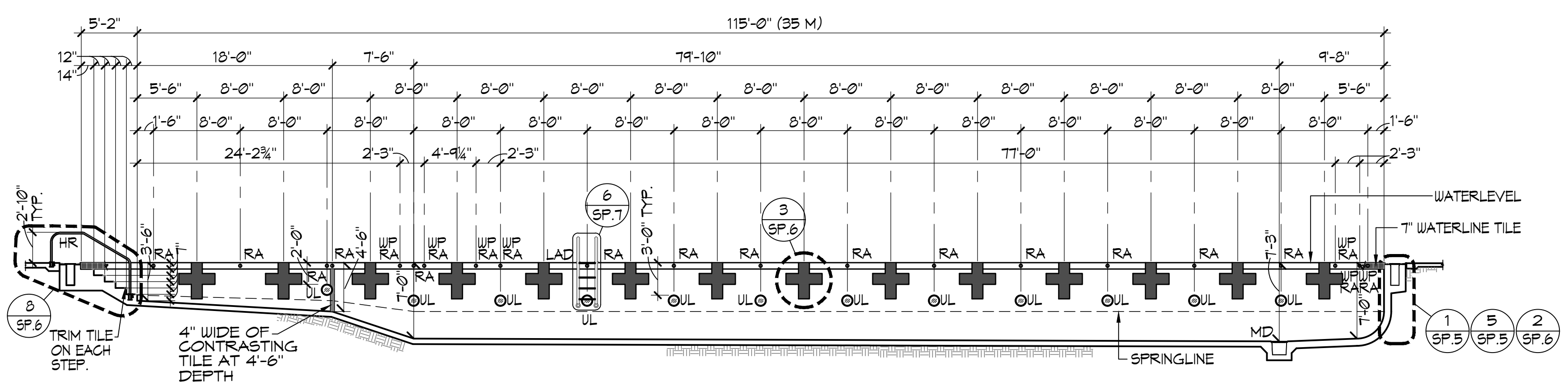


COVINA VALLEY HS POOL REPLACEMENT
 COVINA VALLEY UNIFIED SCHOOL DISTRICT
 483 SOUTH HOLLERBECK AVENUE COVINA, CA 91723

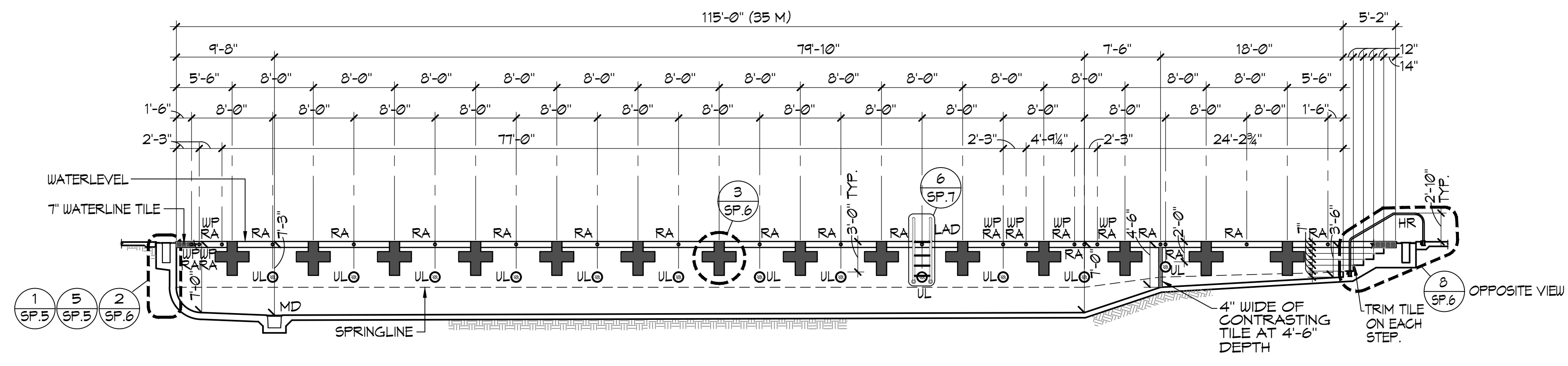
DSA SUBMITTAL SET_V2
 Issue Date 04-28-2023
 REVISIONS

75-22616-00
 DSA A# 03-122700
 DSA FILE # 154-18
 SWIMMING POOL SECTIONS

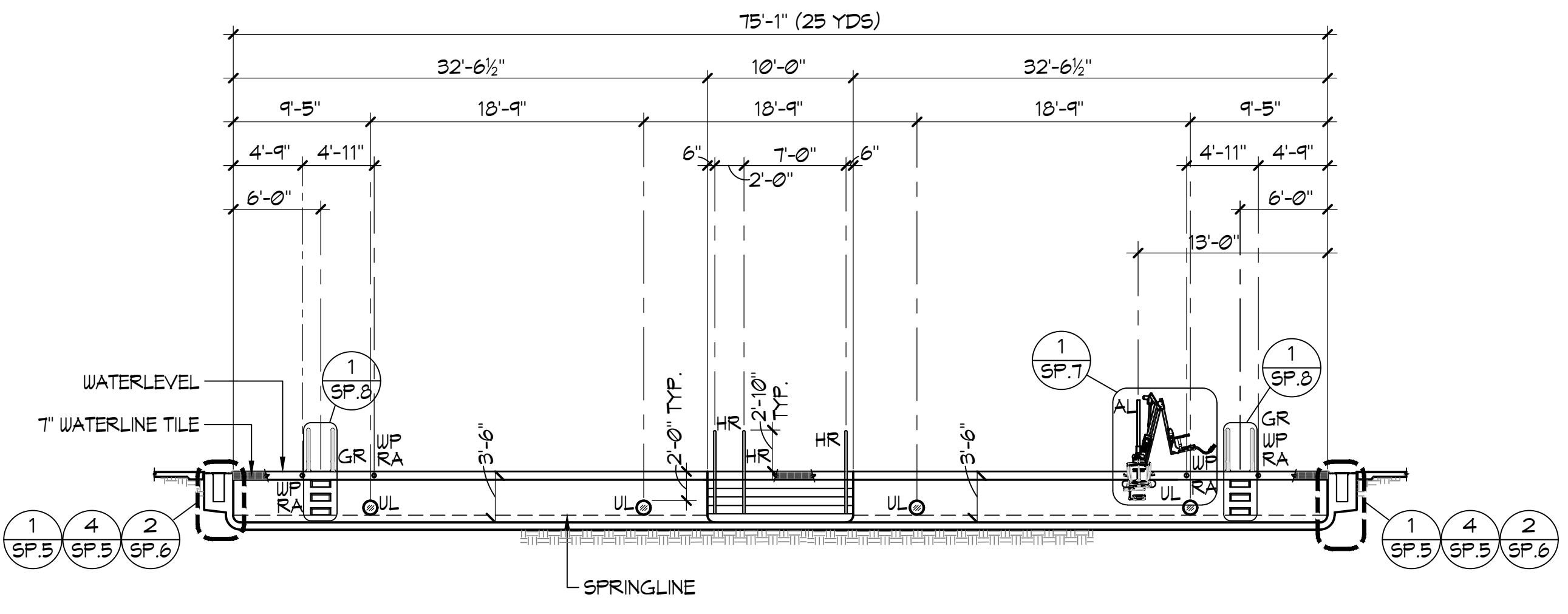
SP.4



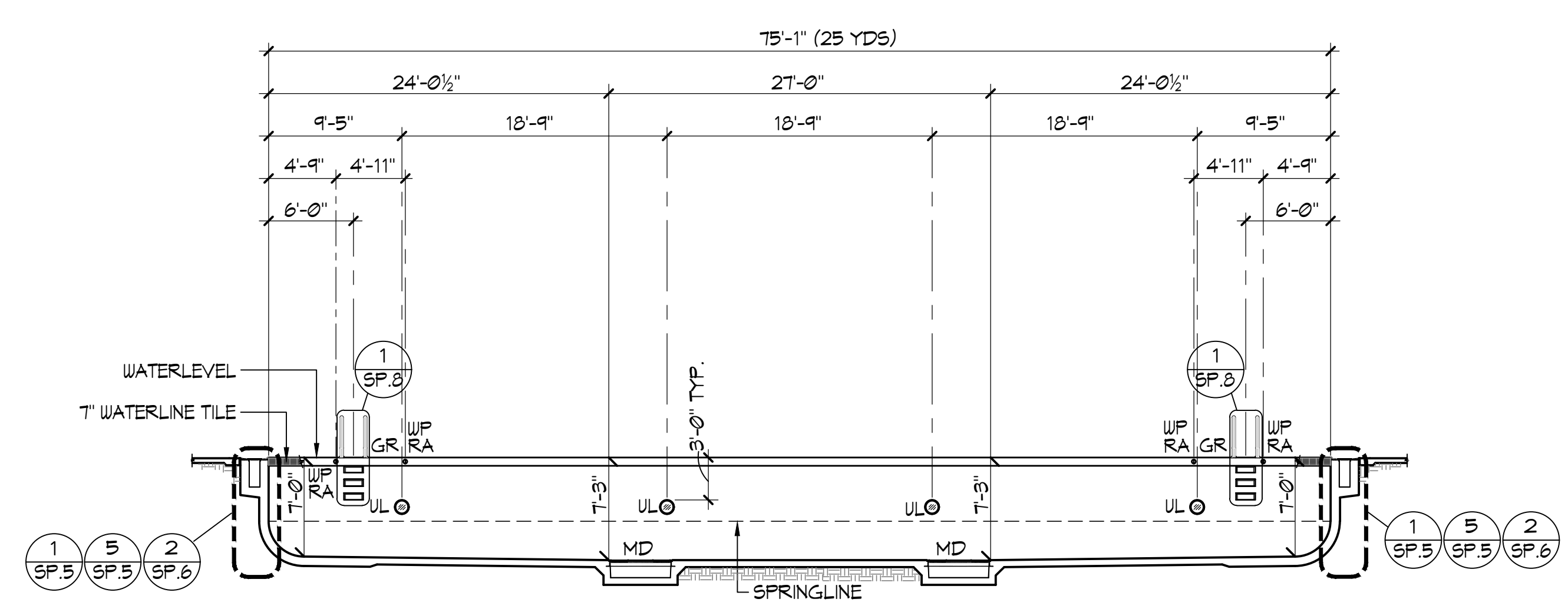
SWIMMING POOL SECTION 1/8"=1'-0"



SWIMMING POOL SECTION 1/8"=1'-0"



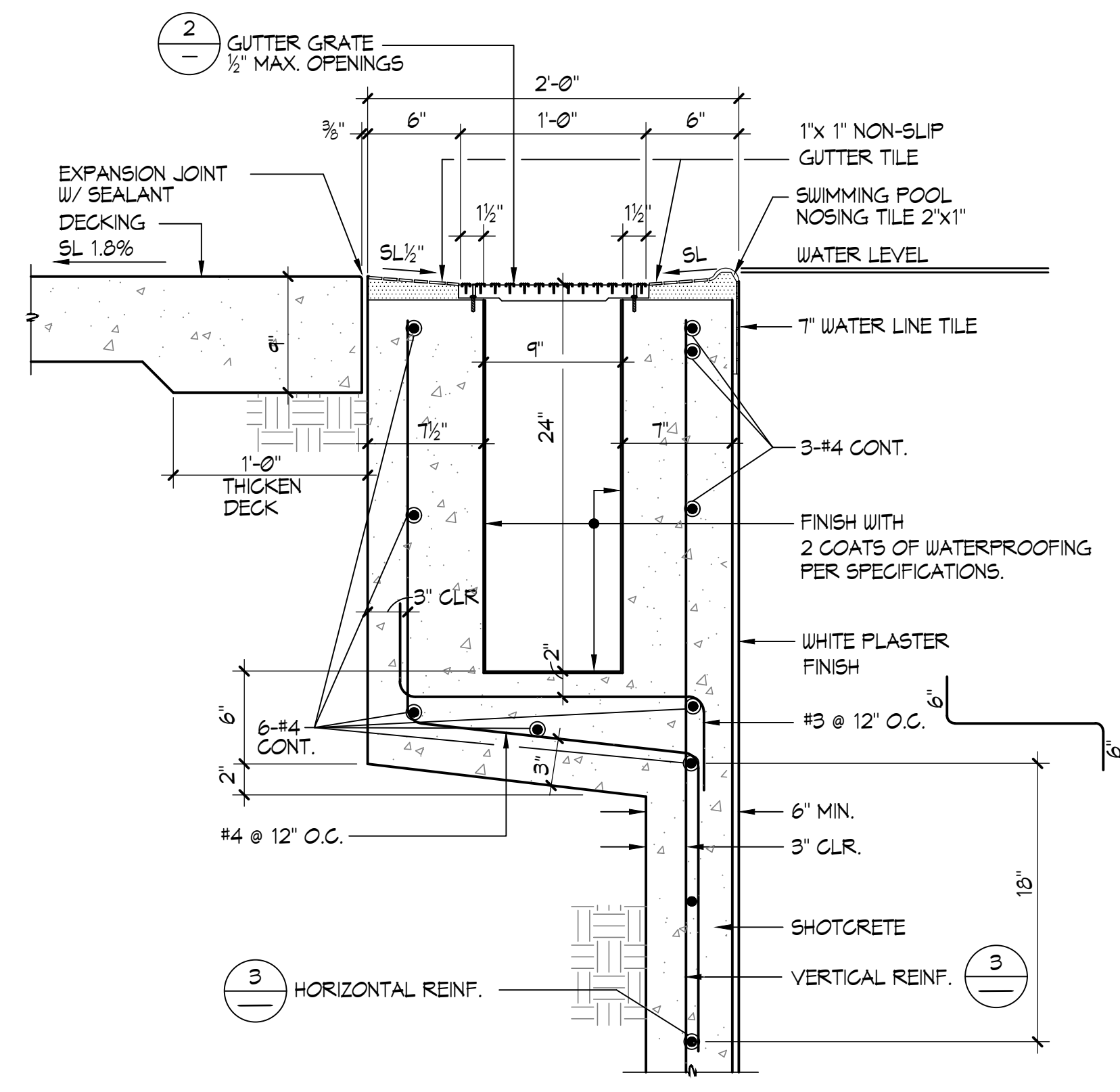
SWIMMING POOL SECTION 1/8"=1'-0"



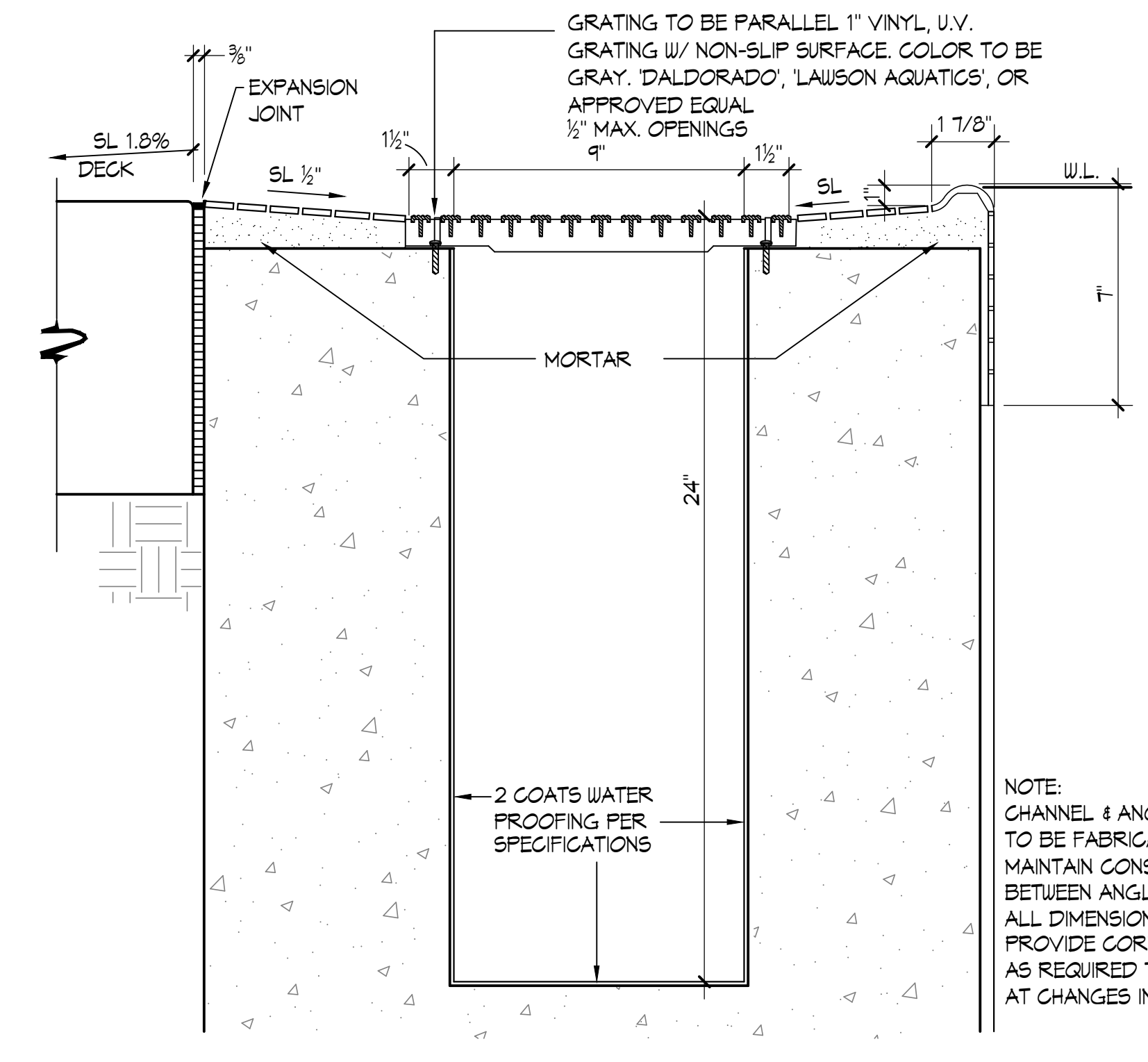
SWIMMING POOL SECTION 1/8"=1'-0"

1
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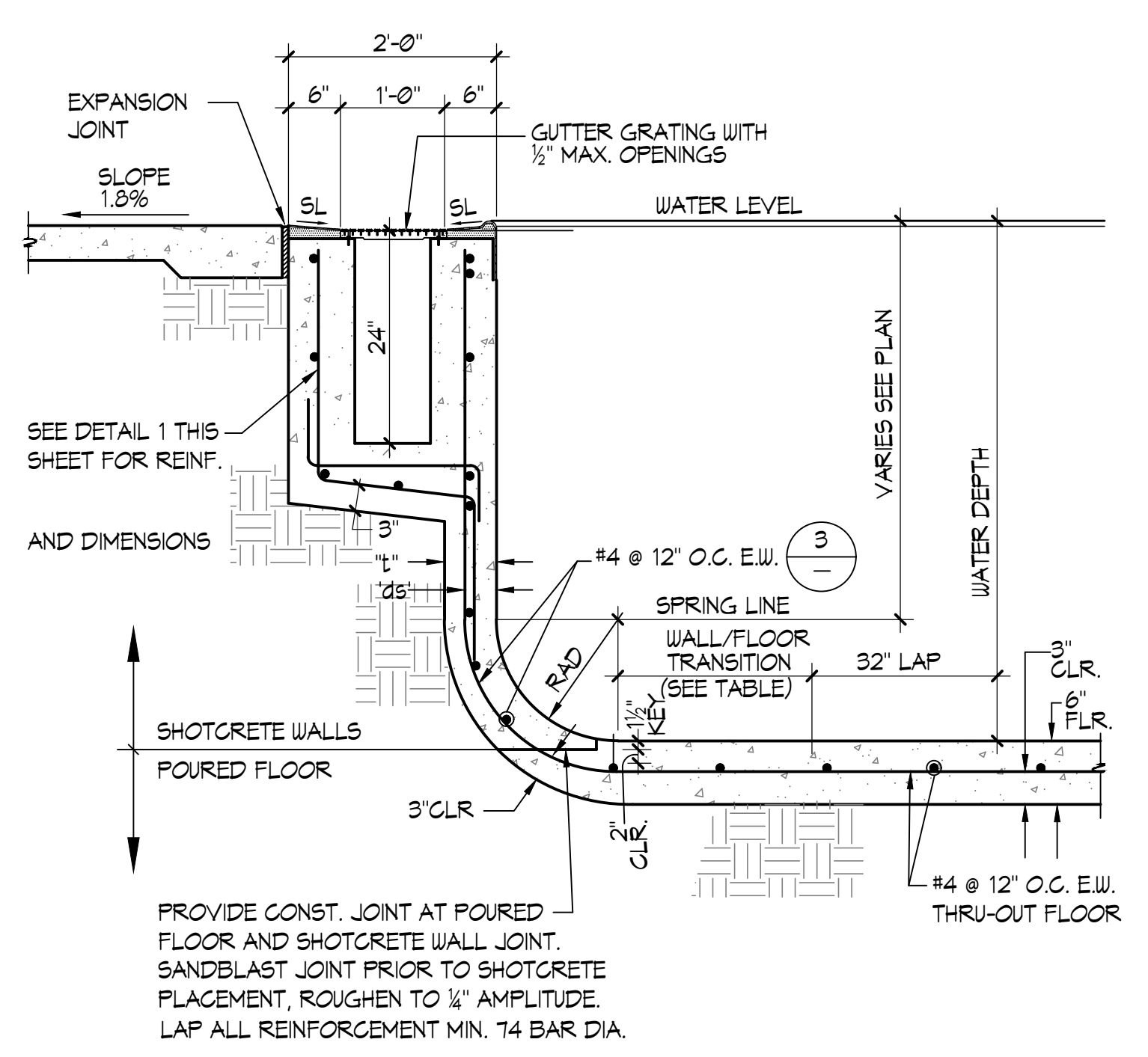
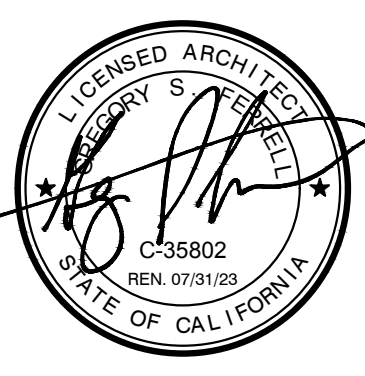
1 RIM FLOW GUTTER 1 1/2" x 1'-0"



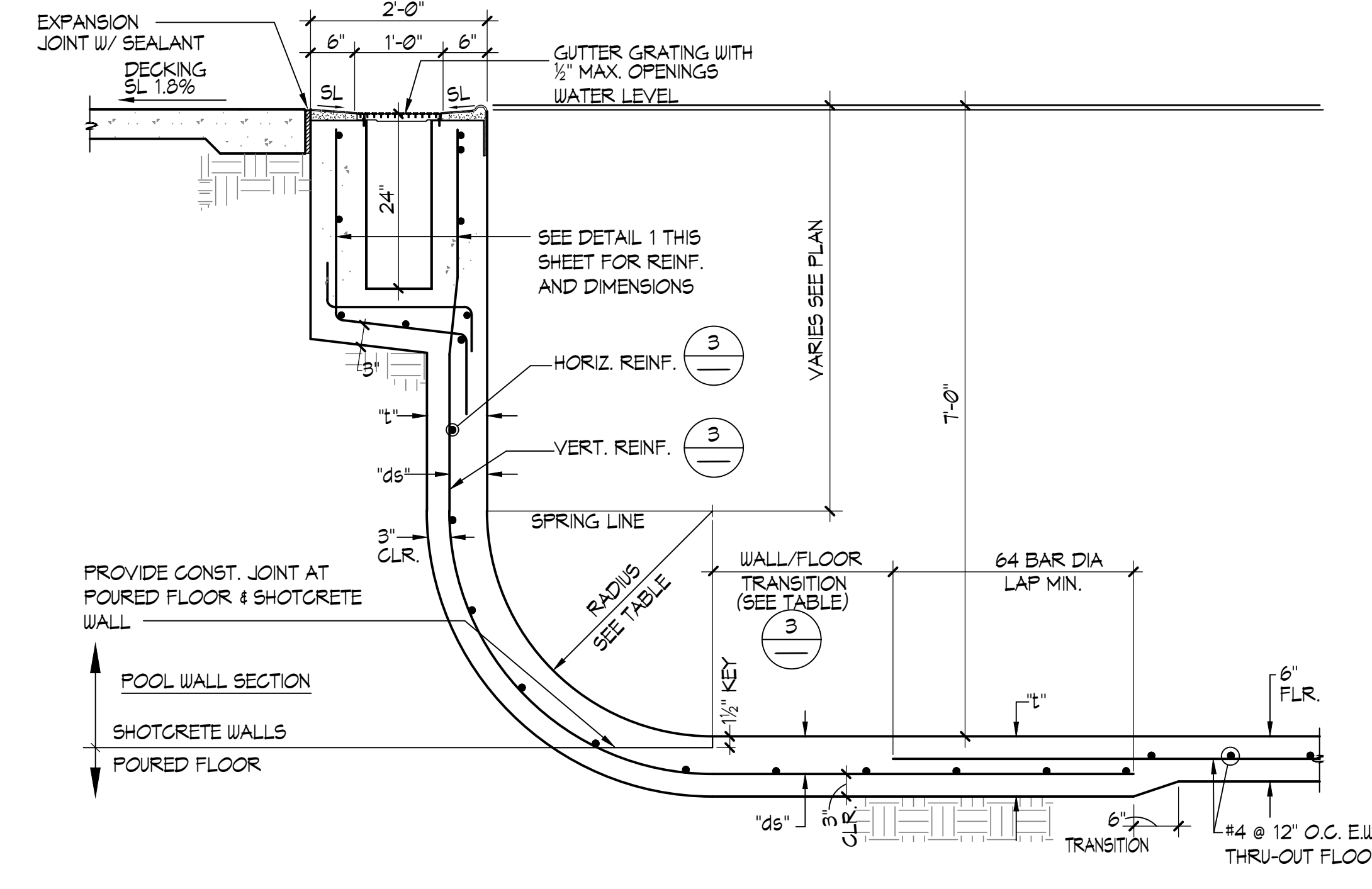
2 RIM FLOW GUTTER/GRATE 3'-1'-0"

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'-1" TO 5'-0"	7"	4"	6" TO 18"	#4 @ 12" O.C.	#4 @ 12" O.C.	24"
5'-1" TO 7'-3"	8"	5"	18" TO 2'-6"	#4 @ 6" O.C.	#4 @ 12" O.C.	24"

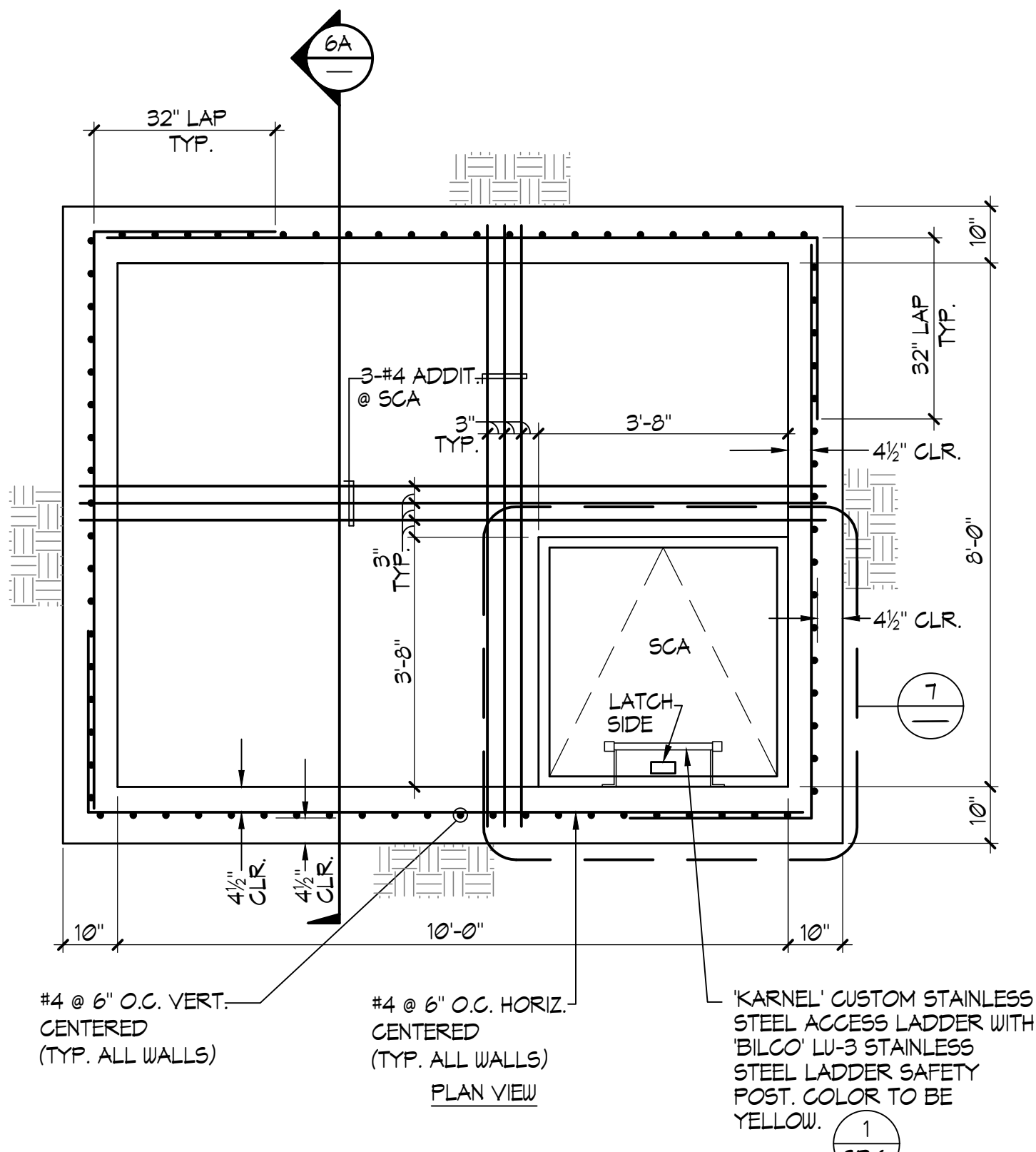
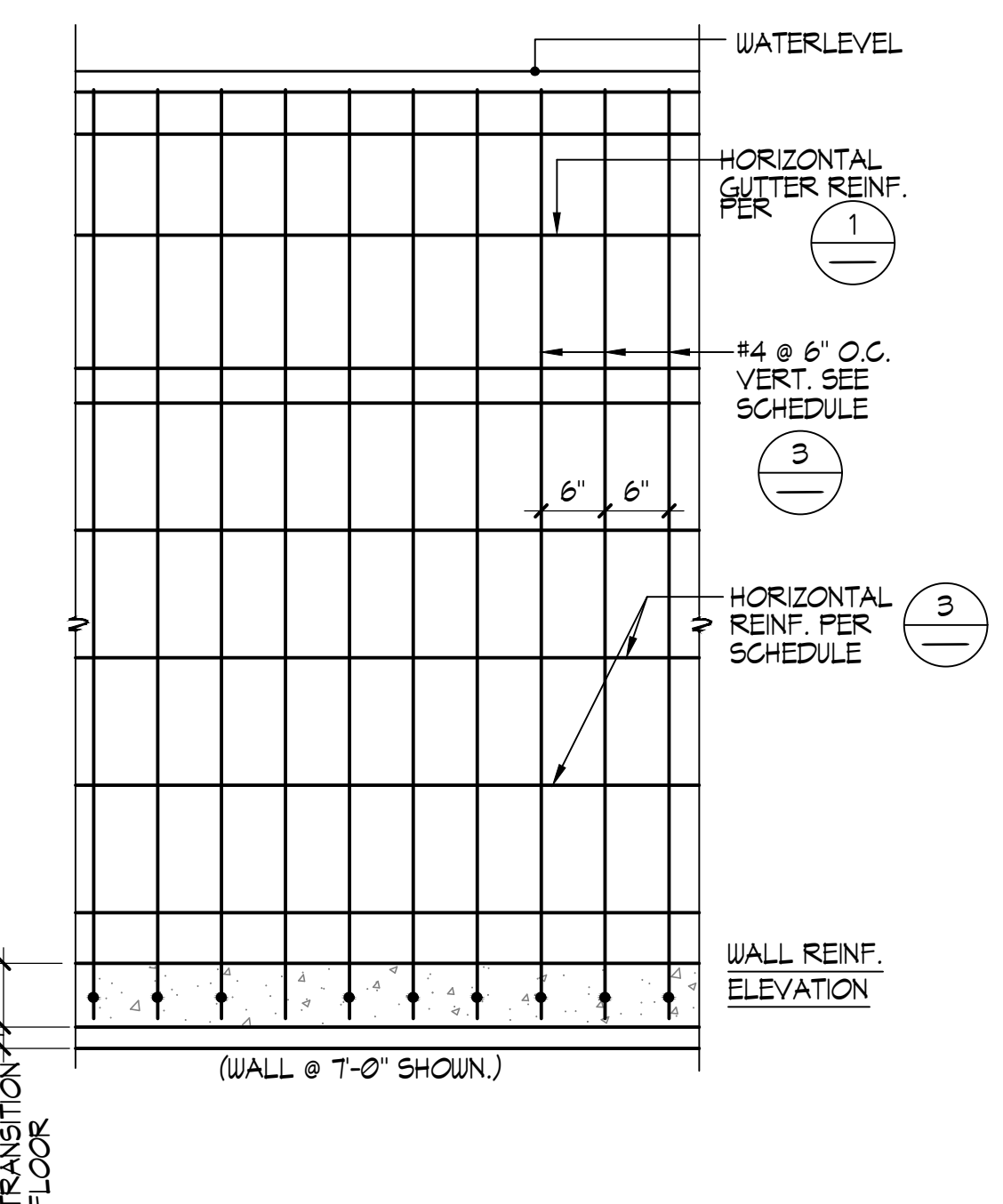
- CONCRETE NOTES:**
- THE MINIMUM ULTIMATE COMPRESSIVE STRENGTH AT 28 DAYS WITH A 0.40-0.45 MAX. WATER/CEMENT RATIO
POOL = 4000 PSI
SLAB-ON-GRADE = 4000 PSI
 - CONTINUOUS INSPECTION BY AN APPROVED DSA INSPECTOR IS REQUIRED OF ALL CONCRETE PLACEMENT.
 - ALL CEMENT USED SHALL CONFORM TO A.S.T.M. C-150 TYPE II
 - FINE AND COARSE AGGREGATE SHALL CONFORM TO A.S.T.M. C-33. MAXIMUM SIZE OF AGGREGATE TO BE 1"
 - CONCRETE MIX DESIGNS SHALL BE BASED UPON ACI-318 SECTIONS 19.3.2 AND 26.4.2.
 - CONCRETE SHALL BE TESTED AND INSPECTED PER SECTION CBC 1105A.3 AND 1905A.1.5.
 - REMOVAL OF FORMS SHALL COMPLY WITH ACI-318 SECTION 26.11.2.
 - ALL REINFORCING SHALL BE ASTM A-615, GRADE 60, UNLESS OTHERWISE NOTED. LAPS SHALL BE 64 BAR DIA.
- SHOTCRETE NOTES:**
- SHOTCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS. SHOTCRETE MATERIAL SHALL HAVE A WATER/CEMENT RATIO OF 0.40-0.45 PER ACI 506R, PART 2, PRODUCTS, SECTION 2.5.3, UET-MIX PROCESS.
 - CONTINUOUS INSPECTION BY AN APPROVED D.S.A. INSPECTOR IS REQUIRED OF ALL SHOTCRETE PLACEMENT.
 - ALL CEMENT USED SHALL CONFORM TO A.S.T.M. C-150 TYPE II
 - 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 3/8"
 - SHOTCRETE MIX DESIGNS SHALL BE PER CBC SECTION 1905A.2.
 - SHOTCRETE SHALL BE TESTED AND INSPECTED PER CBC SECTION 1905A.10 AND 1905A.3.
 - ANCHOR BOLTS, ANCHORS, DOUELS, INSERTS, ETC. SHALL BE SECURELY TIED IN PLACE PRIOR TO PLACING OF SHOTCRETE.
 - ALL REINFORCEMENT WITHIN SHOTCRETE SHALL MAINTAIN MINIMUM 2" CLEAR NON-CONTACT SPLICES.
 - THE FILM OF LANTAGE 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 THOROUGHLY CLEANED WITH AIR AND WATER PRIOR TO RECEIVING SHOTCRETE.
 - ALL REINFORCING SHALL BE ASTM A-615, GRADE 60, UNLESS OTHERWISE NOTED. LAPS SHALL BE 64 BAR DIA.



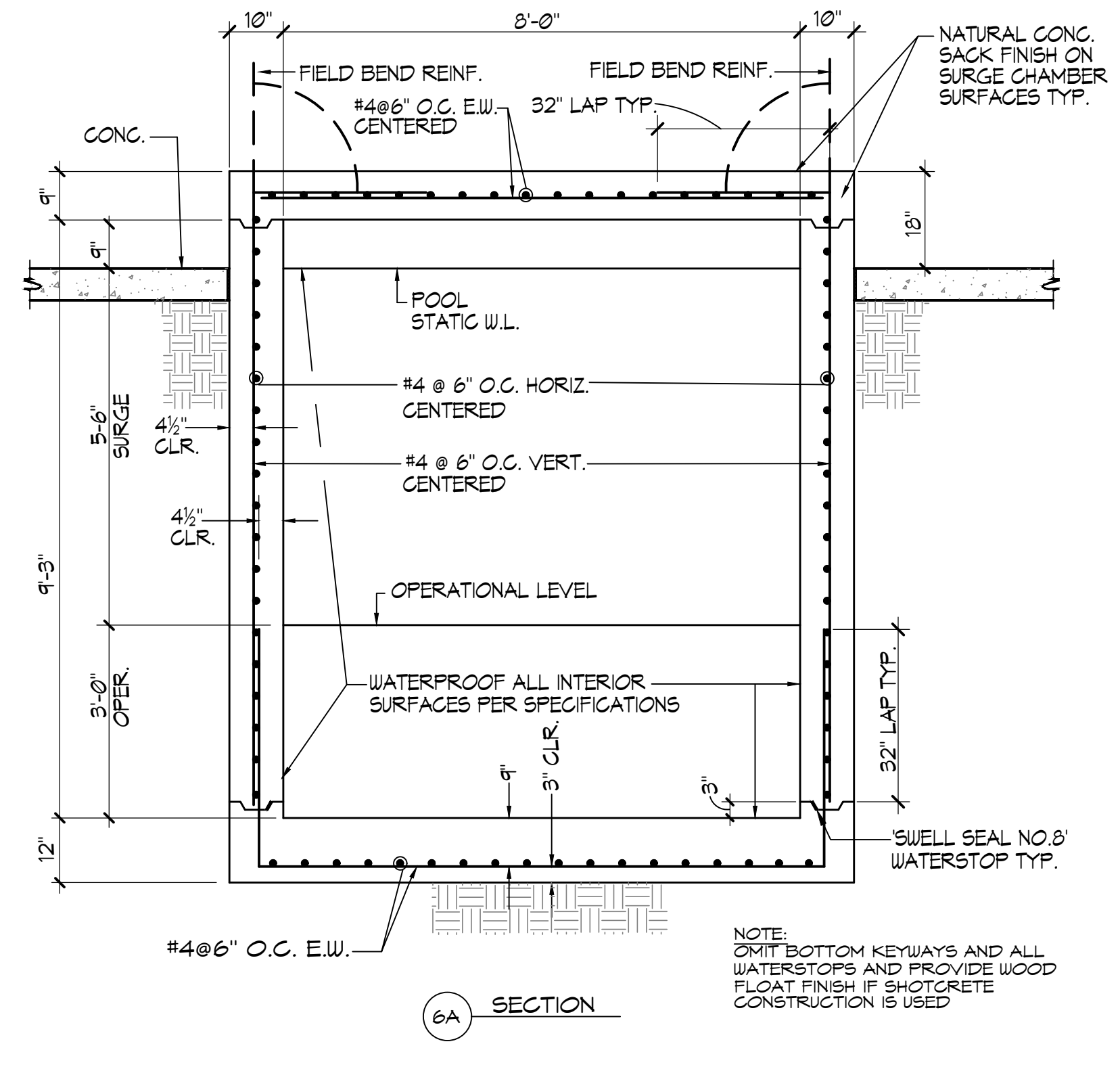
4 POOL WALL 3'-6" TO 5'-0" 3/4" x 1'-0"



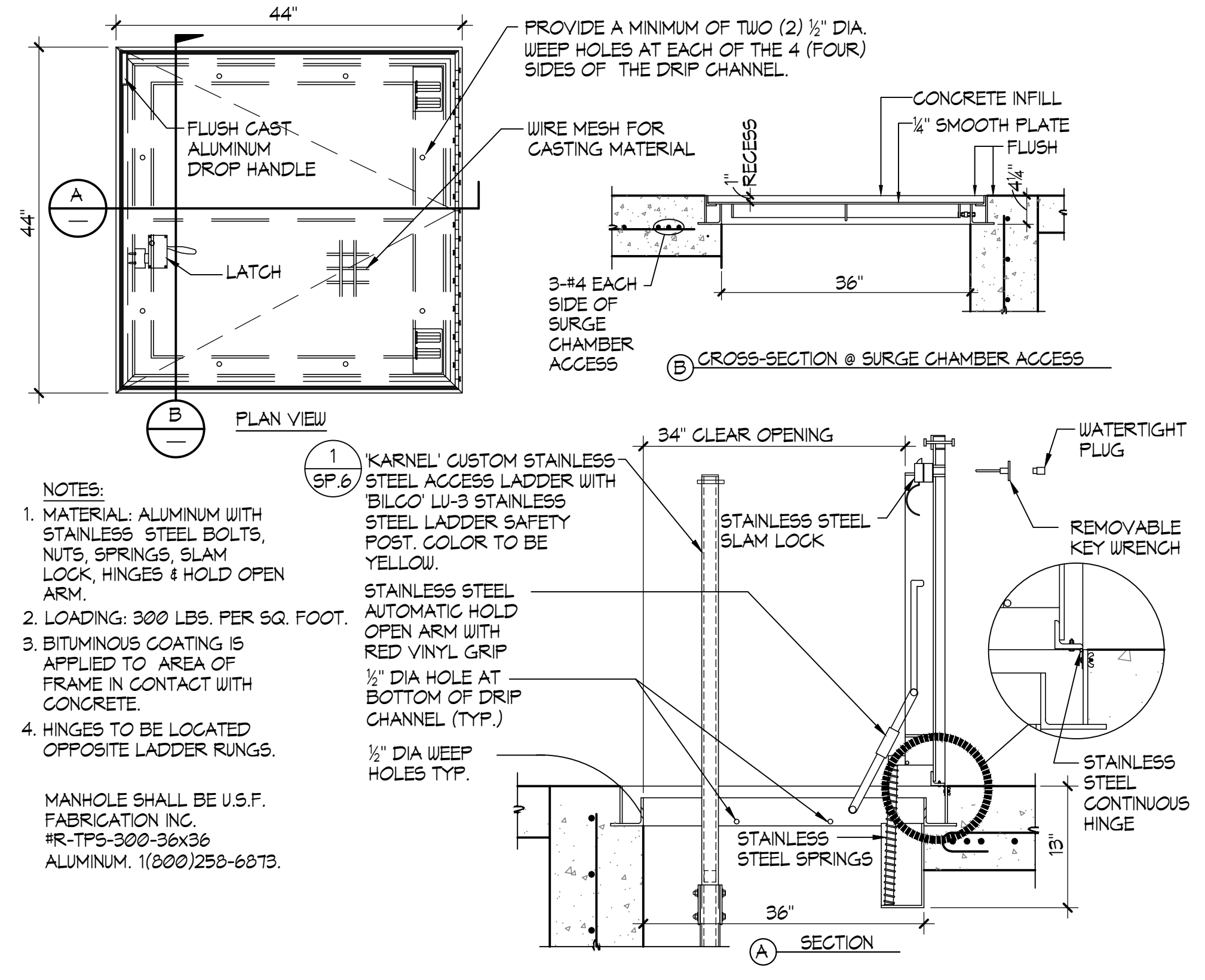
5 POOL WALL 5'-1" TO 7'-3" 3/4" x 1'-0"



6 SURGE CHAMBER 1 1/2" x 1'-0"



7 SURGE CHAMBER ACCESS COVER 3/4" x 1'-0"



- NOTES:**
- MATERIAL: ALUMINUM WITH STAINLESS STEEL BOLTS, NUTS, SPRINGS, SLAM LOCK, HINGES & HOLD OPEN ARM.
 - LOADING: 300 LBS. PER SQ. FOOT.
 - BITUMINOUS COATING IS APPLIED TO AREA OF FRAME IN CONTACT WITH CONCRETE.
 - HINGES TO BE LOCATED OPPOSITE LADDER RUNGS.
- MANHOLE SHALL BE U.S.F. FABRICATION INC. #R-TPS-300-36x36 ALUMINUM. 1/800/250-6073.

COVINA VALLEY HS POOL REPLACEMENT

COVINA VALLEY UNIFIED SCHOOL DISTRICT
463 SOUTH HOLLEBECK AVENUE, COVINA, CA 91723

DSA SUBMITTAL SET_V2

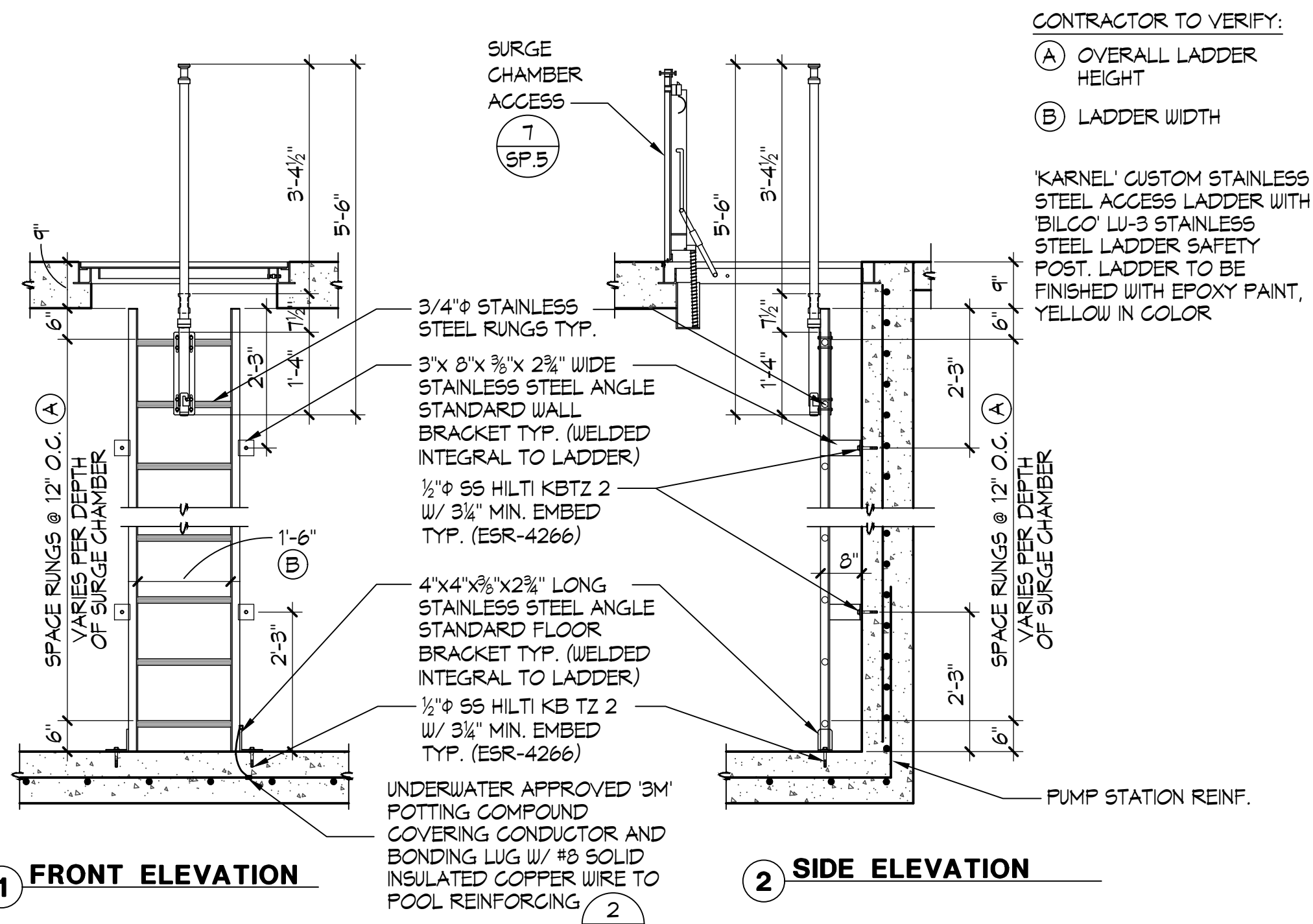
Issue Date: 04-28-2023
REVISIONS

75-22616-00
DSA AH 03-122700
DSA FILE # 19418

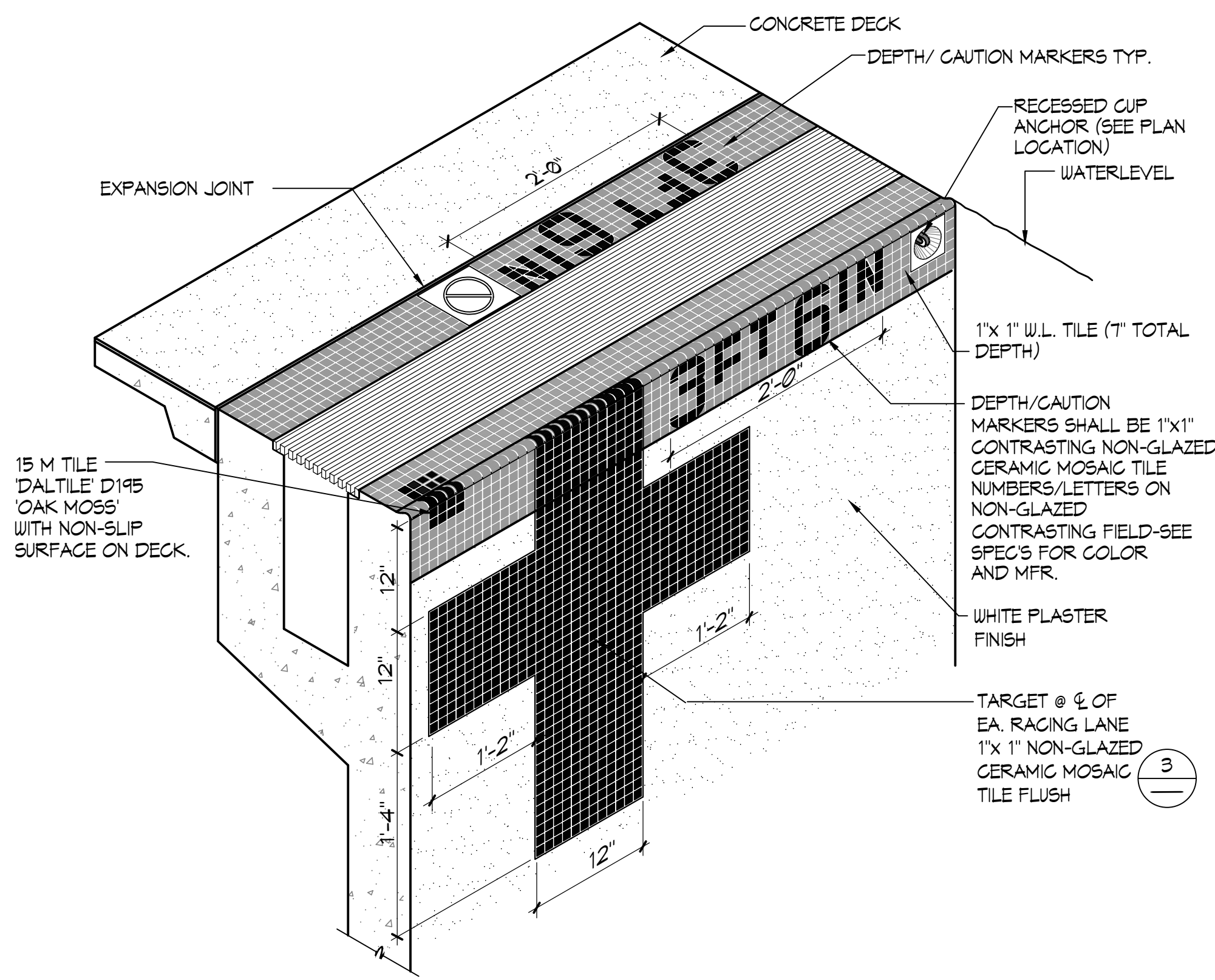
DETAILS

SP.5

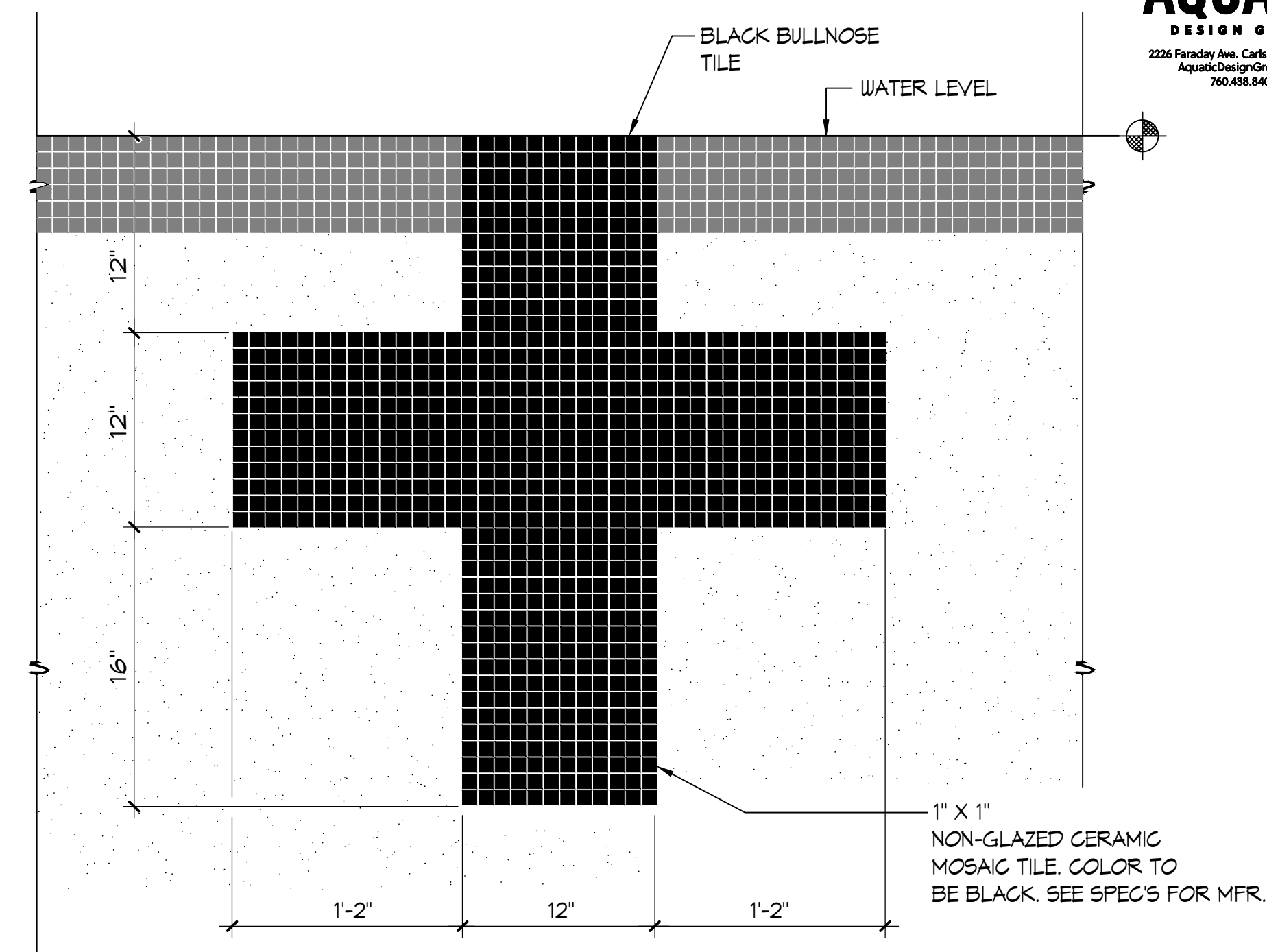
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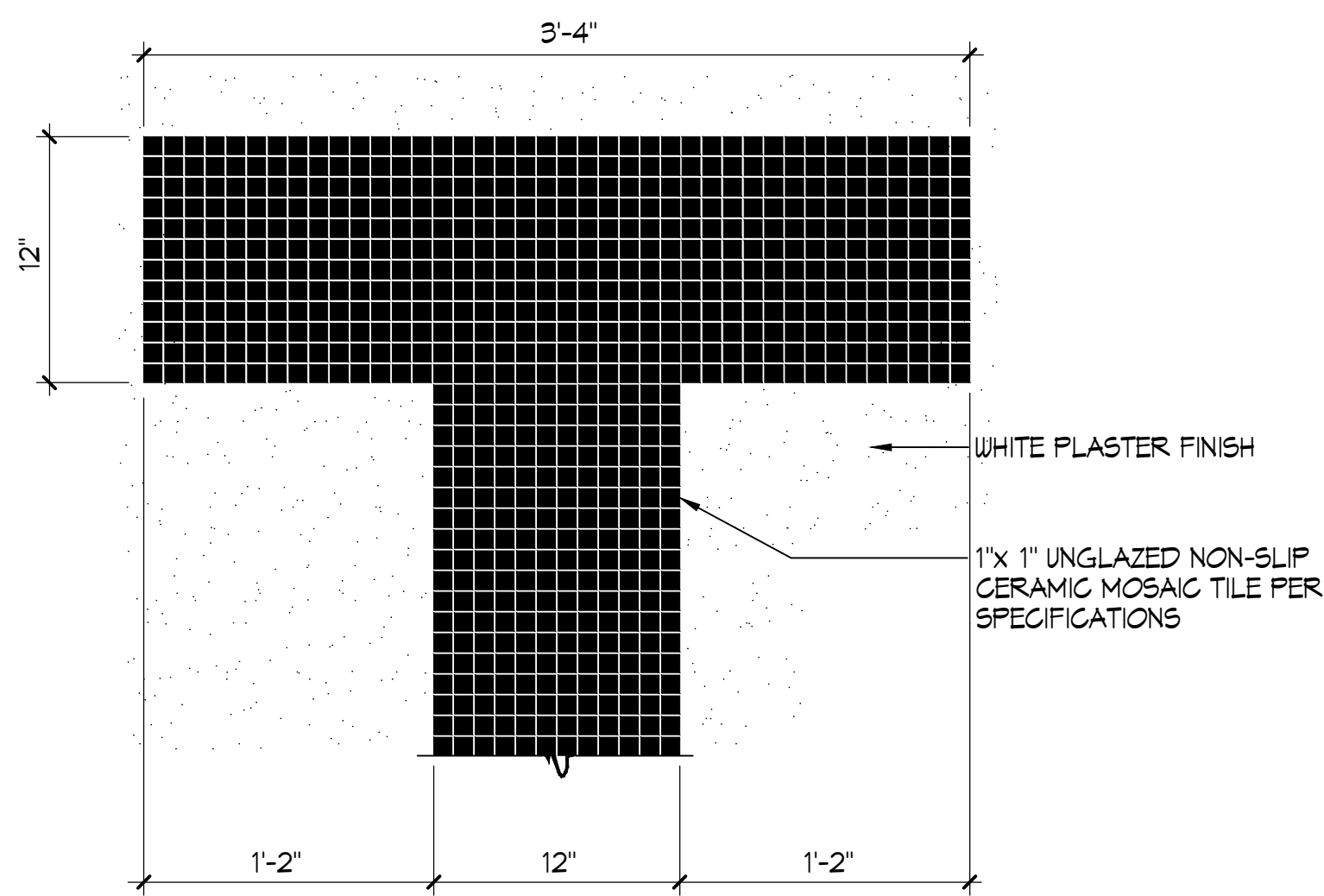
1 SURGE CHAMBER ACCESS LADDER 1/2" = 1'-0"



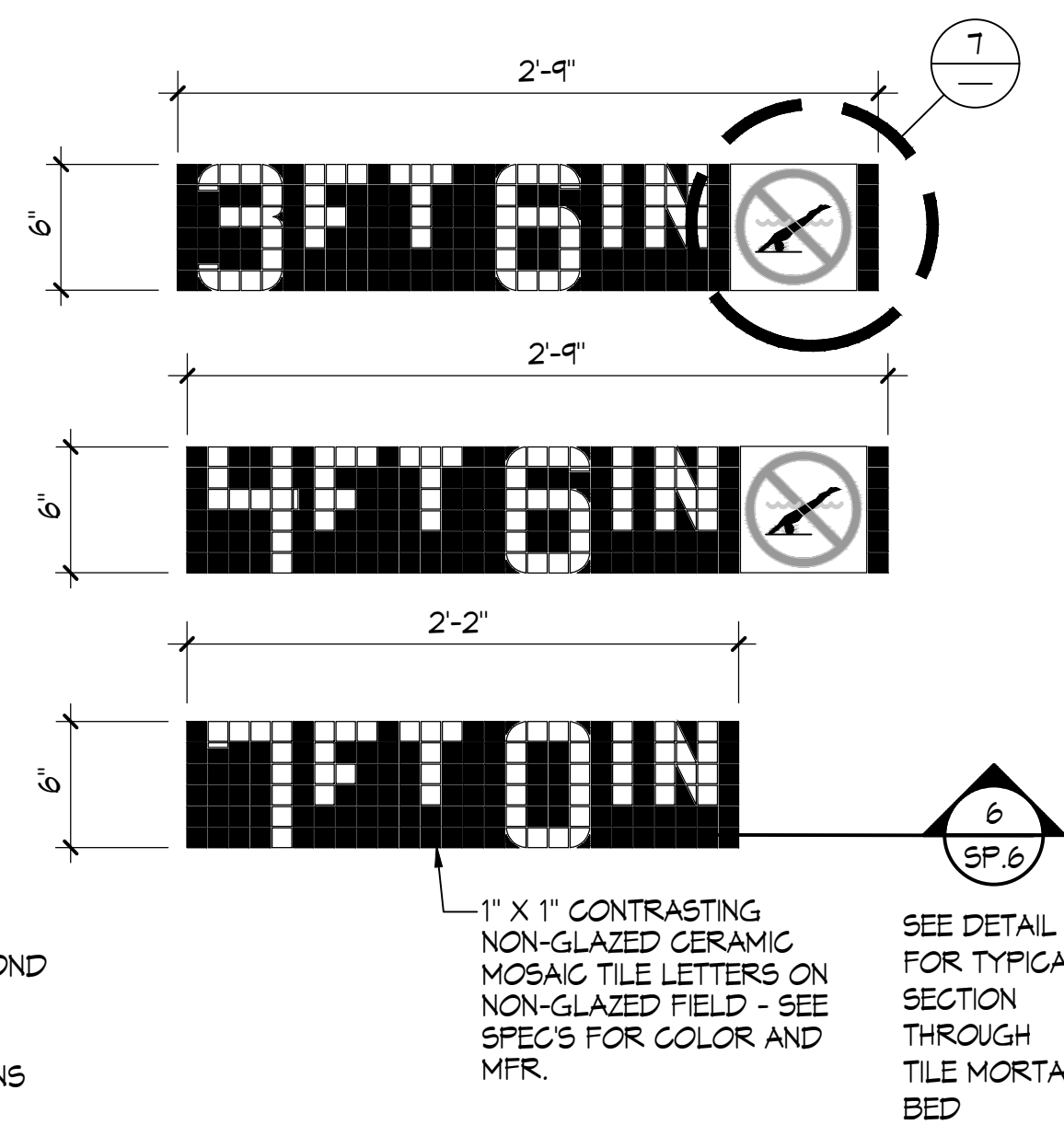
2 TYPICAL RIM FLOW GUTTER PERSPECTIVE NO SCALE



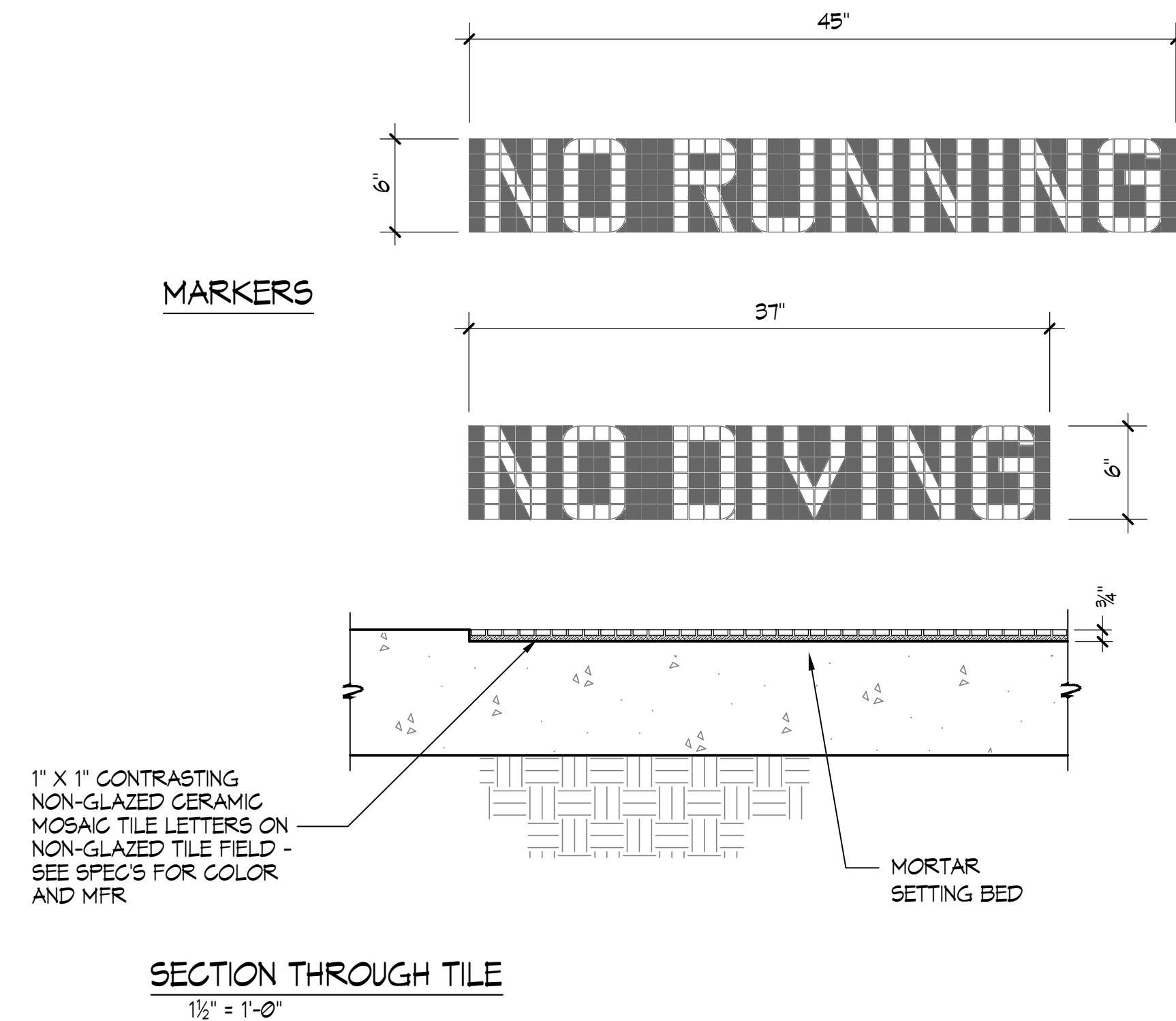
3 END WALL TARGETS 1/2" = 1'-0"



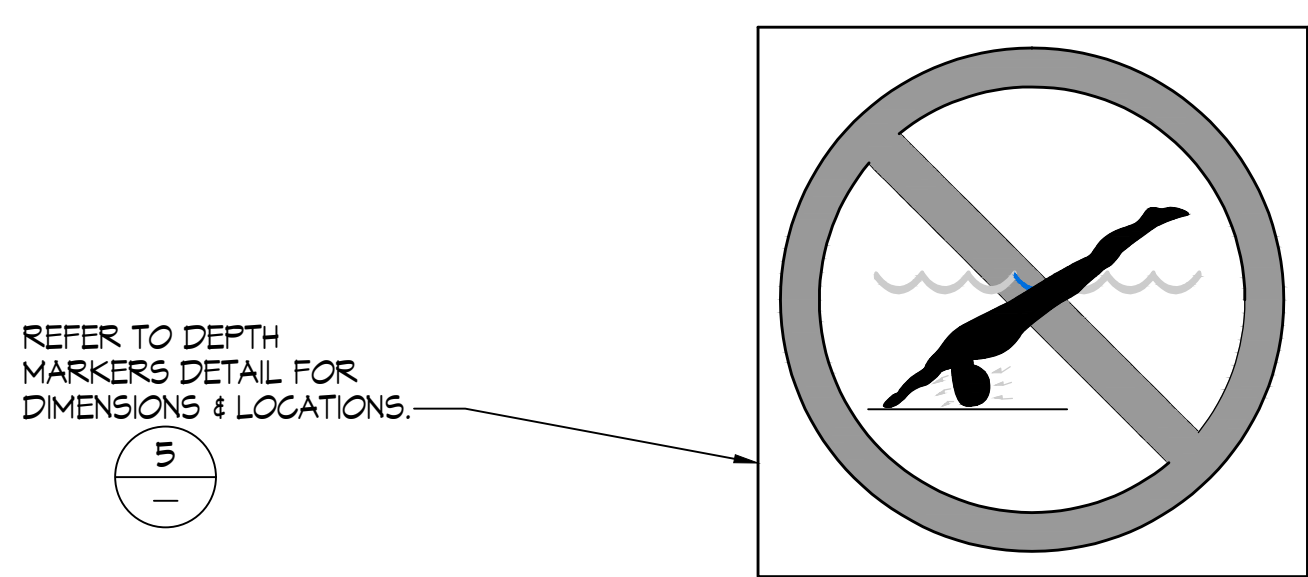
4 RACING LANE LINE 1/2" = 1'-0"



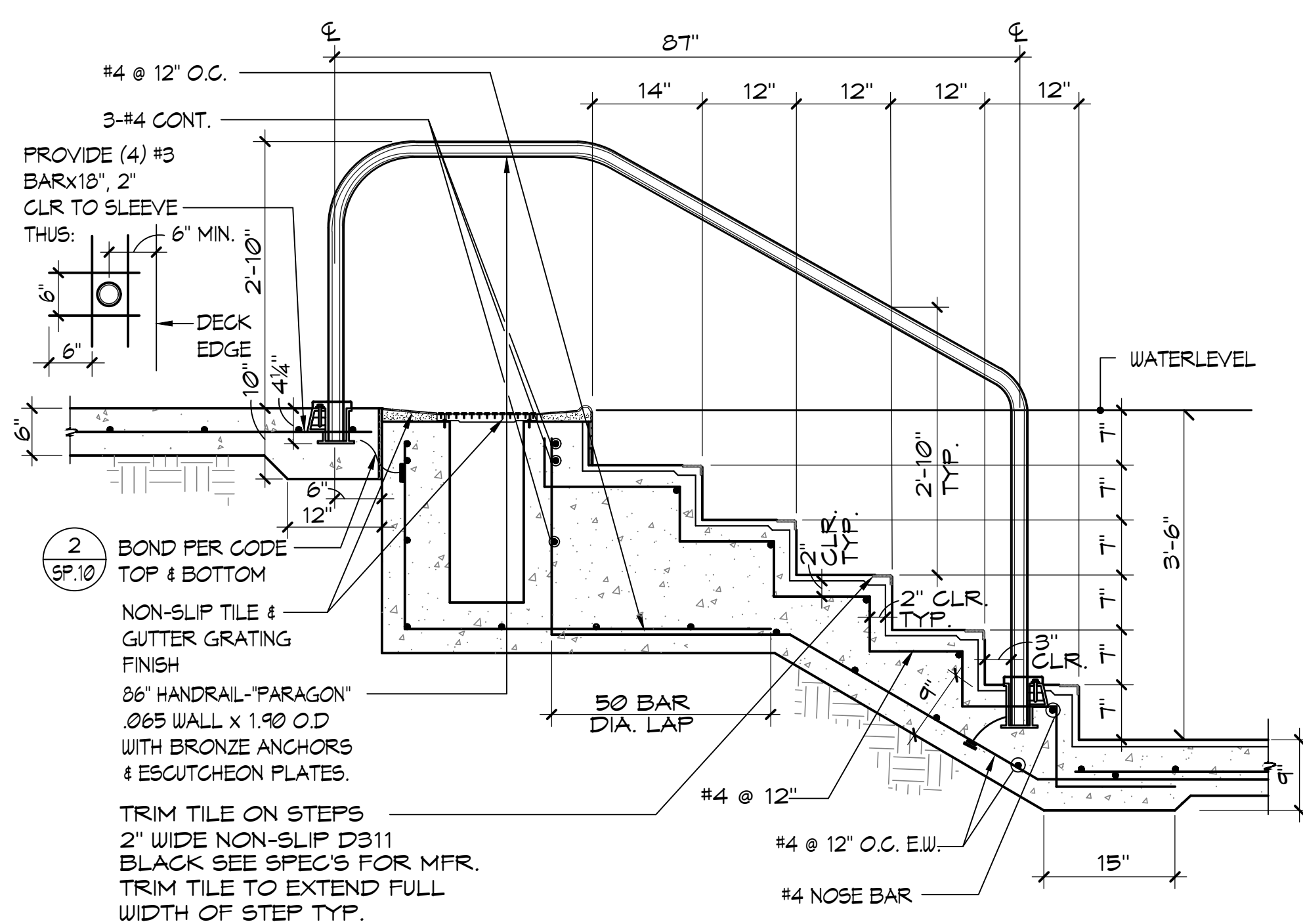
5 DEPTH MARKERS 1/2" = 1'-0"



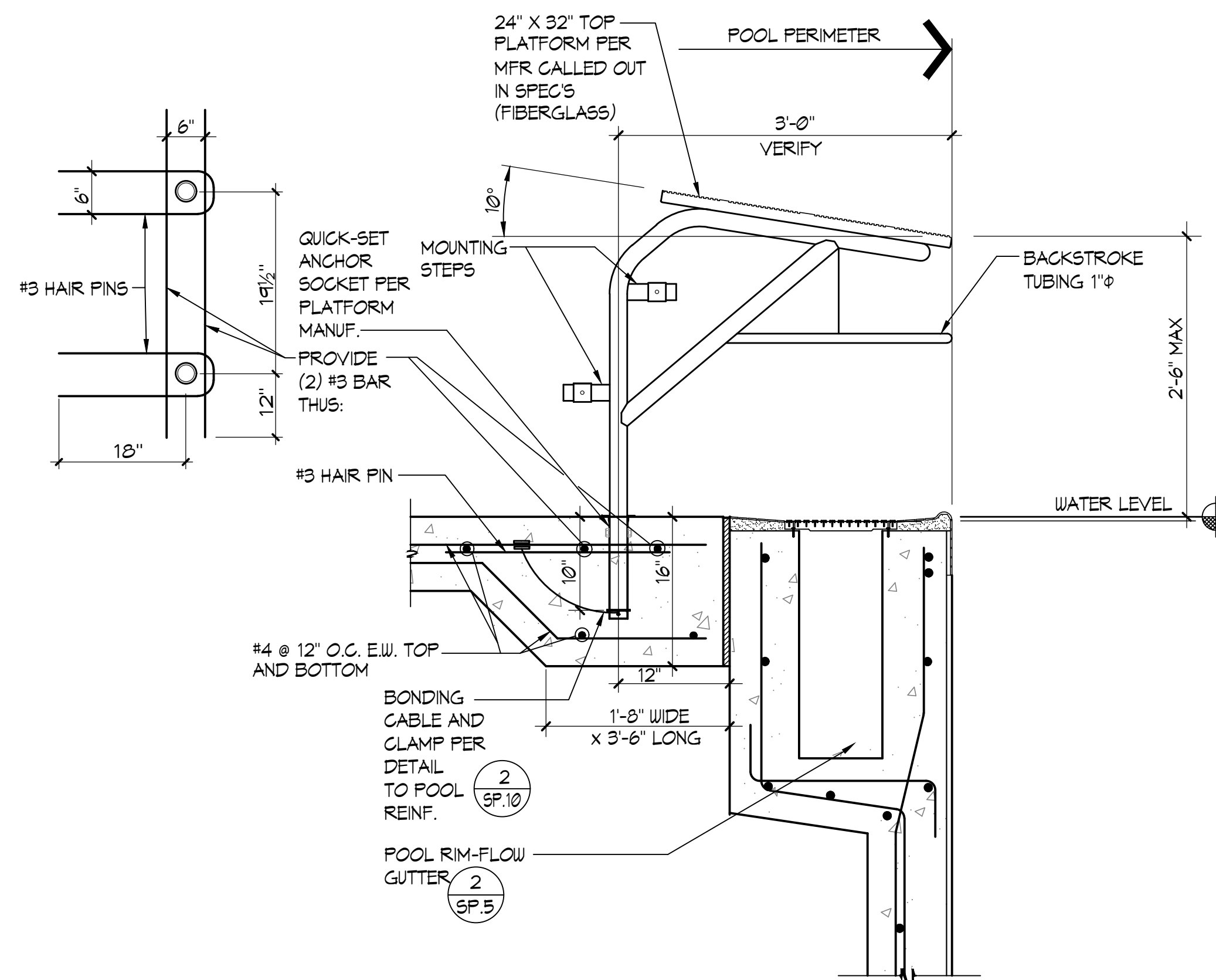
6 "NO RUNNING" / "NO DIVING" MARKERS 1/2" = 1'-0"



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



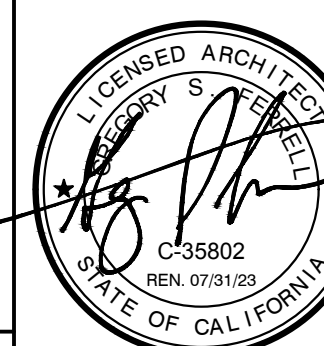
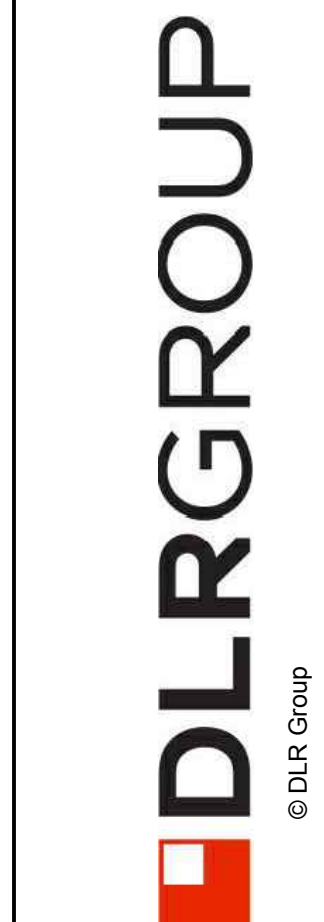
8 HANDRAIL DETAIL 3/4" = 1'-0"



9 RACING PLATFORM 1" = 1'-0"

- SILK SCREEN
1. INLAYS DOUBLE GLAZED WHITE SLIP RESISTANT TILE TYP. OF (1) PIECE OVER 1/4" MORTAR BED WITH 1/8" GROUT JOINTS. SEE PLAN FOR LOCATION.
 2. 1" WIDE RED CIRCLE WITH 1" WIDE RED DIAGONAL LINE.
 3. 1/8" BLUE WATER.
 4. 1/8" RED TICKS ABOUT THE HEAD.
 5. TAN COLOR BODY WITH BLACK OUTLINE, HAIR AND TRUNKS.
 6. 1/8" BLACK POOL FLOOR.

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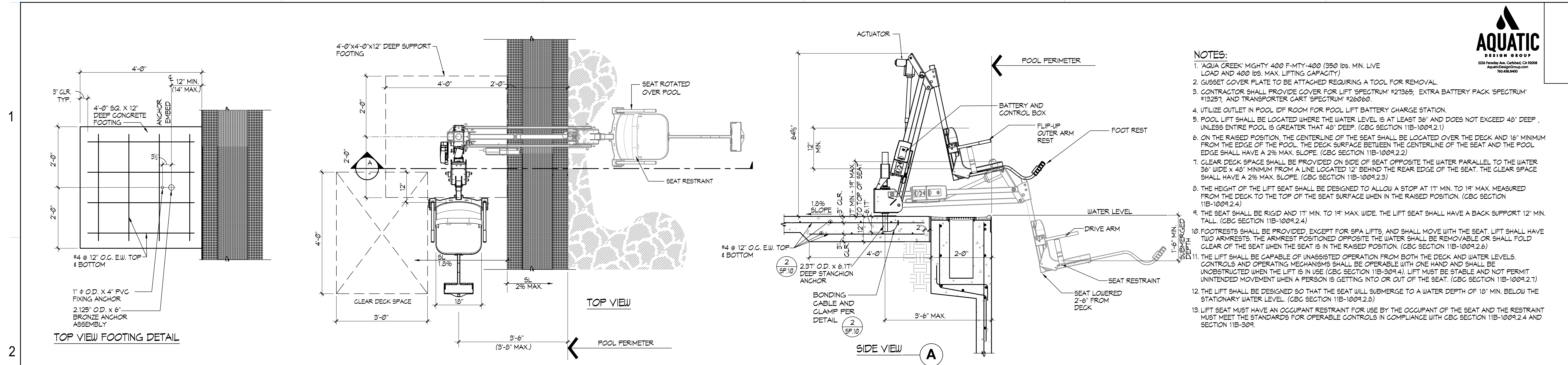
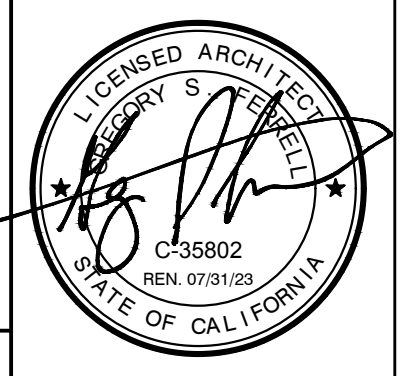


COVINA VALLEY HS POOL REPLACEMENT
 COVINA VALLEY UNIFIED SCHOOL DISTRICT
 483 SOUTH HOLLENBECK AVENUE COVINA, CA 91723

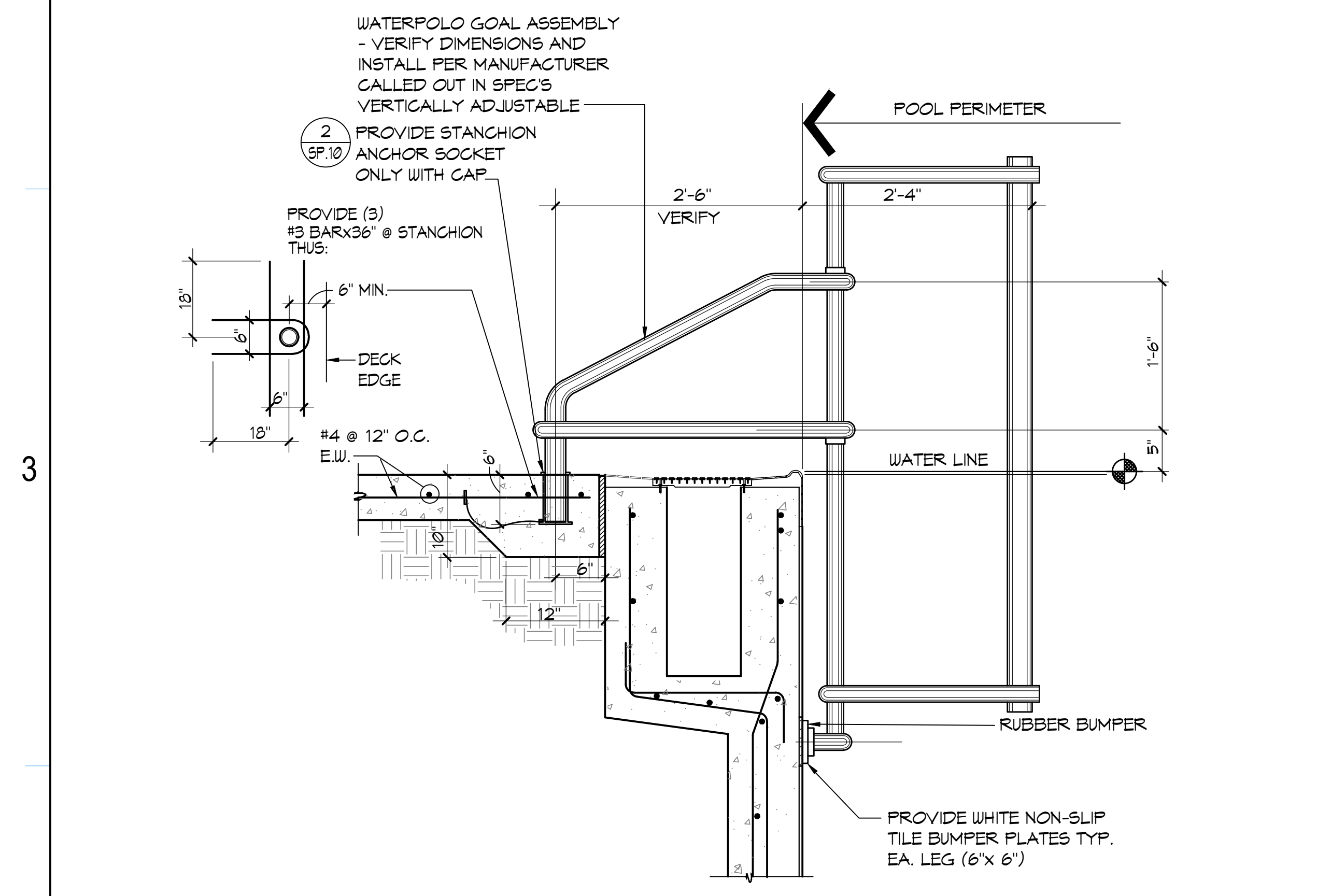
DSA SUBMITTAL SET_V2
 Issue Date 04-28-2023
 REVISIONS

75-22616-00
 DSA AR 03-122700
 DSA FILE # 19148

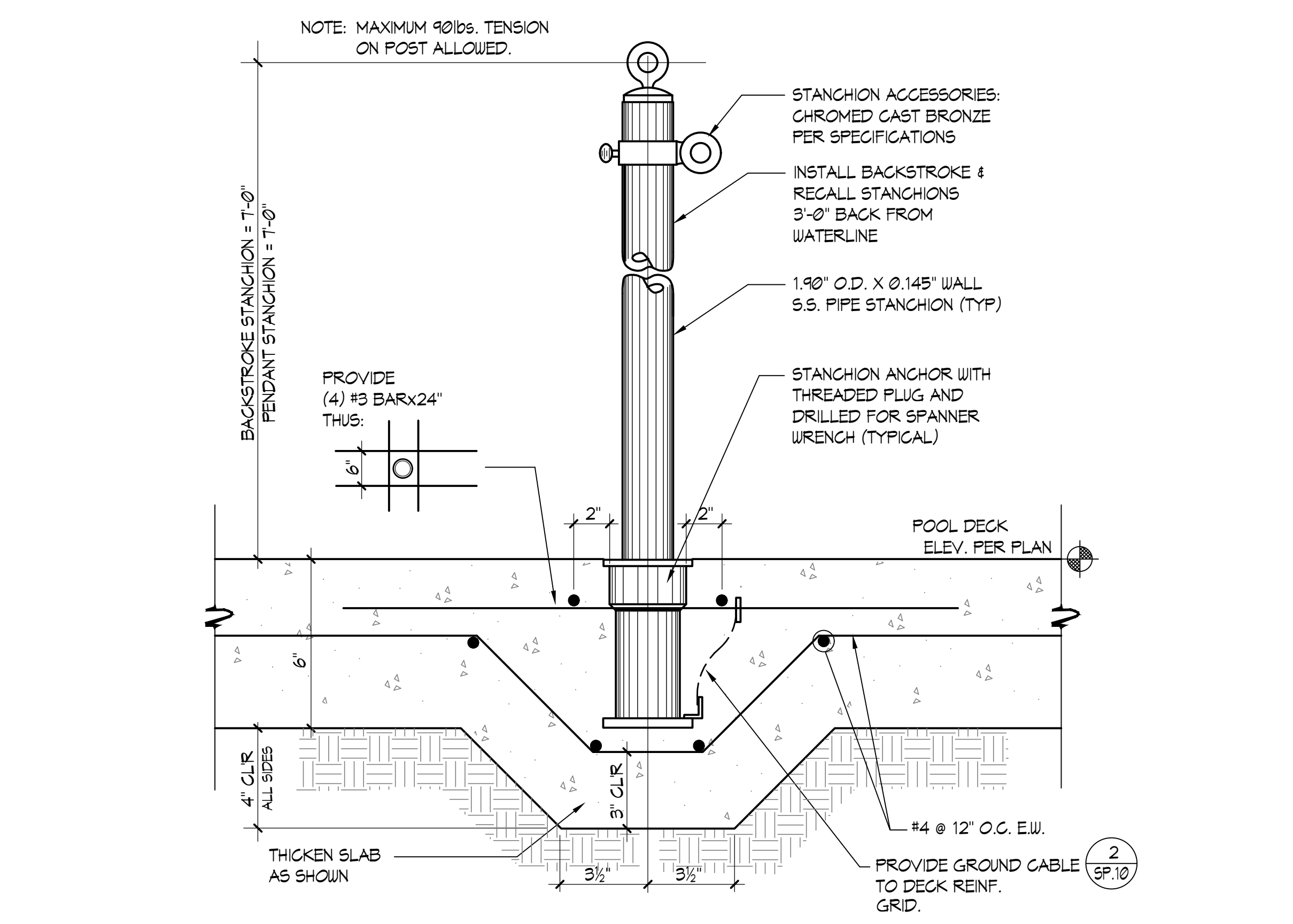
DETAILS
 SP.6



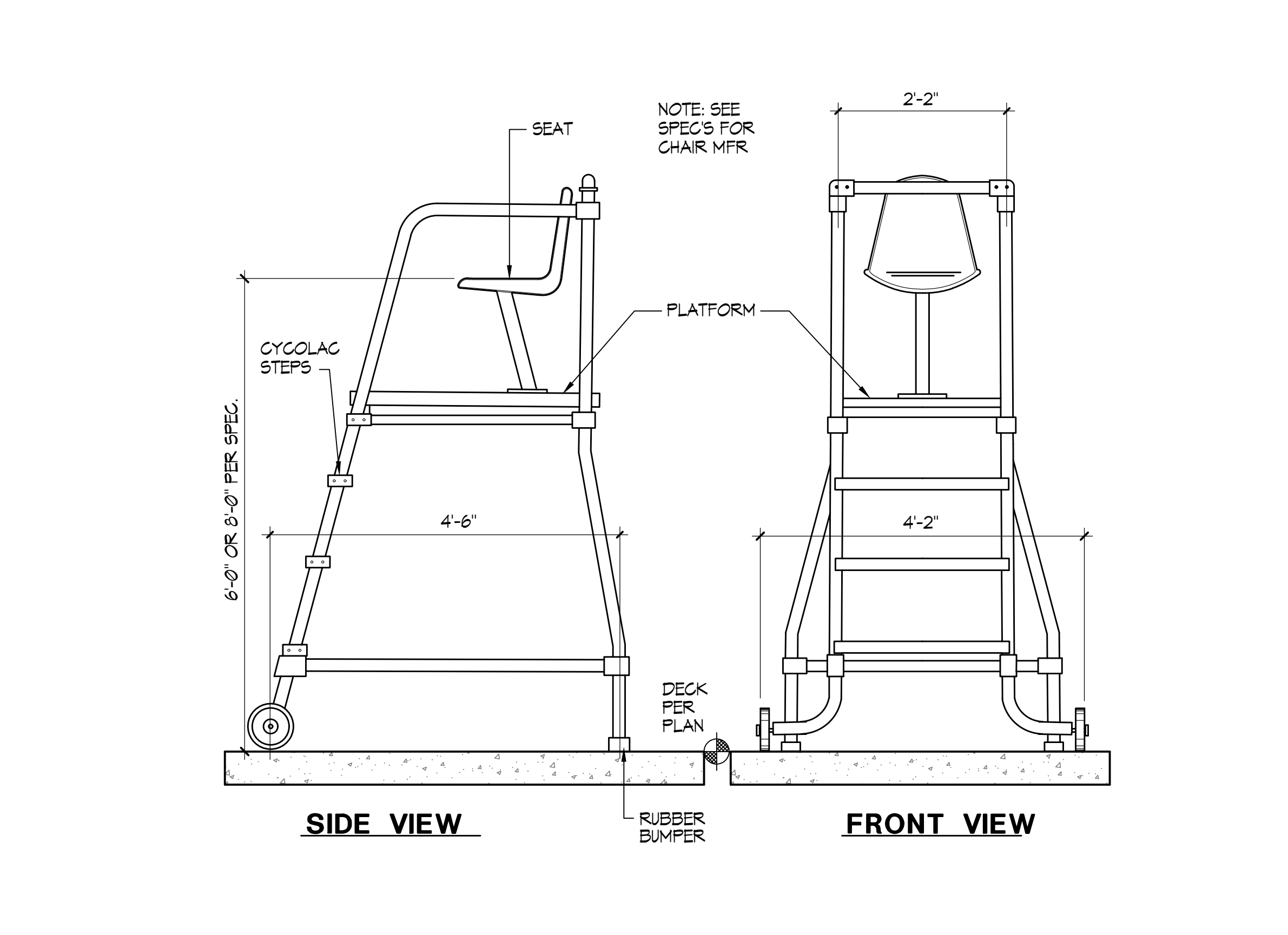
ACCESSIBLE LIFT 3/4" = 1'-0"



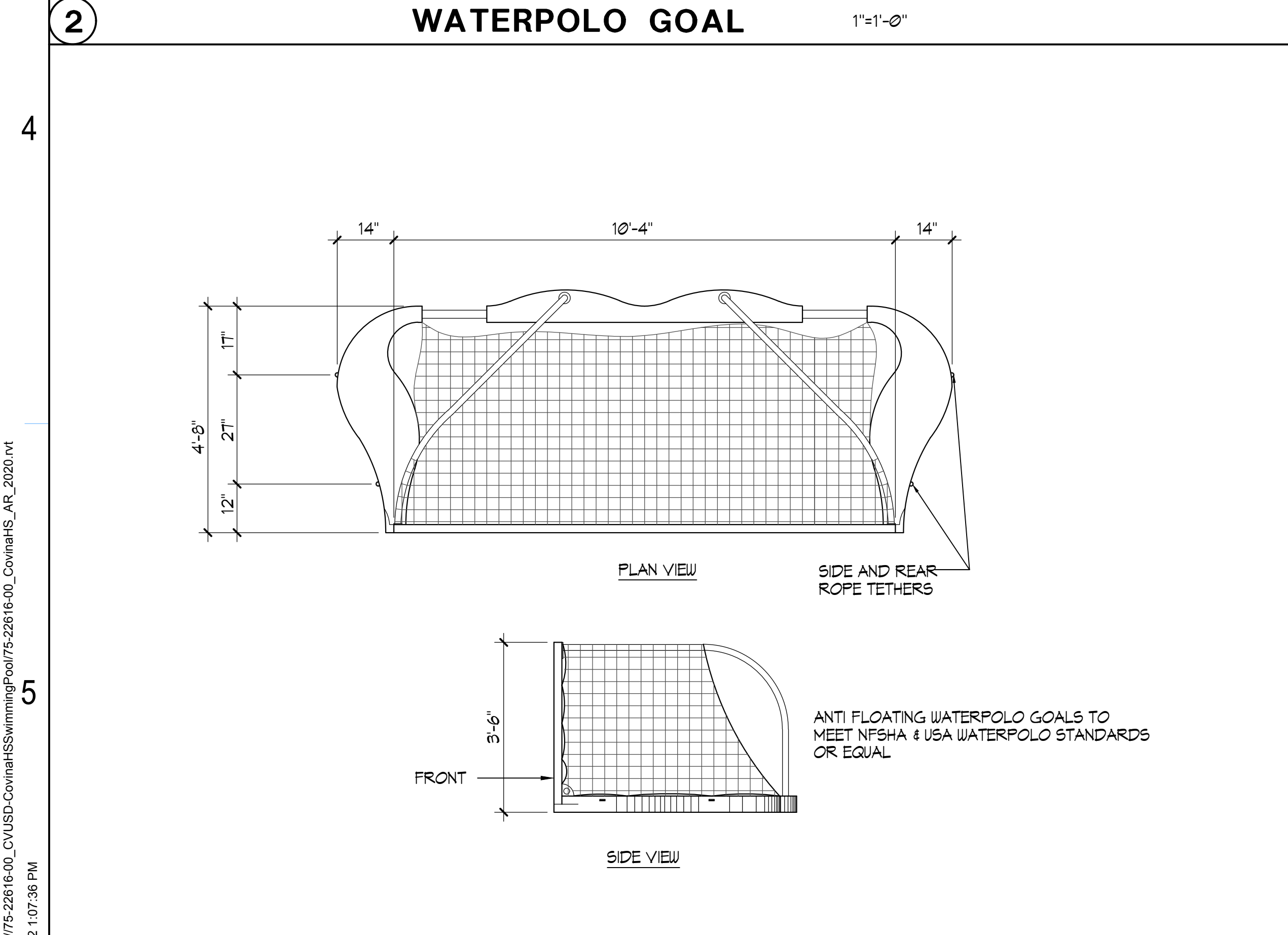
WATERPOLO GOAL 1" = 1'-0"



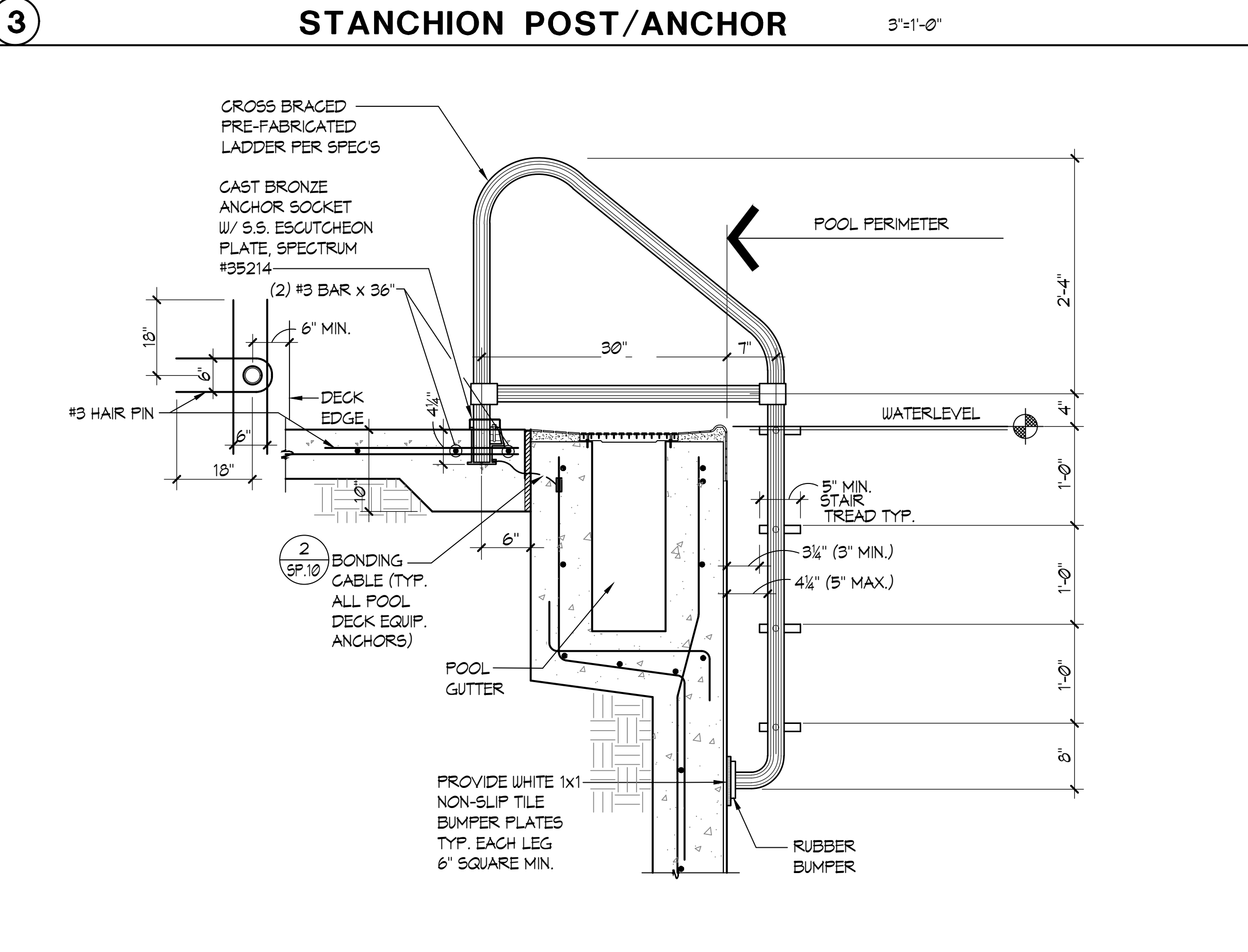
STANCHION POST/ANCHOR 3/4" = 1'-0"



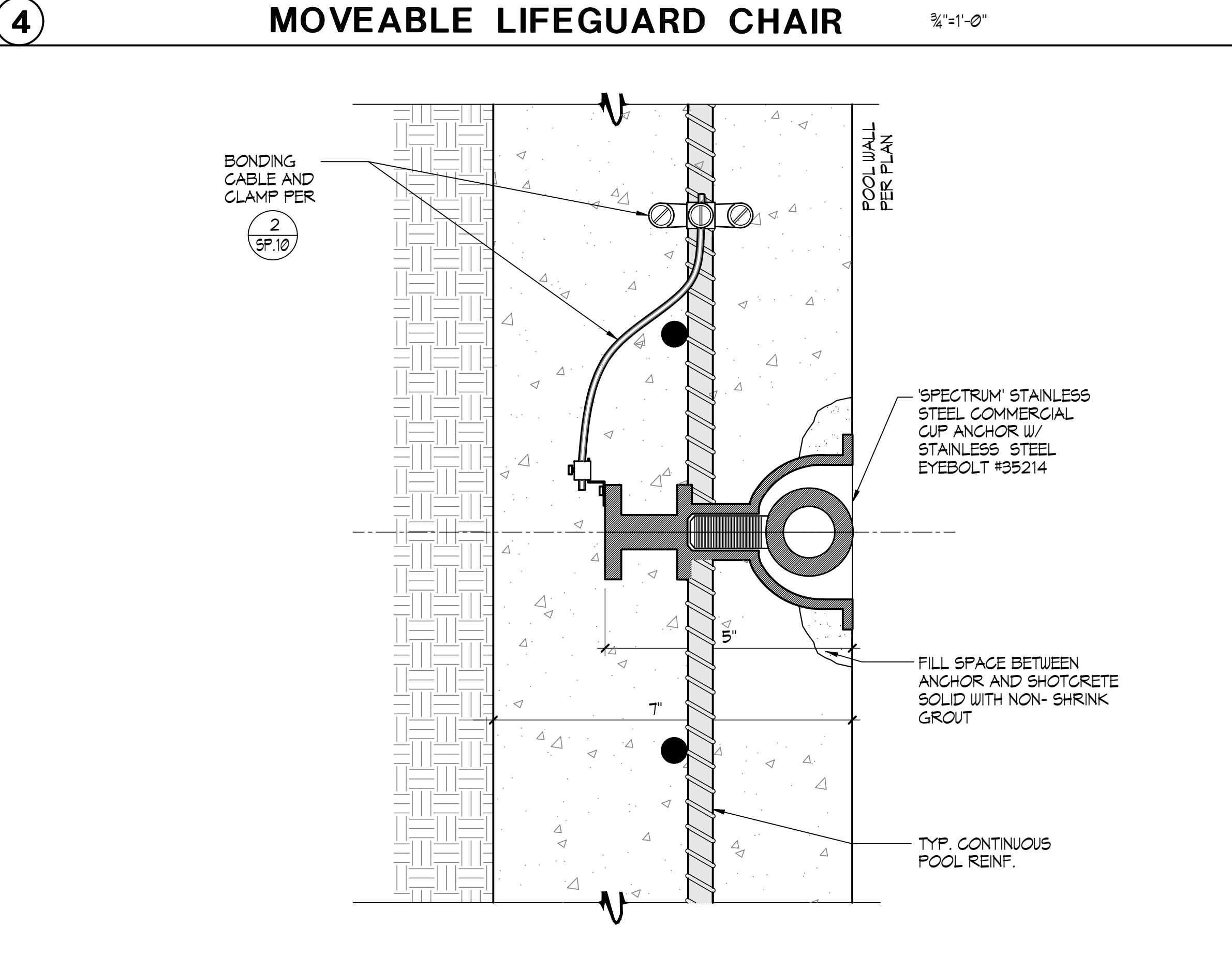
MOVEABLE LIFEGUARD CHAIR 3/4" = 1'-0"



FLOATING WATER POLO GOALS 1/2" = 1'-0"

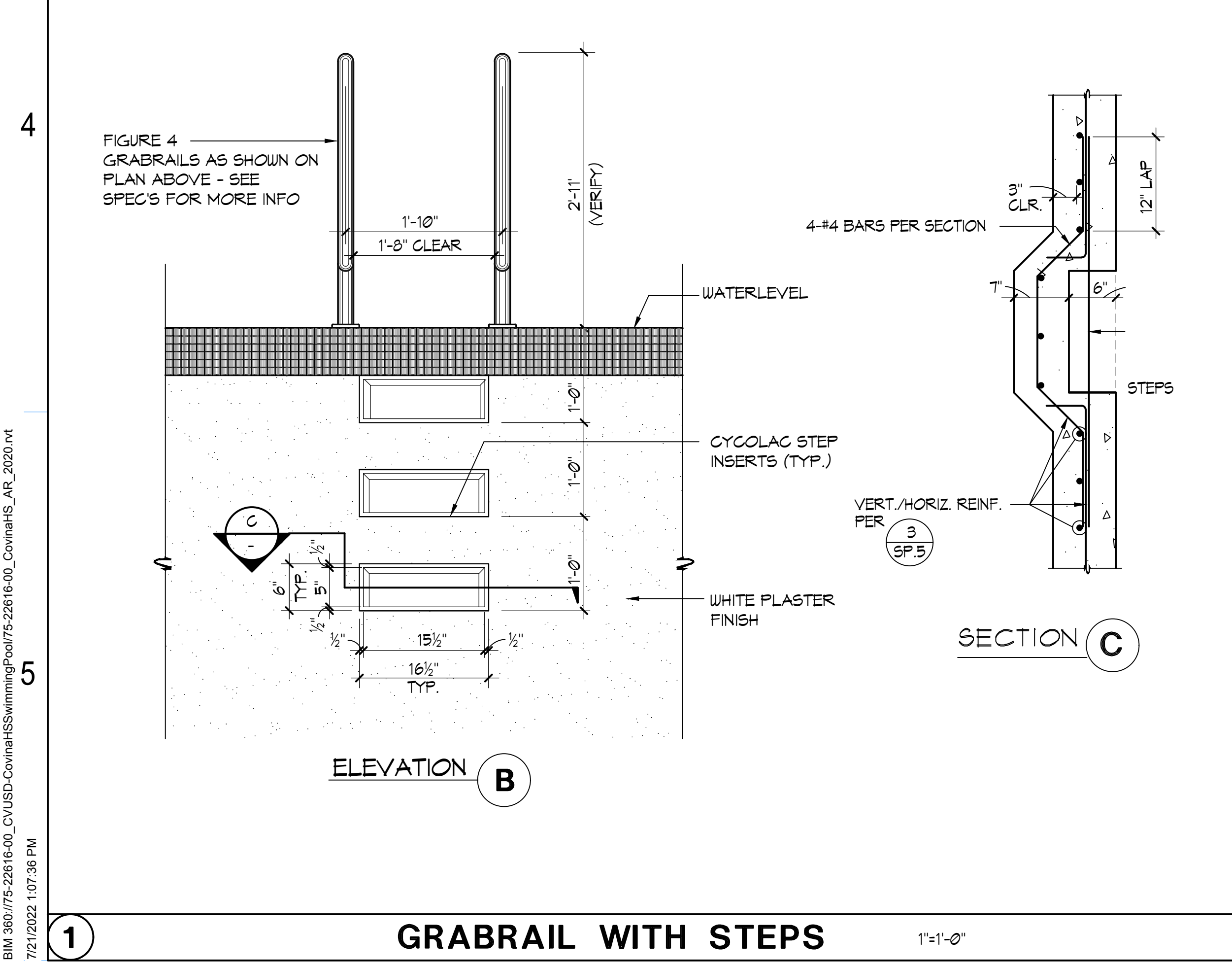
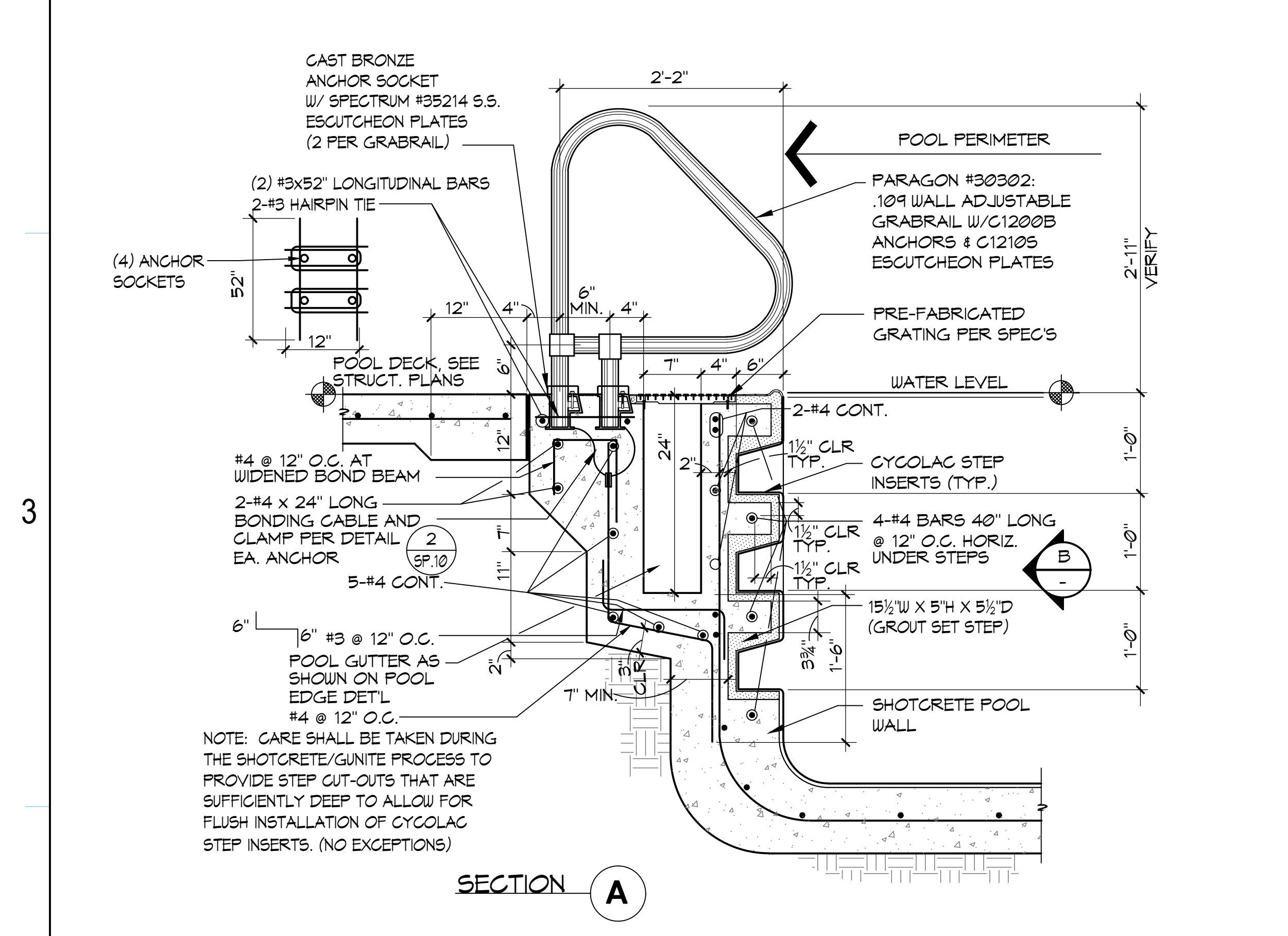
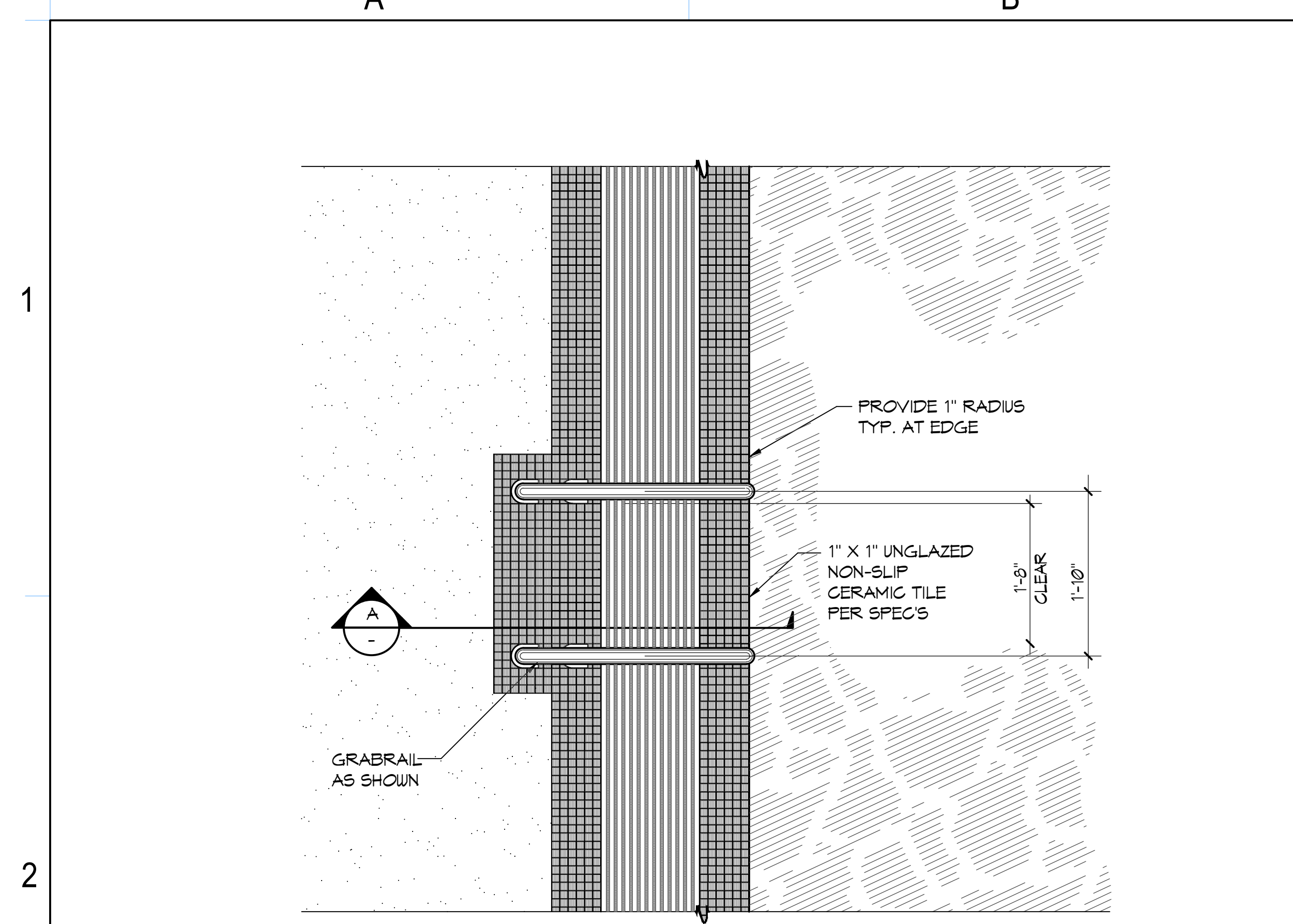


POOL LADDER 1" = 1'-0"

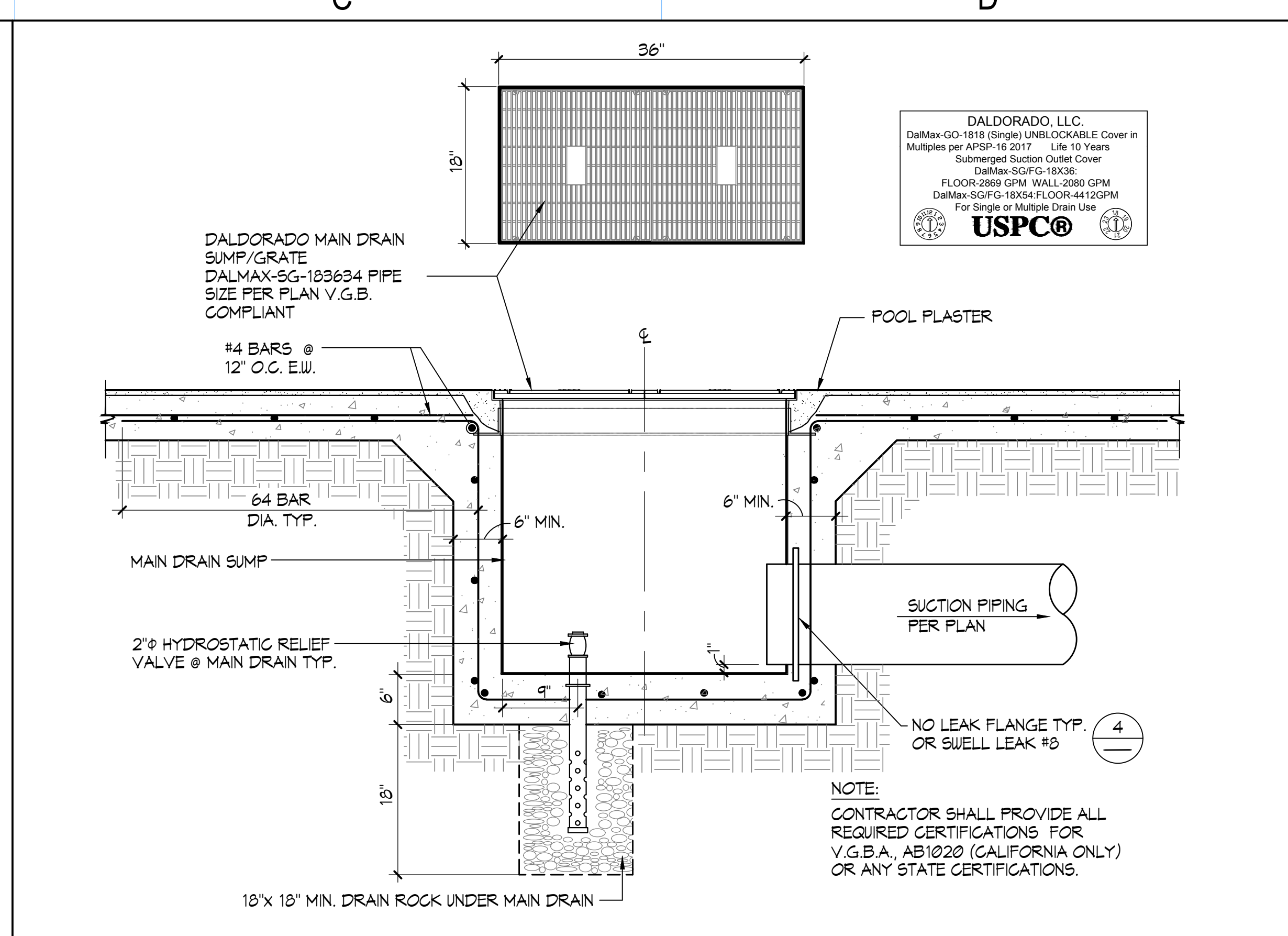


ROPE ANCHOR 1/2" = 1"

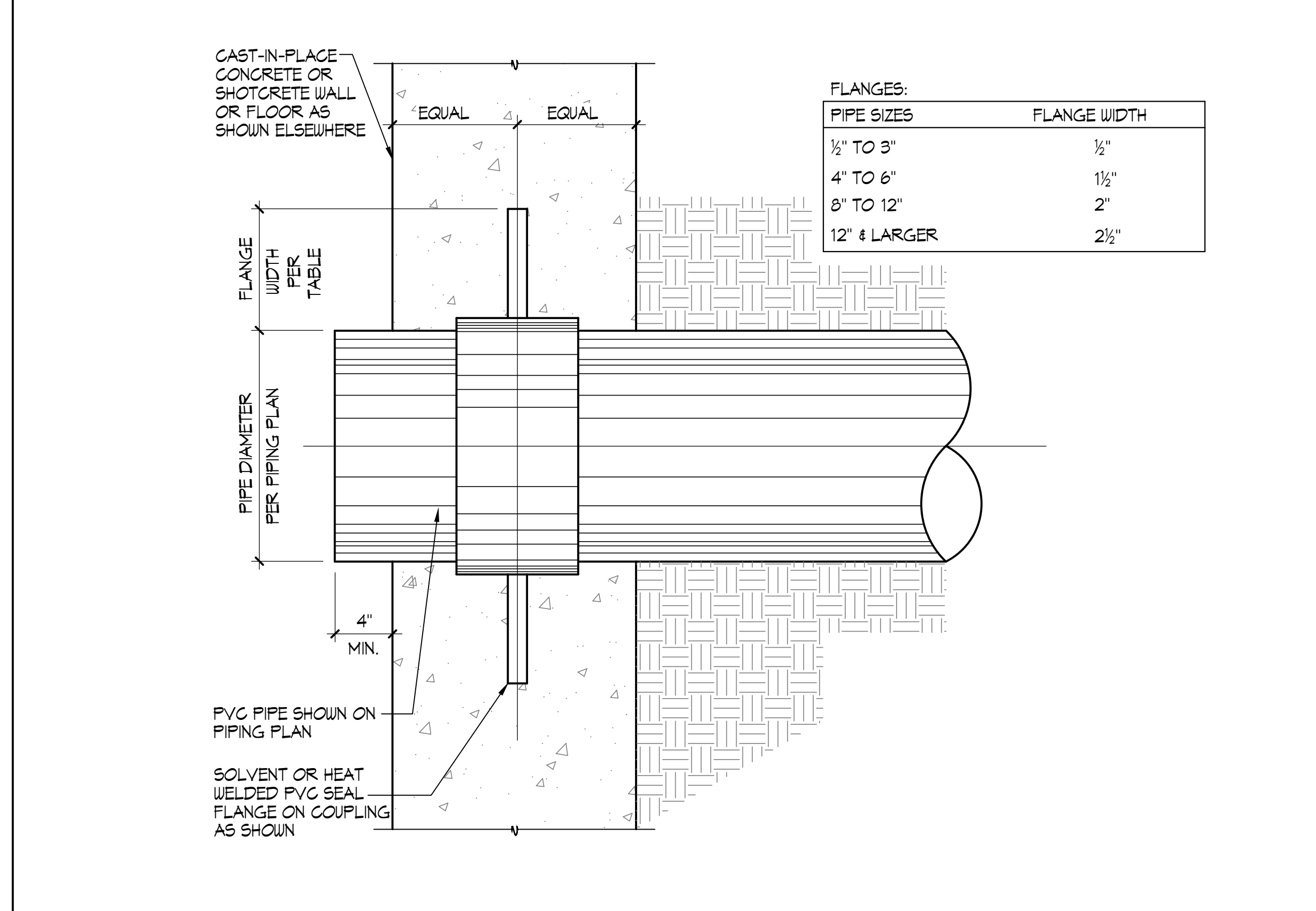
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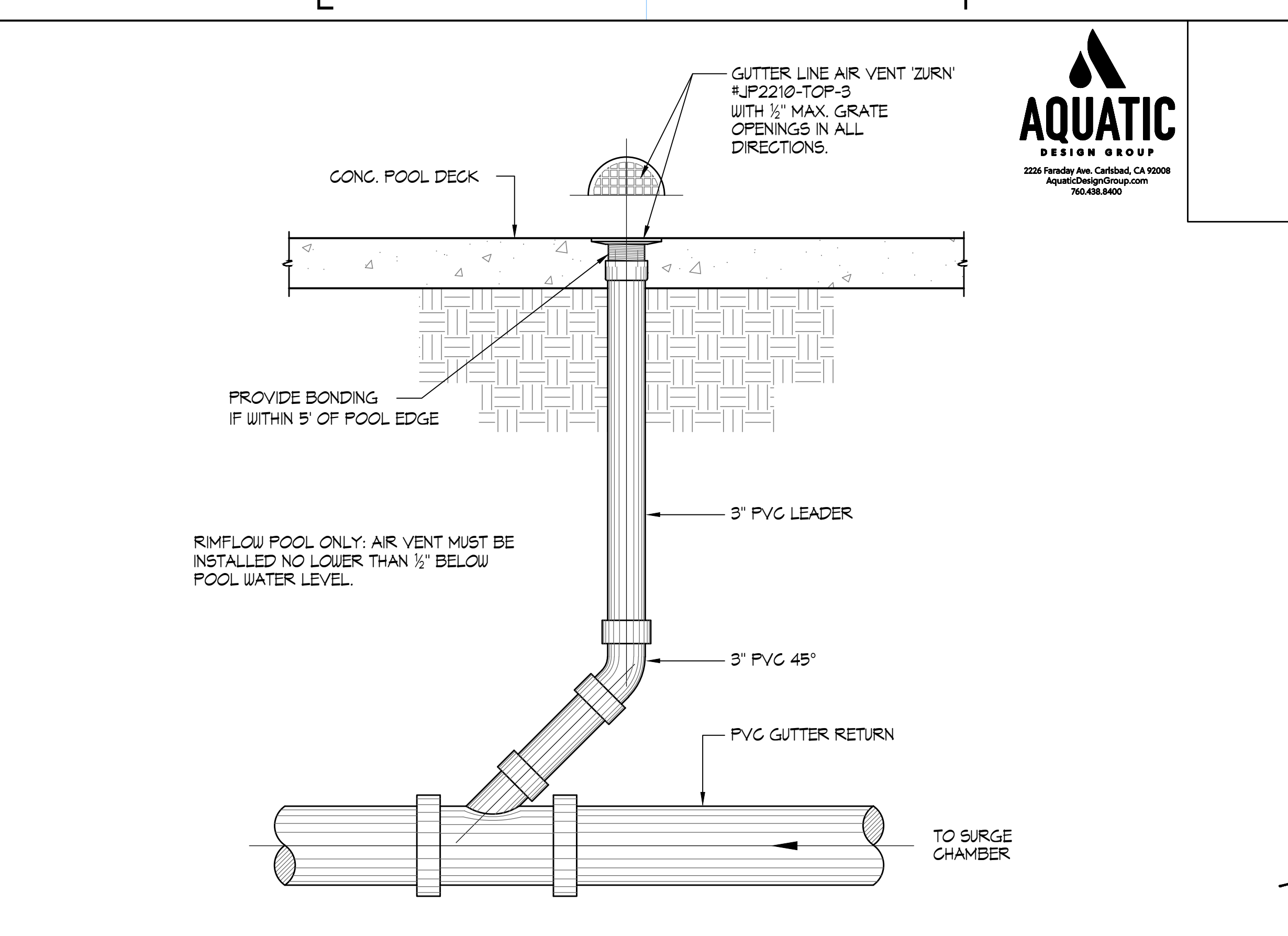
1 GRABRAIL WITH STEPS 1"=1'-0"



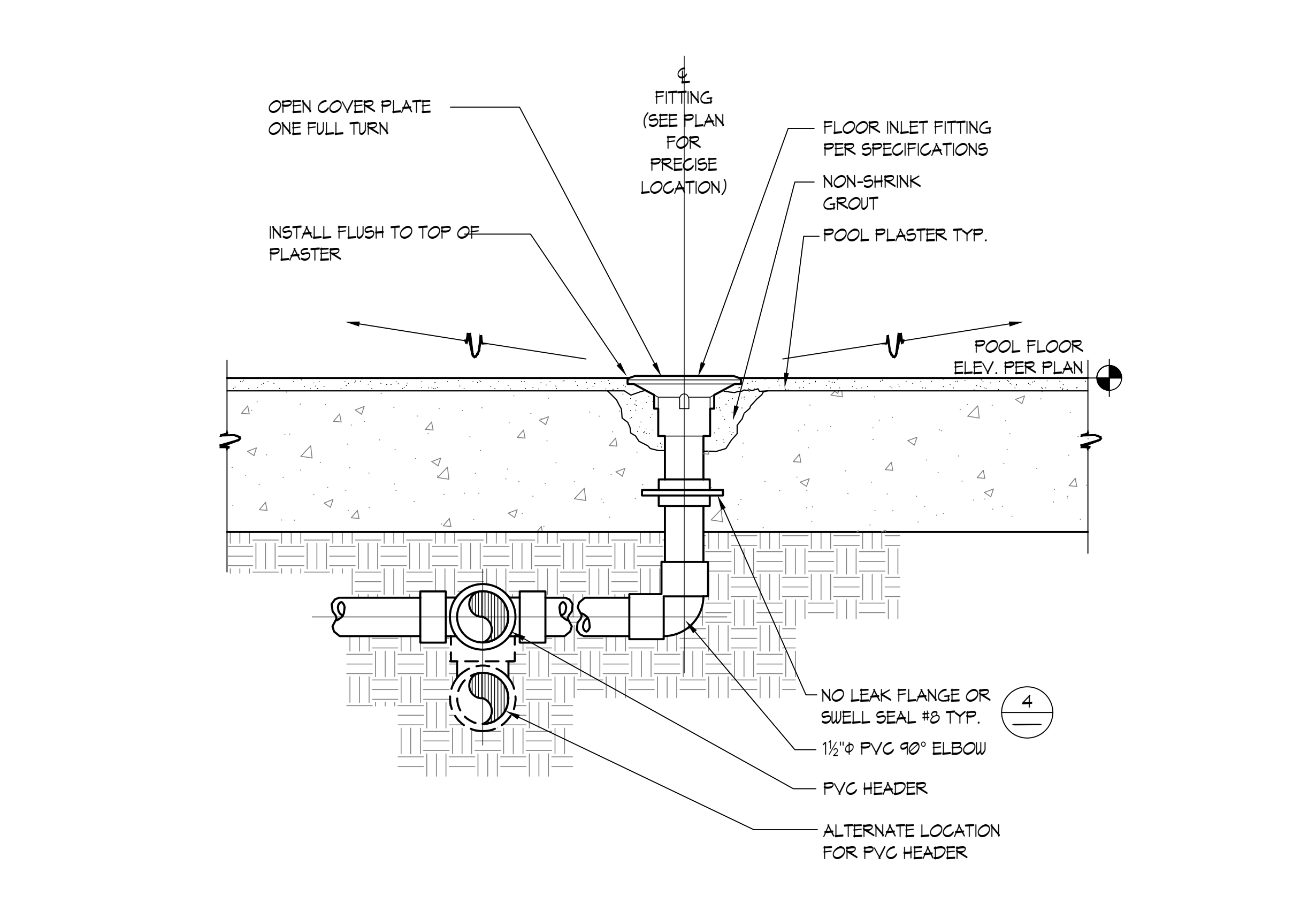
2 MAIN DRAIN 1"=1'-0"



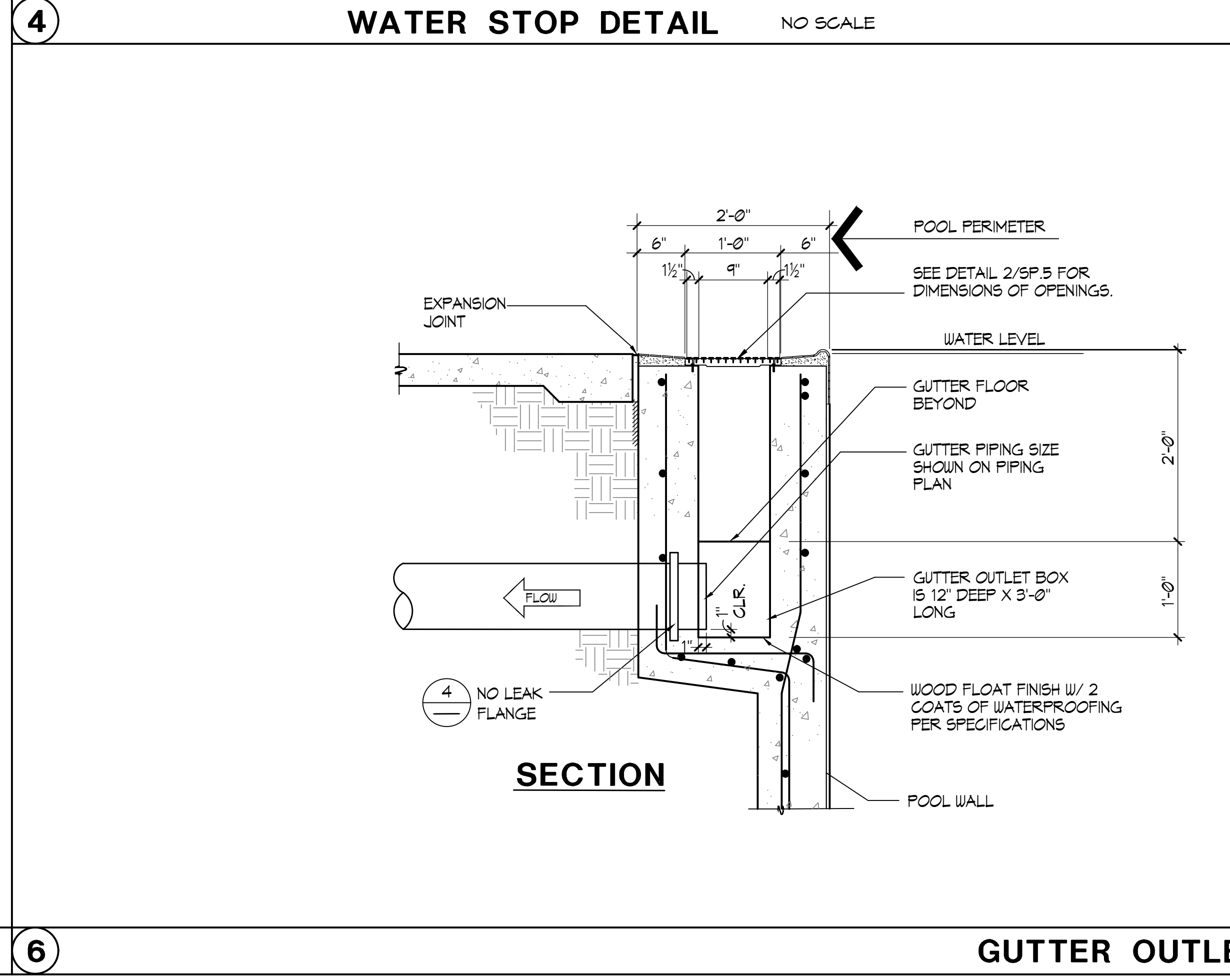
4 WATER STOP DETAIL NO SCALE



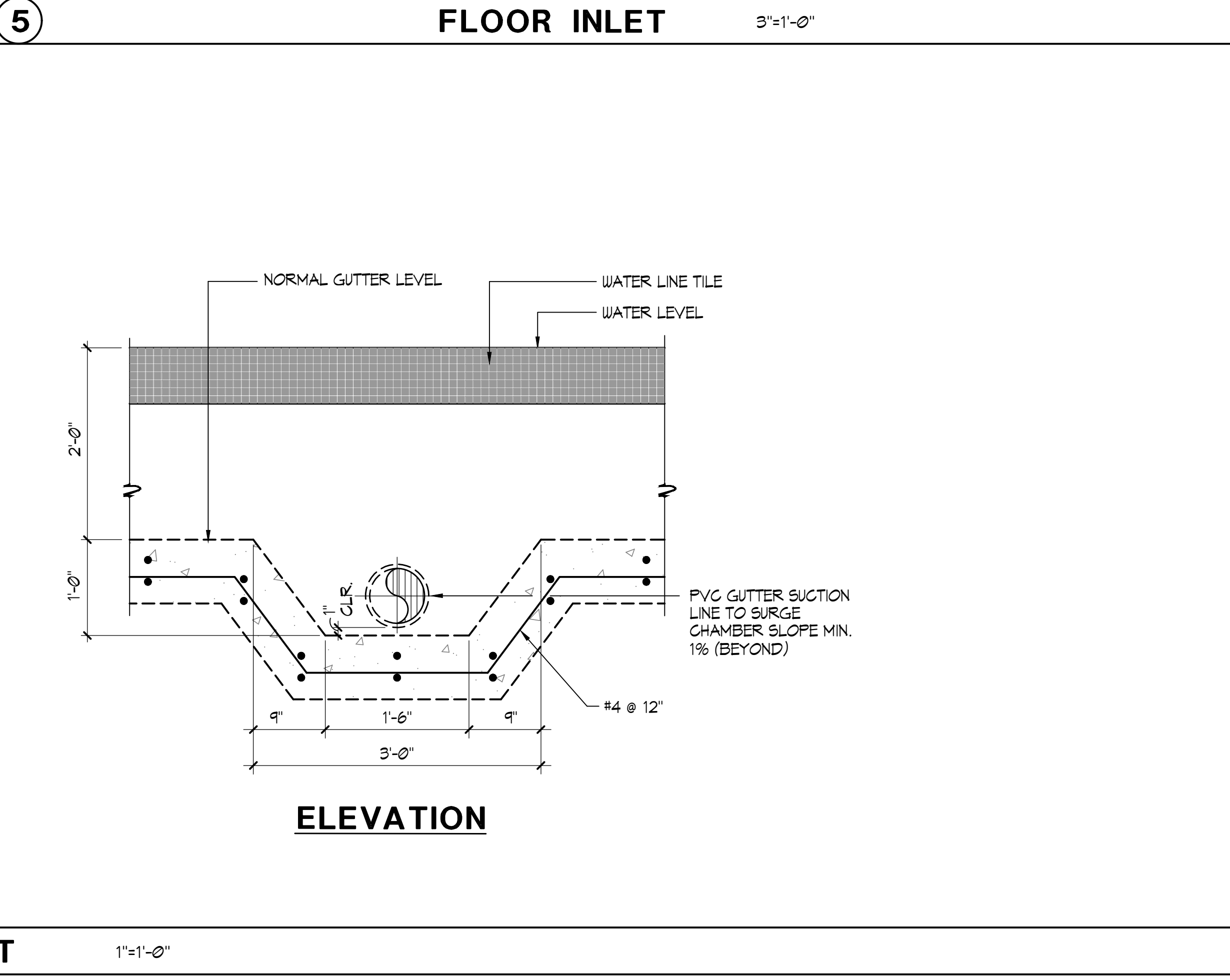
3 AIR VENT 1"=1'-0"



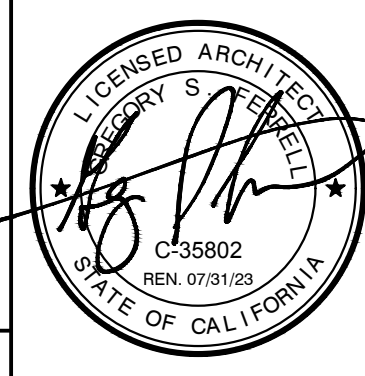
5 FLOOR INLET 3\"/>



6 GUTTER OUTLET 1"=1'-0"



ELEVATION



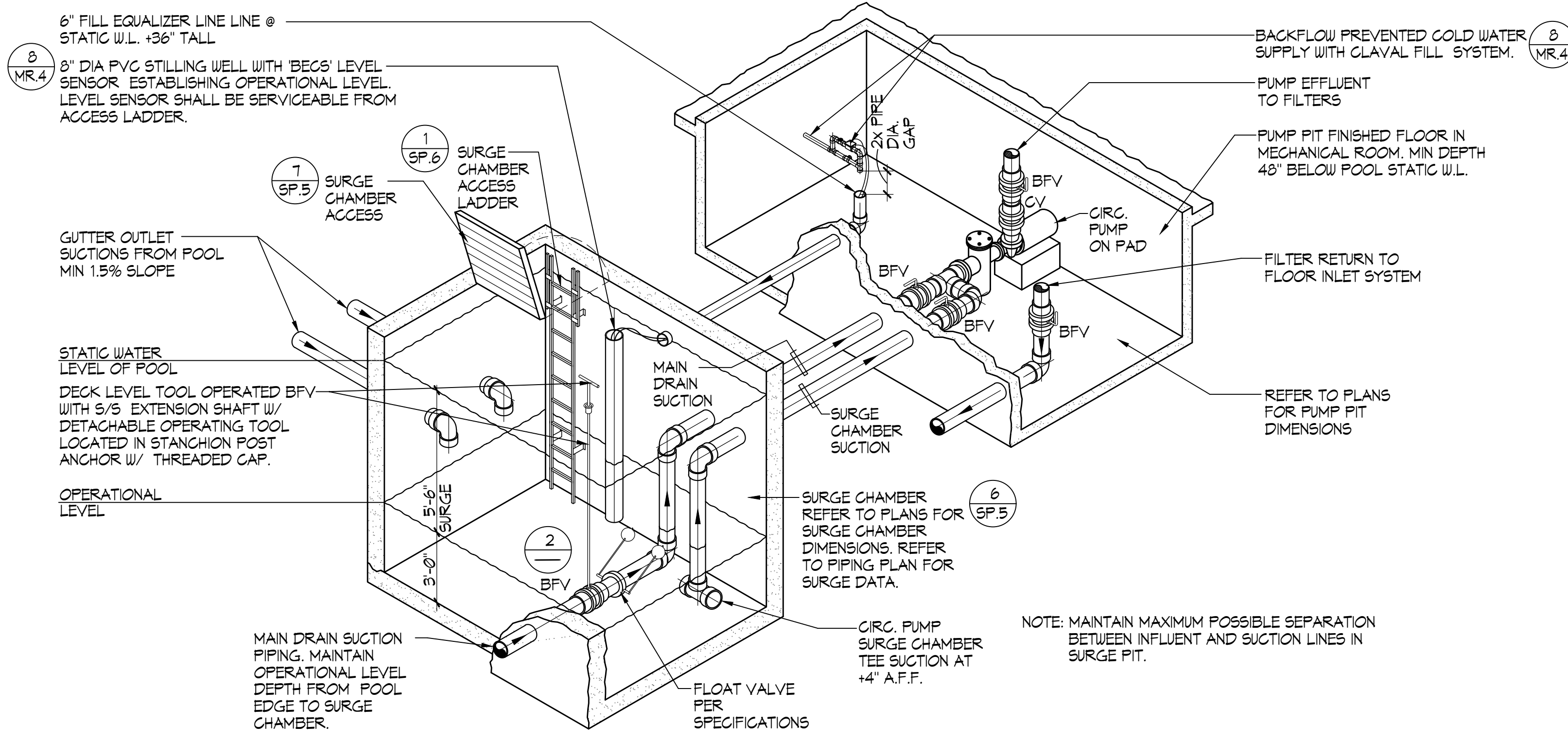
COVINA VALLEY HS POOL REPLACEMENT
 COVINA VALLEY UNIFIED SCHOOL DISTRICT
 465 SOUTH HOLLENBECK AVENUE COVINA, CA 91723

DSA SUBMITTAL SET_V2
 Issue Date 04-28-2023
 REVISIONS

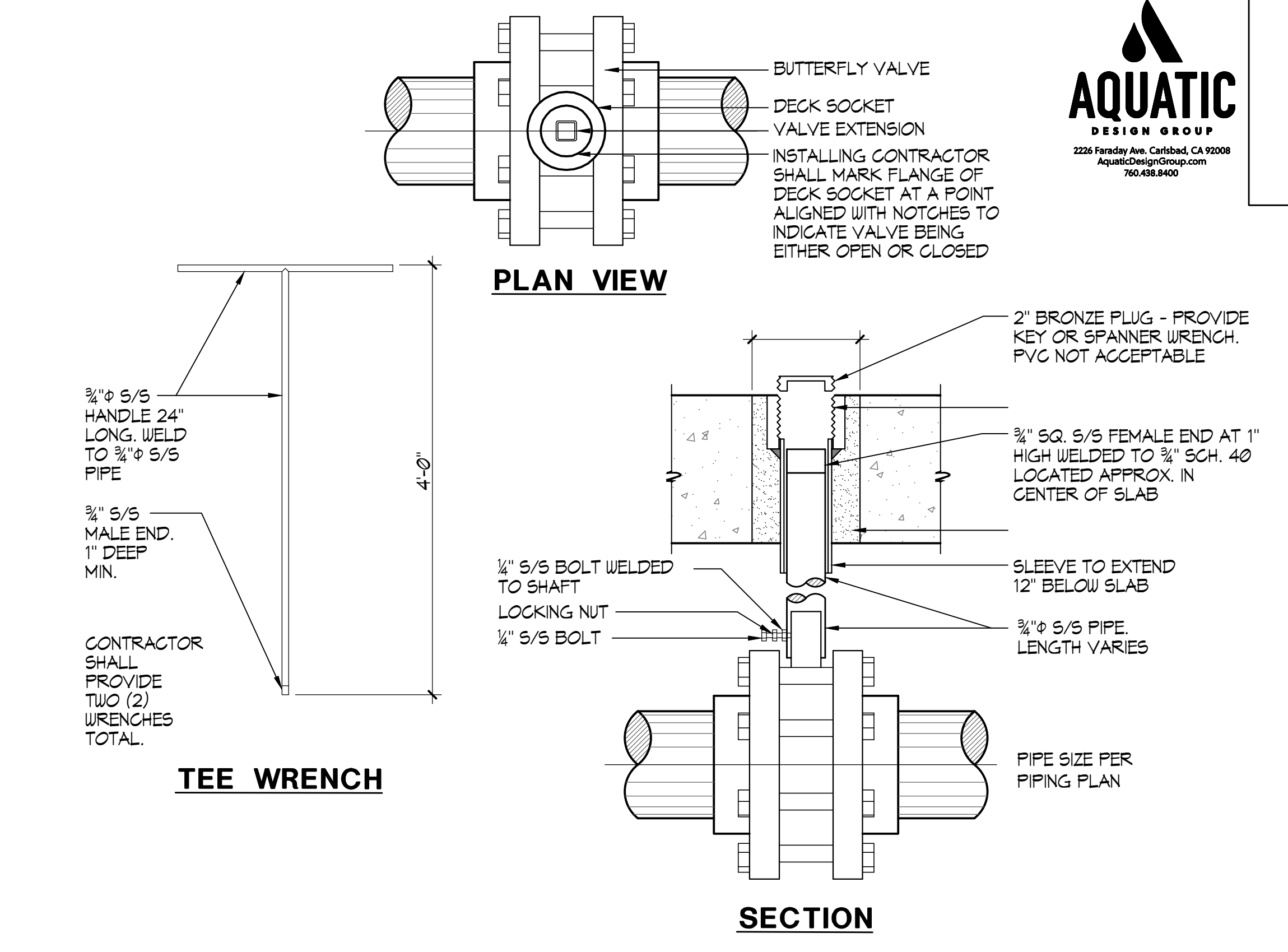
75-22616-00
 DSA AF 03-122700
 DSA FILE # 19-H8
 DETAILS

SP.8

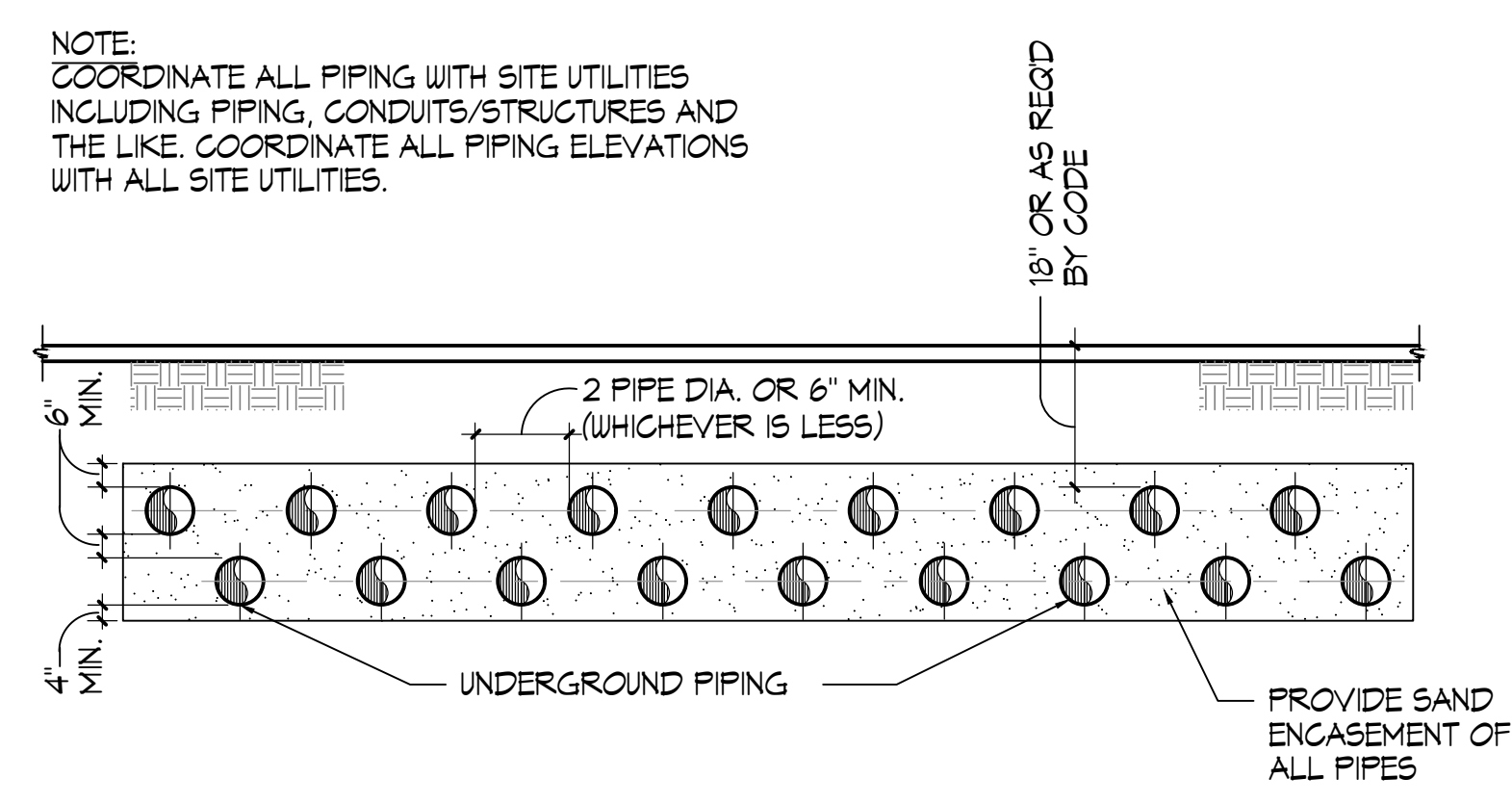
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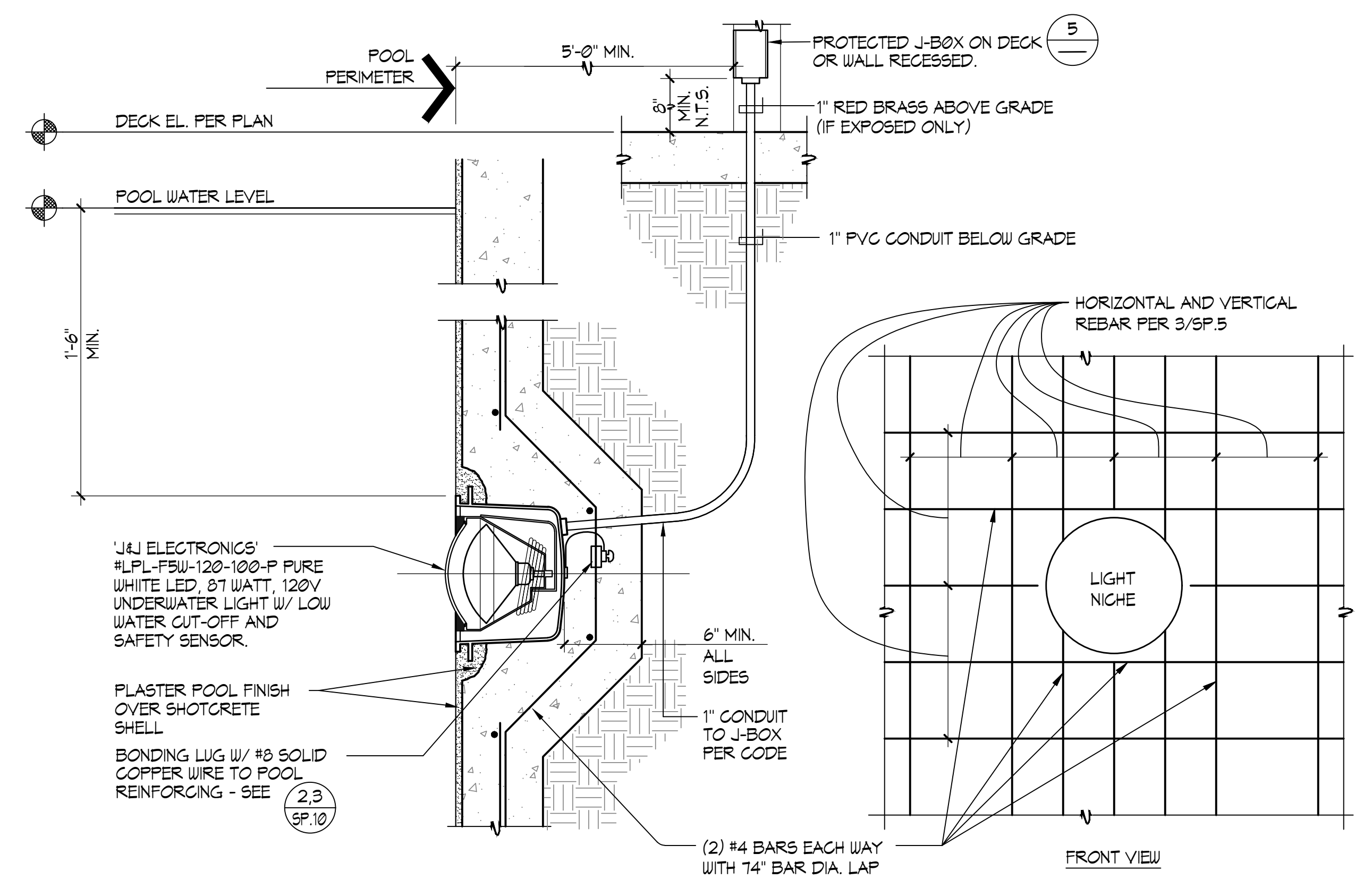
2 SURGE CHAMBER PIPING SCHEMATIC NO SCALE



2 SURGE CHAMBER BUTTERFLY VALVE / EXTENSION DETAIL NO SCALE

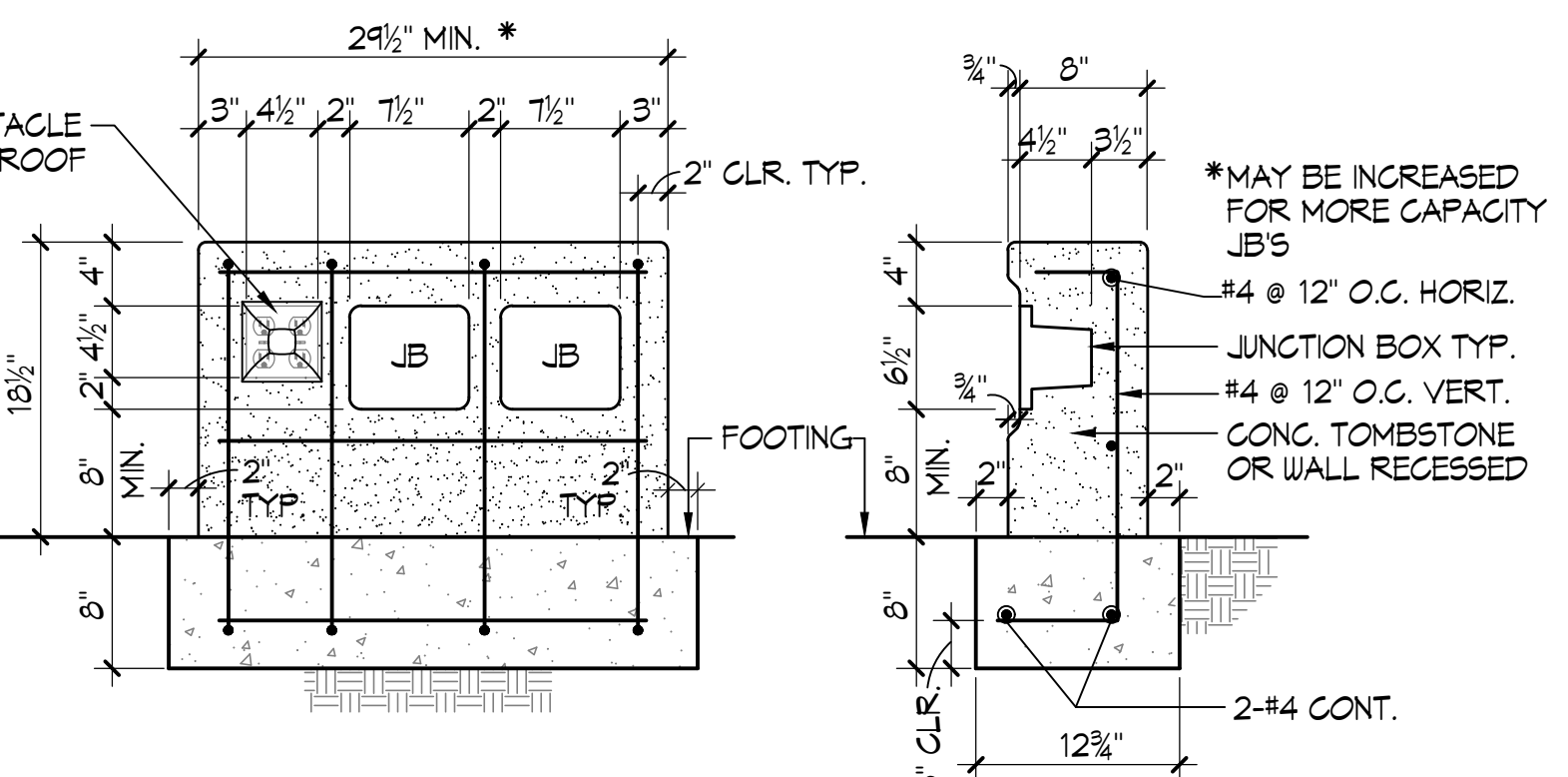


3 STACKED UNDERGROUND PIPING NO SCALE

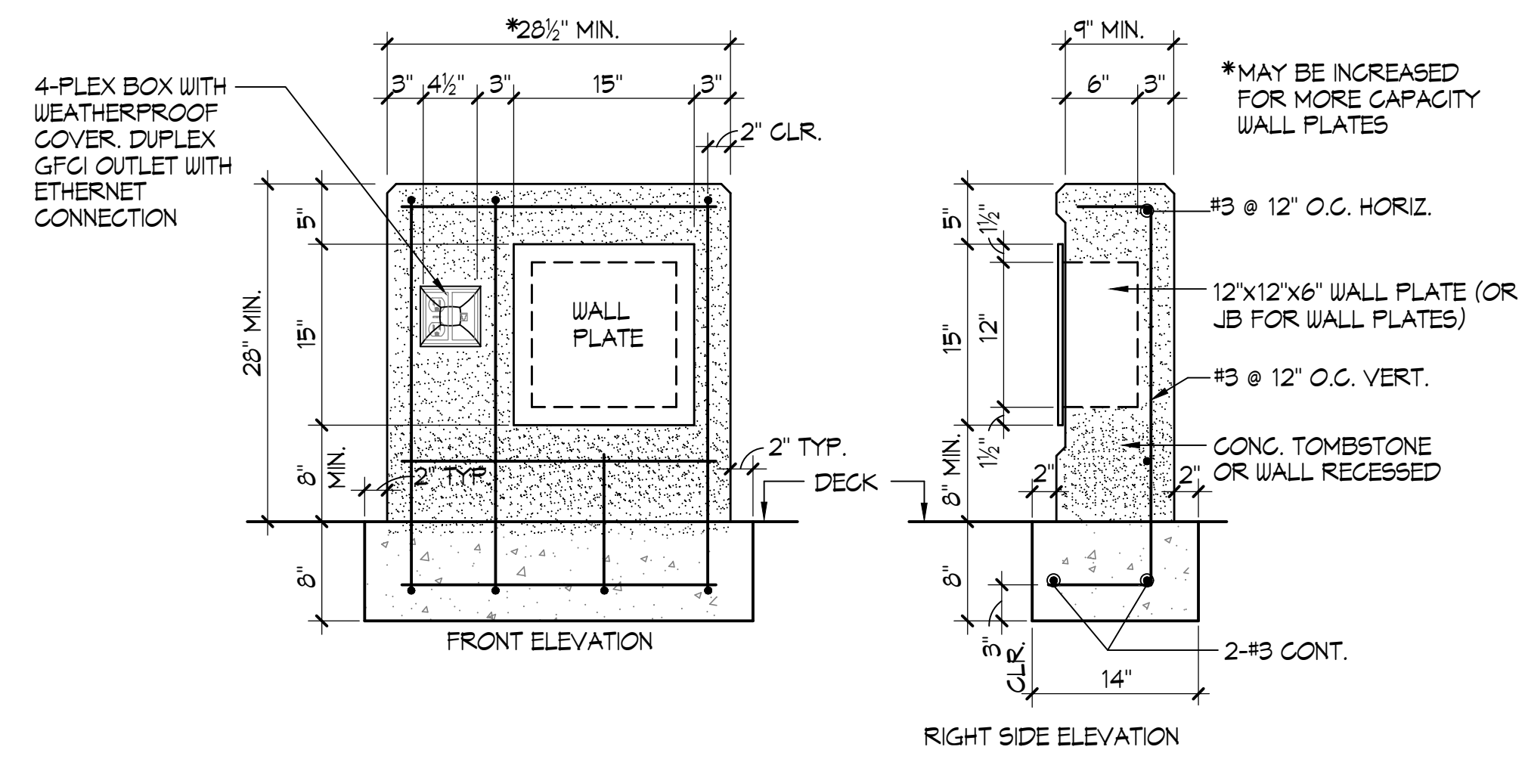


4 UNDERWATER LED LIGHT 1/2\"/>

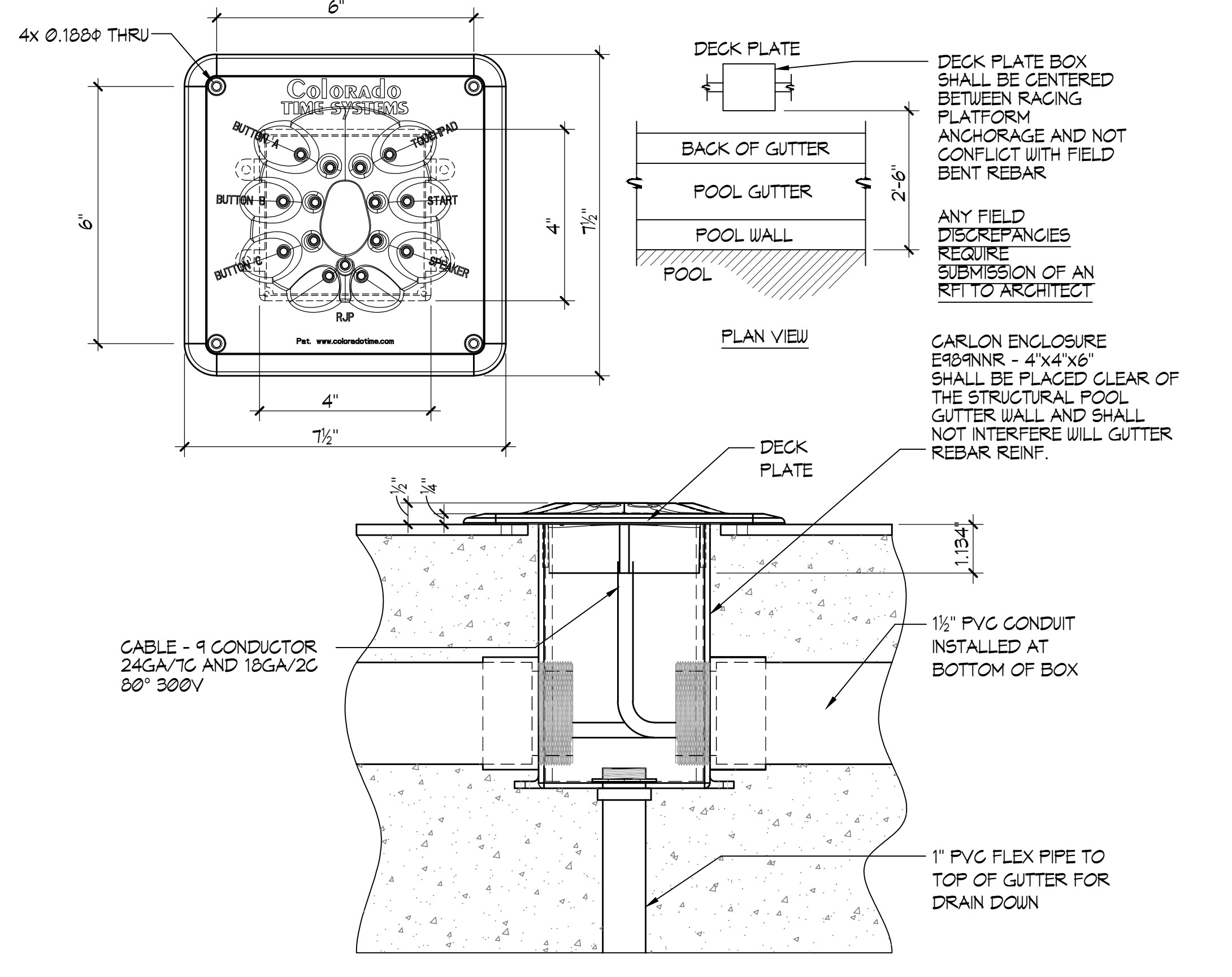
- UNDERWATER LIGHT NOTES:
- ALL CONDUITS IN POOL LIGHTING SYSTEM TO BE A MINIMUM OF 1".
 - CONDUCTORS TO POOL J-BOXES SHALL BE MINIMUM 2-10 & 110 (SEE UNDERWATER LIGHT PLAN) SOLID UNBROKEN TO MAIN PANEL ISOLATED GROUND BUSS. THIS BUSS IS TO BE CONNECTED WITH SOLID INSULATED #8 COPPER WIRE TO UFER & COLD WATER GROUNDING LUG ON GROUNDING BUSS. UPSIZE CONDUCTORS AS REQUIRED FOR HOMERUNS EXCEEDING 100'.
 - 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.
 - 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.
 - LIGHTING CONTRACTORS SHALL BE "ALLEN-BRADLEY" #500 L; OR EQUAL MOUNTED IN A NEMA 12 HINGED COVER - LOCKABLE ENCLOSURE. CONTRACTORS 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.
 - BRASS POOL J-BOXES SHALL BE "HYDREL" #1119; 1/2" HUBS OR EQUAL. (NO DIE CAST BOXES).
 - STRINGS SHALL BE PULLED IN ALL CONDUITS PRIOR TO PLACEMENT OF CONCRETE.
 - LOCAL COUNTY OR CITY CODES SHALL BE ADHERED TO, SPECIFICATIONS TO BE IN ACCORDANCE WITH SECTION 600 OF LATEST N.E.C. BOOK.
 - PROVIDE PULL BOXES AS MAY BE REQUIRED FOR RUNS EXCEEDING 150 FT. OR DUE TO CHANGES IN GRADE OR DIRECTION.
 - CONTRACTOR SHALL TEST UNDERWATER POOL LIGHT GFCI CIRCUITS AND PROVIDE LETTER TO OWNER/DSA UPON SUCCESSFUL TEST.
 - SEAL CONDUIT OPENING IN LIGHT NICHE WITH SILICON CAULKING AFTER LIGHT IS INSTALLED.
 - 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.



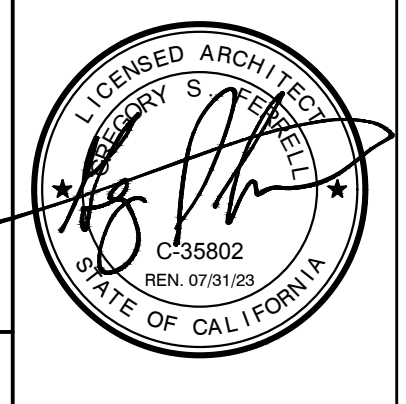
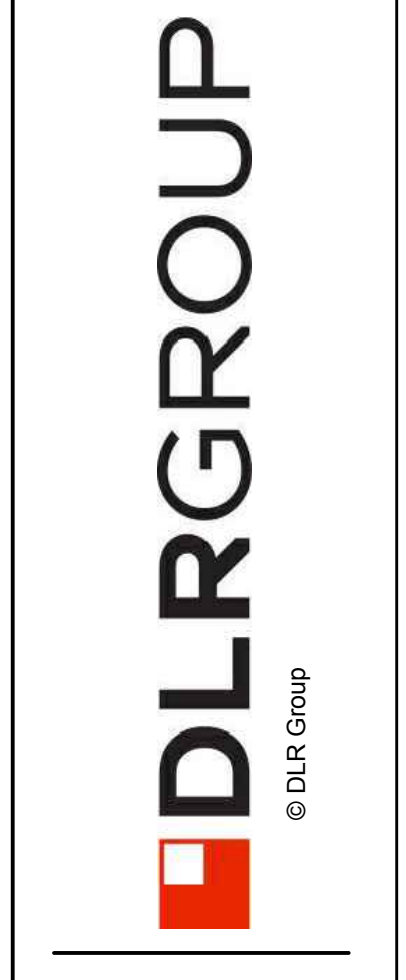
5 UNDERWATER LIGHT JUNCTION BOX CONCRETE SURROUND DETAIL 1\"/>



6 TIMING SYSTEM WALL PLATE CONCRETE SURROUND DETAIL 1\"/>



7 TITANIUM DECK PLATE DETAIL (LOCATED UNDER RACING PLATFORM) NO SCALE



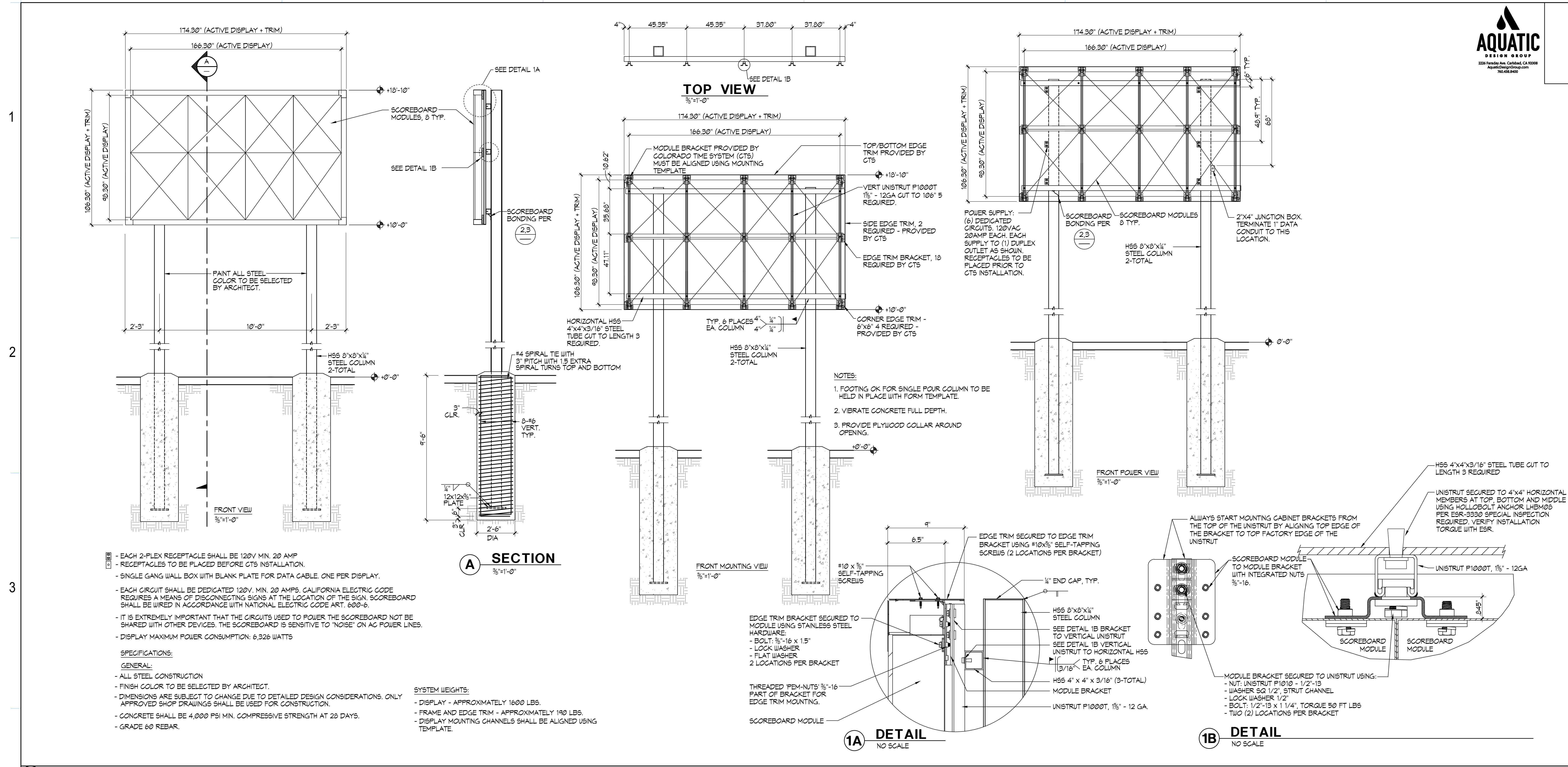
COVINA VALLEY HS POOL REPLACEMENT
 COVINA VALLEY UNIFIED SCHOOL DISTRICT
 483 SOUTH HOLLENBECK AVENUE COVINA, CA 91723

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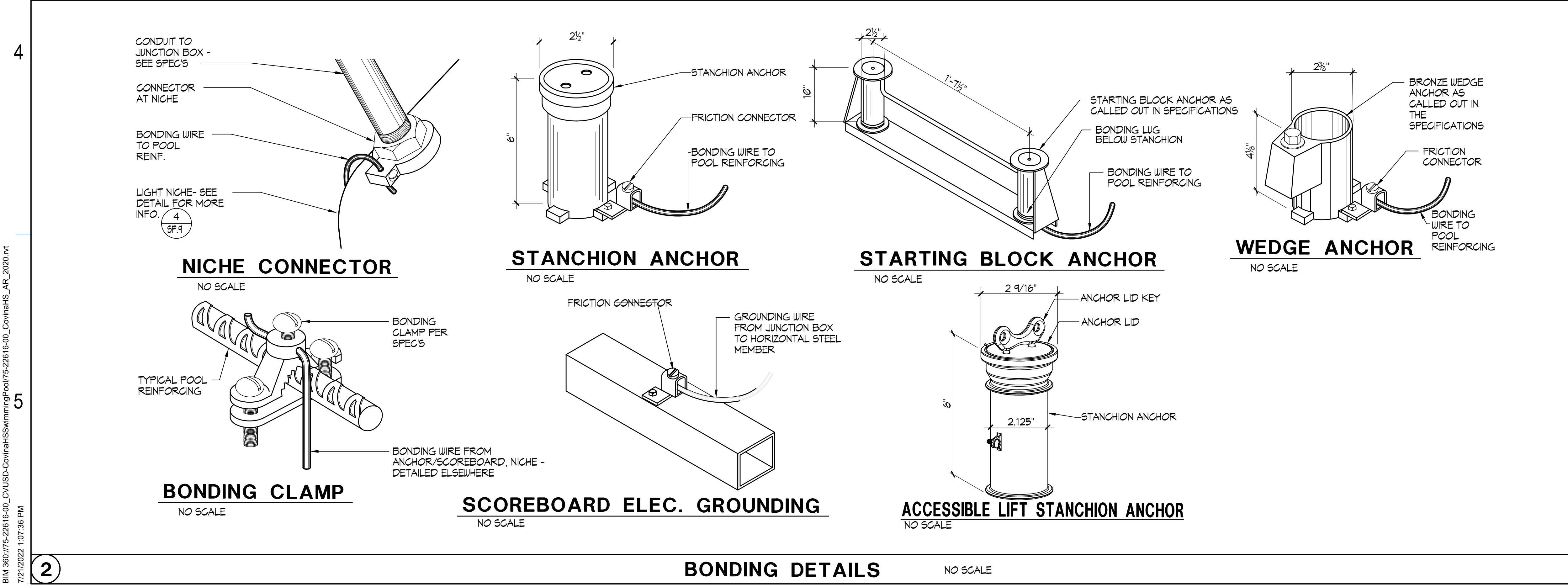
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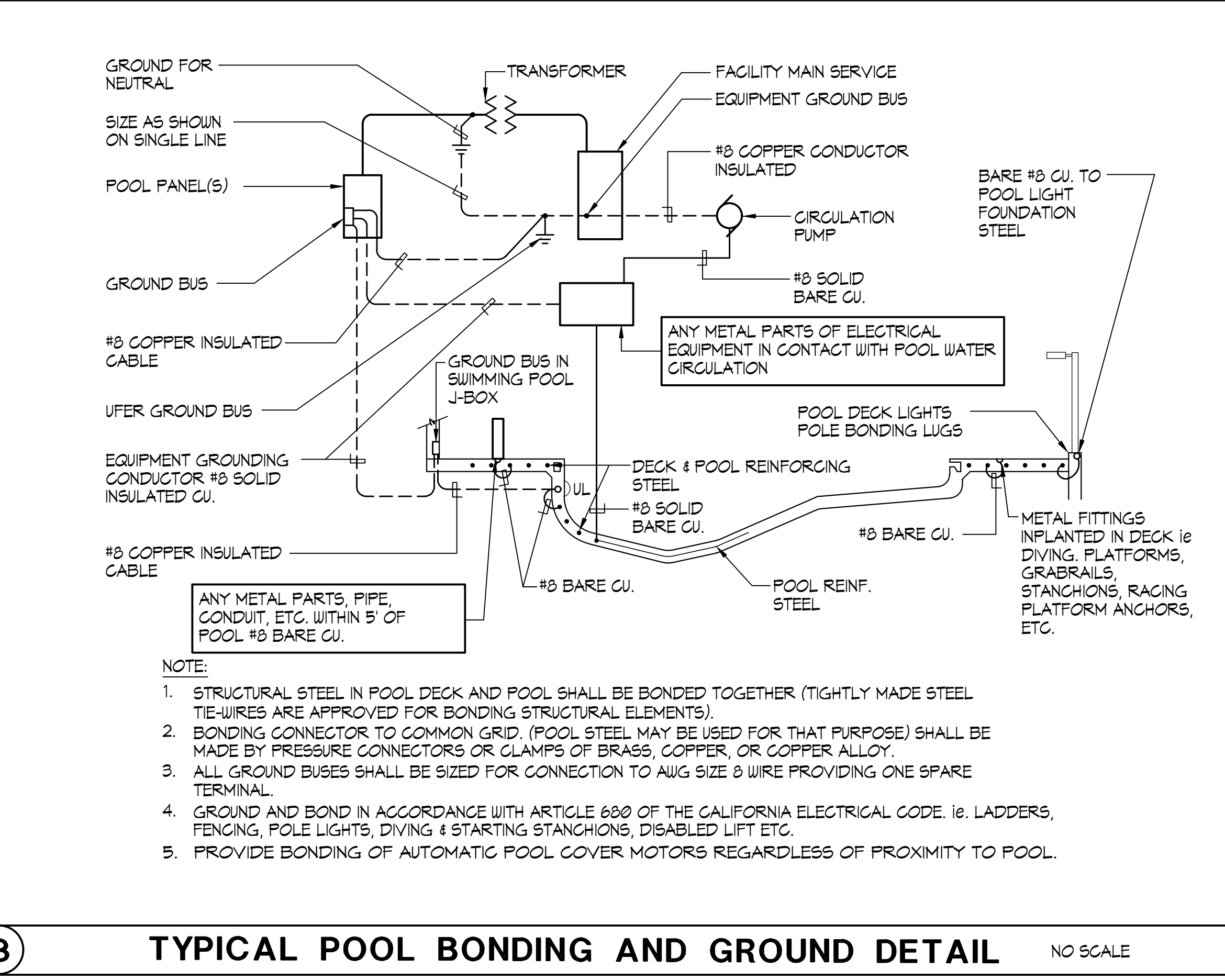
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SCOREBOARD DETAILS AS NOTED

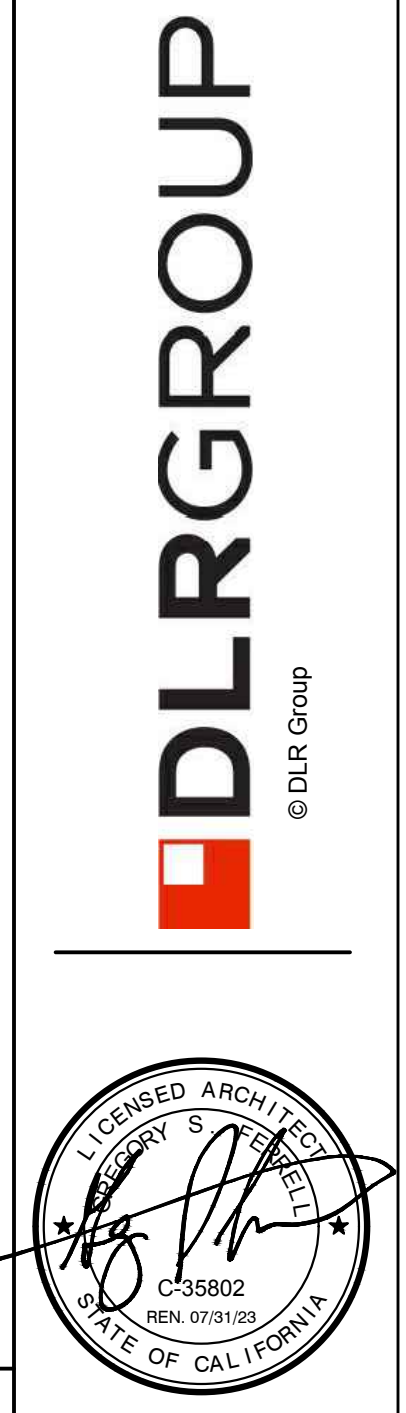
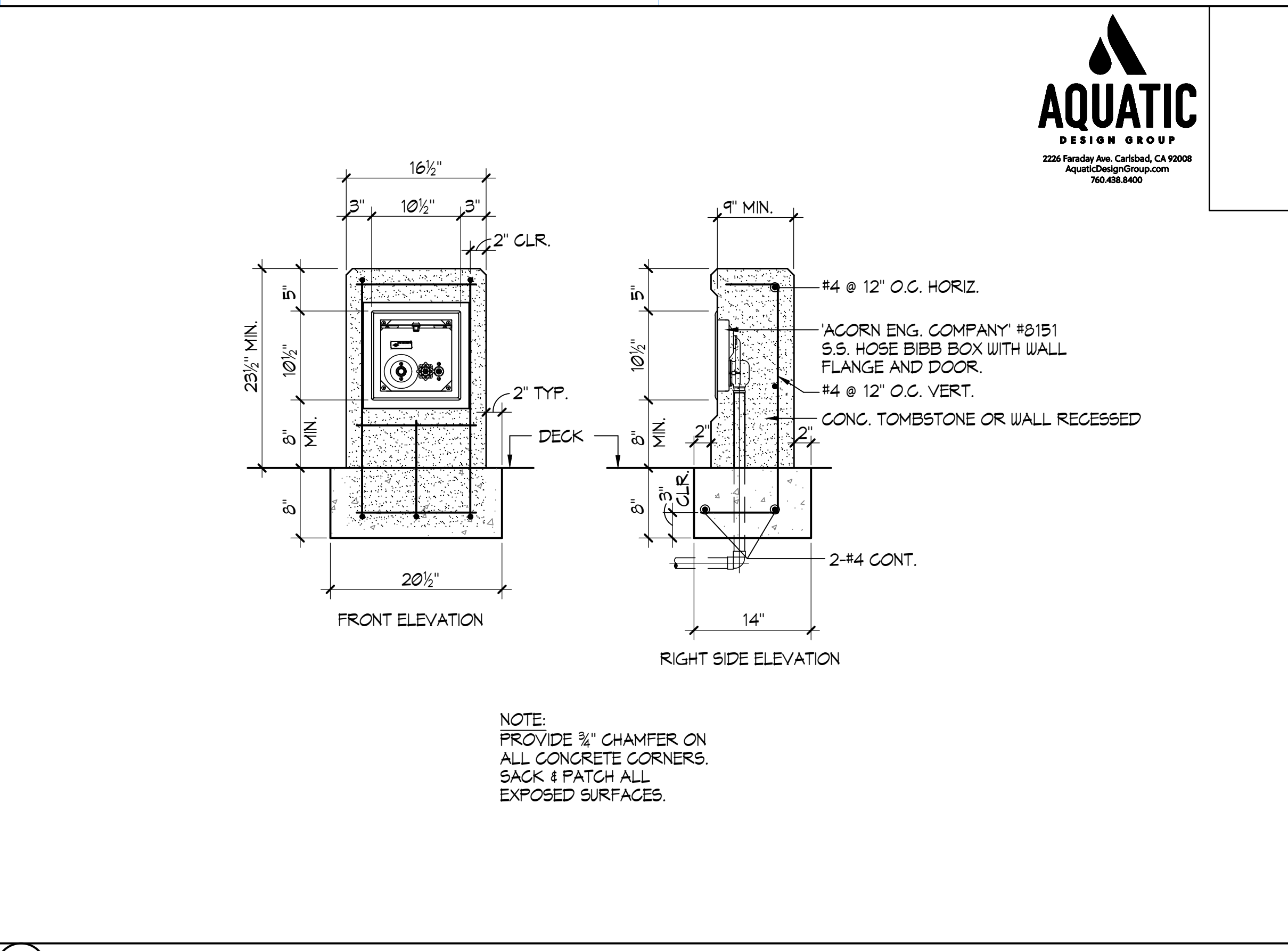
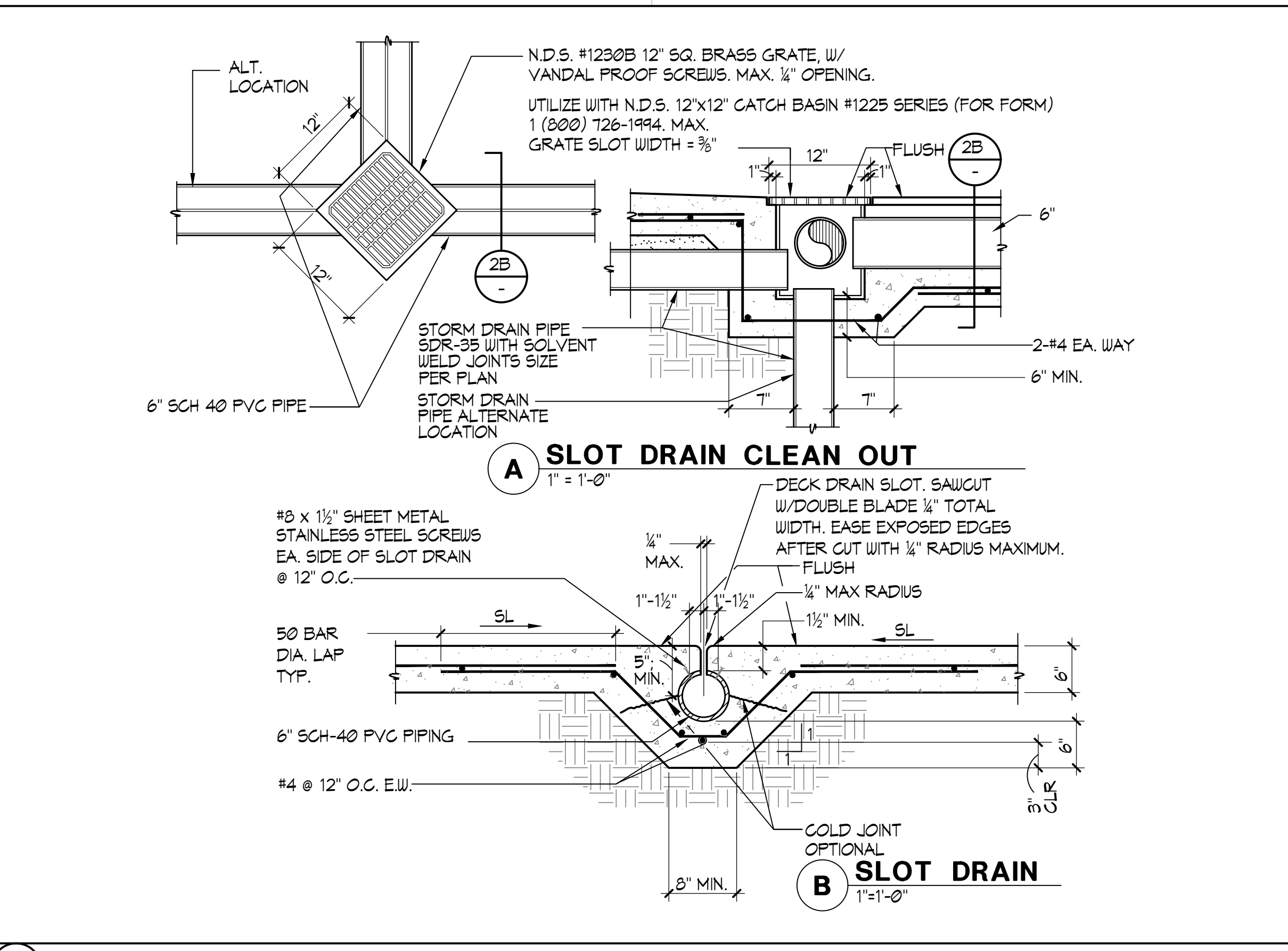
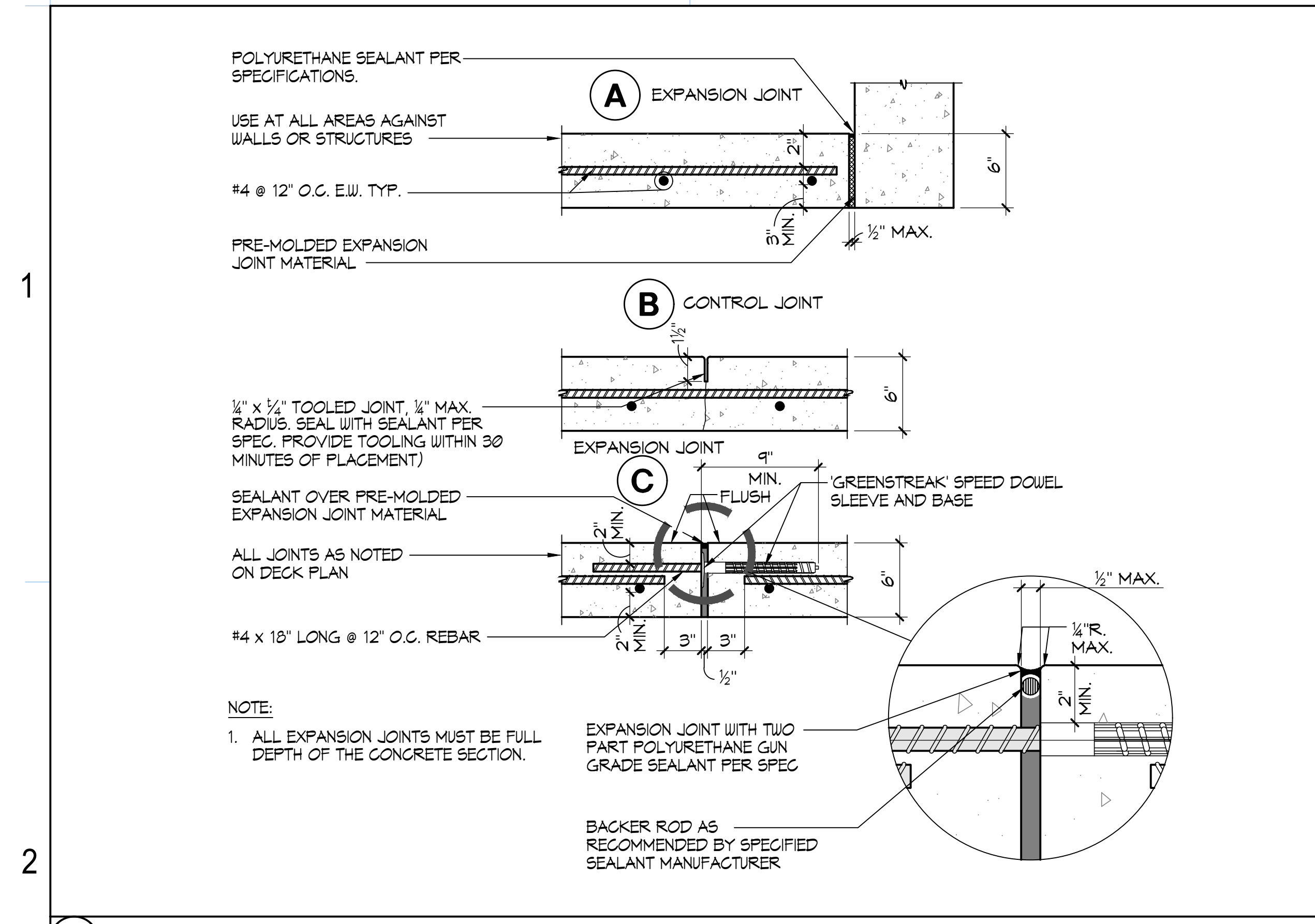


BONDING DETAILS NO SCALE



TYPICAL POOL BONDING AND GROUND DETAIL NO SCALE

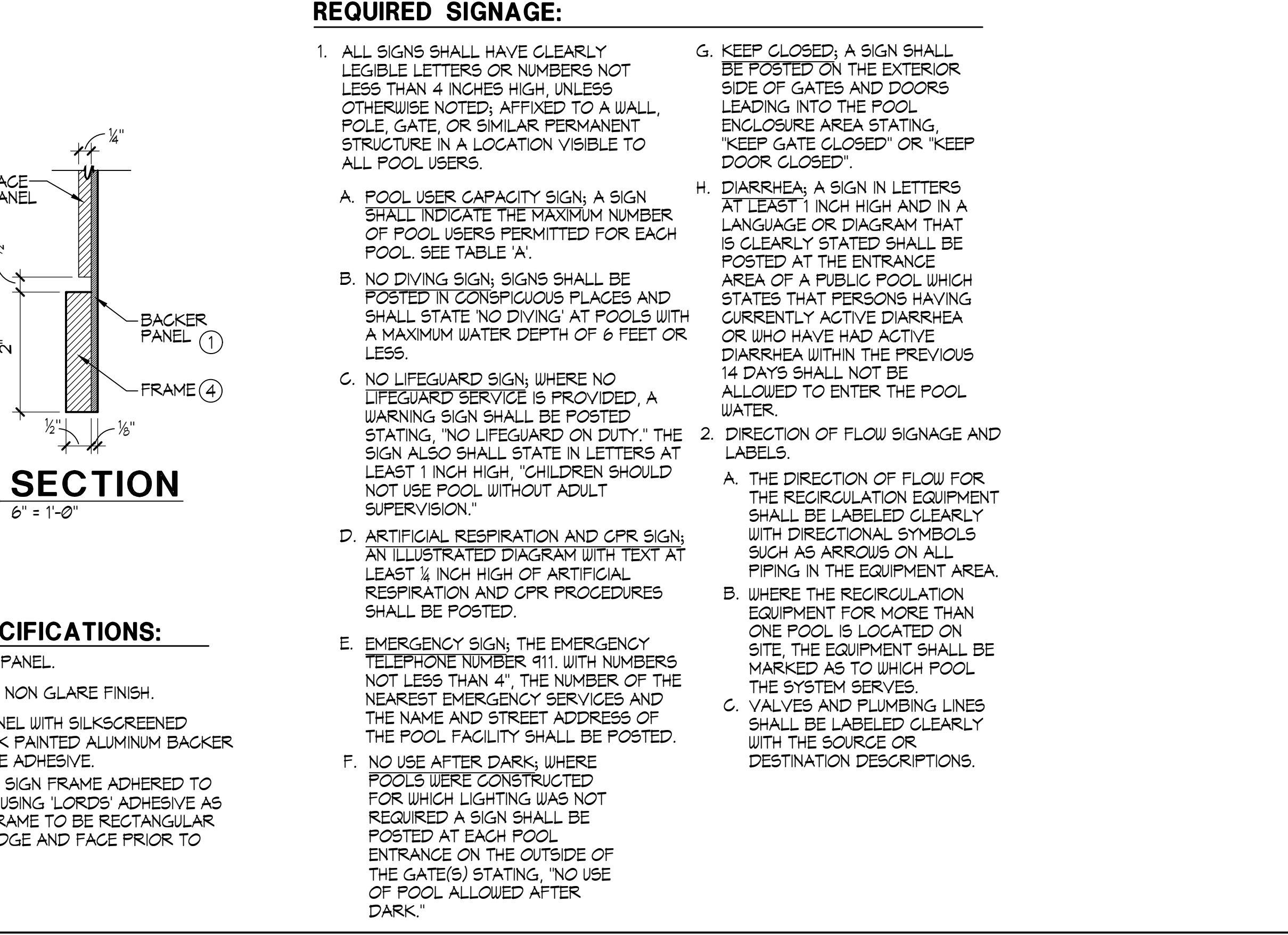
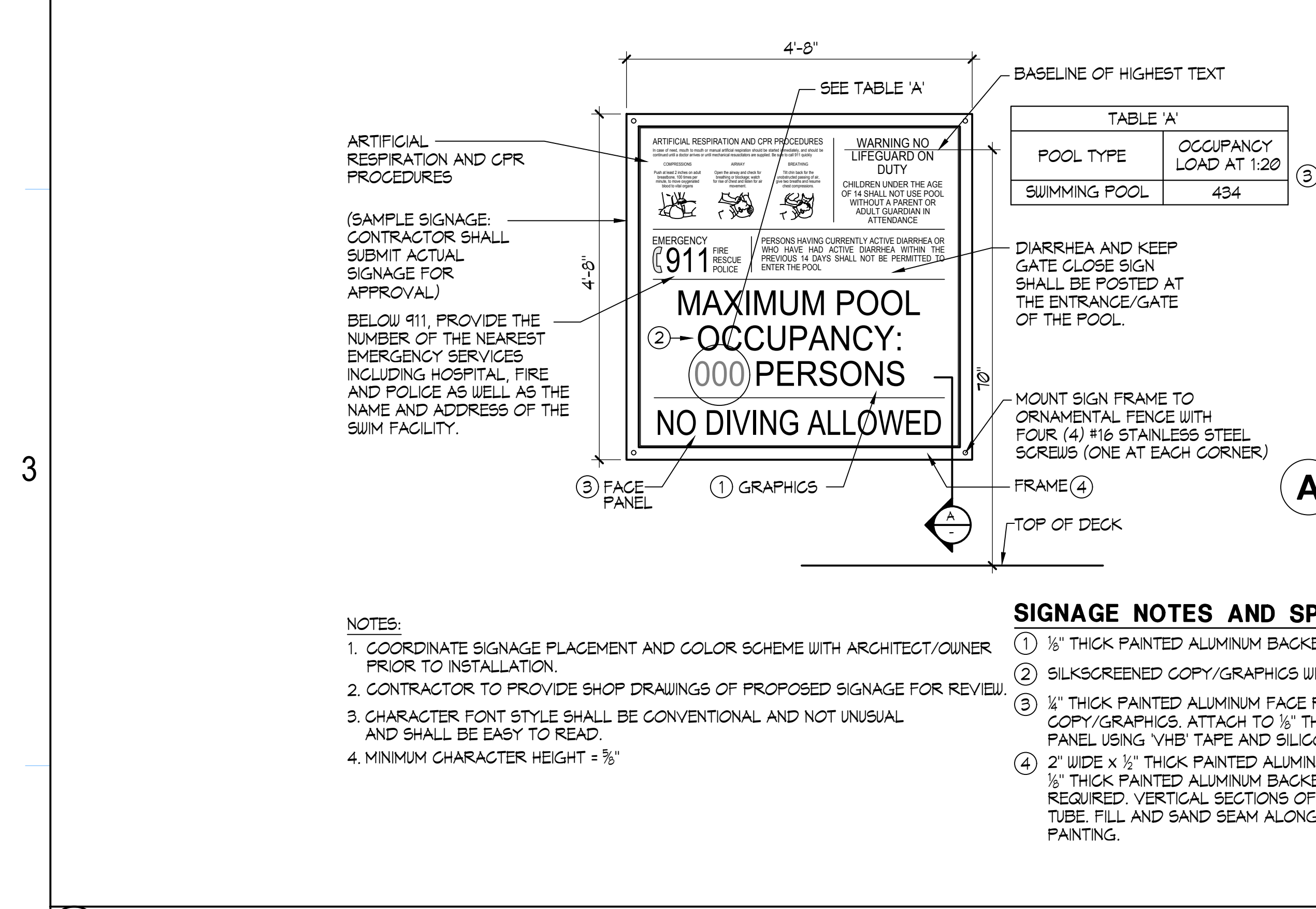
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1 CONCRETE DECK JOINT DETAILS 1/2" x 1'-0"

2 SLOT DRAIN 1' x 1'-0"

3 HOSE BIBB 1' x 1'-0"



4 POOL SIGNAGE DETAIL 1/2" x 1'-0"

5 DECK AREA DRAIN 1/2" x 1"



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REVISIONS

75-22616-00
DSA # 03-122700
DSA FILE # 154-18
DETAILS

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EQUIPMENT LIST

- 1 SWIMMING POOL STRAINER: MER-MADE F.O. SERIES FRP REDUCING BASKET STRAINER. ONE (1) 10"x8" STANDARD, WITH ACRYLIC LID AND TWO (2) STAINLESS STEEL STRAINERS EA. (150 lbs.)
2 SWIMMING POOL CIRCULATION PUMP: PACO #6015-7, 6"x8"x15" TYPE LC END SUCTION CENTRIFUGAL PUMP, 1150 RPM 460V, 3PH, 30HP, RATED AT 1,240 GPM @ 60 FT. TDH...

THREE PHASE MOTOR LOADS AT 460V
SWIMMING POOL CIRCULATION PUMP: 30 HP @ 460V = 40 AMPS

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.

LEGEND

- BV = BALL VALVE
BFV = BUTTERFLY VALVE
CV = CHECK VALVE
FM = FLOWMETER
BW = BACKWASH
FS = FLOOR SINK
AI = ACID INJECTION
CI = CHLORINE INJECTION
PH / PS = PIPE HANGER / PIPE SUPPORT
FG / VG = VACUUM / PRESSURE GAUGE
FD = FLOOR DRAIN
RPBFP = REDUCED PRESSURE BACKFLOW PREVENTOR
A.F.F. = ABOVE FINISHED FLOOR
CO2I = CO2 INJECTION

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.

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 2019 CBC, SECTIONS 1617A.1.24, 1617A.1.25, 1617A.1.26.

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

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 2019 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 200 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.

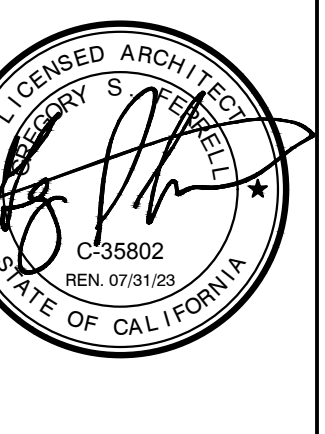
MECHANICAL ANCHORAGE

- 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 DRILL AND THE ABANDONED HOLE. FILL THE ABANDONED HOLE WITH NON-SHRINK GROUT WITH COMPRESSIVE STRENGTH EQUAL TO OR GREATER THAN BASE MATERIAL. IF THE ANCHOR OR DOVEL MAY NOT BE SHIFTED AS NOTED ABOVE, THE STRUCTURAL ENGINEER WILL DETERMINE A NEW LOCATION.

WEDGE, EXPANSION OR ADHESIVE ANCHOR EMBEDMENT DEPTH AND TEST LOAD

Table with columns: SIZE, MIN. EMBED, HILTI KB TZ 2 (65) ANCHORS IN CONCRETE (TENSION LOAD (LBS)/TORQUE LOAD (FT-LBS)), KB TZ 2 (65) ANCHORS IN CMU (TENSION LOAD (LBS)/TORQUE LOAD (FT-LBS)), HILTI HIT-HY 200 ADHESIVE ANCHORS IN CONCRETE (MIN. EMBED/PULL TEST LOAD (LBS)/TORQUE LOAD (FT-LBS)).

MECHANICAL ROOM LAYOUT PLAN 1/8"=1'-0"

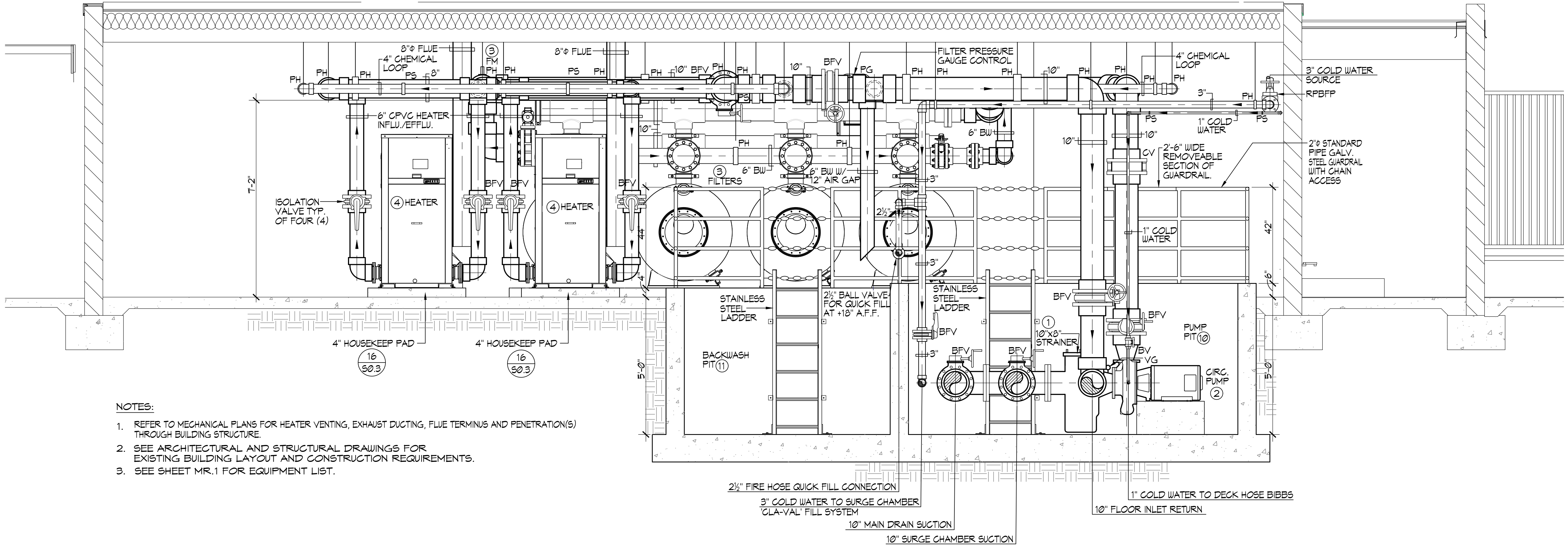
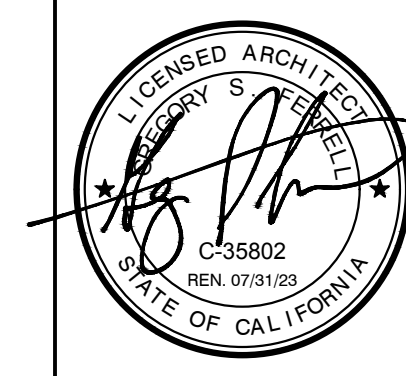


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75-22616-00
DSA #03-122700
DSA FILE # 15148
MECHANICAL ROOM LAYOUT PLAN

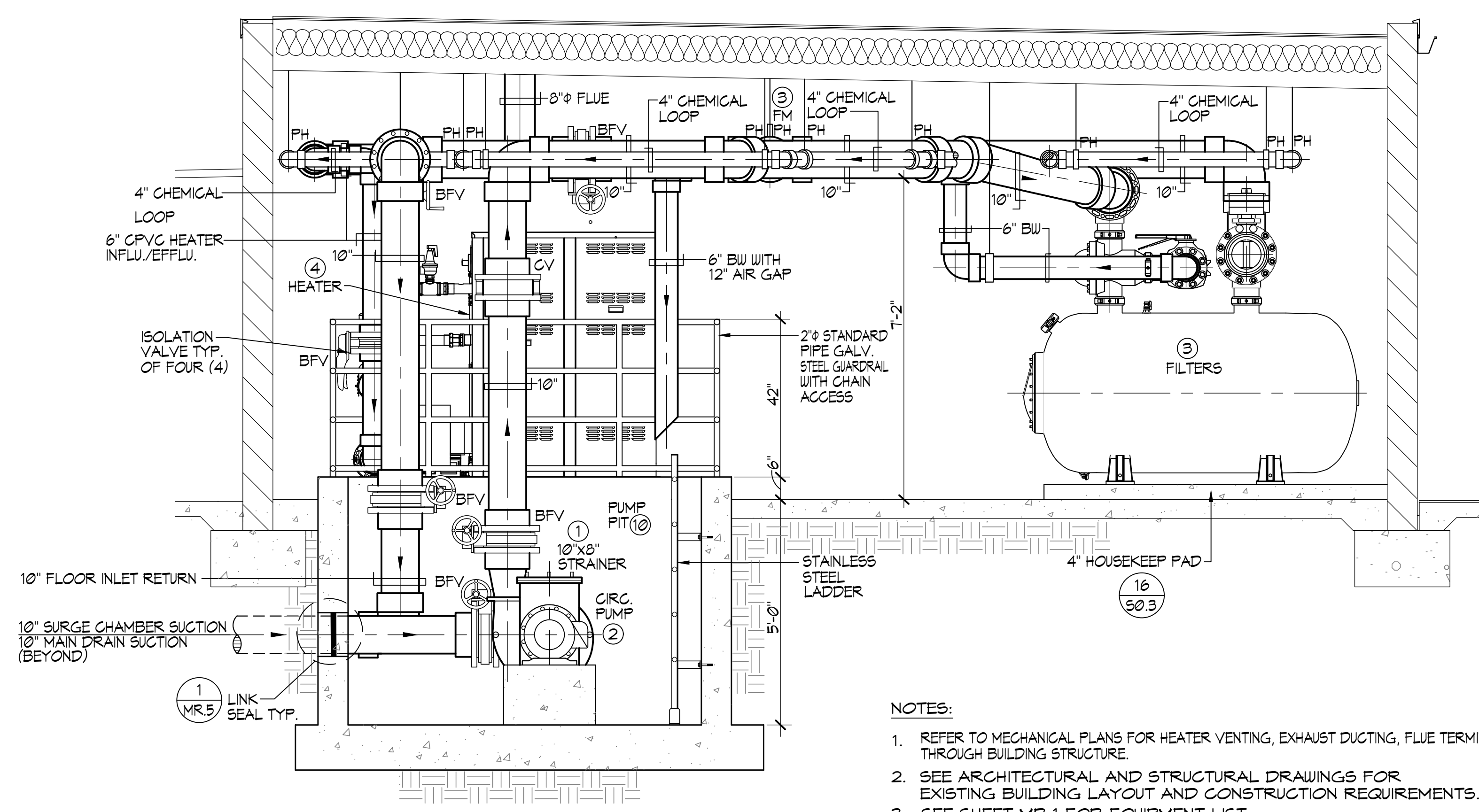
MR.1



- NOTES:**
1. REFER TO MECHANICAL PLANS FOR HEATER VENTING, EXHAUST DUCTING, FLUE TERMINUS AND PENETRATION(S) THROUGH BUILDING STRUCTURE
 2. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR EXISTING BUILDING LAYOUT AND CONSTRUCTION REQUIREMENTS.
 3. SEE SHEET MR.1 FOR EQUIPMENT LIST.

MECHANICAL ROOM SECTION

1/2"=1'-0"

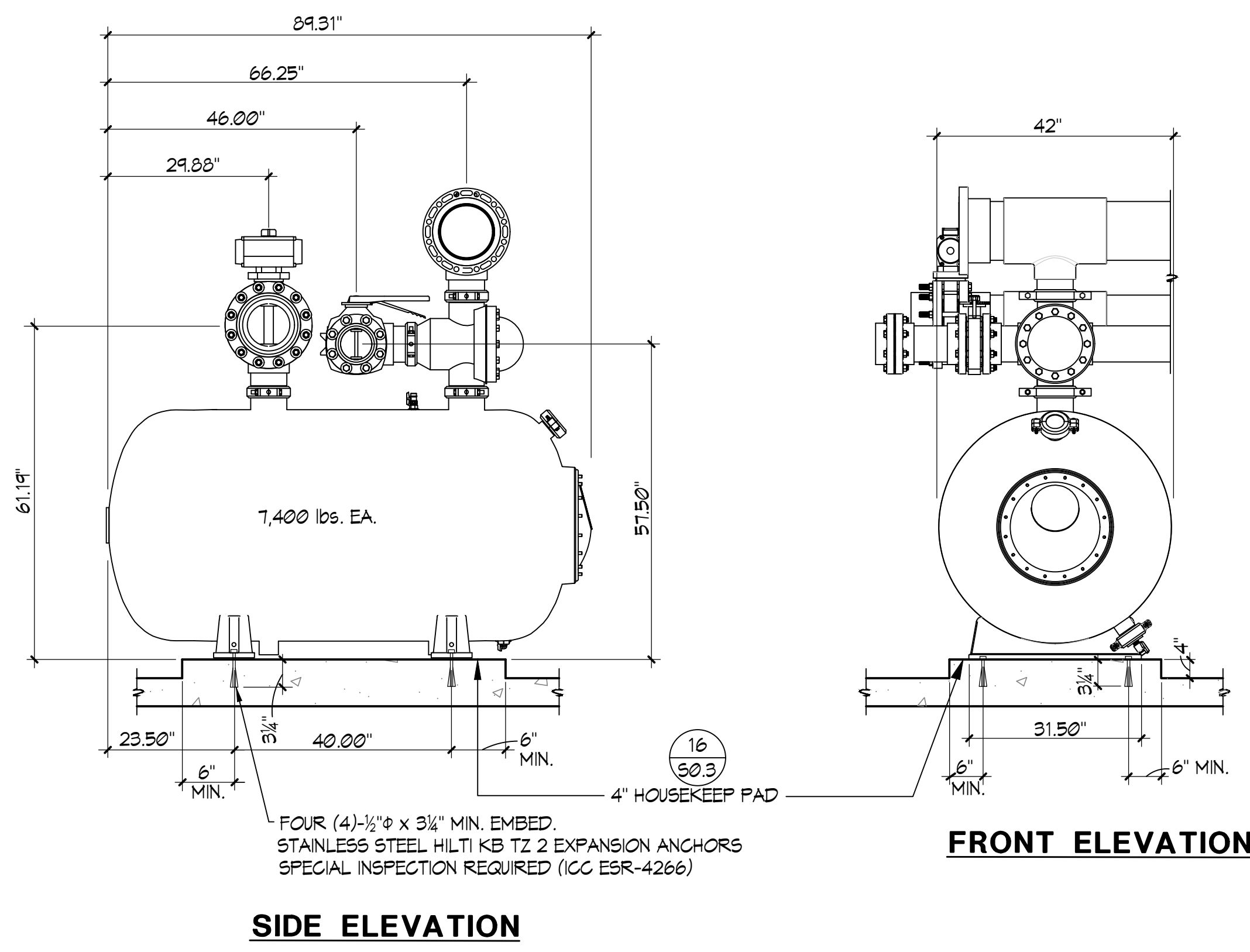


- NOTES:**
1. REFER TO MECHANICAL PLANS FOR HEATER VENTING, EXHAUST DUCTING, FLUE TERMINUS AND PENETRATION(S) THROUGH BUILDING STRUCTURE
 2. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR EXISTING BUILDING LAYOUT AND CONSTRUCTION REQUIREMENTS.
 3. SEE SHEET MR.1 FOR EQUIPMENT LIST.

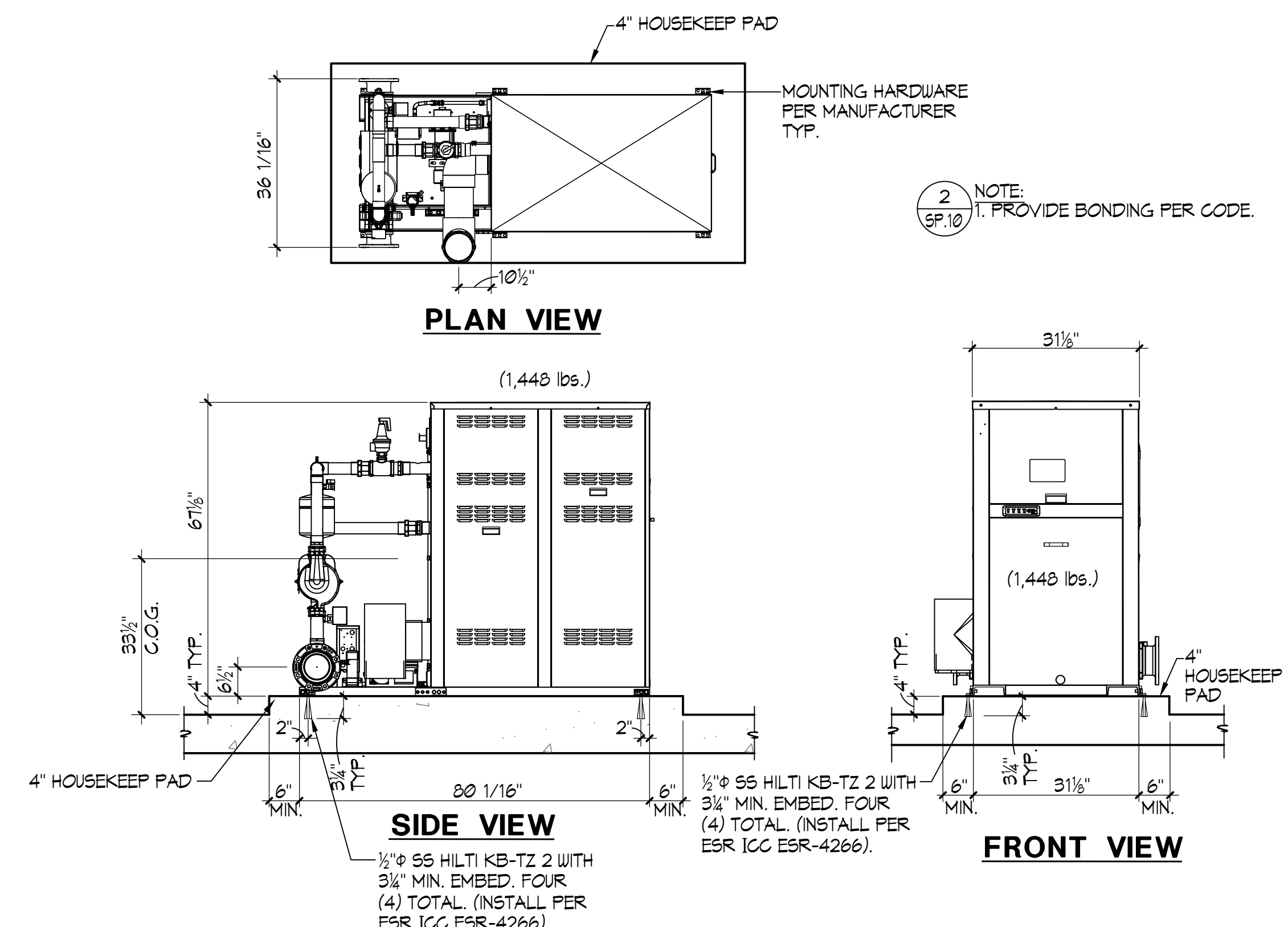
MECHANICAL ROOM SECTION

1/2"=1'-0"

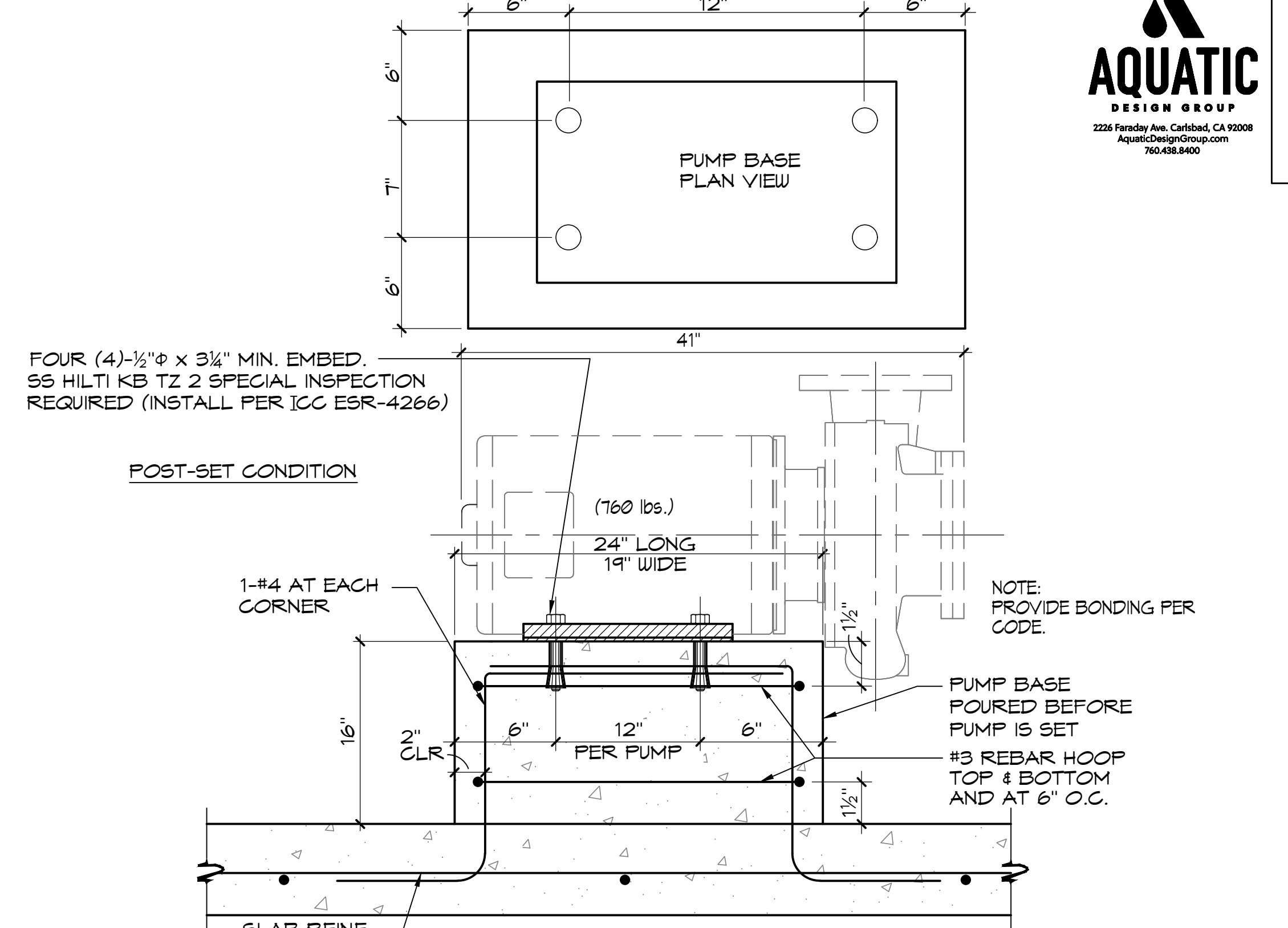
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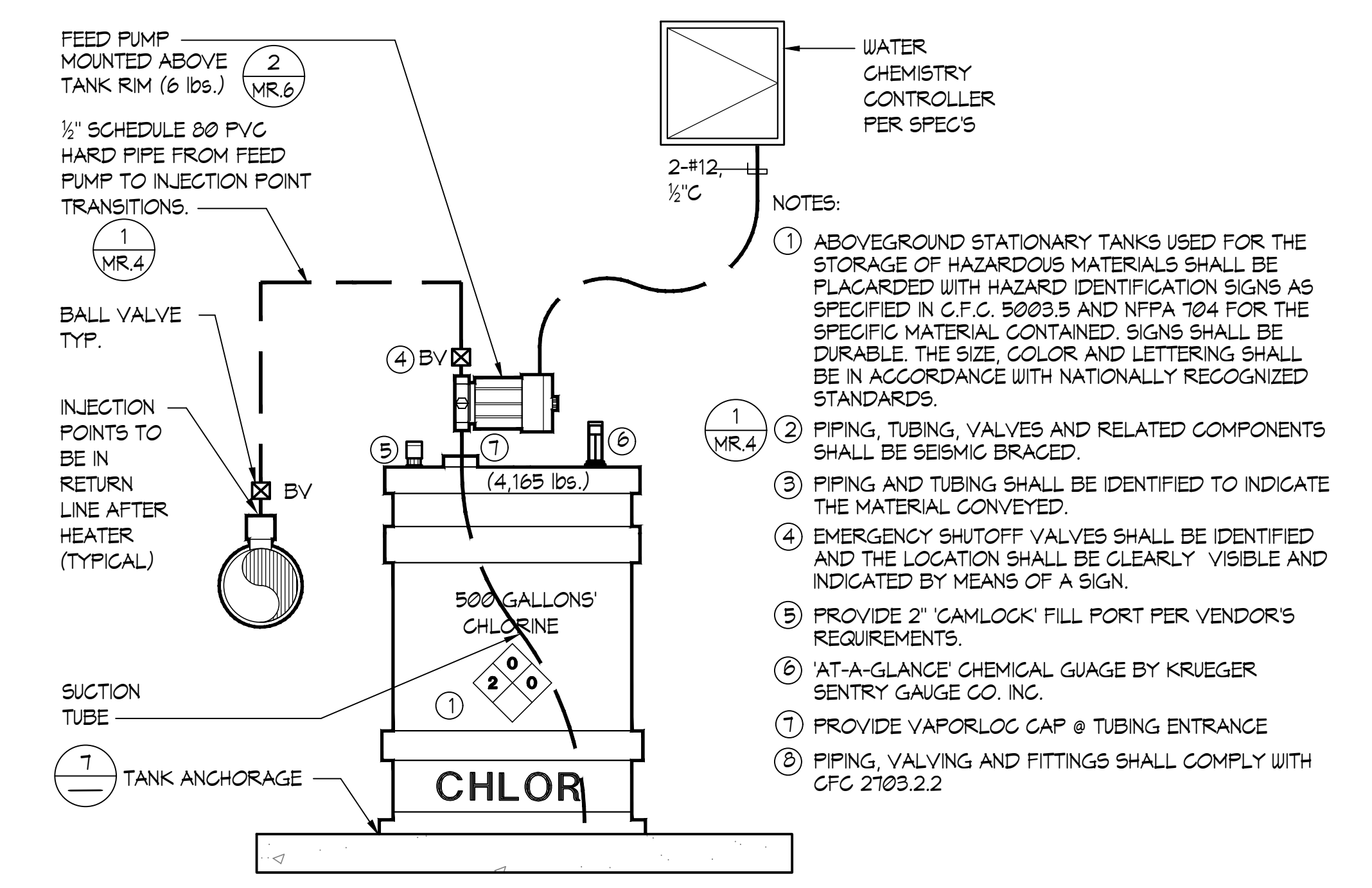
1 FILTER ANCHORAGE NO SCALE



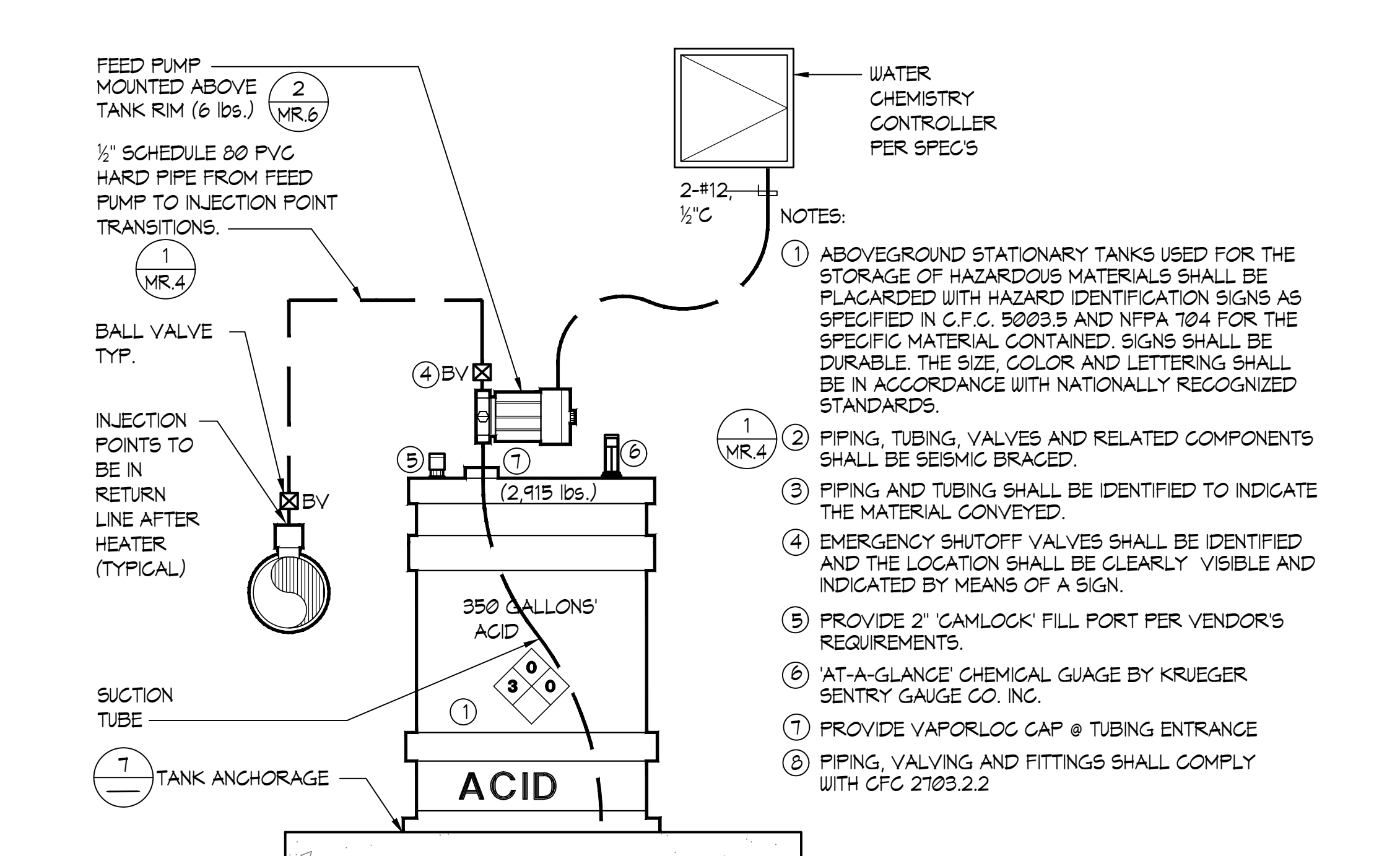
2 HEATER ANCHORAGE NO SCALE



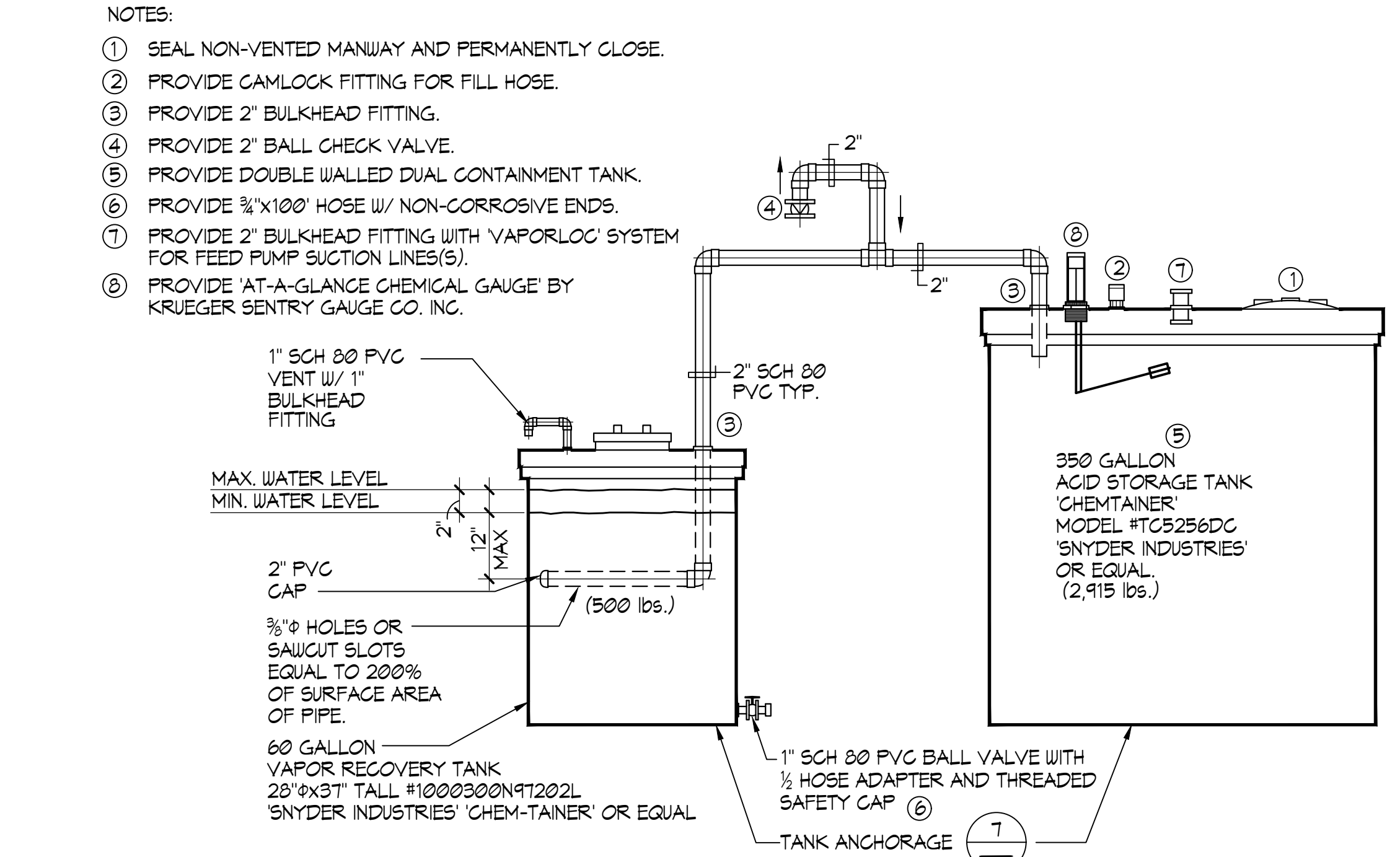
3 PUMP ANCHORAGE NO SCALE



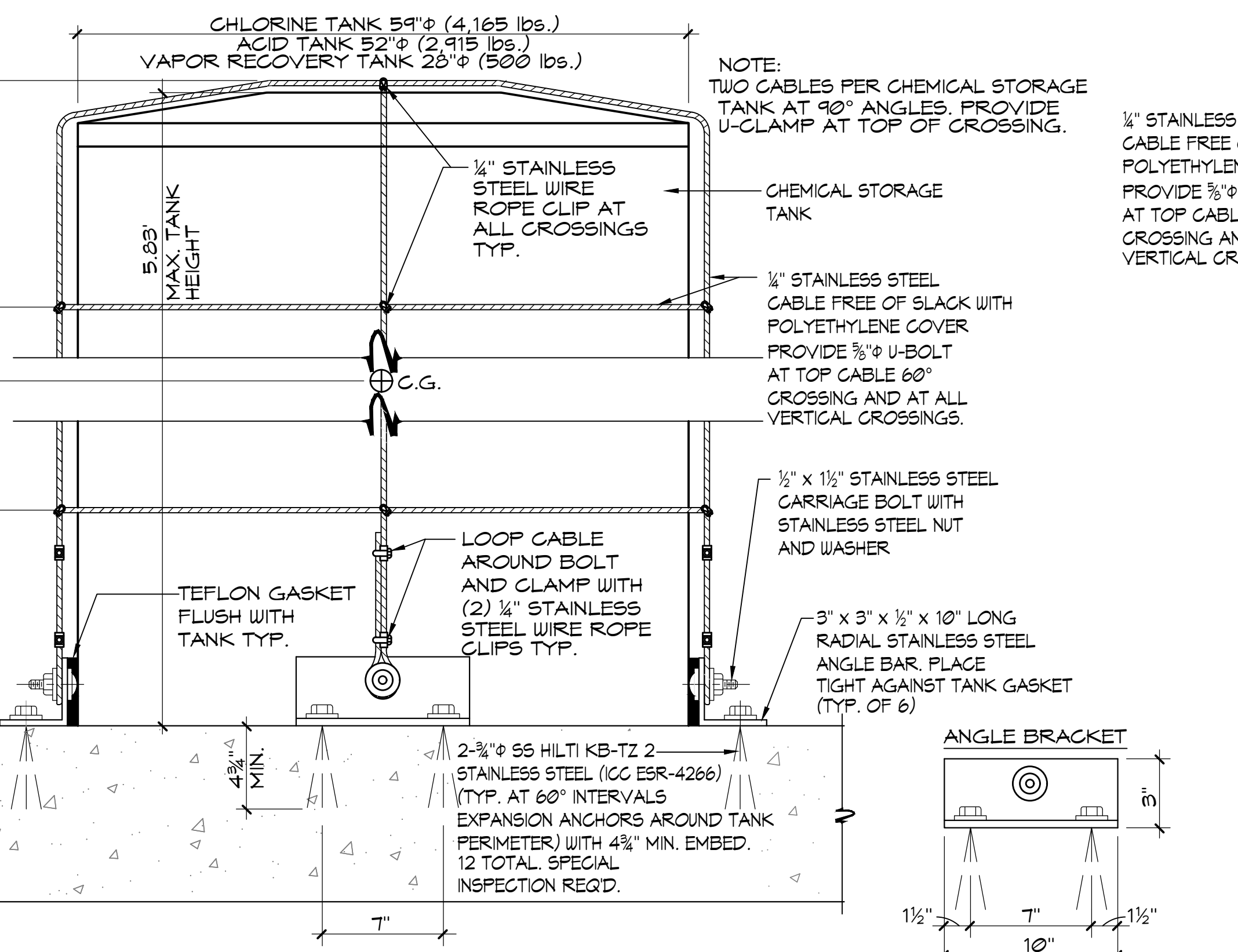
4 SODIUM HYPOCHLORITE FEED SCHEMATIC NO SCALE



5 MURIATIC ACID FEED SCHEMATIC NO SCALE



6 VAPOR RECOVERY TANK 1/16"-1-0"



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

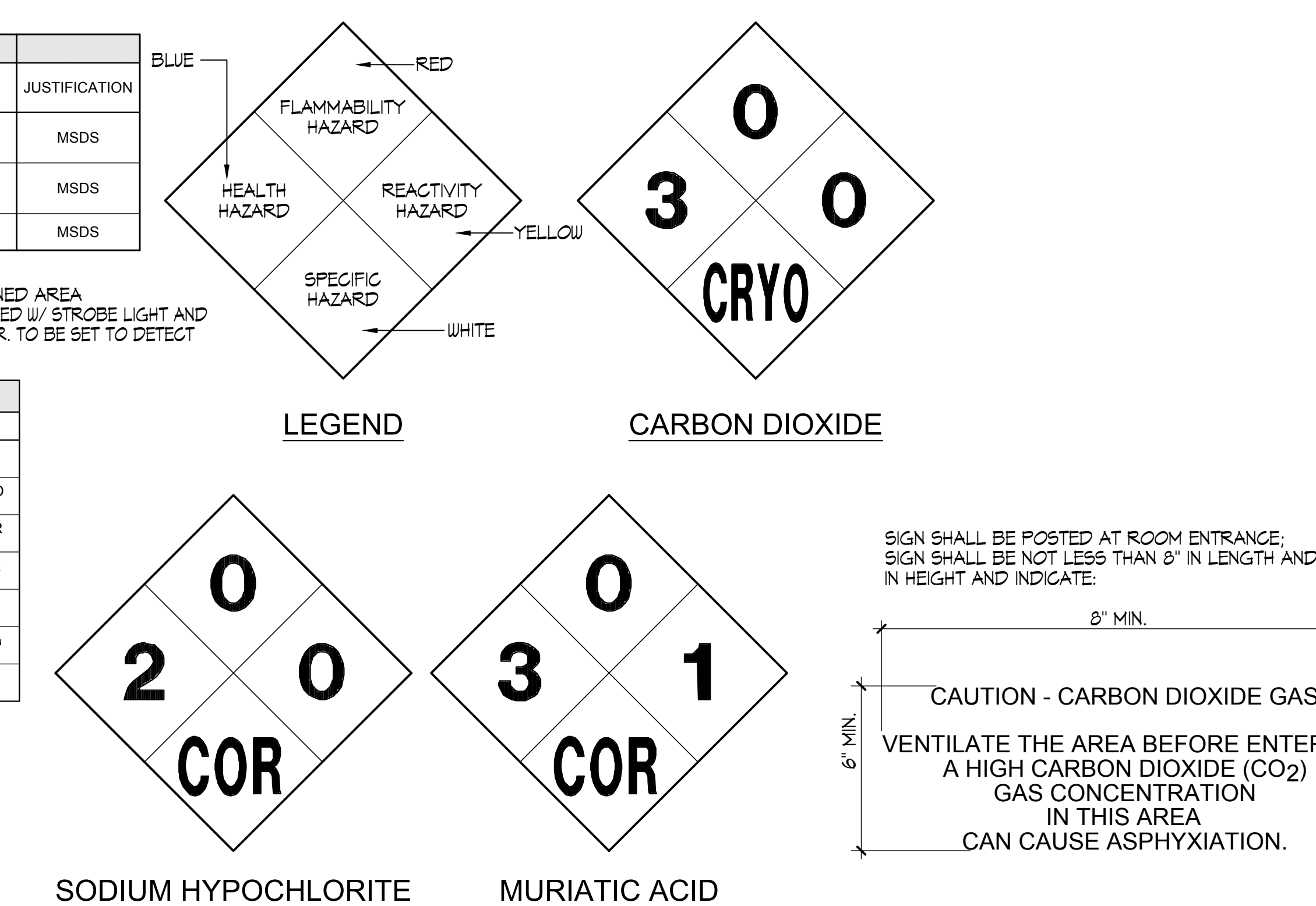
CHEMICAL CLASSIFICATION TABLE										
COMMON NAME	CHEMICAL NAME	% COMP.	CAS #	FORM	QUANT. STORED (NOT USED)	QUANT. IN USE (USE-CLOSED)	MAXIMUM ALLOWABLE QUANTITY	LOCATION (STORAGE & USE)	HAZ CLASSES	JUSTIFICATION
SODIUM HYPOCHLORITE	SODIUM HYPOCHLORITE	12.5%	7681-52-9	LIQUID	0 GAL.	2 @ 500 GAL.	1,000 GAL (SPRINKLED)	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	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 1.12.2(b) OF THE NFPA-1. 6,000 FT³ ALLOWABLE OR 686 lbs. STORAGE PER CONTAINED AREA. PROVIDE HARD WIRED CO₂ DETECTOR ANALOG SENSOR TECHNOLOGY MODEL #471 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 10"-16 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 CO₂.

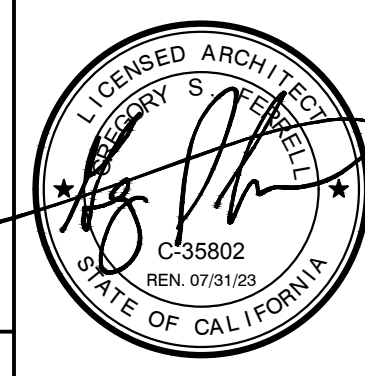
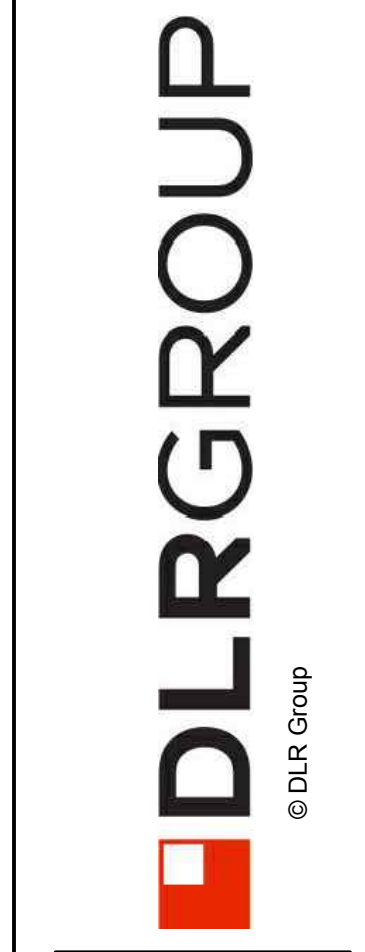
RATING EXPLANATION GUIDE				
RATING	HEALTH HAZARD	FLAMMABILITY HAZARD	REACTIVITY HAZARD	SPECIFIC HAZARD
4	CAN BE LETHAL	EXTREMELY FLAMMABLE. IGNITES AT BELOW 73° F.	MAY EXPLODE AT NORMAL TEMPERATURES AND PRESSURES	OXIDIZER: OX ACID: ACID
3	CAN CAUSE SERIOUS OR PERMANENT INJURY	IGNITES AT ABOVE 73° F. 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: ☸ POLYMERIZES: P
0	NO HAZARD	WILL NOT BURN	STABLE	

NOTES:
1. CONFIRM SIGNAGE WITH LOCAL FIRE MARSHALL AND/OR BUILDING CODES PRIOR TO INSTALLATION. SIGNS SHALL CONFORM TO NFPA 104.
2. SIGNS SHALL BE SIZES AND COLORS PER CODE MOUNTED AT 48" A.F.F. ON DOORS AT CHEMICAL ROOMS.

8 HAZARDOUS INFORMATION SIGNAGE NO SCALE



SODIUM HYPOCHLORITE MURIATIC ACID

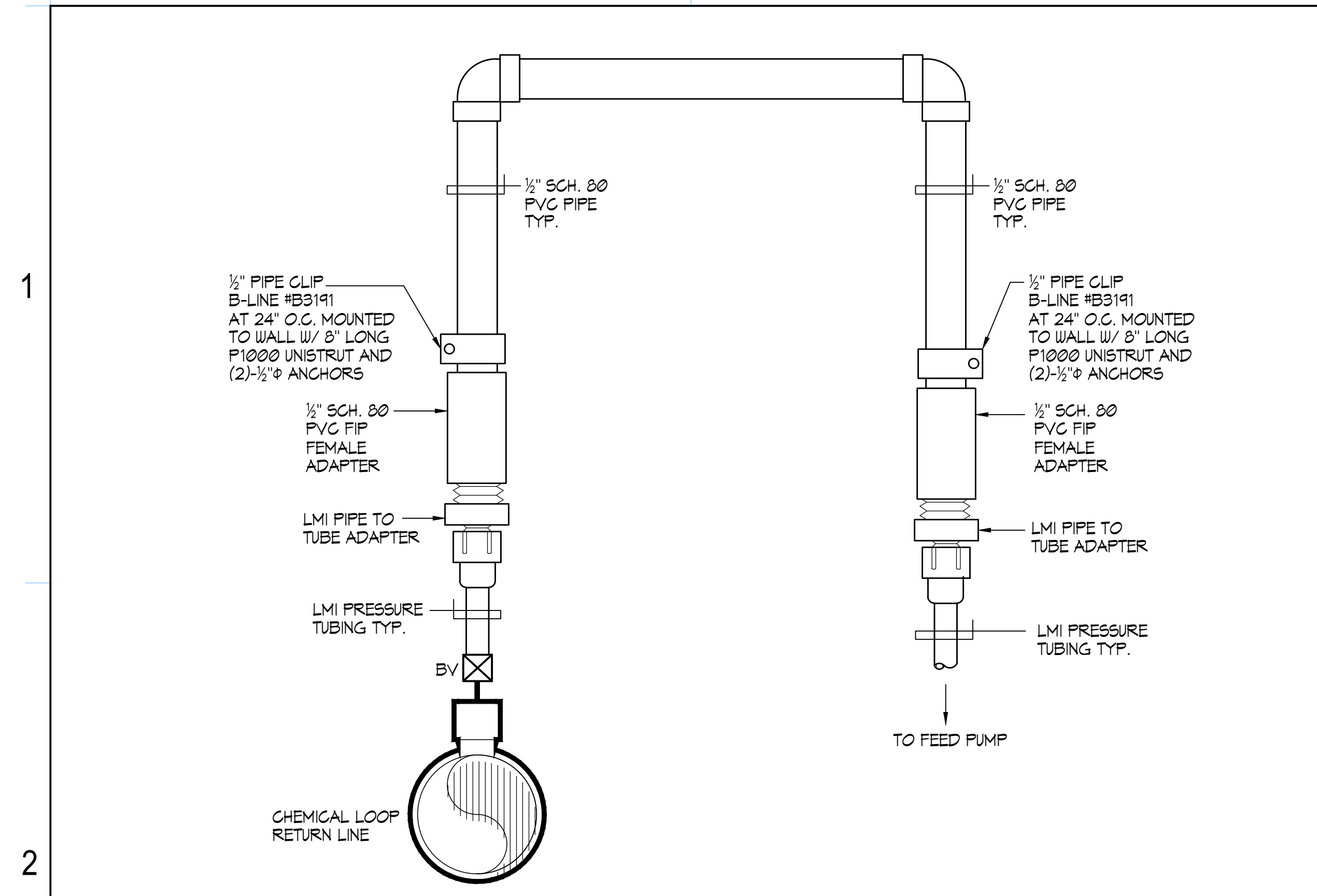


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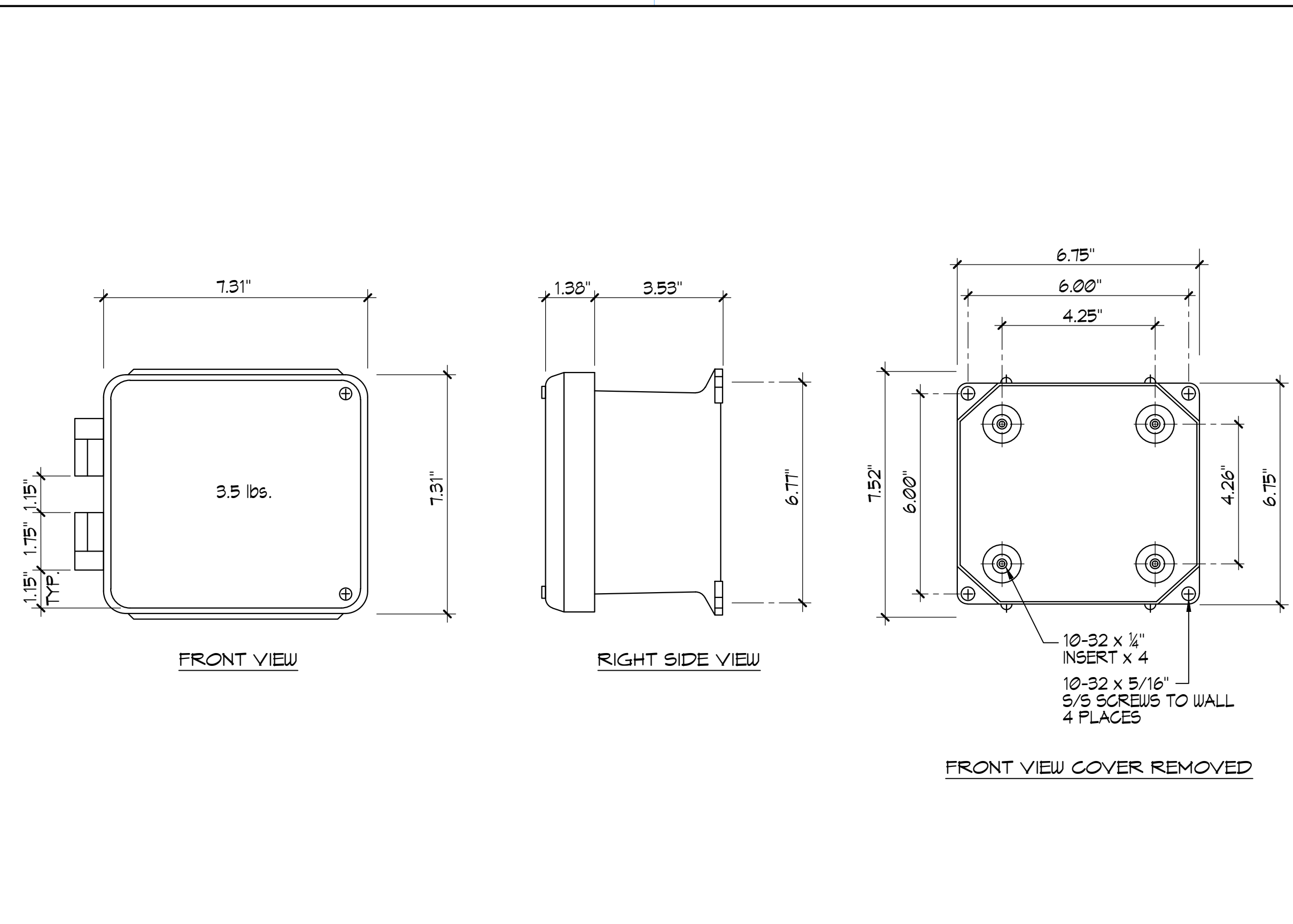
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DSA A# 03-122700
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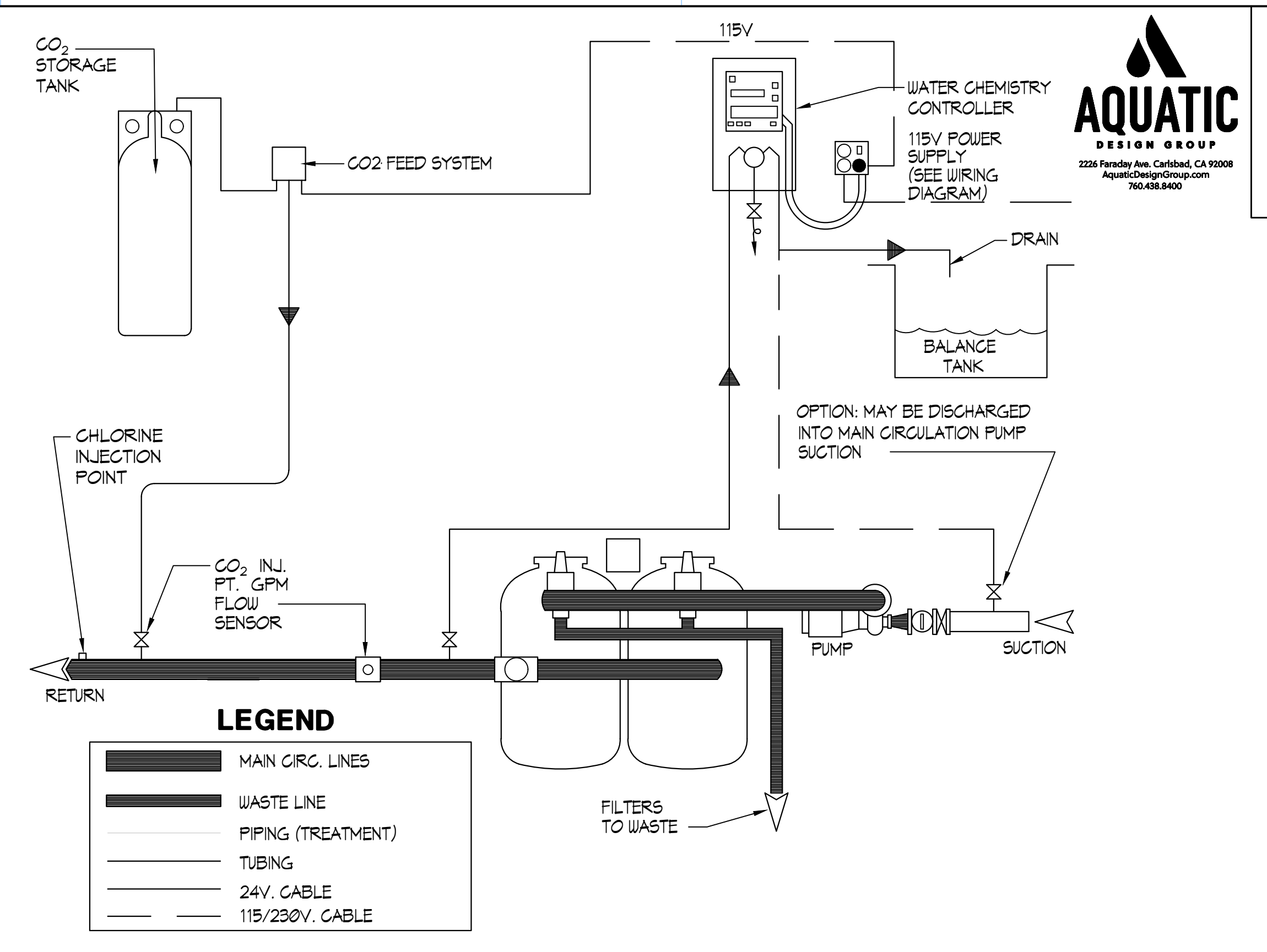
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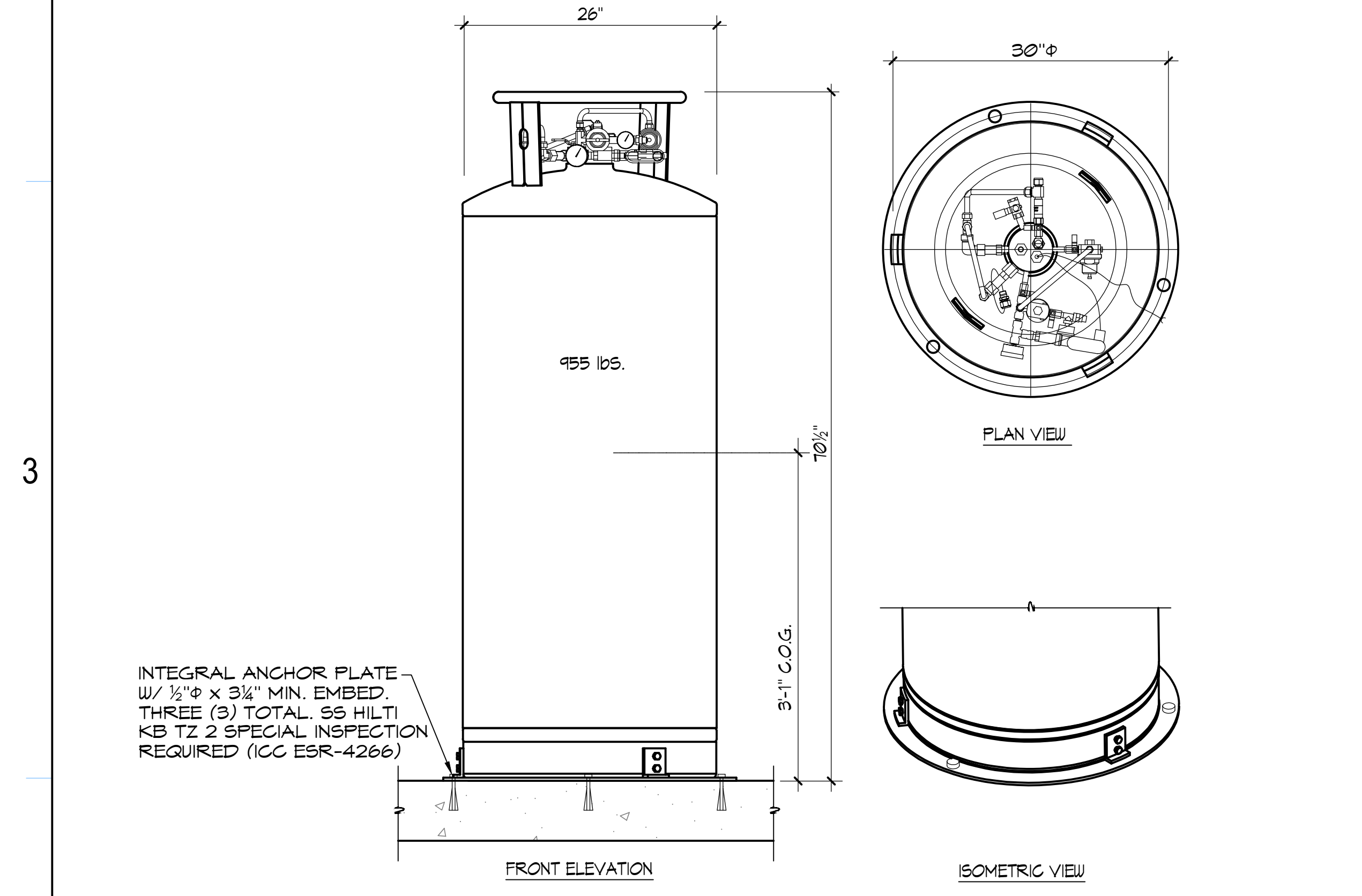
1 CHEMICAL FEED PIPING DETAIL NO SCALE



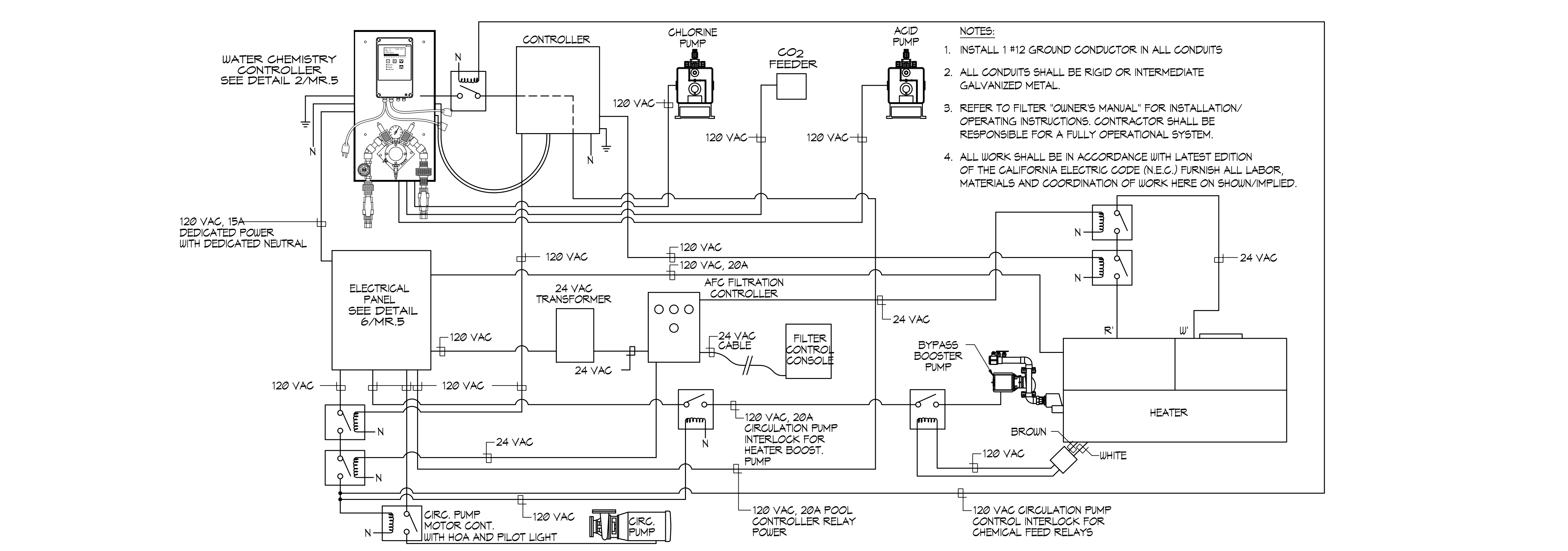
2 CARBON DIOXIDE FEED SYSTEM NO SCALE



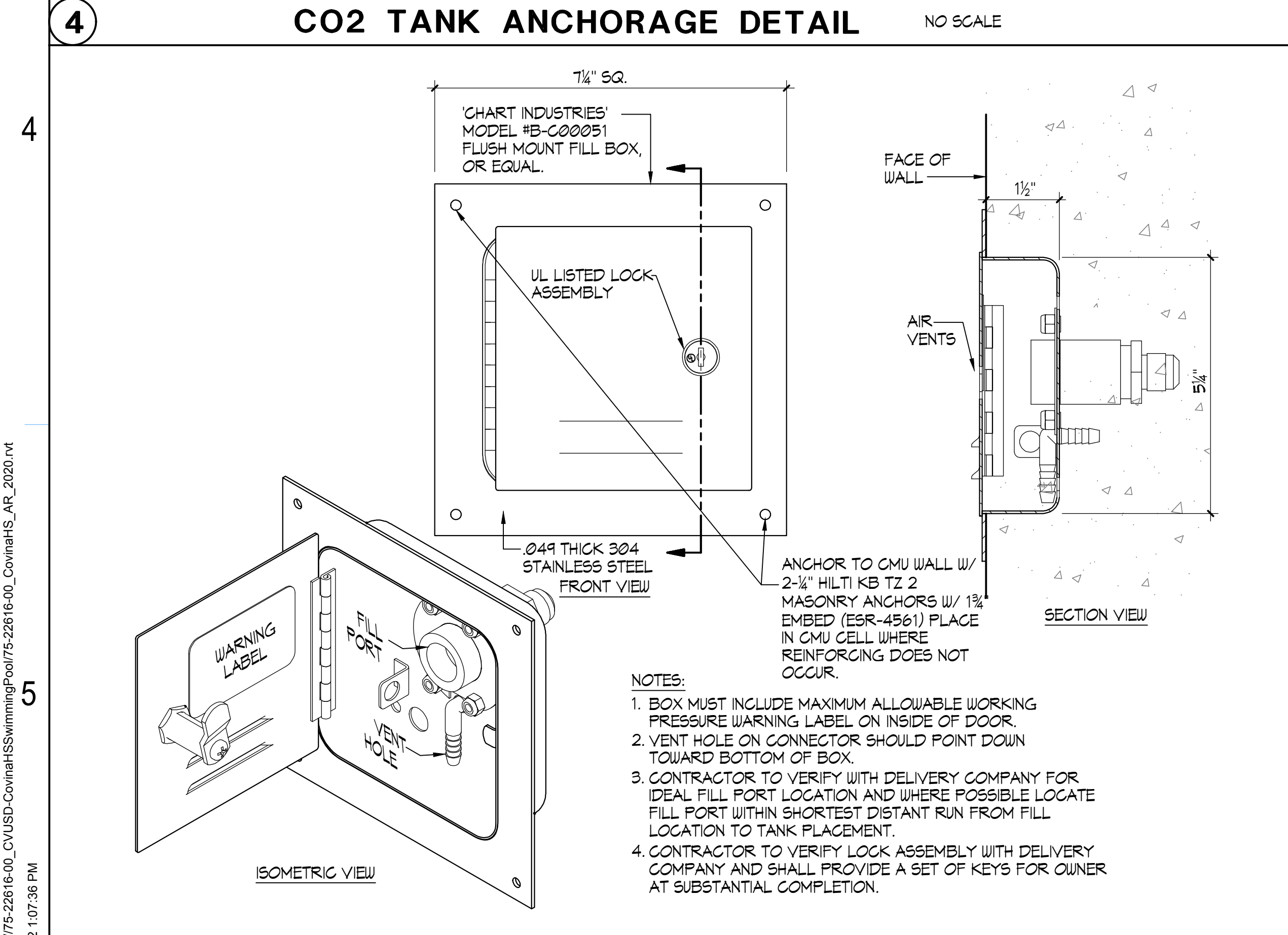
3 TYPICAL CARBON DIOXIDE FEED INSTALLATION NO SCALE



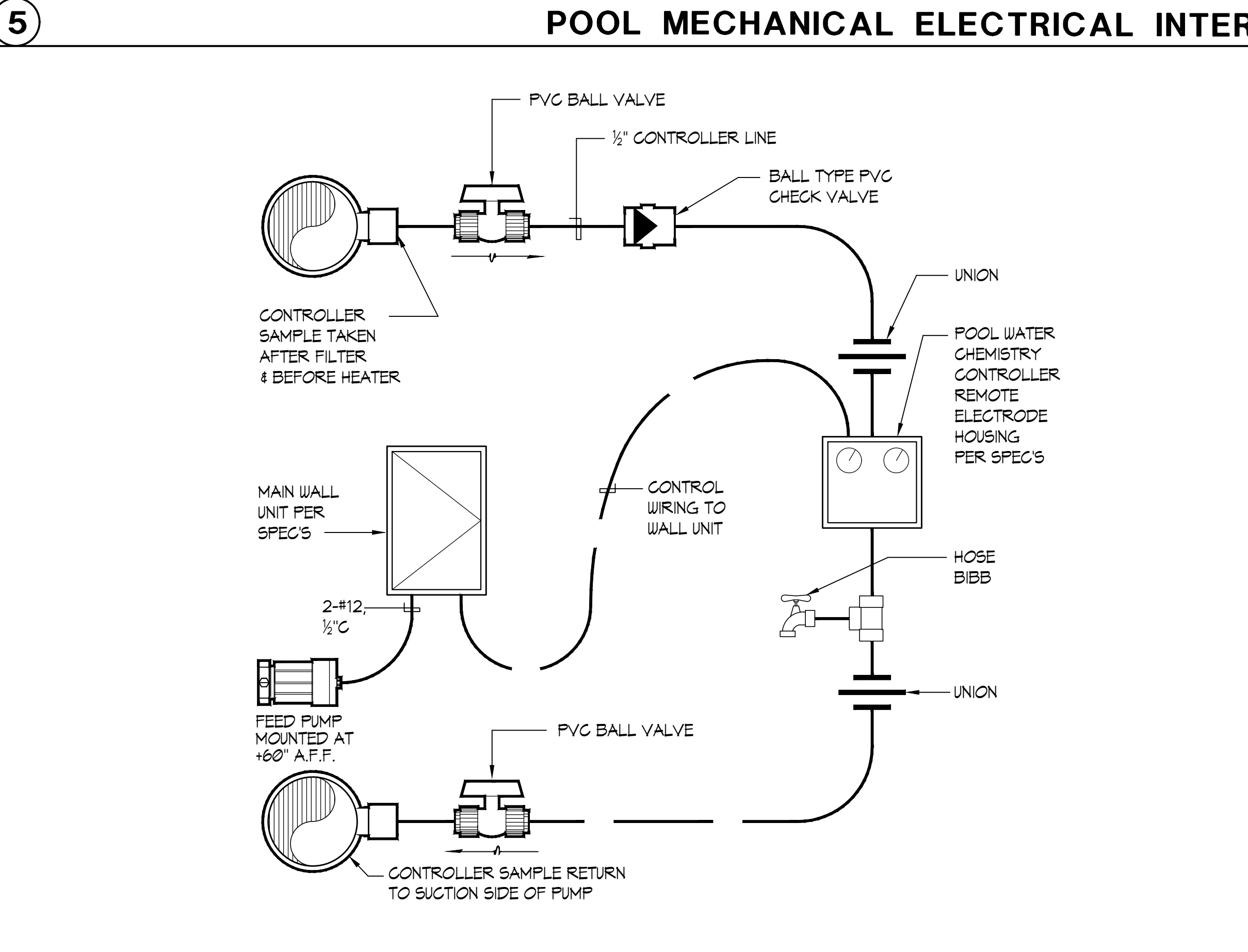
4 CO2 TANK ANCHORAGE DETAIL NO SCALE



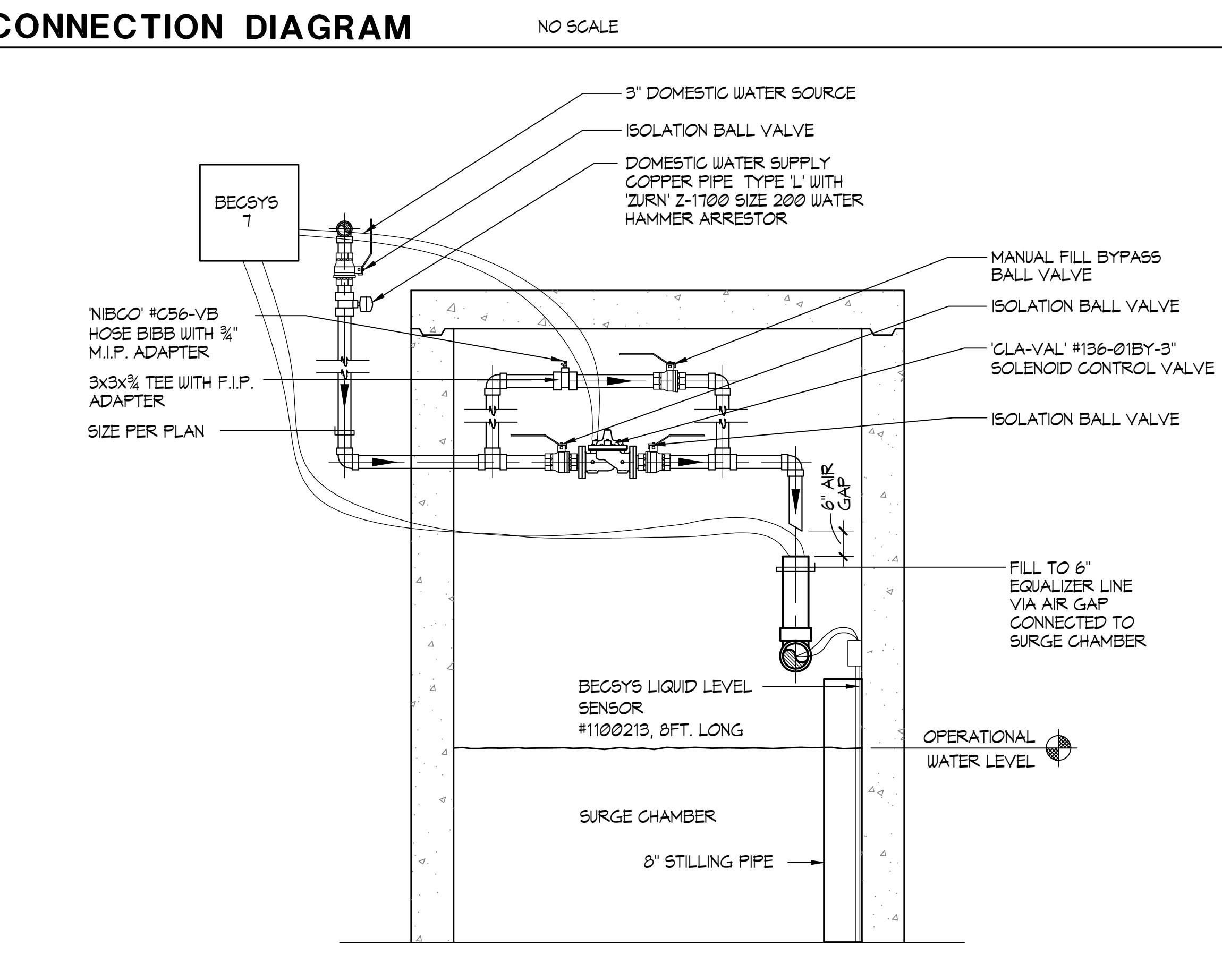
5 POOL MECHANICAL ELECTRICAL INTERCONNECTION DIAGRAM NO SCALE



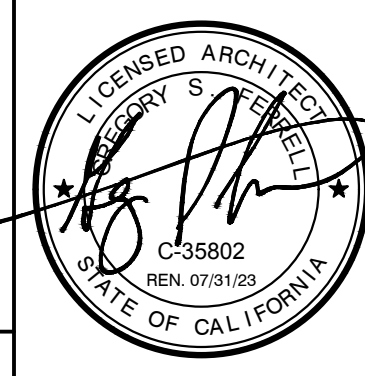
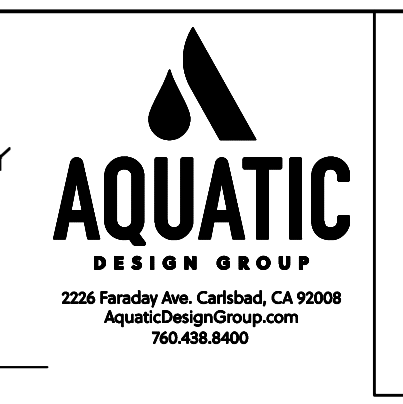
6 CO2 FLUSH MOUNT FILL BOX 1/8"=1"



7 WATER CHEMISTRY CONTROLLER SCHEMATIC NO SCALE



8 AUTOMATIC/MANUAL WATER MAKE-UP SCHEMATIC NO SCALE



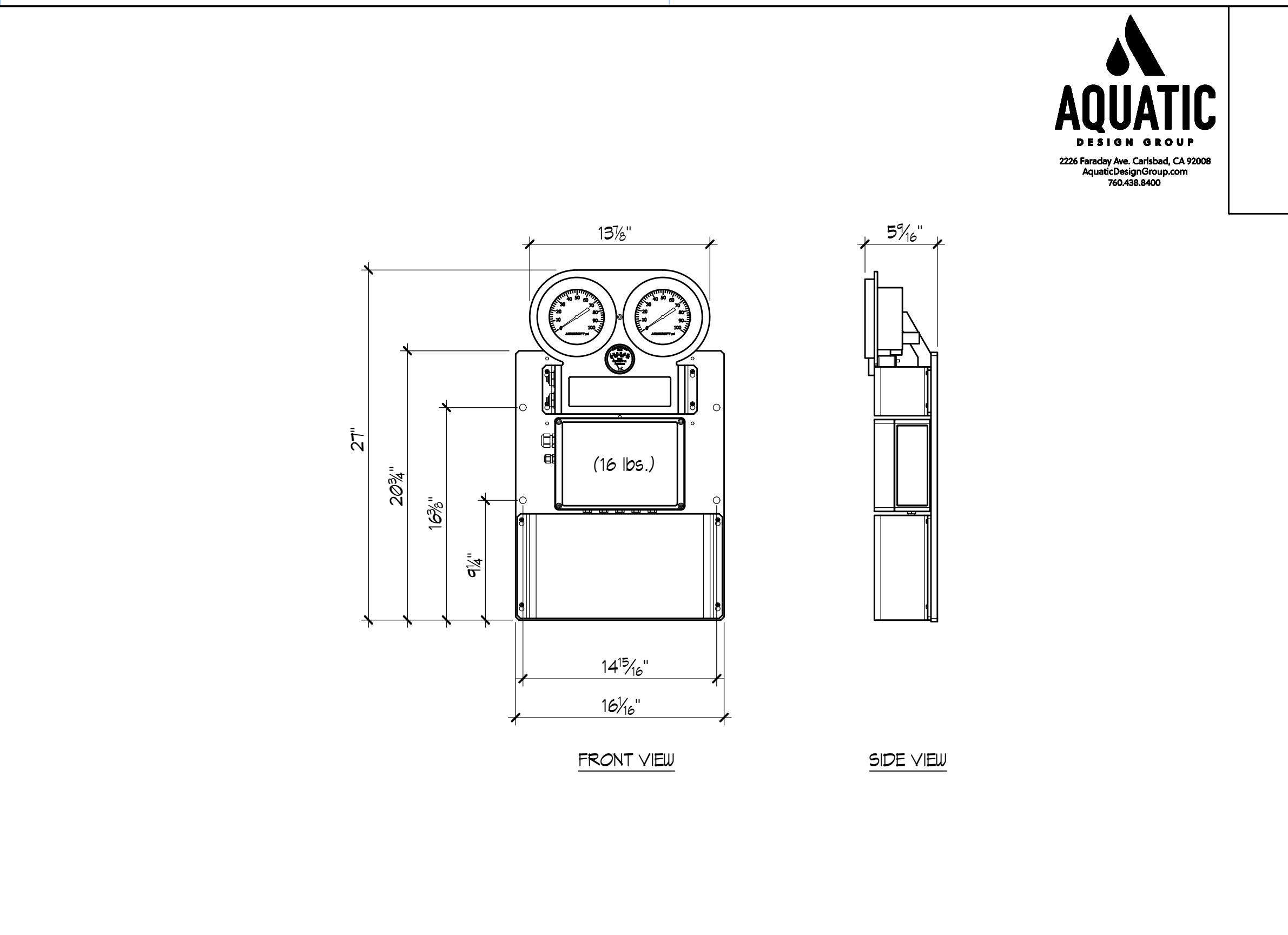
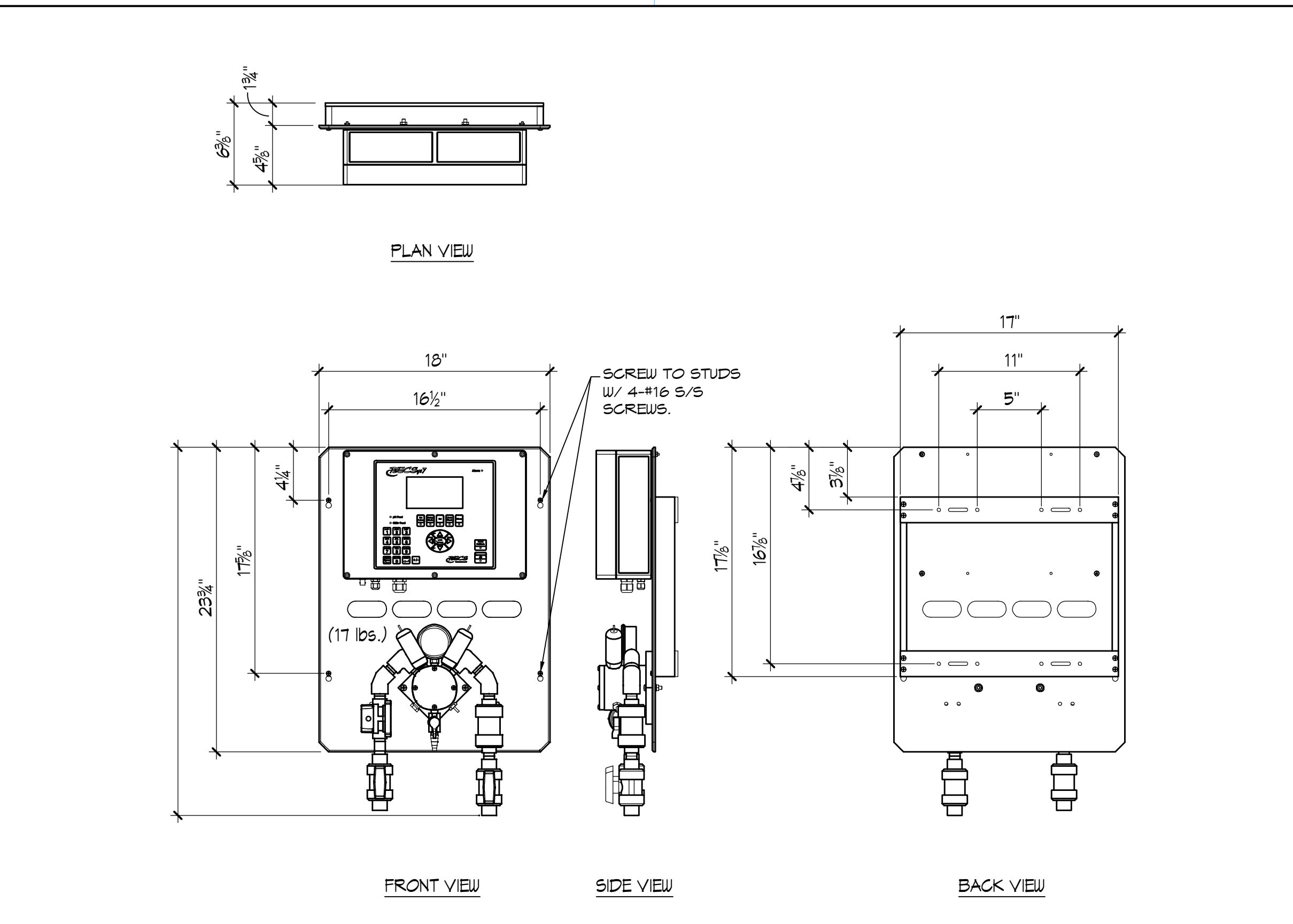
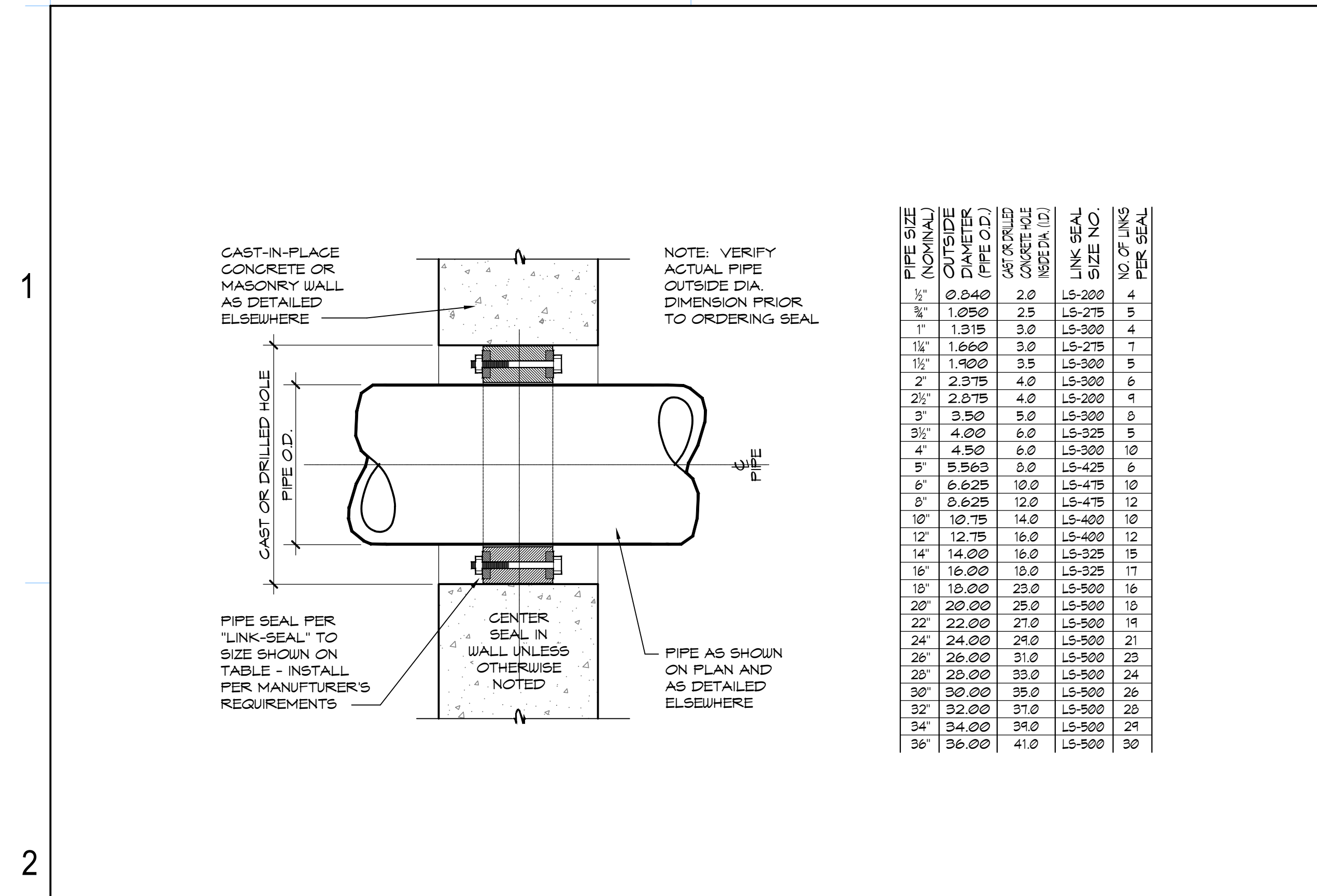
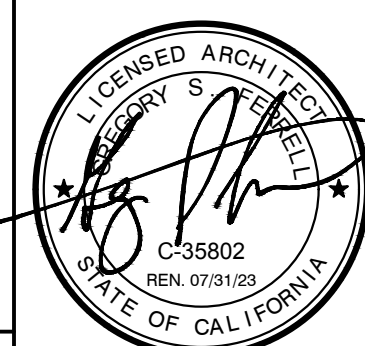
COVINA VALLEY HS POOL REPLACEMENT
 COVINA VALLEY UNIFIED SCHOOL DISTRICT
 483 SOUTH HOLLENBECK AVENUE COVINA, CA 91723

DSA SUBMITTAL SET_V2
 Issue Date 04-28-2023
 REVISIONS

75-22616-00
 DSA A# 03-122700
 DSA FILE # 151-H8
 DETAILS

MR.4

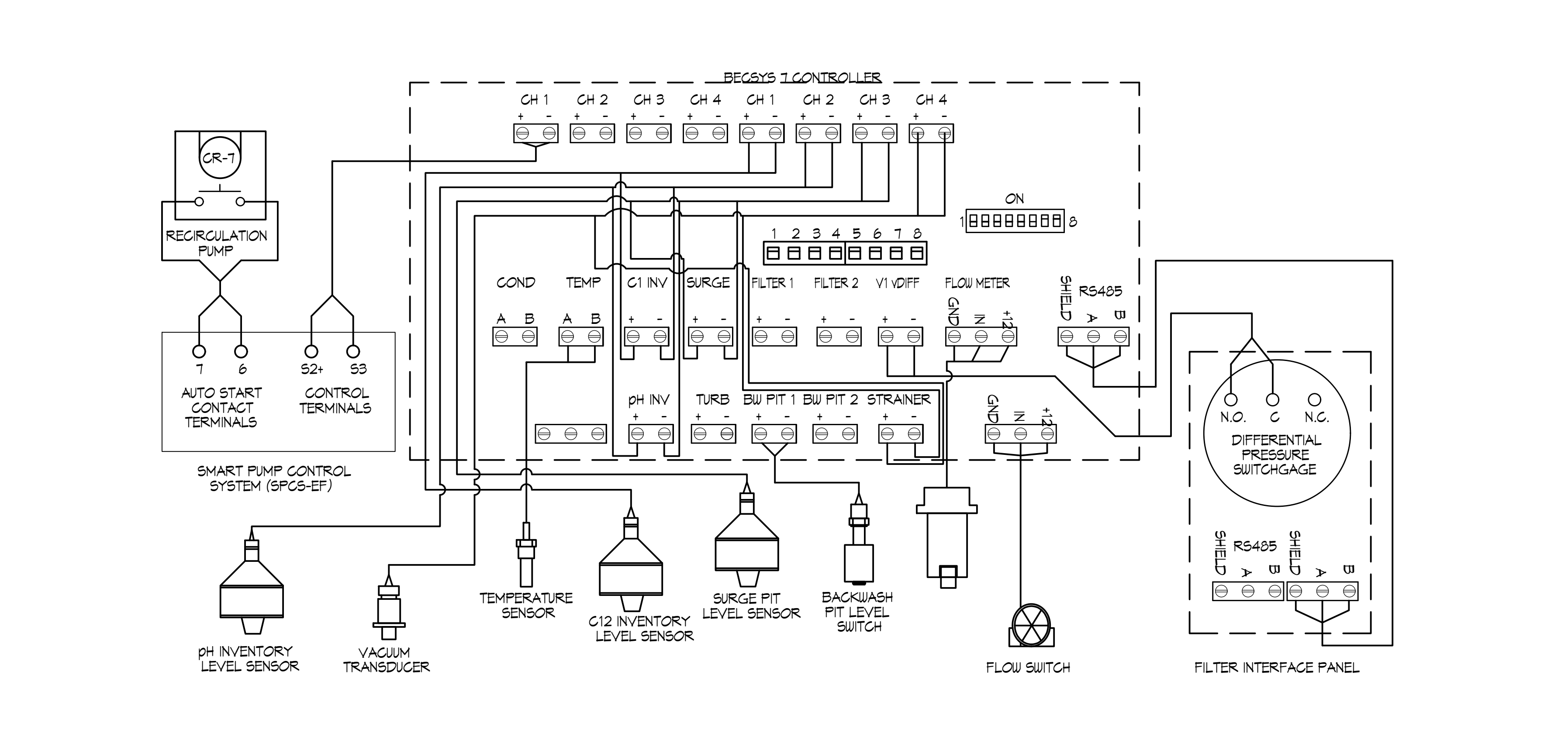
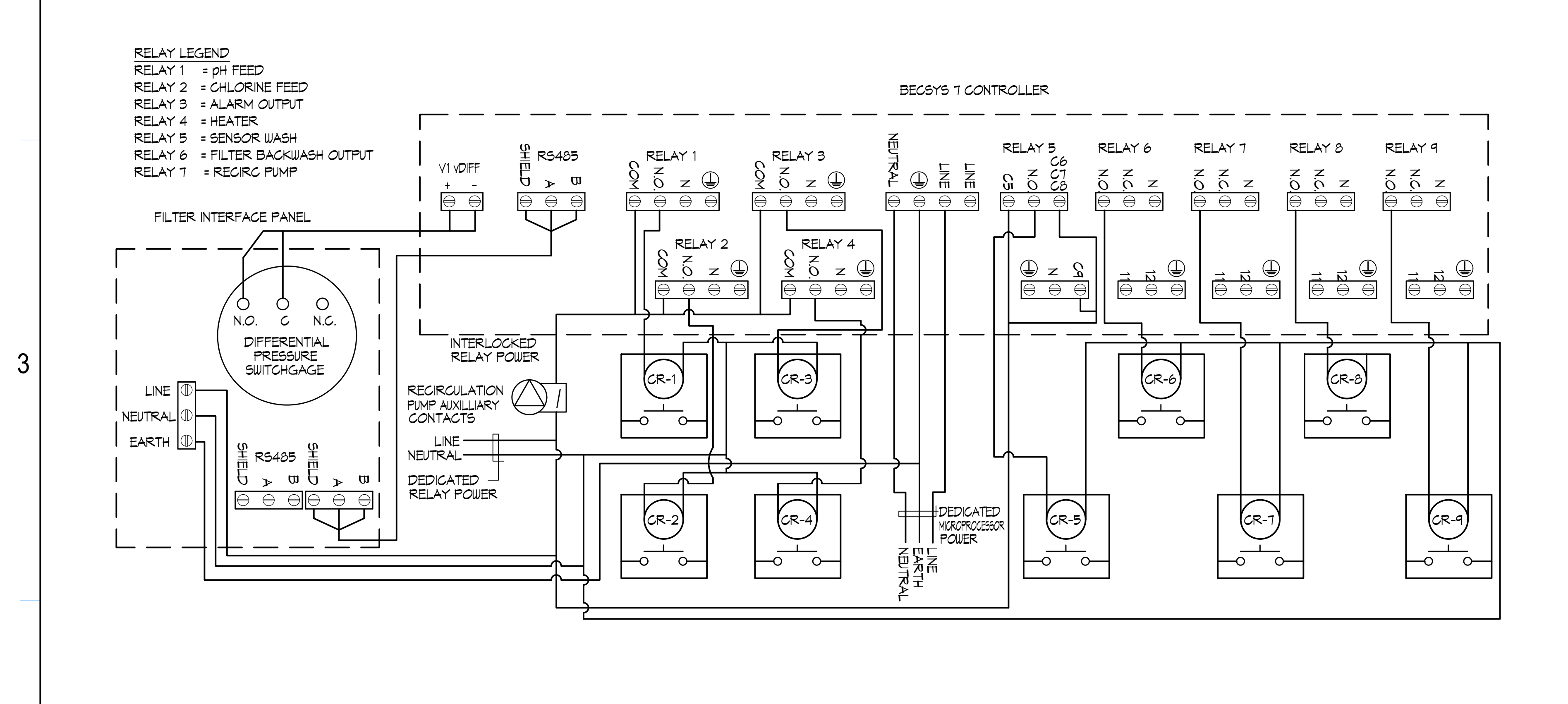
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1 PIPE SEAL TO WALL / FLOOR NO SCALE

2 BECYS 7 WATER CHEMISTRY CONTROLLER 1/2"=1'-0"

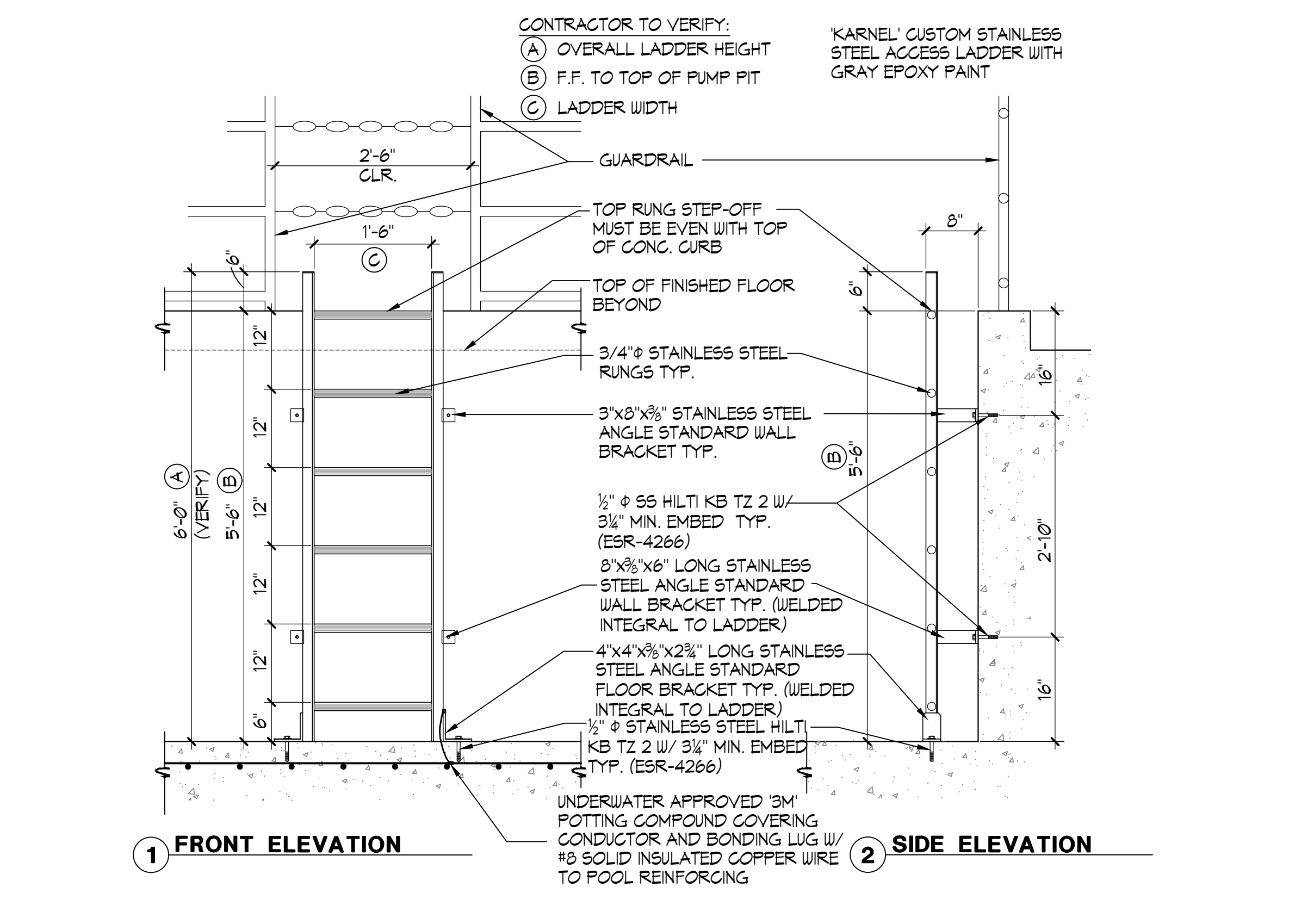
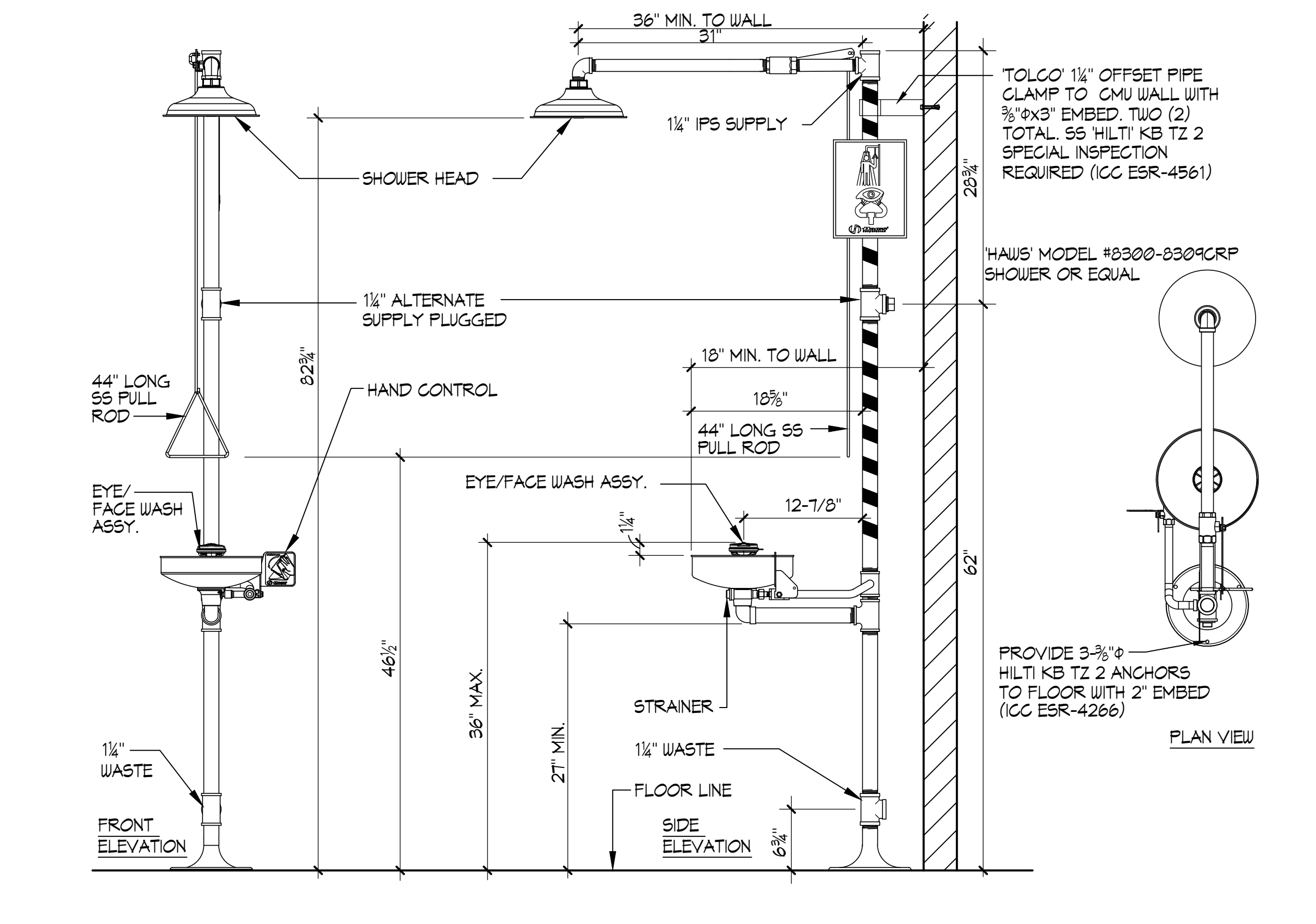
3 BECYS FILTER INTERFACE SYSTEM 1/2"=1'-0"



4 BECYS 7 CONTROLLER NO SCALE

5 BECYS 7 CONTROLLER NO SCALE

DESIGNATION:	VOLTAGE:	120/208V 3PH 4W	LOCATION:	MECHANICAL EQUIP. RM.
'SP'	150 AMP MAIN BREAKER	MAIN LUG	MINIMUM DEVICE	10,000
	RECESSED	SURFACE	A.I.C. RATING	14,000
DESCRIPTION:				
SP UNDERWATER LIGHTS	1	696	696	1200
	3	1200	1200	
	5	696	696	1200
	7	960	960	
SP TIMING SYS DECK RECPT	9	720	720	
	11	1440	1440	
SP SCOREBOARD	13	720	720	
	15	1440	1440	
	17	720	720	
	19	960	960	
	21	720	720	
	23	720	720	
	25	960	960	
	27	1680	1680	
	29			
	31	720	720	
	33			
	35			
	37			
	39			
	41			
TOTAL PER PHASE		8,232	8,256	7,776
+ 25% L.C.L.		1,128	1,194	1,194
TOTAL		9,360	9,450	8,970

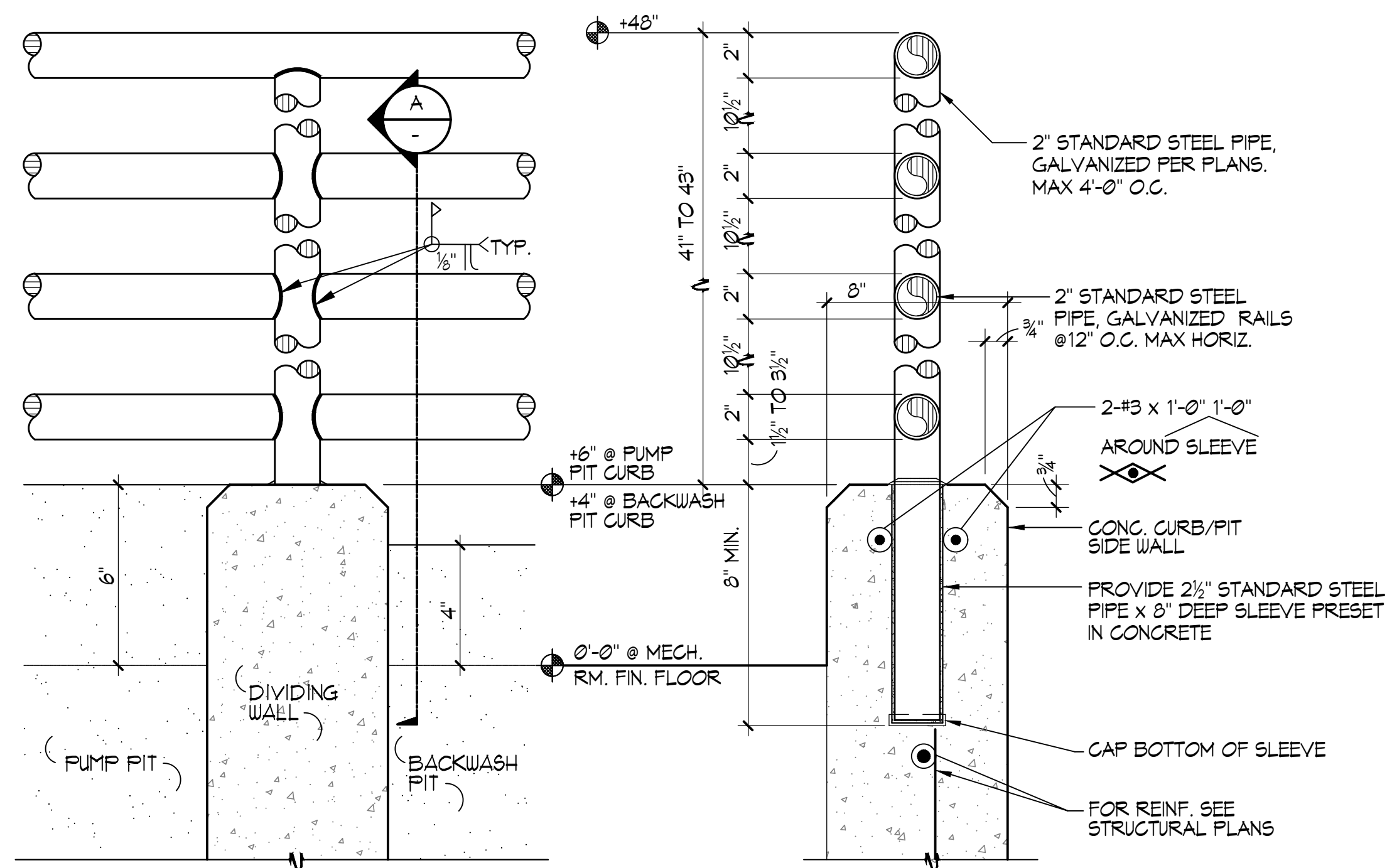


6 PANEL SCHEDULE

7 TYPICAL EYEWASH/SHOWER DETAIL NO SCALE

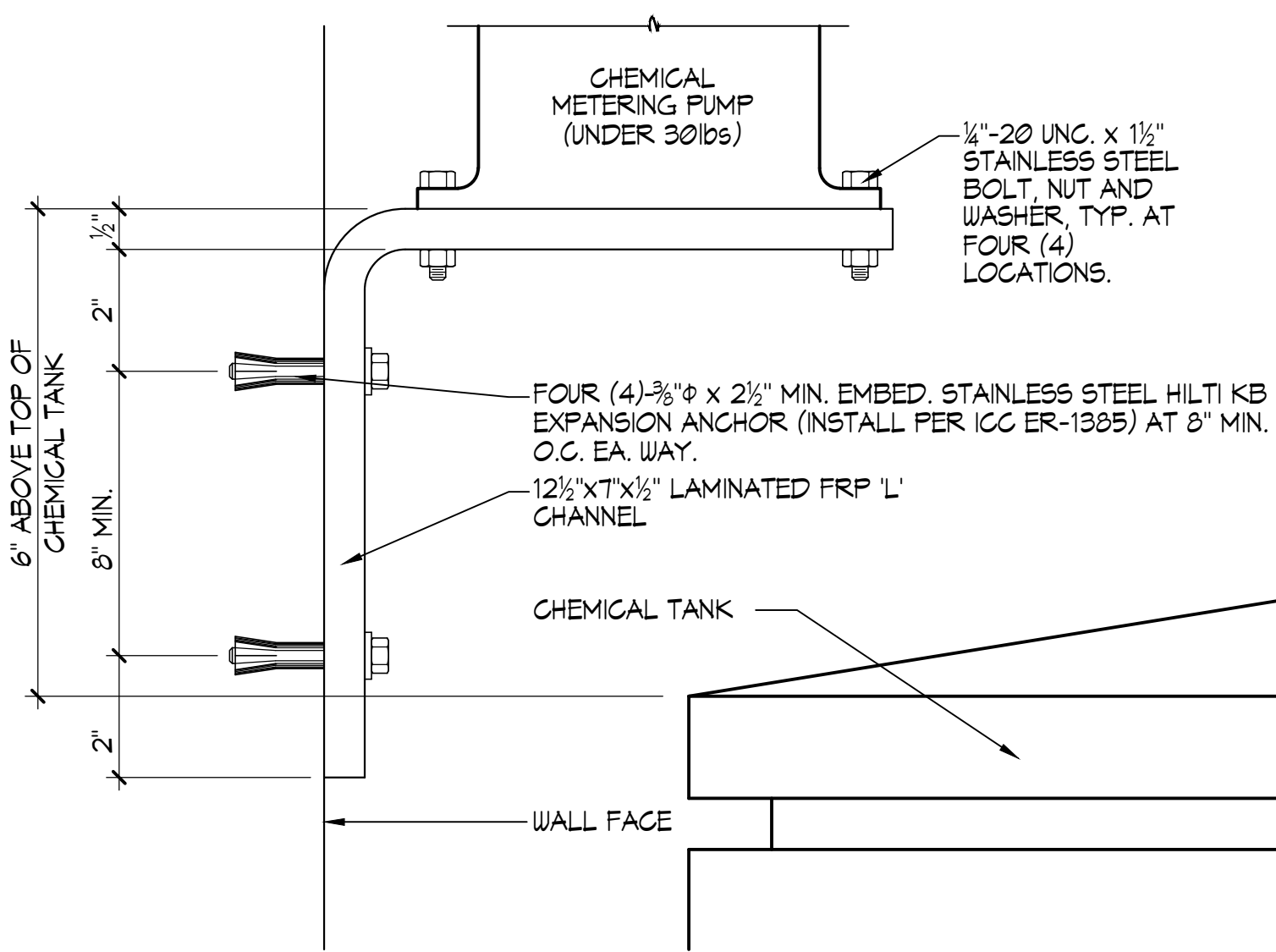
8 PUMP PIT/BACKWASH PIT ACCESS LADDER 3/4"=1'-0"

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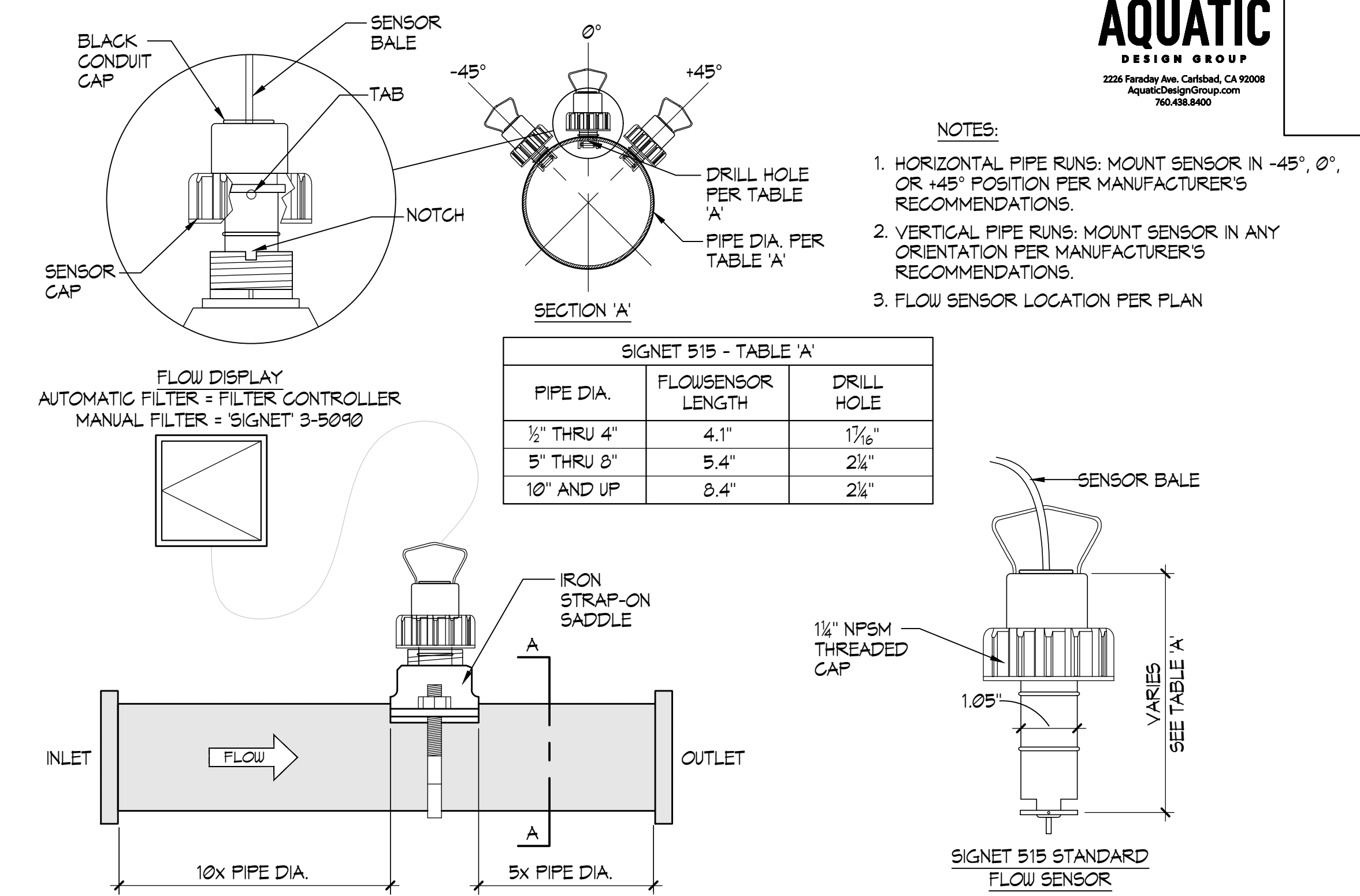


ELEVATION AT PIT DIVIDING WALL

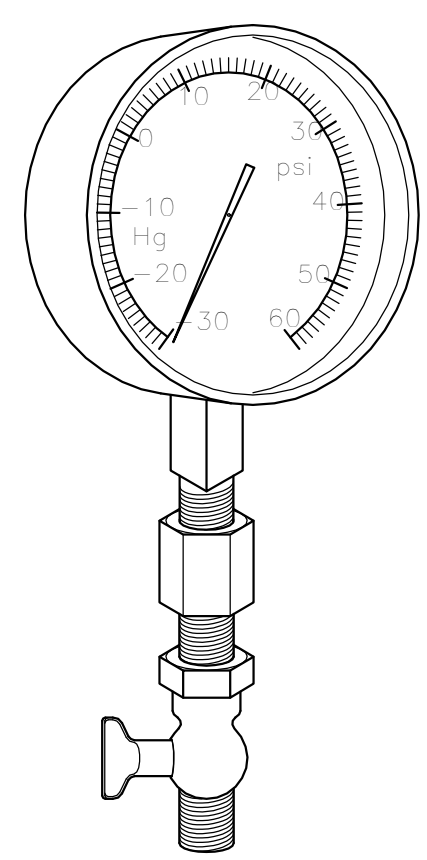
A GUARD RAIL SECTION



CHEMICAL PUMP SHELF



SIGNET FLOWMETER

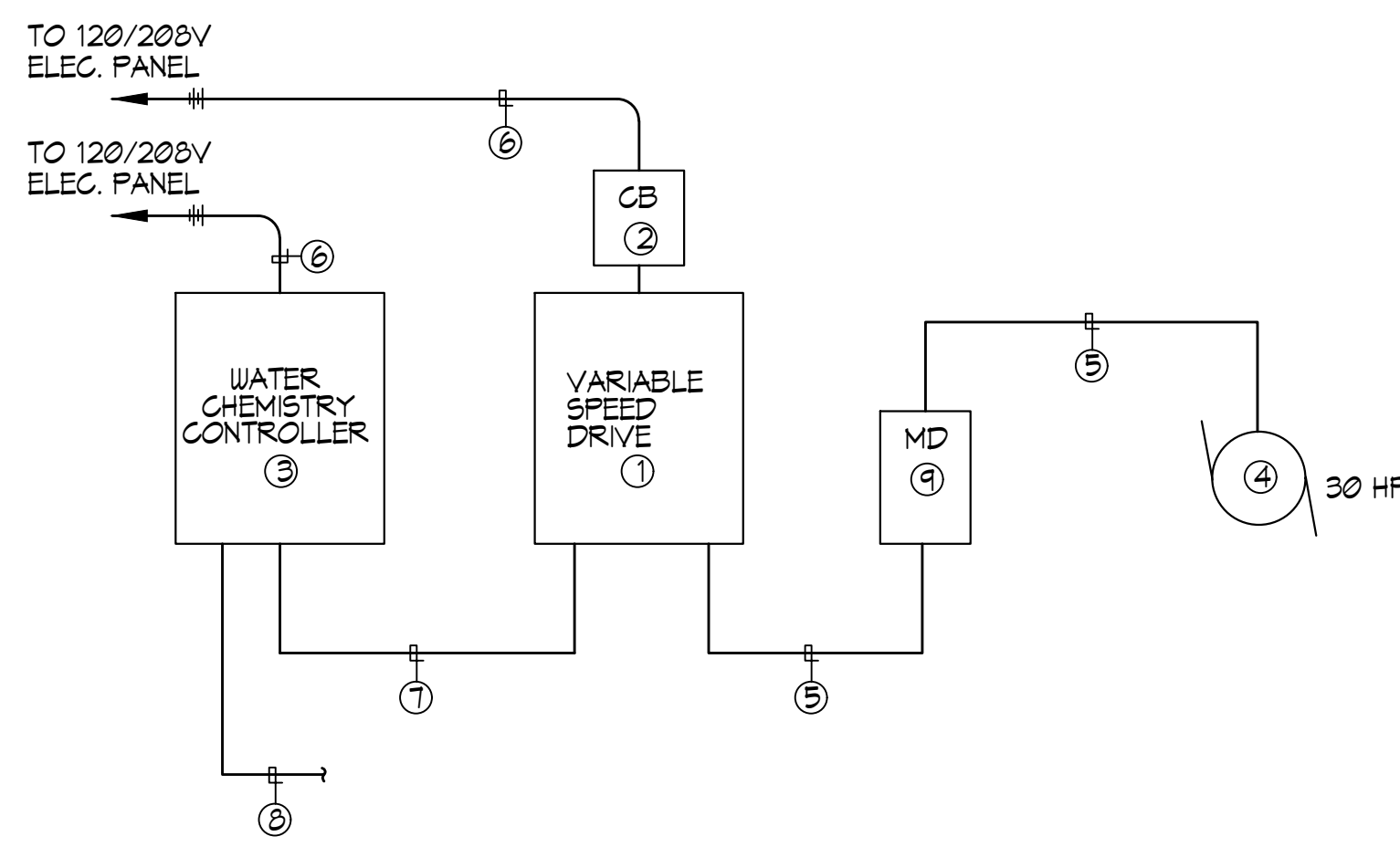


4 1/2" S/S CASED LIQUID FILLED PRESSURE GAUGES SHALL HAVE A DIAL RANGE PRESSURE OF 60psi AND VACUUM RANGE OF 30" Hg THE MINOR GRADUATIONS SHALL HAVE A PRESSURE OF 2psi AND VACUUM OF 2" Hg. 1/2" NPT PER SPECIFICATIONS.

SNUBBER
"PETCOCK" MODEL #A10, BRASS

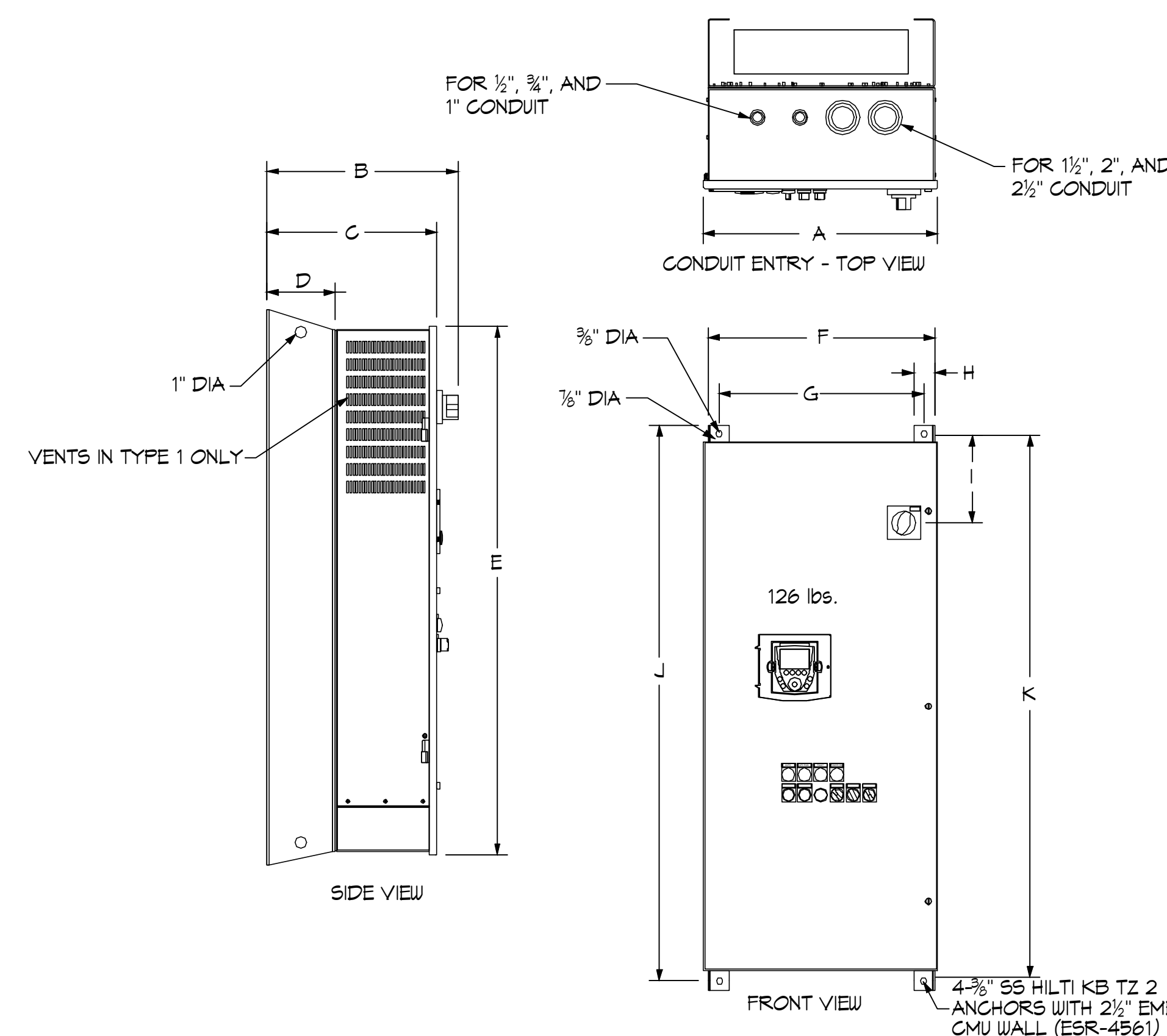
- NOTES:
1. PRESSURE GAUGES SHALL BE INSTALLED BY MEANS OF DRILLING AND TAPPING PIPE TO BE MONITORED. THE GAUGE SHALL THEN BE THREADED INTO THE PIPE. PROVIDE WITH SNUBBER AND PET COCK.
 2. GAUGE MAY BE USED WHEREVER CRUCIAL VACUUM OR PRESSURE READINGS ARE ESSENTIAL.

PRESSURE/VACUUM GAUGE



- 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, SEESINGLE LINE DIAGRAM.
 6. 120 VOLT BRANCH CIRCUITS, SEE PLANS.
 7. 3/4" (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.

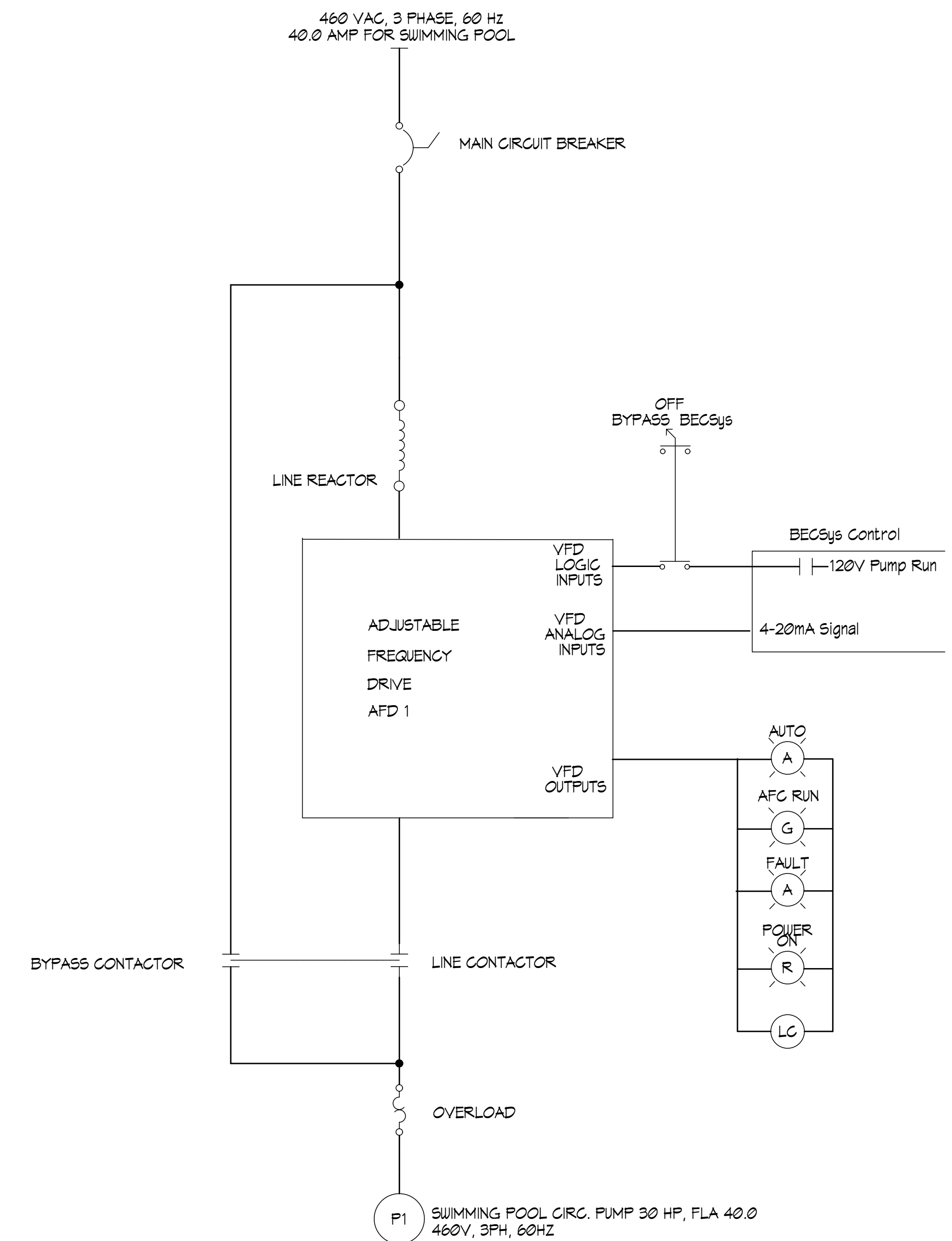
TYPICAL WIRING SCHEMATIC AT SPCS UNIT



'SPCS' EKO-FLEX ENCLOSURE DIMENSIONS

		WEIGHT	DIMENSIONS											
HP	HP		A	B	C	D	E	F	G	H	I	J	K	
460V	208/230V	LBS												
30 TO 50	15 TO 25	177	20.65"	16.83"	14.83"	6.00"	46.64"	20.00"	10.04"	1.86"	7.75"	49.02"	47.83"	

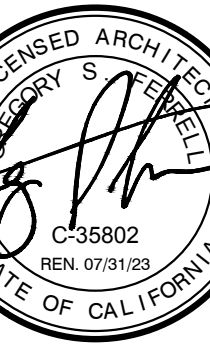
'SPCS' EKO-FLEX SINGLE LINE DIAGRAM



'SPCS' EKO-FLEX SINGLE LINE DIAGRAM



- NOTES:
1. HORIZONTAL PIPE RUNS: MOUNT SENSOR IN -45°, 0°, OR +45° POSITION PER MANUFACTURER'S RECOMMENDATIONS.
 2. VERTICAL PIPE RUNS: MOUNT SENSOR IN ANY ORIENTATION PER MANUFACTURER'S RECOMMENDATIONS.
 3. FLOW SENSOR LOCATION PER PLAN



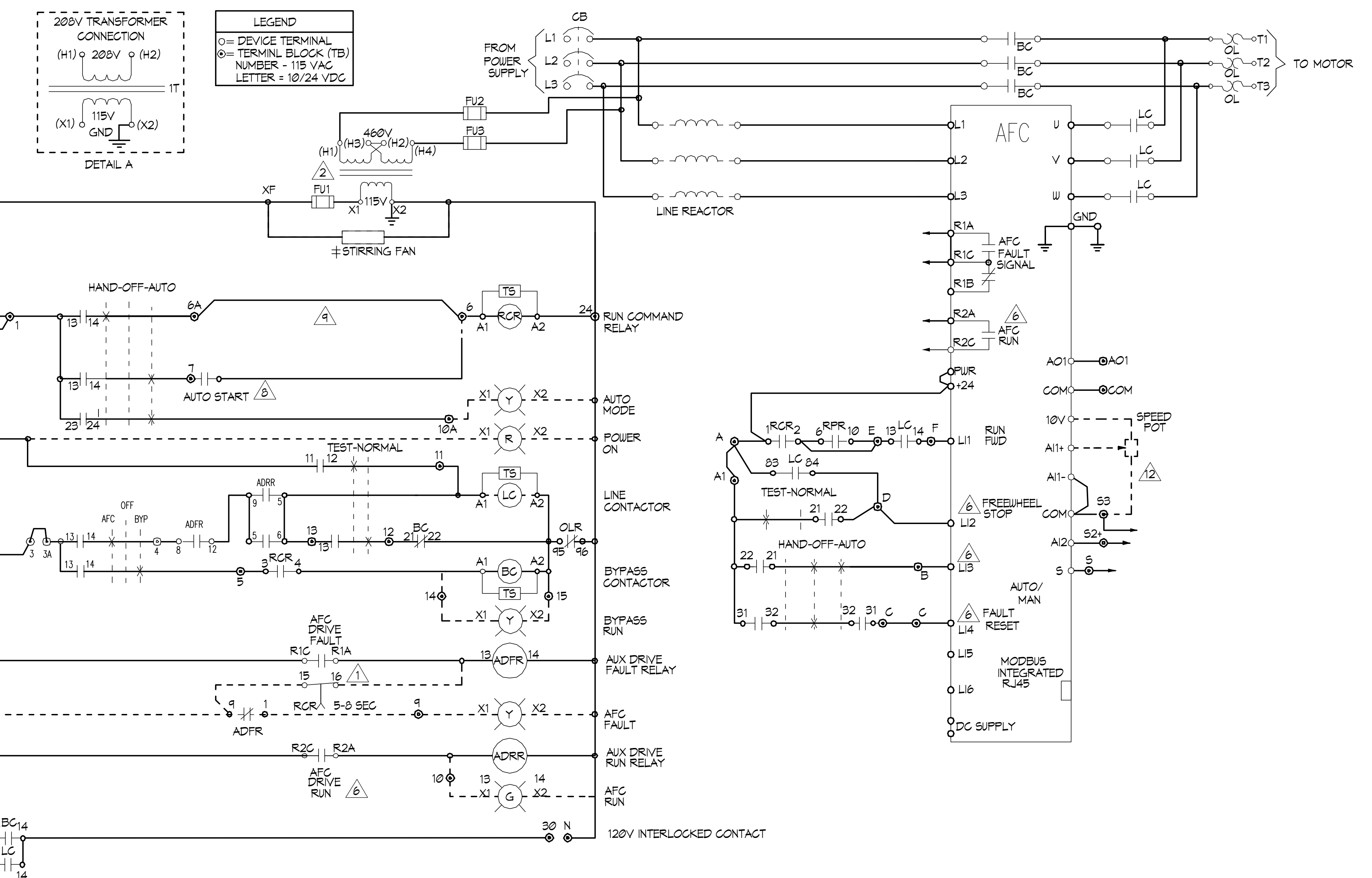
COVINA VALLEY HS POOL REPLACEMENT
COVINA VALLEY UNIFIED SCHOOL DISTRICT
483 SOUTH HOLLENBECK AVENUE COVINA, CA 91723

DSA SUBMITTAL SET_V2
Issue Date 04-28-2023
REVISIONS

75-22616-00
DSA A# 03-122700
DSA FILE # 15188
DETAILS

MR.6

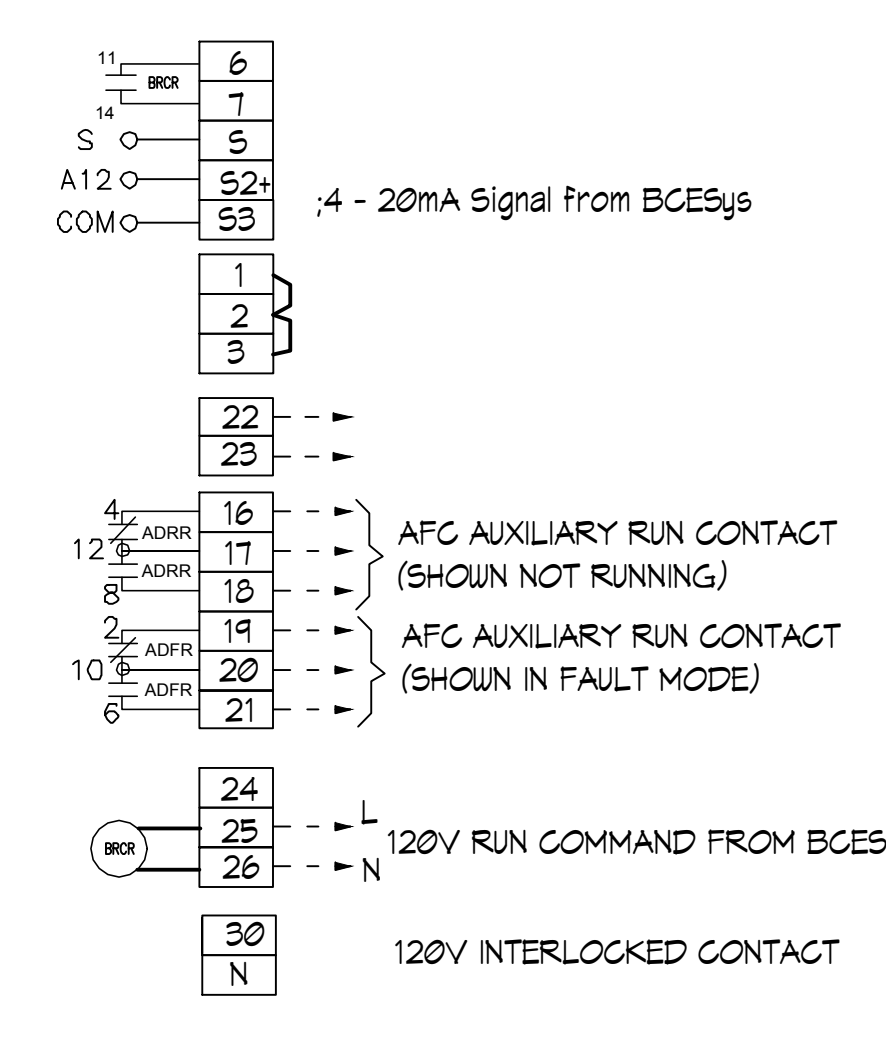
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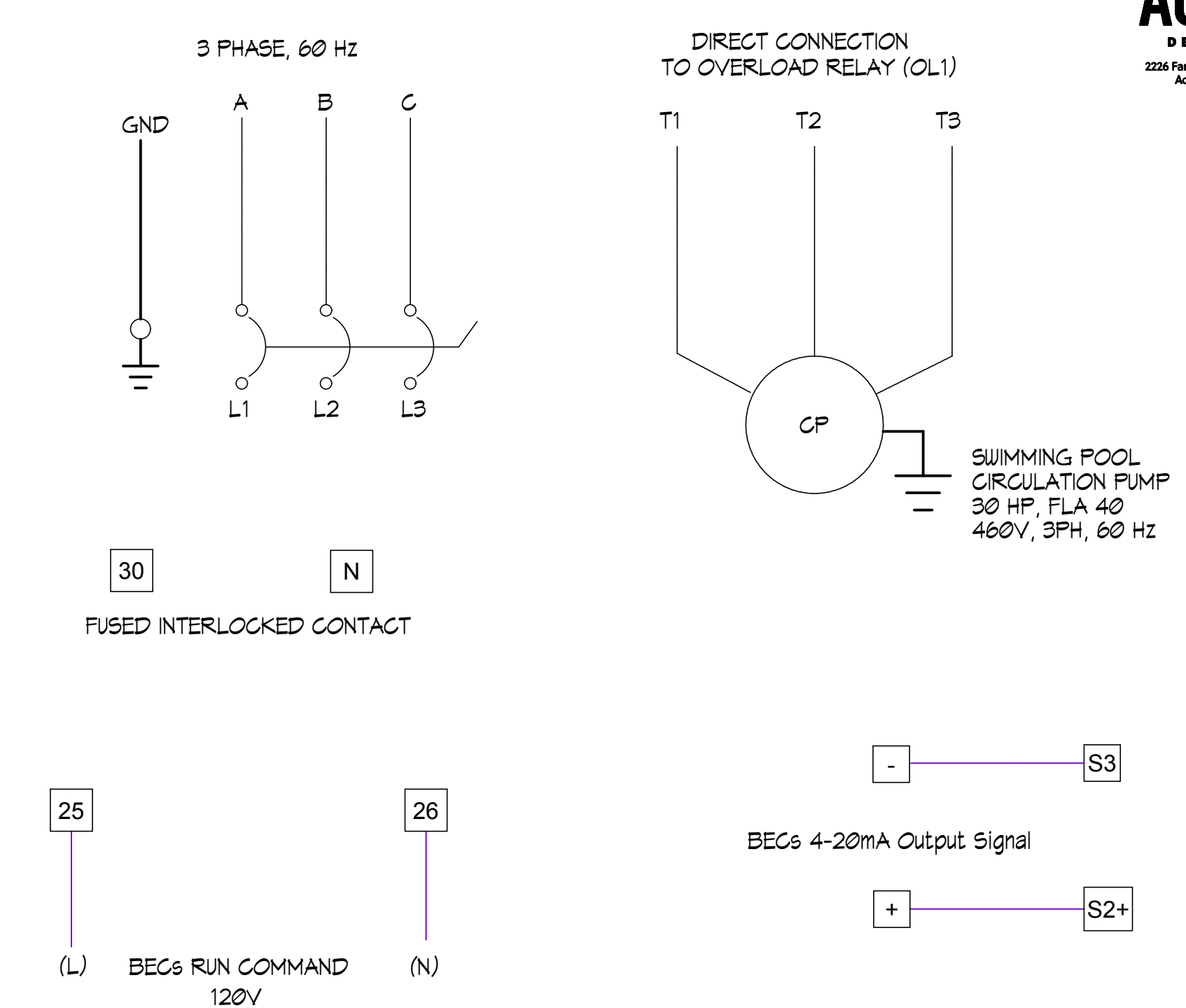
EKO-FLEX ATV61 FACTORY CONFIGURATION

MENU	No	SUB-MENU	DESCRIPTION	CODE	ADJ.
SIM	1.1	----	2/3 WIRE CONTROL	LCG	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	LCI	LEL
I-O	1.5	A12 CONFIG.	A12 MIN. VALUE (mA)	CH12	4
I-O	1.5	R2 CONFIG.	R2 ASSIGN - DRIVE RUNNING	r2C	run
C.L	1.6	----	REF. 1 CHAN	FR1	HMI
C.L	1.6	----	REF. 1B CHAN	FR1	A11
C.L	1.6	----	PROFILE	CHCF	SEP
FUN	1.7	STOP CONFIG.	FREEWHEEL STOP ASSIGN	nST	L12
FUN	1.7	REFERENCE SWITCH	REF. 1B SWITCHING	rCD	L13
FUN	1.7	REFERENCE SWITCH	REF. 1B CHAN	FR1b	A12
FLI	1.8	FAULT RESET	FAULT RESET	rSF	L14
FLI	1.8	CATCH ON THE FLY	CATCH ON THE FLY	FLR	YES
FLI	1.8	OUTPUT PHASE LOSS	OUTPHASE LOSS	PDL	NO
COM	1.9	FORCED LOCAL	FORCED LOCAL ASSIGN.	FLI	L14

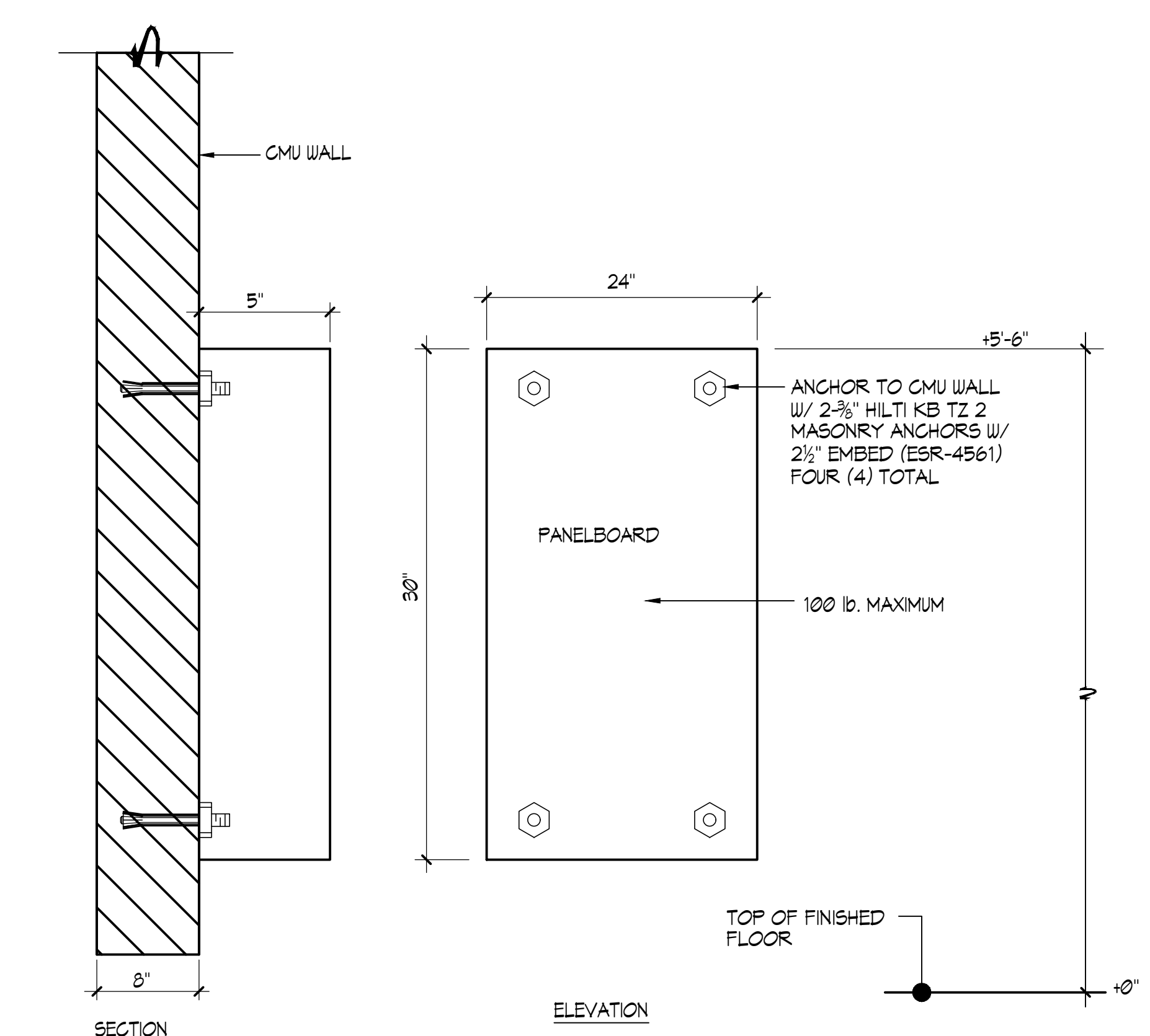
DESCRIPTION	TYPE 1	TYPE 12K	TYPE 3R
± STIRRING FANS	10-100 HP 460V, 1.5-50HP 200/230V	10-100 HP 460V, 1.5-50HP 200/230V	NA
± VENTILATION FAN	NA	NA	ALL HP
± SPACE HEATER	NA	NA	ALL HP



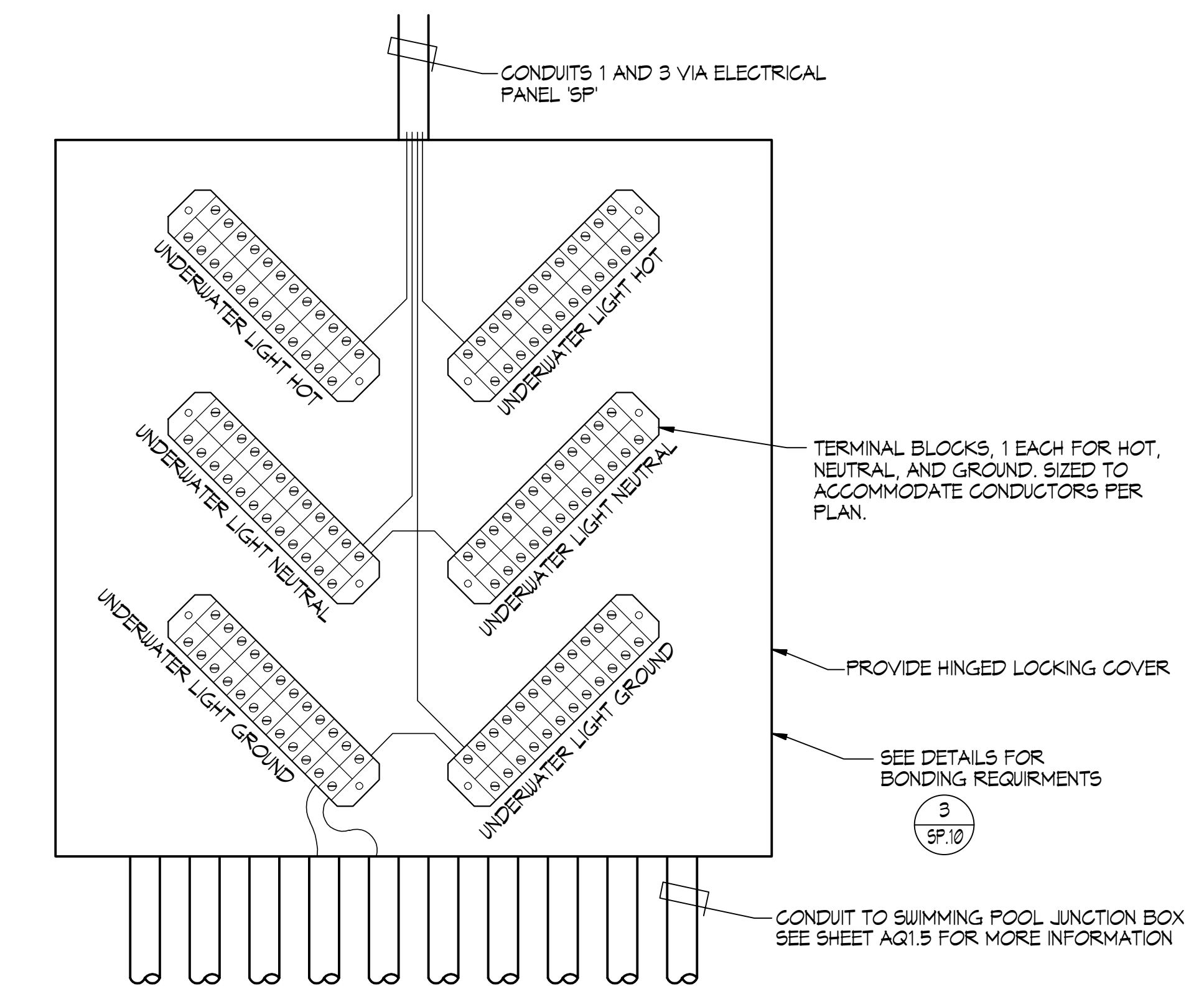
- NOTES:
- RGR TIMED CONTACT USED ONLY IF LINE CONTACTOR IS SUPPLIED
 - CONTROL TRANSFORMER SHOWN FOR 460V PRIMARY. FOR 230V PRIMARY, JUMPER H2-H3 IS
 - PROGRAMMED I/O SEE CONTROLLER FUNCTION CONFIGURATION TABLE.
 - BEGs RUN COMMAND RELAY (BRCR)
 - JUMPER USED WHEN START-STOP PUSH BUTTONS NOT USED.



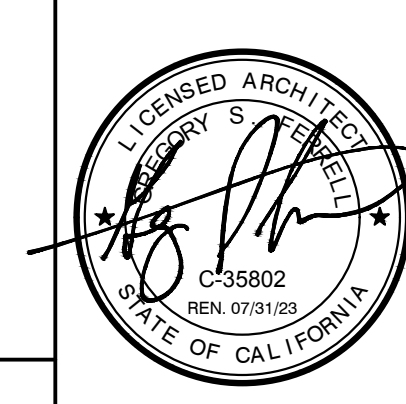
2 'SPCS' EKO-FLEX FIELD CONNECTION DIAGRAM NO SCALE



3 PANELBOARD MOUNTING DETAIL NO SCALE



4 UNDERWATER LIGHT CONTACTOR PANEL NO SCALE



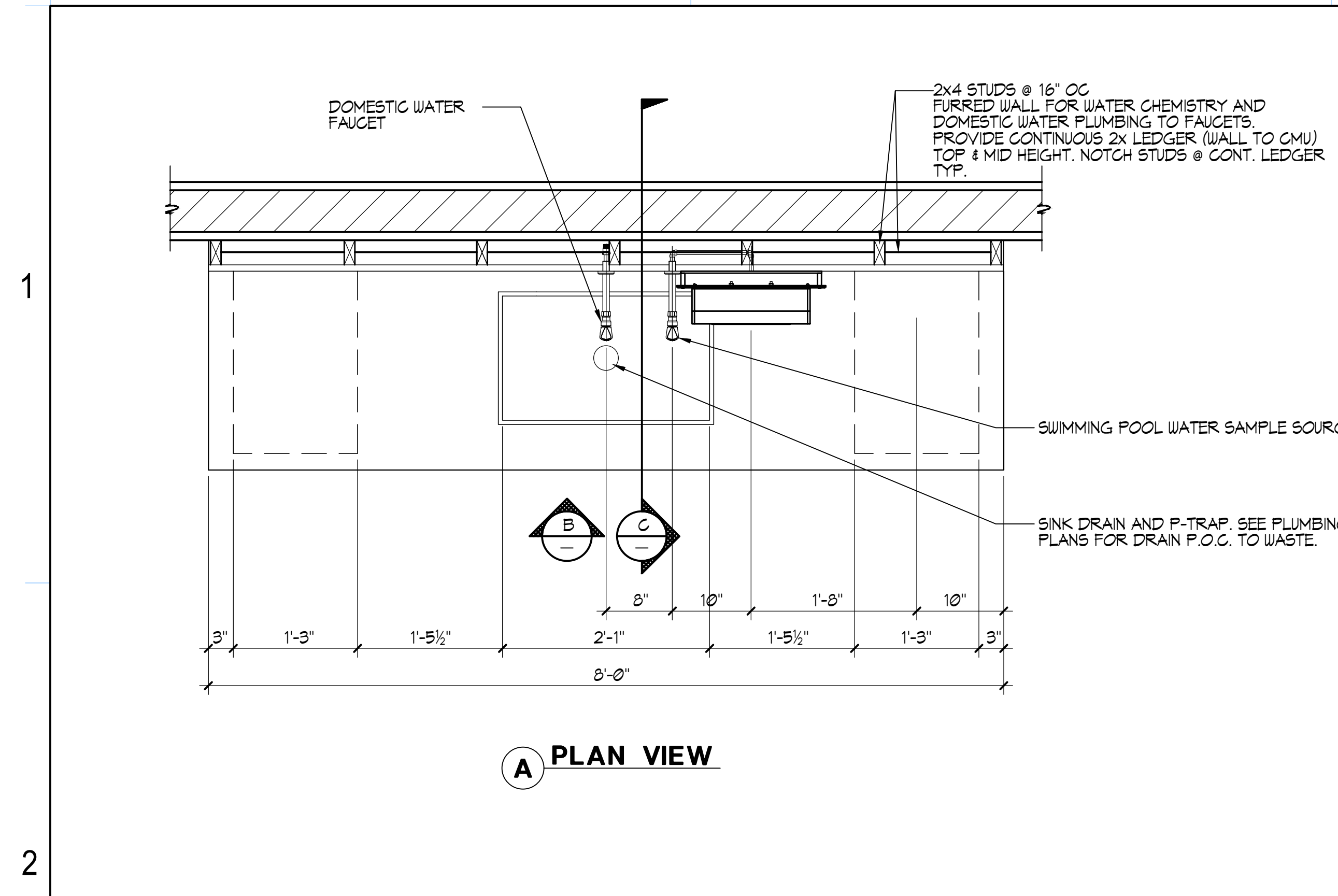
COVINA VALLEY HS POOL REPLACEMENT
 COVINA VALLEY UNIFIED SCHOOL DISTRICT
 483 SOUTH HOLLERBECK AVENUE COVINA, CA 91723

DSA SUBMITTAL SET_V2
 Issue Date 04-28-2023
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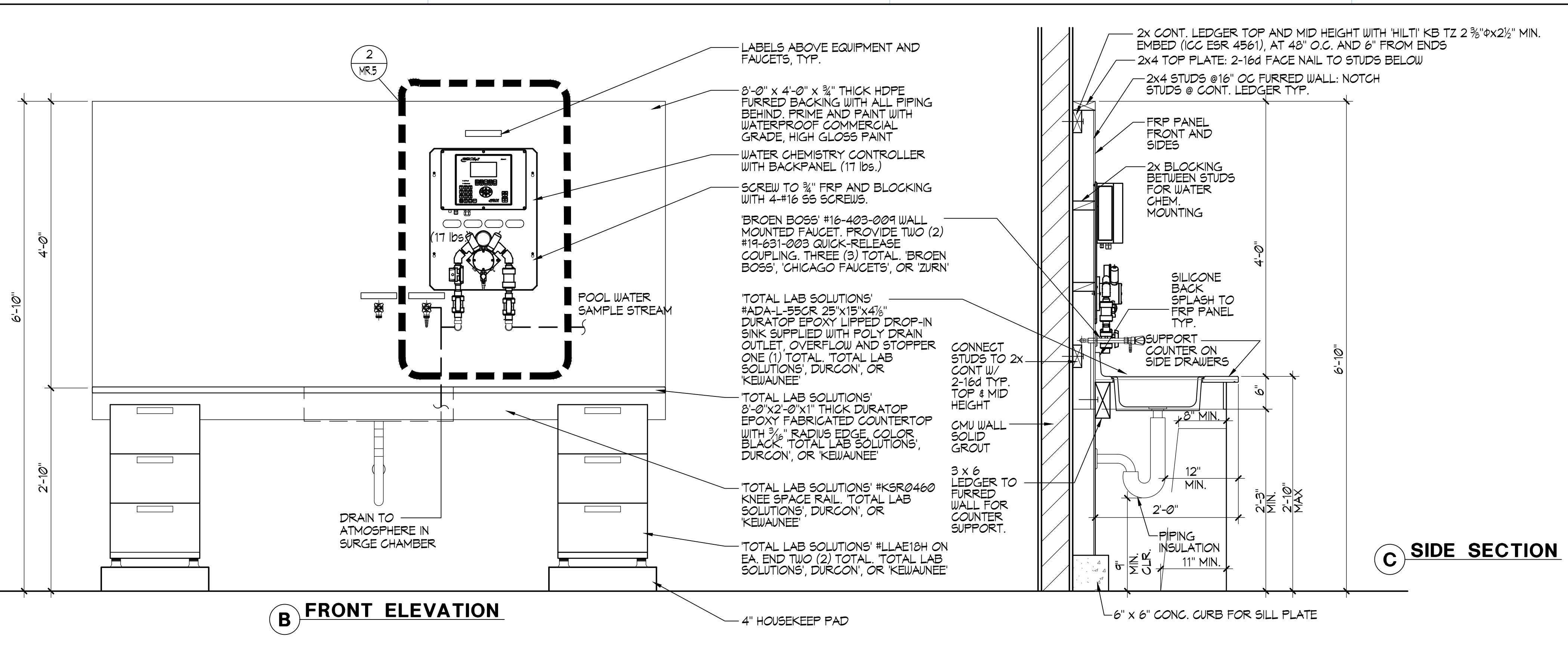
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 DSA A# 03-122700
 DSA FILE # 19-148
 DETAILS

MR.7

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A PLAN VIEW

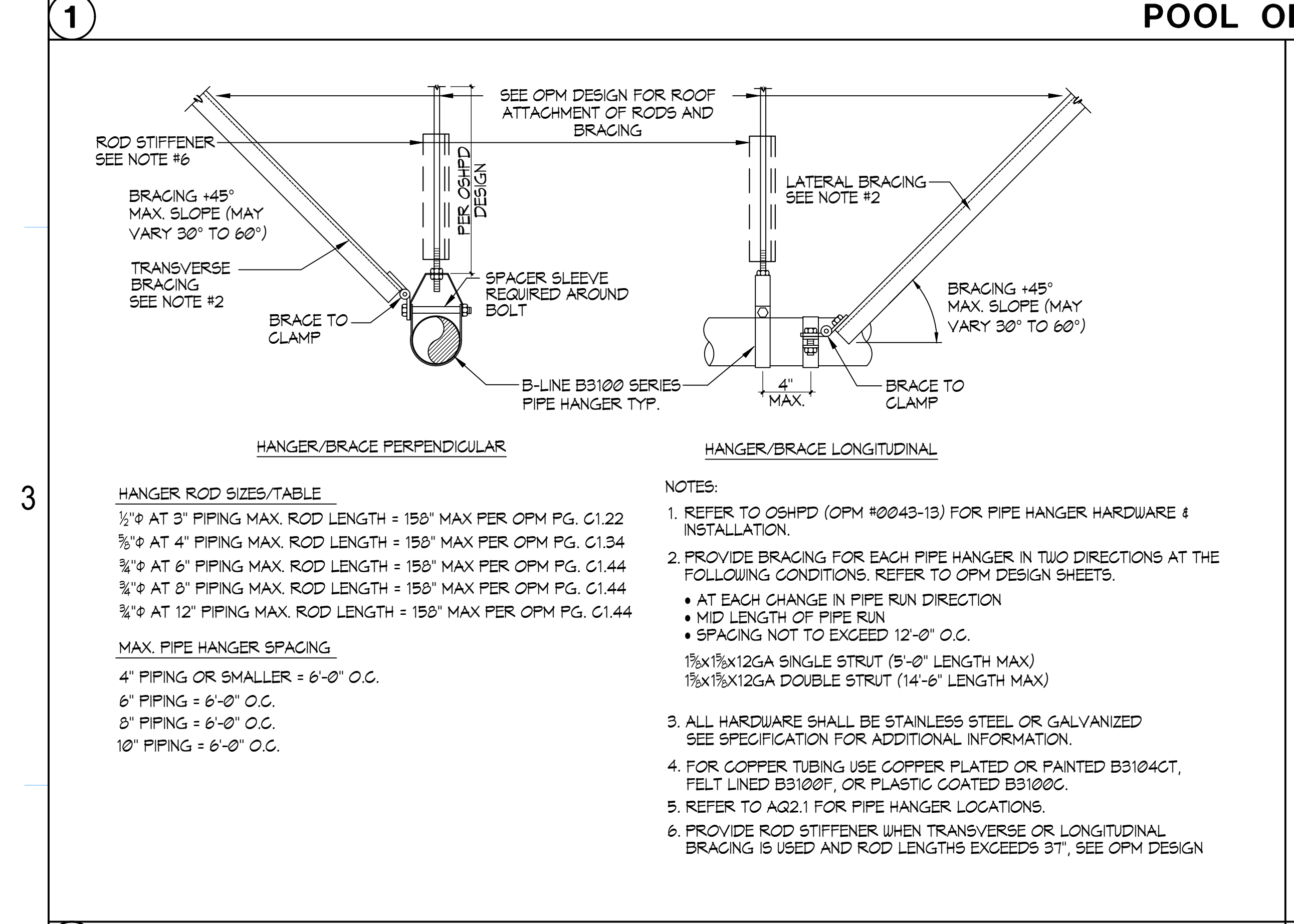


B FRONT ELEVATION

C SIDE SECTION

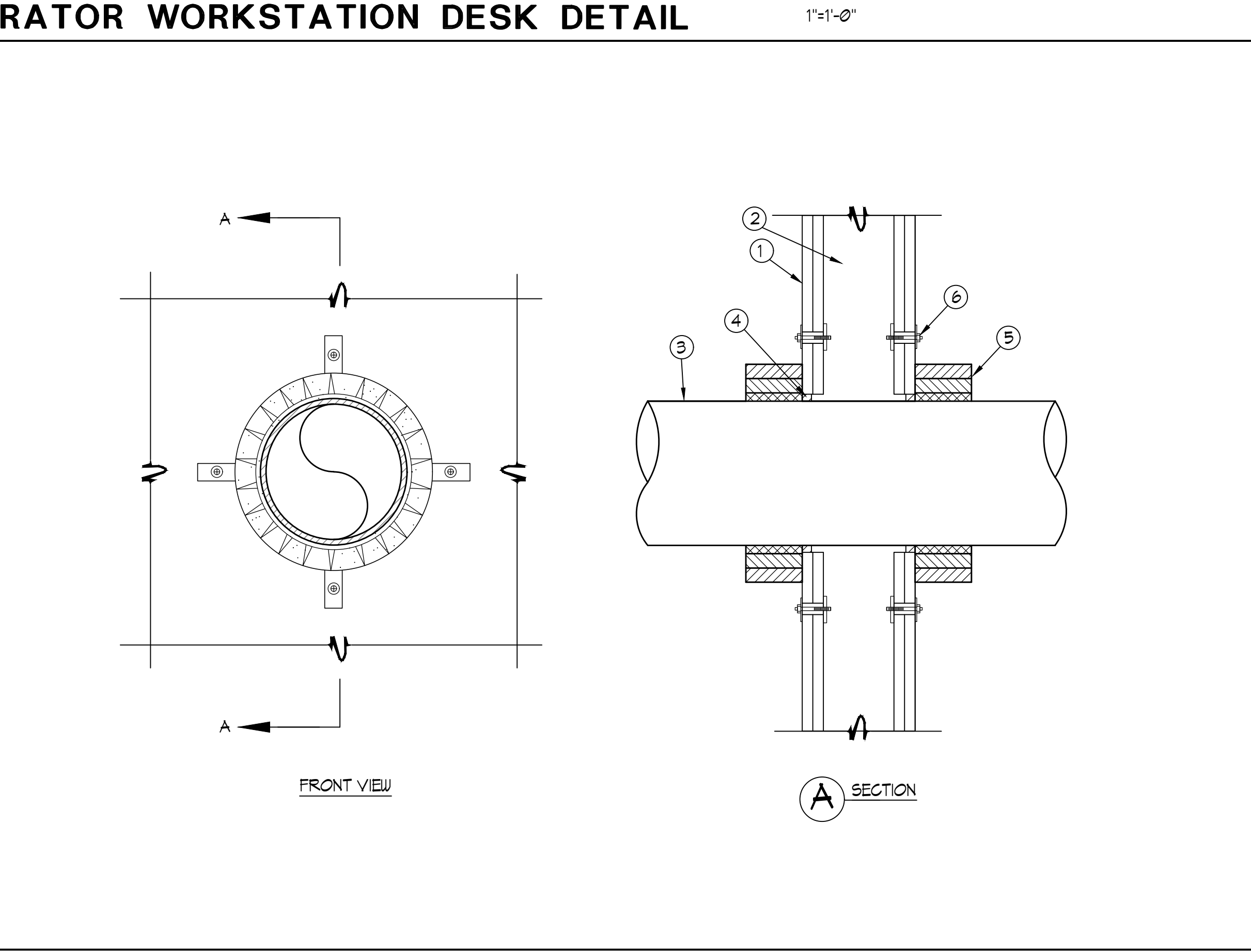
POOL OPERATOR WORKSTATION DESK DETAIL

1"=1'-0"



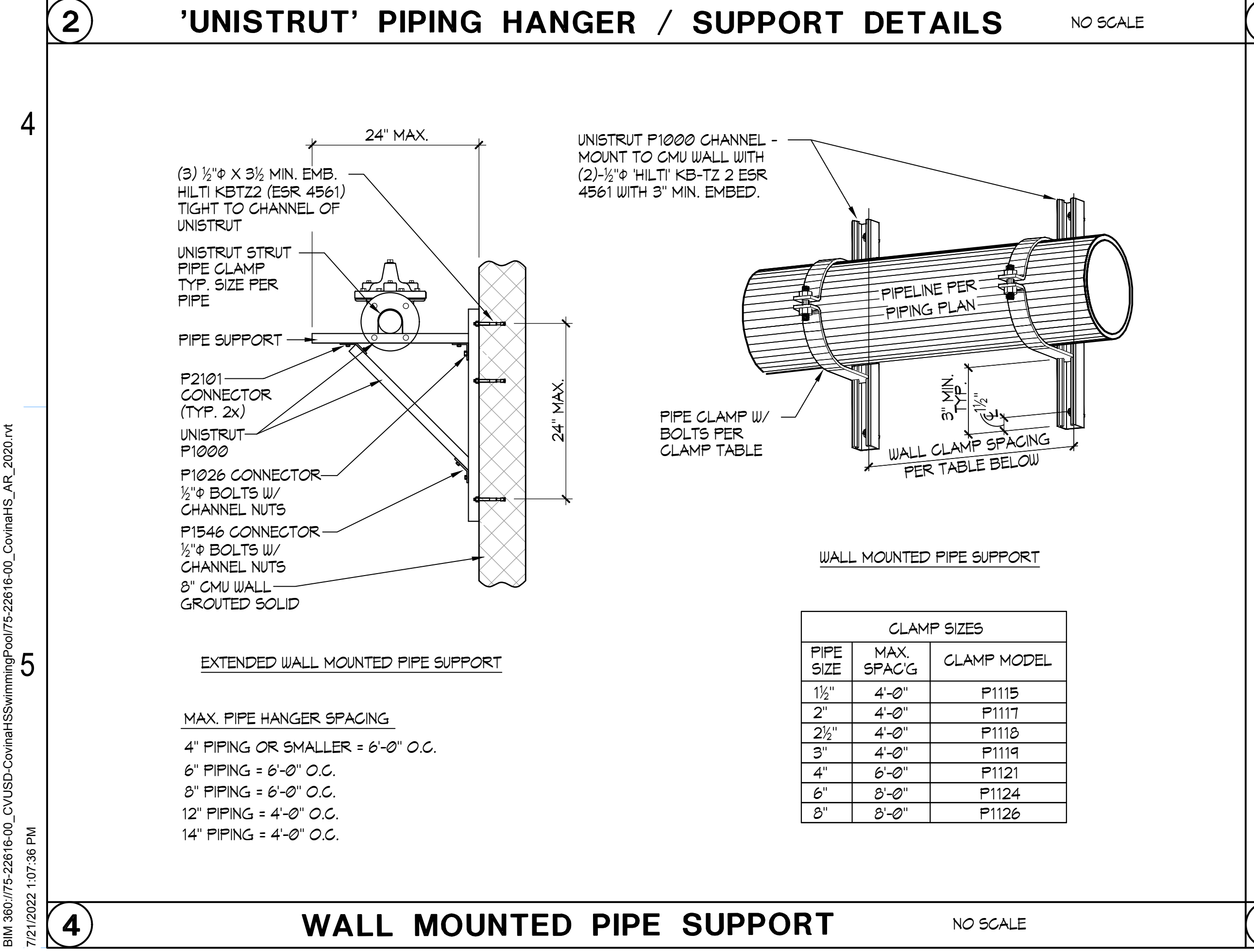
'UNISTRUT' PIPING HANGER / SUPPORT DETAILS

NO SCALE



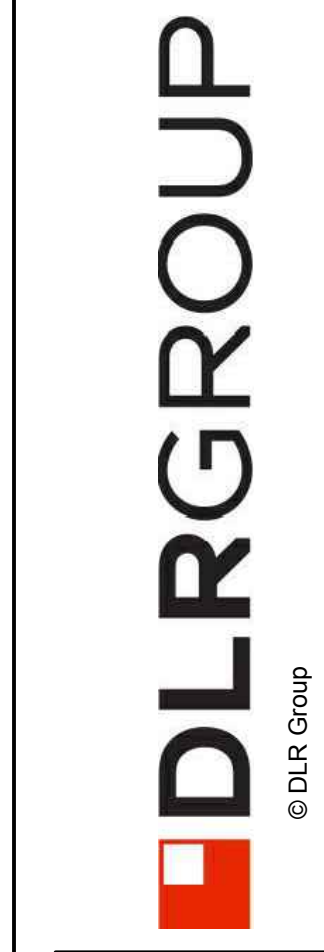
PIPE PENETRATION THRU 1-HR OR 2-HR WALL DETAIL

NO SCALE



WALL MOUNTED PIPE SUPPORT

NO SCALE



COVINA VALLEY HS POOL REPLACEMENT
 COVINA VALLEY UNIFIED SCHOOL DISTRICT
 463 SOUTH HOLLERBECK AVENUE COVINA, CA 91723

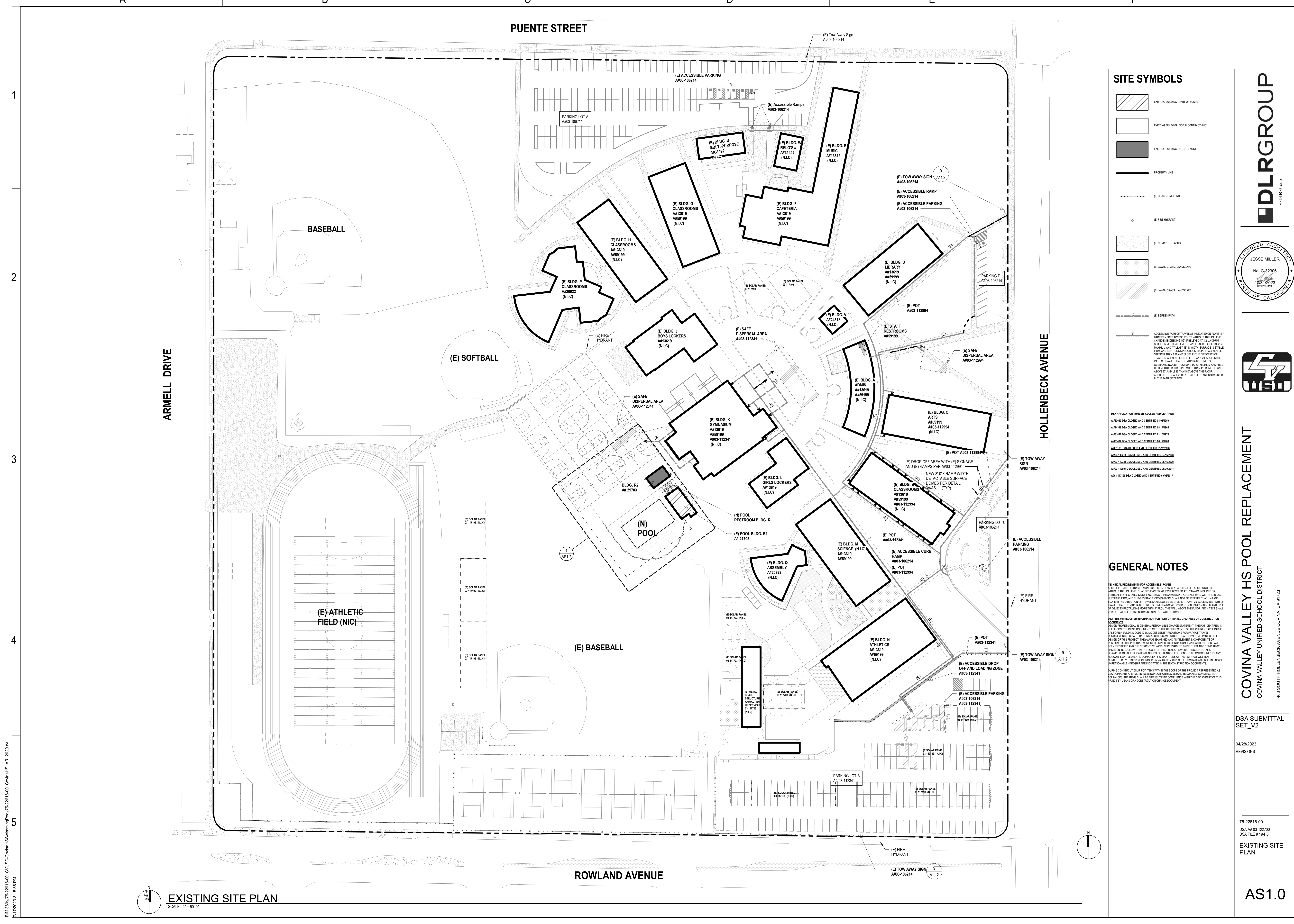
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 DSA A# 03-122700
 DSA FILE # 15148

DETAILS

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SITE SYMBOLS

- EXISTING BUILDING - PART OF SCOPE
- EXISTING BUILDING - NOT IN CONTRACT (N/C)
- EXISTING BUILDING - TO BE REMOVED
- PROPERTY LINE
- (E) CHAIN LINK FENCE
- (E) FIRE HYDRANT
- (E) CONCRETE PAVING
- (E) LAWN / GRASS / LANDSCAPE
- (E) LAWN / GRASS / LANDSCAPE
- (E) EGRESS PATH

ACCESSIBLE PATH OF TRAVEL AS INDICATED ON PLANS IS A BARRIER FREE ACCESS ROUTE WITHOUT ABRUPT LEVEL CHANGES EXCEEDING 1/2" IN 12" MAXIMUM SLOPE OR VERTICAL LEVEL CHANGES NOT EXCEEDING 1/4" MAXIMUM AND AT LEAST 48" IN WIDTH. SURFACE IS STABLE, FIRM AND SLIP-RESISTANT. CROSS SLOPE SHALL NOT BE STEEPER THAN 1:48 AND IN THE DIRECTION OF TRAVEL SHALL NOT BE STEEPER THAN 1:50. ACCESSIBLE PATH OF TRAVEL SHALL BE MAINTAINED FREE OF OBSTRUCTING OBSTRUCTIONS TO 48" MINIMUM AND FREE OF OBJECTS PROTRUDING MORE THAN 4" FROM THE WALL ABOVE 27" AND LESS THAN 8" ABOVE THE FLOOR. ARCHITECTS SHALL VERIFY THAT THERE ARE NO BARRIERS IN THE PATH OF TRAVEL.

- DSA APPLICATION NUMBER CLOSED AND CERTIFIED
- A#13619 DSA CLOSED AND CERTIFIED 04/18/19
- A#14018 DSA CLOSED AND CERTIFIED 04/17/19
- A#14045 DSA CLOSED AND CERTIFIED 03/19/19
- A#15999 DSA CLOSED AND CERTIFIED 04/17/19
- A#16098 DSA CLOSED AND CERTIFIED 06/28/18
- A#16054 DSA CLOSED AND CERTIFIED 03/19/18
- A#16118 DSA CLOSED AND CERTIFIED 06/28/18
- A#16117 DSA CLOSED AND CERTIFIED 06/28/18
- A#16117 W DSA CLOSED AND CERTIFIED 06/28/18

GENERAL NOTES

TECHNICAL REQUIREMENTS FOR ACCESSIBLE ROUTE
 ACCESSIBLE PATH OF TRAVEL AS INDICATED ON PLANS IS A BARRIER FREE ACCESS ROUTE WITHOUT ABRUPT LEVEL CHANGES EXCEEDING 1/2" IN 12" MAXIMUM SLOPE OR VERTICAL LEVEL CHANGES NOT EXCEEDING 1/4" MAXIMUM AND AT LEAST 48" IN WIDTH. SURFACE IS STABLE, FIRM AND SLIP-RESISTANT. CROSS SLOPE SHALL NOT BE STEEPER THAN 1:48 AND IN THE DIRECTION OF TRAVEL SHALL NOT BE STEEPER THAN 1:50. ACCESSIBLE PATH OF TRAVEL SHALL BE MAINTAINED FREE OF OBSTRUCTING OBSTRUCTIONS TO 48" MINIMUM AND FREE OF OBJECTS PROTRUDING MORE THAN 4" FROM THE WALL ABOVE 27" AND LESS THAN 8" ABOVE THE FLOOR. ARCHITECT SHALL VERIFY THAT THERE ARE NO BARRIERS IN THE PATH OF TRAVEL.

DSA #15154 - REQUIRED INFORMATION FOR PATH OF TRAVEL UPDATES ON CONSTRUCTION DOCUMENTS

FOR PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE STATEMENT, THE POT IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS MEETS THE REQUIREMENTS OF THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE (CBC) ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITIONS AND STRUCTURAL REPAIRS AS PART OF THE SCOPE OF THIS PROJECT. THE LAW ENFORCING AND ANY ELEVATED COMPONENTS OR PORTIONS OF THE POT THAT WERE DETERMINED TO BE NON-COMPLIANT WITH THE CBC HAVE BEEN IDENTIFIED AND THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLIANCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THIS PROJECT'S WORK THROUGH DETAILS, DRAWINGS AND PROVISIONS INCORPORATED INTO THESE CONSTRUCTION DOCUMENTS. ANY NON-COMPLIANT ELEMENTS, COMPONENTS OR PORTIONS OF THE POT THAT WILL NOT BE CORRECTED BY THIS PROJECT BASED ON EVALUATION THESE PROJECT LIMITATIONS OR A FINDING OF UNREASONABLE HARDSHIP ARE INDICATED IN THESE CONSTRUCTION DOCUMENTS.

DURING CONSTRUCTION, IF POT ITEMS WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS NON-COMPLIANT ARE FOUND TO BE NON-COMPLIANT BY THE RESPONSIBLE CONTRACTOR OR SUBCONTRACTOR, THE TIME SHALL BE BROUGHT INTO COMPLIANCE WITH THE CBC AS PART OF THE PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT.

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EXISTING SITE PLAN
 SCALE: 1" = 50'-0"

DLR GROUP
 ARCHITECTS

DLR GROUP

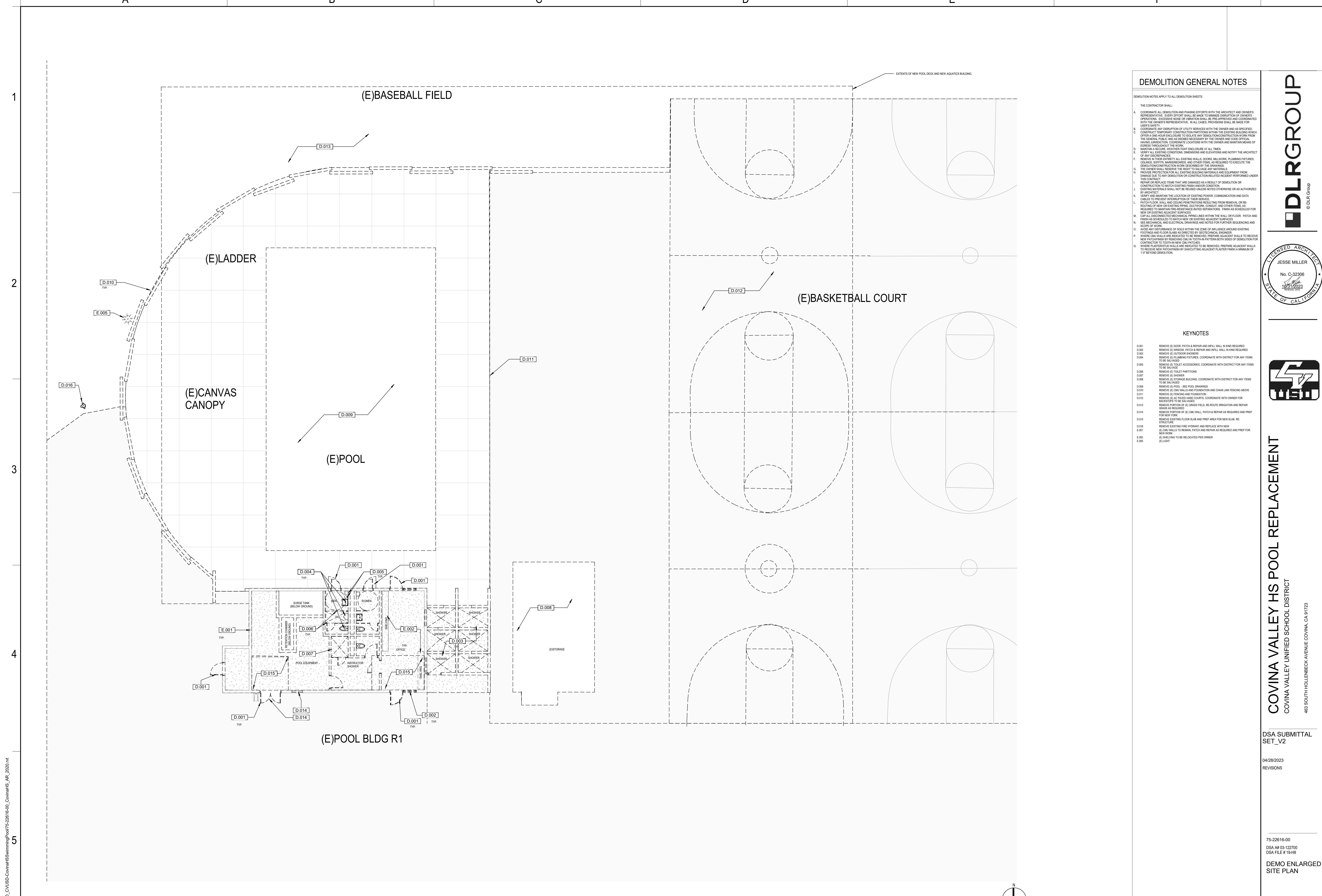
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 COVINA VALLEY UNIFIED SCHOOL DISTRICT
 463 SOUTH HOLLENBECK AVENUE COVINA, CA 91723

DSA SUBMITTAL SET_V2
 04/28/2023 REVISIONS

75-22616-00
 DSA # 03-122700
 DSA FILE # 19-48

EXISTING SITE PLAN

AS1.0

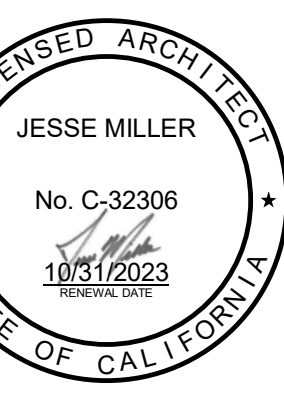


DEMOLITION GENERAL NOTES

- DEMOLITION NOTES APPLY TO ALL DEMOLITION SHEETS.
- THE CONTRACTOR SHALL:
- COORDINATE ALL DEMOLITION AND PHASING EFFORTS WITH THE ARCHITECT AND OWNER'S REPRESENTATIVE. EXCESSIVE NOISE OR VIBRATION SHALL BE PRE-APPROVED AND COORDINATED WITH THE OWNER'S REPRESENTATIVE. IN ALL CASES, PROFESSIONS SHALL BE MADE FOR USER'S SAFETY.
 - COORDINATE ANY DISRUPTION OF UTILITY SERVICES WITH THE OWNER AND AS SPECIFIED.
 - CONSTRUCT TEMPORARY CONSTRUCTION PARTITIONS WITHIN THE EXISTING BUILDING WHICH OFFER A ONE-FOOT ENCLOSURE TO ISOLATE ANY DANGER FROM CONSTRUCTION WORK FROM THE GENERAL PUBLIC AND AS DEEMED NECESSARY BY THE OWNER AND CCCE OFFICIAL HAVING JURISDICTION. COORDINATE LOCATIONS WITH THE OWNER AND MAINTAIN BEANS OF EGRESS THROUGHOUT THE WORK.
 - MAINTAIN SECURE, WEATHER-TIGHT ENCLOSURE AT ALL TIMES.
 - VERIFY ALL EXISTING CONDITIONS, DIMENSIONS AND ELEVATIONS AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES.
 - REMOVE ALL EXISTING WALLS, SCISSOR WALLWORK, PLUMBING FIXTURES, CEILING, SOFFITS, MARKERS, AND OTHER ITEMS AS REQUIRED TO EXECUTE THE DEMOLITION CONSTRUCTION WORK DESCRIBED BY THE DRAWINGS.
 - THE OWNER SHALL RESERVE THE RIGHT TO SALVAGE ANY MATERIALS.
 - PROVIDE PROTECTION FOR ALL EXISTING BUILDING MATERIALS AND EQUIPMENT FROM DAMAGE DUE TO ANY DEMOLITION OR CONSTRUCTION-RELATED INCIDENT PERFORMED UNDER THIS CONTRACT.
 - REPAIR OR REPLACE ITEMS THAT ARE DAMAGED AS A RESULT OF DEMOLITION OR CONSTRUCTION TO MATCH EXISTING FINISH AND/OR CONDITION.
 - VERIFY AND MAINTAIN THE LOCATION OF EXISTING POWER, COMMUNICATION AND DATA CABLES TO PREVENT INTERRUPTION OF THEIR SERVICE.
 - PATCH FLOOR, WALL AND CEILING REPAIRS TO MATCH EXISTING FINISHES, OR AS REQUIRED TO MATCH PRE-EXISTING FINISHES, FINISH AS SCHEDULED FOR NEW OR EXISTING ADJACENT SURFACES.
 - CAP ALL DISCONNECTED MECHANICAL PIPING LINES WITHIN THE WALL OR FLOOR. PATCH AND FINISH AS SCHEDULED TO MATCH NEW OR EXISTING ADJACENT SURFACES.
 - SEE MECHANICAL AND ELECTRICAL DRAWINGS AND NOTES FOR FURTHER SCHEDULING AND SCOPE OF WORK.
 - AVOID ANY INTERFERENCE OF SOLE WITHIN THE ZONE OF INFLUENCE AROUND EXISTING FOOTINGS AND FLOOR SLABS AS DIRECTED BY GEOTECHNICAL ENGINEER.
 - WHERE CHAIN WALLS ARE INDICATED TO BE REMOVED, PREPARE ADJACENT WALLS TO RECEIVE NEW PATCHWORK BY REINFORCING WITH 100# IN PATTERN WITH SIZES OF DEMOLITION FOR CONTRACTOR TO TOOTH-IN NEW CHAIN WALLS.
 - WHERE PATTERNOCK WALLS ARE INDICATED TO BE REMOVED, PREPARE ADJACENT WALLS TO RECEIVE NEW PATCHWORK BY SAWCUTTING ADJACENT PLASTER FINISH A MINIMUM OF 1" BEFORE DEMOLITION.

KEYNOTES

- D.001 REMOVE (E) DOOR, PATCH & REPAIR AND INFILL WALL IN KIND REQUIRED
- D.002 REMOVE (E) WINDOW, PATCH & REPAIR AND INFILL WALL IN KIND REQUIRED
- D.003 REMOVE (E) OUTDOOR BURNER
- D.004 REMOVE (E) PLUMBING FIXTURES, COORDINATE WITH DISTRICT FOR ANY ITEMS TO BE SALVAGED
- D.005 REMOVE (E) TOILET ACCESSORIES, COORDINATE WITH DISTRICT FOR ANY ITEMS TO BE SALVAGED
- D.006 REMOVE (E) TOILET PARTITIONS
- D.007 REMOVE (E) SHOWER
- D.008 REMOVE (E) STORAGE BUILDING, COORDINATE WITH DISTRICT FOR ANY ITEMS TO BE SALVAGED
- D.009 REMOVE (E) POOL - SEE POOL DRAWINGS
- D.010 REMOVE (E) CHAIN WALLS AND FOUNDATION AND CHAIN LINK FENCING ABOVE
- D.011 REMOVE (E) FENCING AND FOUNDATION
- D.012 REMOVE (E) CANVAS CANOPY, COORDINATE WITH OWNER FOR BACKTIPS TO BE SALVAGED
- D.013 REMOVE PORTION OF (E) GRASS FIELD, RE ROUTE IRRIGATION AND REPAIR GRASS AS REQUIRED
- D.014 REMOVE PORTION OF (E) CHAIN WALL, PATCH & REPAIR AS REQUIRED AND PREP FOR NEW WORK
- D.015 REMOVE EXISTING FLOOR SLAB AND PREP AREA FOR NEW SLAB, RE STRUCTURE
- D.016 REMOVE EXISTING FIRE INTRANT AND REPLACE WITH NEW
- E.001 (E) CHAIN WALLS TO REMAIN, PATCH AND REPAIR AS REQUIRED AND PREP FOR NEW WORK
- E.002 (E) SHELVING TO BE RELOCATED PER OWNER
- E.003 (E) LIGHT



COVINA VALLEY HS POOL REPLACEMENT
 COVINA VALLEY UNIFIED SCHOOL DISTRICT
 483 SOUTH HOLLENBECK AVENUE COVINA, CA 91723

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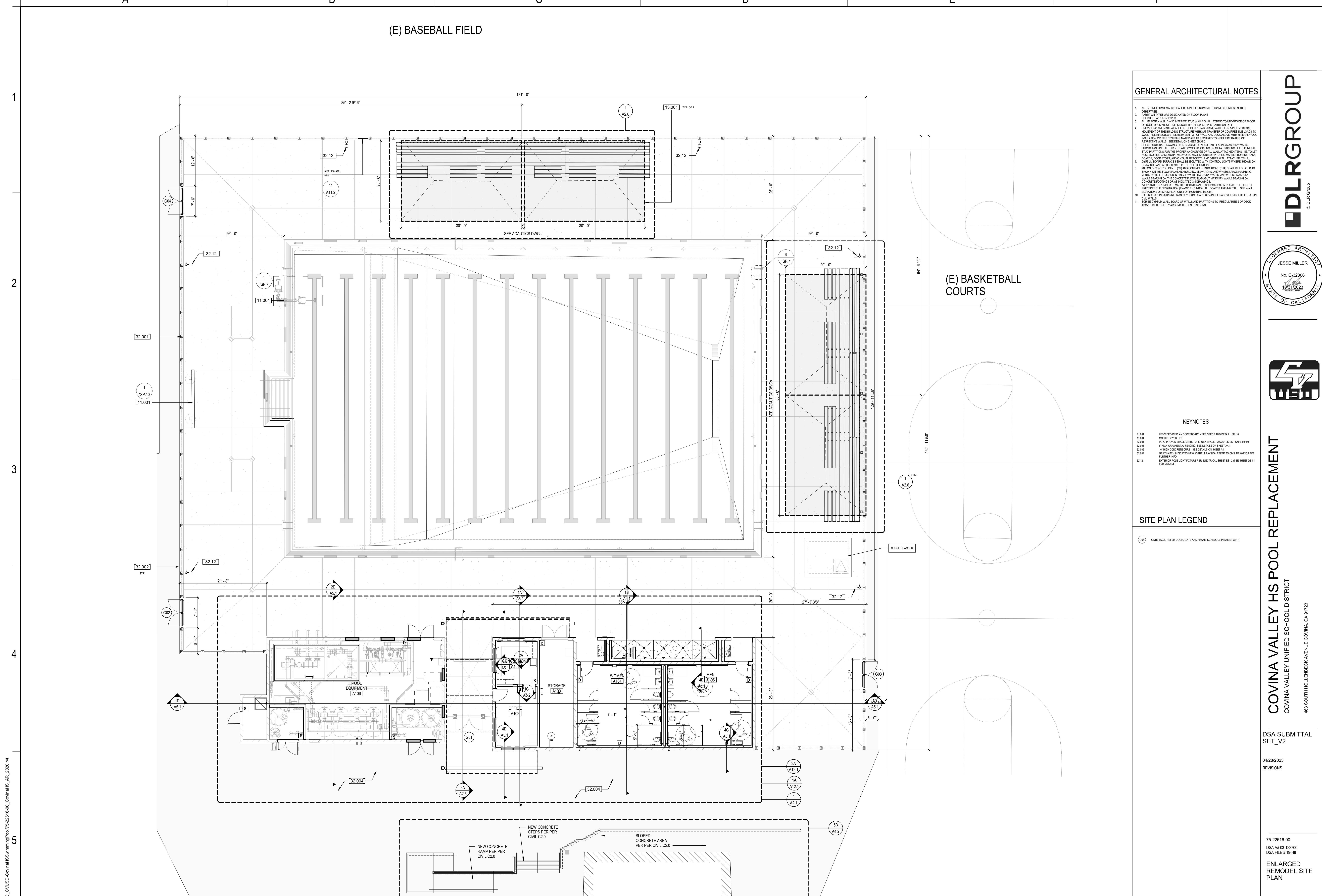
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DEMO ENLARGED SITE PLAN

AS1.2

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1 EXISTING ENLARGED SITE PLAN
 SCALE: 1/8" = 1'-0"



(E) BASEBALL FIELD

(E) BASKETBALL COURTS

GENERAL ARCHITECTURAL NOTES

1. ALL INTERIOR GYM WALLS SHALL BE 8" MINIMUM THICKNESS, UNLESS NOTED OTHERWISE.
2. PARTITION TYPES ARE DESIGNATED ON FLOOR PLANS.
3. ALL MASONRY WALLS AND EXTERIOR STUD WALLS SHALL EXTEND TO UNDERSIDE OF FLOOR OR ROOF DECK ABOVE UNLESS NOTED OTHERWISE. PER PARTITION TYPE PROVISIONS ARE MADE AT ALL FULL HEIGHT NON-BEARING WALLS FOR VERTICAL MOVEMENT OF THE BUILDING STRUCTURE WITHOUT TRANSFER OF COMPRESSIVE LOADS TO WALL. FULL PENETRATIONS BETWEEN TOP OF WALL AND DECK ABOVE WITH MINERAL WOOL INSULATION OR FIRE STOPPING MATERIAL AS REQUIRED TO MEET FIRE RATING OF PARTITION.
4. SEE STRUCTURE DRAWINGS FOR BRACING FOR NON-BEARING MASONRY WALLS.
5. FURNISH AND INSTALL FIRE-TREATED WOOD BLOCKING OR METAL BACKING PLATE IN METAL STUD PARTITIONS FOR THE PERIMETER OF ALL WALLS AT INTERSECTIONS. INCLUDE ACCESSORIES, CASEWORK, MILLWORK, WALL-MOUNTED FIXTURES, HANGER BRACKETS, TACK BOARDS, BOOK SHELVES, AND OTHER WALL-MOUNTED ITEMS.
6. DIVISION BOARD SURFACES SHALL BE ISOLATED WITH CONTROL JOINTS WHERE SHOWN ON DRAWINGS AND AS DESCRIBED IN THE SPECIFICATIONS.
7. MASONRY CONTROL JOINTS (CJ) AND CONTROL JOINTS ABOVE (CAJ) SHALL BE LOCATED AS SHOWN ON THE FLOOR PLAN AND BUILDING ELEVATIONS, AND WHERE LARGE CLADDING VENTS OR RISERS OCCUR IN SINGLE WITH THE MASONRY WALLS AND WHERE MASONRY WALLS BEARING ON THE CONCRETE FLOOR SLAB BUT MASONRY WALLS BEARING ON CONCRETE FOOTINGS OR AS INDICATED ON DRAWINGS.
8. "NOTES" AND "THE" INDICATE MASONRY BOARD AND TACK BOARDS ON PLANS. THE LENGTH, PRELIMINARY THE SEPARATION (LUMBER) IF BRICK, TACK BOARDS ARE 4" TALL. SEE WALL ELEVATIONS OR SPECIFICATIONS FOR MOUNTING HEIGHT.
9. EXTENDING CHANNELS AND OPTION BRIMS OF 8" MINIMUM ABOVE FINISHED CEILING ON GYM WALLS.
10. SCORE SYSTEM WALL BOARD OF WALLS AND PARTITIONS TO IRREGULARITIES OF DECK ABOVE. SEAL TIGHTLY AROUND ALL PENETRATIONS.

KEYNOTES

- 11.001 LED VIDEO DISPLAY SCOREBOARD - SEE SPEC AND DETAIL 10P.10
- 11.004 MOBILE HOVER LIFT
- 13.001 PO APPROVED SHADE STRUCTURE, USA SHADE - 27X32 USING POPEX 1104S
- 32.001 6" HIGH ORNAMENTAL FENCING, SEE DETAILS ON SHEET A4.1
- 32.002 18" HIGH CONCRETE CURB, SEE DETAILS ON SHEET A4.1
- 32.004 GRAY PATCH INDICATES NEW ASPHALT PAVING - REFER TO CIVIL DRAWINGS FOR FURTHER INFO
- 32.12 EXTERIOR POLE LIGHT FIXTURE PER ELECTRICAL SHEET E31.2 (SEE SHEET A6.1 FOR DETAILS)

SITE PLAN LEGEND

- ⊙ GATE TAGS: REFER DOOR, GATE AND FRAME SCHEDULE IN SHEET A1.1

6 ENLARGED REMODEL SITE PLAN
AS1.3 / SCALE: 1/8" = 1'-0"



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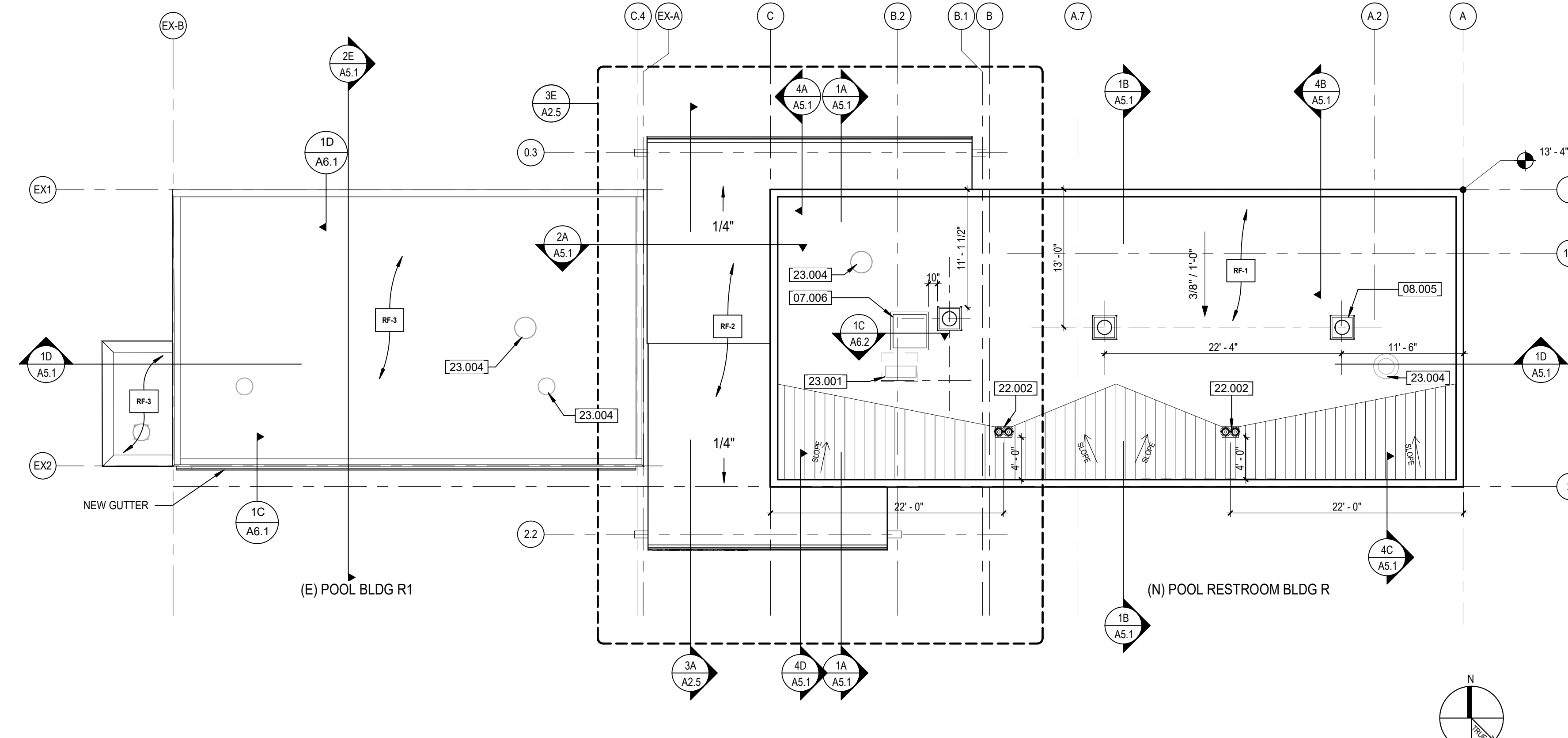
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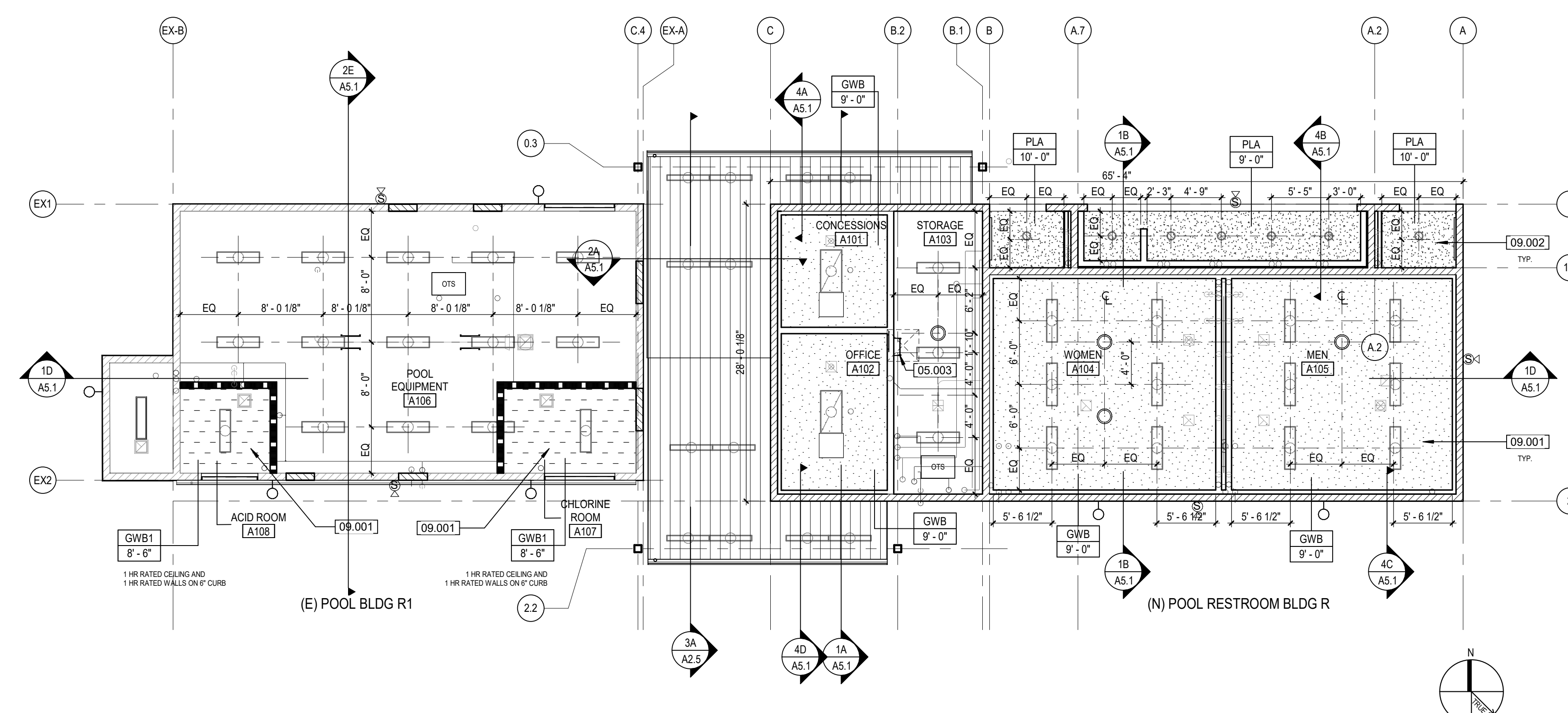
ENLARGED REMODEL SITE PLAN

AS1.3

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3 ROOF PLAN - (E) POOL BLDG R1 AND (N) POOL RESTROOM BLDG R
SCALE: 1/8" = 1'-0"



2 REFLECTED CEILING PLAN - (E) POOL BLDG R1 AND (N) POOL RESTROOM BLDG R
SCALE: 1/8" = 1'-0"

REFLECTED CEILING PLAN LEGEND

- PLA - FRAMED EXTERIOR CEMENT PLASTER CEILING / SOFFIT REFER TO DETAIL 20A.1
- GWS - FRAMED GYPSUM BOARD CEILING REFER TO DETAIL 20A.1
- GWB - 1 HR RATED FRAMED GYPSUM BOARD CEILING REFER TO DETAIL 20A.1
- MTL - EXPOSED STRUCTURAL DECK, FLUOROPOLYMER COATING NYLON FINISH REFER TO DETAIL 20A.2
- OTS - OPEN TO STRUCTURE

LIGHT FIXTURE LEGEND

- SURFACE MOUNTED LIGHT FIXTURE - SEE ELECTRICAL
- 2'x4' RECESSED LIGHT FIXTURE - SEE ELECTRICAL
- 6'x6' SURFACE MOUNTED LIGHT FIXTURE - SEE ELECTRICAL
- SOLUBLE LIGHT FIXTURE
- RECESSED DOWNLIGHT - SEE ELECTRICAL
- WALL PACK LIGHT - SEE ELECTRICAL

ROOF PLAN GENERAL NOTES

1. ROOF PLAN GENERAL NOTES APPLY TO ALL ROOF PLAN SHEETS.
2. ROOF FLOOR ARE CREATED BY LIFTING THE ROOF STRUCTURE UNLESS NOTED OTHERWISE. SEE STRUCTURAL DRAWINGS FOR ELEVATIONS OF THE HIGH AND LOW POINTS TO DETERMINE PROPER WATER DRAINAGE.
3. TYPED INSULATION SHALL PROVIDE A MINIMUM OF 14-INCH PER FOOT OF SLOPE TO ROOF DRAINS.
4. DRAIN AREAS MARKED WITH A HATCH WITHIN DIMENSIONED DRAINAGE AREAS SHALL BE DRAINAGE AREAS MARKED WITH A HATCH WITHIN DIMENSIONED DRAINAGE AREAS.
5. ALL ROOF CURBS TO BE A MINIMUM OF 4 INCHES ABOVE FINISHED ROOFING.
6. FINISHED ROOFING ON CURBS TO BE 4 INCHES ABOVE FINISHED ROOFING.
7. SEE STRUCTURAL DRAWINGS FOR FRAMING AND ROOF PENETRATIONS.
8. COORDINATE THE SIZE AND LOCATION OF ROOF PENETRATIONS FOR MECHANICAL AND ELECTRICAL EQUIPMENT. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR PENETRATIONS NOT SHOWN ON THIS DRAWING.
9. FLASHINGS, CURBS, VENTS AND OTHERS PER MANUFACTURER'S RECOMMENDATIONS IF DETAIL NOT SHOWN ON DRAWINGS.

REFLECTED CEILING PLAN GENERAL NOTES

1. REFLECTED CEILING PLAN GENERAL NOTES APPLY TO ALL REFLECTED CEILING PLAN SHEETS.
2. ALL CEILING GRIDPANELS SHALL BE CENTERED IN EACH ROOM UNLESS NOTED OTHERWISE.
3. CEILING HEIGHTS ARE NOTED ON THE REFLECTED CEILING PLANS ARE MEASURED FROM THE FINISH FLOOR OF THE ROOM.
4. ALL ELECTRICAL FIXTURES, SPEAKERS, SMOKE AND THERMAL DETECTORS, MECHANICAL GRILLES, SPRINKLER HEADS, AND OTHER CEILING MOUNTED DEVICES SHALL BE CENTERED BETWEEN CEILING GRID LINES UNLESS NOTED OTHERWISE. SPRINKLER HEADS SHALL BE WITHIN 3/8" OF A GRID CENTER LINE.
5. IN ACOUSTICAL CEILING PANELS WITH SQUARE IN THE CENTER, CENTER DEVICES REFERENCE IN NOTES IN EACH END OF THE GRID LINE LOCATE IN THE CENTER OF EACH AC WITH MULTIPLE SPORED PATTERNS, COORDINATE LOCATION WITH THE ARCHITECT.
6. PROVIDE A NUMBER SYSTEM AND ELECTRICITY SYMBOLS, MECHANICAL PANEL DIFFUSERS, AND OTHER CEILING MOUNTED DEVICES AT AC/CURVE/CORNER PANEL CEILING. ALL DIMENSIONS ON REFLECTED CEILING PLANS ARE ACTUAL AND ARE TO THE FOLLOWING UNLESS NOTED OTHERWISE:
 - a. FACE OF FINISHED WALL
 - b. FACE OF FINISHED BULKHEAD
 - c. CENTERLINE OF COLUMN
 - d. CENTERLINE OF TIE
7. IN AREAS WITH EXPOSED STRUCTURE CEILING, COORDINATE EXACT LOCATIONS OF MECHANICAL, ELECTRICAL, AND OTHER CEILING MOUNTED DEVICES WITH EACH REPRESENTATIVE SUBCONTRACTOR.
8. ALL WALLS EXTEND TO UNDERSIDE OF CEILING EXCEPT THOSE SHOWN SHOWN IN WHICH OPTIMUM BOARD OR MASONRY EXTENDS MIN 4 INCHES ABOVE FINISHED CEILING. ALL METAL STEEL EXTEND TO UNDERSIDE OF FLOOR OR ROOF DECK.

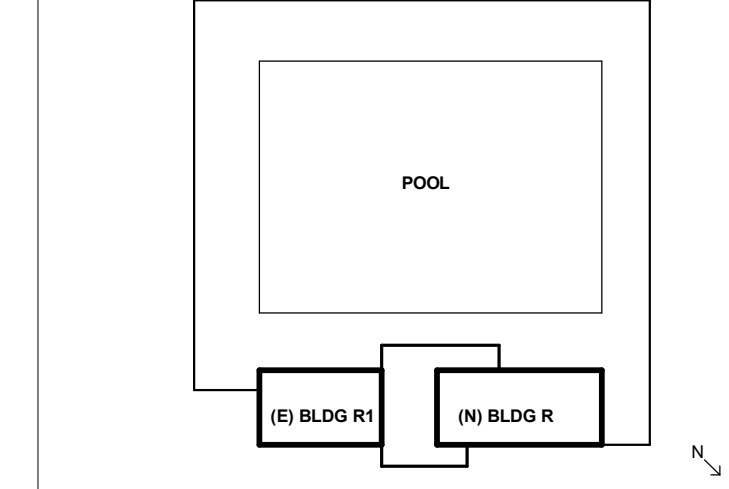
GENERAL ARCHITECTURAL NOTES

1. ALL INTERIOR CMU WALLS SHALL BE 8 INCHES NOMINAL THICKNESS UNLESS NOTED OTHERWISE.
2. PARTITION TYPES ARE DESCRIBED ON FLOOR PLANS.
3. ALL INTERIOR PARTITIONS ARE CONCRETE OR WOOD BLOCKING METAL BRACING PLATE IN METAL STUD PARTITIONS FOR THE PROPER ANCHORAGE OF ALL WALL ATTACHED ITEMS. (E. TOLERANCE SHALL BE 1/4" MAXIMUM FROM THE CENTERLINE OF THE PARTITION TO THE CENTERLINE OF THE WALL ATTACHED ITEMS.)
4. ALL PARTITIONS ARE TO BE 8 FT. TALL HEIGHT UNLESS NOTED OTHERWISE. PER PARTITION TYPE. PROVIDE A MINIMUM OF 1/4" TYPICAL HEIGHT ABOVE FINISHED FLOOR TO THE TOP OF THE PARTITION. ALL PARTITIONS TO BE 1/4" TYPICAL ABOVE FINISHED FLOOR TO THE TOP OF THE PARTITION.
5. SEE STRUCTURAL DRAWINGS FOR BRACING OF NON-LOAD BEARING MASONRY WALLS.
6. FINISH AND INSTALL FIRE TREATED WOOD BLOCKING METAL BRACING PLATE IN METAL STUD PARTITIONS FOR THE PROPER ANCHORAGE OF ALL WALL ATTACHED ITEMS. (E. TOLERANCE SHALL BE 1/4" MAXIMUM FROM THE CENTERLINE OF THE PARTITION TO THE CENTERLINE OF THE WALL ATTACHED ITEMS.)
7. DRYWALL BOARD SURFACES SHALL BE ISOLATED WITH CONTROL JOINTS WHERE SHOWN ON DRAWINGS AND AS DESCRIBED IN THE SPECIFICATIONS.
8. MASONRY CONTROL JOINTS (CJ) AND CONTROL JOINTS ABOVE CEILING SHALL BE LOCATED AS SHOWN ON THE FLOOR PLAN AND CEILING PLAN. COORDINATE WITH THE ARCHITECT.
9. VENTS OR RISERS OCCUR IN SINGLE WITH THE MASONRY WALLS AND WHERE MASONRY WALLS BEARING ON THE CONCRETE FLOOR OR ARE NOT MASONRY WALLS BEARING ON CONCRETE FOOTINGS OR AS INDICATED ON DRAWINGS.
10. "NDS" AND "TYP" INDICATE MASONRY WALLS NOT TO BE MOUNTED TO PARTITIONS ON CONCRETE FOOTINGS OR AS INDICATED ON DRAWINGS.
11. ALL WALLS EXTEND TO UNDERSIDE OF CEILING EXCEPT THOSE SHOWN SHOWN IN WHICH OPTIMUM BOARD OR MASONRY EXTENDS MIN 4 INCHES ABOVE FINISHED CEILING. ALL METAL STEEL EXTEND TO UNDERSIDE OF FLOOR OR ROOF DECK.
12. EXTERIOR WALL BOARDS OF WALLS AND PARTITIONS TO BE REGULARITIES OF DECK ABOVE. SEAL TIGHTLY AROUND ALL PENETRATIONS.

KEYNOTES

- | # | DESCRIPTION |
|--------|------------------------------------------------------------------------|
| 03.002 | CONCRETE SLAB INFILL. VERIFY INFILL SIZE IN FIELD. - SEE STRUCT & SPEC |
| 04.001 | MILL ON PAINT - SEE ARCH |
| 05.002 | HIS COLUMN - SEE STRUCT |
| 06.002 | ROOF ACCESS LADDER - SEE DETAIL ON SHEET A6.1 |
| 09.002 | DOWNDROPT - PREPARED COLOR TO MATCH ADJ. COLUMN |
| 09.001 | OTB - CEILING - SEE DETAILS ON SHEET A6.1 & SPEC |
| 09.002 | EXTERIOR CEMENT PLASTER CEILING - SEE DETAILS ON SHEET 20A.1 & SPEC |
| 09.003 | STAINLESS STEEL COUNTERTOP - SEE DETAILS ON SHEET A6.1 & SPEC |
| 22.001 | ROOF MECHANICAL INTAKE - SEE MECHANICAL DRAWINGS |
| 23.004 | EXHAUST FAN - SEE MECHANICAL DRAWINGS |
| 32.11 | FIRE EXTINGUISHER CABINET - RECESSED - SEE DETAIL ON SHEET A6.2 |
| 32.14 | FIRE EXTINGUISHER CABINET - WALL MOUNT - SEE DETAIL ON SHEET A6.2 |

KEY PLAN



PARTITION TYPES DESCRIPTIONS

- REFER TO SHEET A6.6 FOR PARTITION TYPES
- | MATERIAL DESCRIPTION | RATING / HEIGHT |
|----------------------|---------------------------------------------------|
| STEEL METAL STUD | |
| W = WOOD STUDS | A = FULL HEIGHT / UNDERSIDE OF STRUCT (NOT RATED) |
| S = SHUNT WALLS | B = 4' FENCED CEILING (NOT RATED) |
| M = MASONRY | C = PARTIAL HEIGHT (NOT RATED) |
| C = CONCRETE | D = UNDERSIDE OF CEILING (NOT RATED) |
| | E = PARTIAL HEIGHT (NOT RATED) |
| | F = SMOKE PARTITION (NOT RATED) |
| | G = 6 HOUR RATED (CORRIDOR) |
| | L = 0 HOUR RATED |
| | N = 1 HOUR RATED |
| | O = 2 HOUR RATED |
| | P = 3 HOUR RATED |
| | Q = 4 HOUR RATED |

UNIT WIDTH / CONFIGURATION

- | UNIT WIDTH / CONFIGURATION | UNIT WIDTH |
|---------------------------------------------|---------------------------------------------|
| F = FLOORING STRIPS / CHANNELS | 1 = 10' METAL |
| 1 = 10' METAL | 2 = 2' METAL 1 1/2" CHANNEL |
| 2 = 2' METAL 1 1/2" CHANNEL | 3 = 3' METAL |
| 3 = 3' METAL | 4 = 4' METAL 1 1/2" WOOD 3/8" CMU |
| 4 = 4' METAL 1 1/2" WOOD 3/8" CMU | 5 = 6' METAL 1 1/2" WOOD 3/8" CMU / 8" CONC |
| 5 = 6' METAL 1 1/2" WOOD 3/8" CMU / 8" CONC | 6 = 8' METAL 1 1/2" WOOD 3/8" CMU / 8" CONC |
| 6 = 8' METAL 1 1/2" WOOD 3/8" CMU / 8" CONC | 7 = 10' CONC |
| 7 = 10' CONC | X = NON-STANDARD WITH SEE DETAILS |
| X = NON-STANDARD WITH SEE DETAILS | Y = DIMENSIONAL STUD FRAMING |
| Y = DIMENSIONAL STUD FRAMING | Z = STAGGERED STUD FRAMING |

GYPSUM WALLBOARD INDICATOR

- NOT INCLUDING SHUNT LINERS
- | UNIT WIDTH | GYPSUM INDICATOR |
|------------|-----------------------------------------|
| 1 | 1 = ONE LAYER TAG SIDE |
| 2 | 2 = ONE LAYER EACH SIDE |
| 3 | 3 = TWO LAYER TAG SIDE, ONE LAYER OTHER |
| 4 | 4 = TWO LAYERS EACH SIDE |
| 5 | 5 = TWO LAYERS TAG SIDE, NO GWS OTHER |
| 6 | 6 = THREE LAYERS EACH SIDE |

UNIQUE CONDITION (SEE SCHEDULE)

- | UNIQUE CONDITION (SEE SCHEDULE) | UNIT WIDTH |
|---------------------------------|-------------------|
| 0 = NO UNIQUE CONDITION | 1 = FULL FINISH |
| 1 = FULL FINISH | 2 = PLUMBING WALL |



REFER TO SHEET A6.6 FOR PARTITION TYPES

1 FLOOR PLAN - (E) POOL BLDG R1 AND (N) POOL RESTROOM BLDG R
SCALE: 1/8" = 1'-0"



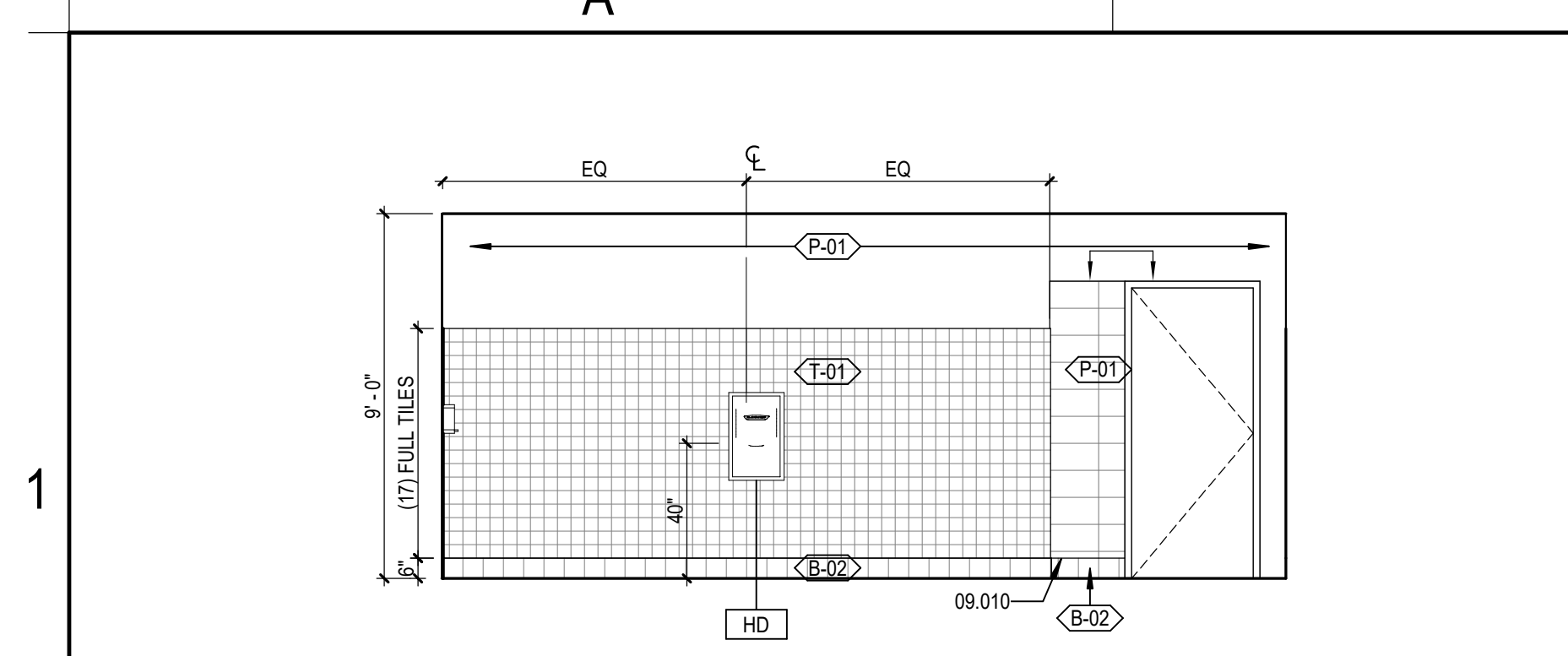
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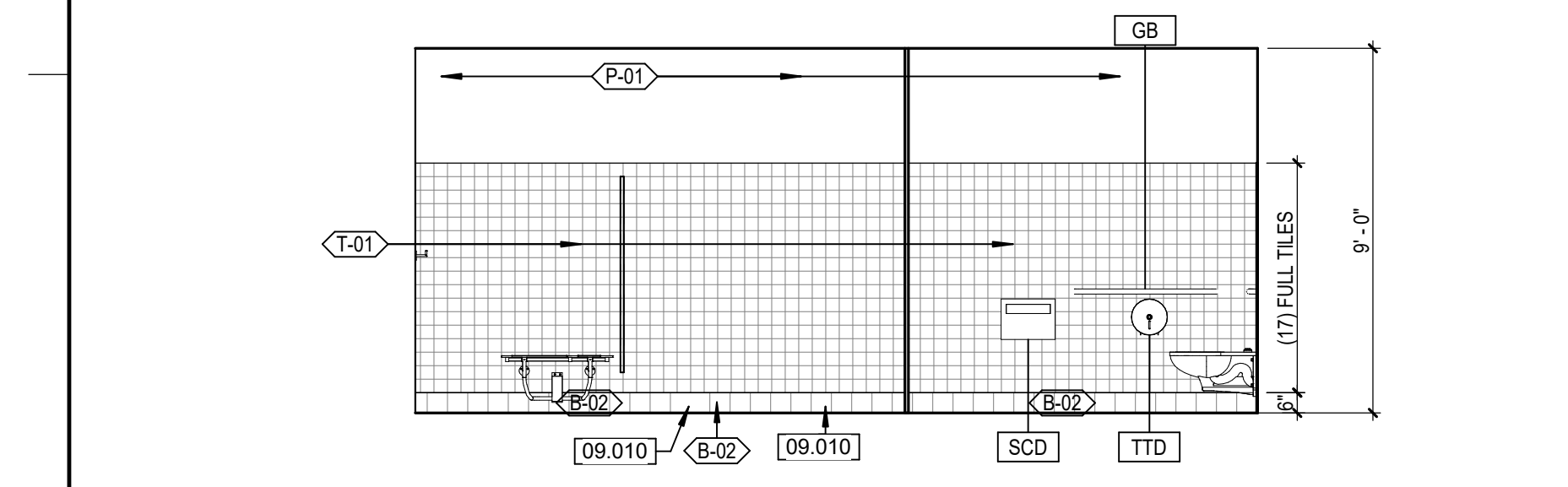
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FLOOR PLAN, REFLECTED CEILING PLAN & ROOF PLAN

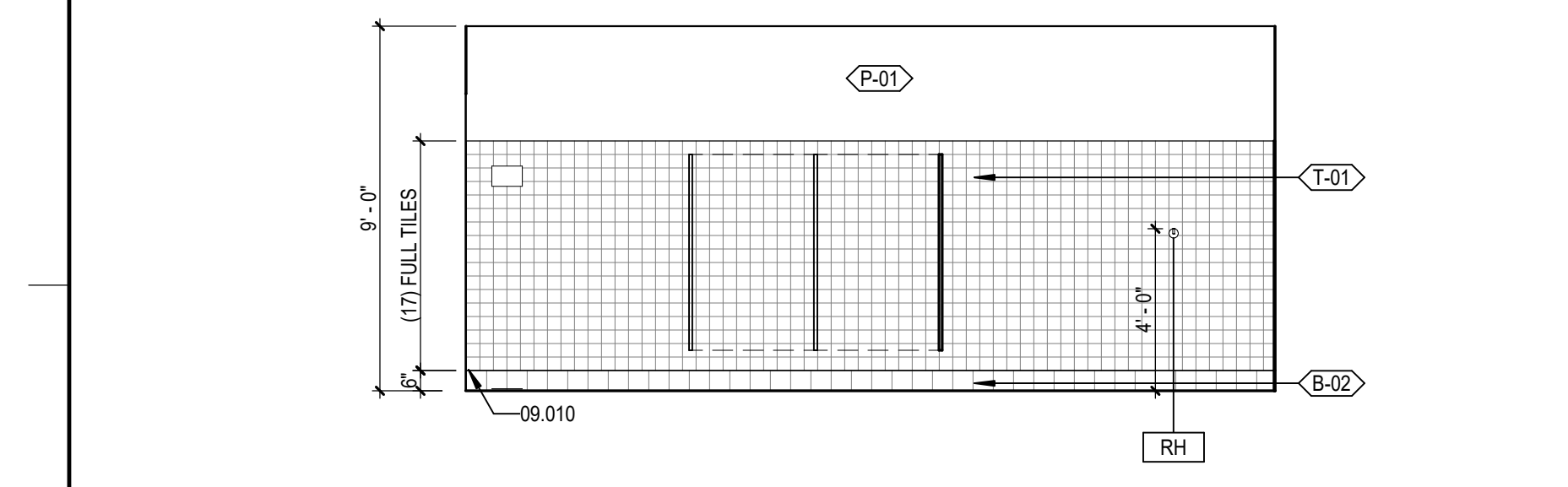
A2.1



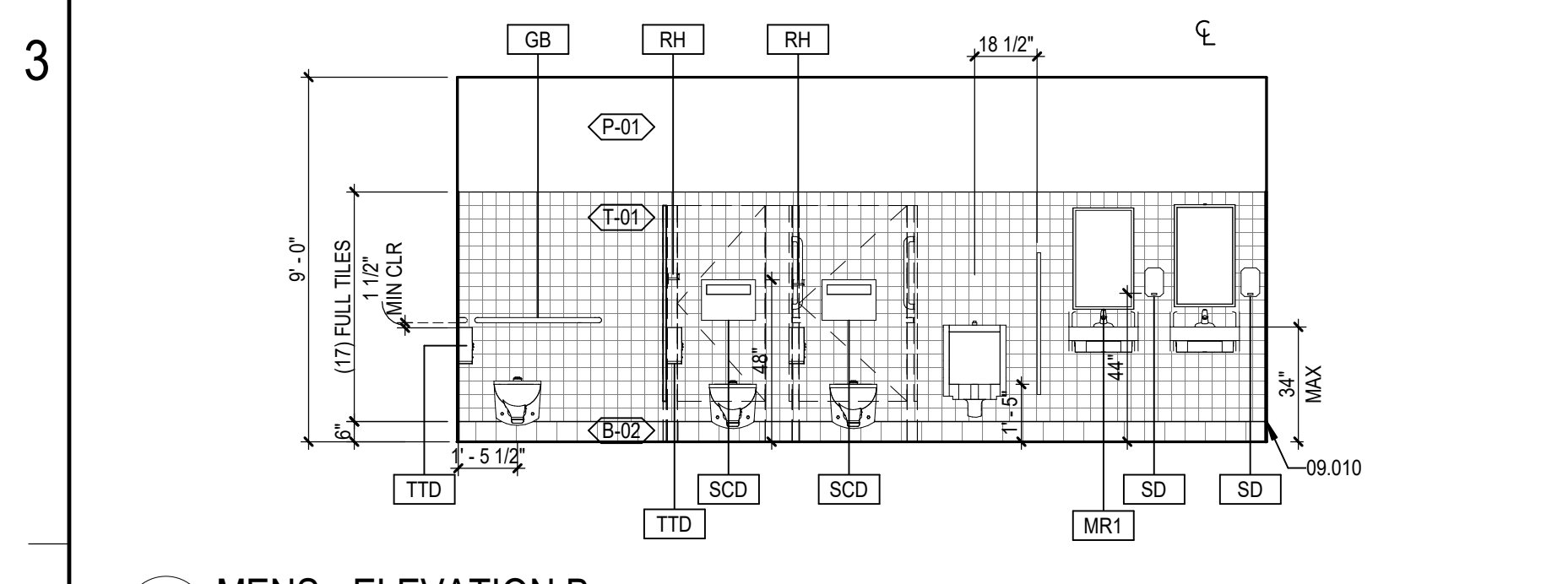
1A MEN A105 - A
A2.2 SCALE: 1/4" = 1'-0"



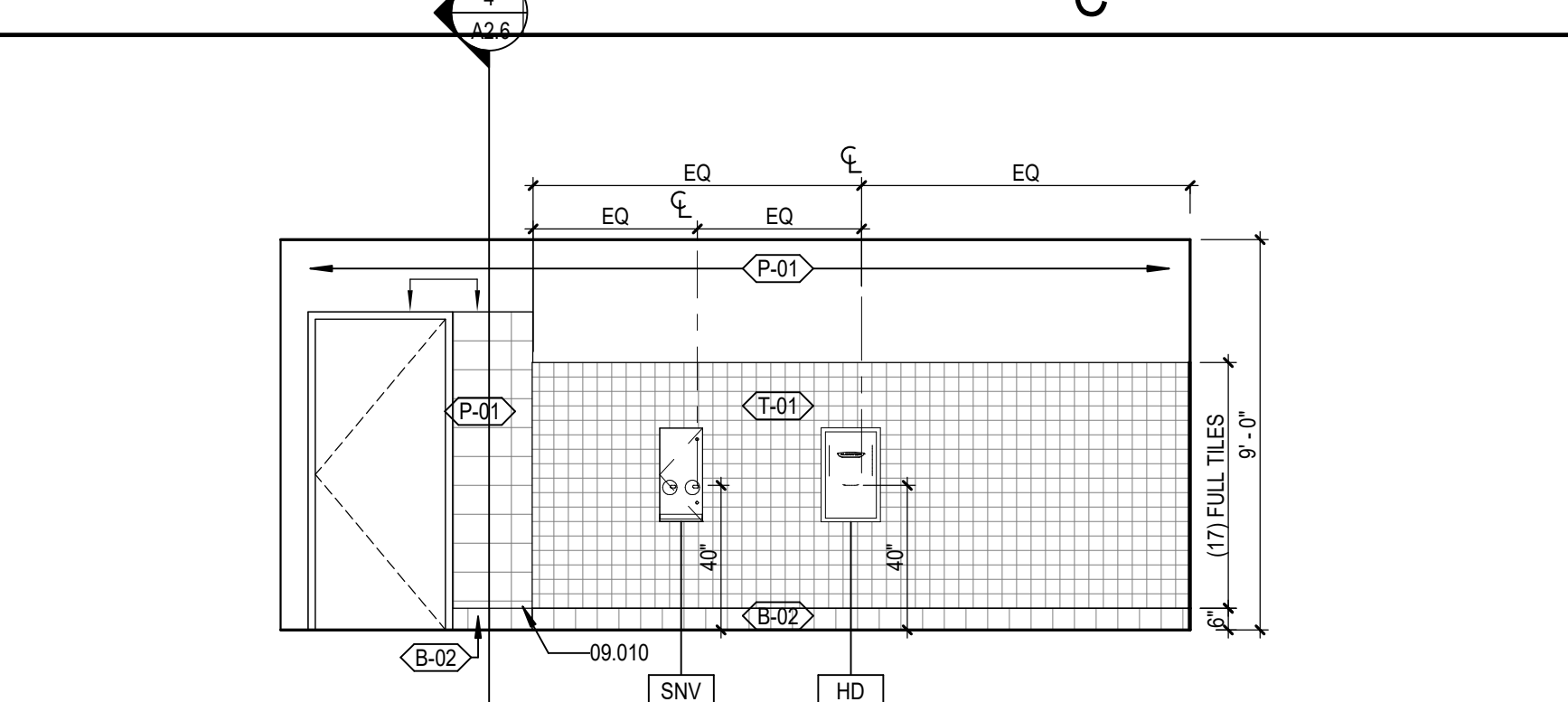
2A MEN A105 - C
A2.2 SCALE: 1/4" = 1'-0"



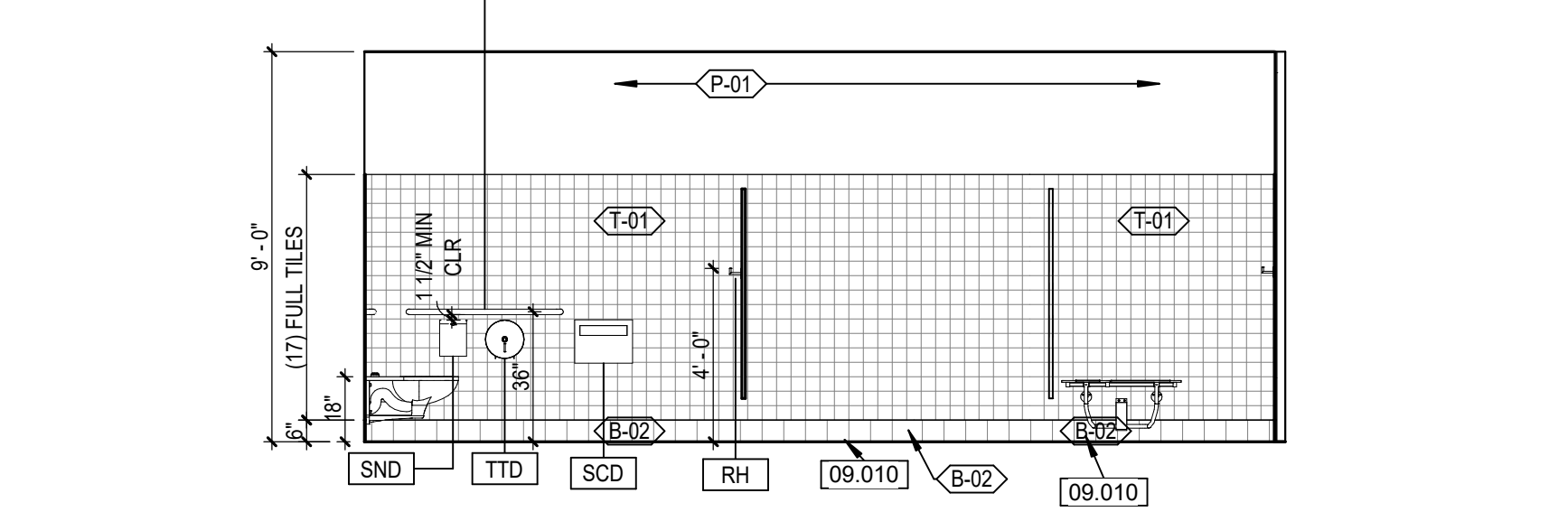
3A MEN A105 - B
A2.2 SCALE: 1/4" = 1'-0"



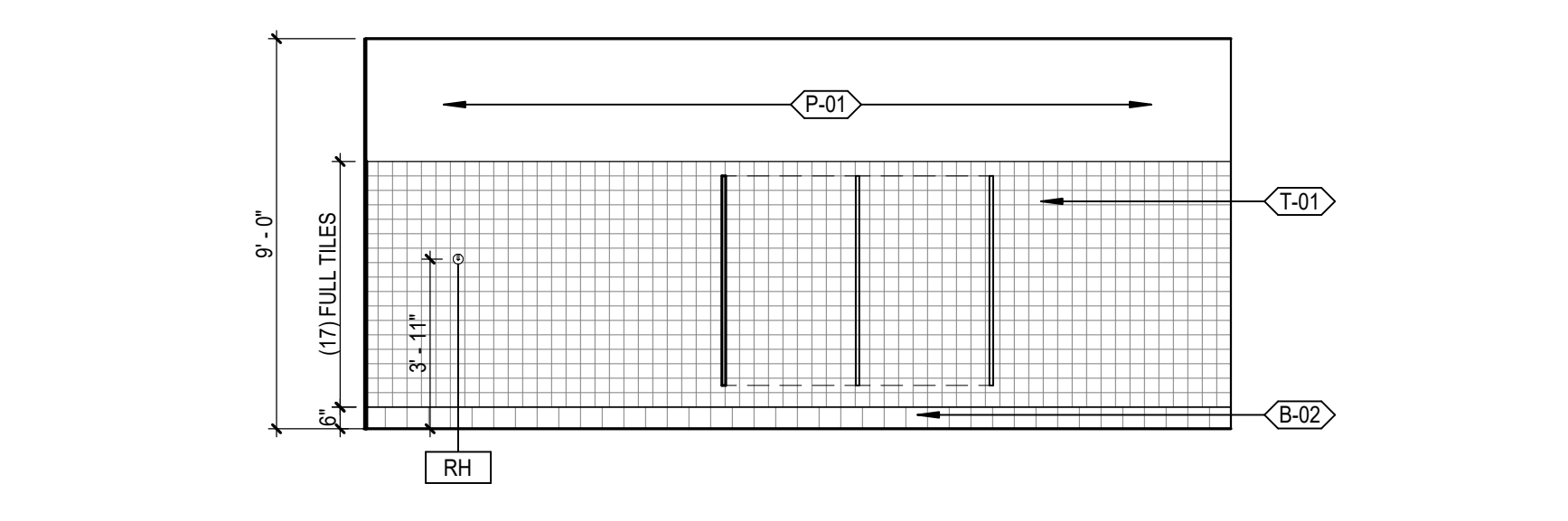
6A MENS - ELEVATION B
A2.2 SCALE: 1/4" = 1'-0"



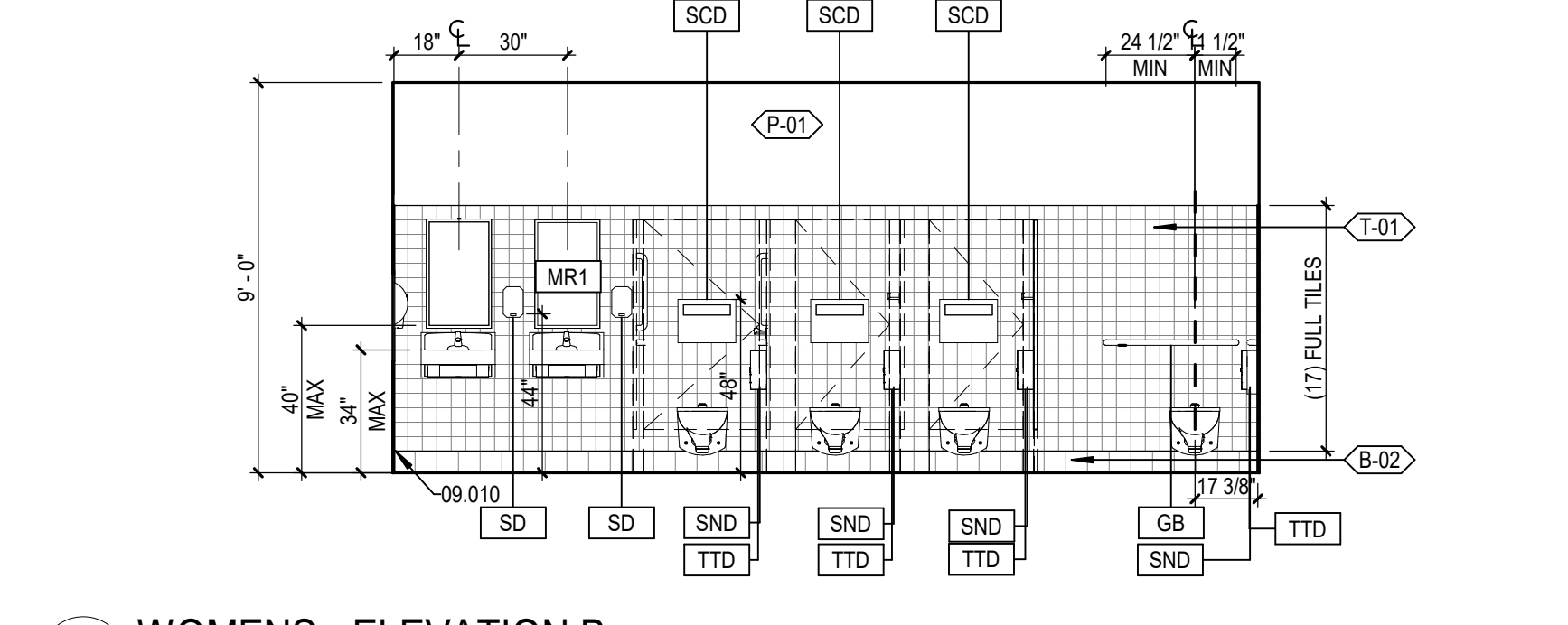
1C WOMEN A104 - A
A2.2 SCALE: 1/4" = 1'-0"



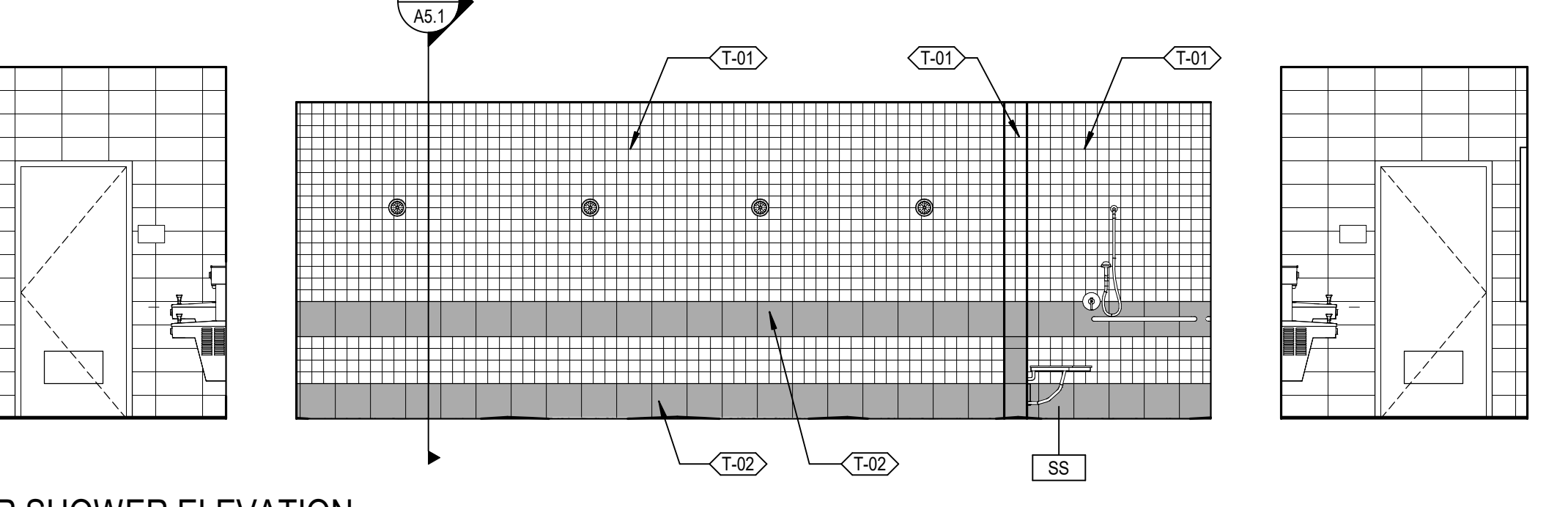
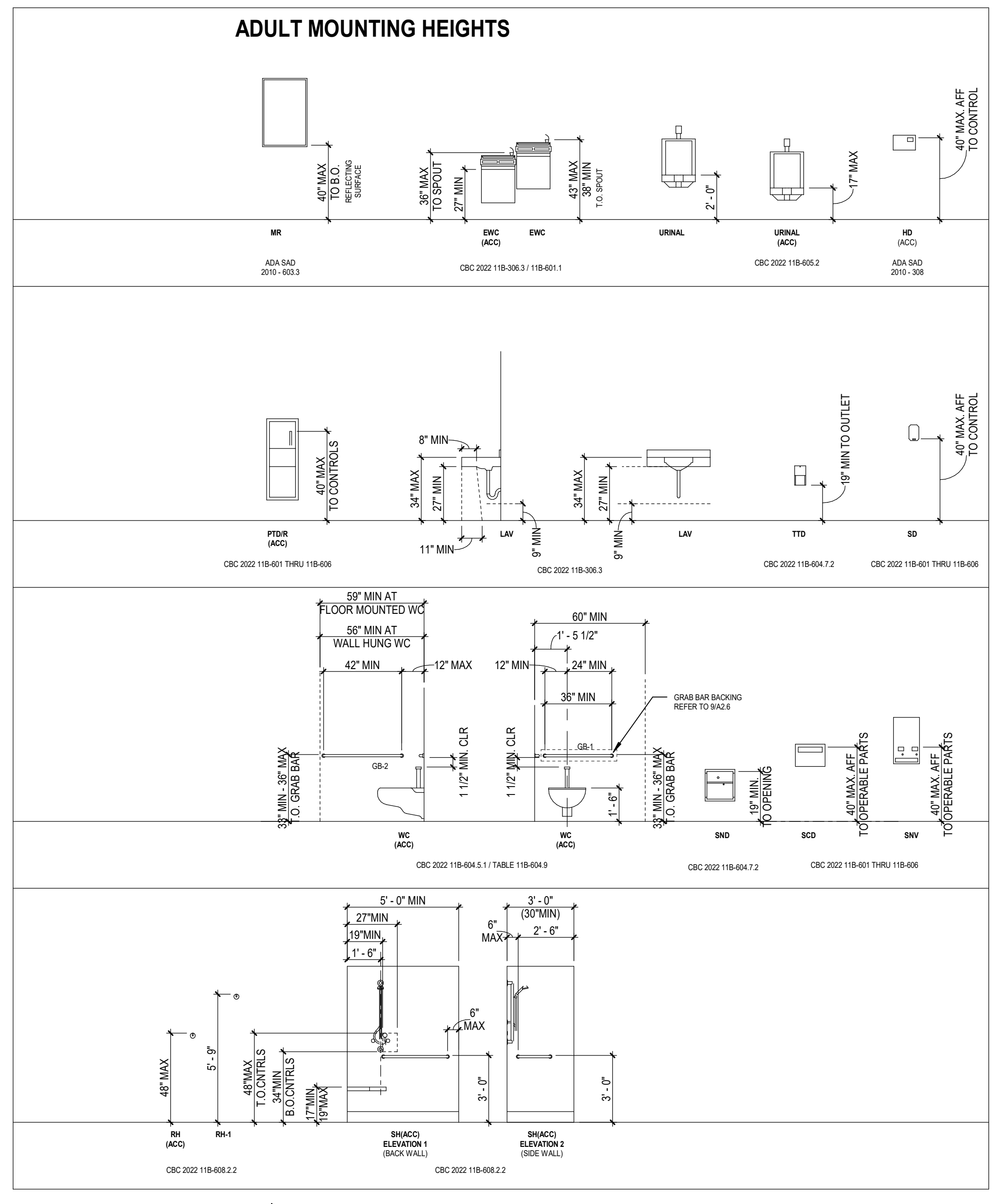
2C WOMEN A104 - C
A2.2 SCALE: 1/4" = 1'-0"



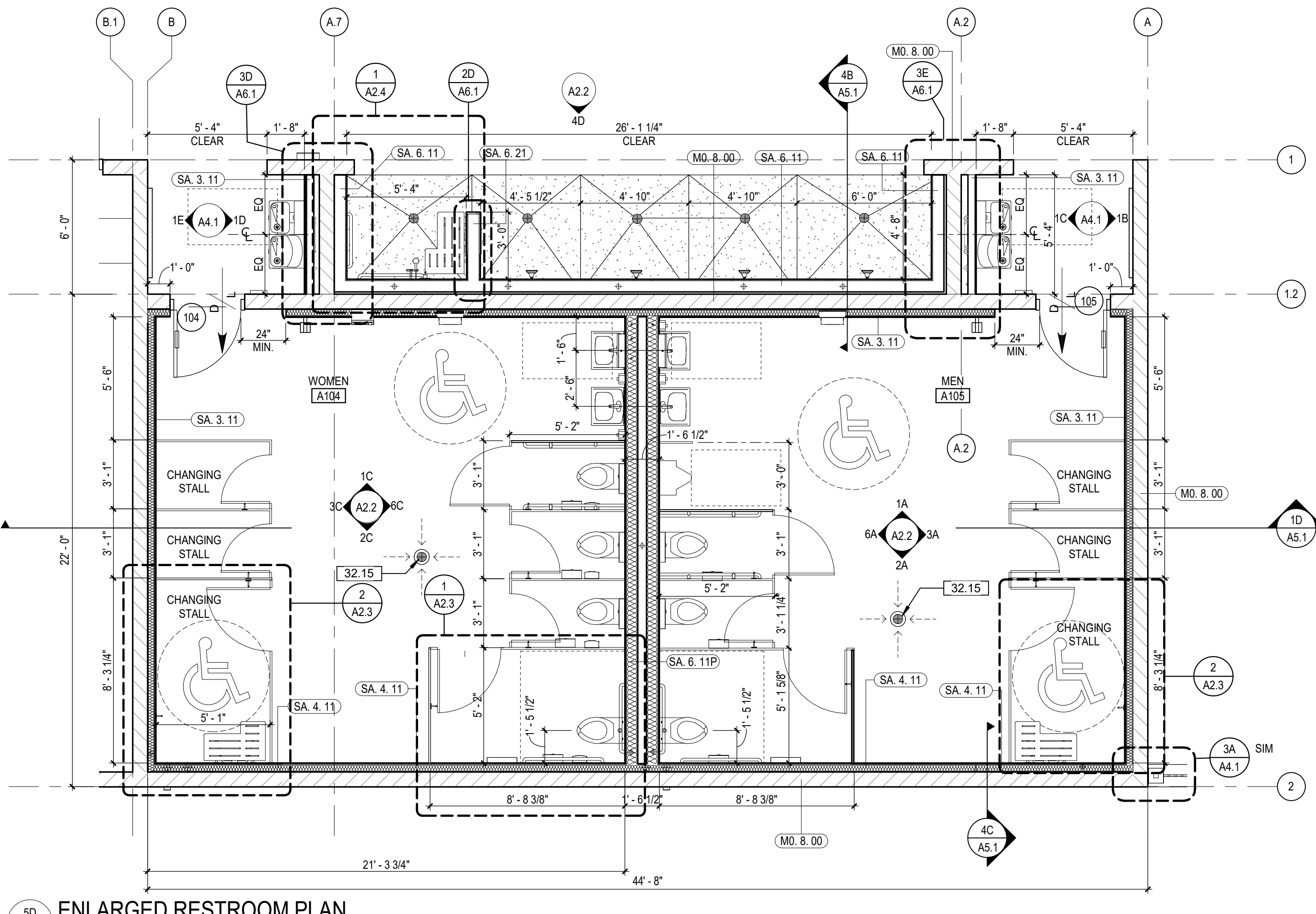
3C WOMEN A104 - D
A2.2 SCALE: 1/4" = 1'-0"



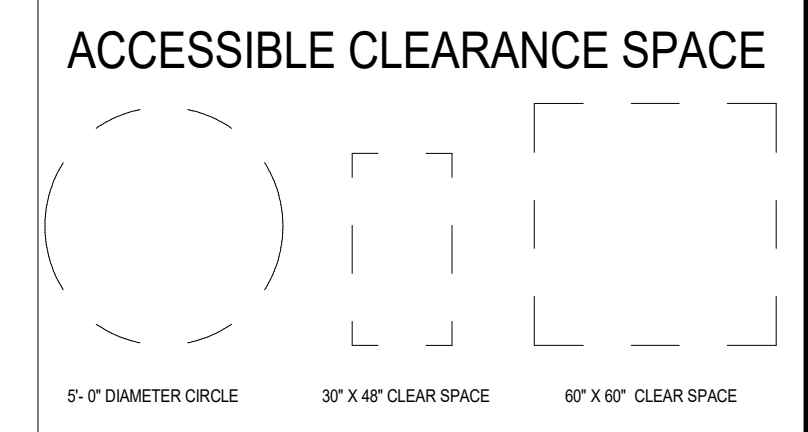
6C WOMENS - ELEVATION B
A2.2 SCALE: 1/4" = 1'-0"



4D EXTERIOR SHOWER ELEVATION
NO SCALE



5D ENLARGED RESTROOM PLAN
A2.2 SCALE: 1/4" = 1'-0"



GENERAL NOTES FOR ACCESSIBILITY

- A. ACCESSIBLE URINAL SHALL PROVIDE CLEAR FLOOR SPACE PER CRC 2019 - 118-405
- B. ACCESSIBLE WATER CLOSET SHALL PROVIDE CLEAR SPACE PER CRC 2019 - 2019 - 118-604
- C. ACCESSIBLE LAVATORIES AND SINKS SHALL PROVIDE CLEAR SPACE PER CRC 2019 - 118-406
- D. ACCESSIBLE TOILET ROOMS SHALL PROVIDE A TURNING SPACE OF 60 INCHES IN DIAMETER PER CRC 2019 - 118-304
- E. ACCESSIBLE WATER FOUNTAINS SHALL PROVIDE CLEAR FLOOR SPACE PER CRC 2019 - 118-402
- F. ACCESSIBLE TOILET PARTITIONS SHALL COMPLY WITH CRC 2019 - 118-304
- G. EXPOSED PIPES AND SURFACES UNDER LAVATORIES AND SINKS SHALL BE INSULATED PER CRC 2019 - 118-604
- H. REFER TO FINISH FLOOR PLAN SHEET A2.1 FOR THE LOCATION OF TOILET ACCESSORIES

KEYNOTES

- 08.010 START FULL TILE
- 32.15 FLOOR DRAIN REQUIRED TO DRAIN NOT LESS THAN 1/4" PER FOOT. PROVIDE 1" MIN WALL COVE BASE

TOILET ACCESSORIES ABBREVIATIONS

ABBREVIATION	DESCRIPTION
ACC	ADA ACCESSIBLE
BCS	BABY CHANGING STATION
EWC	ELECTRIC WATER COOLER
GB-1	GRAB BAR (BACK WALL)
GB-2	GRAB BAR (SIDE WALL)
GB-3	GRAB BAR (VERTICAL)
GB-4	GRAB BAR (AMBULATORY STALL)
GB-5	GRAB BAR (SHOWER)
HD	HAND DRYER
LAV	LAVATORY
MBH	MOP/BROOM HOLDER
MR	MIRROR
MRS	MIRROR WITH SHELF
PTD	PAPER TOWEL DISPENSER
PTD/R	COMBINATION TOWEL DISPENSER/RECEPTACLE
RH	ROBE HOOK
SCD	SEAT COVER DISPENSER
SCR	SHOWER CURTAIN ROD
SD	SOAP DISPENSER
SND	SANITARY NAPKIN DISPOSAL
SNV	SANITARY NAPKIN VENDOR
SSS	STAINLESS STEEL SHELF
TTD	TOILET TISSUE DISPENSER
US	UTILITY SHELF
WC	WATER CLOSET
WR	WASTE RECEPTACLE

PARTITION TYPES DESCRIPTIONS

REFER TO SHEET A2.0 FOR PARTITION TYPES

MATERIAL DESCRIPTION	NOTATION
STUCCO (METAL STUD)	1
WOOD STUD	2
SMFT WALLS	3
MASCHRY	4
CONCRETE	5

ADDITIONAL HEIGHT

NOTATION	DESCRIPTION
1	FULL HEIGHT (UNDERSIDE OF STRUCT (NOT RATED))
2	8" ABOVE CEILING (NOT RATED)
3	UNDERSIDE OF CEILING (NOT RATED)
4	PARTIAL HEIGHT (NOT RATED)
5	VARIABLE HEIGHT (NOT RATED)
6	SHOWER PARTITION (NOT RATED)
7	0 HOUR RATED (CORRIDOR)
8	1 HOUR RATED
9	2 HOUR RATED
10	3 HOUR RATED
11	4 HOUR RATED

UNIT WIDTH / CONSTRUCTION

NOTATION	DESCRIPTION
1	1.0" METAL
2	1.12" METAL
3	1.12" METAL
4	1.12" METAL
5	1.12" METAL
6	1.12" METAL
7	1.12" METAL
8	1.12" METAL
9	1.12" METAL
10	1.12" METAL
11	1.12" METAL
12	1.12" METAL
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38	1.12" METAL
39	1.12" METAL
40	1.12" METAL
41	1.12" METAL
42	1.12" METAL
43	1.12" METAL
44	1.12" METAL
45	1.12" METAL
46	1.12" METAL
47	1.12" METAL
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87	1.12" METAL
88	1.12" METAL
89	1.12" METAL
90	1.12" METAL
91	1.12" METAL
92	1.12" METAL
93	1.12" METAL
94	1.12" METAL
95	1.12" METAL
96	1.12" METAL
97	1.12" METAL
98	1.12" METAL
99	1.12" METAL
100	1.12" METAL

UNIQUE CONDITION (SEE SCHEDULE)

NOTATION	DESCRIPTION
1	NO UNIQUE CONDITION
2	1/2" FINISH
3	PLUMBING WALL

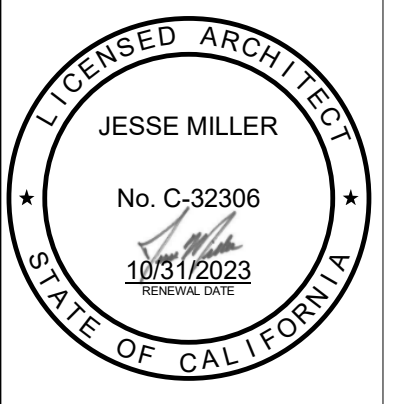
MATERIAL

NOTATION	DESCRIPTION
1	NO UNIQUE CONDITION
2	1/2" FINISH
3	PLUMBING WALL

RATING HEIGHT

NOTATION	DESCRIPTION
1	NO UNIQUE CONDITION
2	1/2" FINISH
3	PLUMBING WALL

REFER TO SHEET A2.0 FOR PARTITION TYPES



COVINA VALLEY HS POOL REPLACEMENT
COVINA VALLEY UNIFIED SCHOOL DISTRICT
483 SOUTH-HOLLENBECK AVENUE COVINA, CA 91723

DSA SUBMITTAL SET_V2
04/28/2023
REVISIONS

75-22616-00
DSA # 03-122700
DSA FILE # 19-48

ENLARGED FLOOR PLAN AND INTERIOR ELEVATIONS

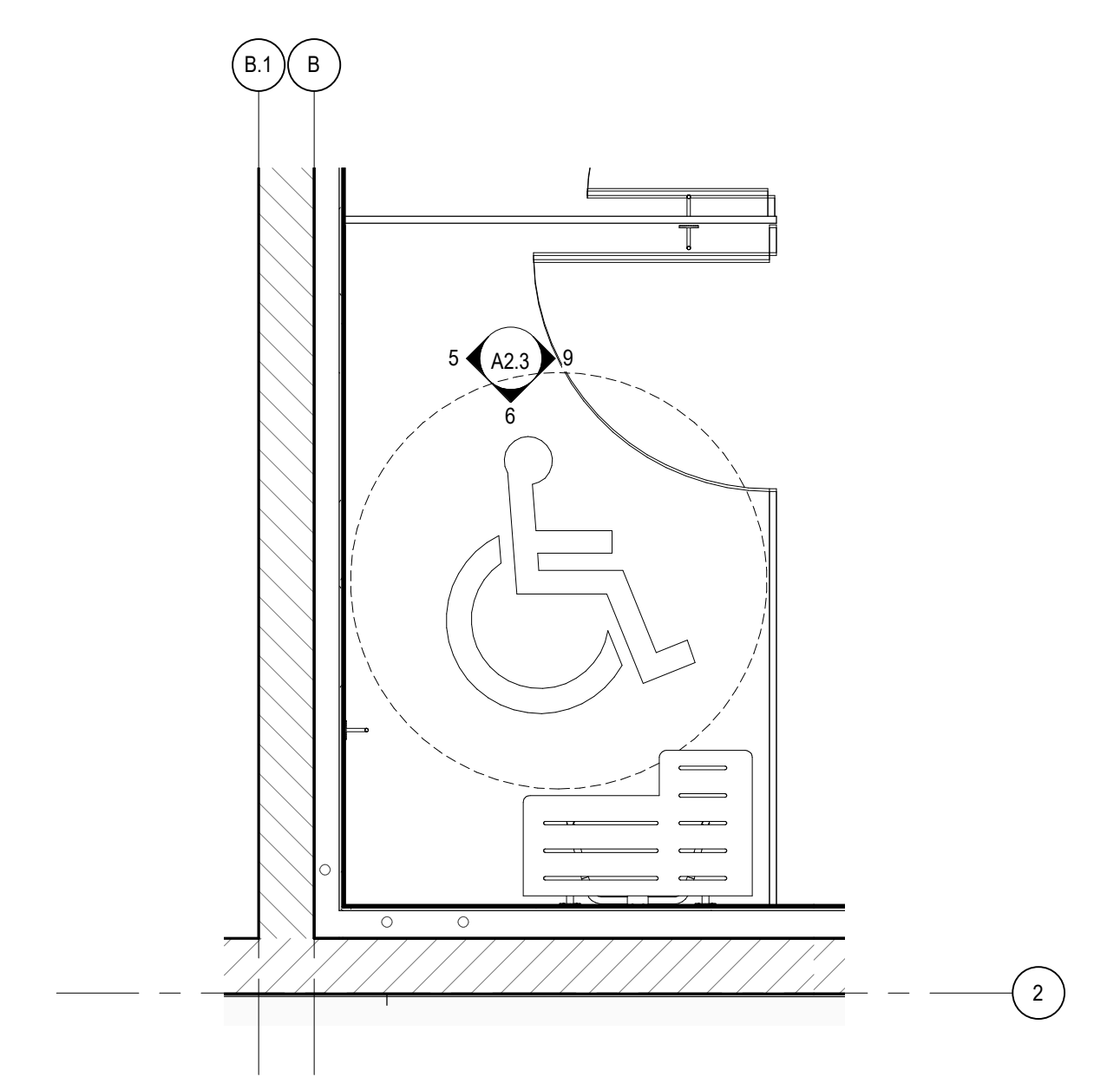
A2.2

GENERAL ARCHITECTURAL NOTES

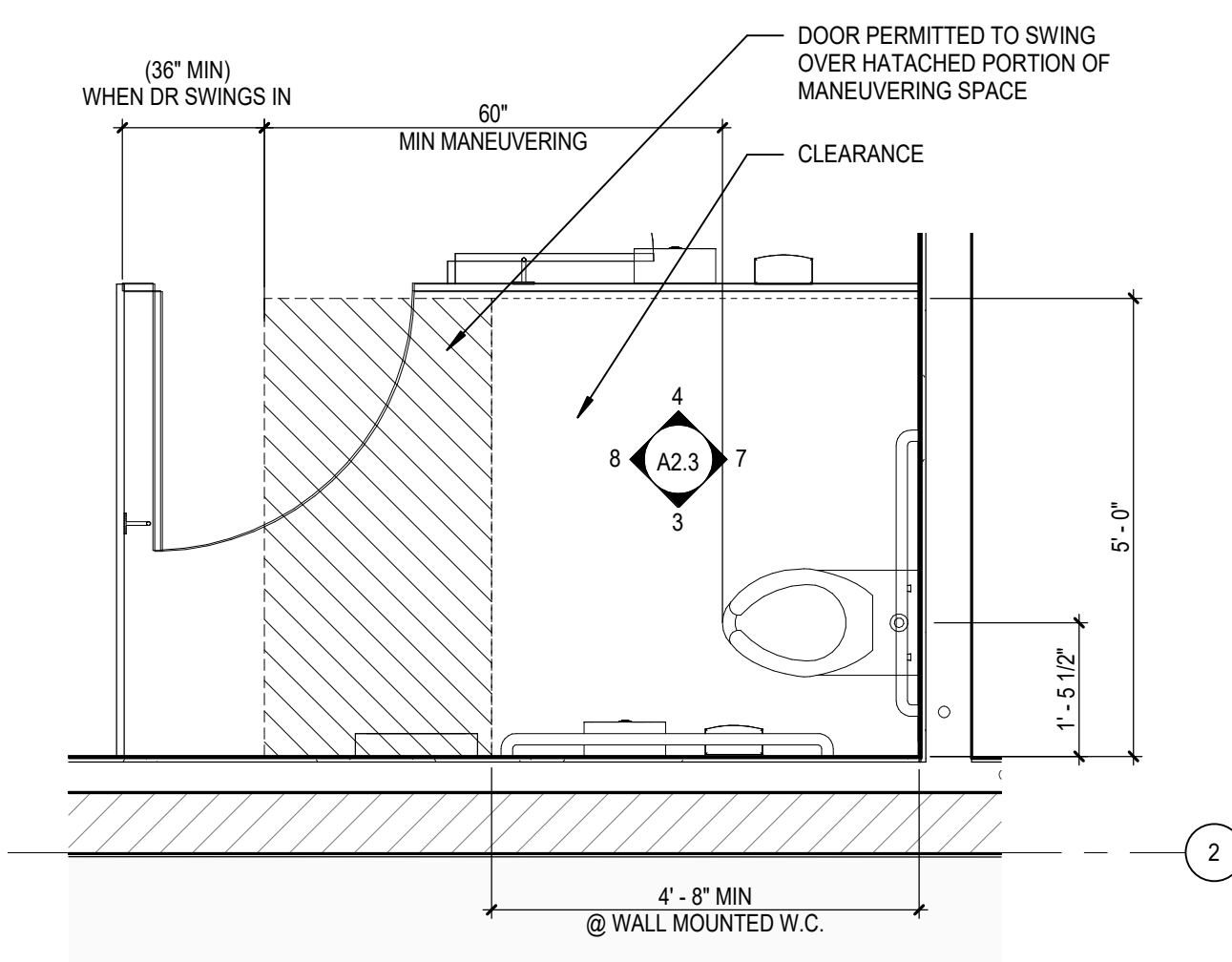
- ALL INTERIOR CMU WALLS SHALL BE 8 INCHES NOMINAL THICKNESS, UNLESS NOTED OTHERWISE.
- PARTITION TYPES ARE DESIGNATED ON FLOOR PLANS.
- SEE SHEET A2.3 FOR TYPES.
- ALL MASONRY WALLS AND INTERIOR STUD WALLS SHALL EXTEND TO UNDERSIDE OF FLOOR OR ROOF DECK ABOVE UNLESS NOTED OTHERWISE. PER PARTITION TYPE.
- PROVISIONS ARE MADE AT ALL FULL HEIGHT NON-BEARING WALLS FOR 1-INCH VERTICAL MOVEMENT OF THE BUILDING STRUCTURE WITHOUT TRANSFER OF COMPRESSIVE LOADS TO WALL. ALL BRIGGLES ARE BETWEEN TOP OF WALL AND DECK ABOVE WITH MINERAL WOOL INSULATION OF THE EXPOSURE MATERIALS AS REQUIRED TO MEET THE BRIGGLE HEIGHTS.
- SEE STRUCTURAL DRAWINGS FOR BRACING OF NON-LOAD BEARING MASONRY WALLS.
- FURNISH AND INSTALL FINE PINEWOOD WOODWORK ON METAL BRACING PLATE IN METAL STUD PARTITIONS FOR THE PROPER ANCHORAGE OF ALL WALL ATTACHED ITEMS. IE TOILET ACCESSORIES, CROWN MOULDING, WALL MOUNTED TELEPHONE, MARKER BOARDS, TACK BOARDS, DOOR STOPS, AUDIO VISUAL BRACKETS AND OTHER WALL ATTACHED ITEMS.
- COPYING BOARD SURFACES SHALL BE LOCATED WITH CONTROL JOINTS WHERE SHOWN ON DRAWINGS AND AS DESCRIBED IN THE SPECIFICATIONS.
- MASONRY CONTROL JOINTS (CJ) AND CONTROL JOINTS (CJ) ABOVE CMU SHALL BE LOCATED AS SHOWN ON THE FLOOR PLAN AND BUILDING ELEVATIONS AND WHERE LARGE PLUMBING WALLS BEARING ON THE CONCRETE FLOOR SHALL BE MASONRY WALLS BEARING ON CONCRETE FOOTINGS OR AS INDICATED ON DRAWINGS.
- MEET AND TEST MORTAR MASONRY AND ROOF BRACKETS ON PLUMB. THE LENGTH PRECEDES THE DESIGNATION (EXAMPLE: 16 MSD). ALL BOARDS ARE 4'-0" TALL. SEE WALL ELEVATIONS OR SPECIFICATIONS FOR MOUNTING HEIGHT.
- EXTEND FURRING CHANNELS AND CYPRESUM BOARD UP 4 INCHES ABOVE FINISHED CEILING ON CMU WALLS.
- SCHEMATIC WALL BOARD OF WALLS AND PARTITIONS TO IRREGULARITIES OF DECK ABOVE. SEAL, TIGHTLY, AROUND ALL PENETRATIONS.

KEYNOTES

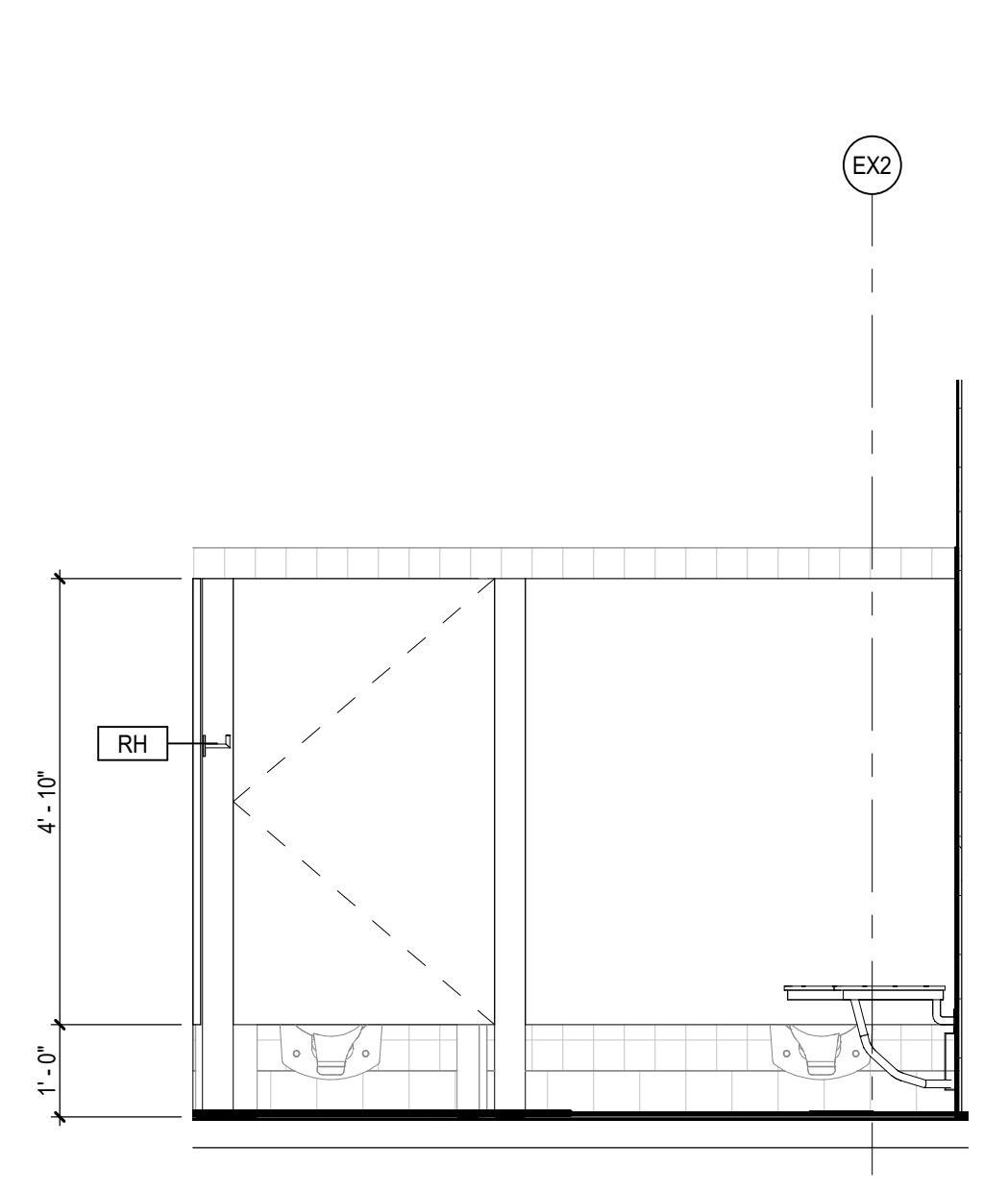
- | | |
|--------|--------------------------------------------------------------|
| 08.006 | WINDOW HANDLE OPEN DEVICE |
| 09.011 | MANUAL WINDOW SHADE W/ RECESSED POCKET - SEE FINISH SCHEDULE |
| 11.002 | REFRIGERATOR, MC, 6"DC |
| 11.003 | MICROWAVE, MC, 6"DC |
| 21.005 | SEMI-RECESSED FIRE EXTINGUISHER |



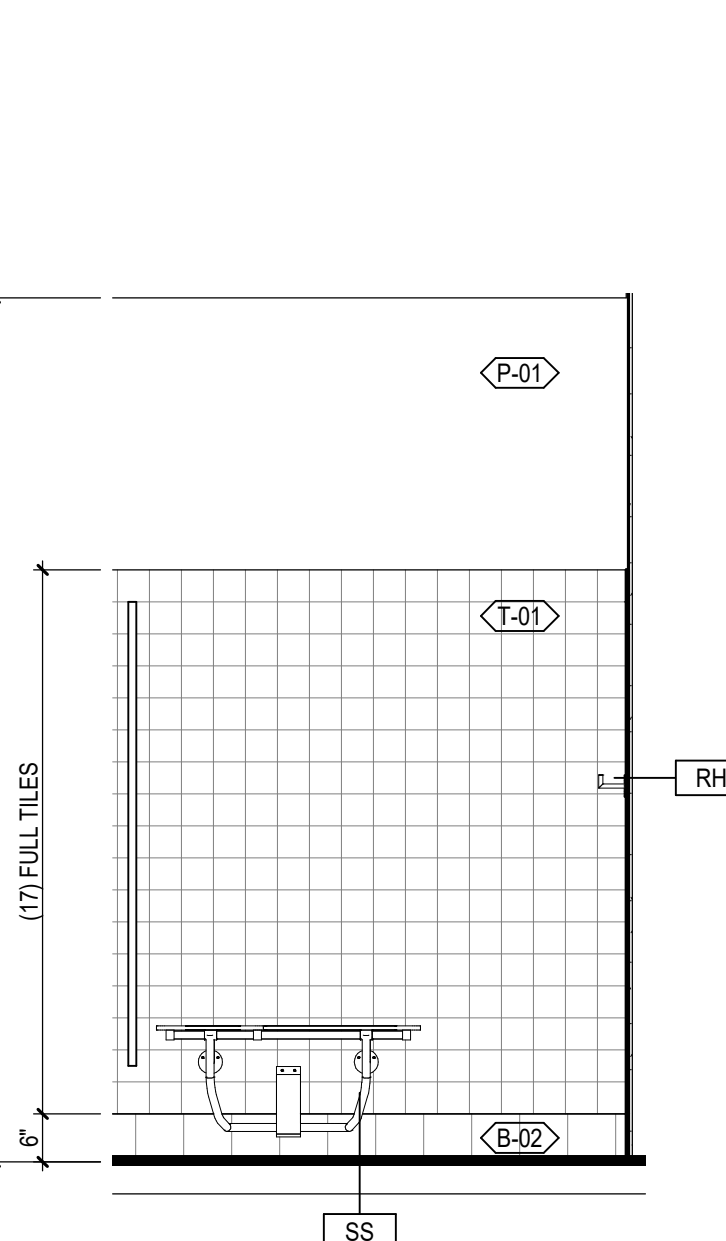
2 ENLARGED RESTROOM PLAN - CHANGING ADA
A2.3 SCALE: 1/2" = 1'-0"



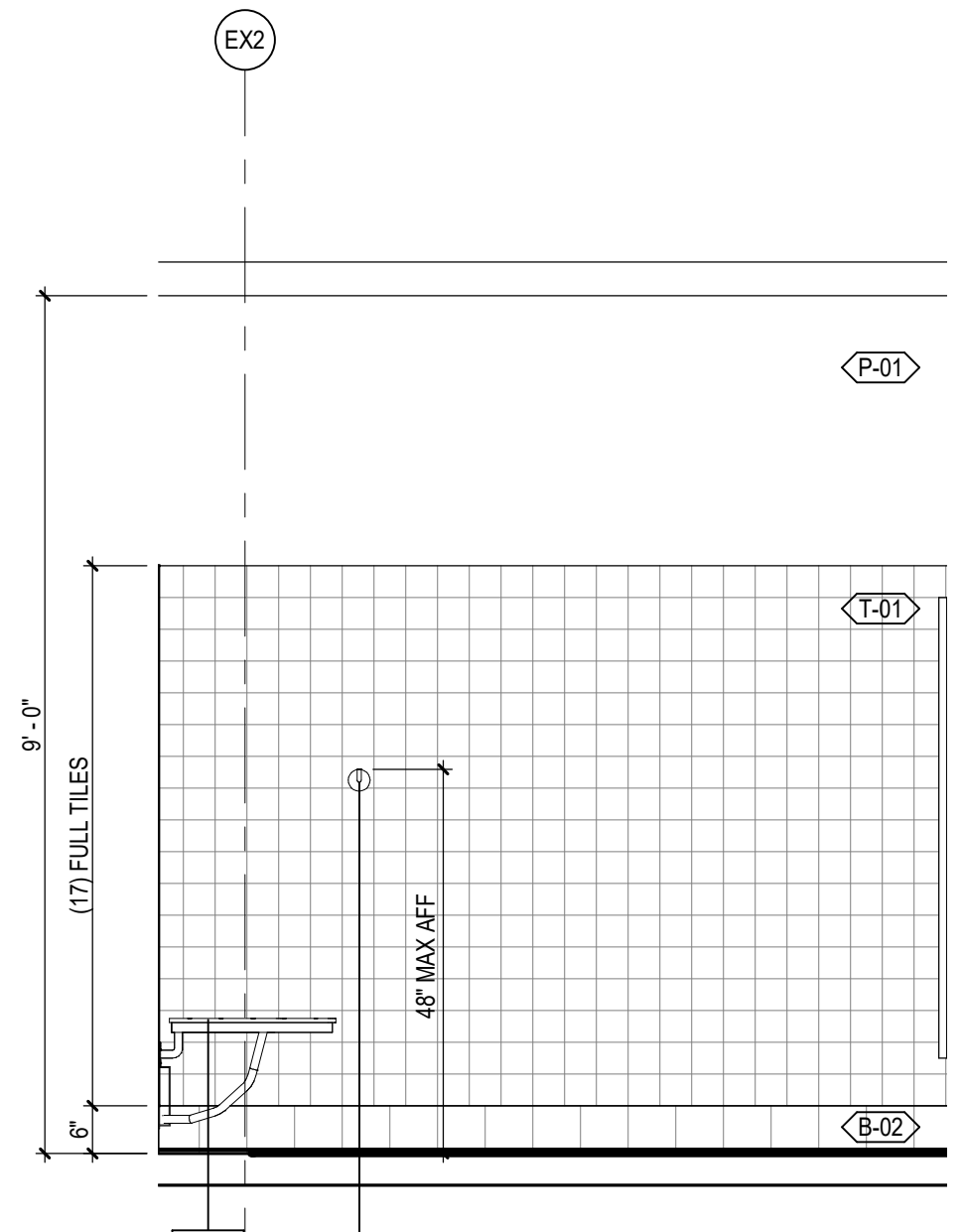
1 ENLARGED RESTROOM PLAN - ADA
A2.3 SCALE: 1/2" = 1'-0"



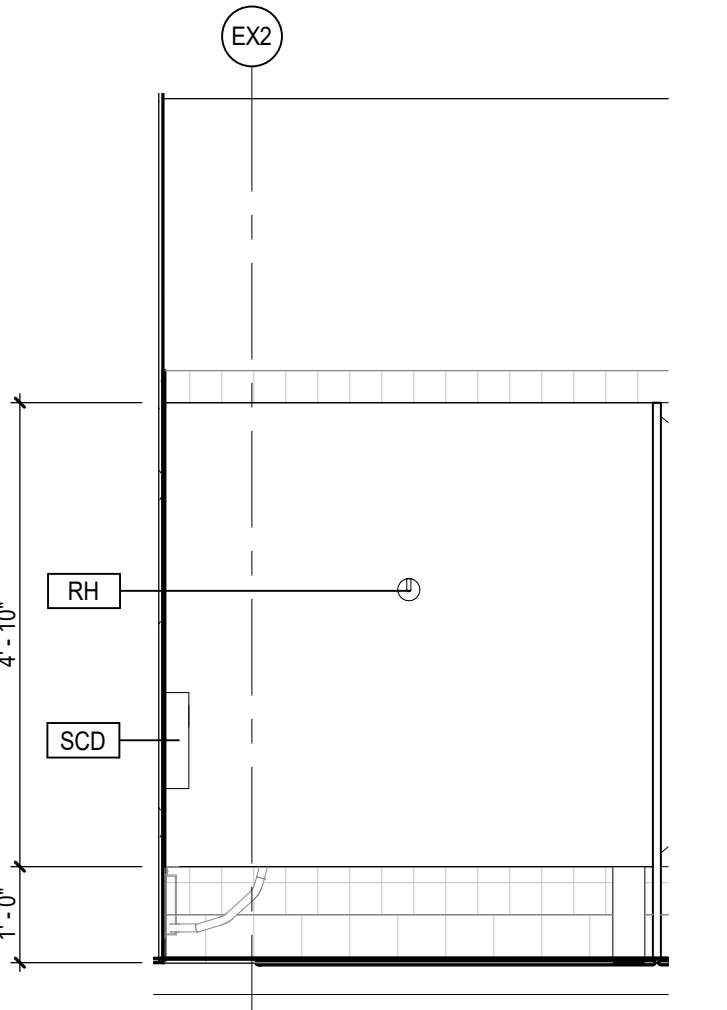
9 Elevation 1 - c
A2.3 SCALE: 1/2" = 1'-0"



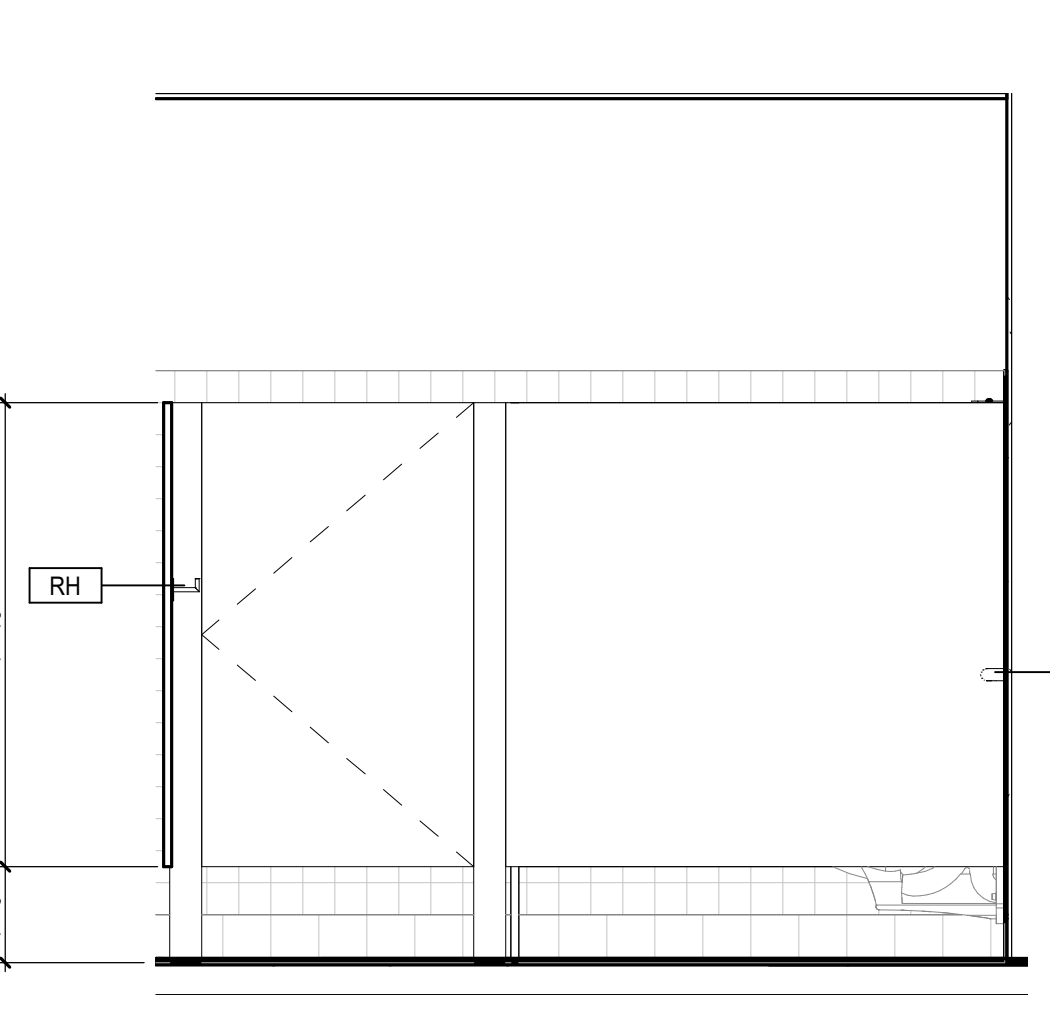
6 Elevation 2 - d
A2.3 SCALE: 1/2" = 1'-0"



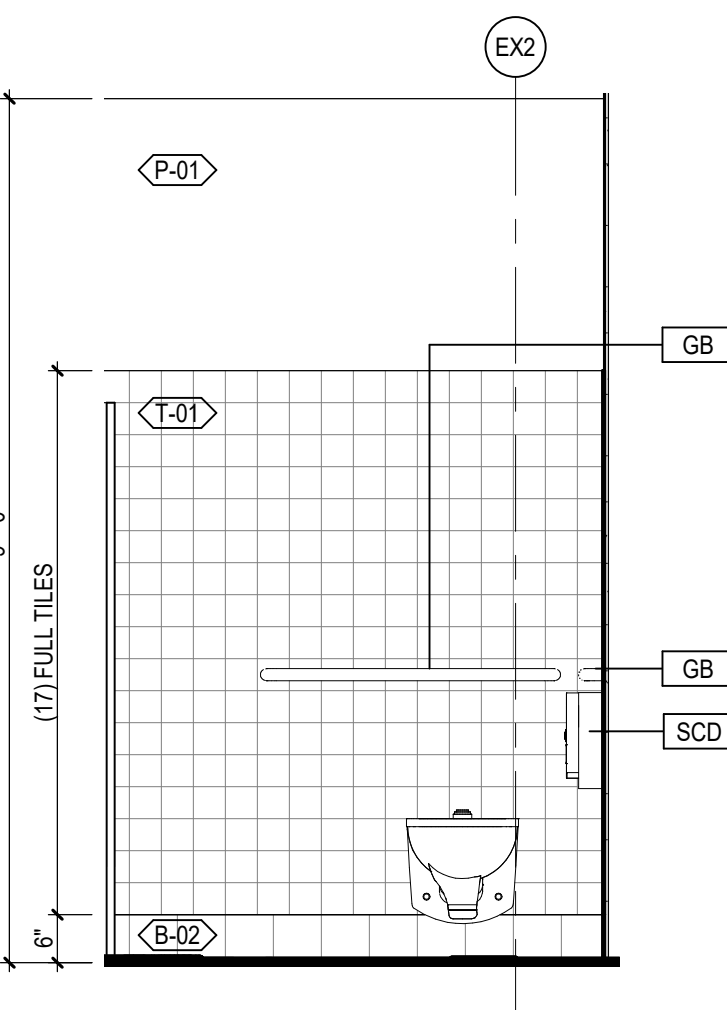
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A2.3 SCALE: 1/2" = 1'-0"



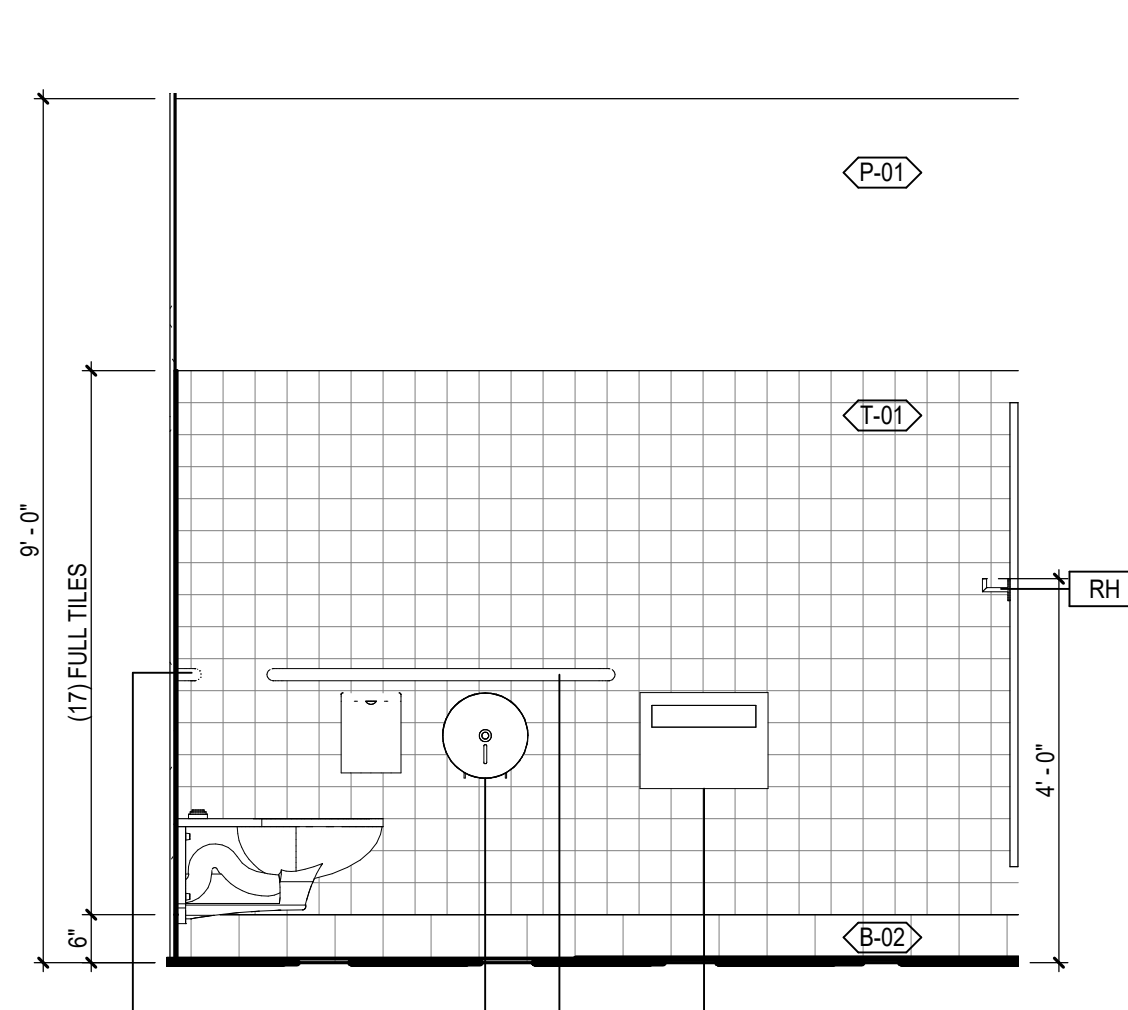
8 ELEVATION 4
A2.3 SCALE: 1/2" = 1'-0"



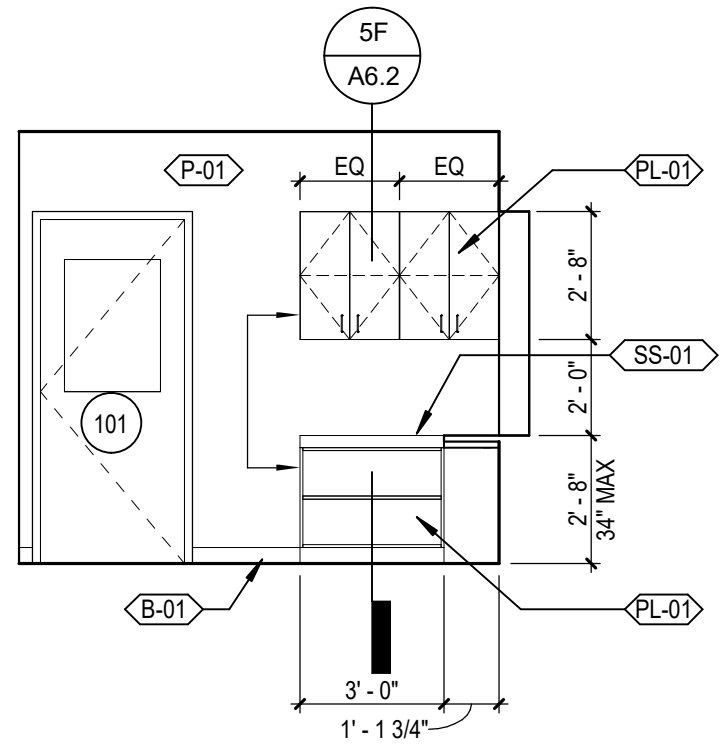
4 ELEVATION 3
A2.3 SCALE: 1/2" = 1'-0"



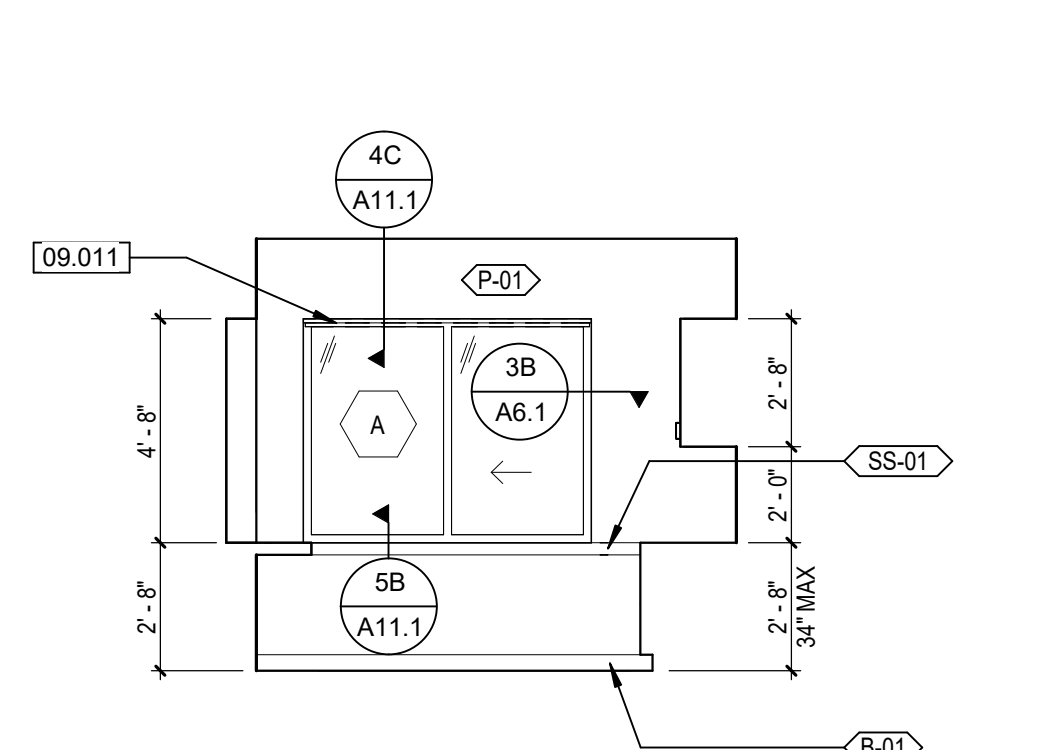
7 ELEVATION 2
A2.3 SCALE: 1/2" = 1'-0"



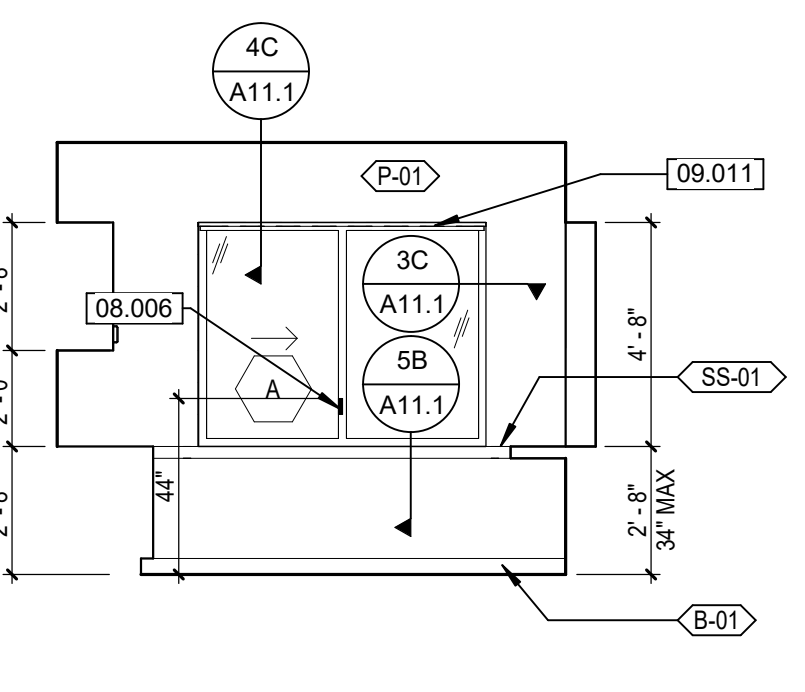
3 ELEVATION 1
A2.3 SCALE: 1/2" = 1'-0"



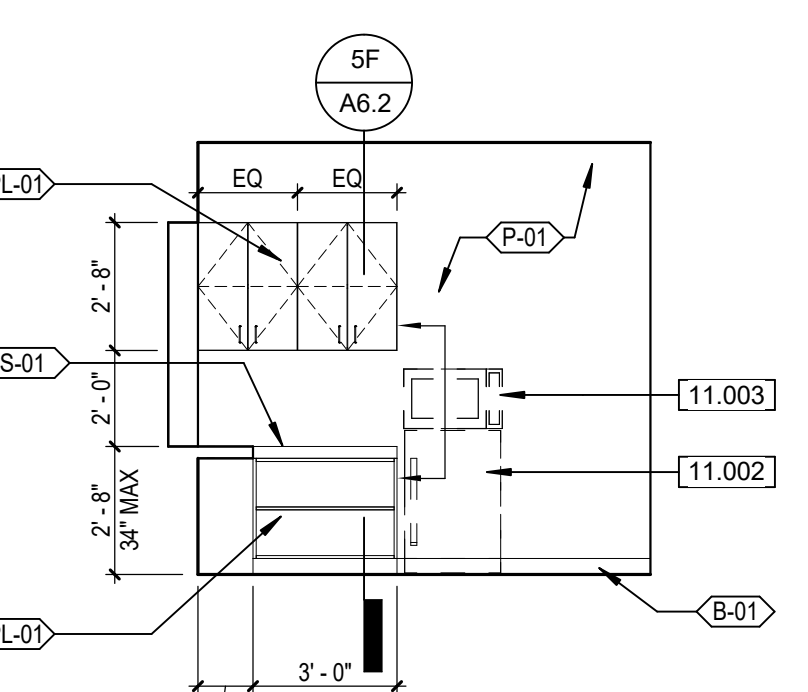
1D CONCESSIONS A101 - C
A2.3 SCALE: 1/4" = 1'-0"



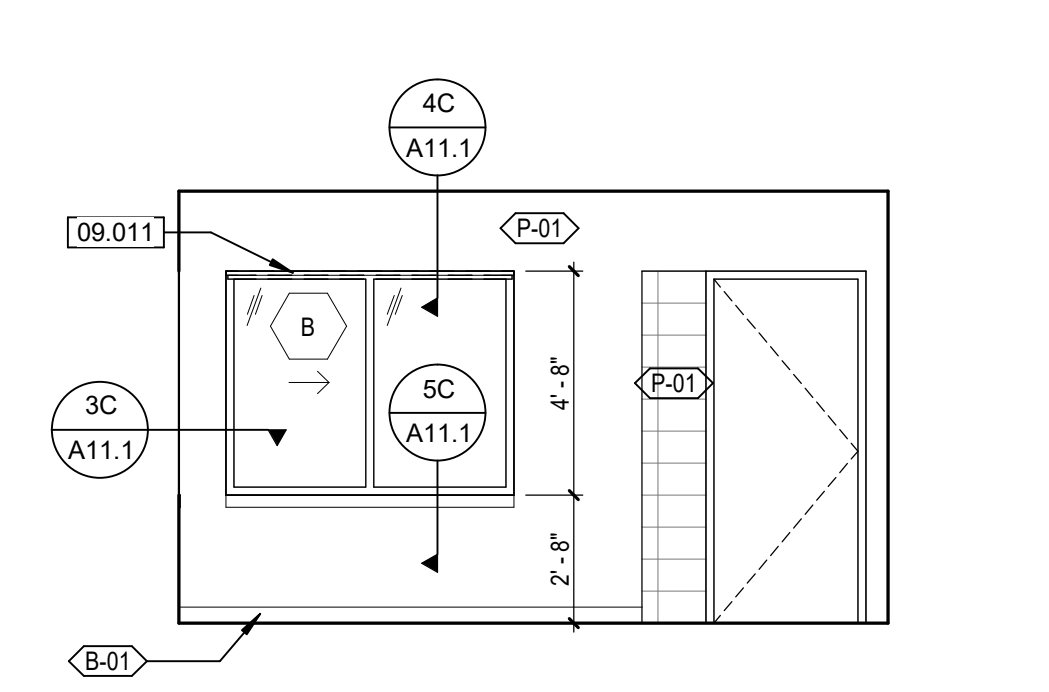
3D CONCESSIONS A101 - A
A2.3 SCALE: 1/4" = 1'-0"



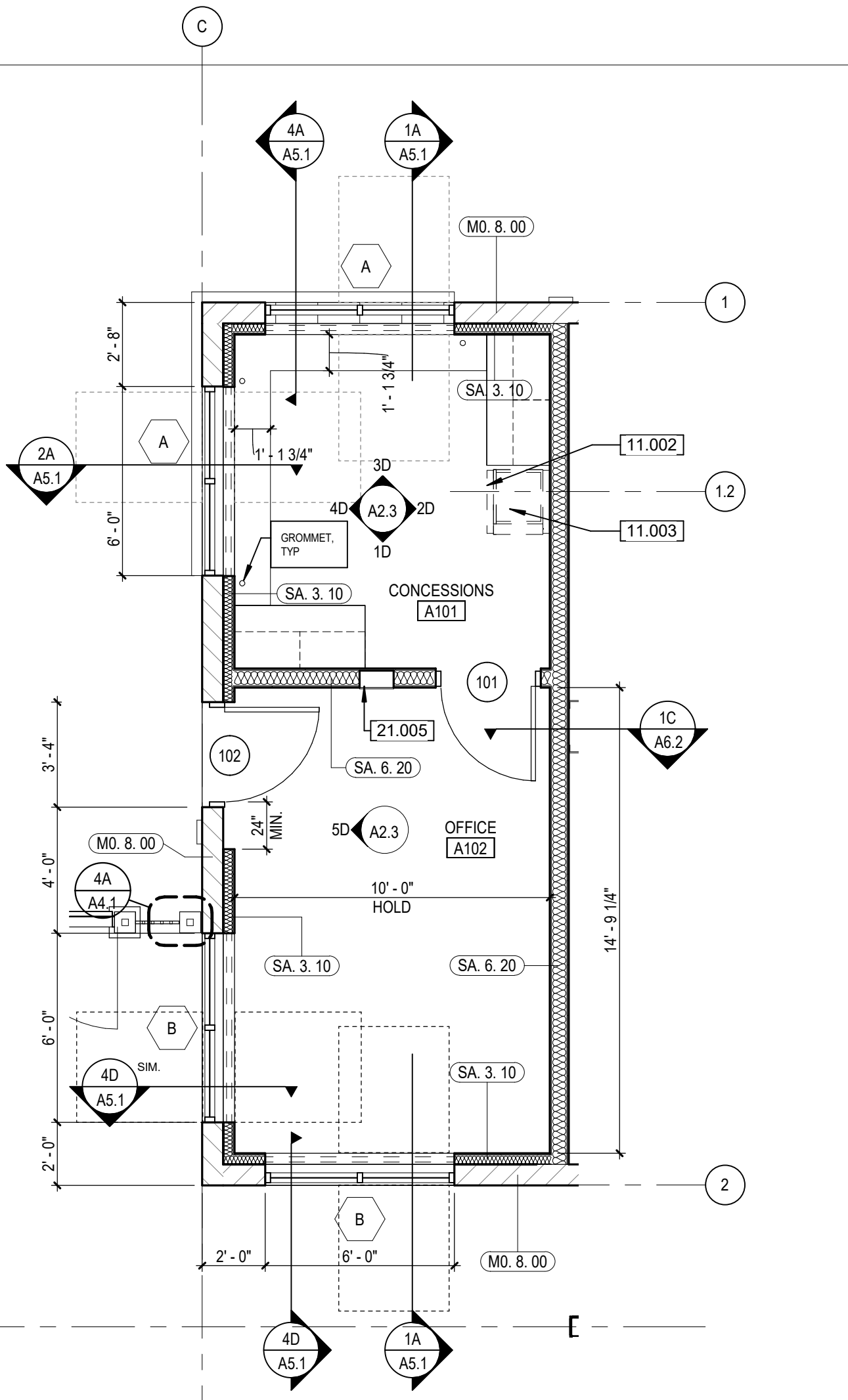
4D CONCESSIONS A101 - D
A2.3 SCALE: 1/4" = 1'-0"



2D CONCESSIONS A101 - B
A2.3 SCALE: 1/4" = 1'-0"



5D OFFICE A102 - A
A2.3 SCALE: 1/4" = 1'-0"

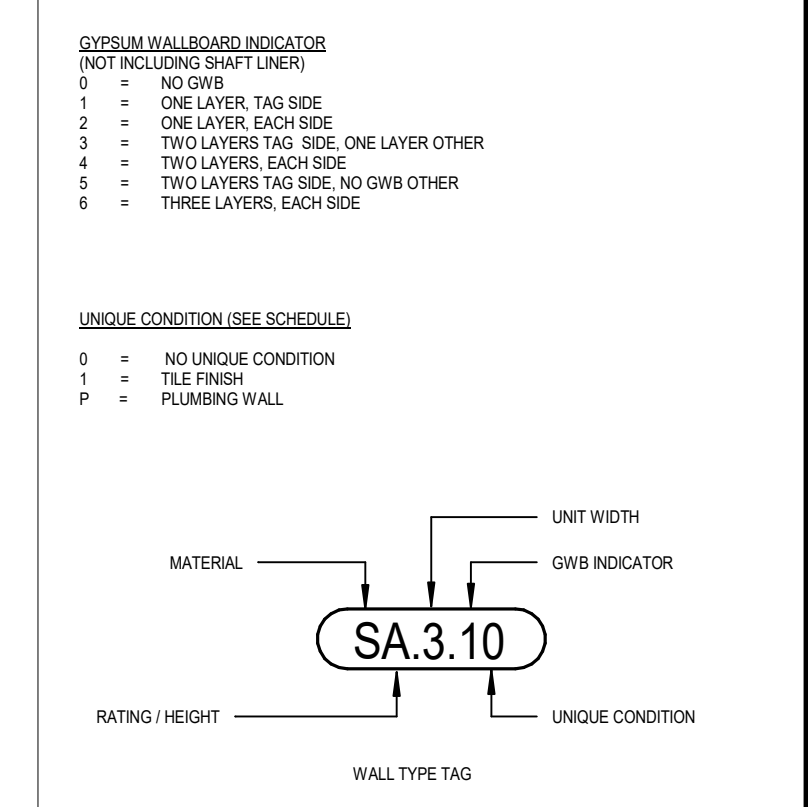


6E ENLARGED FLOOR PLAN - CONCESSIONS AND OFFICE
A2.3 SCALE: 1/4" = 1'-0"

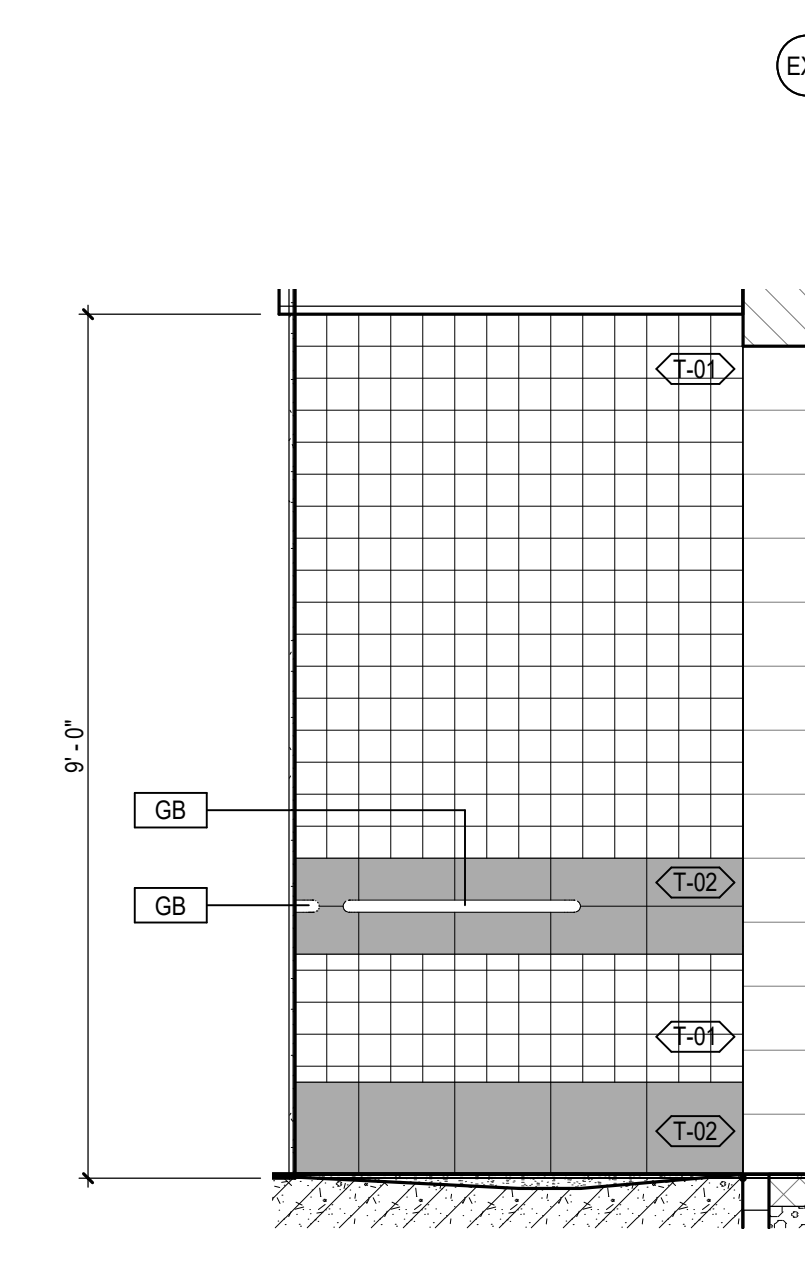
PARTITION TYPES DESCRIPTIONS

- REFER TO SHEET A8.6 FOR PARTITION TYPES
- MATERIAL DESCRIPTION**
- M = METAL STUD (ETIC)
 - W = WOOD STUDS
 - CS = GYP/PLASTER
 - M = MASONRY
 - C = CONCRETE
- RATING / HEIGHT**
- A = FULL HEIGHT (UNDERSIDE OF STRUCT NOT RATED)
 - B = 8'-0" ABOVE CEILING (NOT RATED)
 - C = UNDERSIDE OF CEILING (NOT RATED)
 - D = PARTIAL HEIGHT (NOT RATED)
 - E = VARIABLE HEIGHT (NOT RATED)
 - F = SMOKE PARTITION (NOT RATED)
 - G = 0 HOUR RATED (CORRIDOR)
 - H = 1 HOUR RATED
 - I = 2 HOUR RATED
 - J = 3 HOUR RATED
 - K = 4 HOUR RATED
- UNIT WIDTH / CONSTRUCTION**
- 1 = 1" METAL STUD
 - 2 = 2" METAL / 1 1/2" WOOD
 - 3 = 3" METAL
 - 4 = 4" METAL / 2" WOOD / 1 1/2" WOOD
 - 5 = 4" METAL / 2" WOOD / 1 1/2" WOOD / 1" WOOD
 - 6 = 4" METAL / 1 1/2" WOOD / 1" WOOD / 1" WOOD
 - 7 = 4" METAL / 1 1/2" WOOD / 1" WOOD / 1" WOOD
 - 8 = 1" WOOD
 - 9 = 1 1/2" WOOD / 1" WOOD
 - 10 = 1 1/2" WOOD / 1" WOOD
 - 11 = 1 1/2" WOOD / 1" WOOD
 - 12 = 1 1/2" WOOD / 1" WOOD
 - 13 = 1 1/2" WOOD / 1" WOOD
 - 14 = 1 1/2" WOOD / 1" WOOD
 - 15 = 1 1/2" WOOD / 1" WOOD
 - 16 = 1 1/2" WOOD / 1" WOOD
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 - 97 = 1 1/2" WOOD / 1" WOOD
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 - 99 = 1 1/2" WOOD / 1" WOOD
 - 100 = 1 1/2" WOOD / 1" WOOD

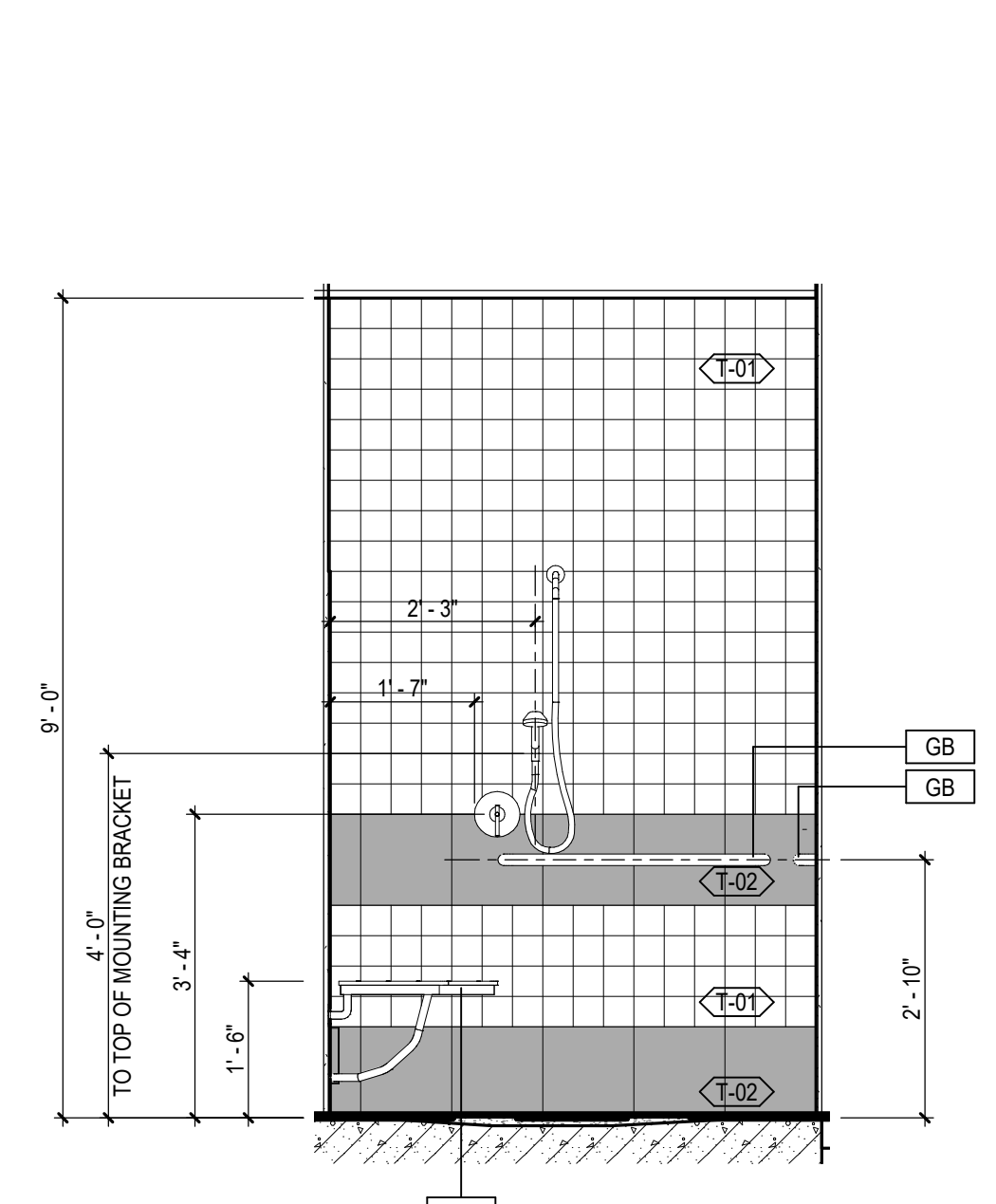
- UNIQUE CONDITION (SEE SCHEDULE)**
- 1 = NO UNIQUE CONDITION
 - 2 = TILE FLOOR
 - 3 = PLUMBING WALL



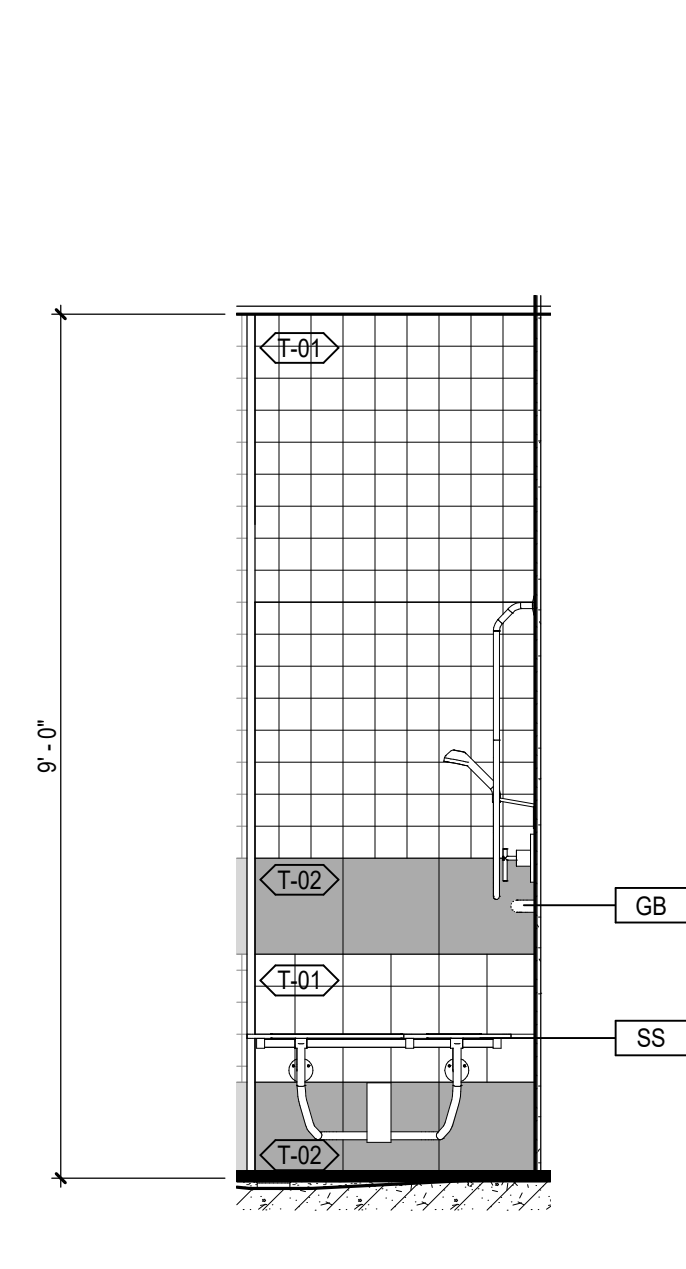
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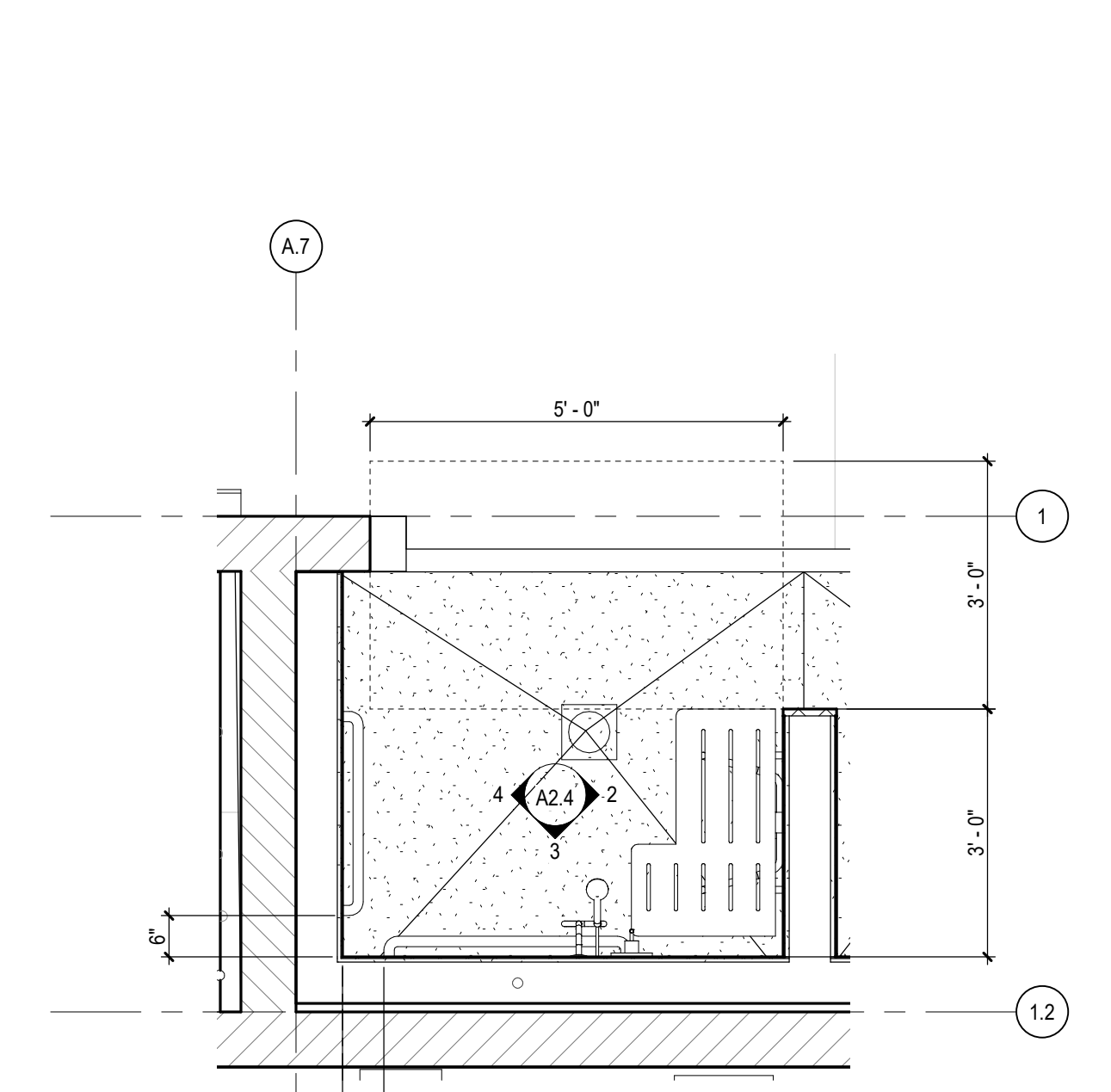
4 SHOWER ELEVATION
A2.4 SCALE: 1/2" = 1'-0"



3 SHOWER ELEVATION
A2.4 SCALE: 1/2" = 1'-0"



2 SHOWER ELEVATION
A2.4 SCALE: 1/2" = 1'-0"



1 ENLARGED SHOWER COMPARTMENT PLAN
A2.4 SCALE: 1/2" = 1'-0"

GENERAL ARCHITECTURAL NOTES

- ALL INTERIOR CMU WALLS SHALL BE 8 INCHES NOMINAL THICKNESS, UNLESS NOTED OTHERWISE.
- PARTITION TYPES ARE DESIGNATED ON FLOOR PLANS.
- SEE SHEET A01 FOR TYPES.
- ALL MASONRY WALLS AND PARTITIONS SHALL BE SET TO UNDERSIDE OF FLOOR OR ROOF DECK ABOVE, UNLESS NOTED OTHERWISE. PER PARTITION TYPE, PROVISIONS ARE MADE FOR ALL FULL HEIGHT PARTITION WALLS FOR VERTICAL MOVEMENT OF THE BUILDING STRUCTURE WITHOUT TRANSFER OF COMPRESSION LOADS TO WALL. FULL HEIGHT PARTITIONS BETWEEN TOP OF WALL AND DECK ABOVE WITH MINERAL WOOL INSULATION OR FIRE STOPPING MATERIALS AS REQUIRED TO MEET FIRE RATING OF RESPECTIVE WALLS. SEE DETAIL FOR PARTITION TYPES.
- SEE STRUCTURAL DRAWINGS FOR BRACING OF NON-LOAD BEARING MASONRY WALLS.
- FURNISH AND INSTALL FIRE-TREATED WOOD BLOCKING OR METAL BRACING PLATE IN METAL STUD PARTITIONS FOR THE PROPER ANCHORAGE OF ALL WALL ATTACHED ITEMS, I.E. TOILET ACCESSORIES, COUNTERTOP, WALL MOUNTED OUTLETS, MIRROR BOARDS, TRUCK MOUNTED SCOR STOPS, AUDIO VISUAL BRACKETS, AND OTHER WALL ATTACHED ITEMS. EXPOSED BRACKETS SHALL BE LOCATED WITH CONTROL JOINTS WHERE SHOWN ON DRAWINGS AND AS DESCRIBED IN THE SPECIFICATION.
- MASONRY CONTROL JOINTS (CJ) AND CONTROL JOINTS ABOVE (CAJ) SHALL BE LOCATED AS SHOWN ON THE FLOOR PLAN AND INCLUDING ELEVATIONS, AND WHERE LAYOUT PLANNING VENTS OR RISERS OCCUR IN SINGLE WYTHE MASONRY WALLS, AND WHERE MASONRY WALLS BEARING ON THE CONCRETE FLOOR OR AIR-HEAT MASONRY WALLS BEARING ON CONCRETE FOOTINGS OR AS INDICATED ON DRAWINGS.
- NEED AND TYPED INDICATE MARKER BOARD AND TACK BOARDS ON PLANS. THE LENGTH PRECEDES THE DESIGNATION (EXAMPLE: 16" MBD). ALL BOARDS ARE 4'-0" TALL. SEE WALL ELEVATIONS OR SPECIFICATIONS FOR LOCATING HEIGHT.
- EXTEND FIBRING CHANNELS AND GYPSUM BOARD UP 4 INCHES ABOVE FINISHED CEILING ON CMU WALLS.
- SCHEMATIC WALL BOARDS OF WALLS AND PARTITIONS TO IRREGULARITIES OF DECK ABOVE. SEAL TIGHTLY AROUND ALL PENETRATIONS.

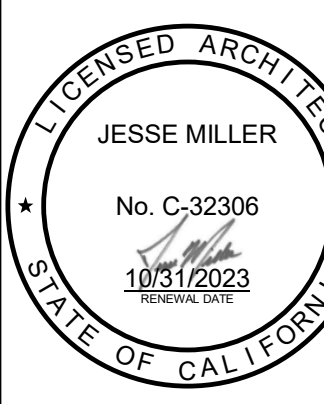
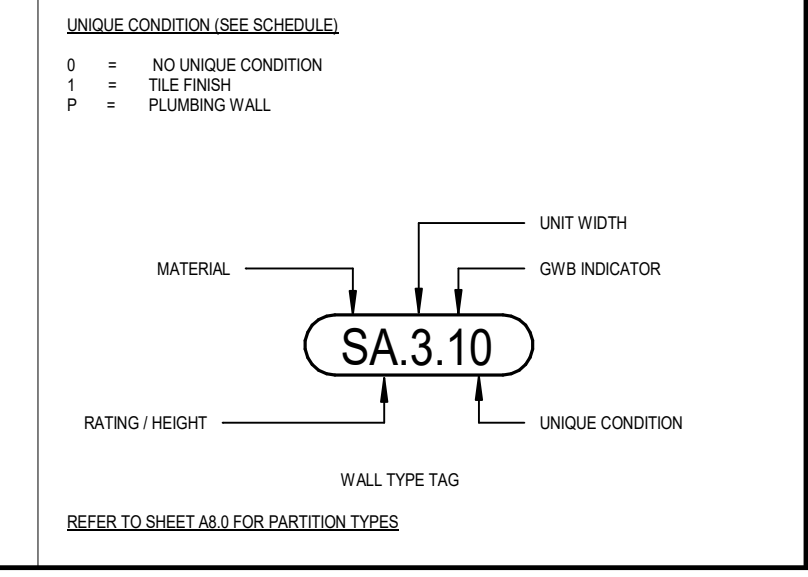
KEYNOTES

PARTITION TYPES DESCRIPTIONS

- REFER TO SHEET A01 FOR PARTITION TYPES
- | MATERIAL DESCRIPTION | RATING/HEIGHT |
|-----------------------|-------------------------------------------------|
| D = STEEL METAL STUDS | A = FULL HEIGHT (UNDERSIDE OF STRUCT NOT RATED) |
| W = WOOD STUDS | B = 8' ABOVE CEILING (NOT RATED) |
| H = SHINY WALLS | C = UNDERSIDE OF CEILING (NOT RATED) |
| M = MASONRY | D = PARTIAL HEIGHT (NOT RATED) |
| C = CONCRETE | E = VARIABLE HEIGHT (NOT RATED) |
| | F = SMOKE PARTITION (NOT RATED) |
| | G = SMOKE PARTITION (CORRIDOR) |
| | H = 65 HOUR RATED |
| | I = 1 HOUR RATED |
| | J = 2 HOUR RATED |
| | K = 3 HOUR RATED |
| | L = 4 HOUR RATED |

- | UNIT WIDTH CONFIGURATION | UNIQUE CONDITION (SEE SCHEDULE) |
|----------------------------------------------|---------------------------------|
| 1 = 1 1/2" METAL / FIBRING CHANNELS | 0 = NO UNIQUE CONDITION |
| 2 = 2 1/2" METAL / 1 1/2" WOOD | 1 = TILE FINISH |
| 3 = 3/8" METAL | P = PLUMBING WALL |
| 4 = 4" METAL / 3" WOOD / 3" SW CMU | |
| 5 = 8" METAL / 3" WOOD / 3" SW CMU / 8" CONC | |
| 6 = 8" METAL / 7" WOOD / 3" SW CMU / 8" CONC | |
| 7 = 11" SW CMU / 1" CONC | |
| 8 = NON-STANDARD WIDTH. SEE DETAILS | |
| 9 = DOUBLE STUD FRAMING | |
| 10 = STAGGERED STUD FRAMING | |

- | GLASS WALL UNFINISHED INDICATOR (NOT INCLUDING GLASS LINER) | UNIQUE CONDITION (SEE SCHEDULE) |
|-------------------------------------------------------------|---------------------------------|
| 0 = NO GLASS | 0 = NO UNIQUE CONDITION |
| 1 = ONE LAYER TAG SIDE | 1 = TILE FINISH |
| 2 = ONE LAYER EACH SIDE | P = PLUMBING WALL |
| 3 = TWO LAYERS TAG SIDE, ONE LAYER OTHER | |
| 4 = TWO LAYERS EACH SIDE | |
| 5 = TWO LAYERS TAG SIDE, NO GWS OTHER | |
| 6 = THREE LAYERS EACH SIDE | |

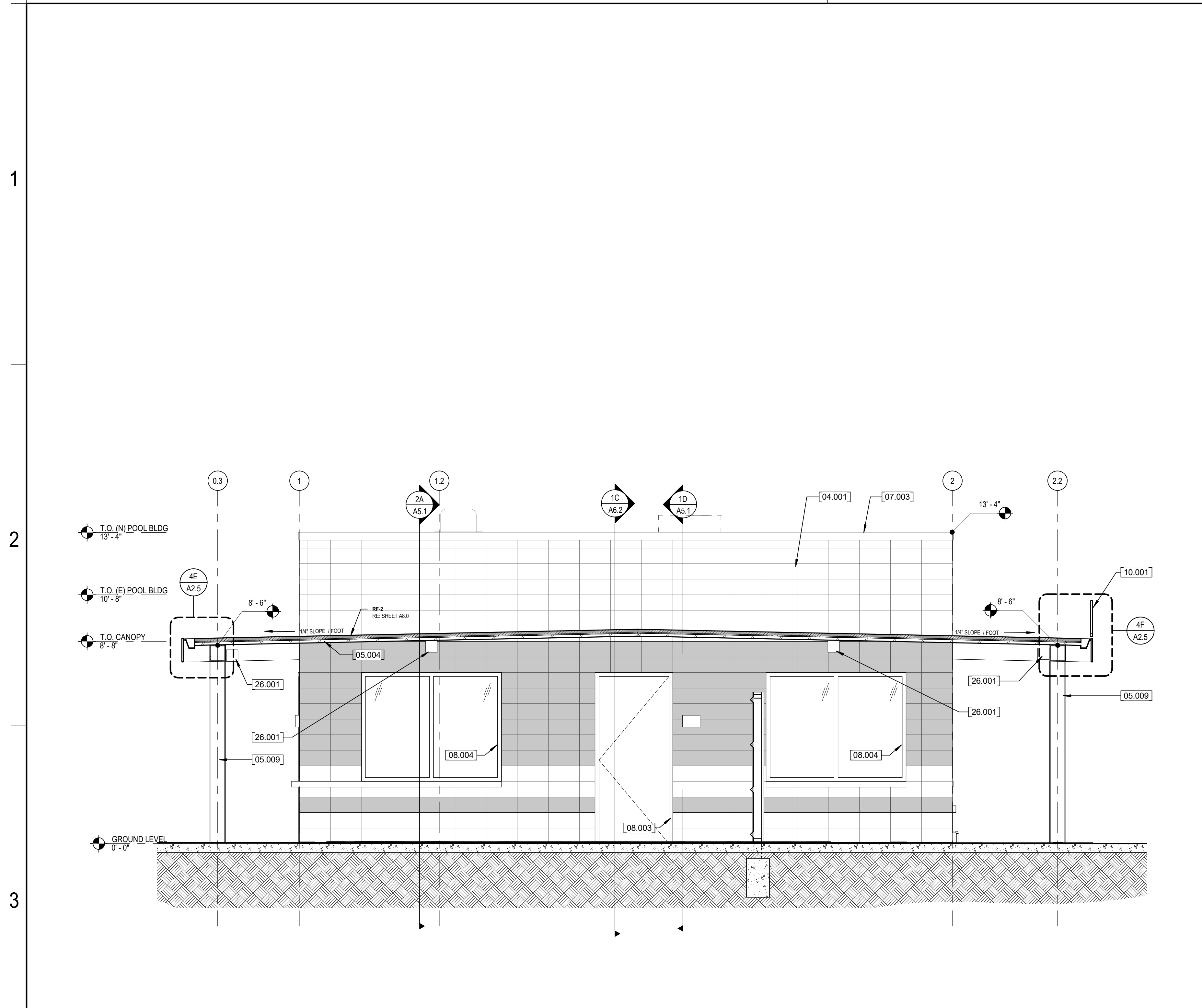


COVINA VALLEY HS POOL REPLACEMENT
 COVINA VALLEY UNIFIED SCHOOL DISTRICT
 483 SOUTH HOLLENBECK AVENUE COVINA, CA 91723

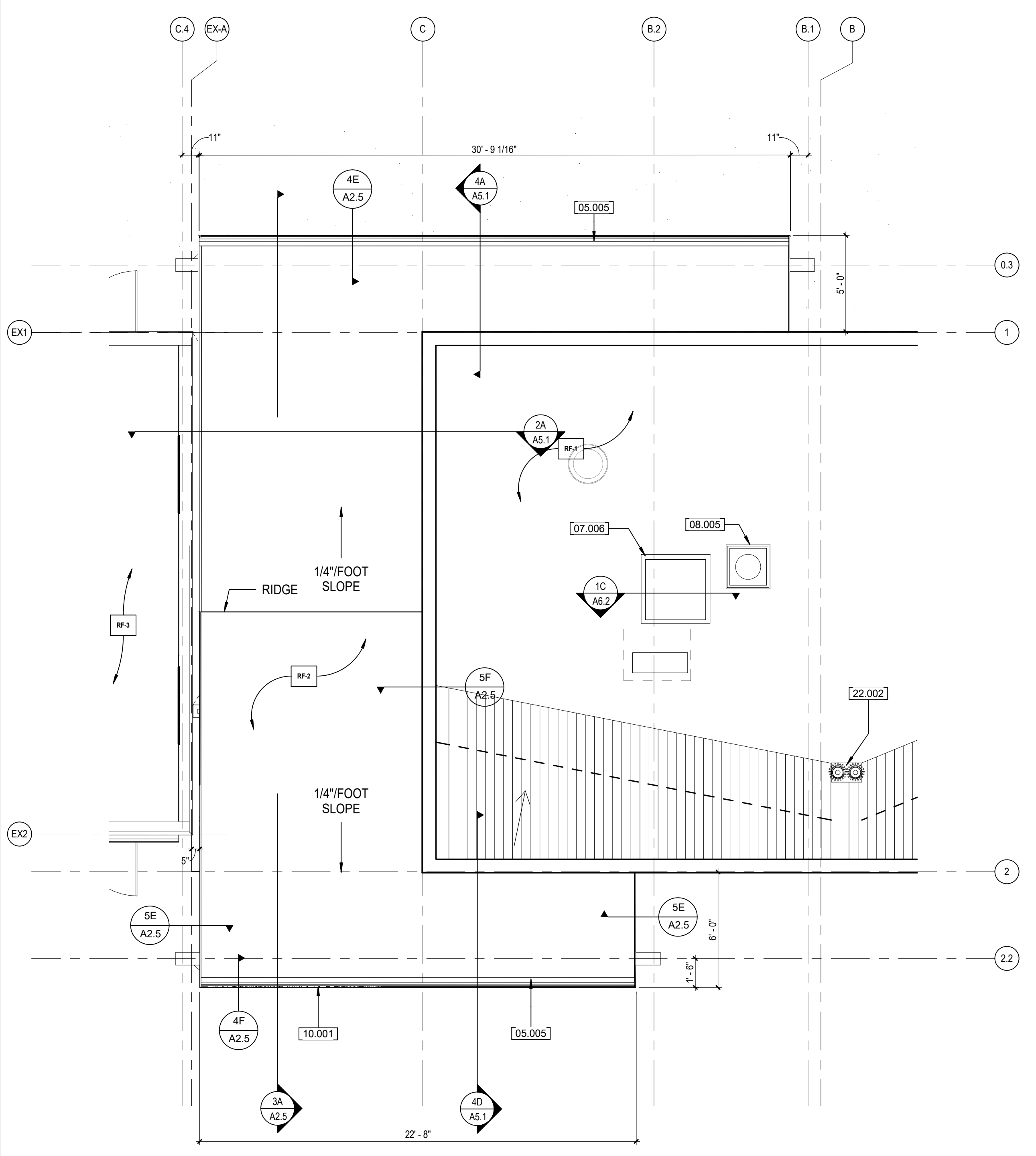
DSA SUBMITTAL SET_V2
 04/28/2023
 REVISIONS

75-22616-00
 DSA # 03-122700
 DSA FILE # 19-4B

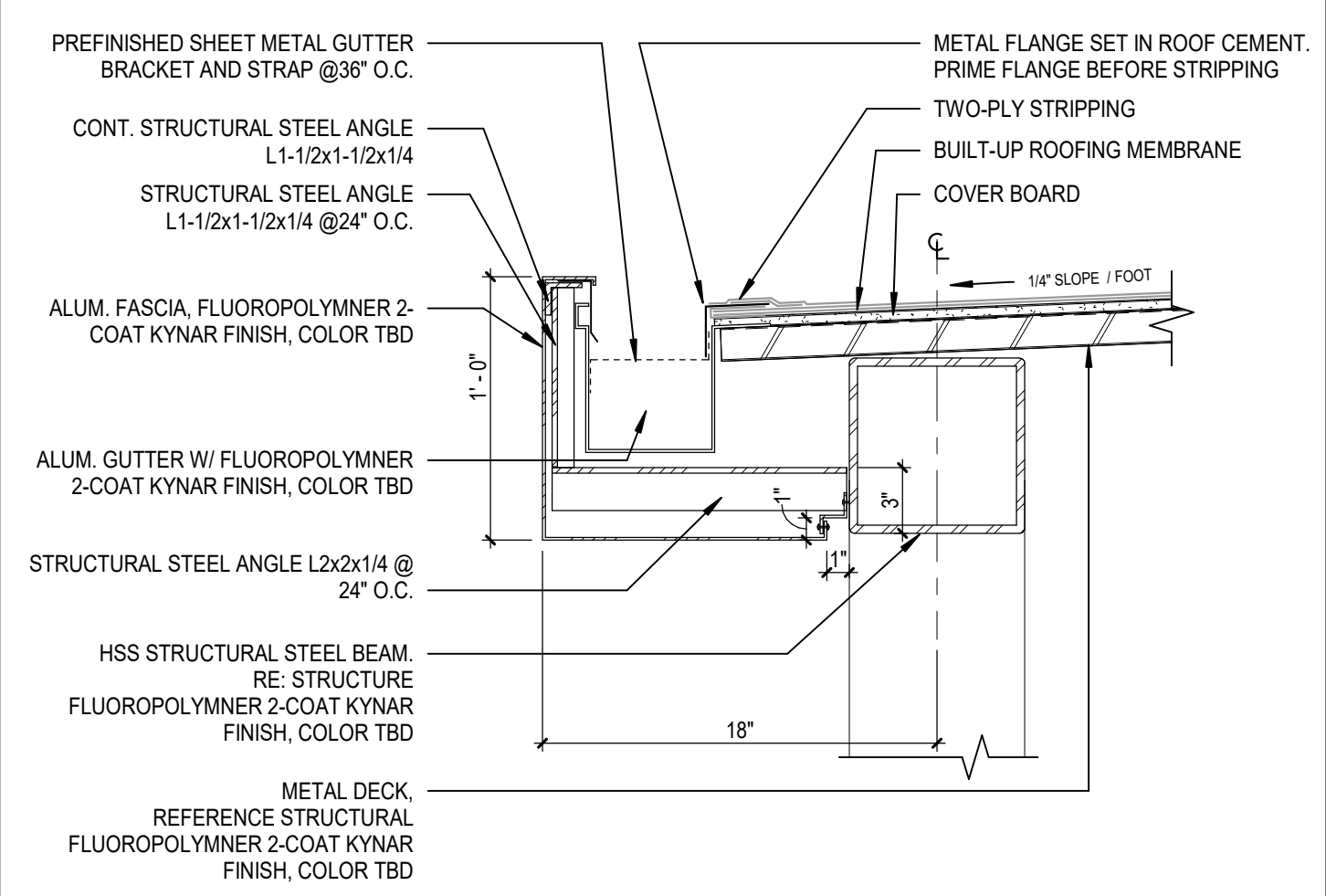
ENLARGED FLOOR PLAN AND INTERIOR ELEVATIONS
A2.4



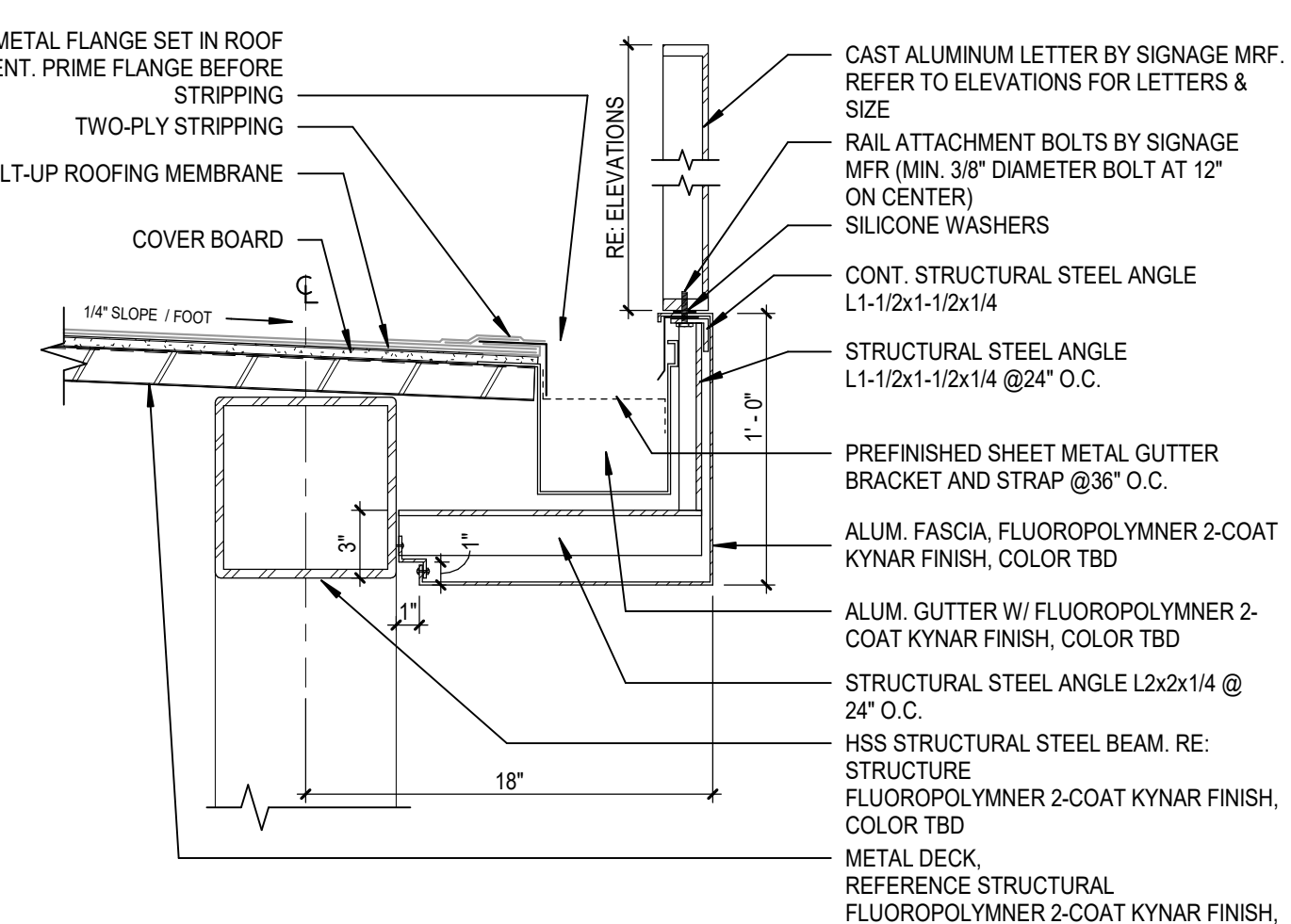
3A SECTION THRU CANOPY
SCALE: 3/8\"/>



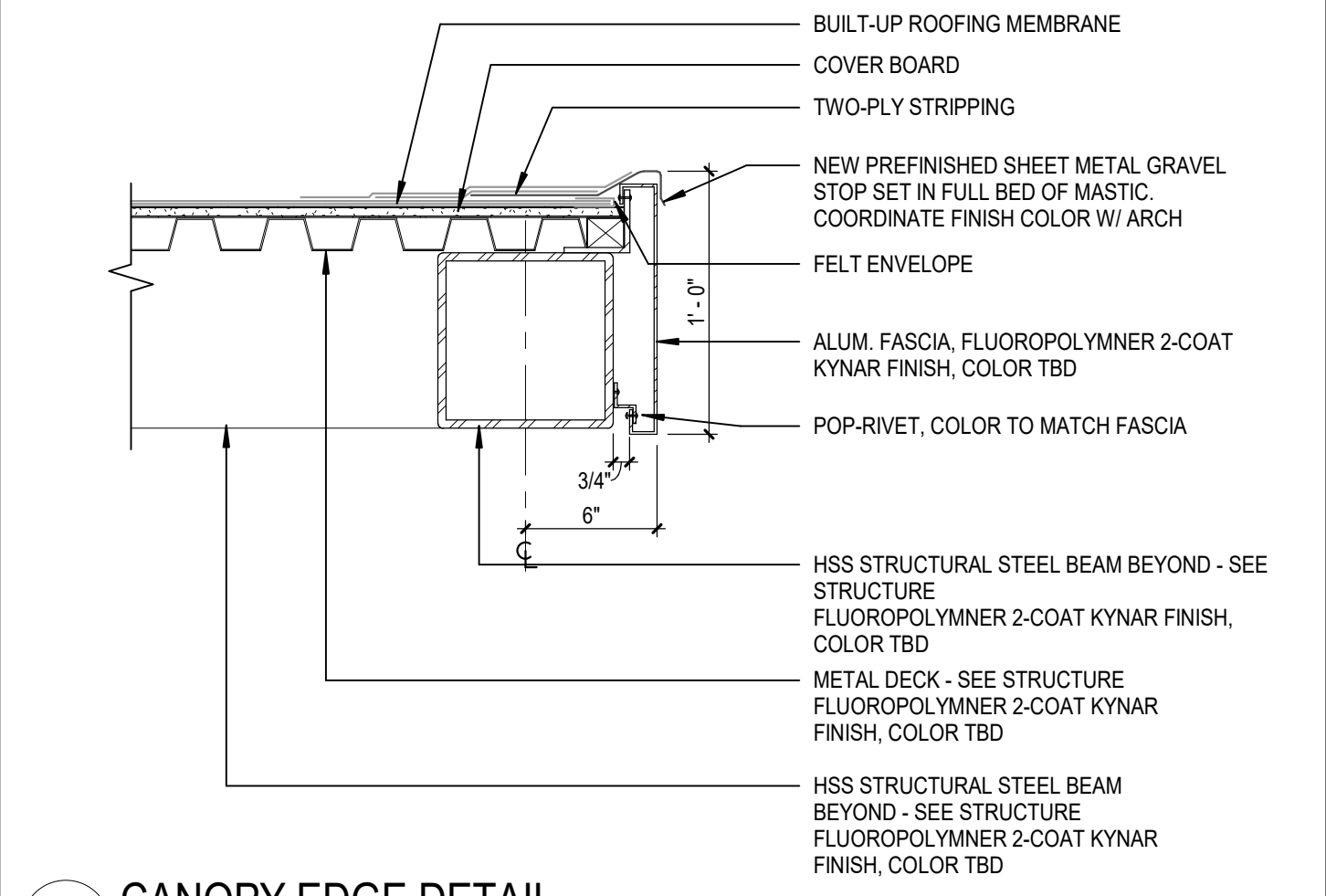
3E ENLARGED CANOPY PLAN
SCALE: 1/4\"/>



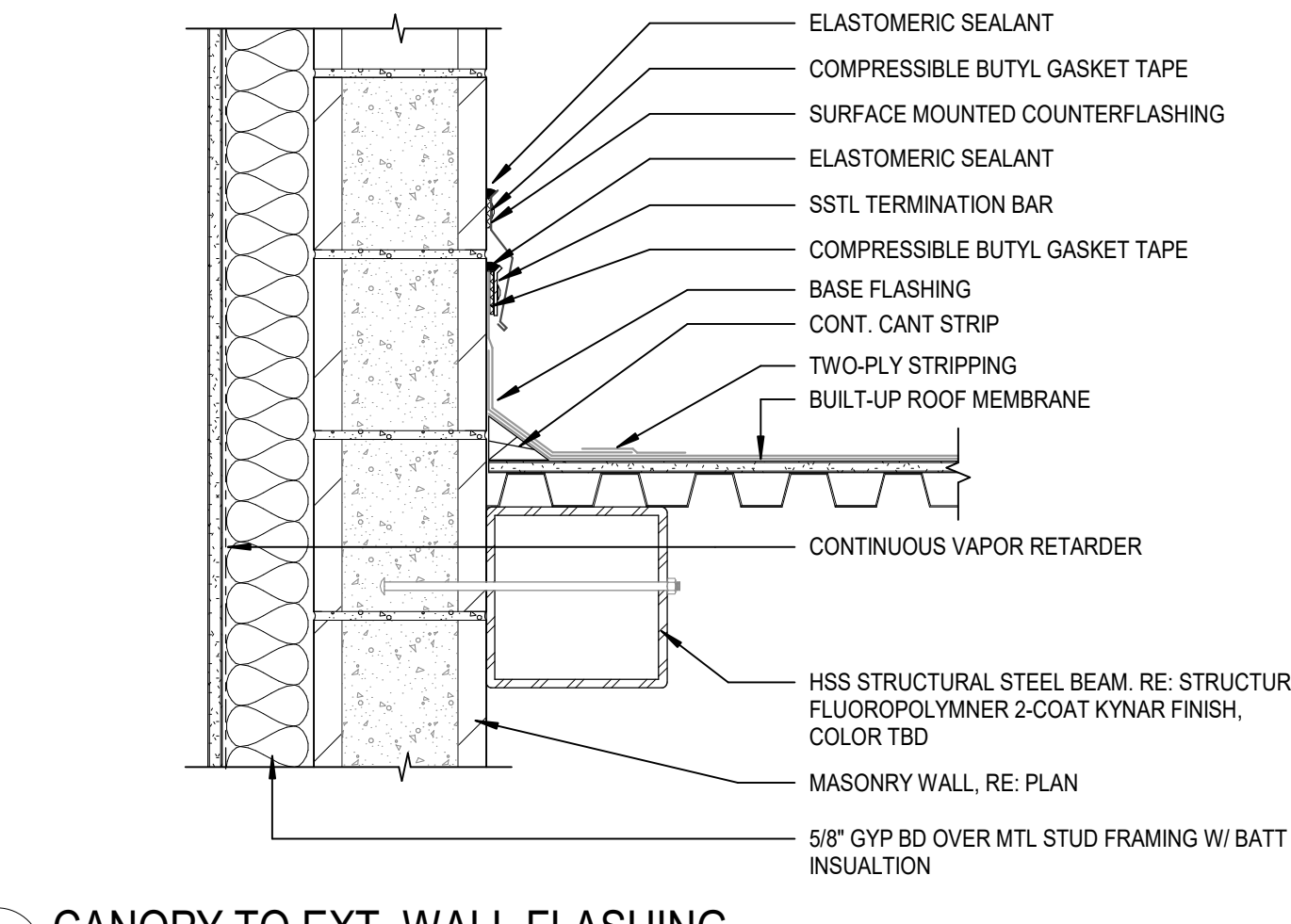
4E CANOPY EDGE DETAIL @ INTEGRATED GUTTER
SCALE: 1 1/2\"/>



4F SECTION DETAIL @ CAST ALUMINUM LETTERS
SCALE: 1 1/2\"/>



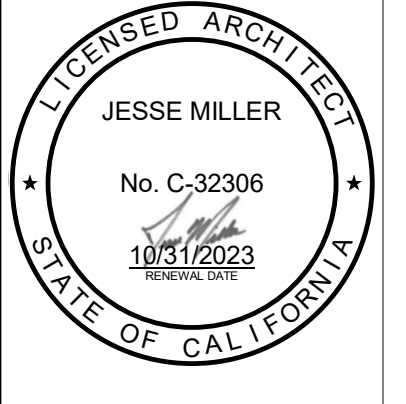
5E CANOPY EDGE DETAIL
SCALE: 1 1/2\"/>



5F CANOPY TO EXT. WALL FLASHING
SCALE: 1 1/2\"/>

KEYNOTES

- 04.001 RIFAL CMU FINISH - SEE 04.000
- 05.004 METAL DECK 1-1/2\"/>
- 05.009 EXPOSED STRUCTURAL STEEL FINISH, FLUOROPOLYMER 2-COAT KYNAR FINISH, COLOR TBD, SEE STRUCTURE, SEE 05.12 FOR A&S SPEC
- 07.003 CMU WALL SHEET METAL PARAPET CORING CAP, MATCH EXISTING SPEC 02.10
- 08.003 HOLLOW METAL DOOR AND FRAME
- 08.004 EXTERIOR ALUMINUM WINDOW - SEE SCHEDULE
- 10.001 CAST ALUMINUM LETTERS SIGNAGE - SEE #A&S.5
- 26.001 LIGHTING FIXTURE - SEE ELECTRICAL DRAWINGS



COVINA VALLEY HS POOL REPLACEMENT
 COVINA VALLEY UNIFIED SCHOOL DISTRICT
 463 SOUTH HOLLENBECK AVENUE COVINA, CA 91723

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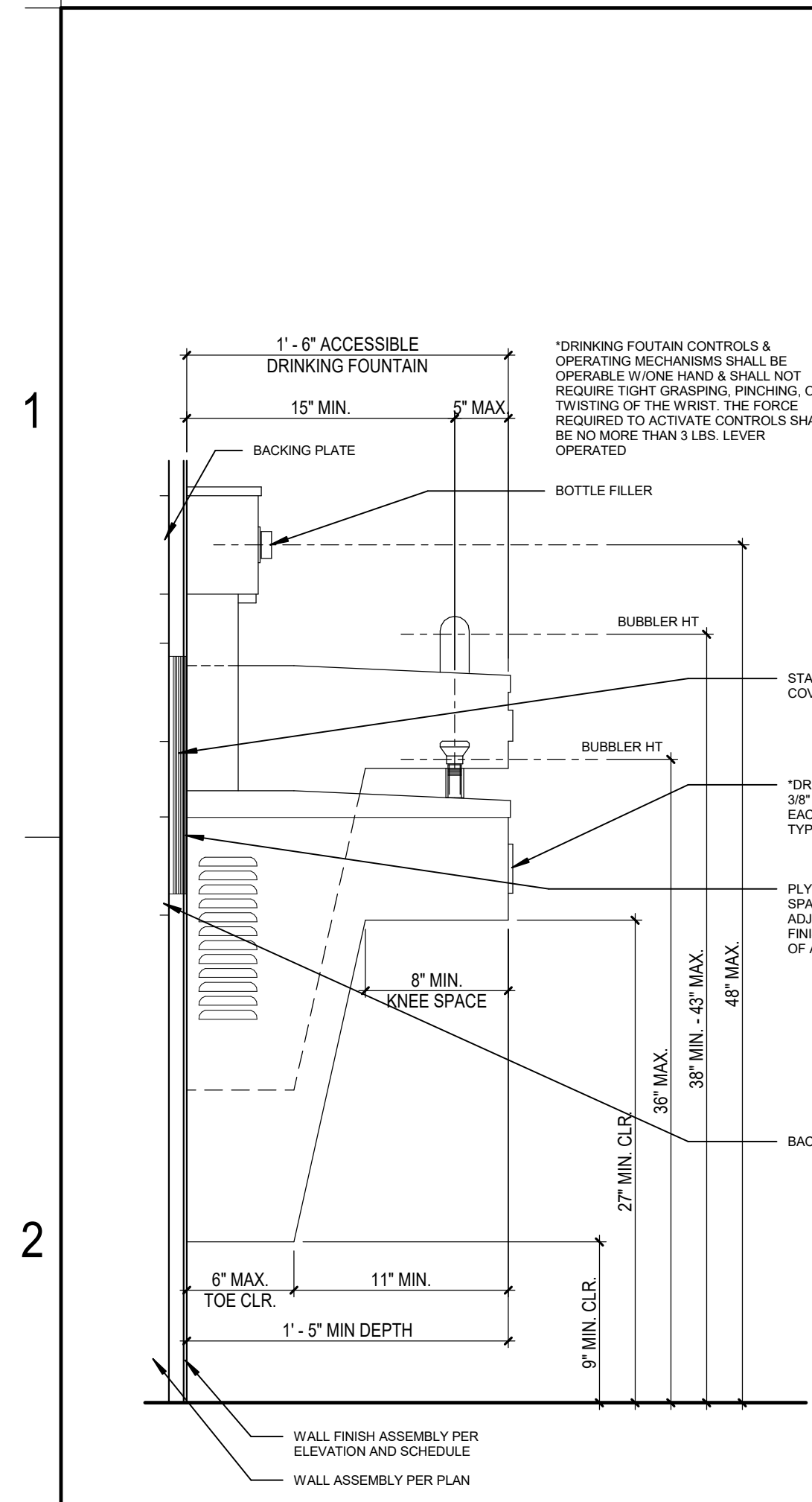
04/28/2023 REVISIONS

75-22616-00
DSA # 03-122700
DSA FILE # 19-48

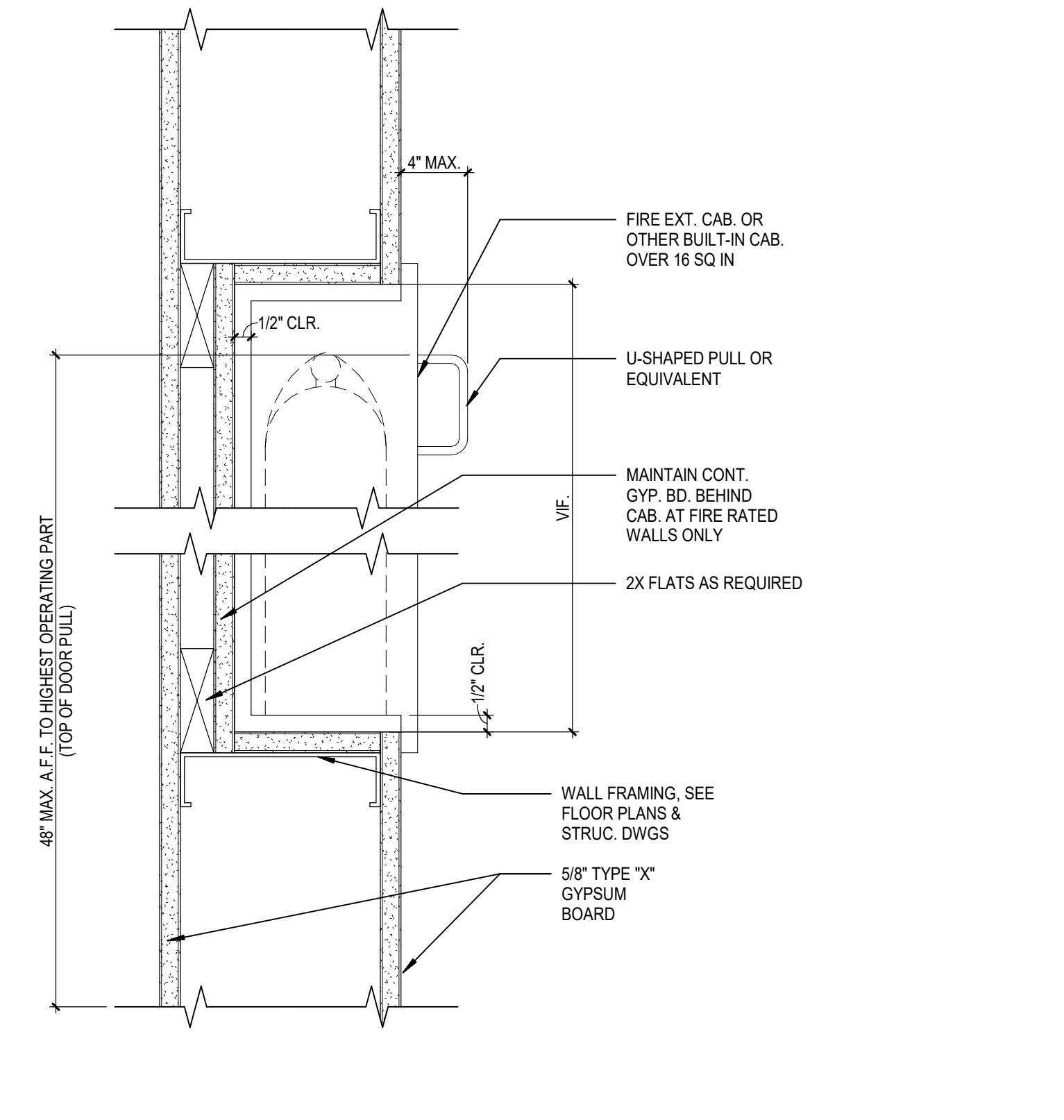
ENLARGED CANOPY PLAN & DETAILS

A2.5

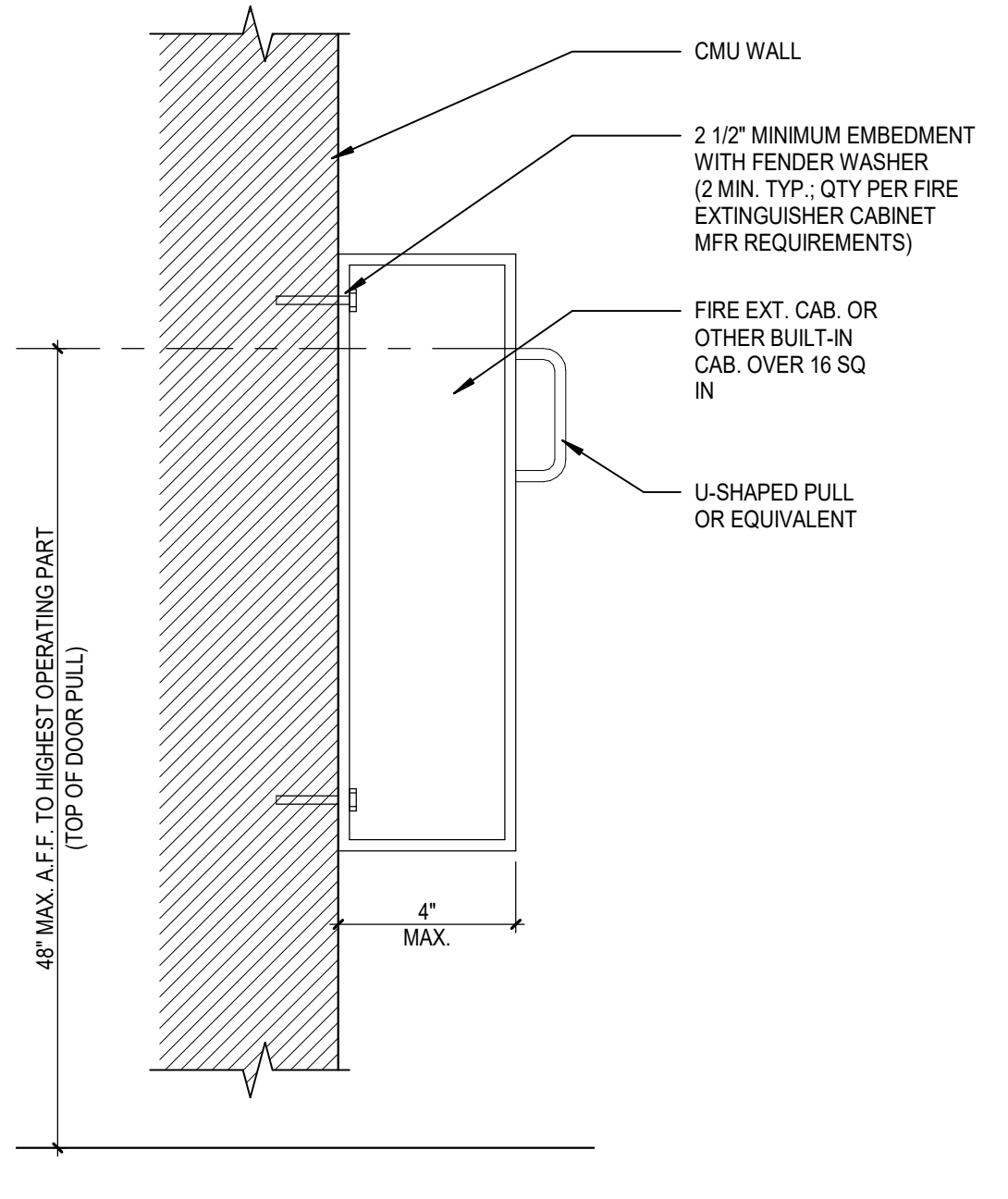
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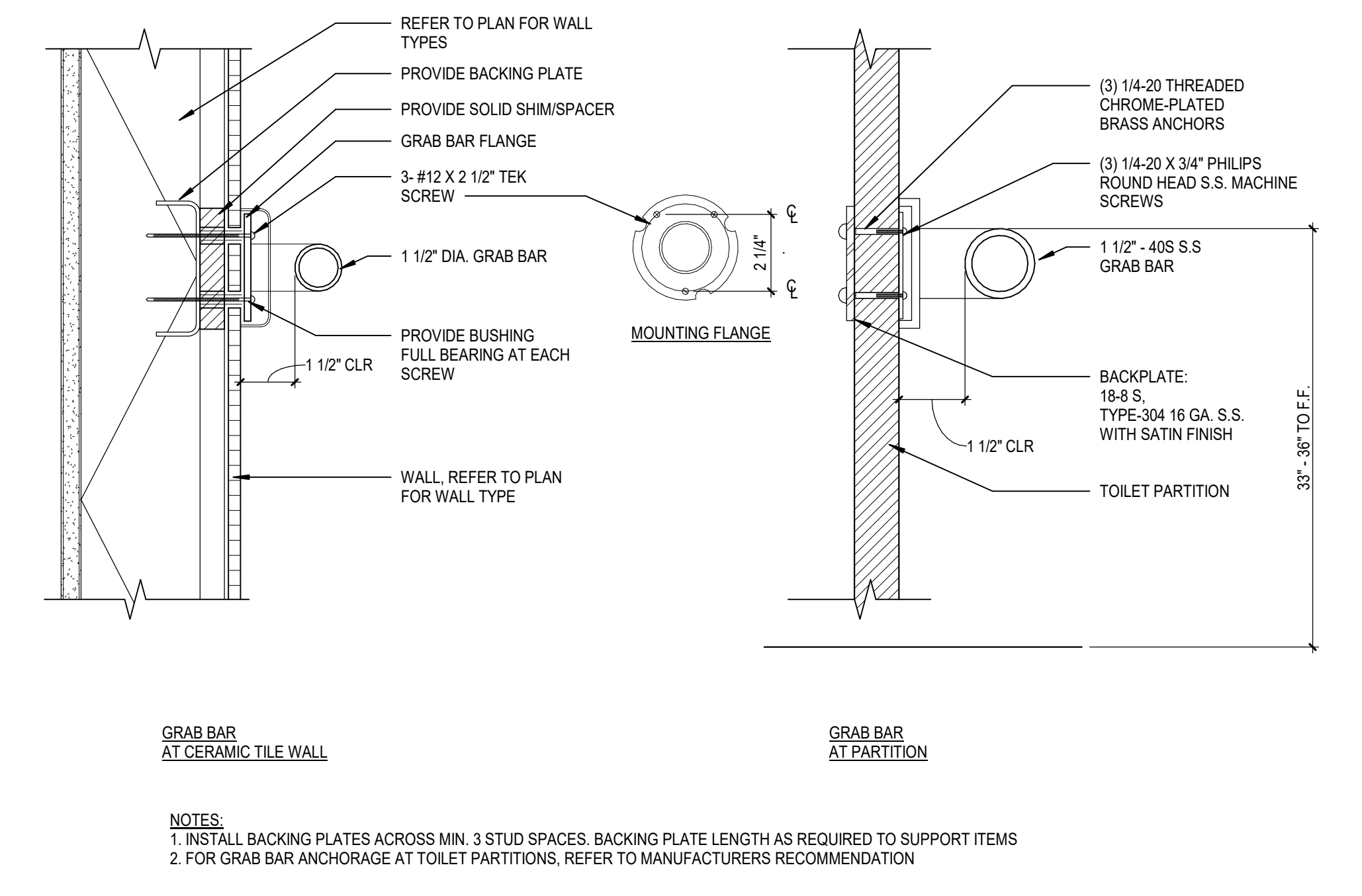
6 ACCESSIBLE DRINKING FOUNTAIN W/ BOTTLE FILLER
A2.6 SCALE: 1/2" = 1'-0"



7 FIRE EXTINGUISHER CABINET - RECESSED
A2.6 SCALE: 3" = 1'-0"



8 FIRE EXTINGUISHER CABINET - WALL MOUNT
A2.6 SCALE: 3" = 1'-0"

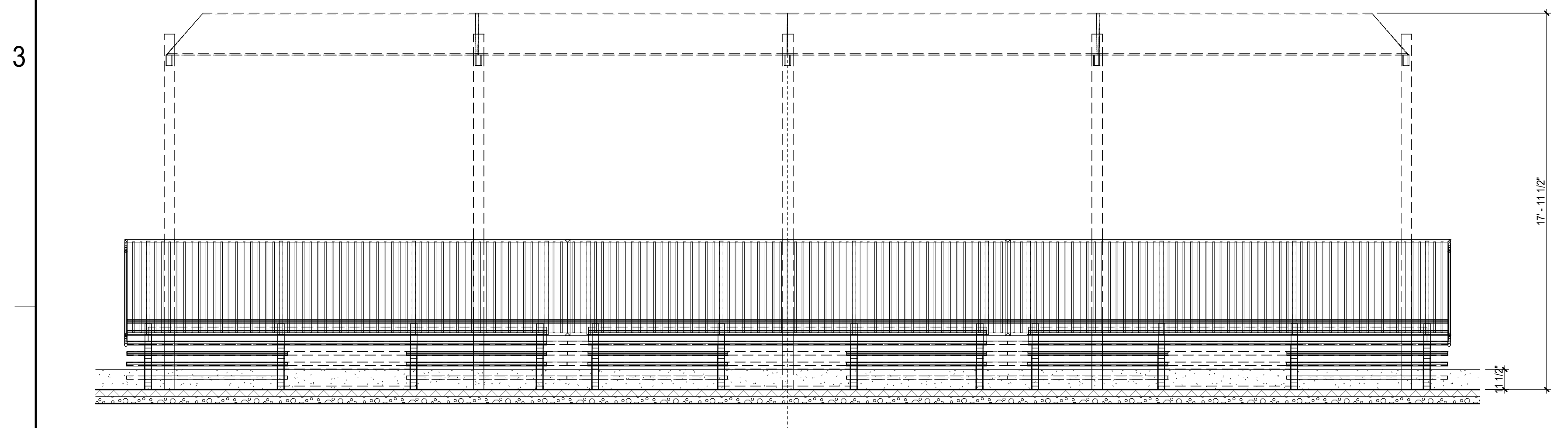


9 GRAB BAR DETAILS
A2.6 SCALE: 3" = 1'-0"

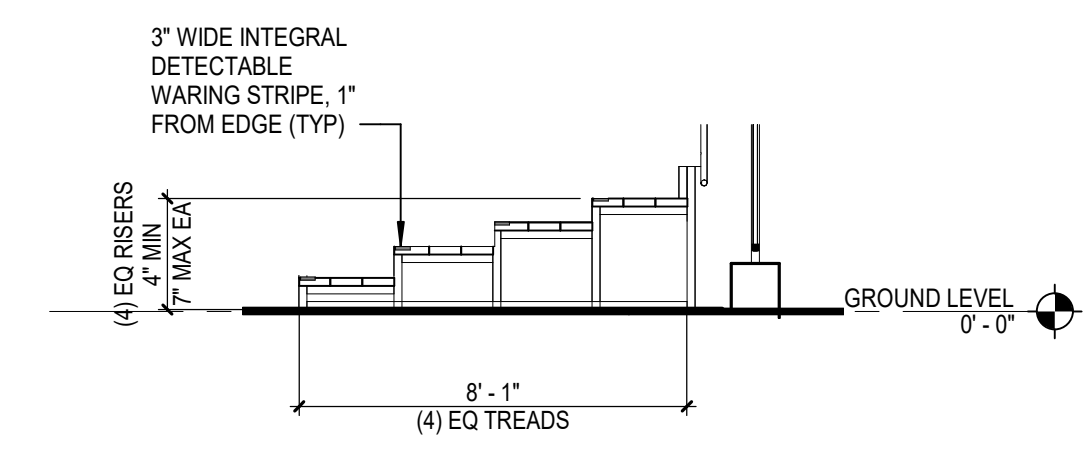
KEYNOTES
13.001 PC APPROVED SHADE STRUCTURE - USA SHADE - 27/2021 USING PC04-119455

DLR GROUP
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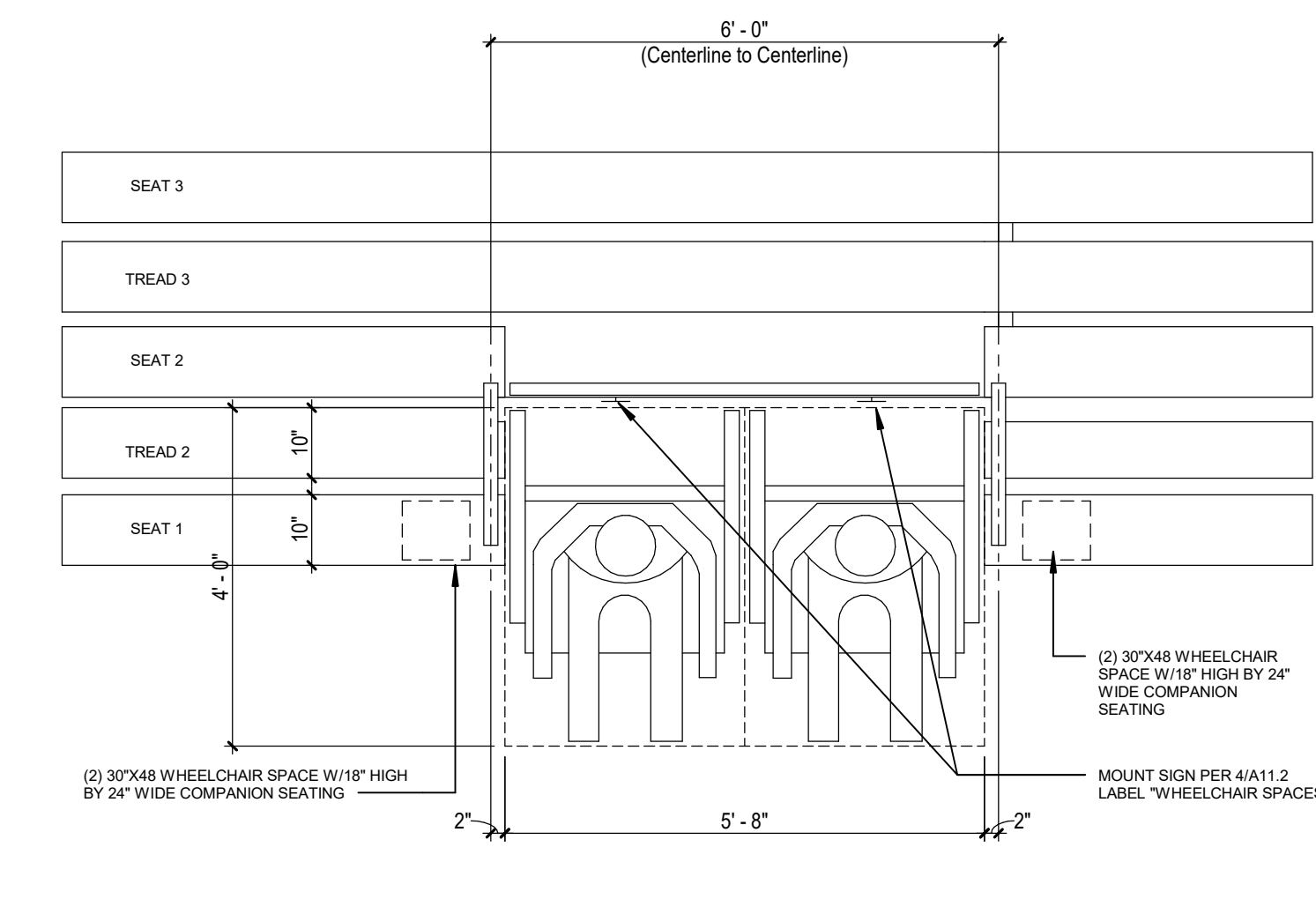
LICENSED ARCHITECT
JESSE MILLER
No. C-32306
10/31/2023
STATE OF CALIFORNIA



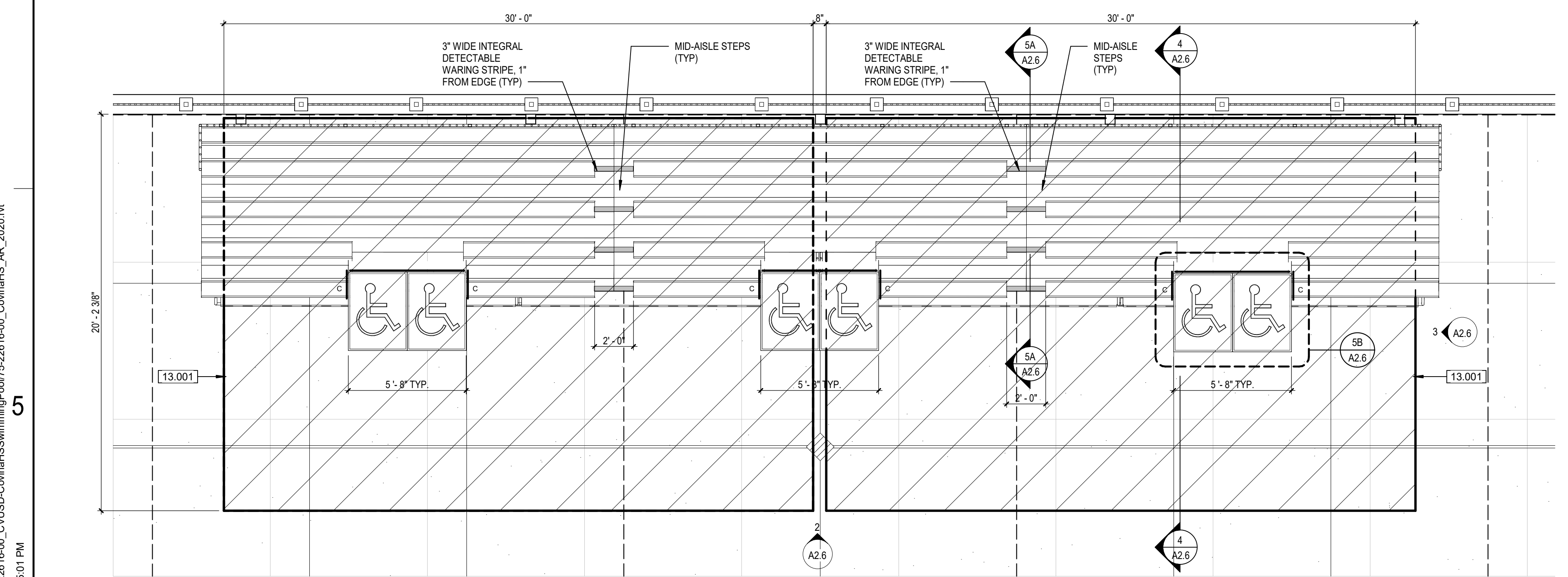
2 CANOPY FRONT ELEVATION
A2.6 SCALE: 1/4" = 1'-0"



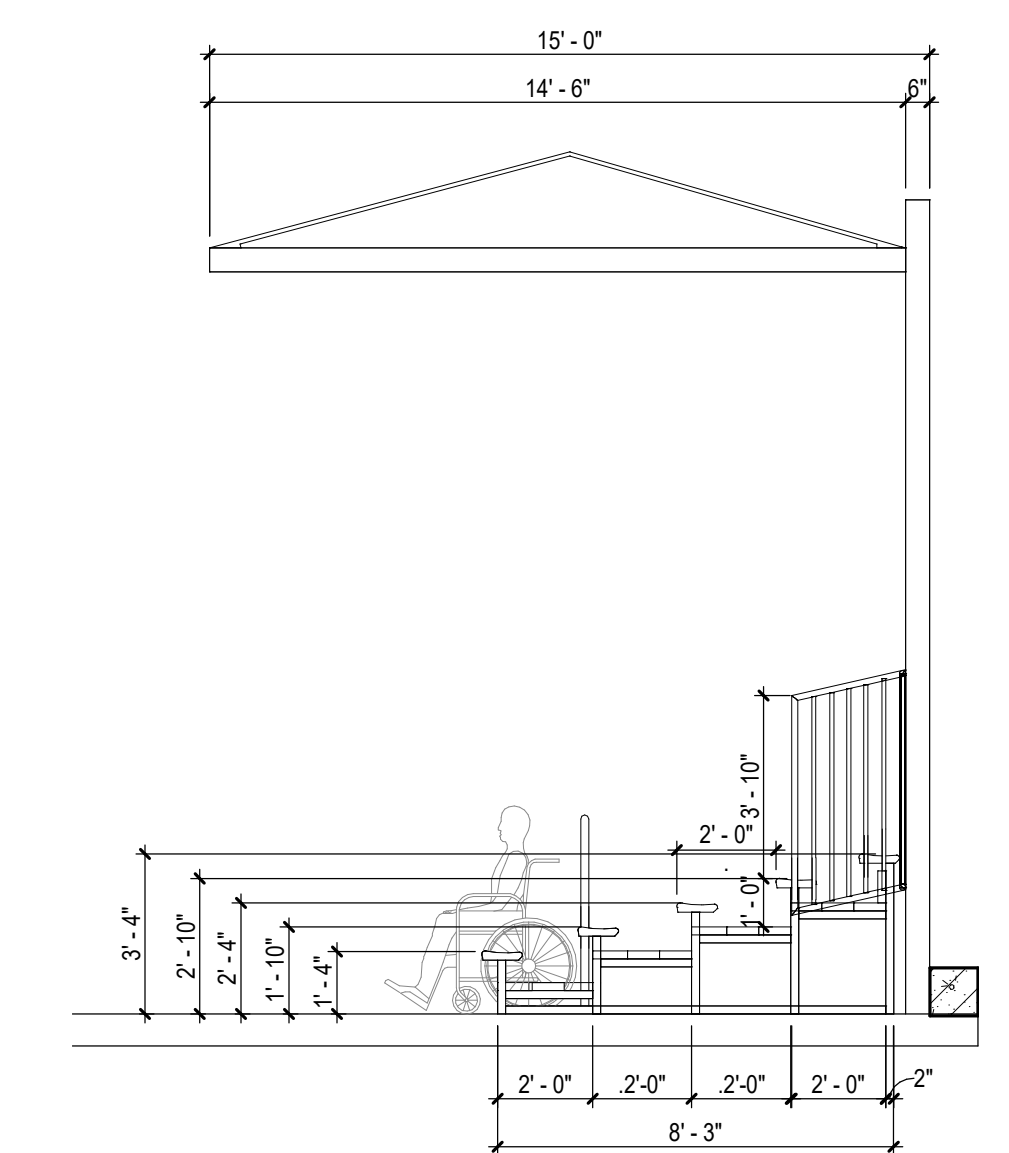
5A BLEACHER STEPS SECTION
A2.6 SCALE: 1/4" = 1'-0"



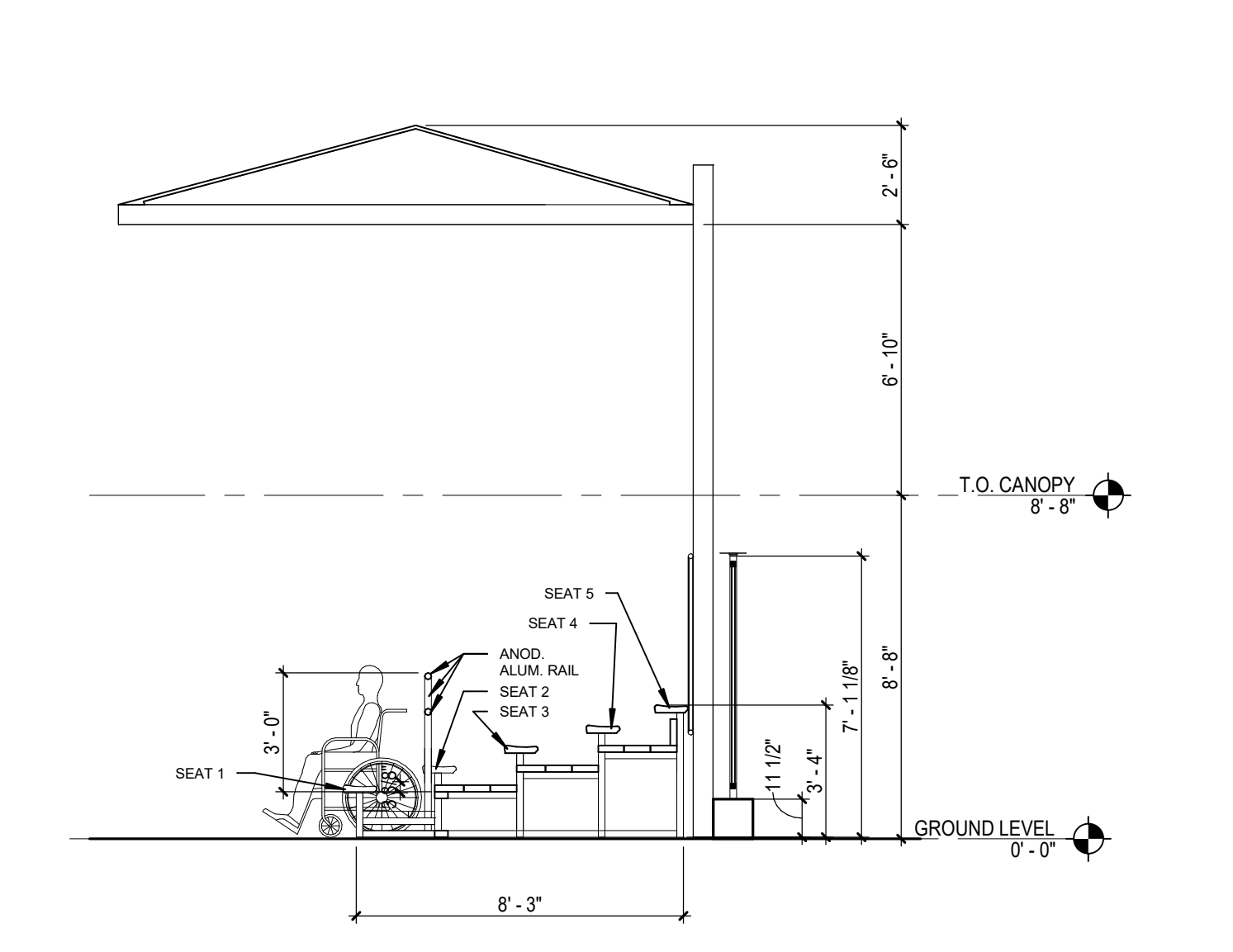
5B WHEELCHAIR AREA DETAIL
A2.6 SCALE: 1/2" = 1'-0"



1 ENLARGED PC APPROVED SHADE STRUCTURE PLAN USING PC#04-119455
A2.6 SCALE: 1/4" = 1'-0"



3 CANOPY SIDE ELEVATION
A2.6 SCALE: 1/4" = 1'-0"



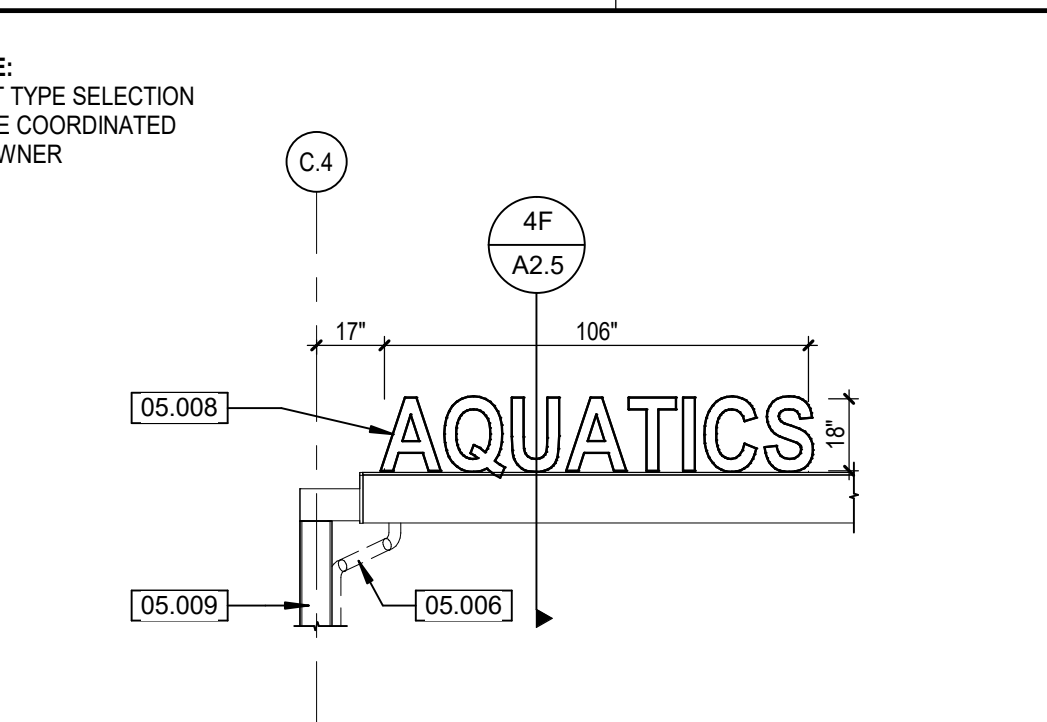
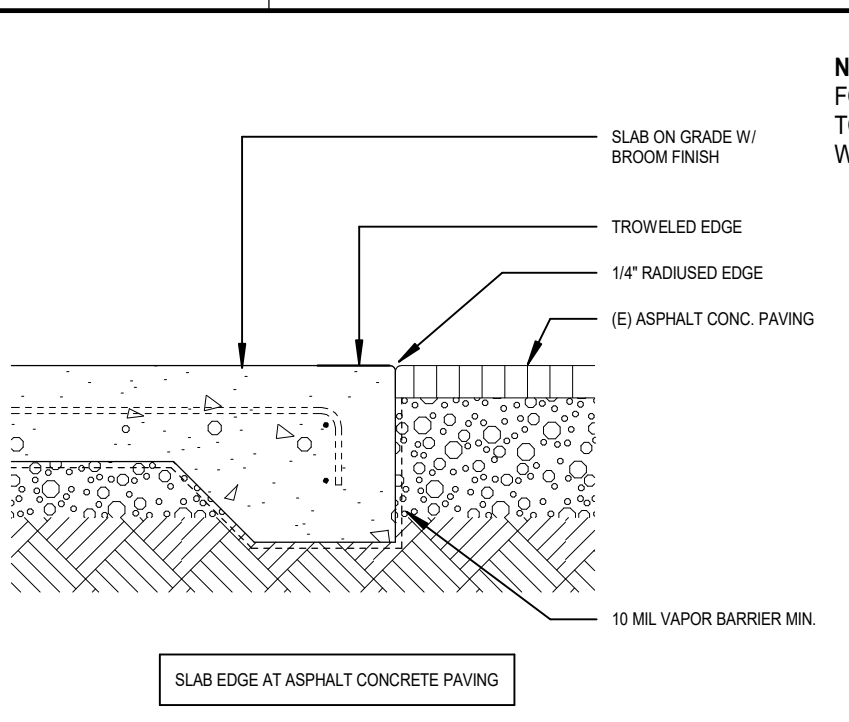
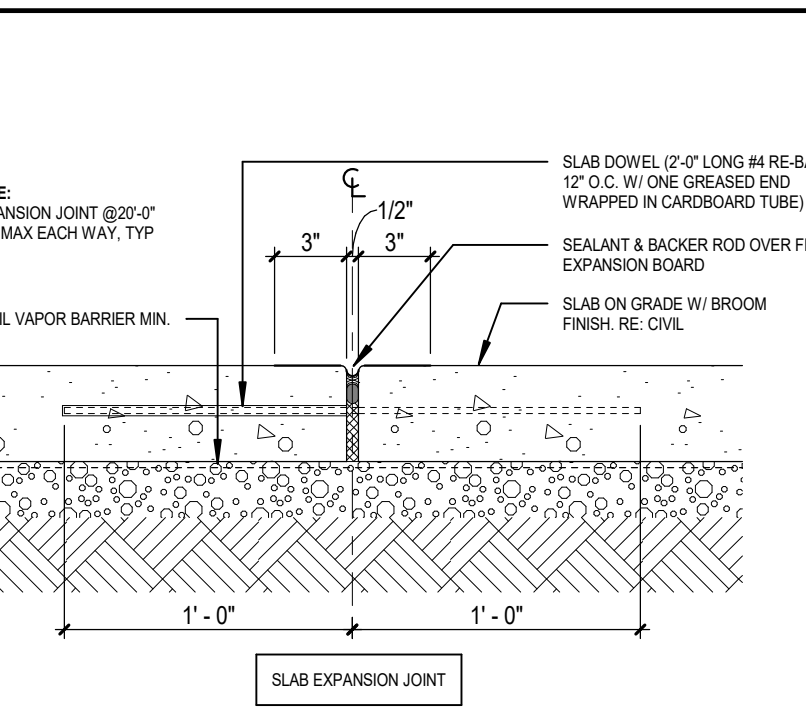
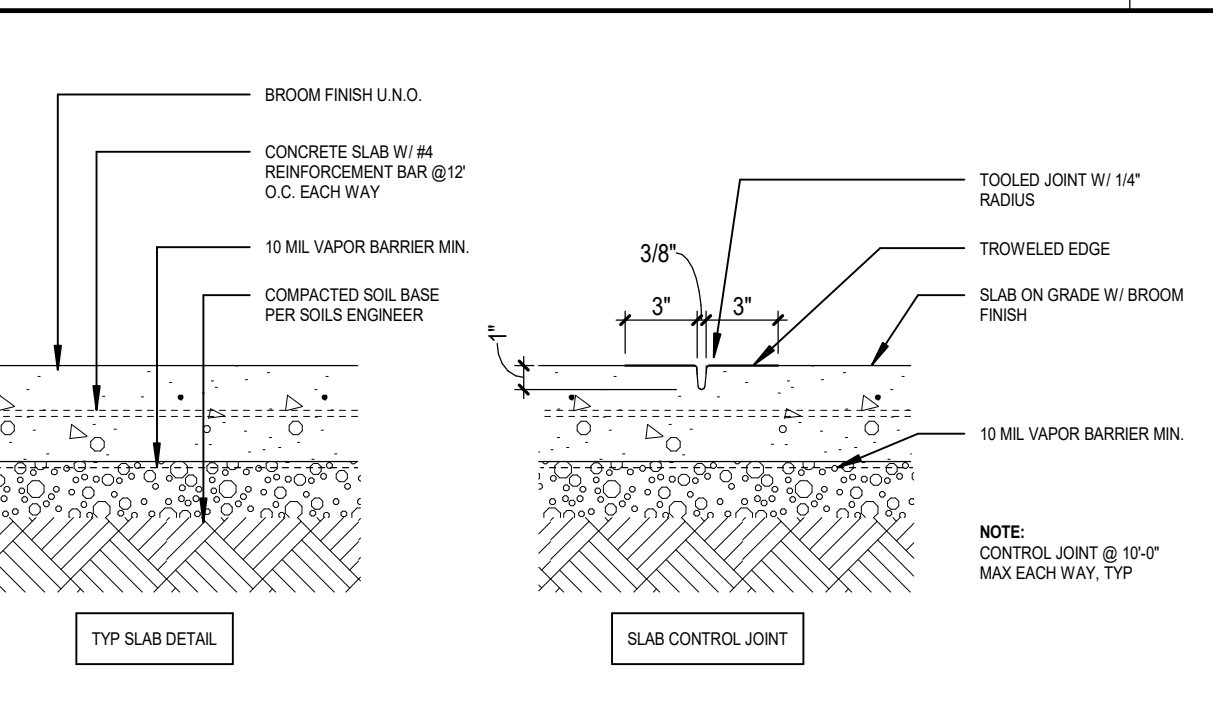
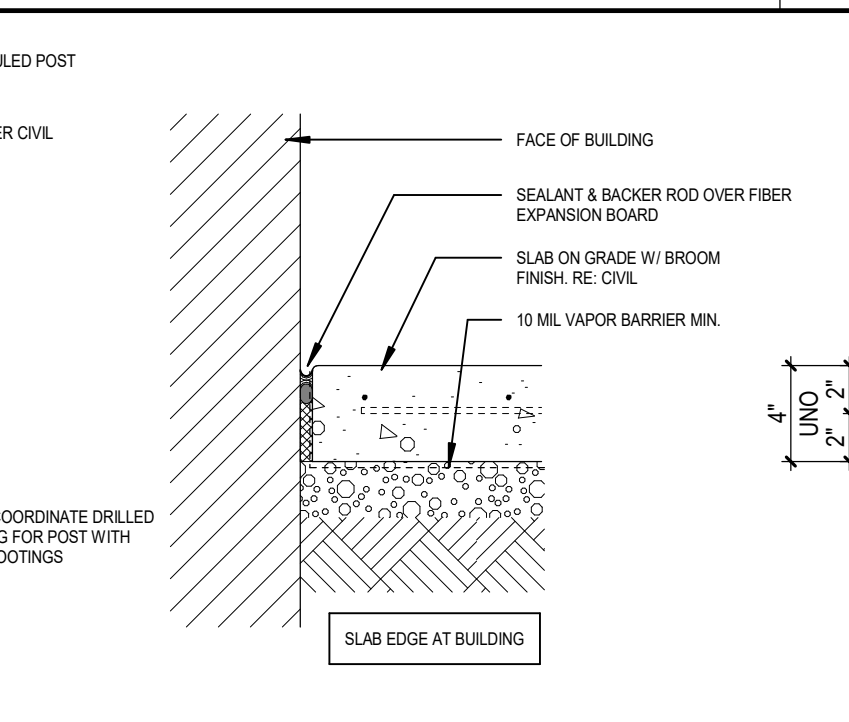
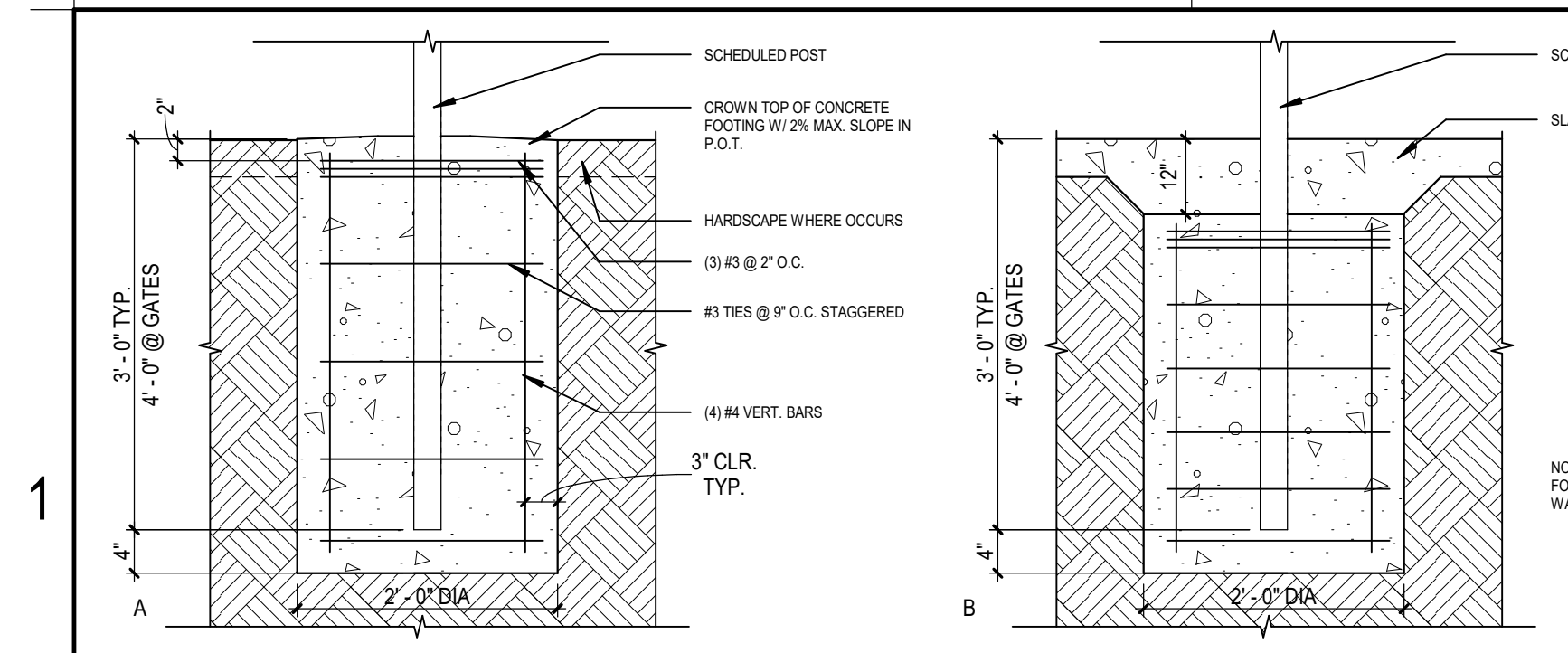
4 CANOPY SECTION
A2.6 SCALE: 1/4" = 1'-0"

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75-22616-00
DSA # 03-122700
DSA FILE # 19-4B

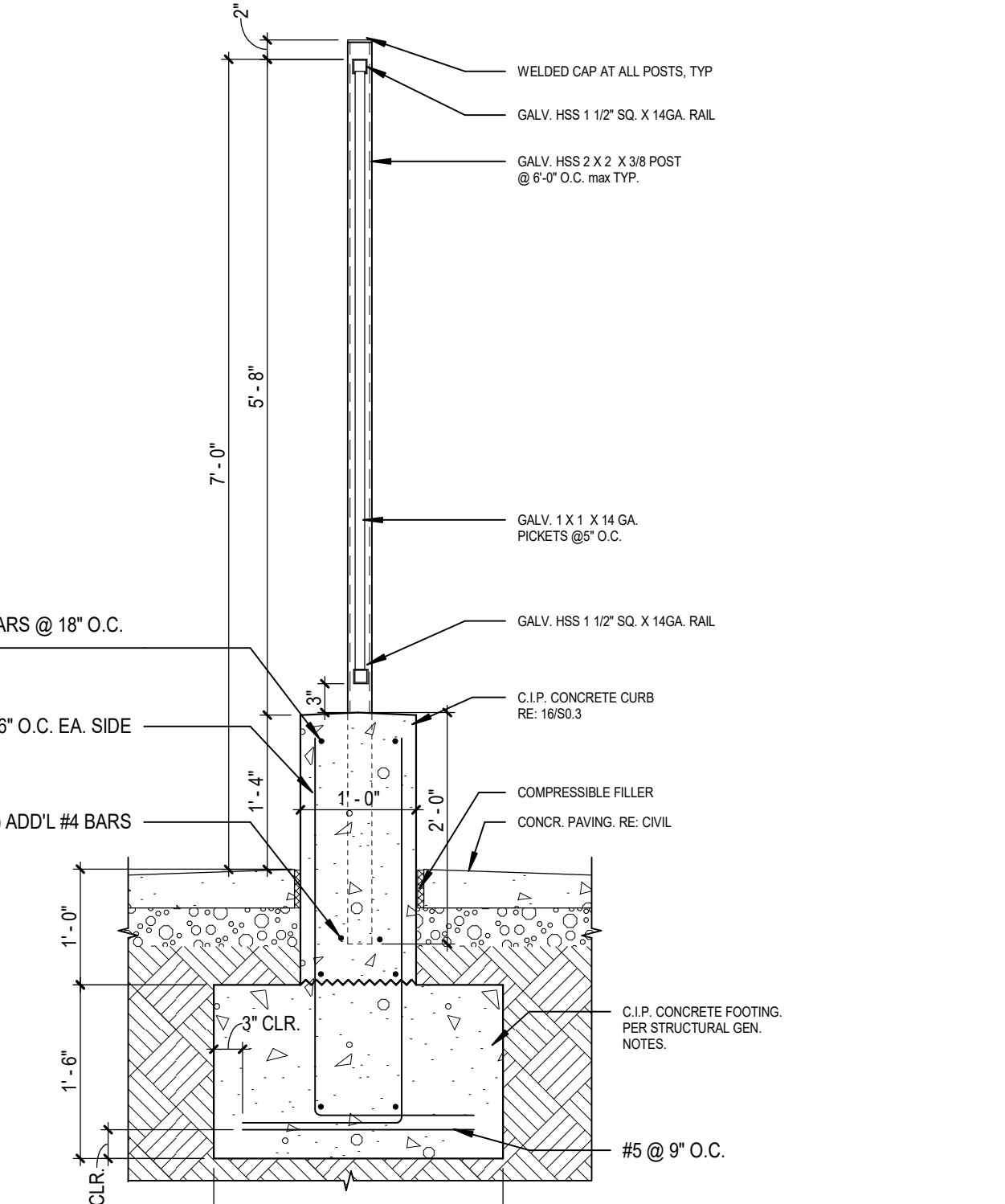
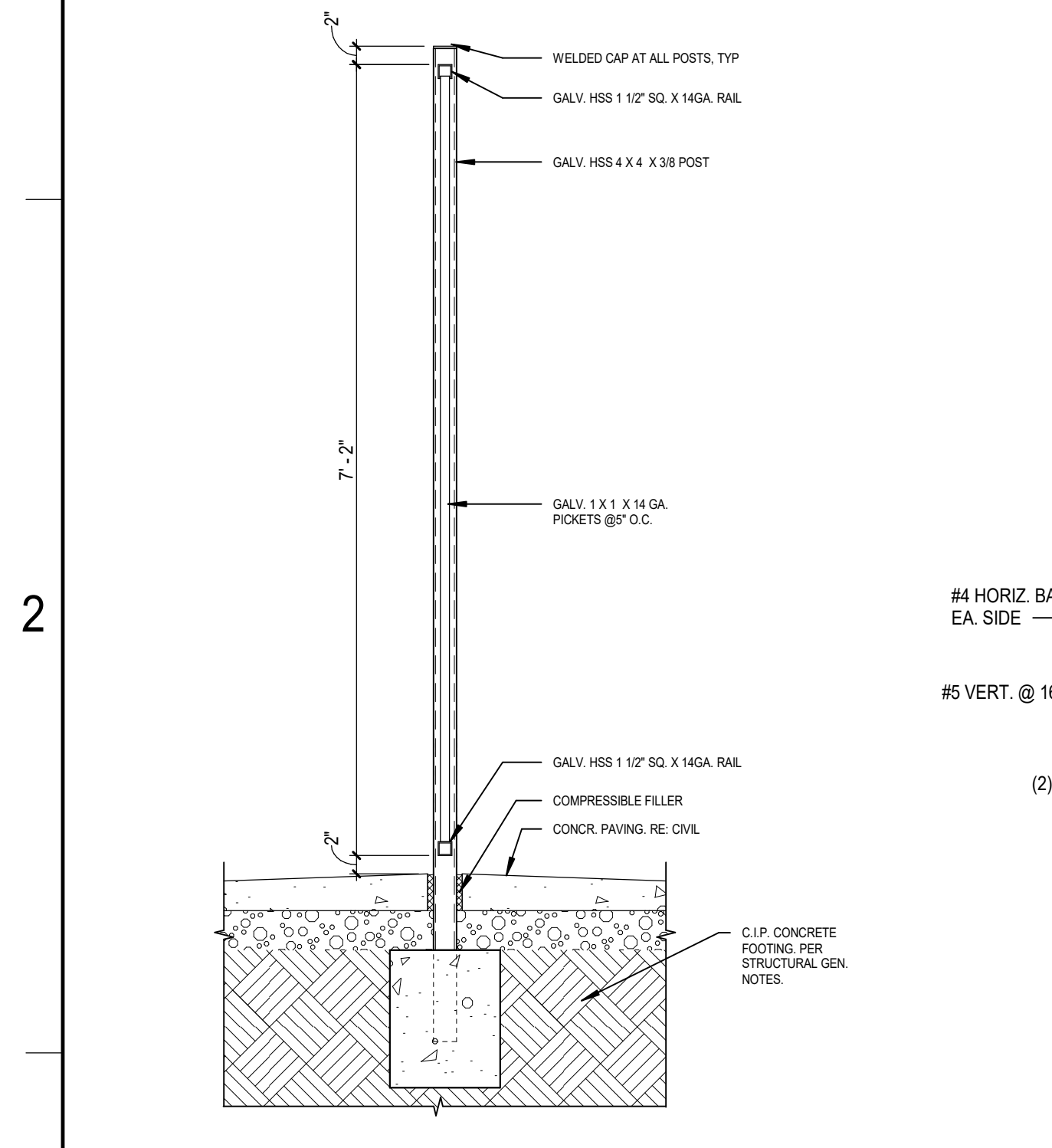
ENLARGED CANOPY PLAN & DETAILS



1 ORNAMENTAL FENCE GATE POST FOOTING
SCALE: 3/4" = 1'-0"

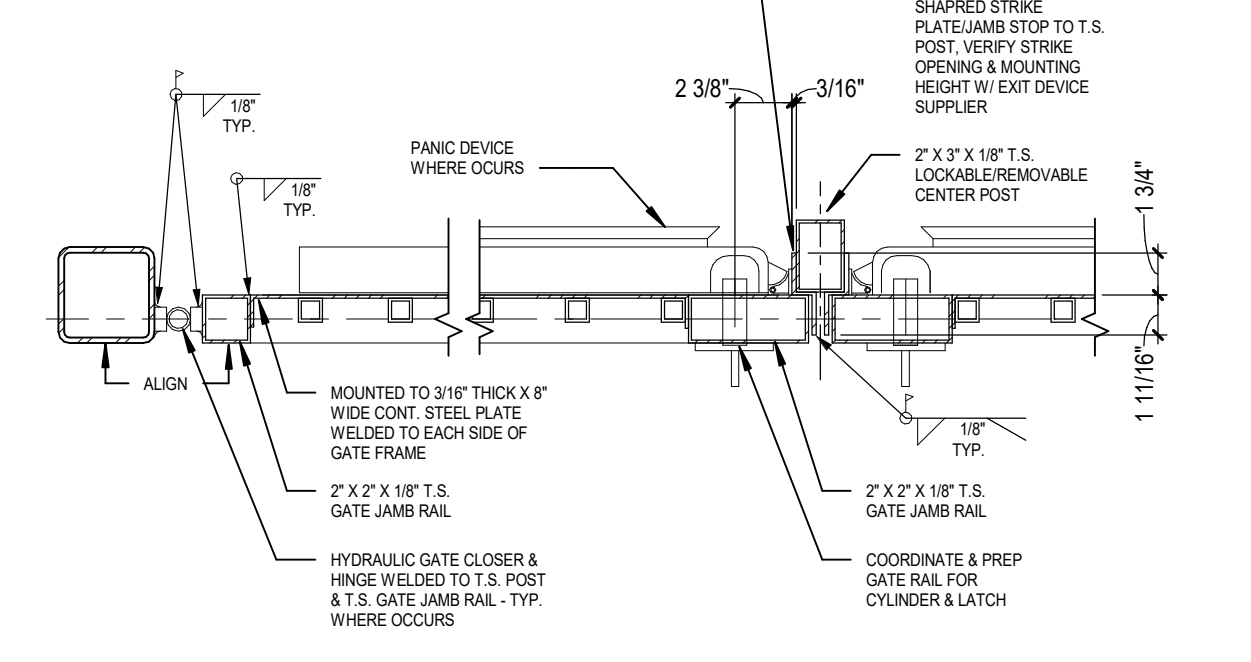
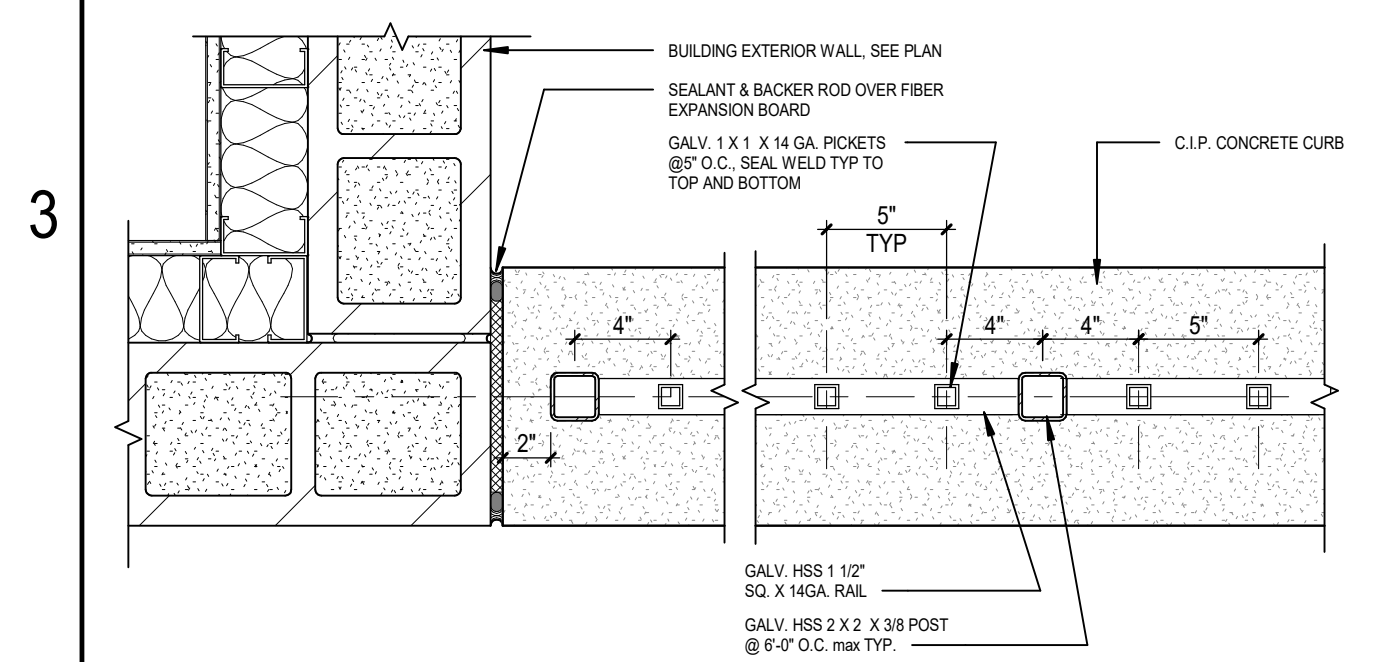
1A TYP SLAB DETAILS
SCALE: 1 1/2" = 1'-0"

1F CAST ALUMINUM LETTER SIGNAGE AT CANOPY
SCALE: 1/4" = 1'-0"



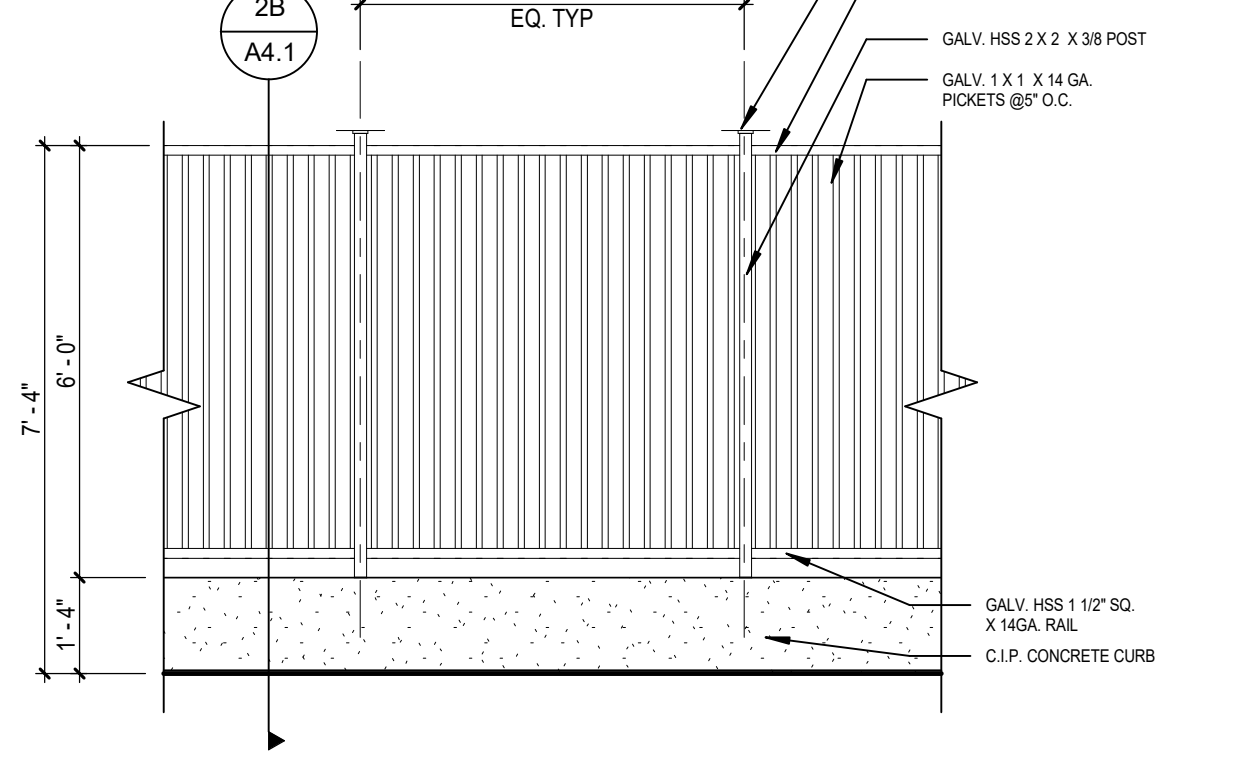
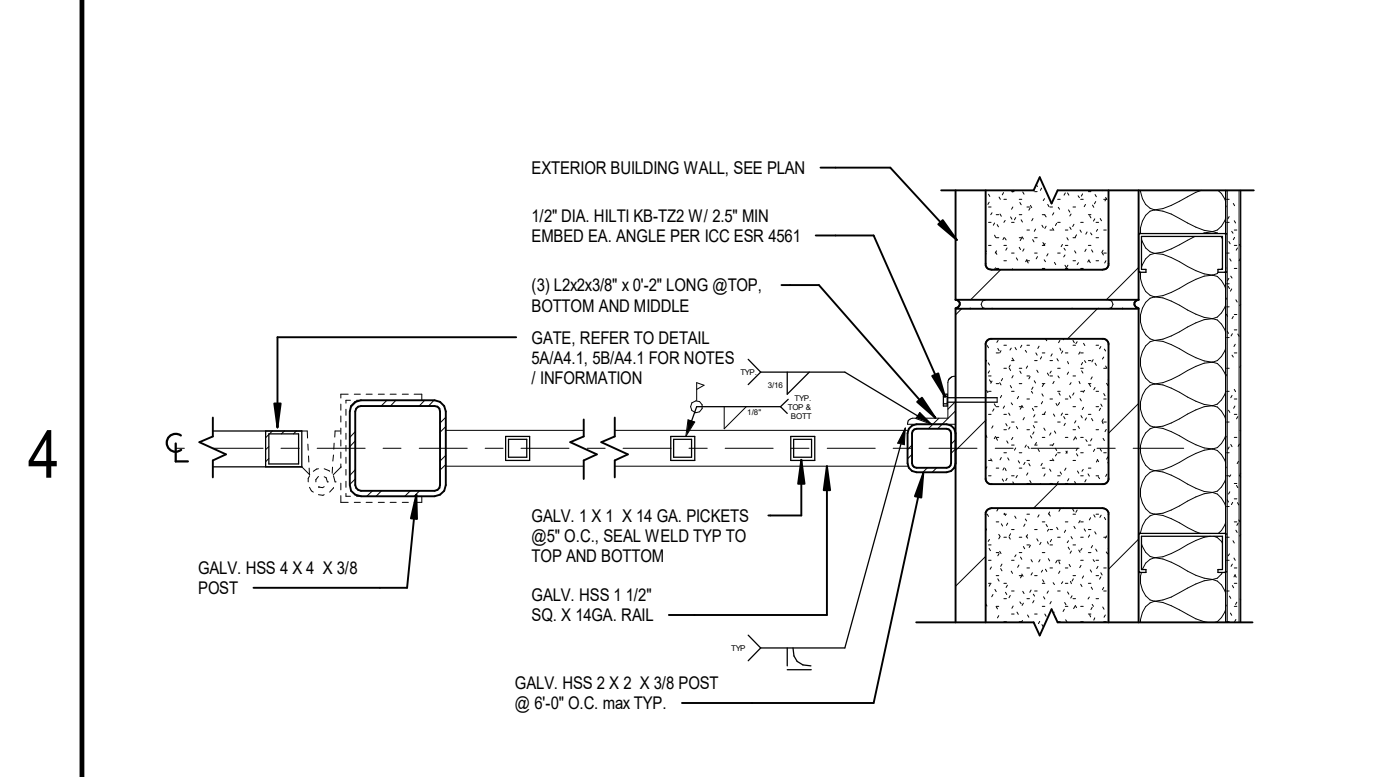
2A ORNAMENTAL FENCE SECTION @ MAIN GATE G01
SCALE: 3/4" = 1'-0"

2B TYP ORNAMENTAL FENCE SECTION
SCALE: 3/4" = 1'-0"



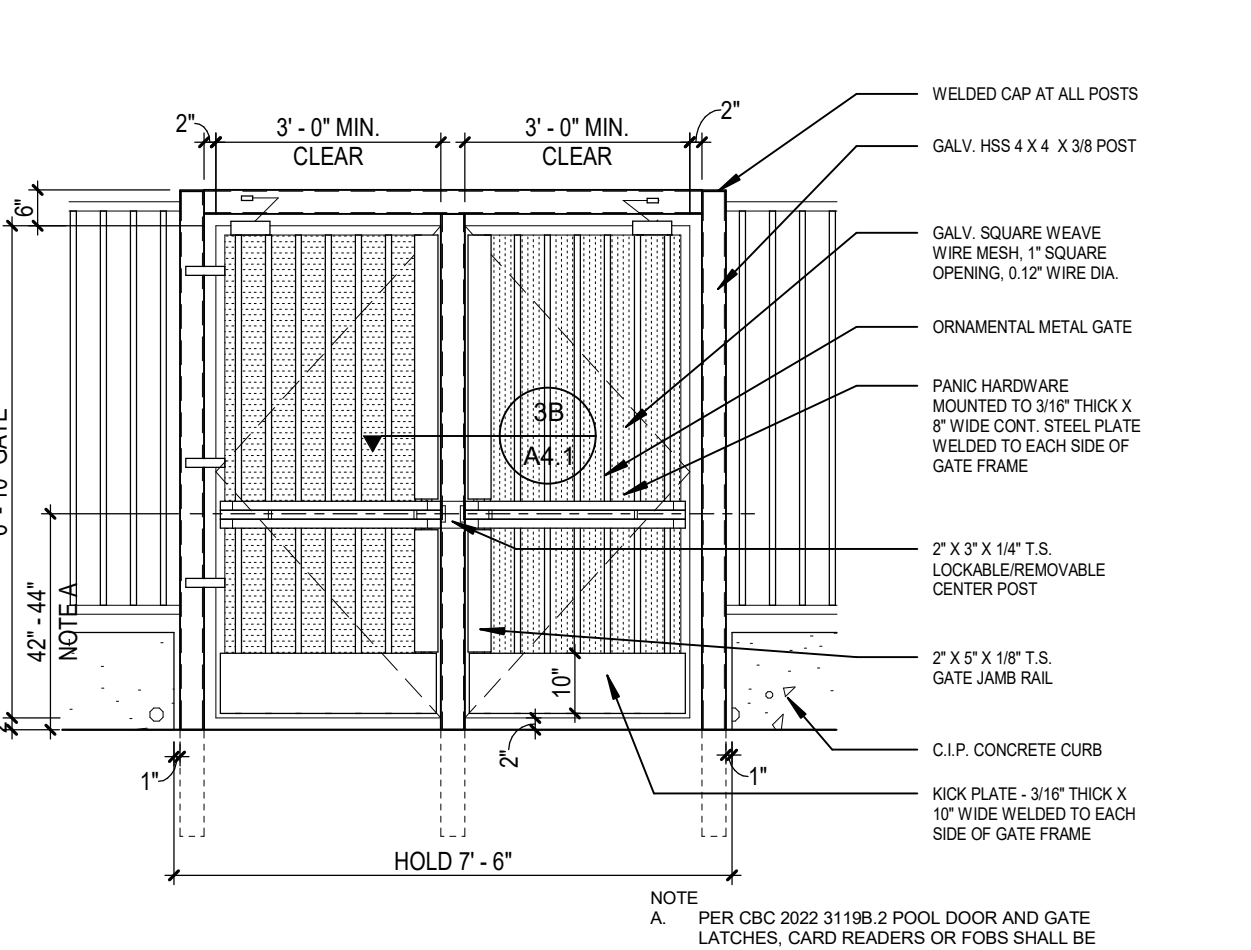
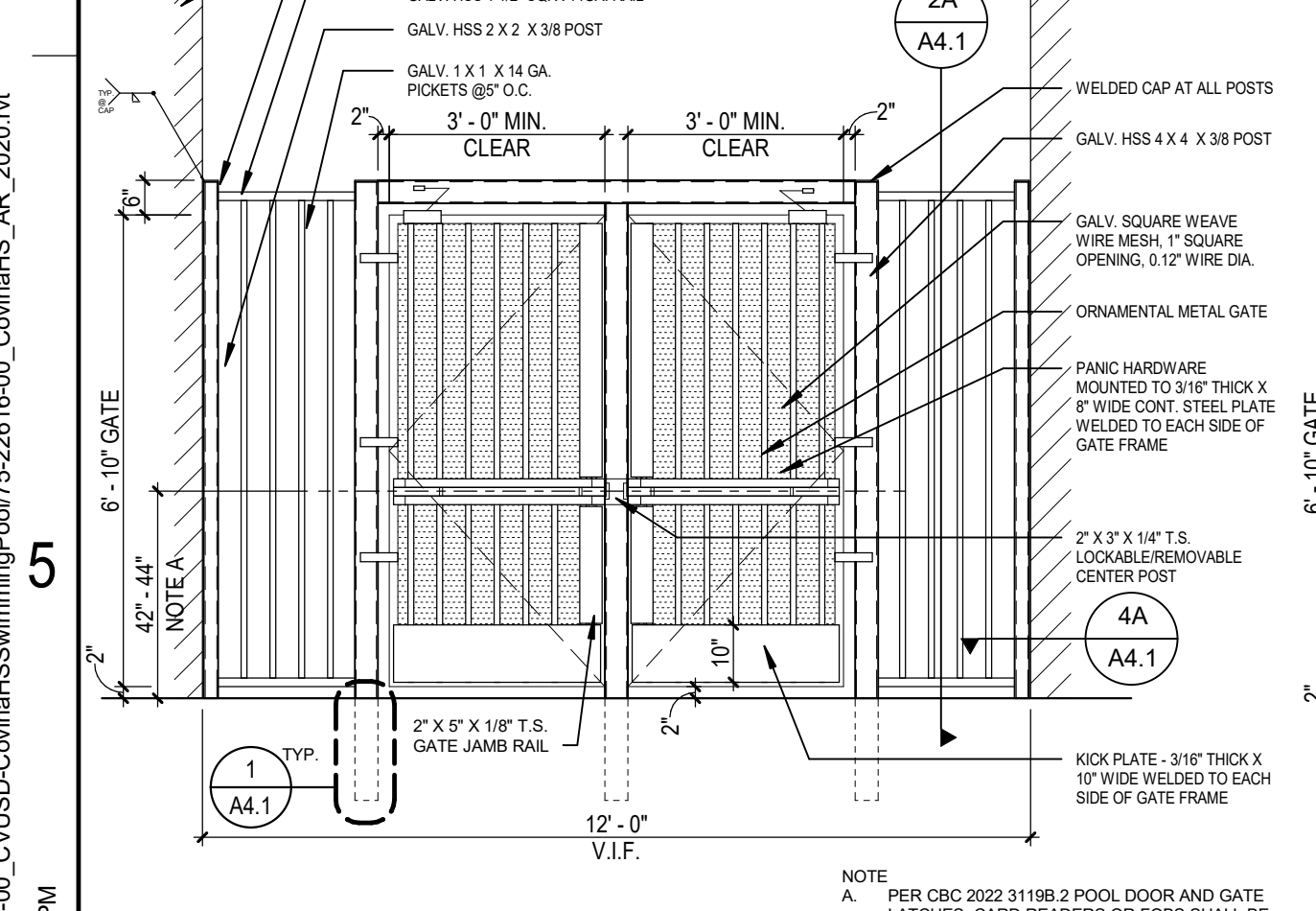
3A PLAN DTL @ ORNAMENTAL FENCE MEETS BLDG
SCALE: 1 1/2" = 1'-0"

3B PLAN DTL @ MAIN GATE ORNAMENTAL FENCE
SCALE: 1 1/2" = 1'-0"



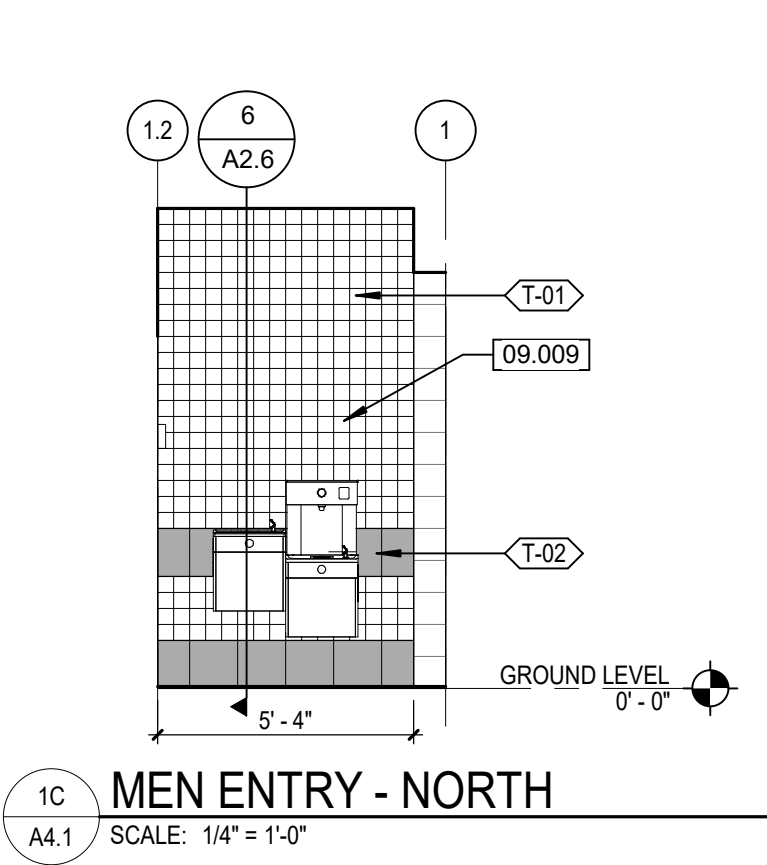
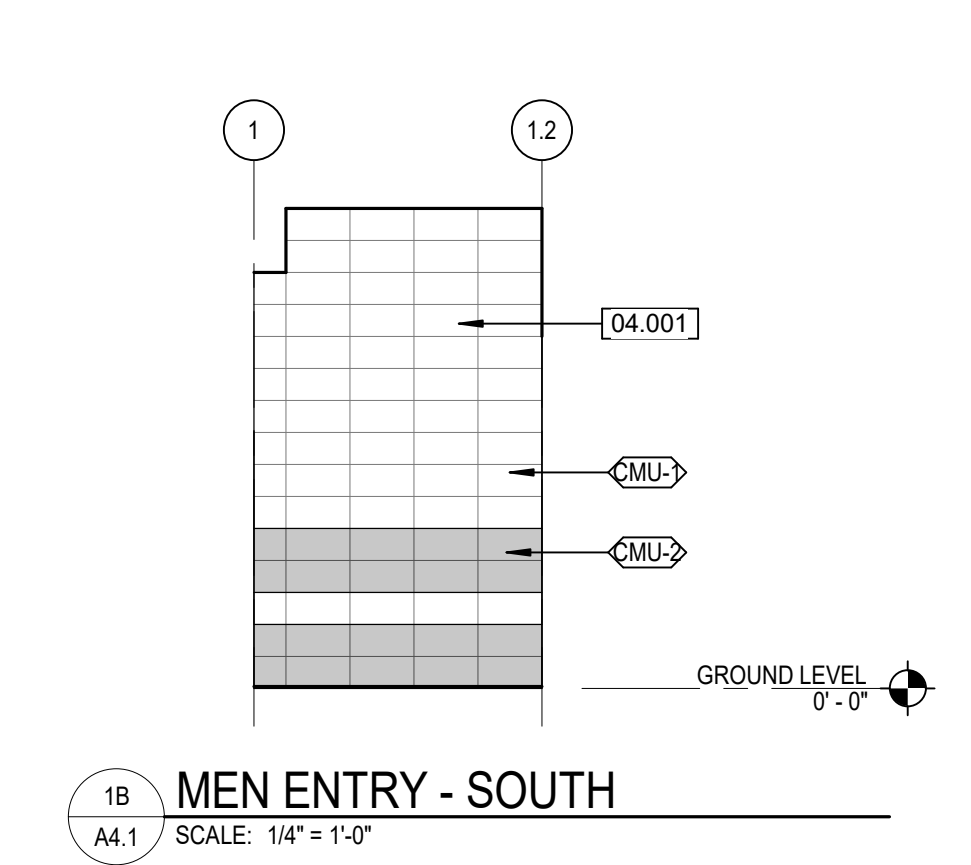
4A PLAN DTL @ MAIN GATE ORNAMENTAL FENCE G01
SCALE: 1 1/2" = 1'-0"

4B TYP ORNAMENTAL FENCE ELEVATION
SCALE: 3/8" = 1'-0"



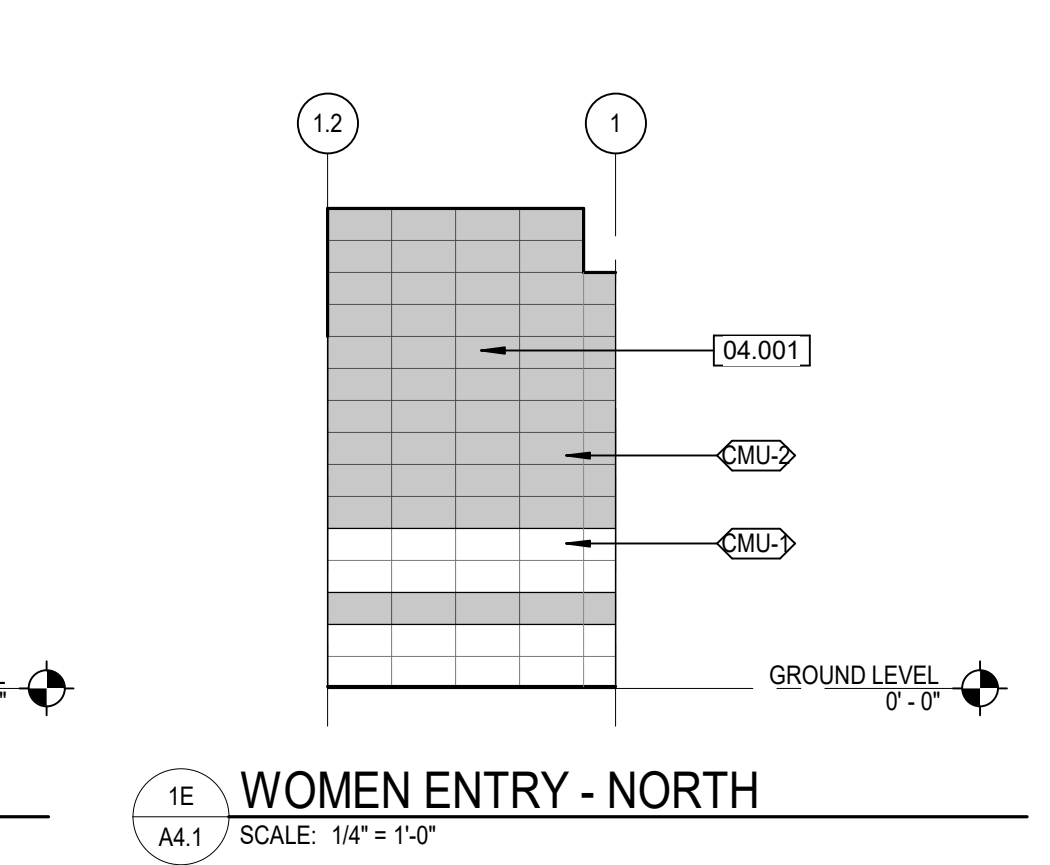
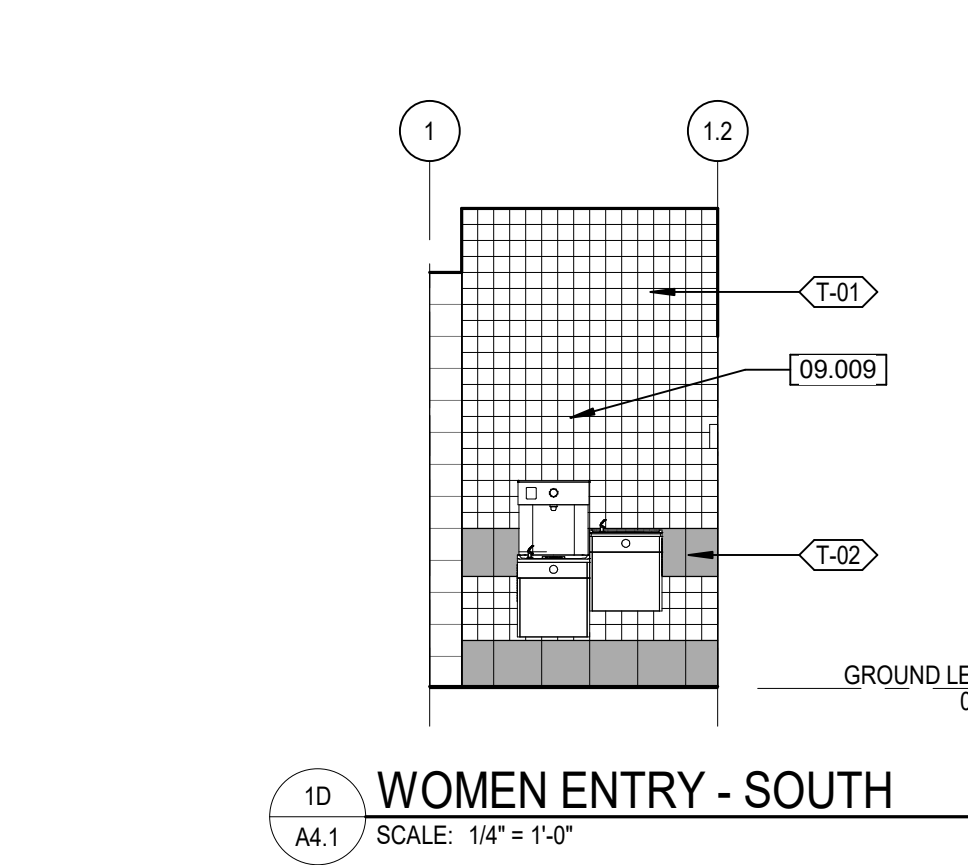
5A TYP ORNAMENTAL MAIN GATE G01
SCALE: 3/8" = 1'-0"

5B TYP ORNAMENTAL DOUBLE GATE G02/G03/G04
SCALE: 3/8" = 1'-0"



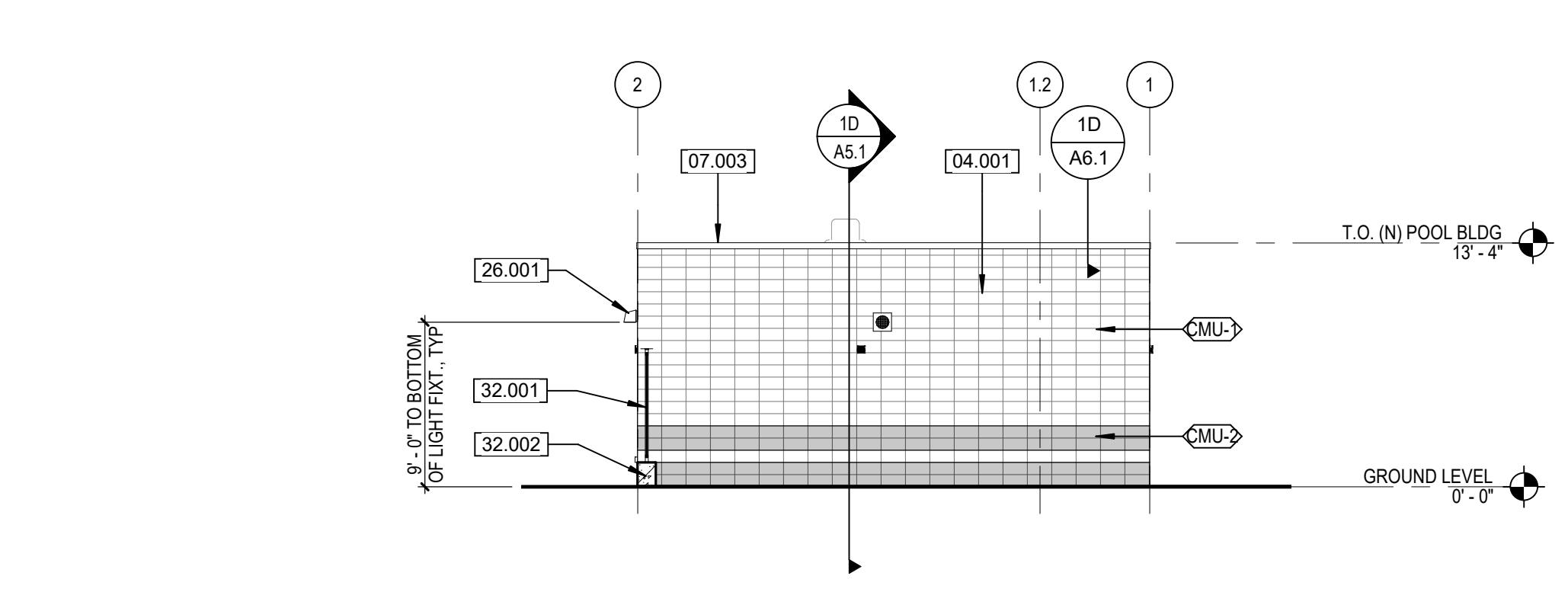
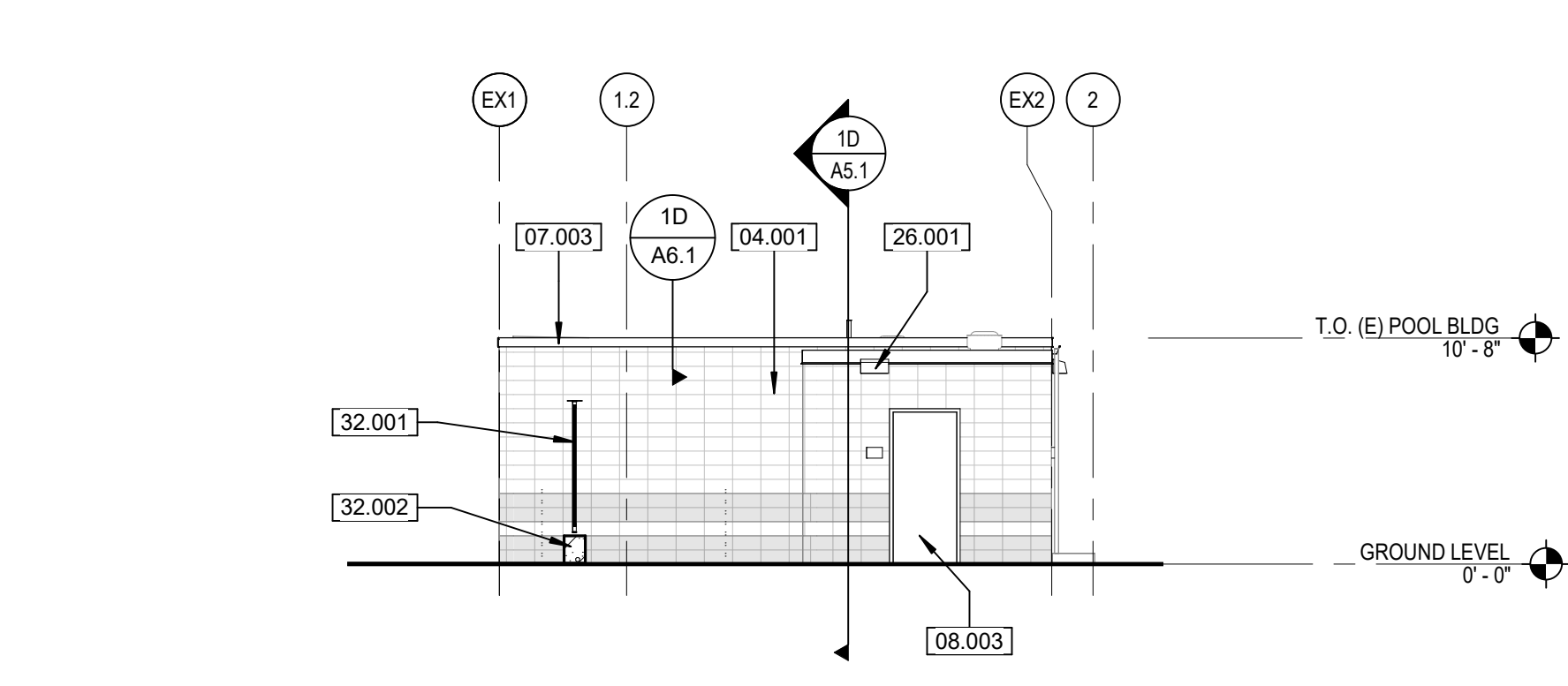
1B MEN ENTRY - SOUTH
SCALE: 1/4" = 1'-0"

1C MEN ENTRY - NORTH
SCALE: 1/4" = 1'-0"



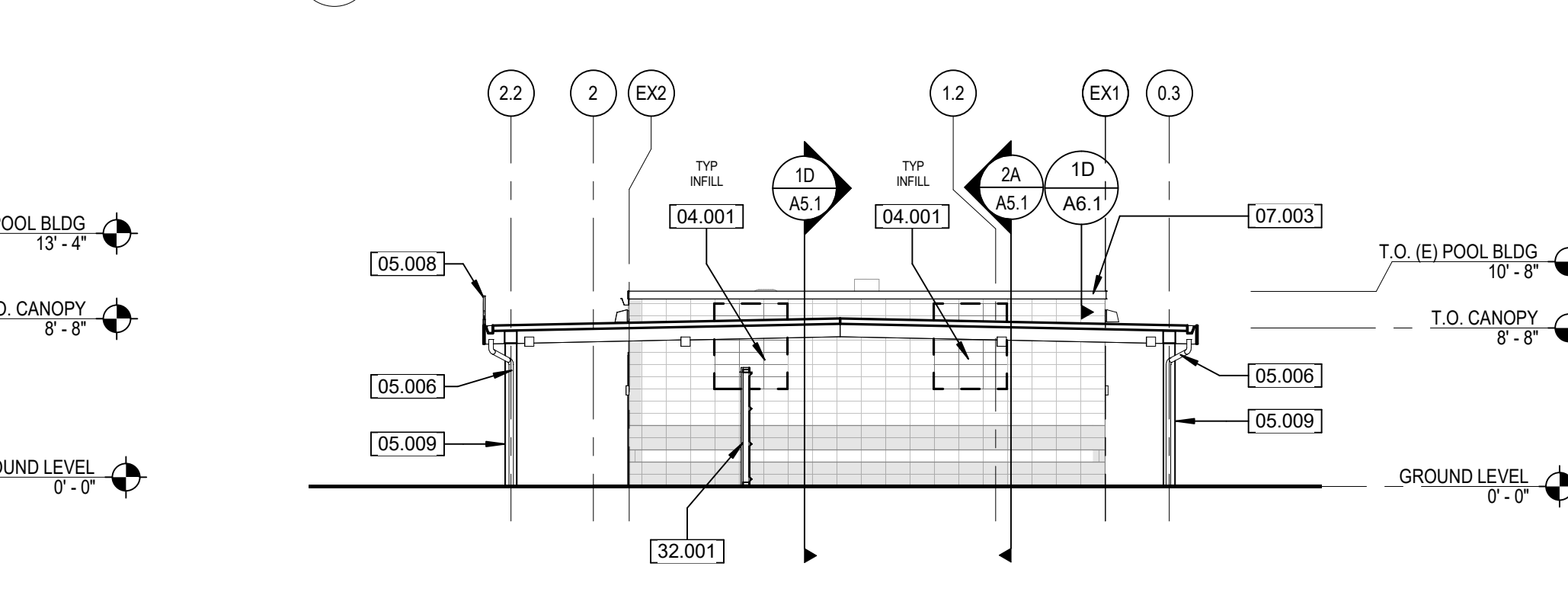
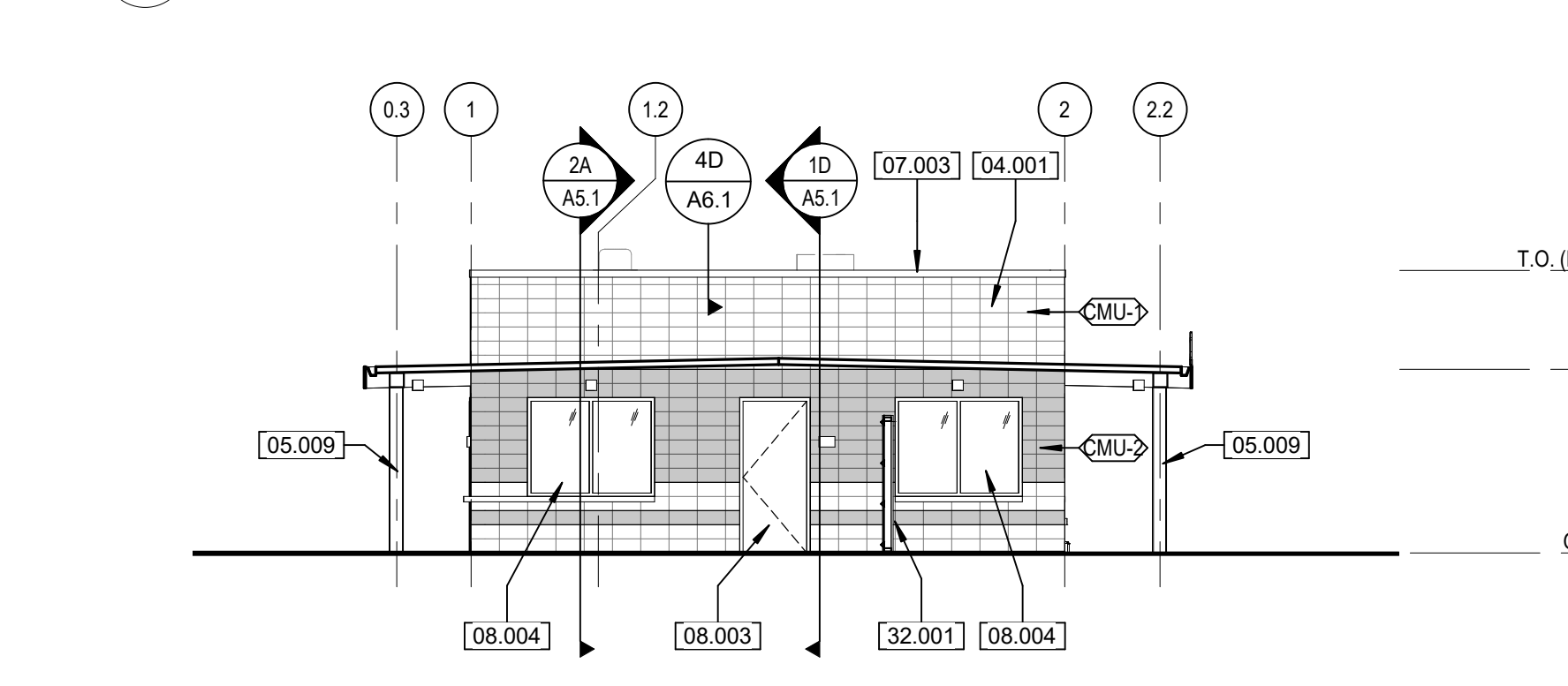
1D WOMEN ENTRY - SOUTH
SCALE: 1/4" = 1'-0"

1E WOMEN ENTRY - NORTH
SCALE: 1/4" = 1'-0"



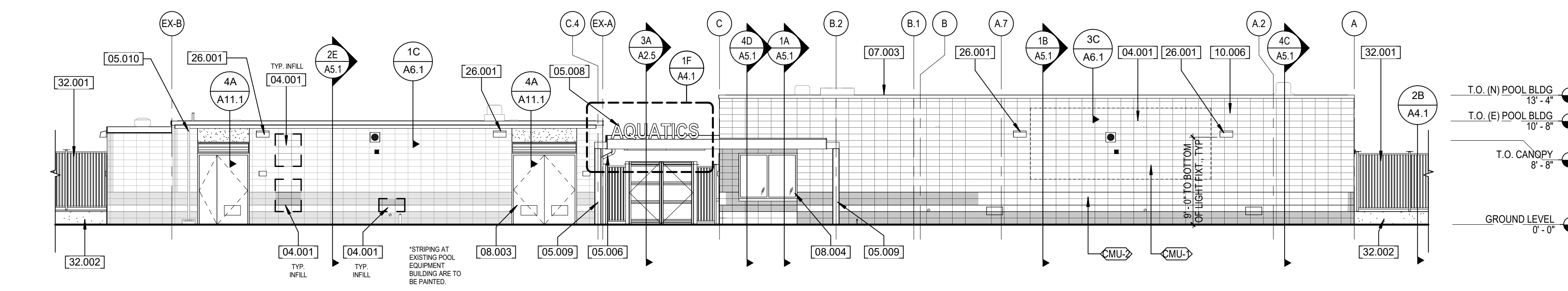
2C NORTHWEST - POOL EQUIPMENT
SCALE: 1/8" = 1'-0"

2E SOUTH EAST - NEW BUILDING
SCALE: 1/8" = 1'-0"

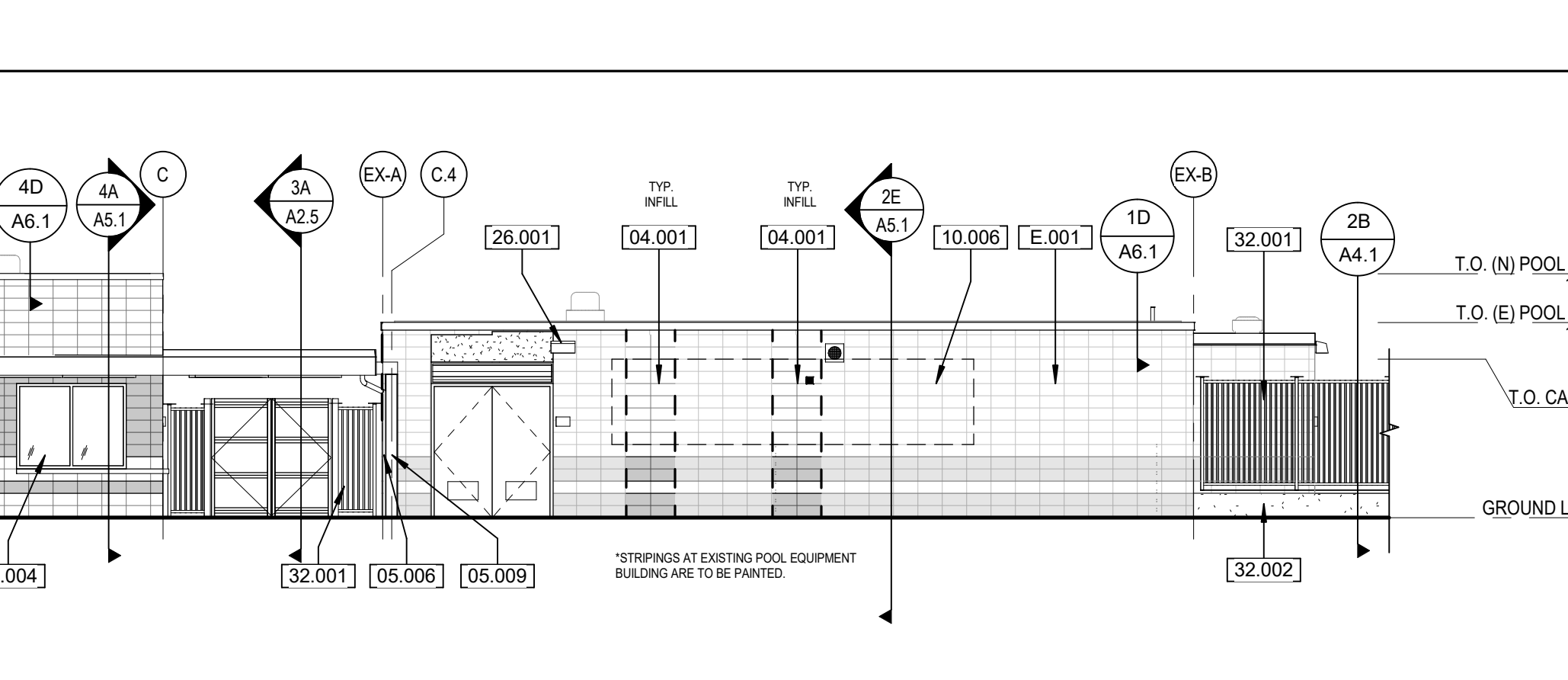


3C NORTHEAST - CORRIDOR
SCALE: 1/8" = 1'-0"

3E SOUTHEAST - CORRIDOR
SCALE: NO SCALE



4C NORTHEAST - BACK VIEW
SCALE: 1/8" = 1'-0"



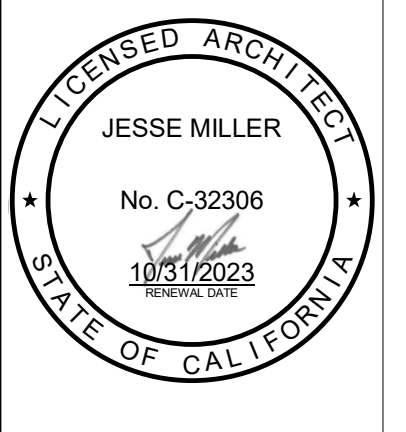
5C SOUTHWEST - POOL VIEW
SCALE: 1/8" = 1'-0"

KEYNOTES

- 04.001 INFILL DMU WALL - SEE SAA.0
- 05.008 DOWNPOUT: PREPARED COLOR TO MATCH ADJ. COLUMN
- 05.009 1/2" TALL CAST ALUMINUM LETTERS
- 06.009 EXPOSED STRUCTURAL STEEL FRAMING, FLUOROPOLYMER COAT KYNAR FINISH, COLOR: BR. SEE STRUCTURE. SEE 01.11 FOR ASER SPECIES
- 07.002 DRAINING DOWNPOUT TO REMAIN, VERIFY IN FIELD
- 08.004 CMU WALL SHEET METAL PANELS TOPPING CAP MATCH EXISTING - SPEC 01.09
- 08.003 HOLLOW METAL DOOR AND FRAME
- 08.004 EXTERIOR ALUMINUM WINDOW - SEE SCHEDULE
- 08.009 TILE FINISH SEE ELEVATIONS
- 10.006 PAINTED GRAPHCES
- 26.001 LIGHTING FEATURE - SEE ELECTRICAL DRAWINGS
- 32.001 IF HIGH ORNAMENTAL FINISH, SEE DETAILS ON SHEET A4.1
- 32.002 1" HIGH CONCRETE CURB - SEE DETAILS ON SHEET A4.1
- 8.001 (E) CONCRETE WALLS TO REMAIN PATCH AND REPAIR AS REQUIRED AND PREP FOR NEW WORK

EXTERIOR FINISH LEGEND

TAG:	CMU-1	CONCRETE MASONRY BLOCK
MTR:	ANGELUS BLOCK CO., INC.	
MODEL/COLOR:	BLUVER/PRECISION	
SIZE:	8x16x12	
TAG:	CMU-2	CONCRETE MASONRY BLOCK
MTR:	ANGELUS BLOCK CO., INC.	
MODEL/COLOR:	GRAY/BLT FACE	
SIZE:	8x16x12	
TAG:	T-01	TERAZO TILE
MTR:	TRASCOR BLDG.	
MODEL/COLOR:	25% - DYE BUDE GRAY 65% - DYE BUDE WHITE 15% - DYE - CHALKBOARD	
SIZE:	4x4"	
TAG:	T-02	CERAMIC TILE
MTR:	DAI TEE	
MODEL/COLOR:	GRAY/BLACK	
SIZE:	12x12"	
MATERIAL:	EXISTING CMU	
MTR:	V.I.F.	
MODEL/COLOR:	PAINT TO MATCH CMU-2	
SIZE:	NA	
MATERIAL:	EXISTING DMU	
MTR:	V.I.F.	
MODEL/COLOR:	PAINT TO MATCH CMU-1	
SIZE:	NA	
TAG:	PL	PORTLAND CEMENT PLASTER
MTR:	SPEC	
MODEL/COLOR:	COLOR TO MATCH DOORFRAME	
SIZE:	SEE ELEVATIONS	



COVINA VALLEY HS POOL REPLACEMENT
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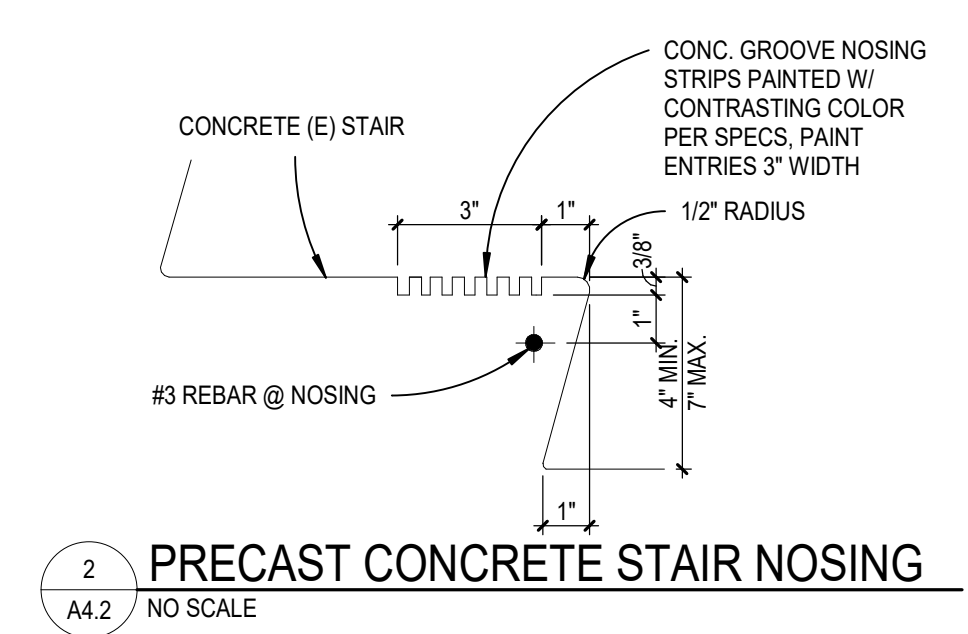
75-22616-00
DSA # 03-122700
DSA FILE # 19-48

EXTERIOR ELEVATIONS AND SITE DETAILS

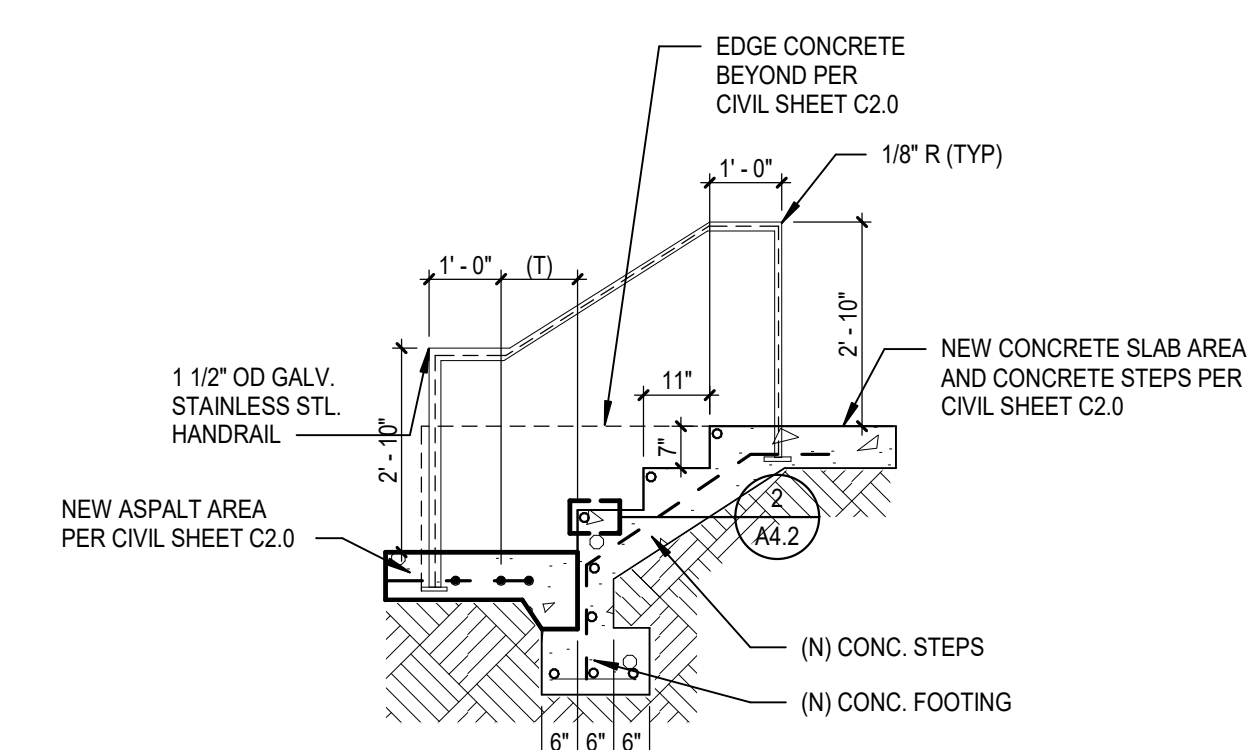
A4.1

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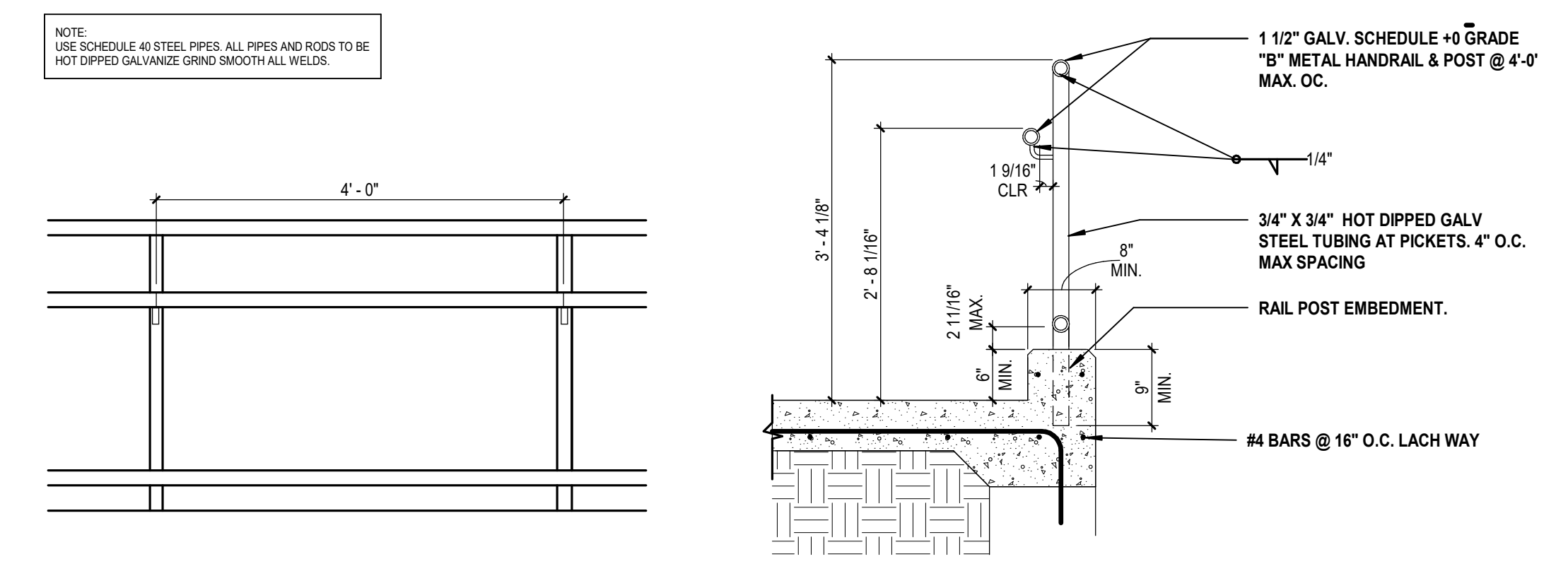
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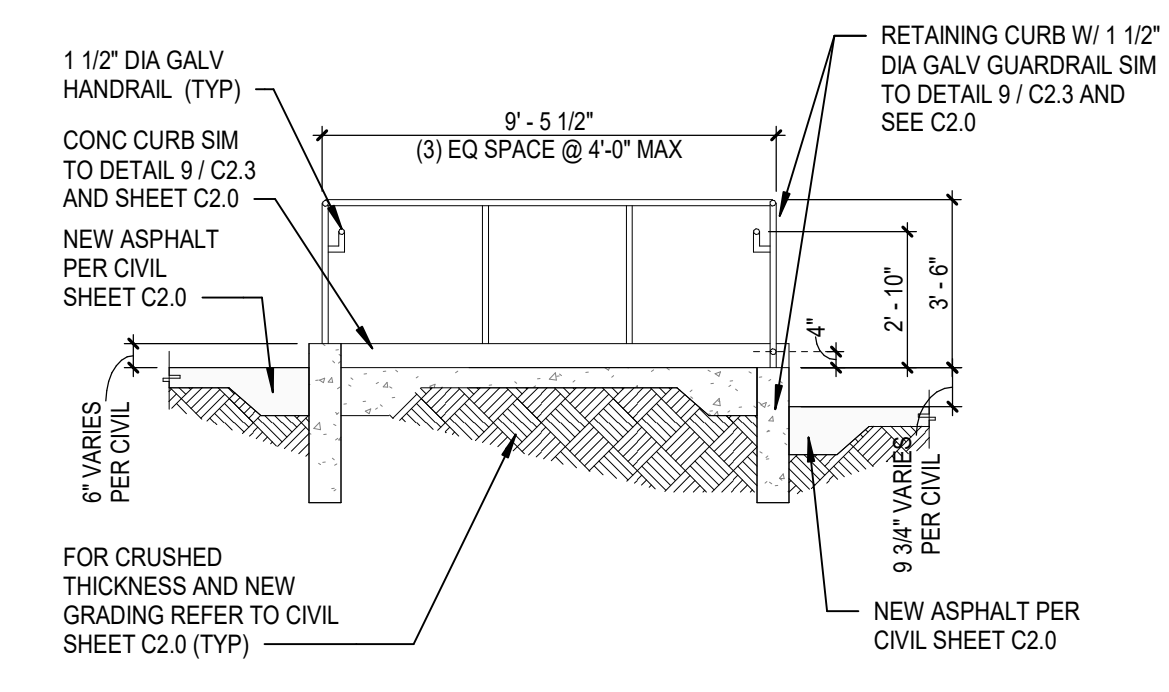
2 PRECAST CONCRETE STAIR NOSING
A4.2 / NO SCALE



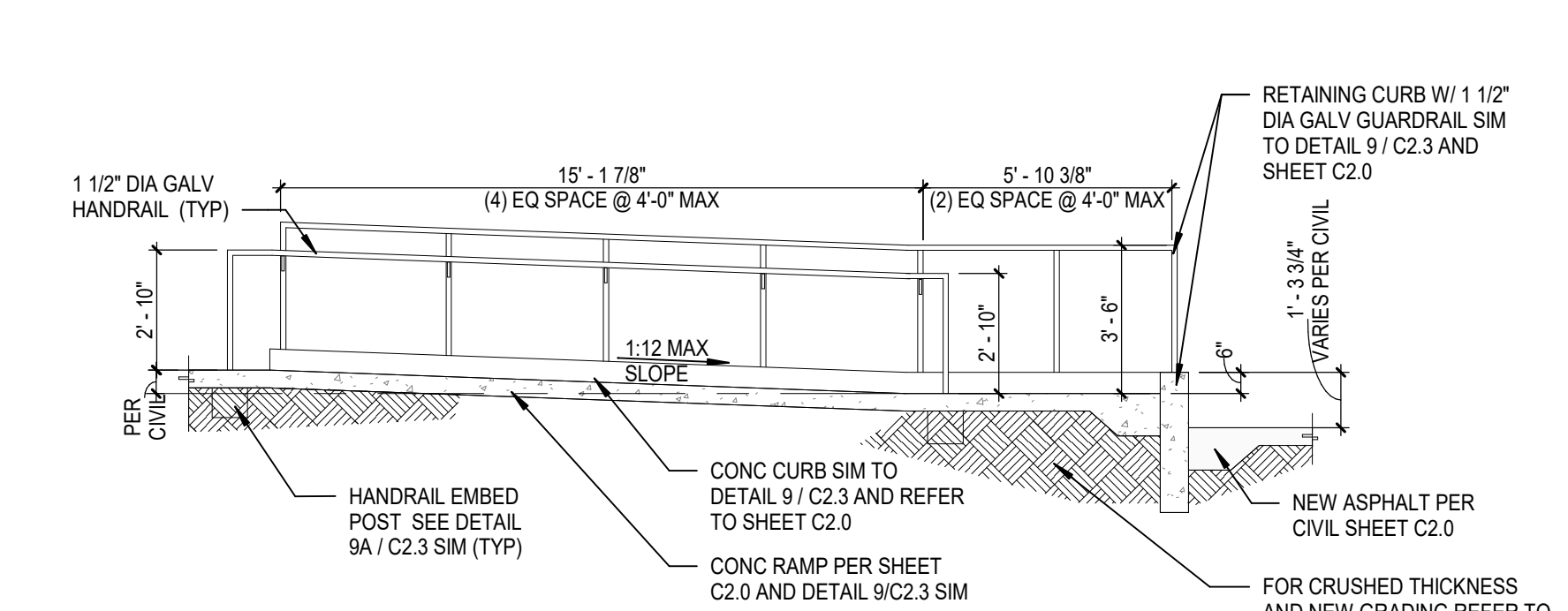
3 (N) CONCRETE STAIR
A4.2 / NO SCALE



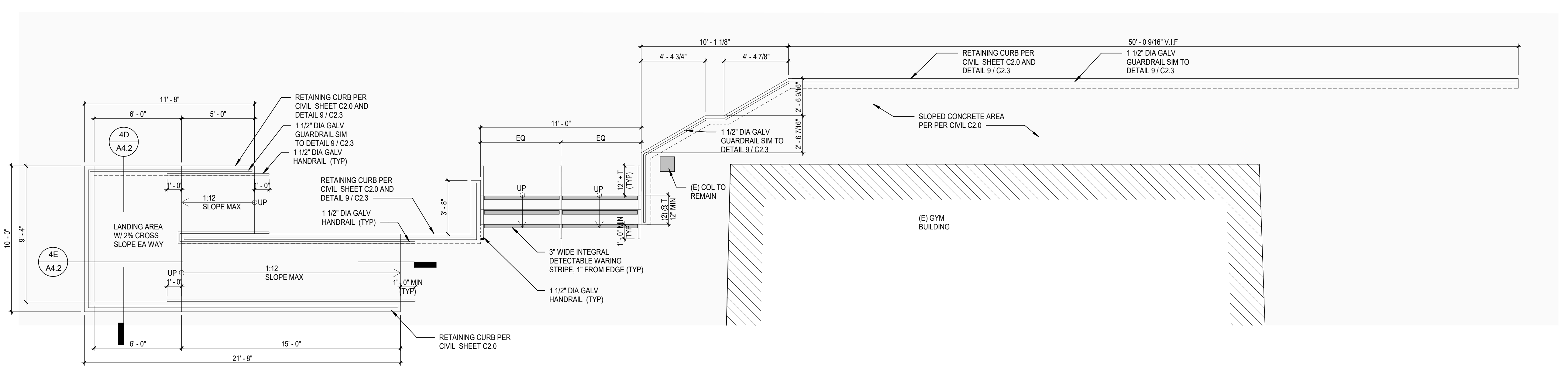
4 TYP. RAMP GUARDRAIL AND HANDRAIL ON CURB
SCALE: 3/4\"/>



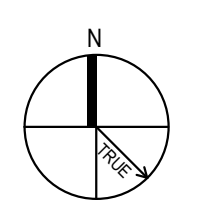
4D RAMP SECTION B
A4.2 / SCALE: 1/4\"/>

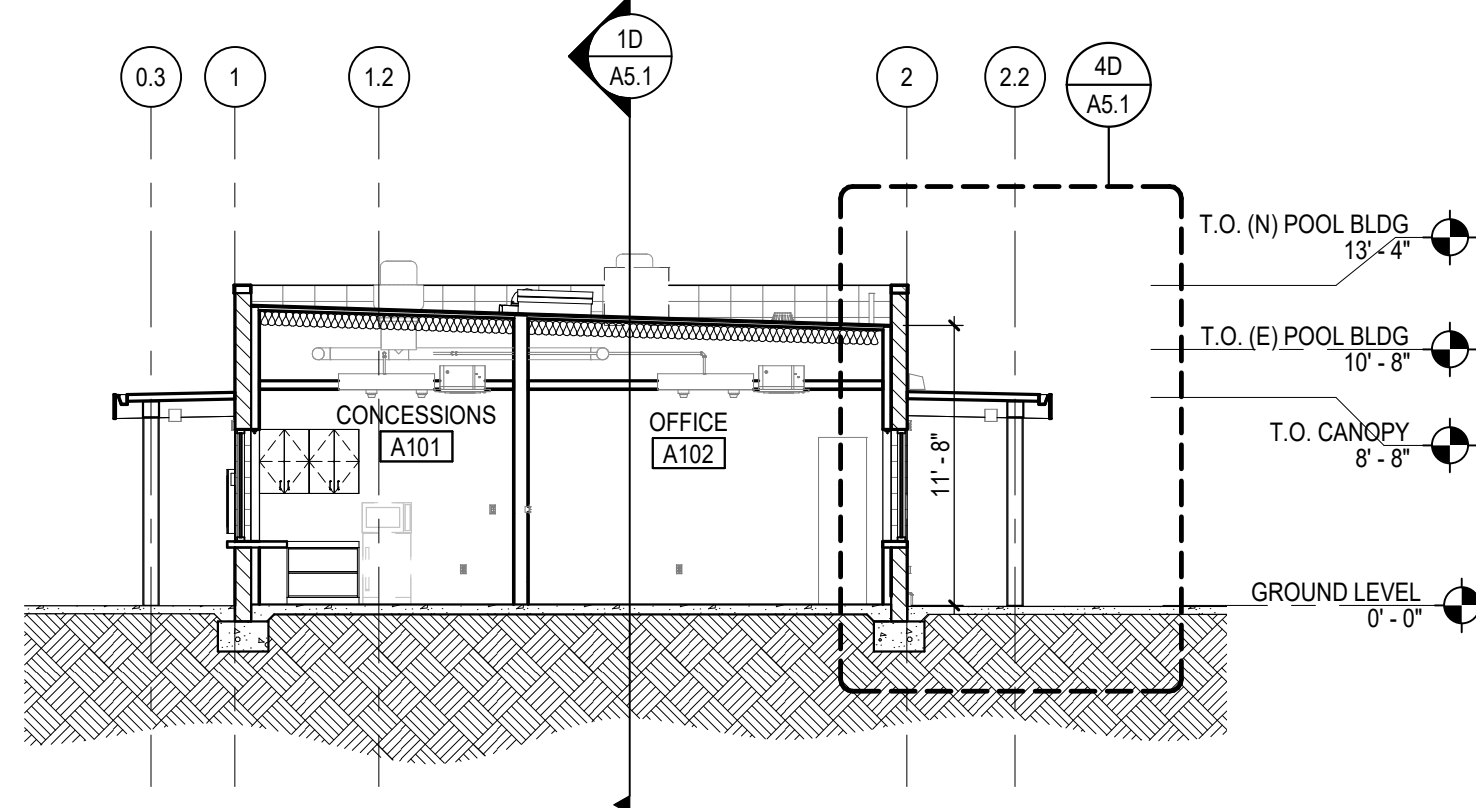


4E RAMP SECTION A
A4.2 / SCALE: 1/4\"/>

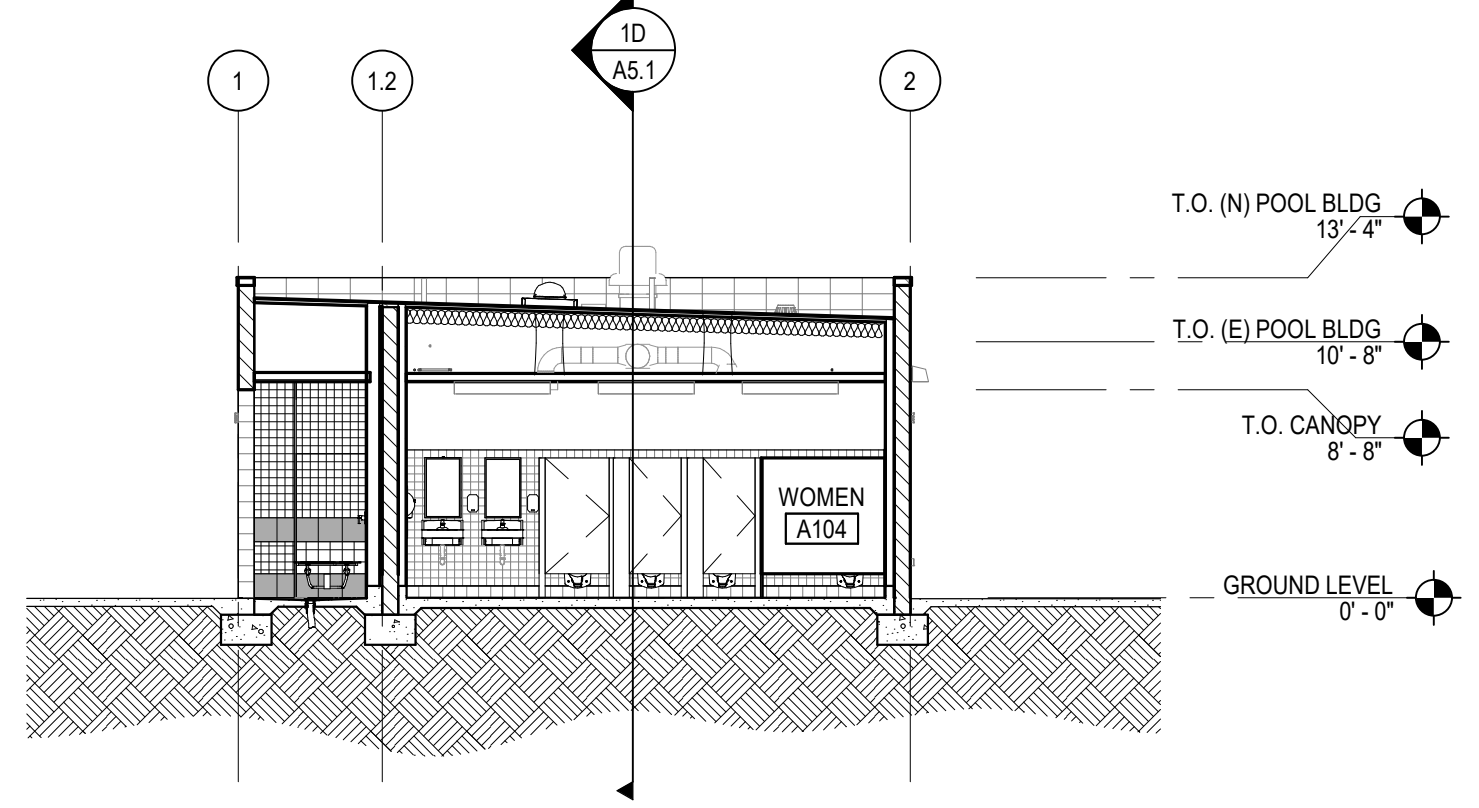


5B ENLARGED PARTIAL SITE PLAN
A4.2 / SCALE: 1/4\"/>

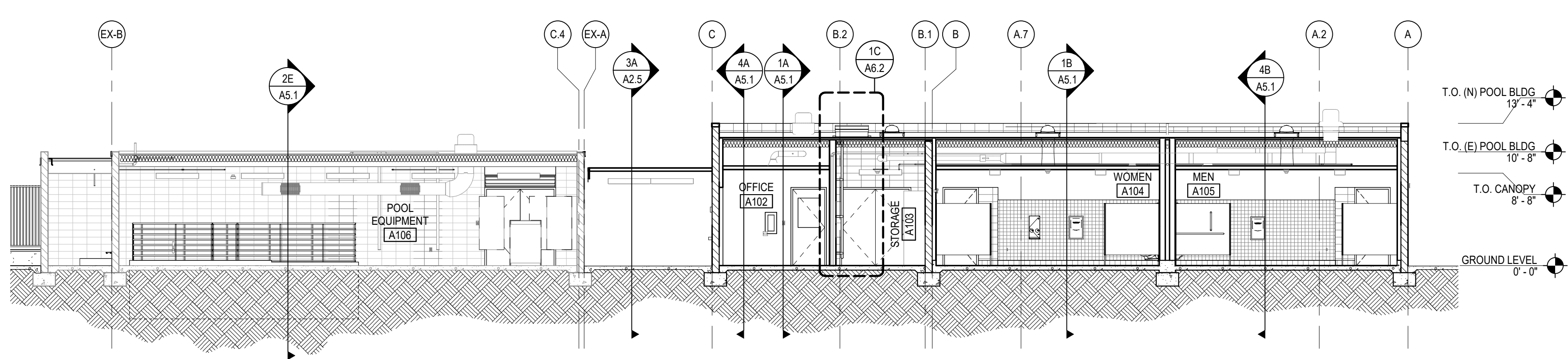




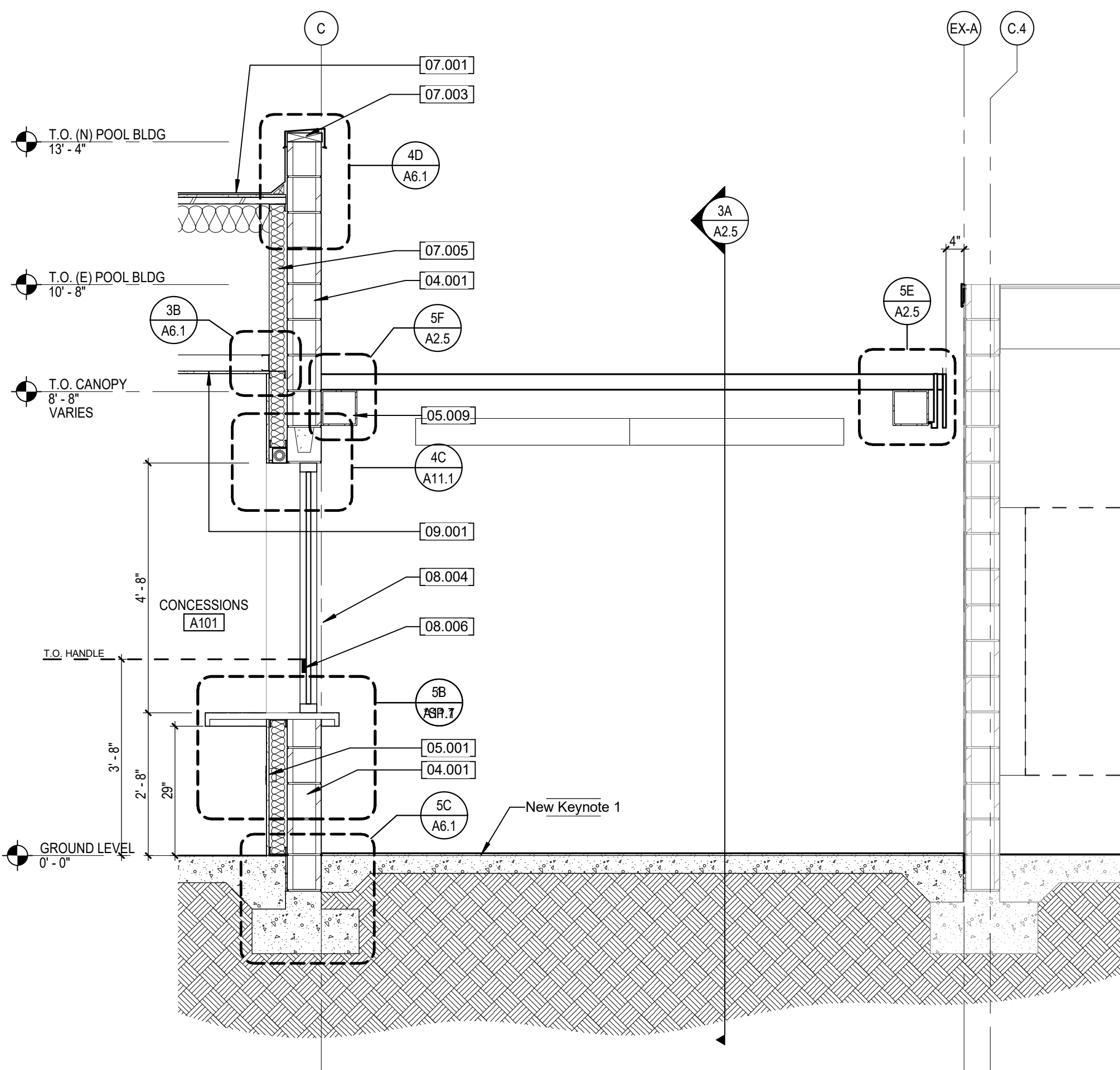
1A BUILDING SECTION - OFFICE/CONCESSION
AS.1 SCALE: 1/8" = 1'-0"



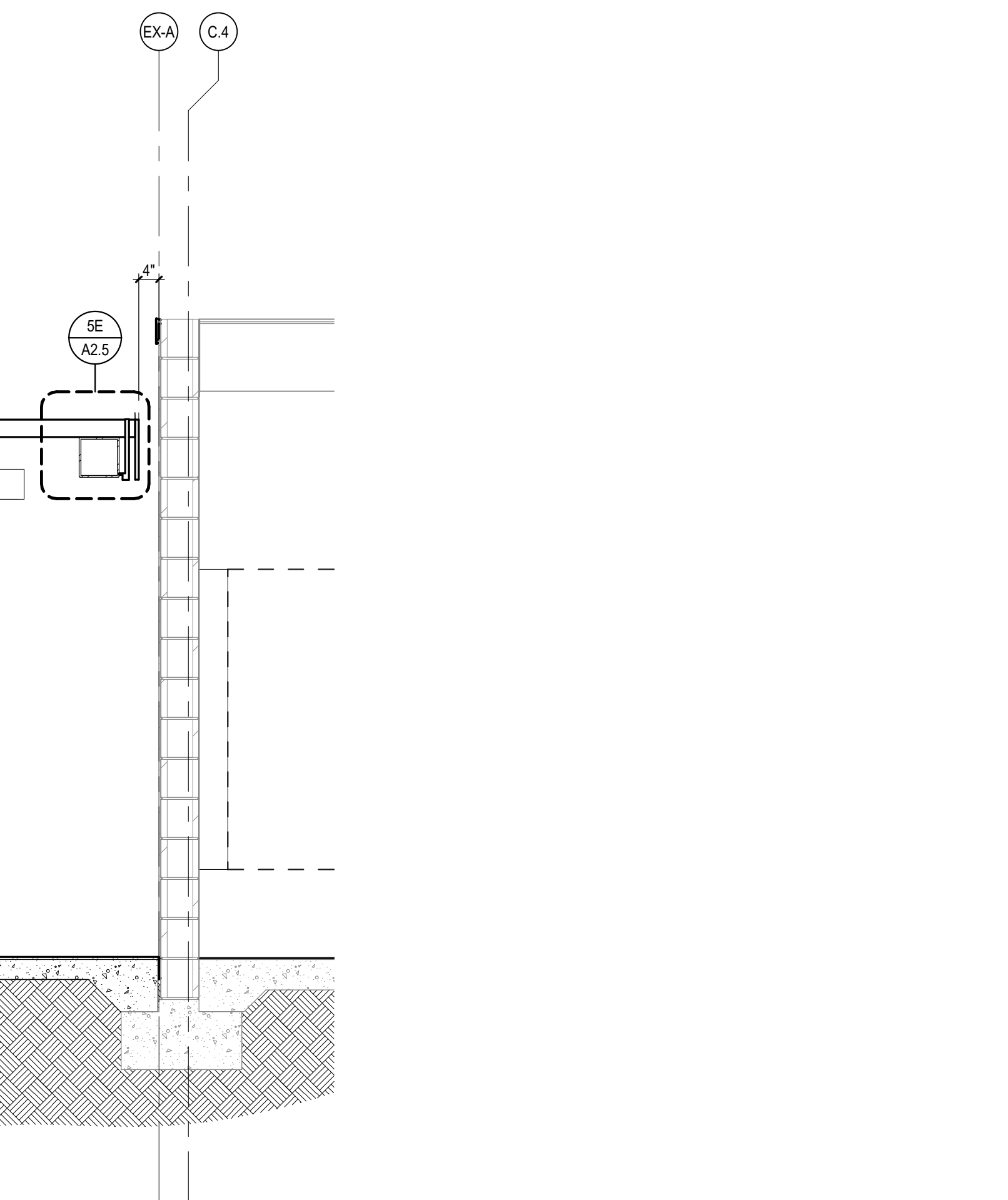
1B BUILDING SECTION - REMODEL
AS.1 SCALE: 1/8" = 1'-0"



1D LONG BUILDING SECTION
AS.1 SCALE: 1/8" = 1'-0"



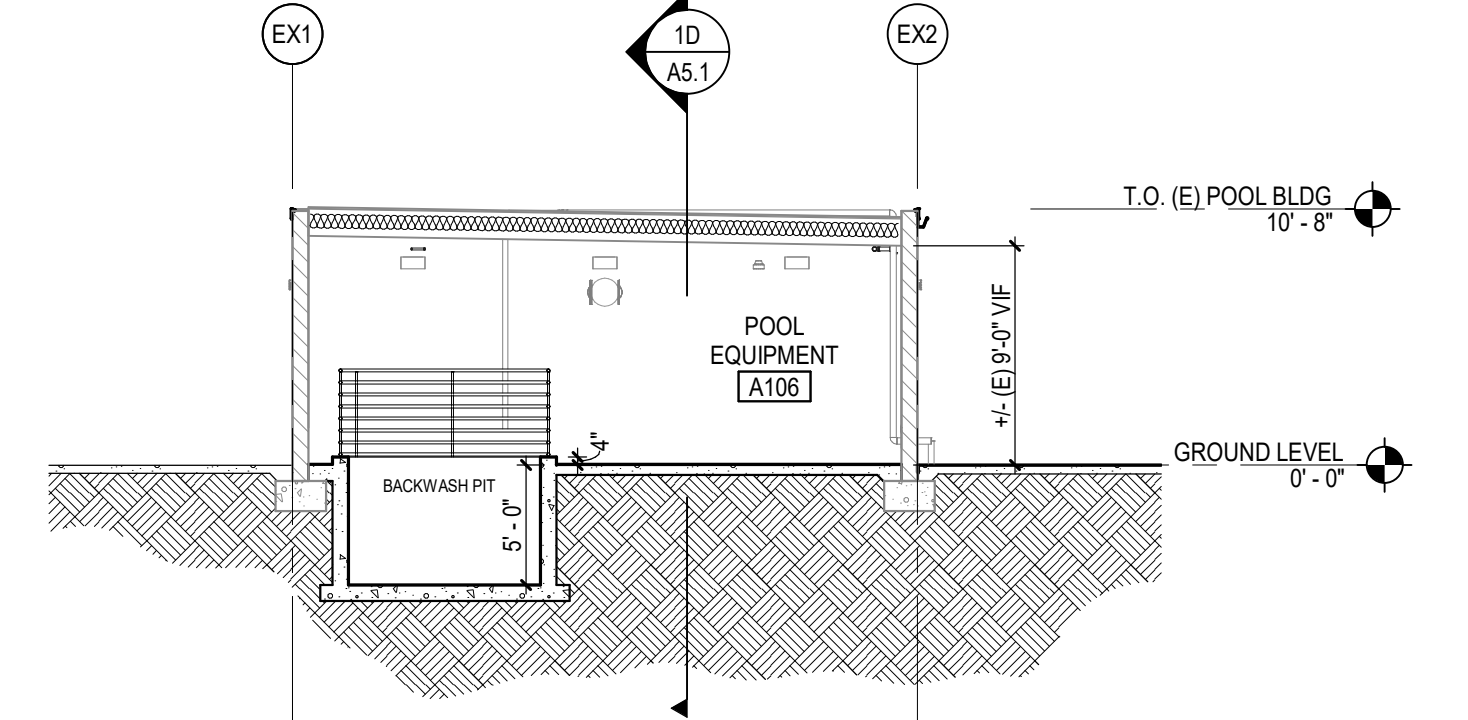
2A WALL SECTION
AS.1 SCALE: 1/2" = 1'-0"



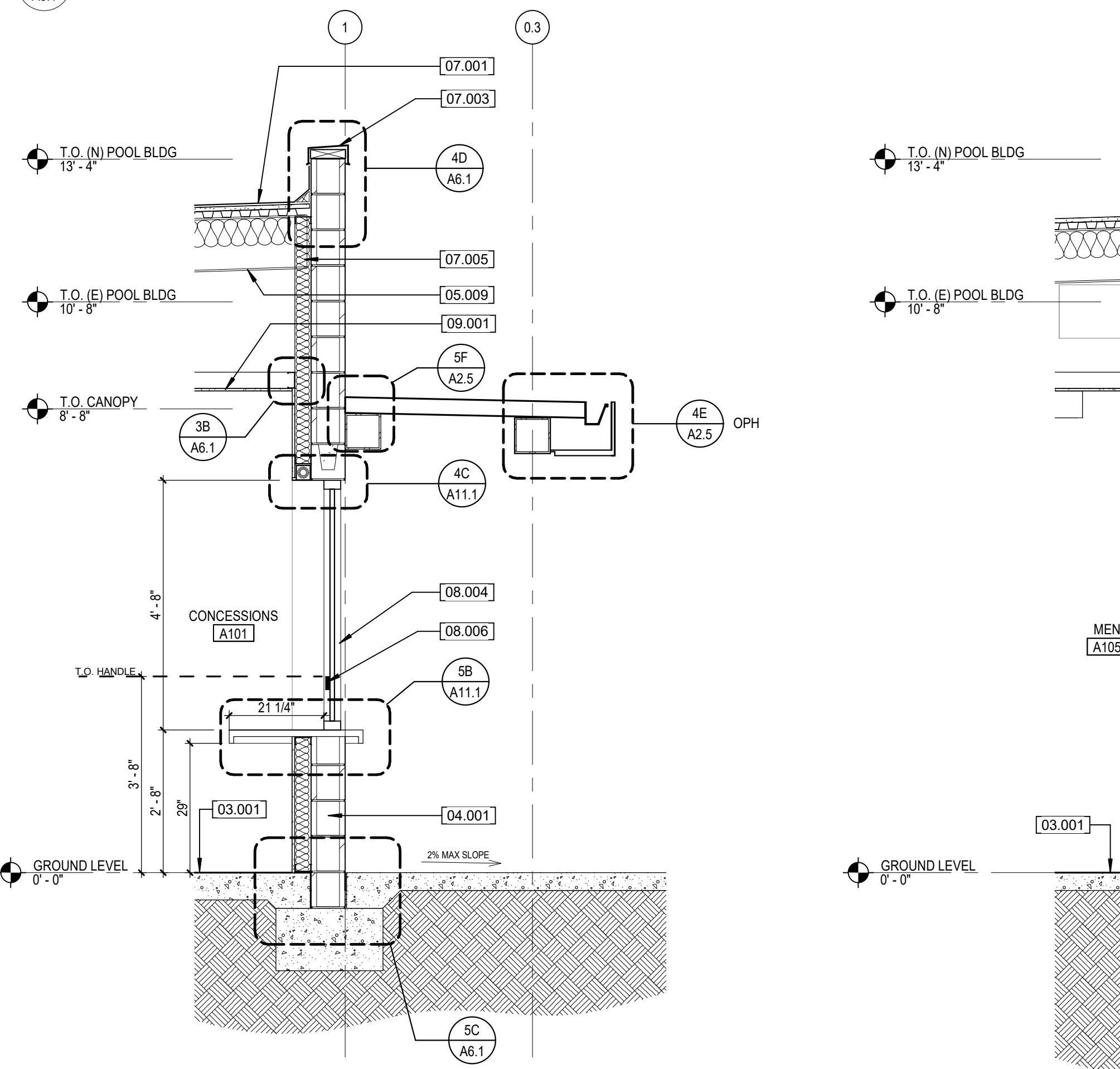
4B WALL SECTION
AS.1 SCALE: 1/2" = 1'-0"



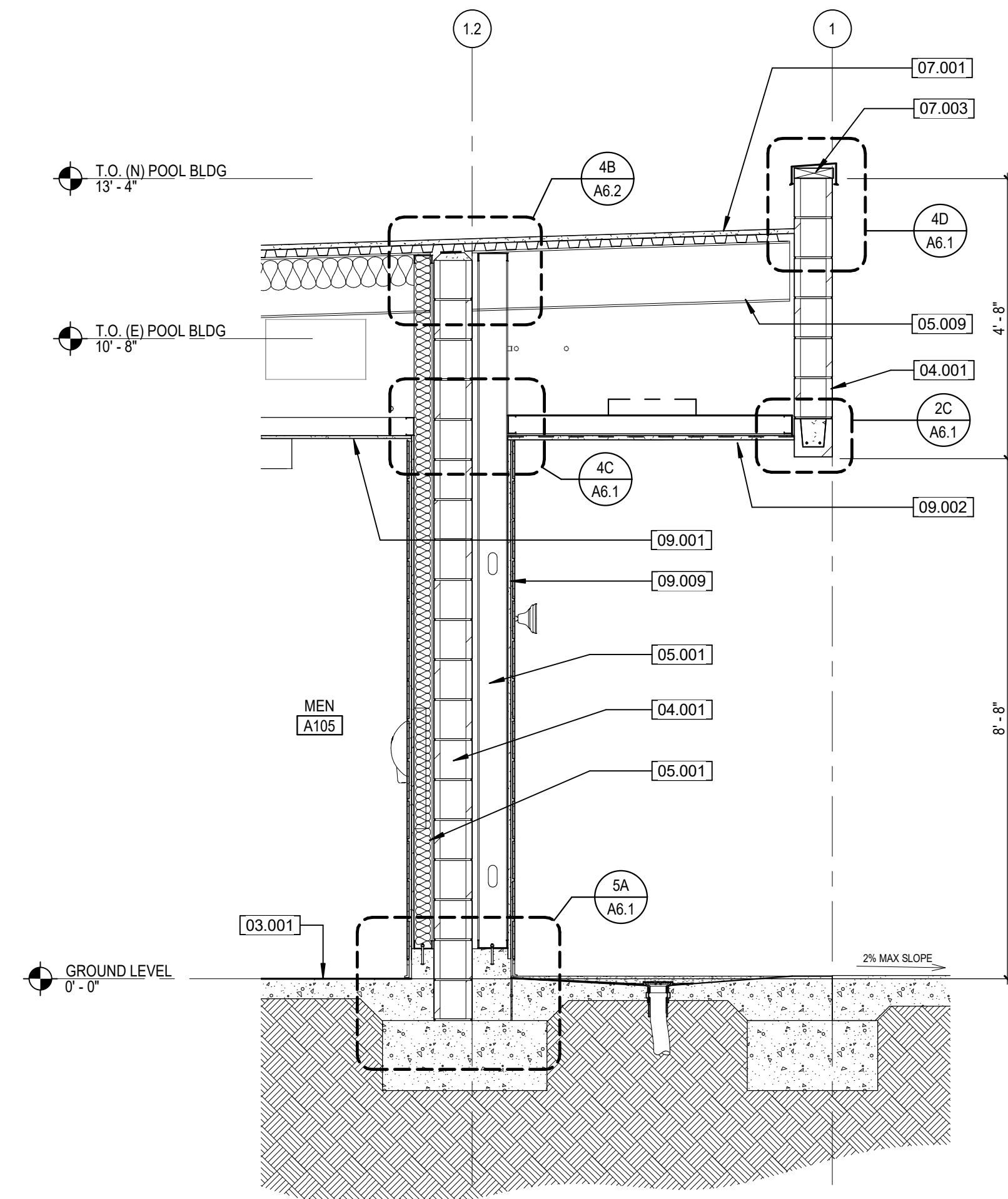
4C WALL SECTION
AS.1 SCALE: 1/2" = 1'-0"



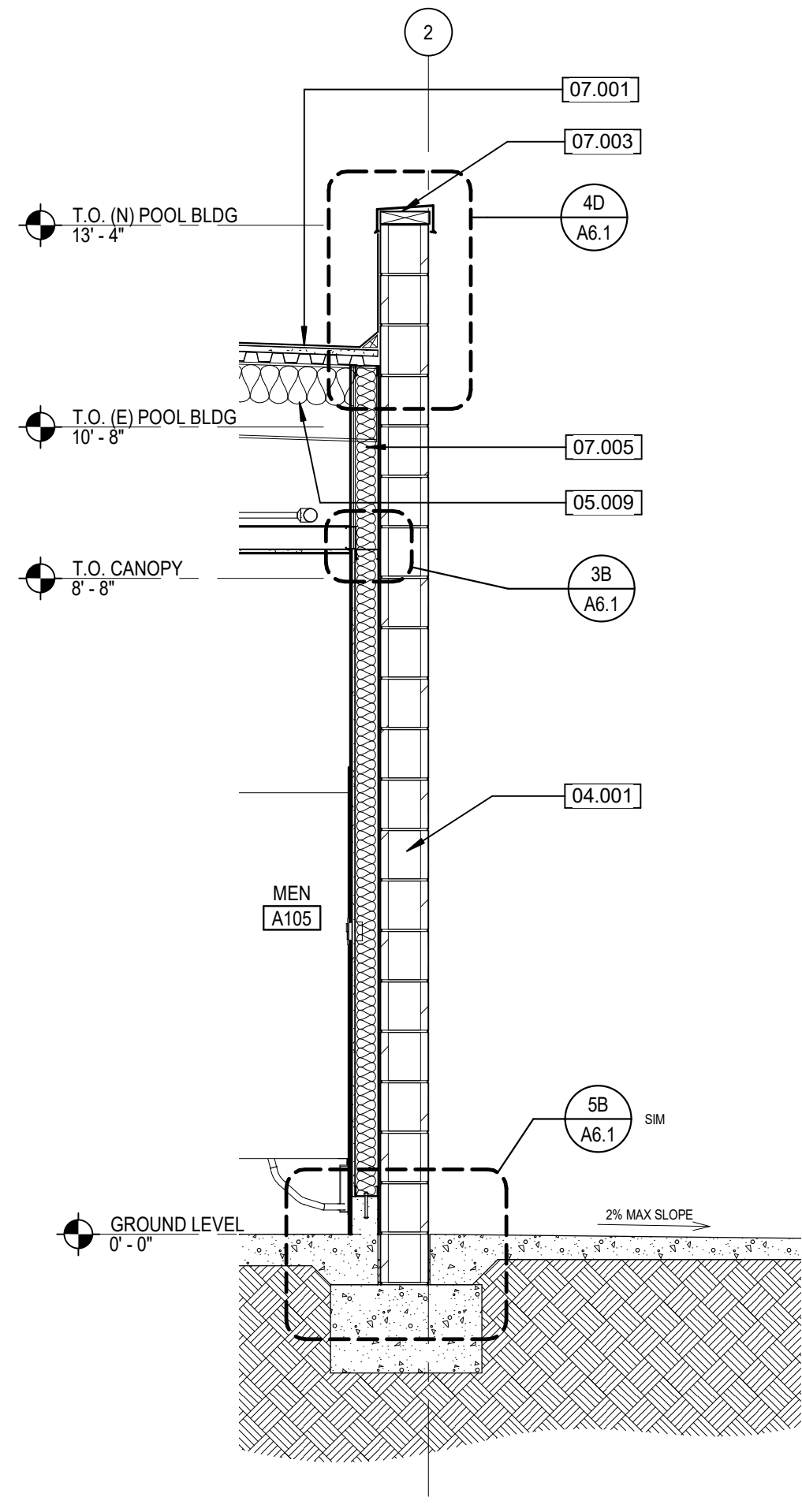
2E BUILDING SECTION - POOL EQUIPMENT BUILDING
AS.1 SCALE: 1/8" = 1'-0"



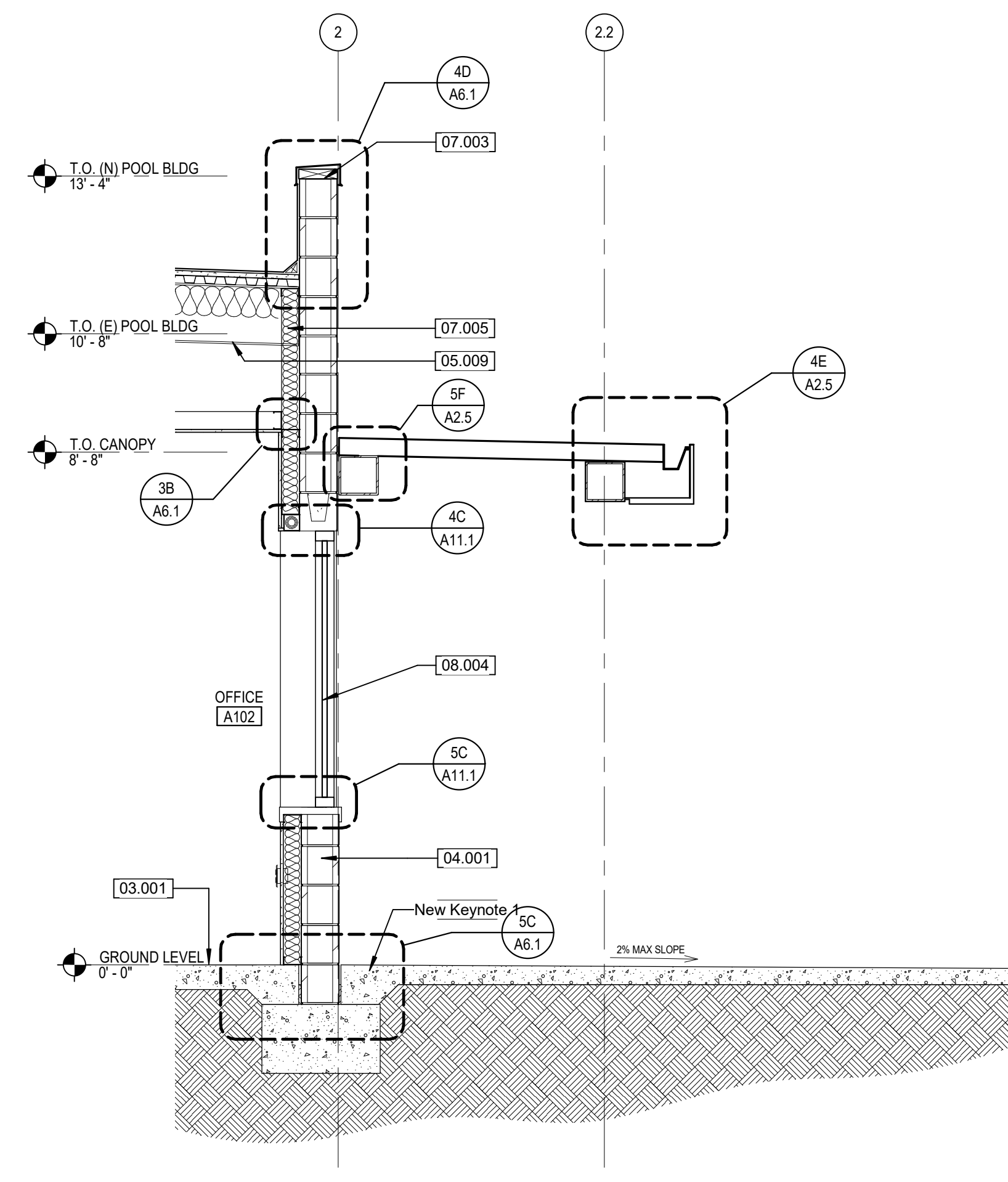
4A WALL SECTION
AS.1 SCALE: 1/2" = 1'-0"



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



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



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

KEYNOTES

- 03.001 CONCRETE SLAB W/ EPOXY FINISH - SEE STRUCT & SPEC
- 04.001 METAL ON WALL - SEE SPEC
- 05.001 METAL STUD PARTITION - SEE SPEC
- 06.001 CORRUGATED STRUCTURAL STEEL FRAMING, FLUOROPOLYMER 3-COAT POWDER FINISH, COLOR TBD. SEE STRUCTURE. SEE 05 TO 13 FOR AESTH SPEC
- 07.001 BUILT UP ROOFING OR SPF SUBSTRATE BOARD ON METAL DECK
- 07.002 2X4 WALL SHEET METAL FRAMING CORING CAP MATCH EXISTING - SPEC 07 TO 08
- 07.005 THERMAL BATTING INSULATION - R-15 - SPEC 07 TO 08
- 08.004 EXTERIOR ALUMINUM WINDOW - SEE SCHEDULE
- 09.001 WINDOW HANDLE PER DEVICE
- 09.002 GYP. BD. CEILING - SEE DETAILS ON SHEET AS.1 & SPEC
- 09.003 EXTERIOR GROUT FILLER CEILING - SEE DETAILS ON SHEET AS.1 & SPEC
- 09.005 TILE FINISH - SEE ELEVATIONS



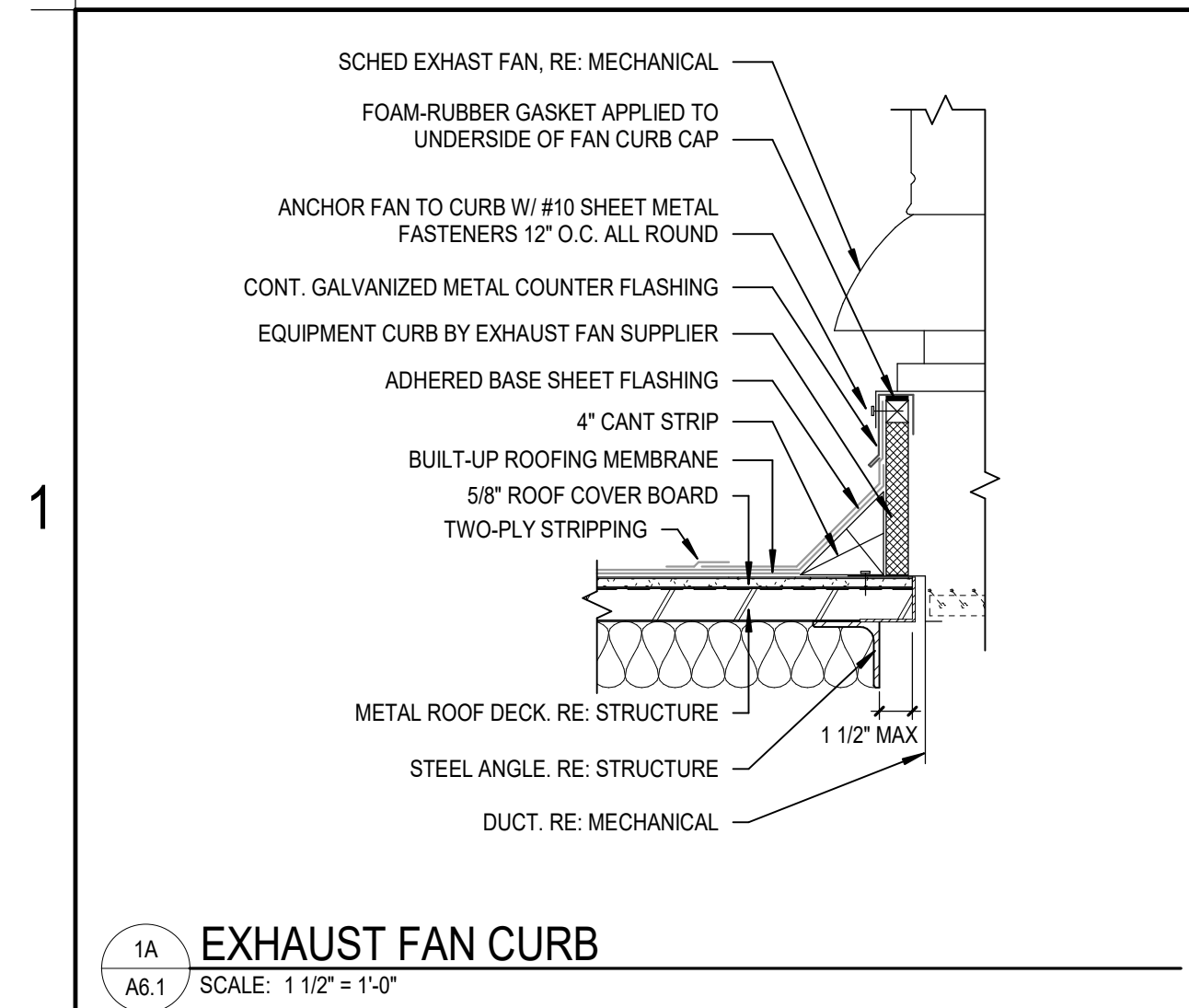
COVINA VALLEY HS POOL REPLACEMENT
COVINA VALLEY UNIFIED SCHOOL DISTRICT
483 SOUTH HOLLENBECK AVENUE COVINA, CA 91723

DSA SUBMITTAL SET_V2
04/28/2023 REVISIONS

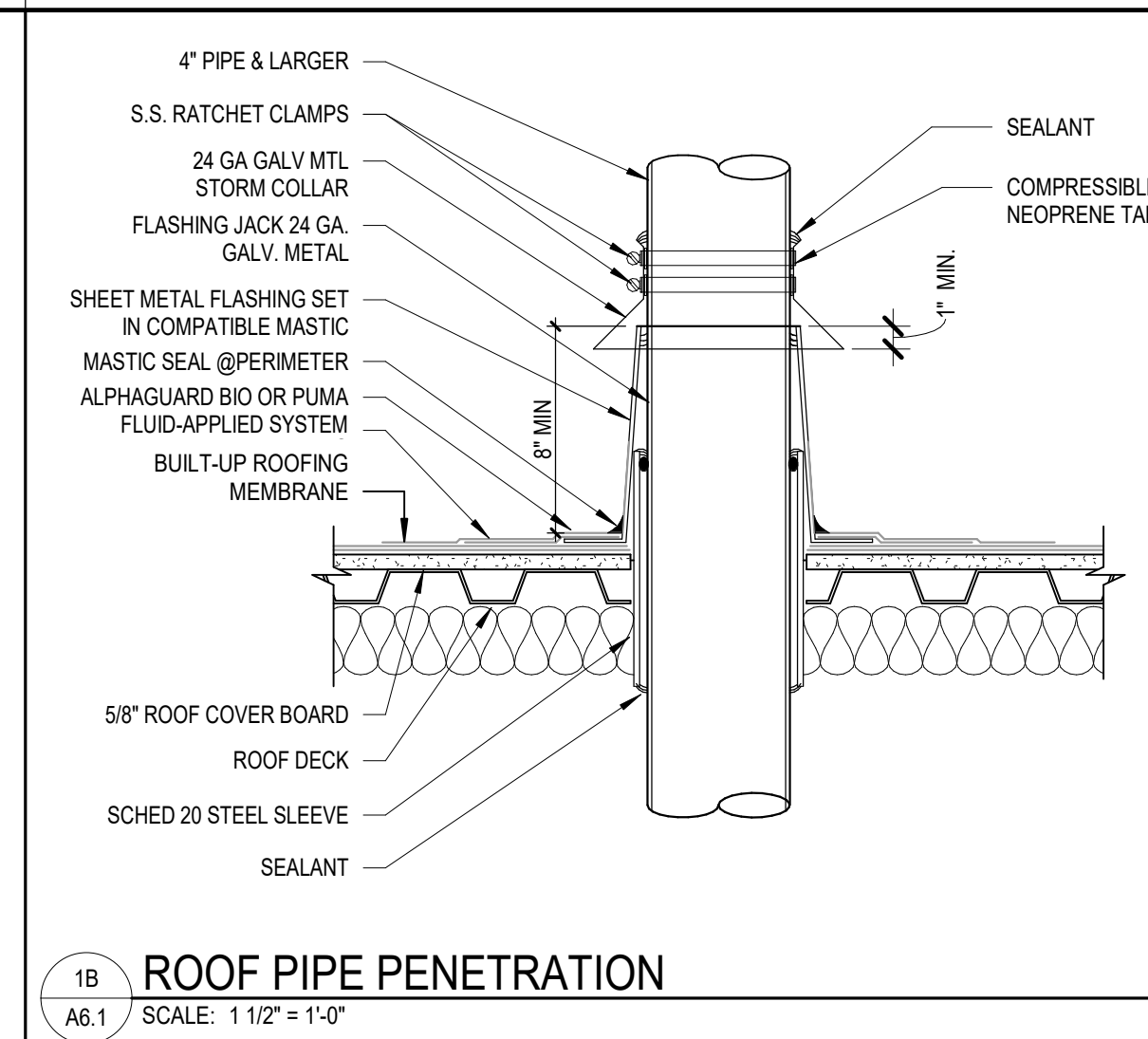
75-22616-00
DSA # 03-122700
DSA FILE # 19-48
BUILDING SECTIONS AND WALL SECTIONS

A5.1

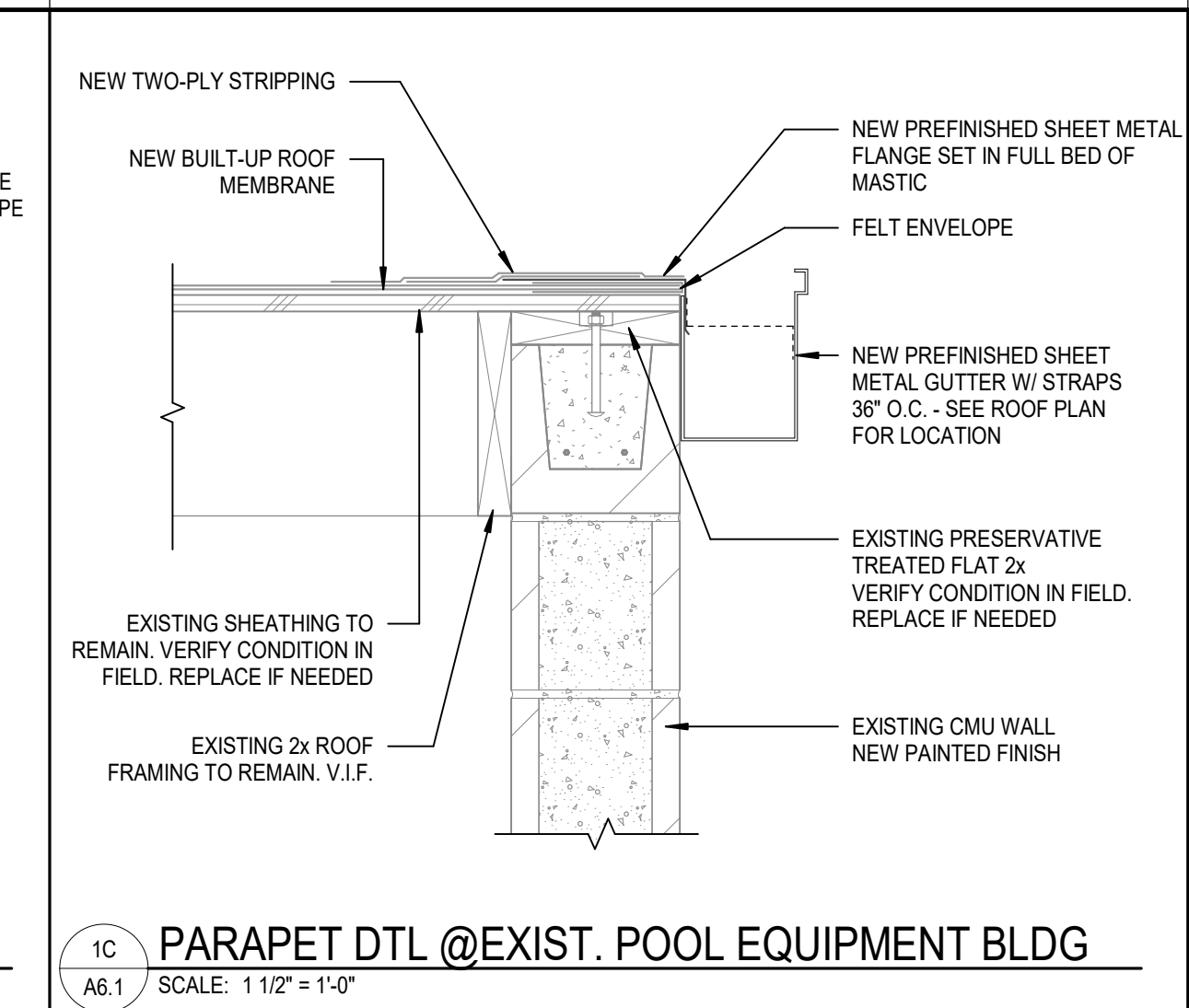
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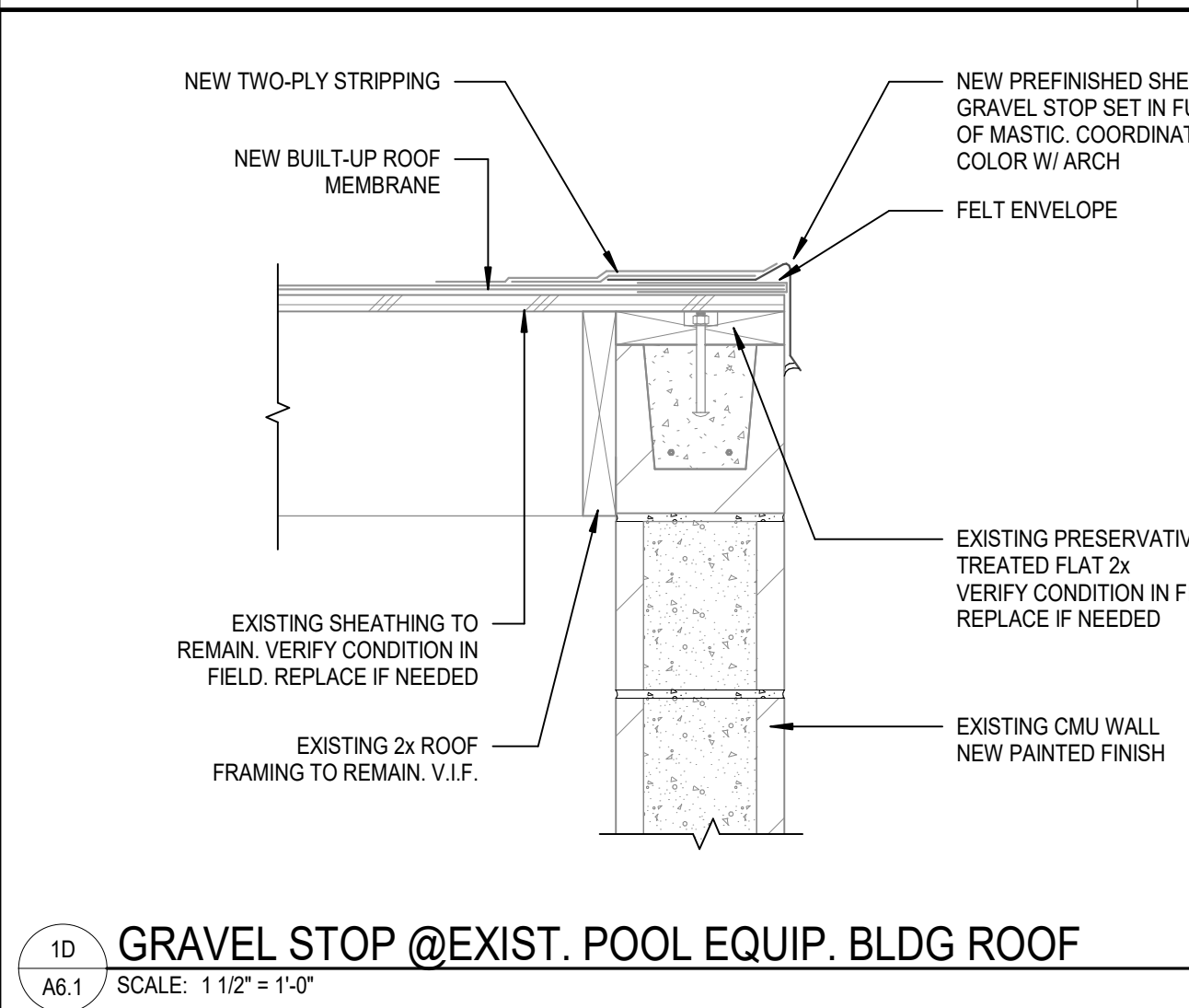
1A EXHAUST FAN CURB
SCALE: 1 1/2" = 1'-0"



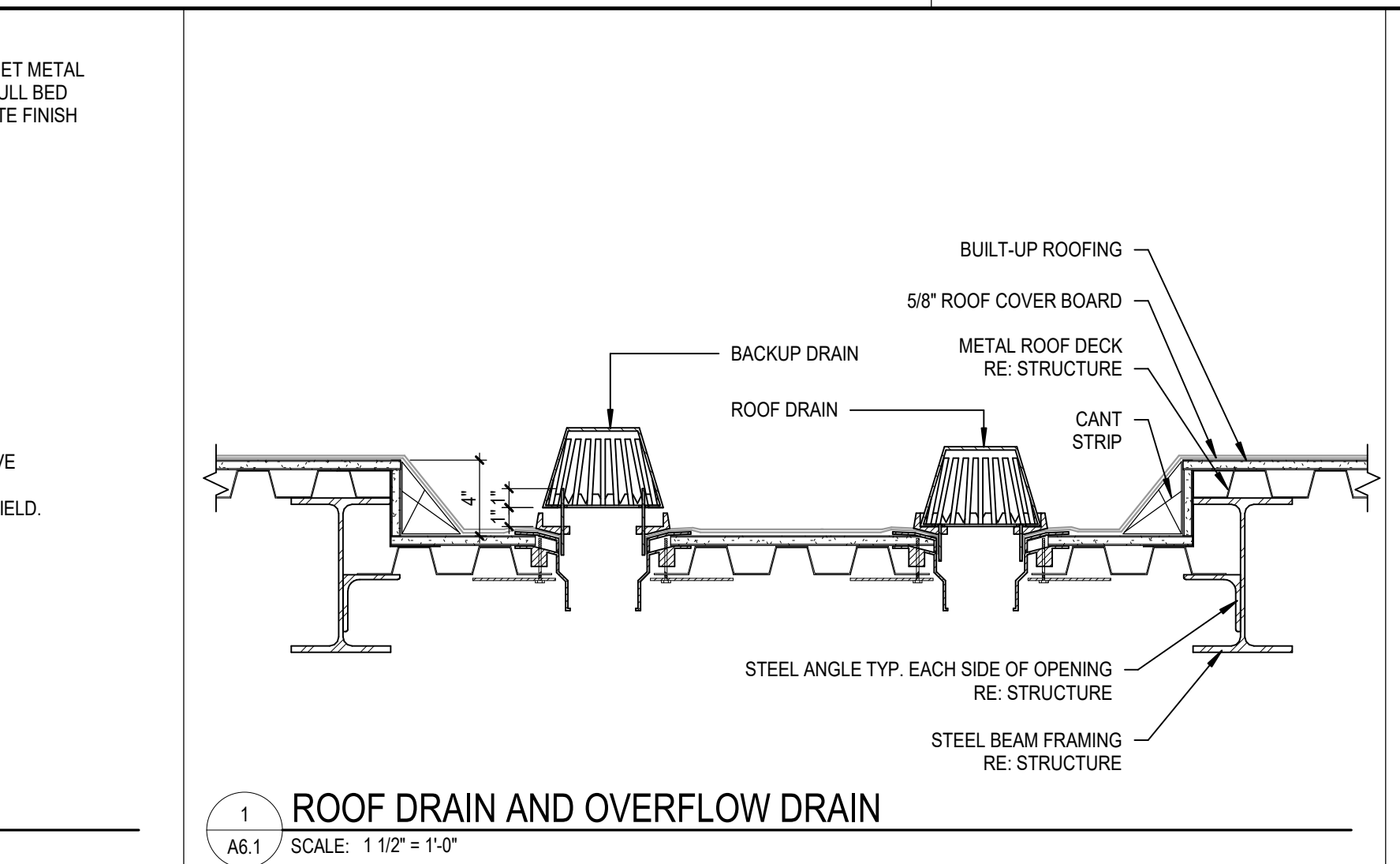
1B ROOF PIPE PENETRATION
SCALE: 1 1/2" = 1'-0"



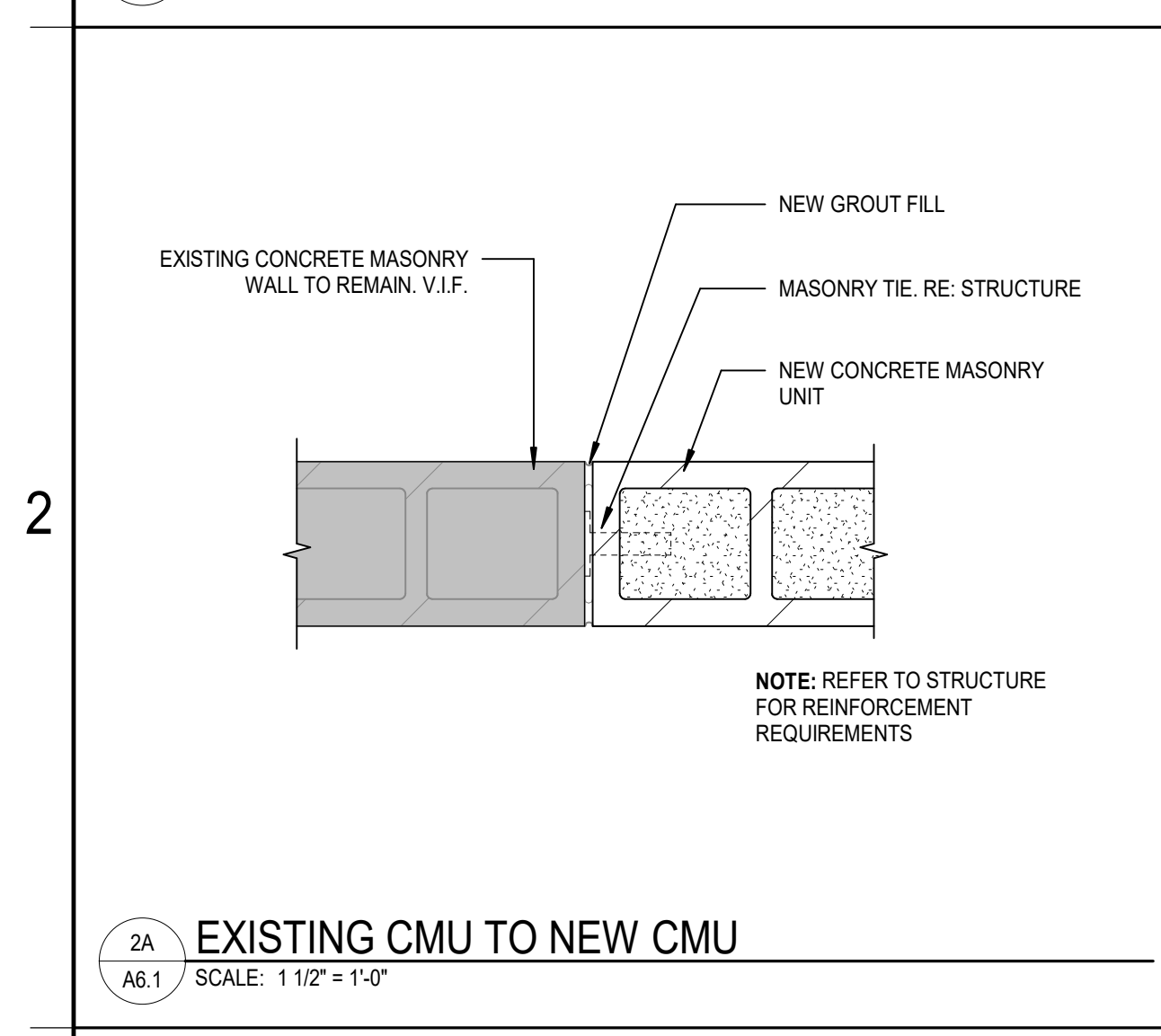
1C PARAPET DTL @ EXIST. POOL EQUIPMENT BLDG
SCALE: 1 1/2" = 1'-0"



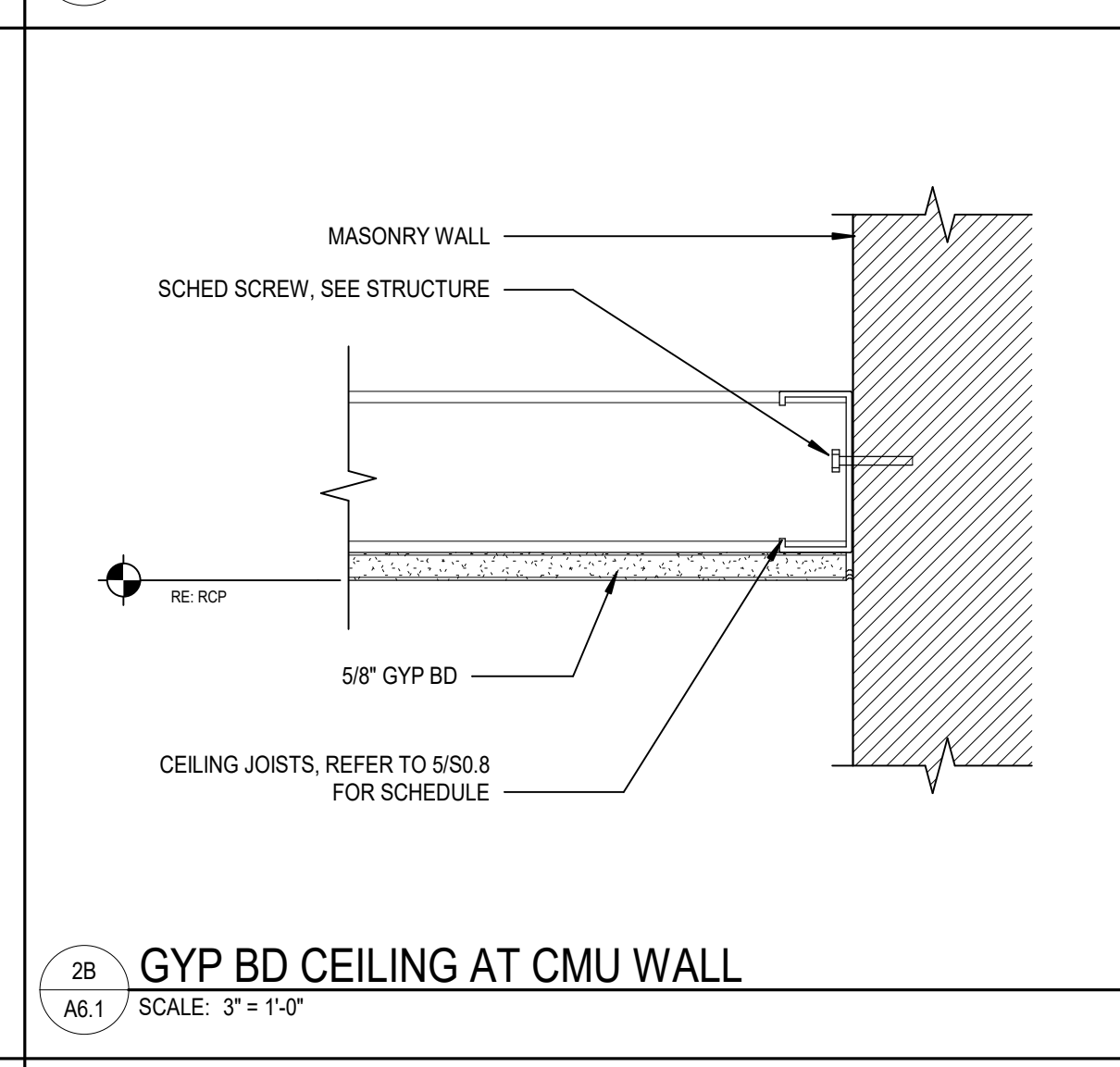
1D GRAVEL STOP @ EXIST. POOL EQUIP. BLDG ROOF
SCALE: 1 1/2" = 1'-0"



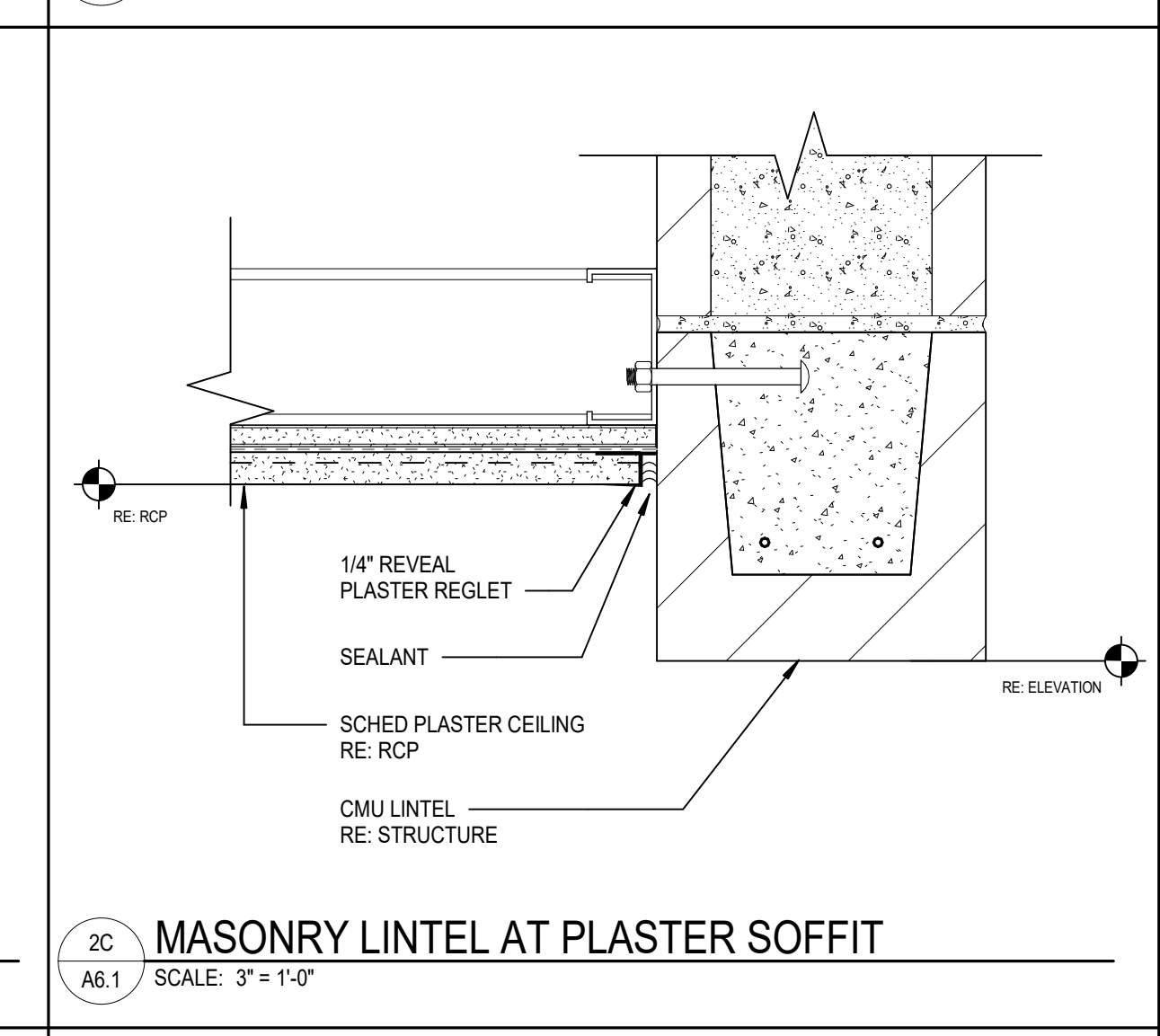
1E ROOF DRAIN AND OVERFLOW DRAIN
SCALE: 1 1/2" = 1'-0"



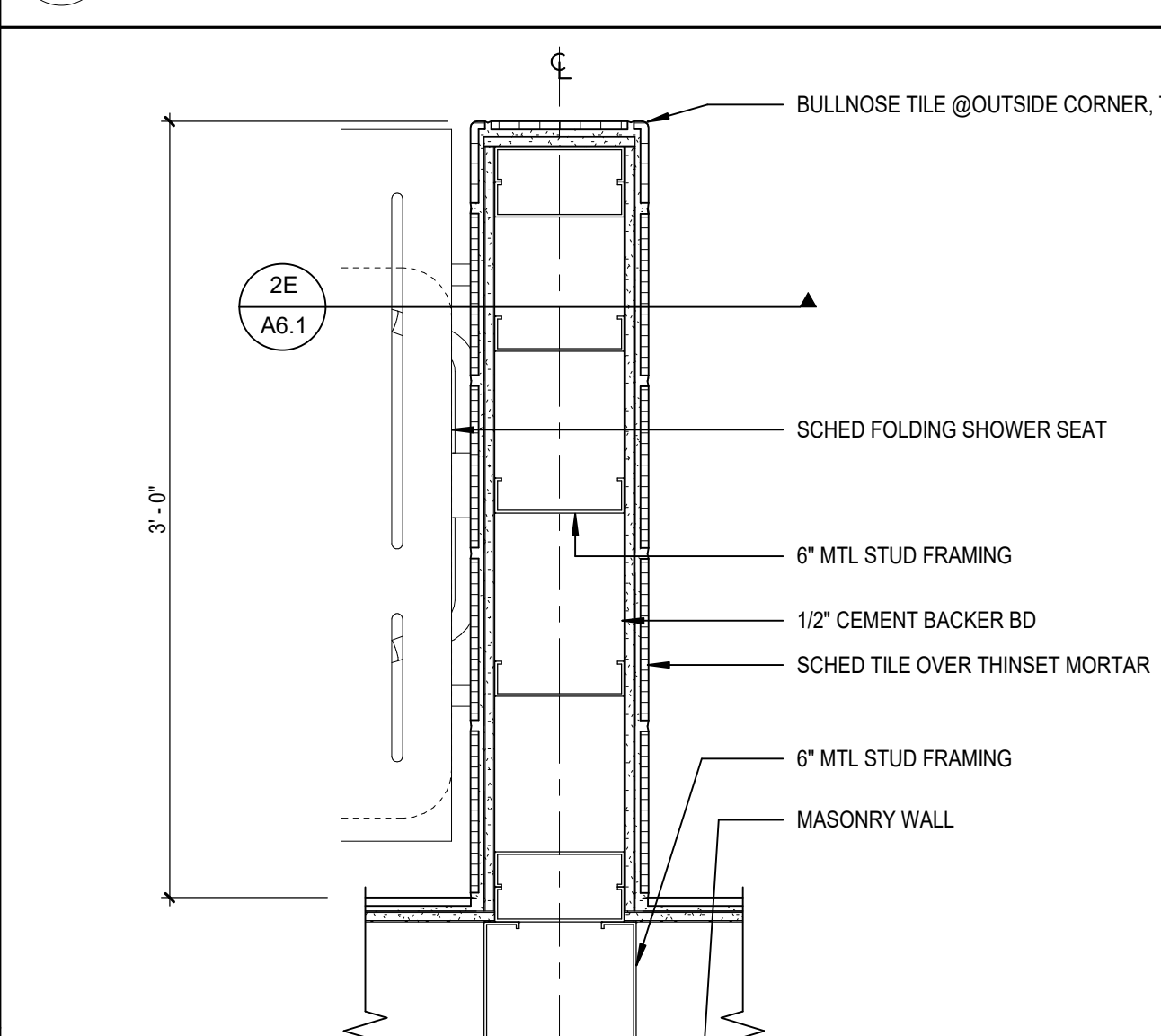
2A EXISTING CMU TO NEW CMU
SCALE: 1 1/2" = 1'-0"



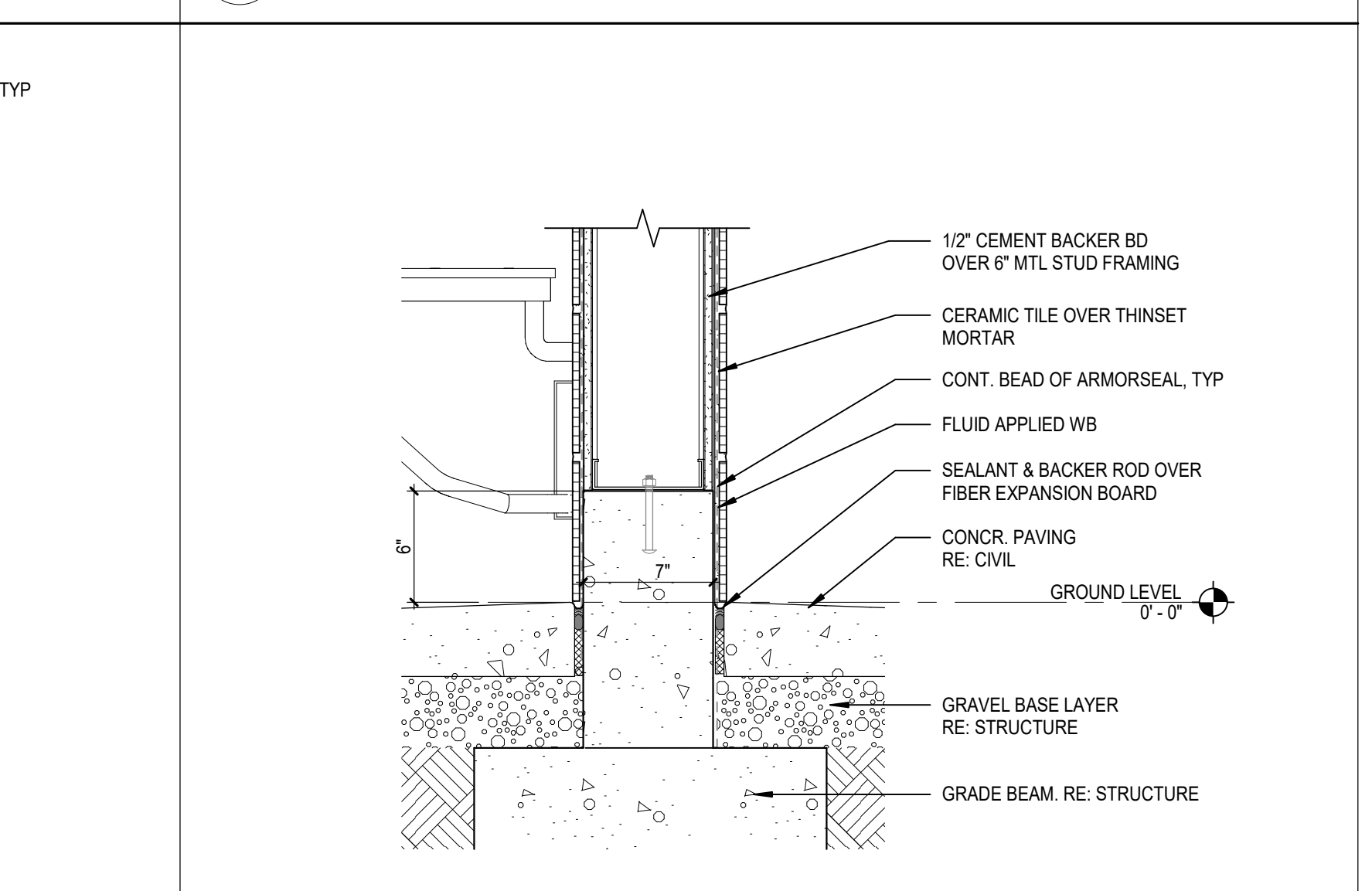
2B GYP BD CEILING AT CMU WALL
SCALE: 3" = 1'-0"



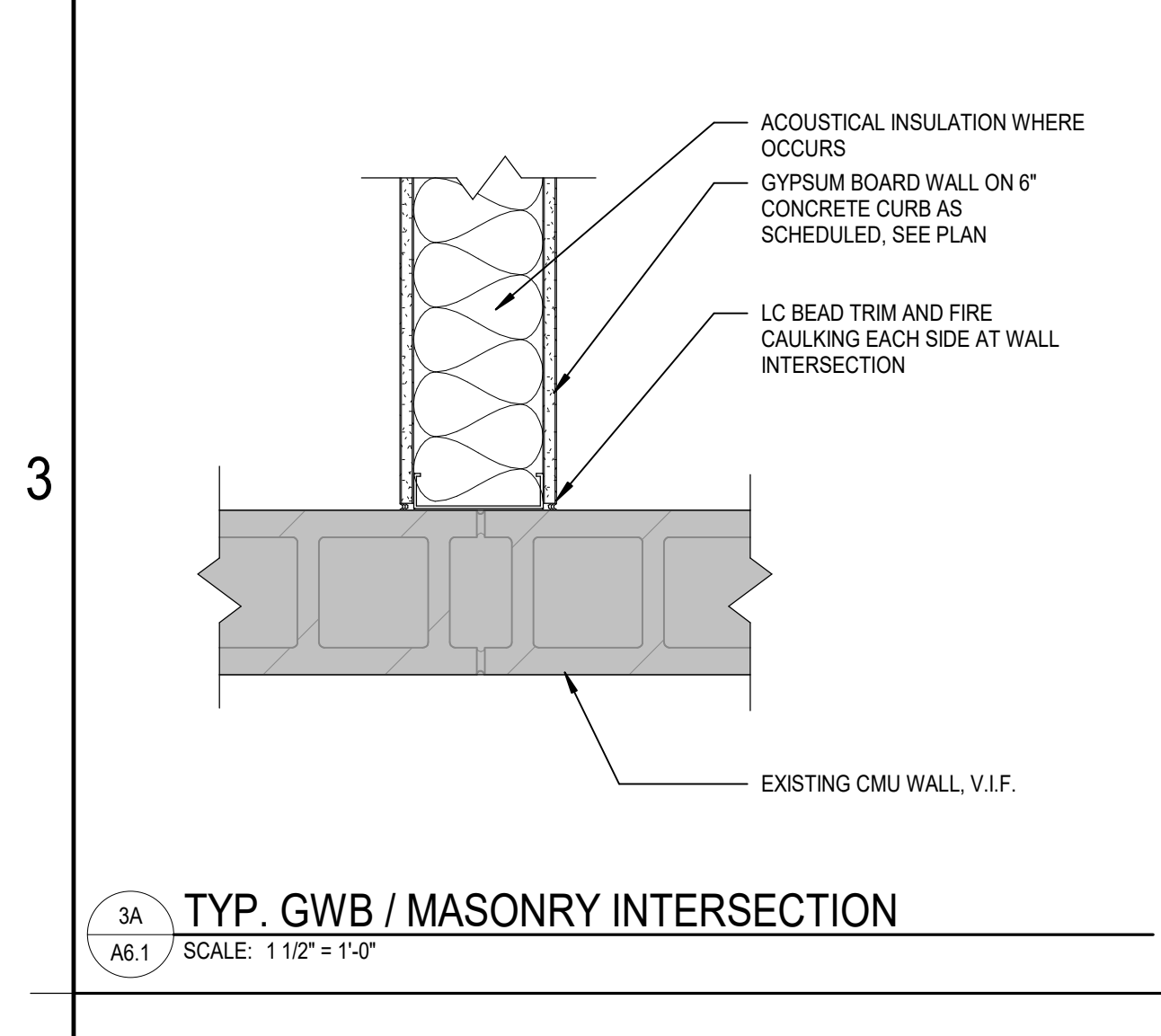
2C MASONRY LINTEL AT PLASTER SOFFIT
SCALE: 3" = 1'-0"



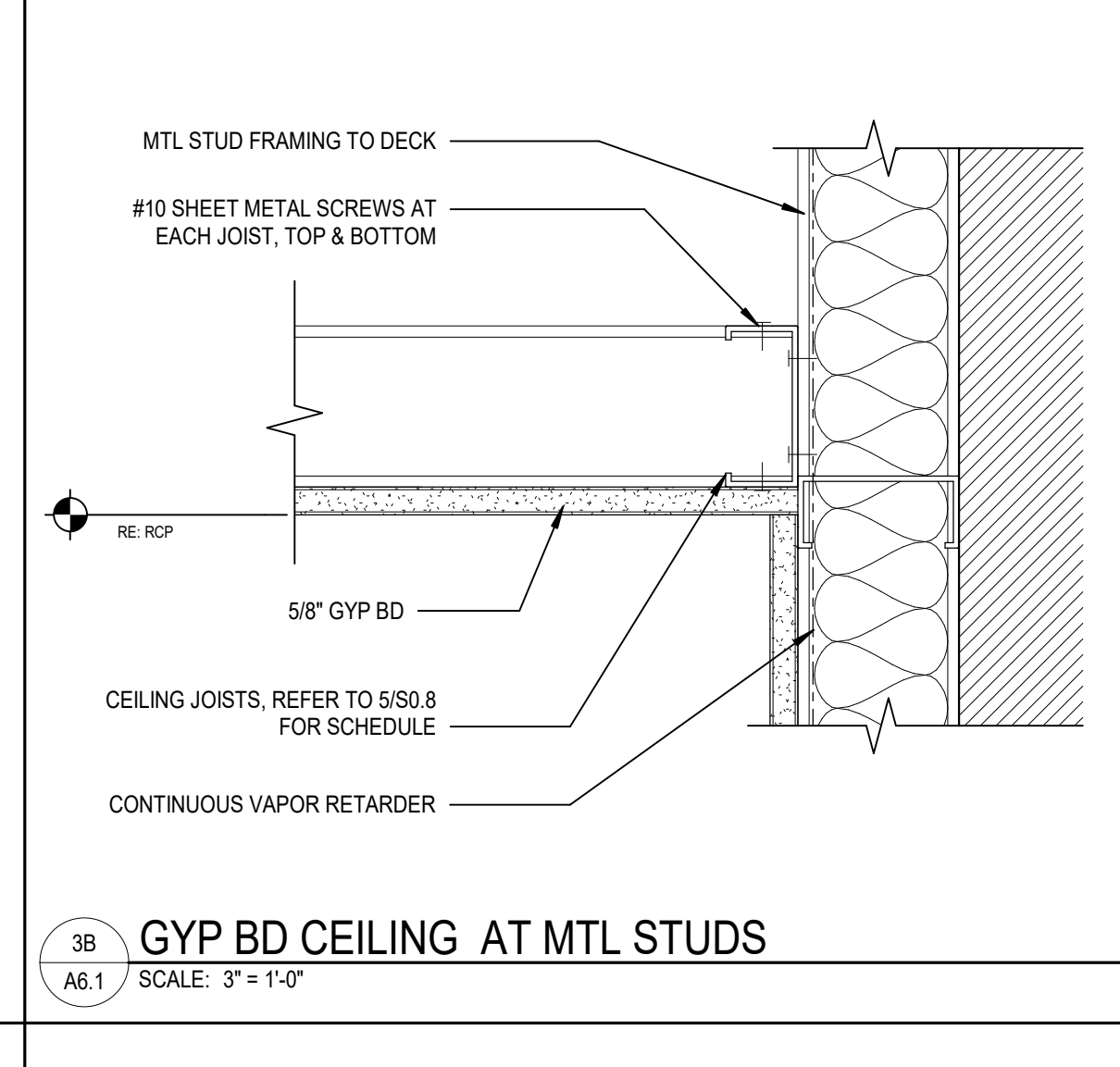
2D PLAN DETAIL @ ADA SHOWER
SCALE: 1 1/2" = 1'-0"



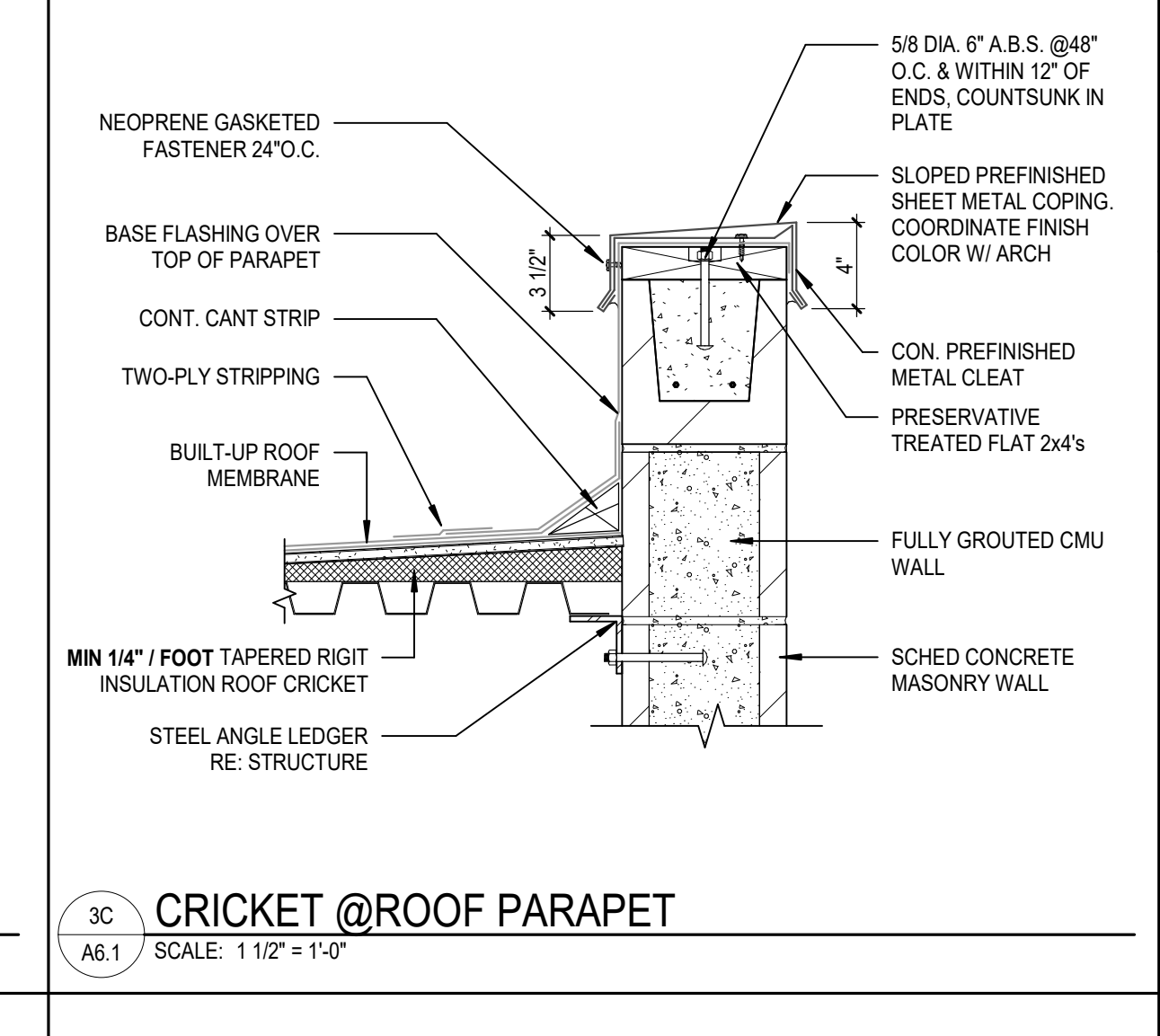
2E EXT WALL BASE @ ADA SHOWER WING WALL
SCALE: 1 1/2" = 1'-0"



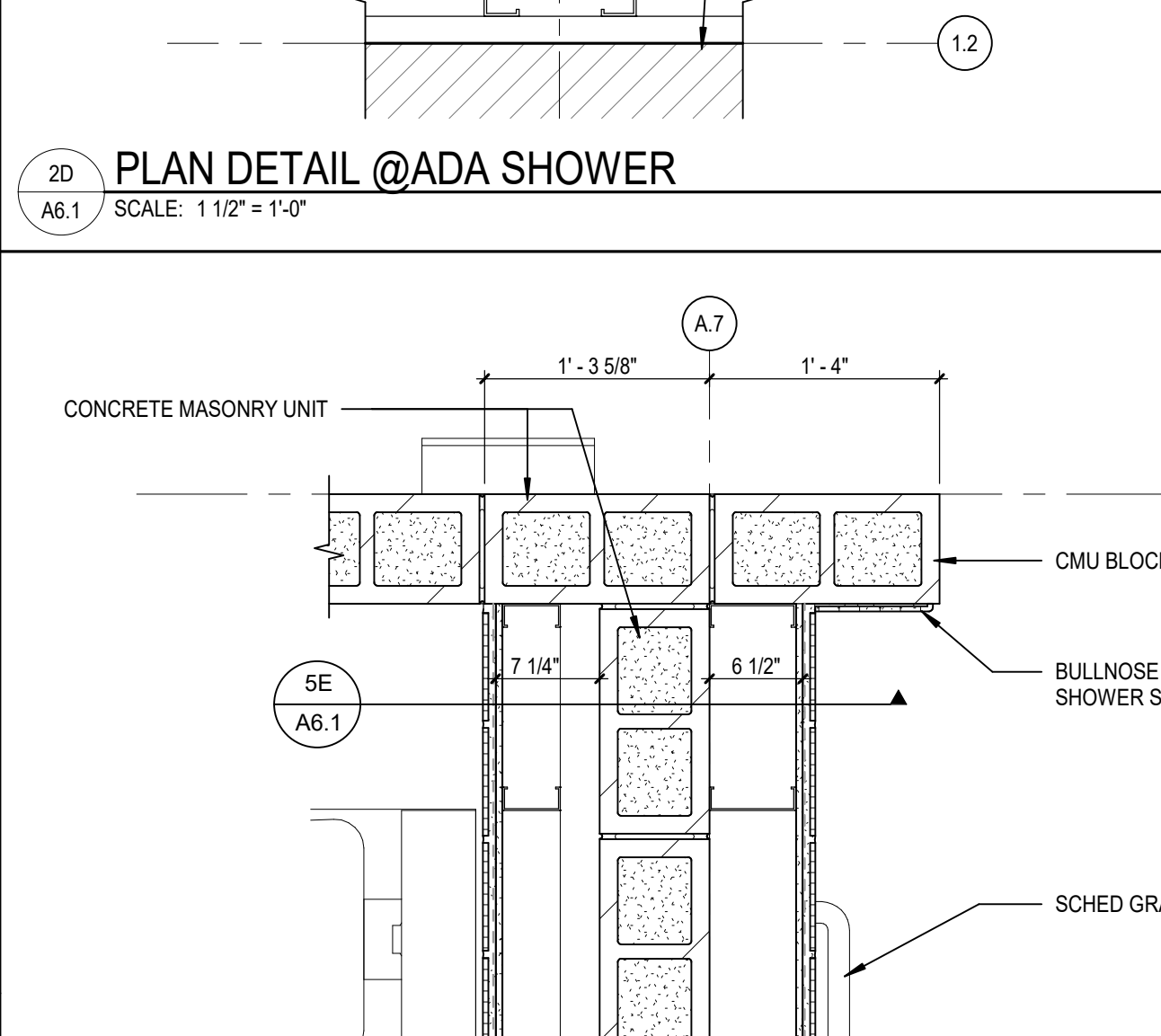
3A TYP. GWB / MASONRY INTERSECTION
SCALE: 1 1/2" = 1'-0"



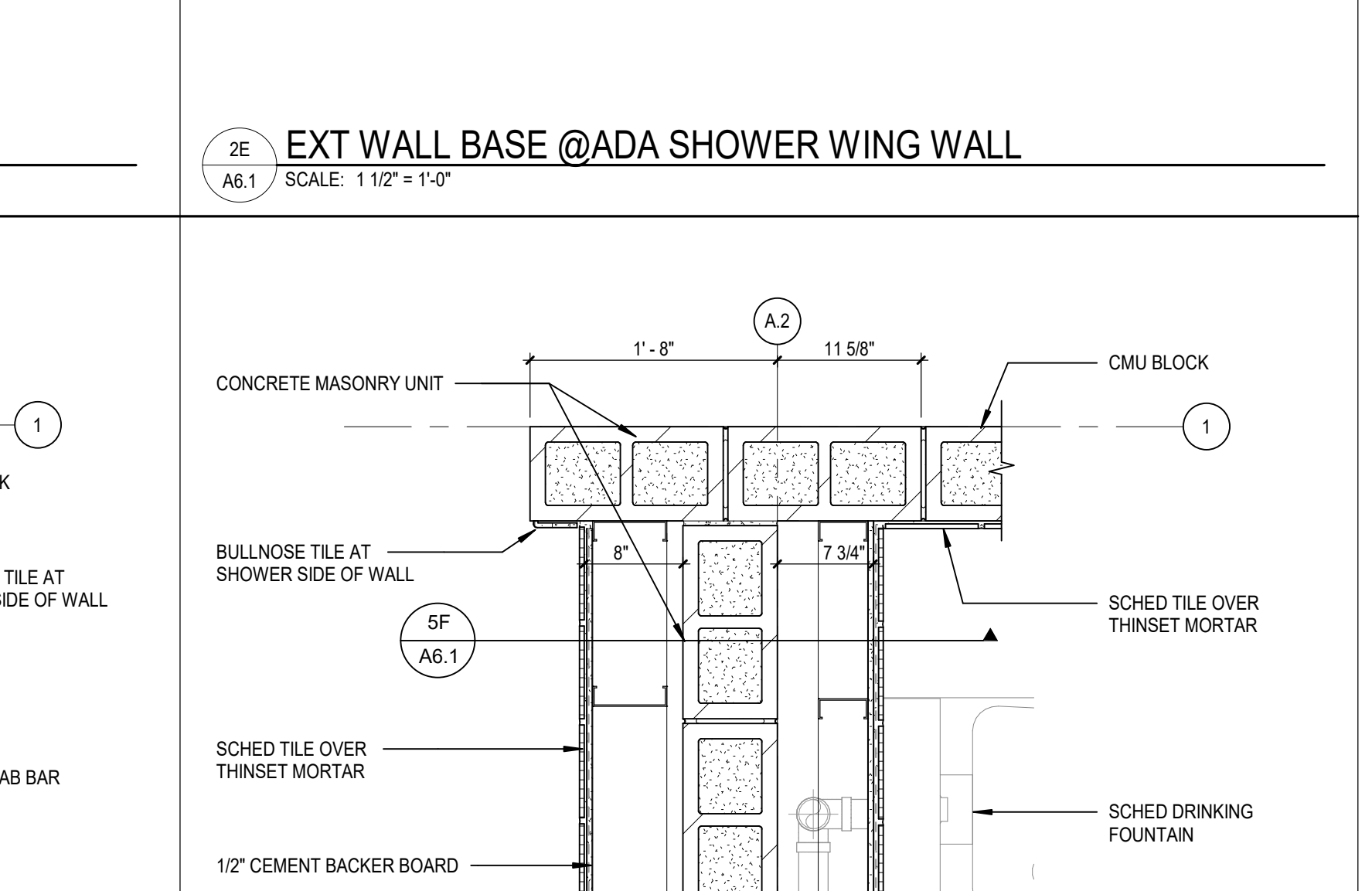
3B GYP BD CEILING AT MTL STUDS
SCALE: 3" = 1'-0"



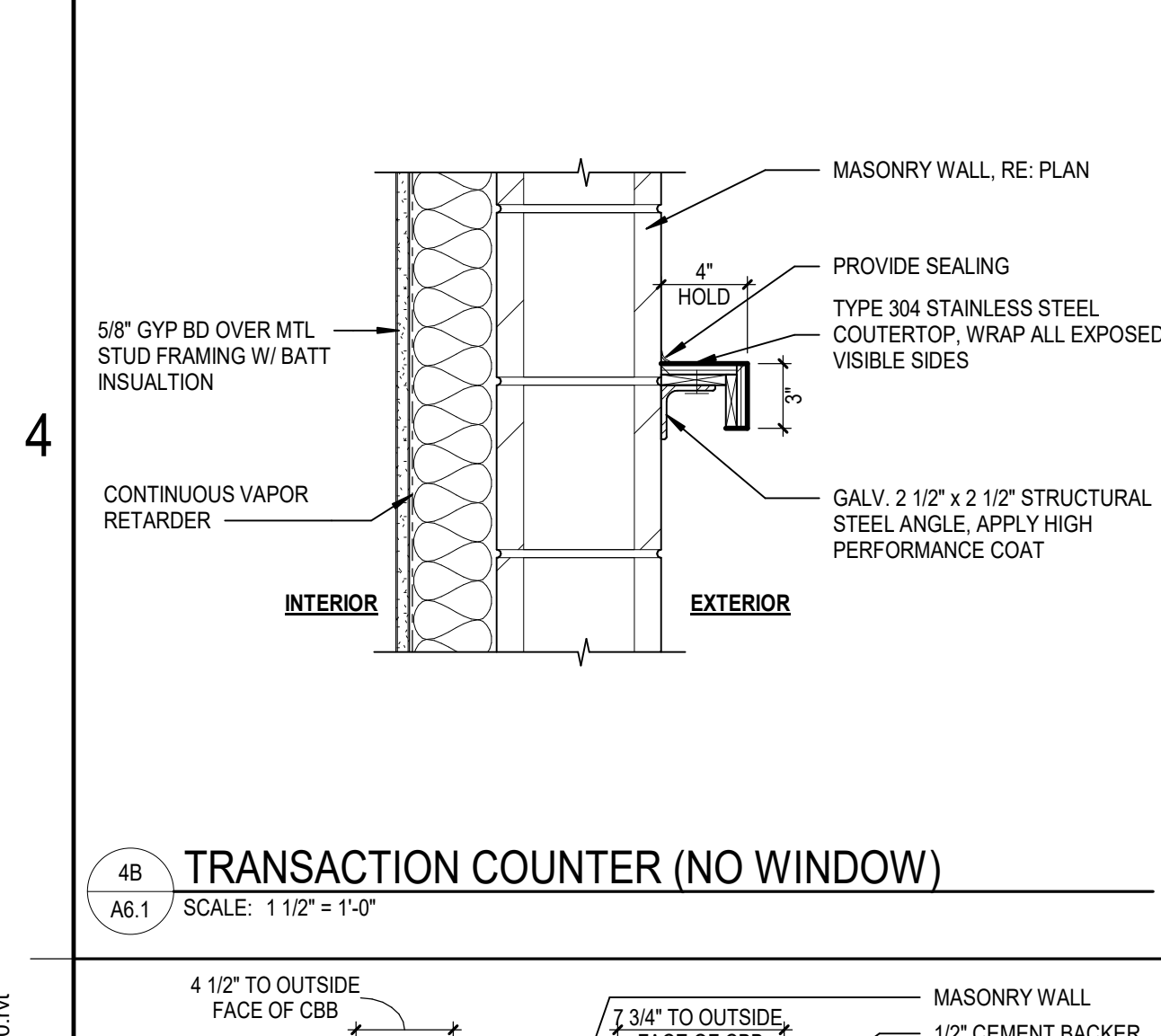
3C CRICKET @ ROOF PARAPET
SCALE: 1 1/2" = 1'-0"



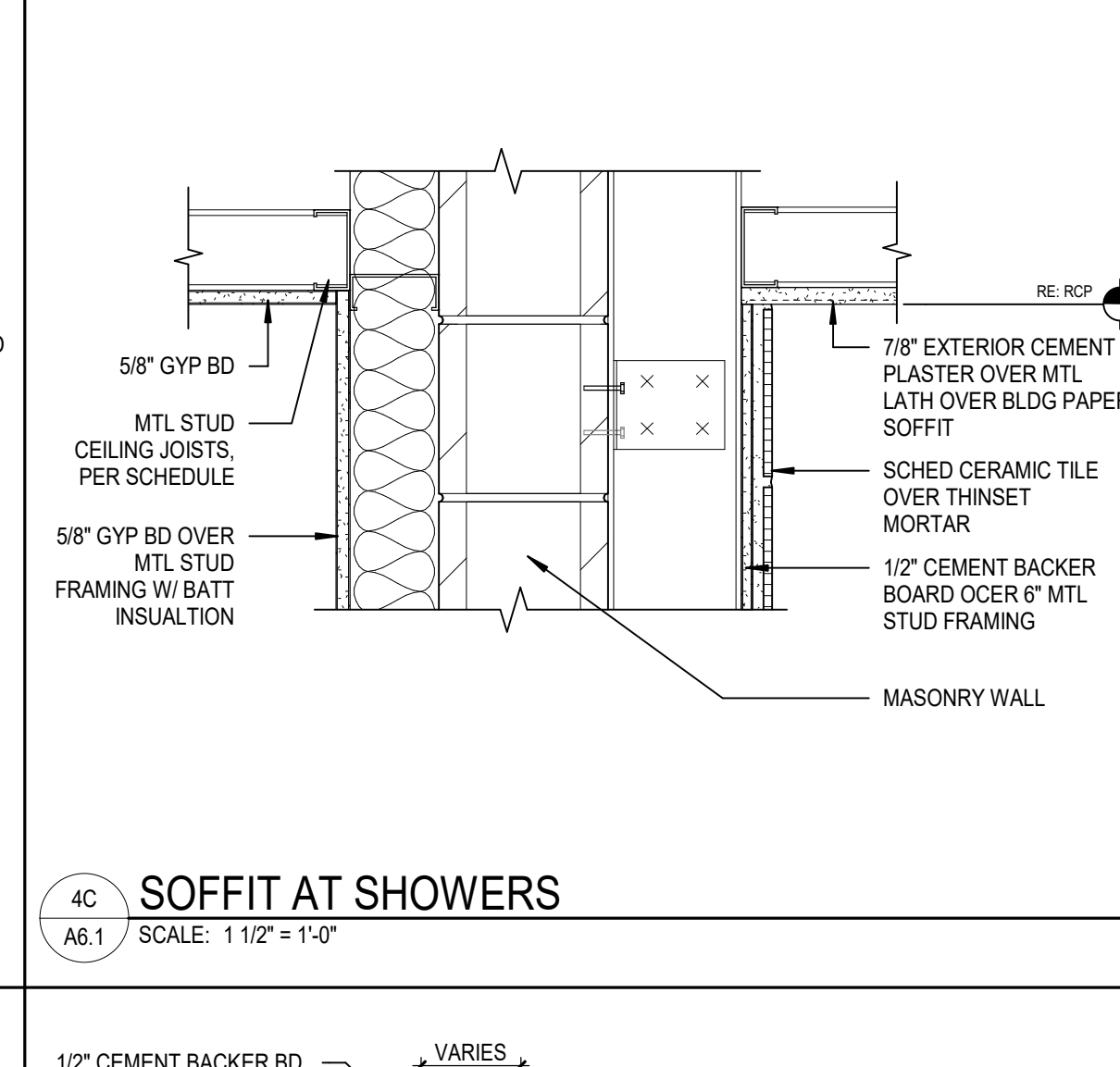
3D PLAN DETAIL @ EXT SHOWER (F)
SCALE: 1" = 1'-0"



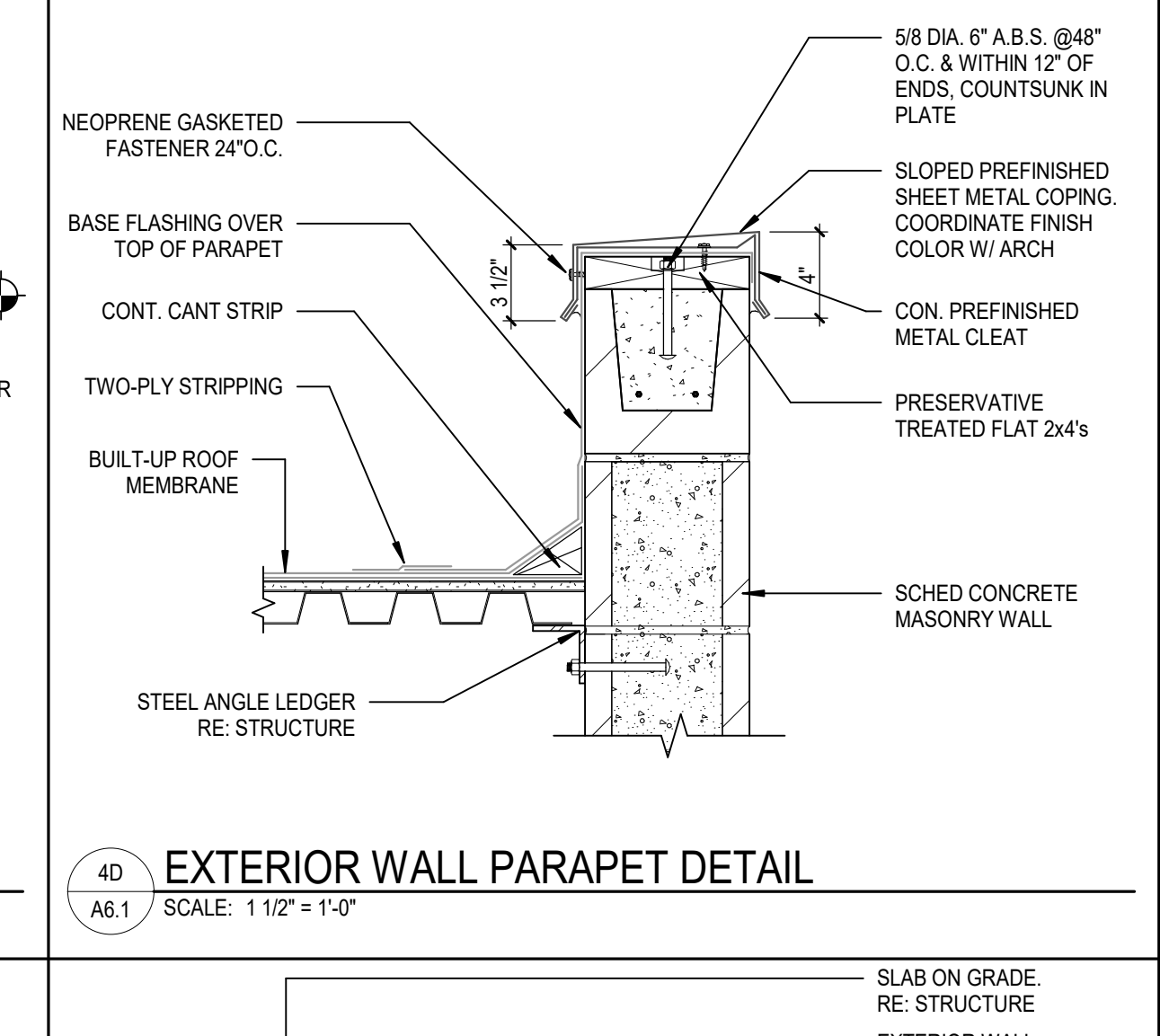
3E PLAN DETAIL @ EXT SHOWER (M)
SCALE: 1" = 1'-0"



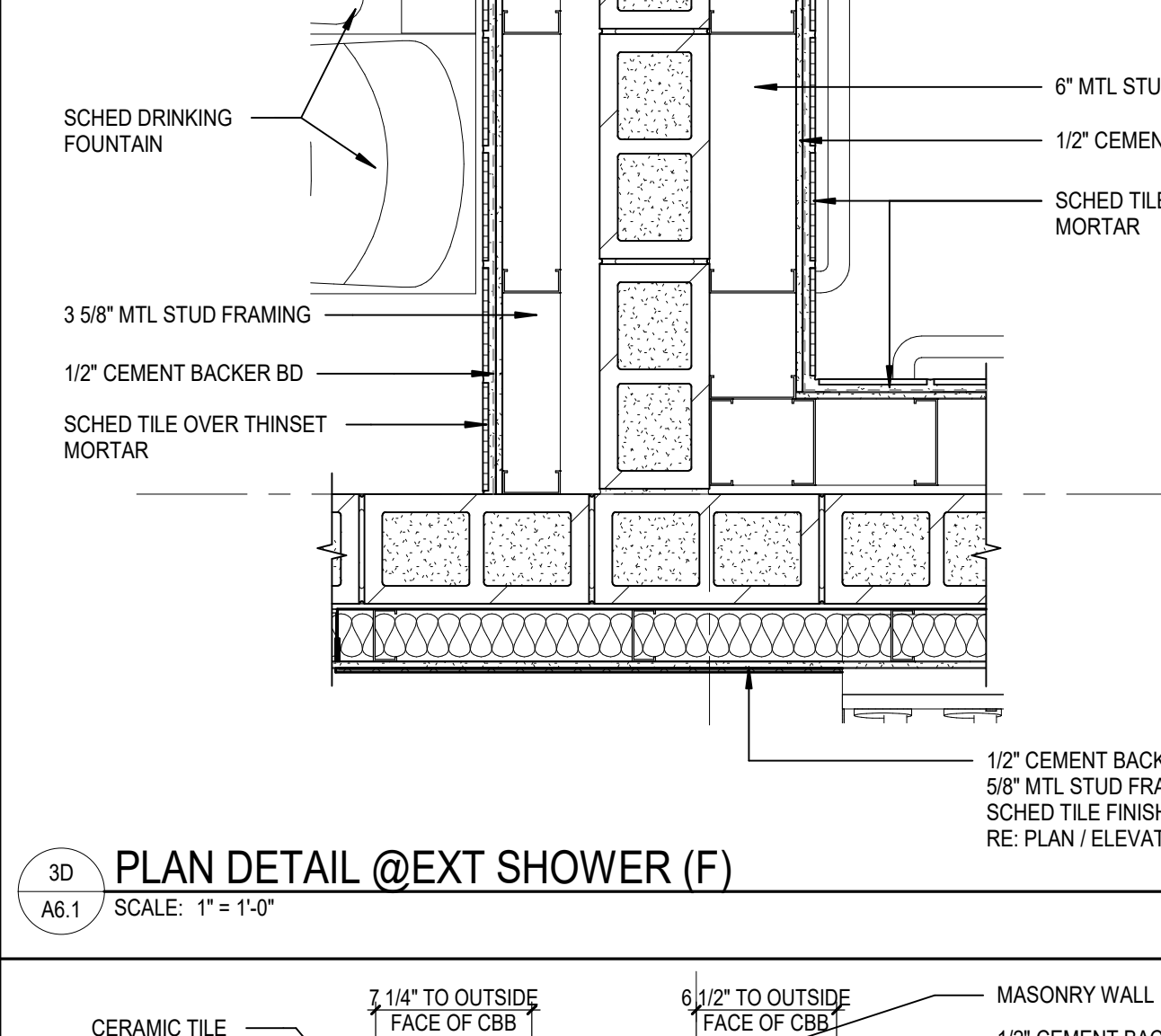
4B TRANSACTION COUNTER (NO WINDOW)
SCALE: 1 1/2" = 1'-0"



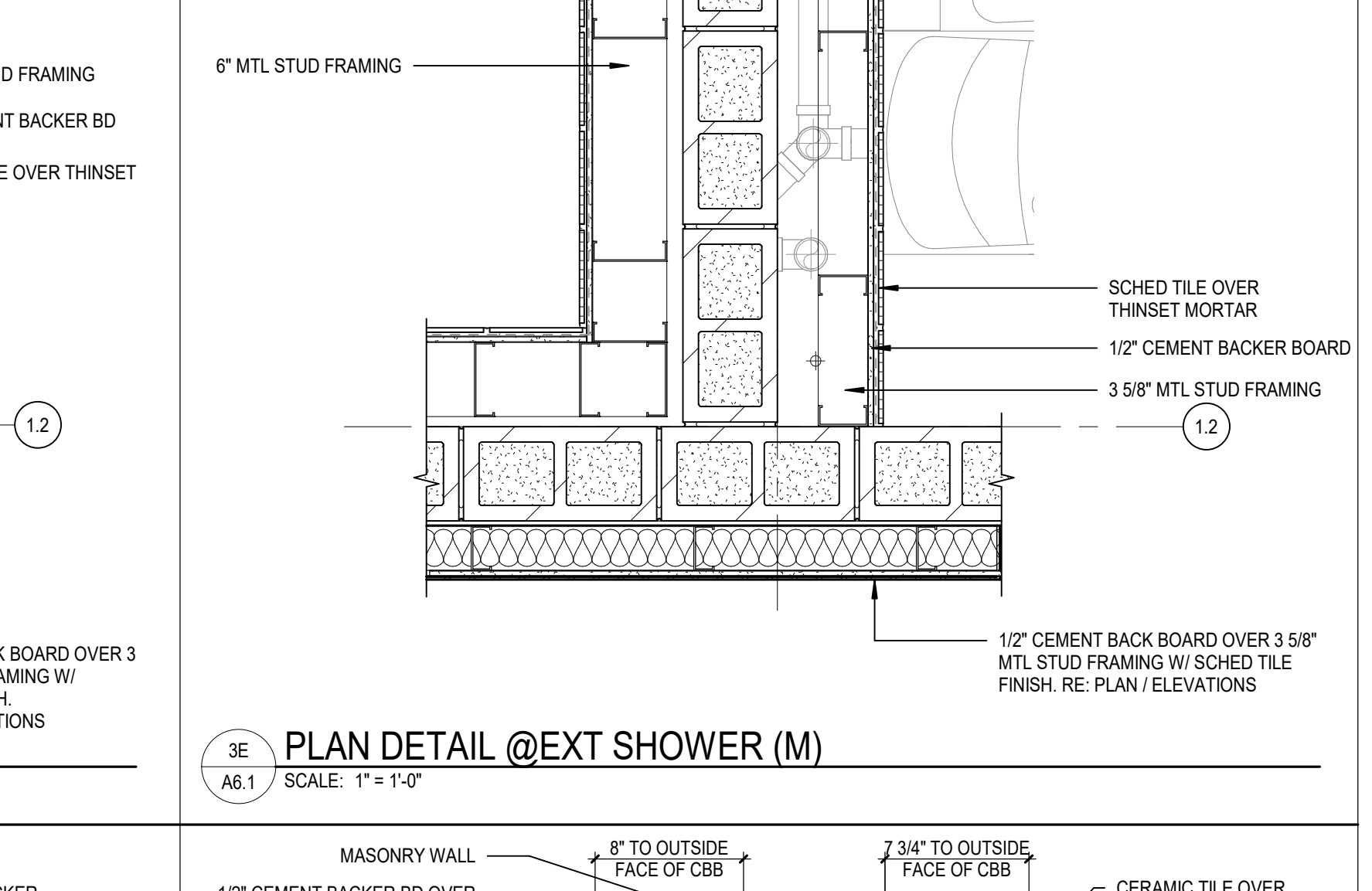
4C SOFFIT AT SHOWERS
SCALE: 1 1/2" = 1'-0"



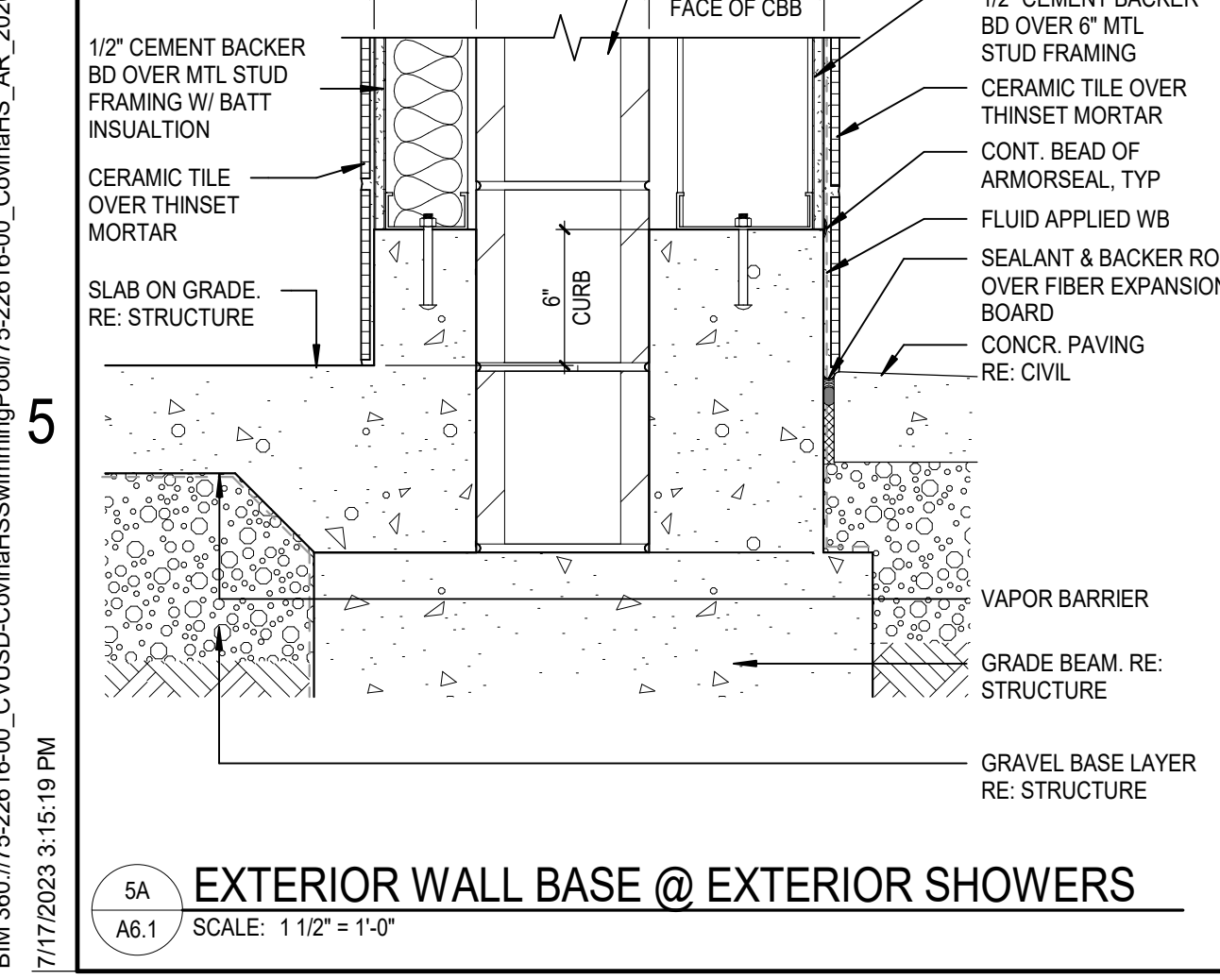
4D EXTERIOR WALL PARAPET DETAIL
SCALE: 1 1/2" = 1'-0"



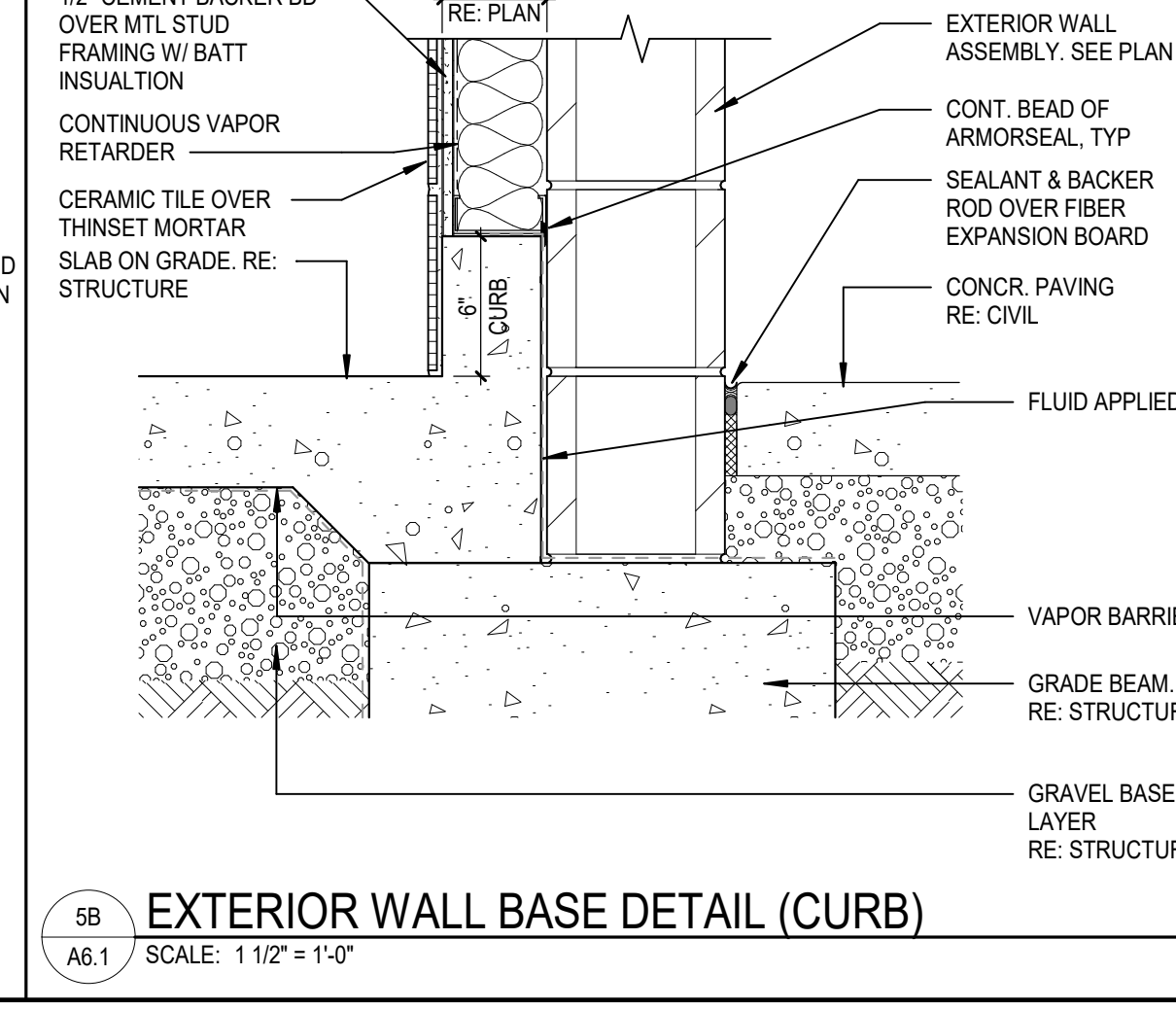
5A EXTERIOR WALL BASE @ EXTERIOR SHOWERS
SCALE: 1 1/2" = 1'-0"



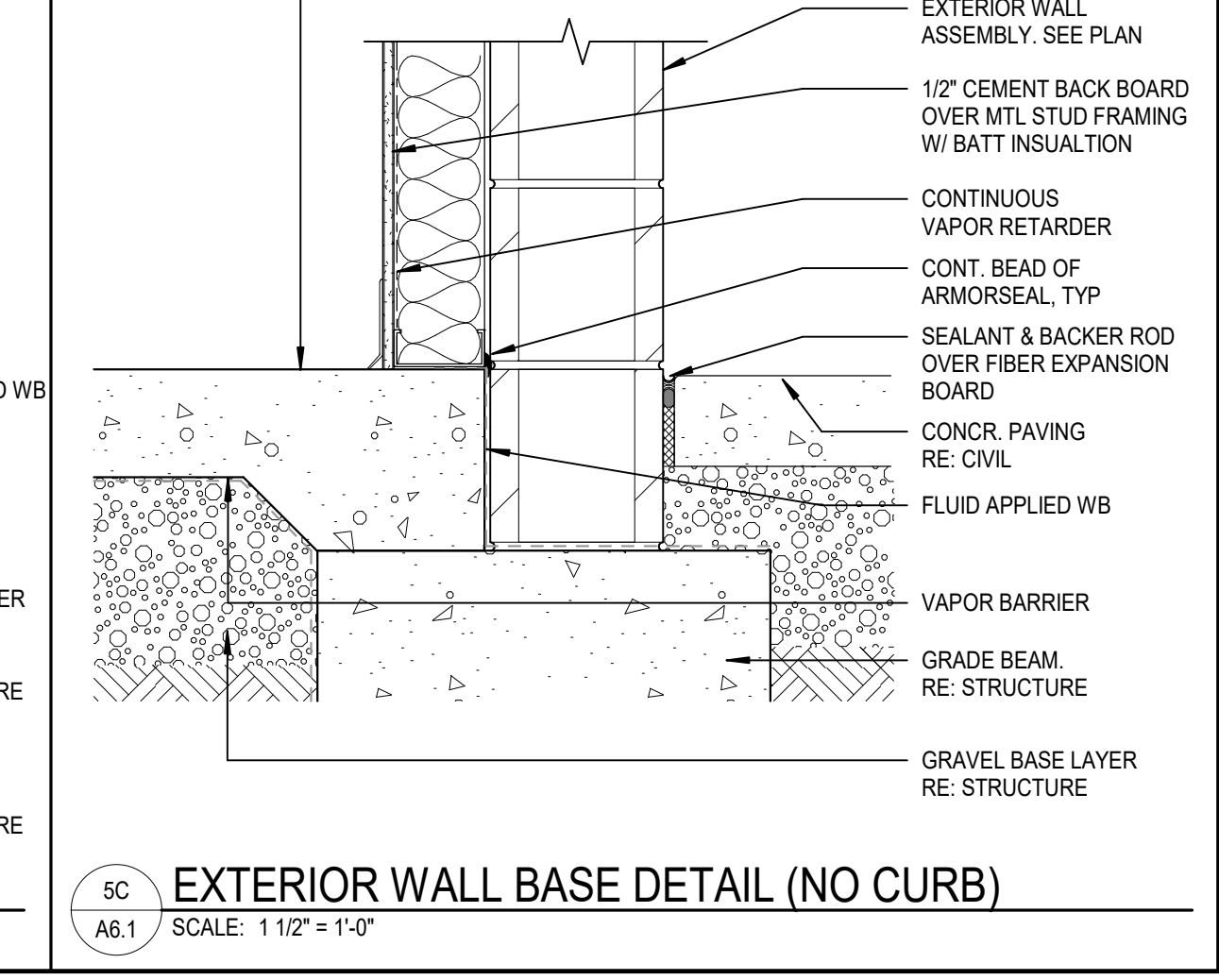
5B EXTERIOR WALL BASE DETAIL (CURB)
SCALE: 1 1/2" = 1'-0"



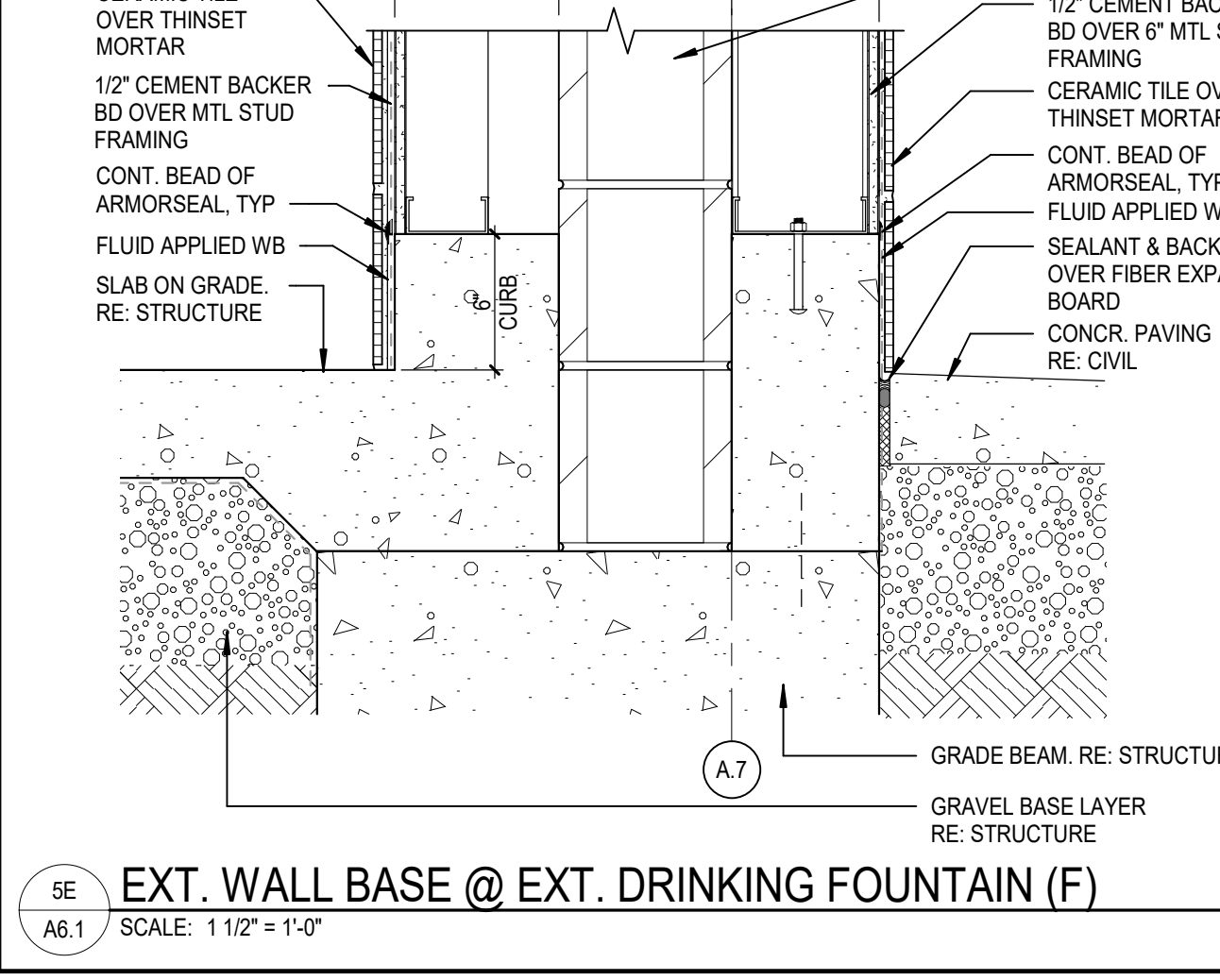
5C EXTERIOR WALL BASE DETAIL (NO CURB)
SCALE: 1 1/2" = 1'-0"



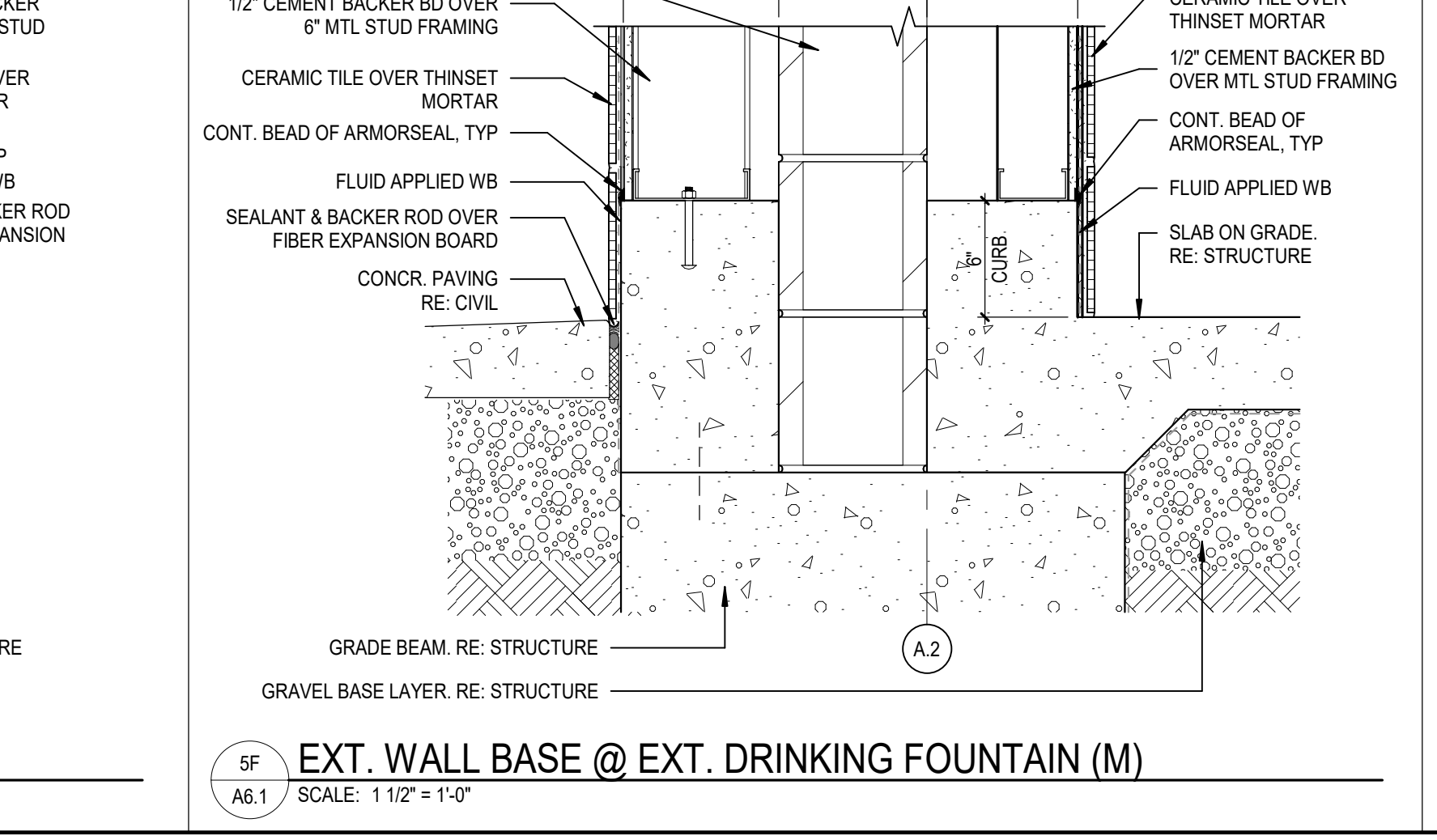
5D EXT. WALL BASE @ EXT. DRINKING FOUNTAIN (F)
SCALE: 1 1/2" = 1'-0"



5E EXT. WALL BASE @ EXT. DRINKING FOUNTAIN (M)
SCALE: 1 1/2" = 1'-0"



5F EXT. WALL BASE @ EXT. DRINKING FOUNTAIN (M)
SCALE: 1 1/2" = 1'-0"



5G EXT. WALL BASE @ EXT. DRINKING FOUNTAIN (M)
SCALE: 1 1/2" = 1'-0"

BIM 360://75-22616-00_CVUSD-CovinaHS/Modeling/04/28/23/22616-00_CovinaHS_AR_2023.rvt
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1. WALL ASSEMBLY: THE 1 OR 2 HOUR FIRE RATED GYPSUM WALLBOARD / STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL LDD OR LWB SERIES WALL OR PARTITION DESIGN IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:

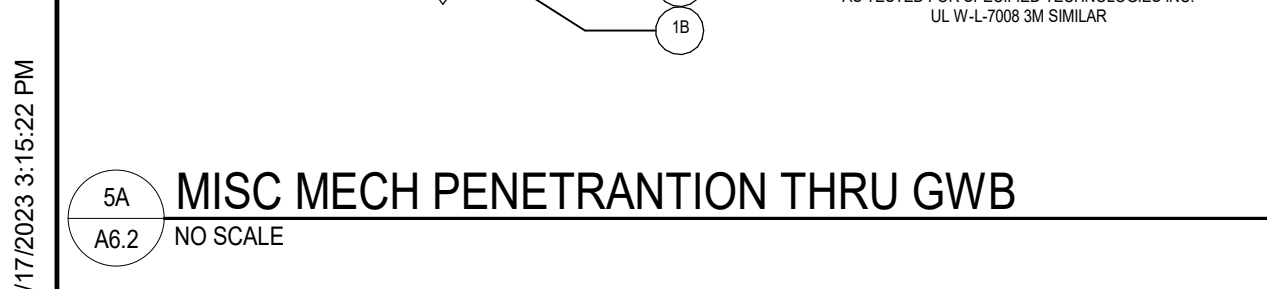
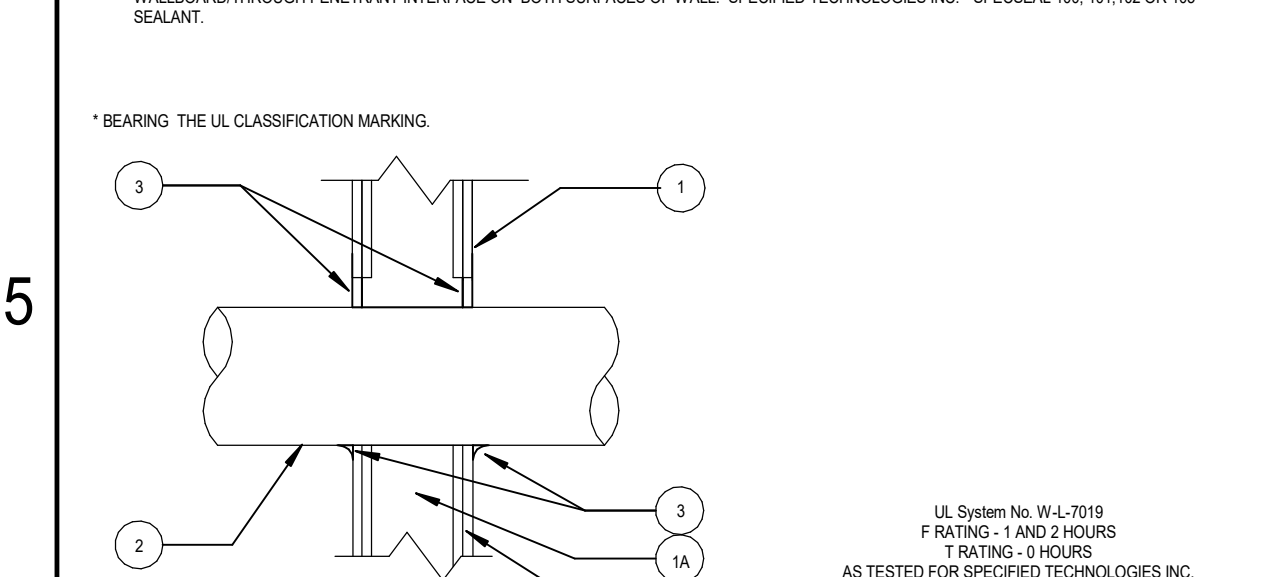
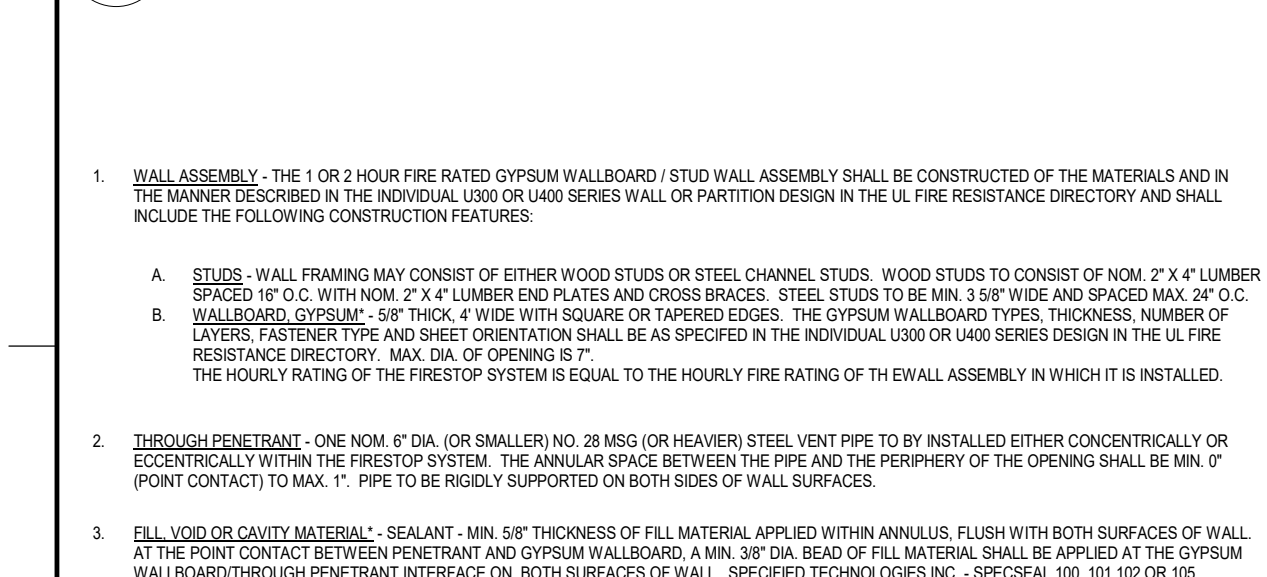
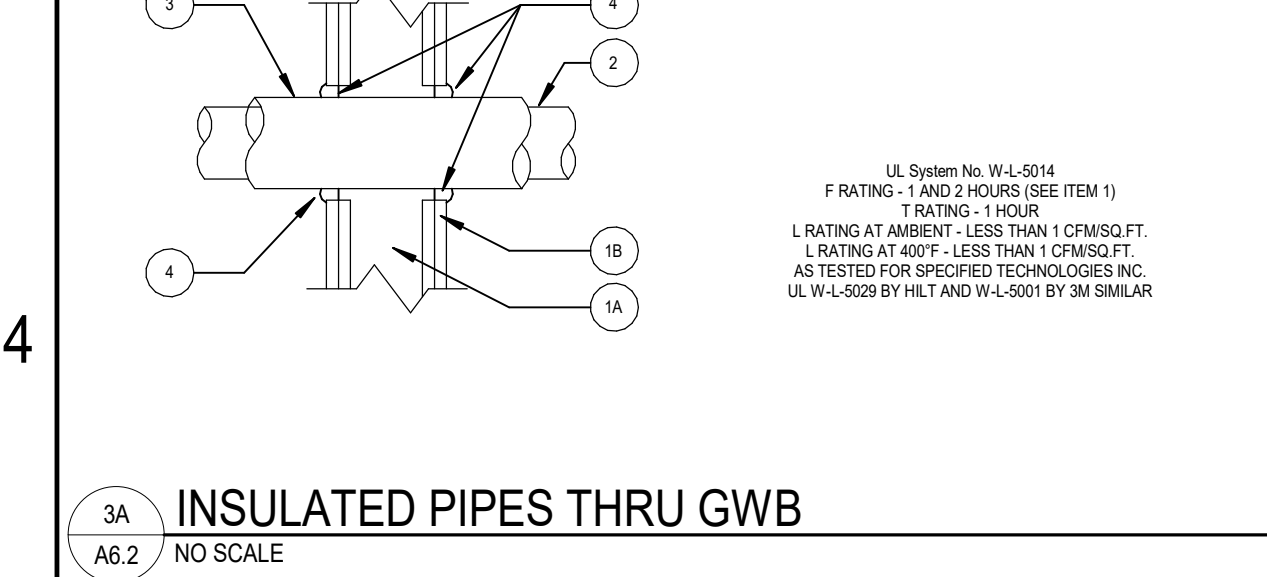
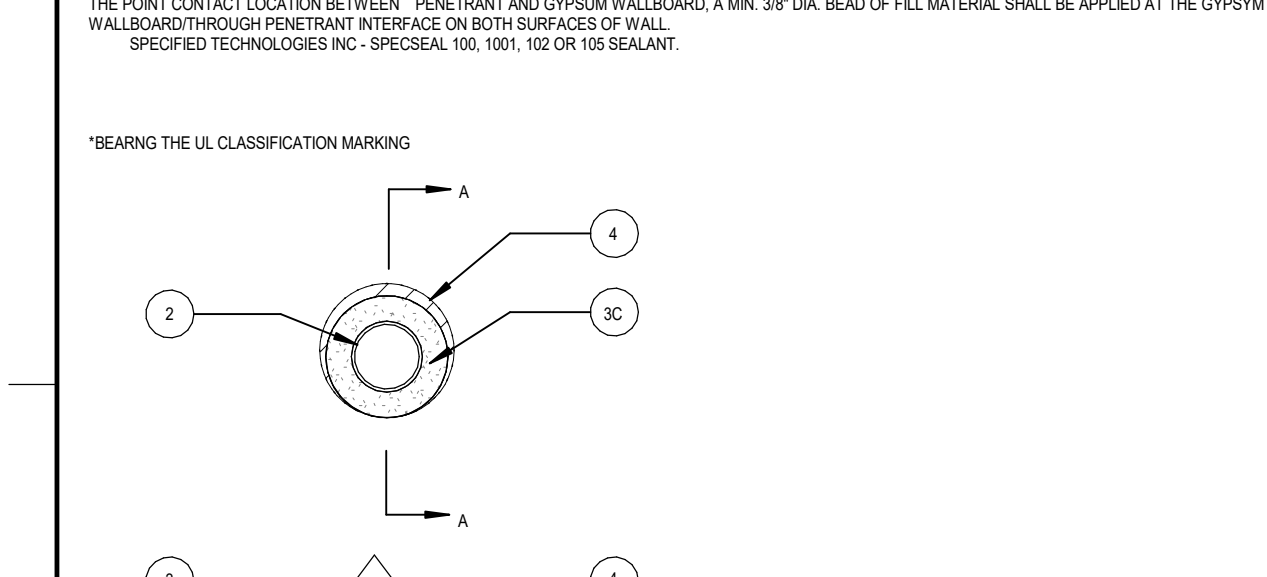
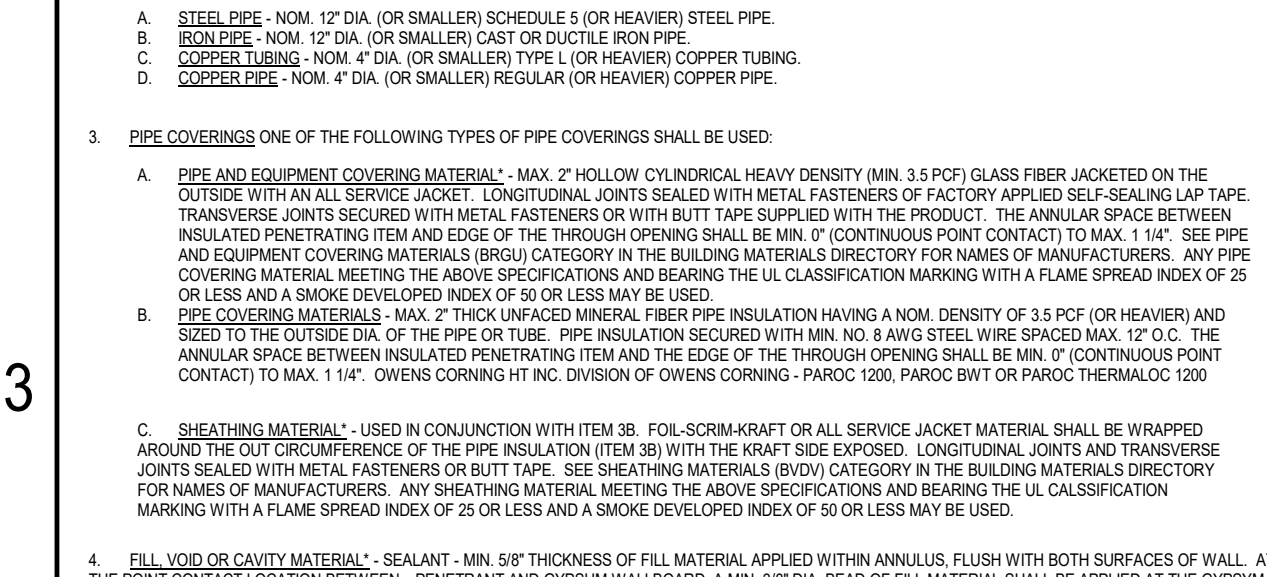
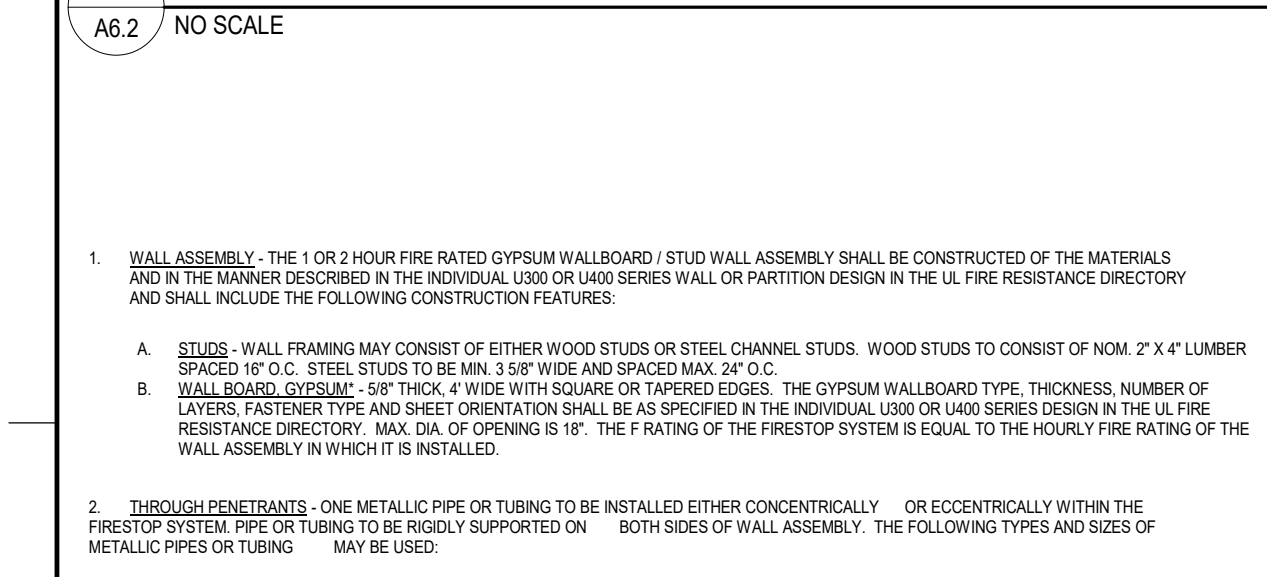
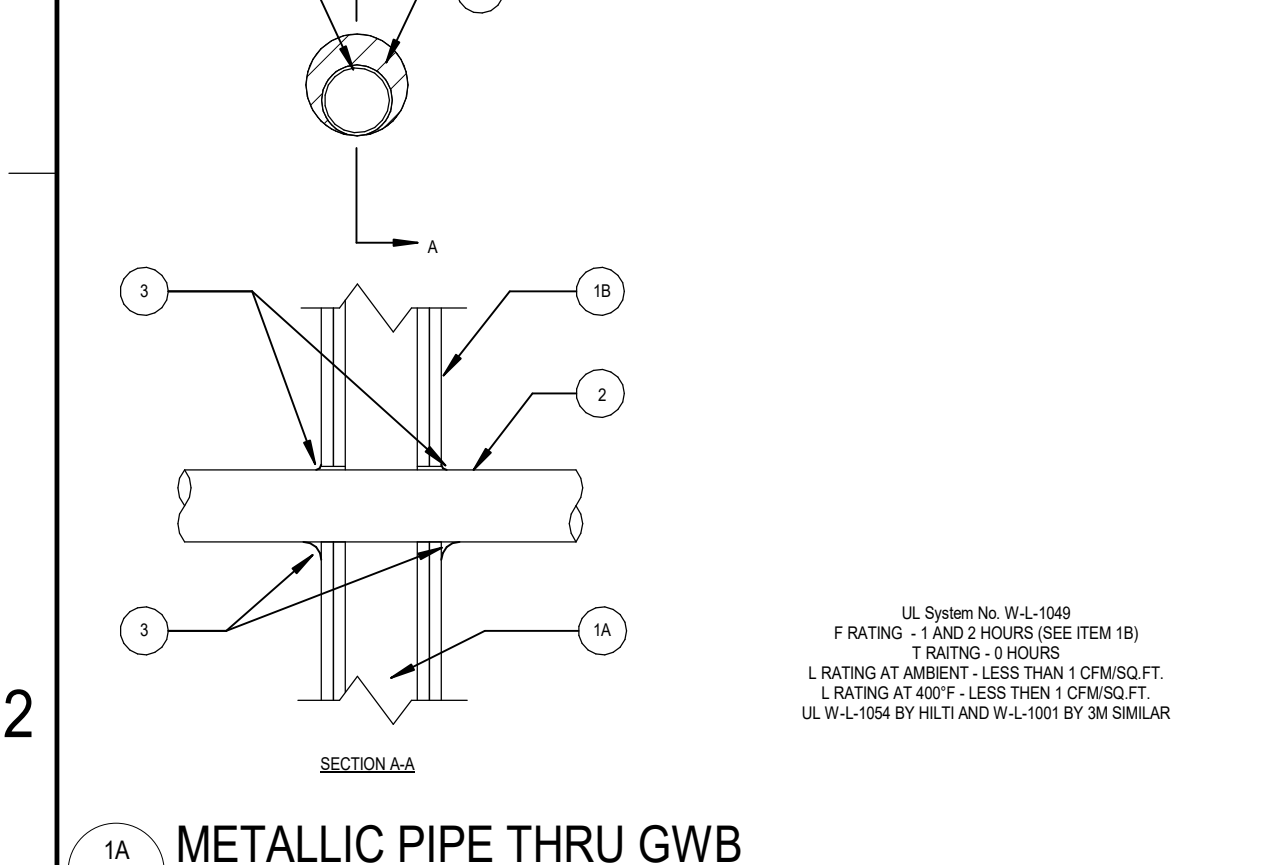
- A. STUDS:** WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOM. 2" X 4" LUMBER SPACED @ 16" O.C. STEEL STUDS TO BE MAX. 3/8" WIDE AND SPACED MAX. 24" O.C. WHEN STEEL STUDS ARE USED AND THE DIA. OF THE OPENING EXCEEDS THE WIDTH OF STUD CAVITY THE OPENING SHALL BE FRAMED ON ALL SIDES USING LENGTHS OF STEEL STUD INSTALLED BETWEEN THE VERTICAL STUDS AND COVERS ATTACHED TO THE STEEL STUDS AT EACH SIDE. THE PENETRATING ITEM SHALL BE INSTALLED IN THE OPENING 4" TO 1" CLEARANCE IS PRESSURE BETWEEN THE PENETRATING ITEM AND THE FRAMING WALL FOUR SIDES.
- B. WALLBOARD:** GYPSUM, 5/8" THICK 4" WIDE WITH SQUARE OR TAPERED EDGES. THE GYPSUM WALLBOARD TYPE, THICKNESS, NUMBER OF LAYERS, FASTENER TYPE AND SHEET SPACING SHALL BE AS SPECIFIED IN THE INDIVIDUAL LDD OR LWB SERIES DESIGN IN THE UL FIRE RESISTANCE DIRECTORY. MAX. DIA. OF OPENING IS 12" FOR STEEL STUD WALLS. MAX. DIA. OF OPENING IS 12" FOR WOOD STUD WALLS. THE HOURLY FIRE RATING OF THE PRESTOP SYSTEM IS EQUAL TO THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED.

2. THROUGH PENETRANT: ONE METALLIC PIPE, CONDUIT OR TUBING TO BE INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE PRESTOP SYSTEM. THE ANNULAR SPACE BETWEEN PIPE, CONDUIT OR TUBING AND THE PERIPHERY OF THE OPENING SHALL BE MIN. 1/2" (POINT CONTACT) TO MAX. 3/4" PIPE, CONDUIT OR TUBING TO BE SUPPORTED ON BOTH SIDERS OF WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES, CONDUITS OR TUBING MAY BE USED:

- A. STEEL PIPE:** NOM. 1/2" DIA. OR SMALLER, SCHEDULE 40 OR HEAVIER STEEL PIPE.
- B. SOLUBLE:** NOM. 1/2" DIA. OR SMALLER, CASI OR DUCTILE IRON PIPE.
- C. CONDUIT:** NOM. 1/2" DIA. OR SMALLER, STEEL ELECTRICAL METALLIC TUBING, NOM. 1/2" DIA. OR SMALLER, STEEL CONDUIT OR NOM. 1/2" DIA. OR SMALLER, FIBERGLASS STEEL CONDUIT.
- D. COPPER TUBING:** NOM. 1/2" DIA. OR SMALLER, TYPE L OR HEAVIER COPPER TUBING.
- E. COPPER PIPE:** NOM. 1/2" DIA. OR SMALLER, REGULAR OR HEAVY COPPER PIPE.

3. FILL VOID OR CAVITY MATERIAL: SEALANT, MIN. 3/8" THICKNESS OF FILL MATERIAL APPLIED WITHIN ANNULUS, FLUSH WITH BOTH SURFACES OF WALL AT THE POINT CONTACT LOCATION BETWEEN PENETRANT AND GYPSUM WALLBOARD. A MIN. 3/8" DIA. BEAD OF FILL MATERIAL SHALL BE APPLIED AT THE GYPSUM WALLBOARD THROUGH PENETRANT INTERFACE ON BOTH SURFACES OF WALL. SPECIFIED TECHNOLOGIES INC., SPECIESAL 100, 101, 102 OR 105 SEALANT.

*BEARING THE UL CLASSIFICATION MARKING.



1. WALL ASSEMBLY: THE 1 OR 2 HOUR FIRE RATED GYPSUM WALLBOARD / STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL LDD OR LWB SERIES WALL OR PARTITION DESIGN IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:

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B. WALLBOARD: GYPSUM, 5/8" THICK 4" WIDE WITH SQUARE OR TAPERED EDGES. THE GYPSUM WALLBOARD TYPE, THICKNESS, NUMBER OF LAYERS, FASTENER TYPE AND SHEET SPACING SHALL BE AS SPECIFIED IN THE INDIVIDUAL LDD OR LWB SERIES DESIGN IN THE UL FIRE RESISTANCE DIRECTORY. MAX. DIA. OF OPENING IS 12" FOR STEEL STUD WALLS. MAX. DIA. OF OPENING IS 12" FOR WOOD STUD WALLS. THE HOURLY FIRE RATING OF THE PRESTOP SYSTEM IS EQUAL TO THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED.

2. THROUGH PENETRANT: ONE METALLIC PIPE, CONDUIT OR TUBING TO BE INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE PRESTOP SYSTEM. THE ANNULAR SPACE BETWEEN PIPE, CONDUIT OR TUBING AND THE PERIPHERY OF THE OPENING SHALL BE MIN. 1/2" (POINT CONTACT) TO MAX. 3/4" PIPE, CONDUIT OR TUBING TO BE SUPPORTED ON BOTH SIDERS OF WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES, CONDUITS OR TUBING MAY BE USED:

A. STEEL PIPE: NOM. 1/2" DIA. OR SMALLER, SCHEDULE 40 OR HEAVIER STEEL PIPE.

B. SOLUBLE: NOM. 1/2" DIA. OR SMALLER, CASI OR DUCTILE IRON PIPE.

C. CONDUIT: NOM. 1/2" DIA. OR SMALLER, STEEL ELECTRICAL METALLIC TUBING, NOM. 1/2" DIA. OR SMALLER, STEEL CONDUIT OR NOM. 1/2" DIA. OR SMALLER, FIBERGLASS STEEL CONDUIT.

D. COPPER TUBING: NOM. 1/2" DIA. OR SMALLER, TYPE L OR HEAVY COPPER TUBING.

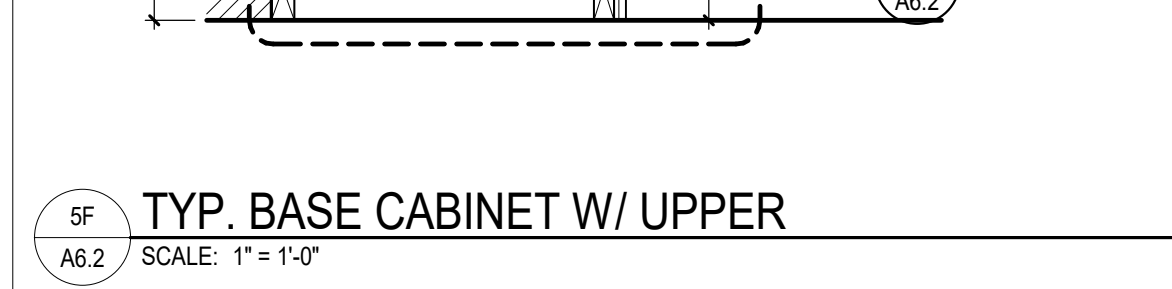
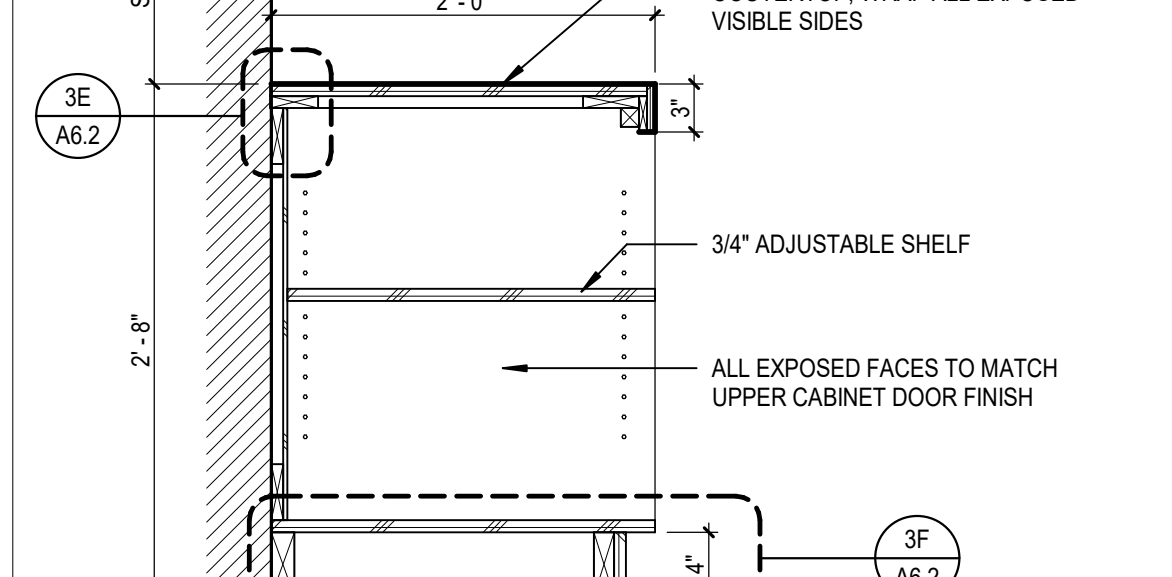
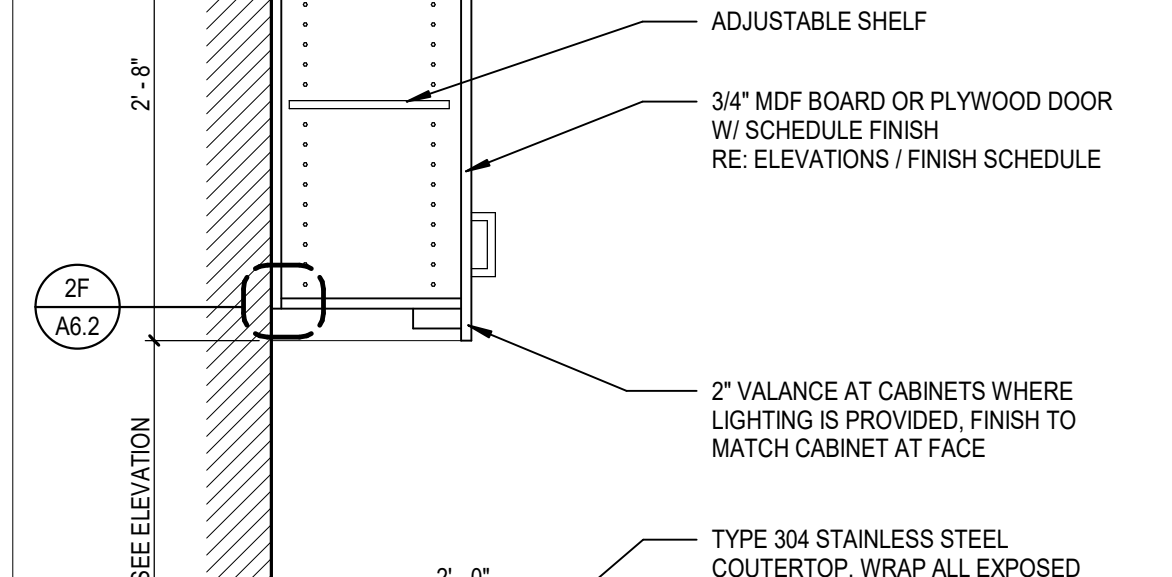
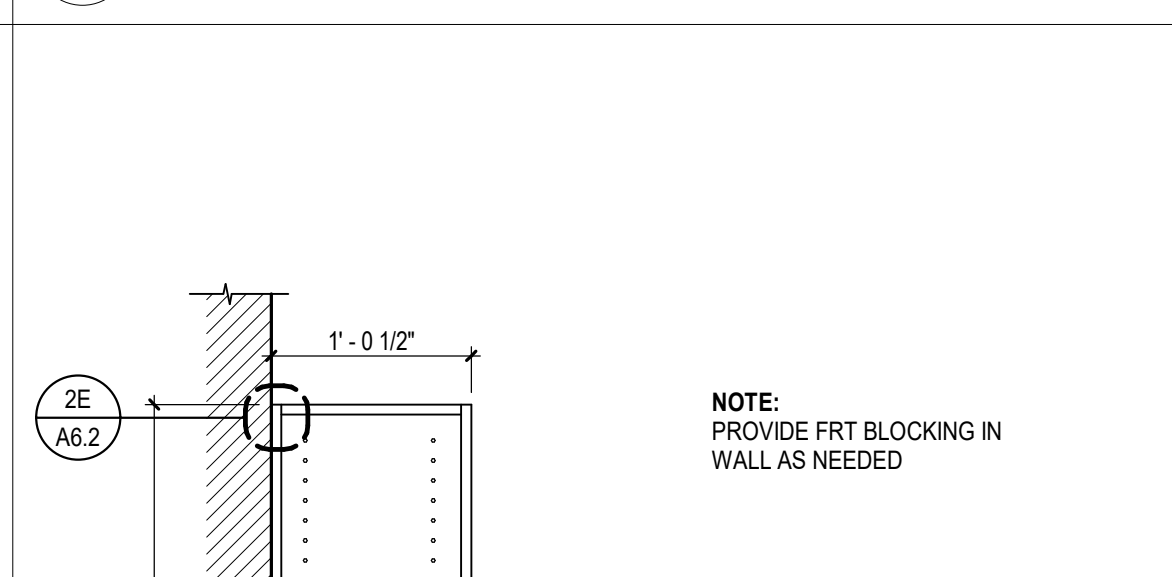
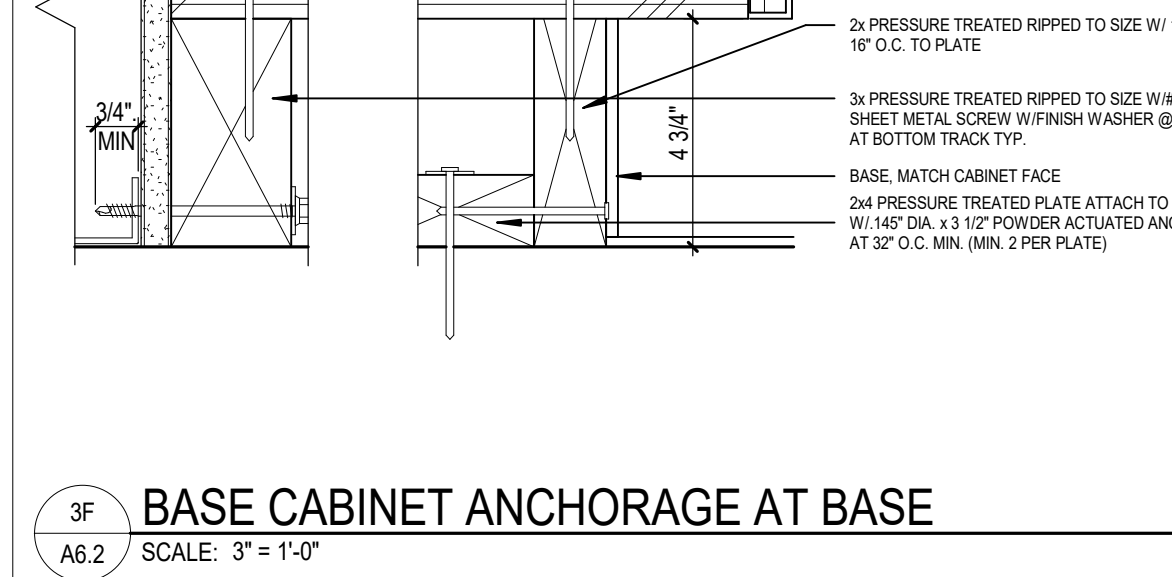
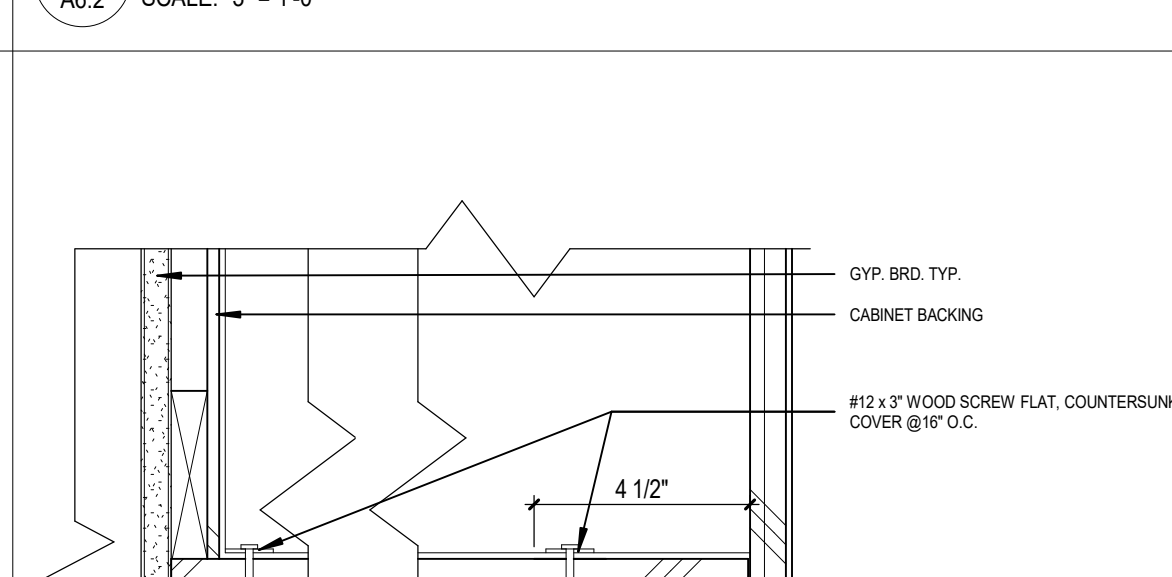
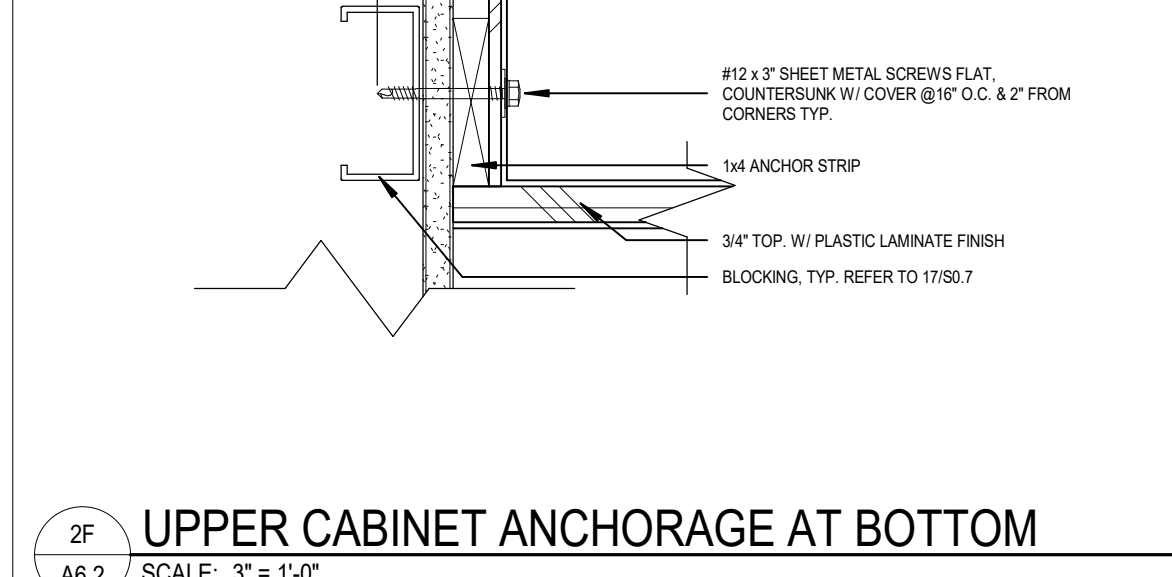
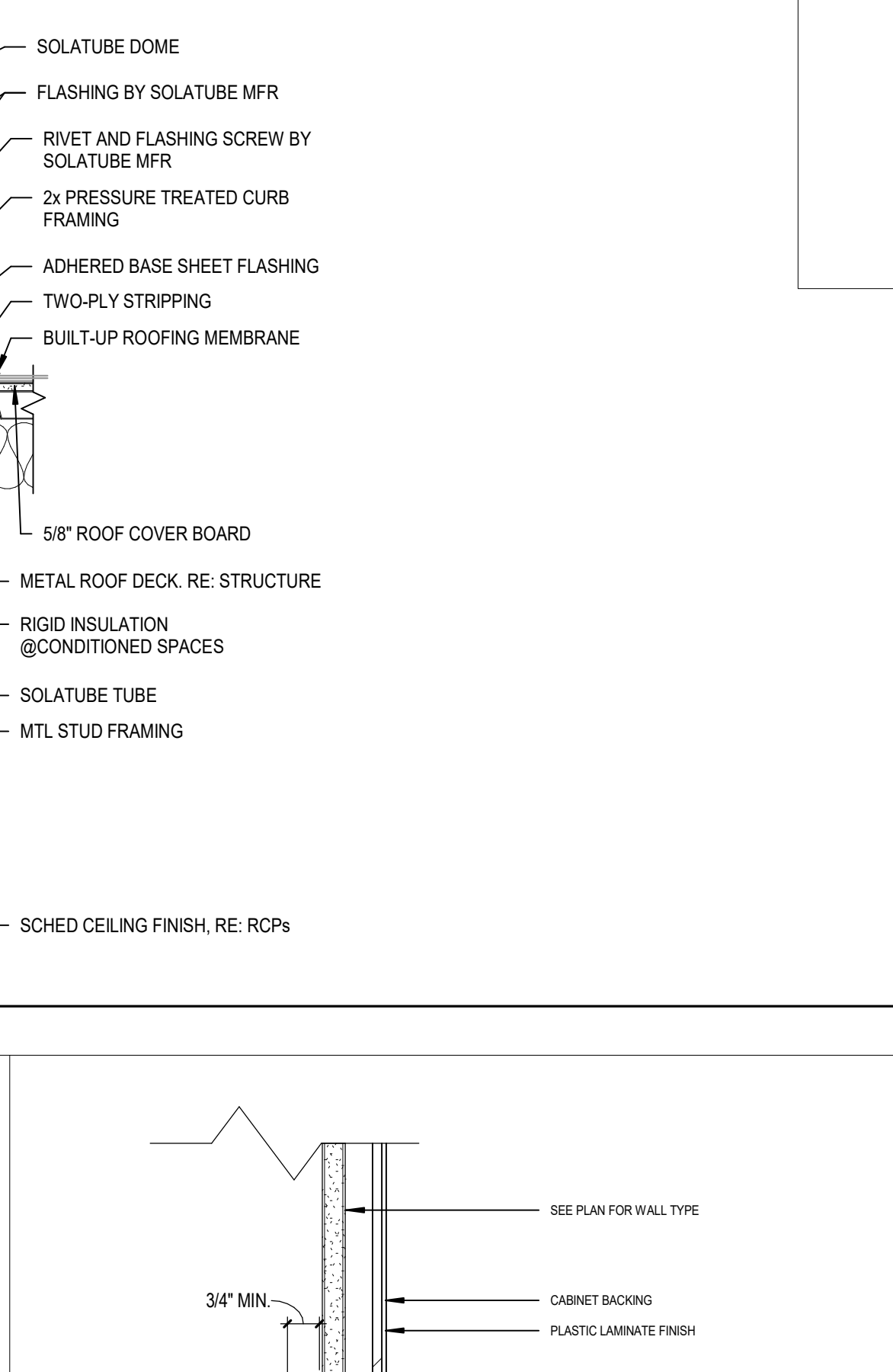
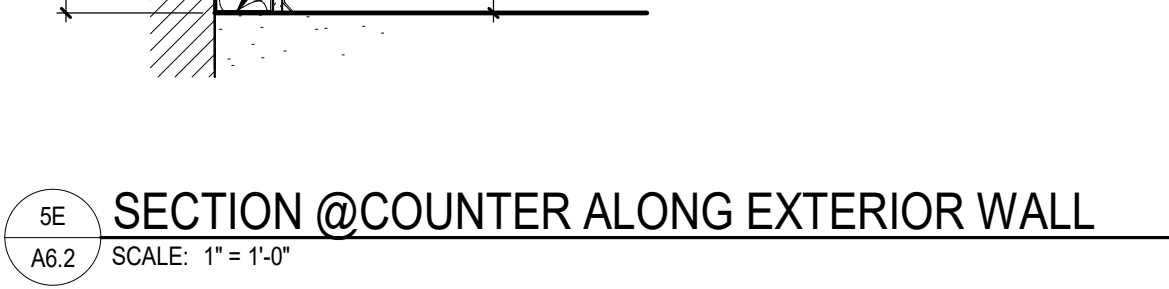
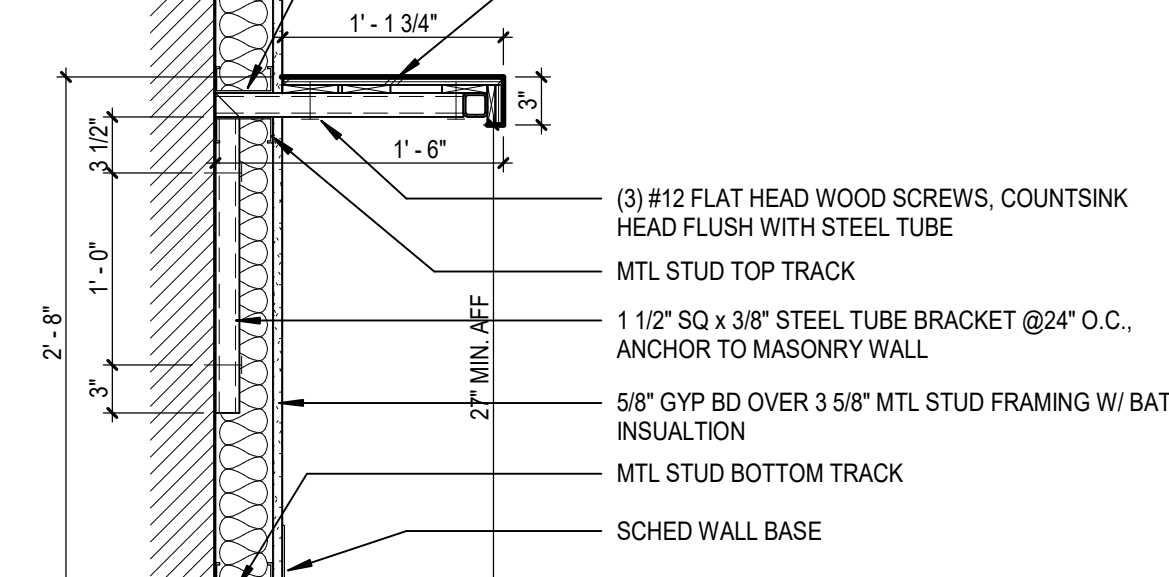
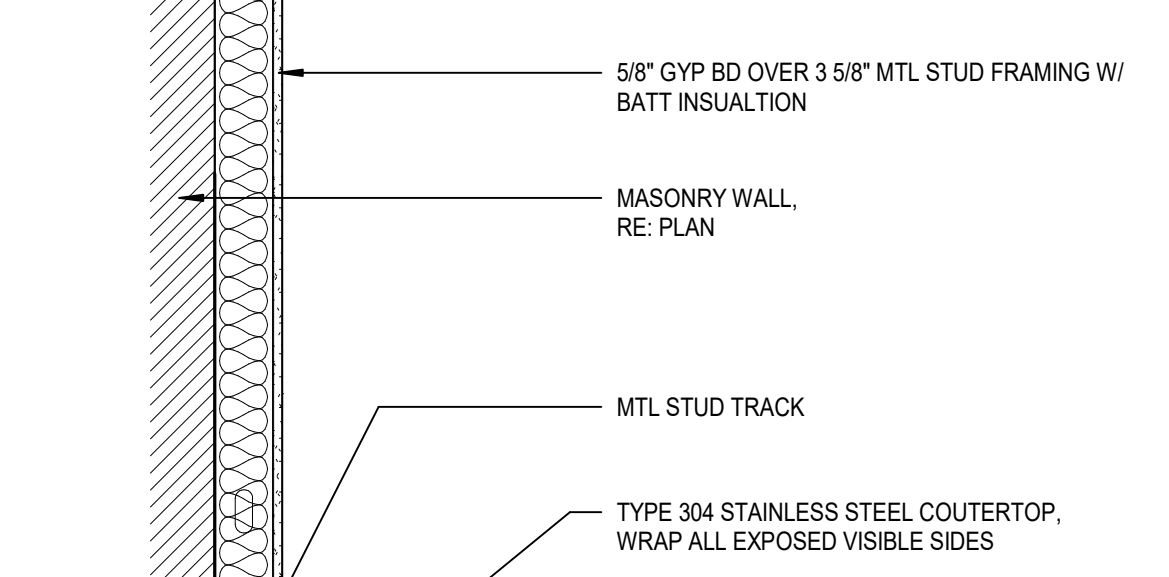
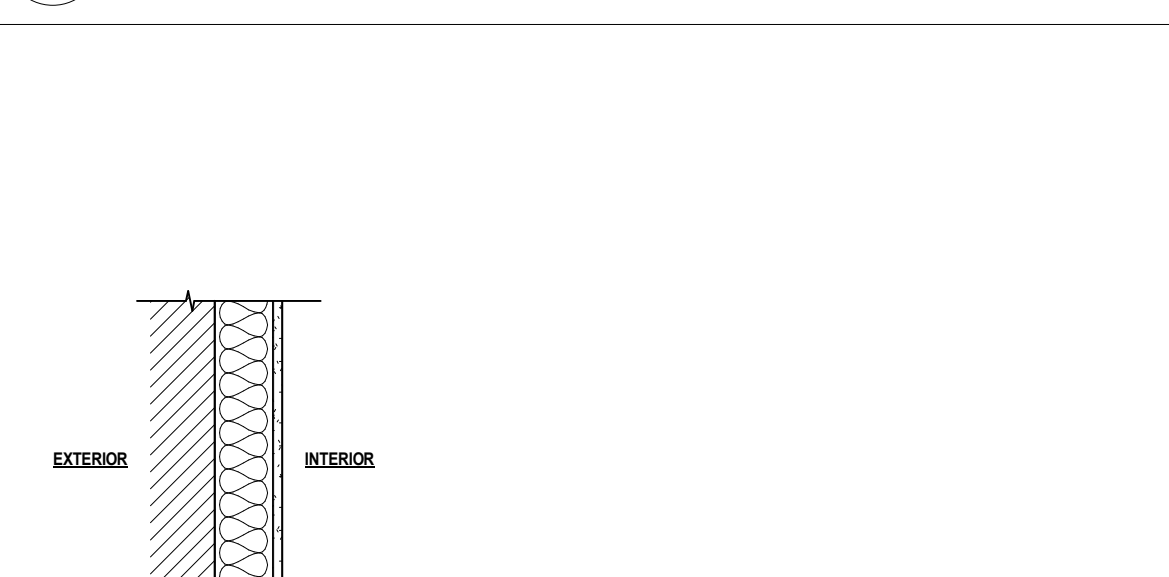
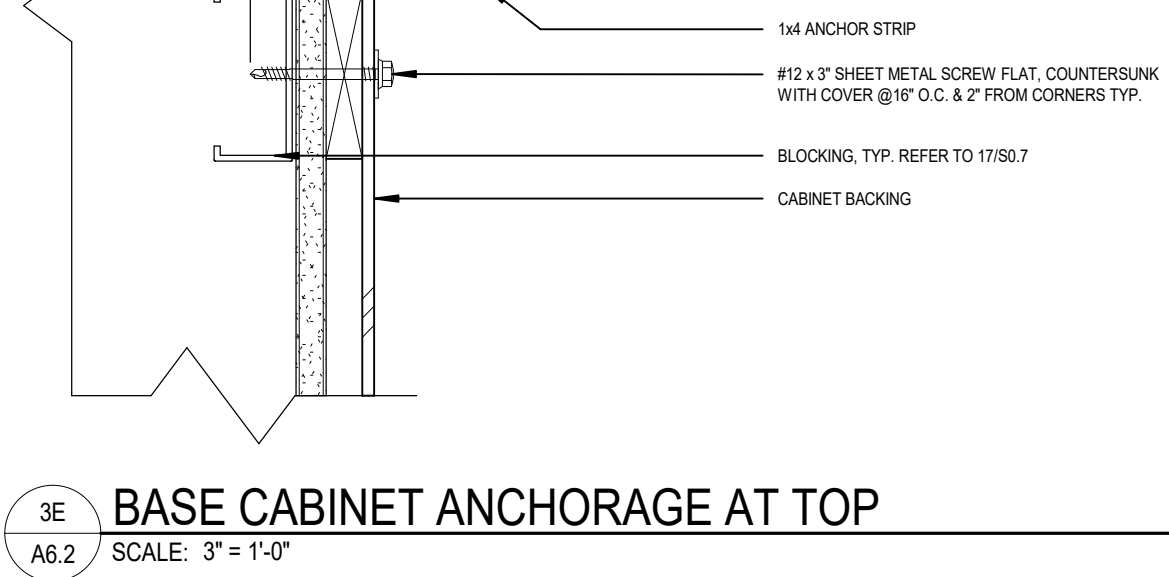
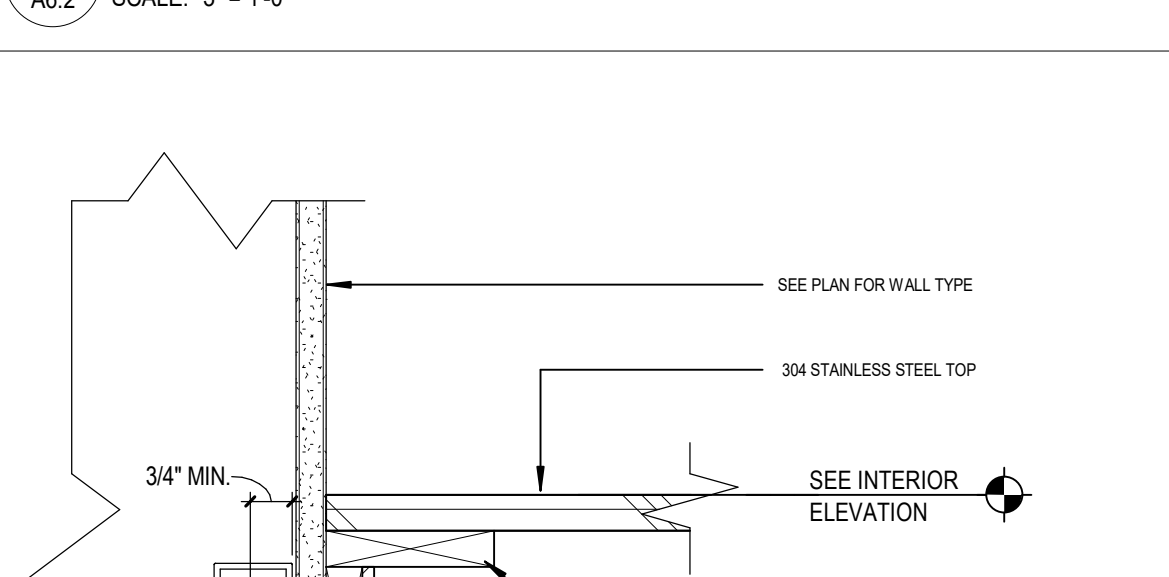
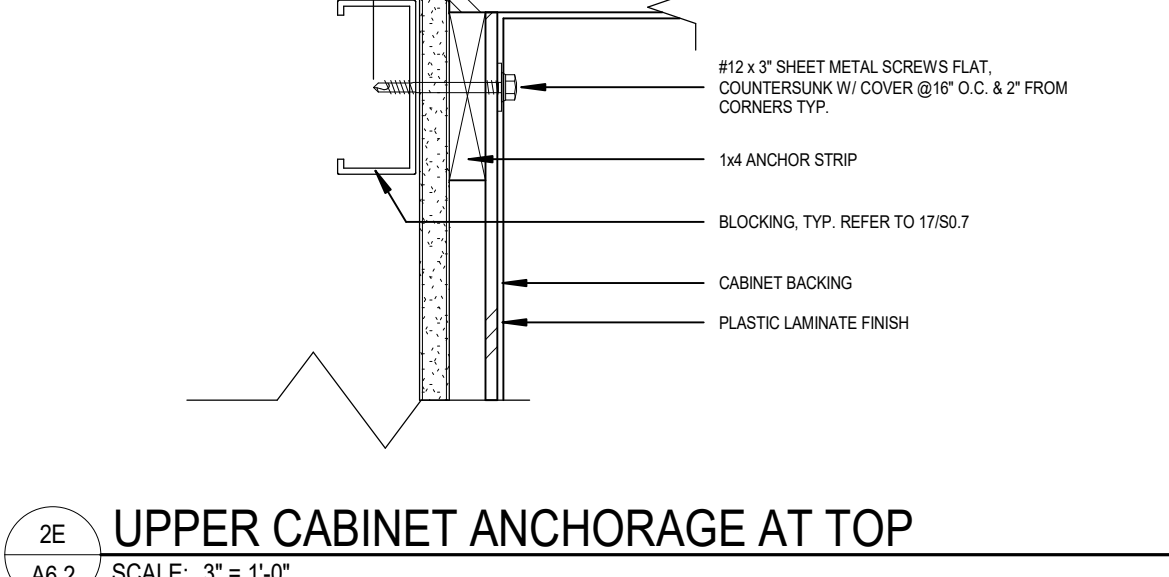
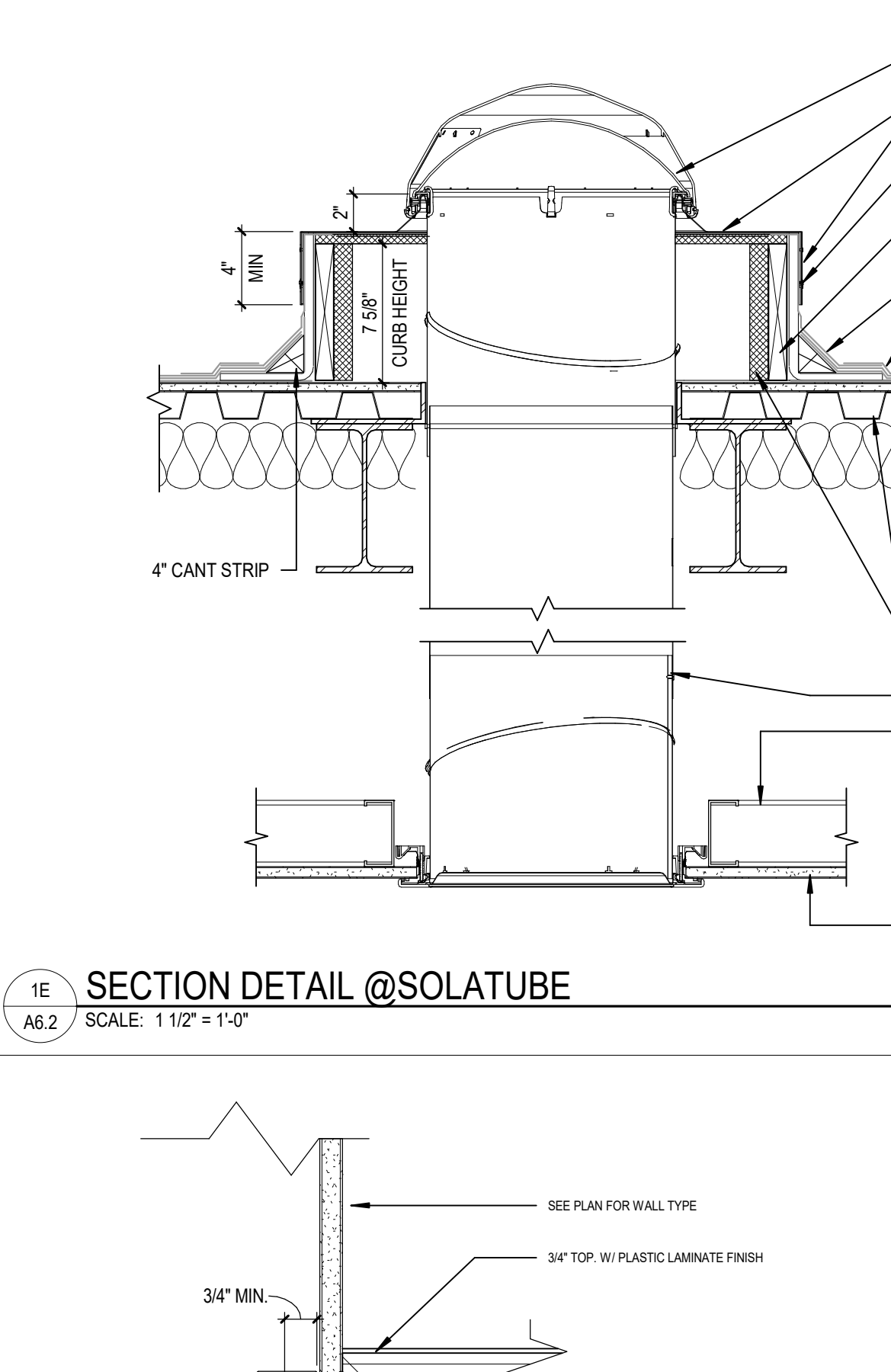
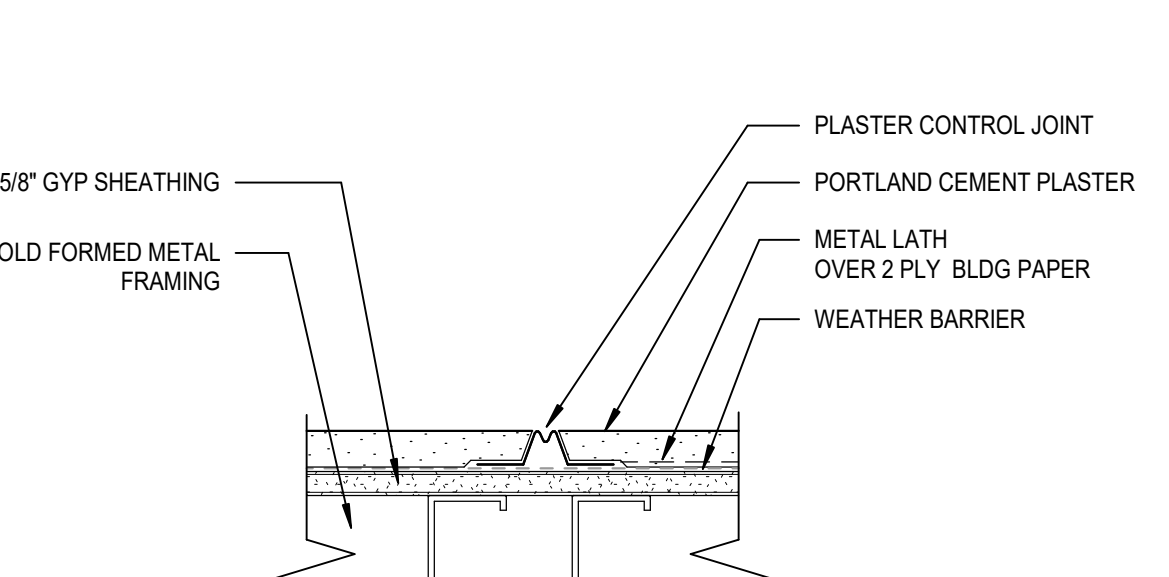
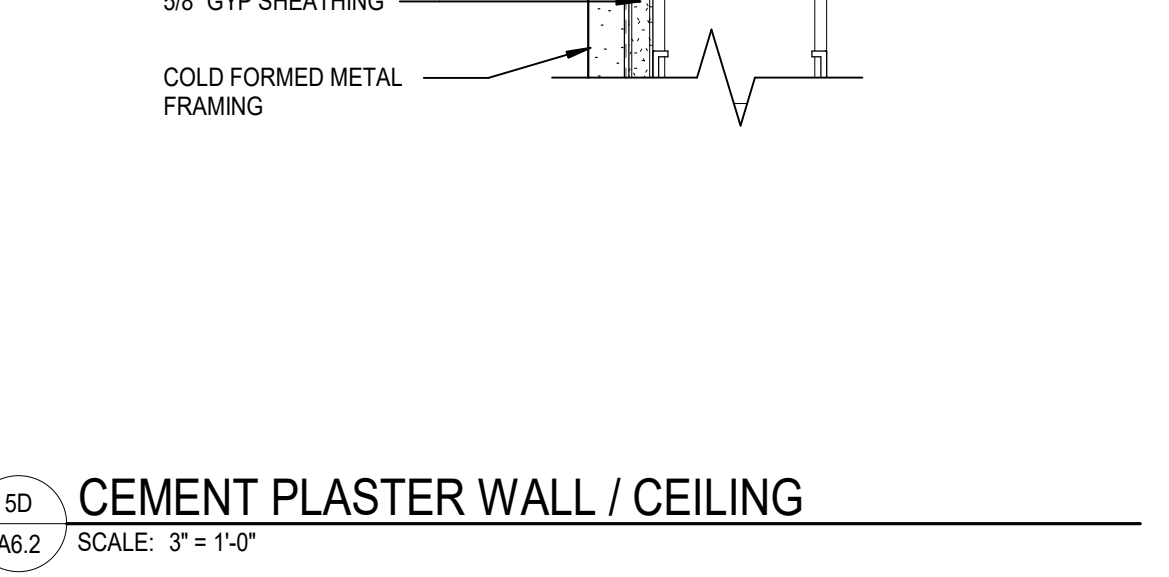
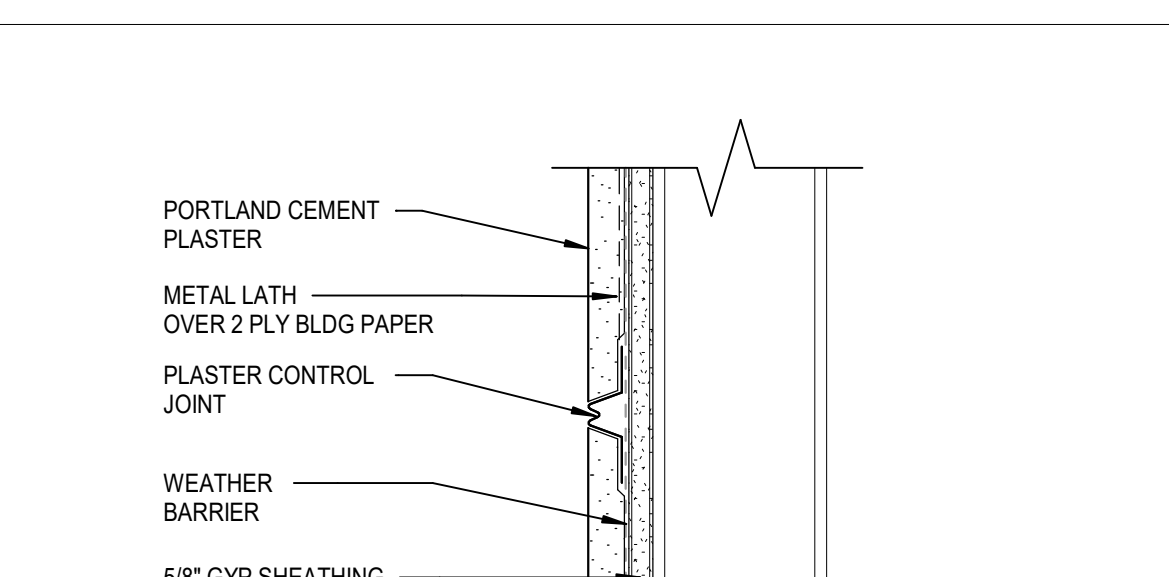
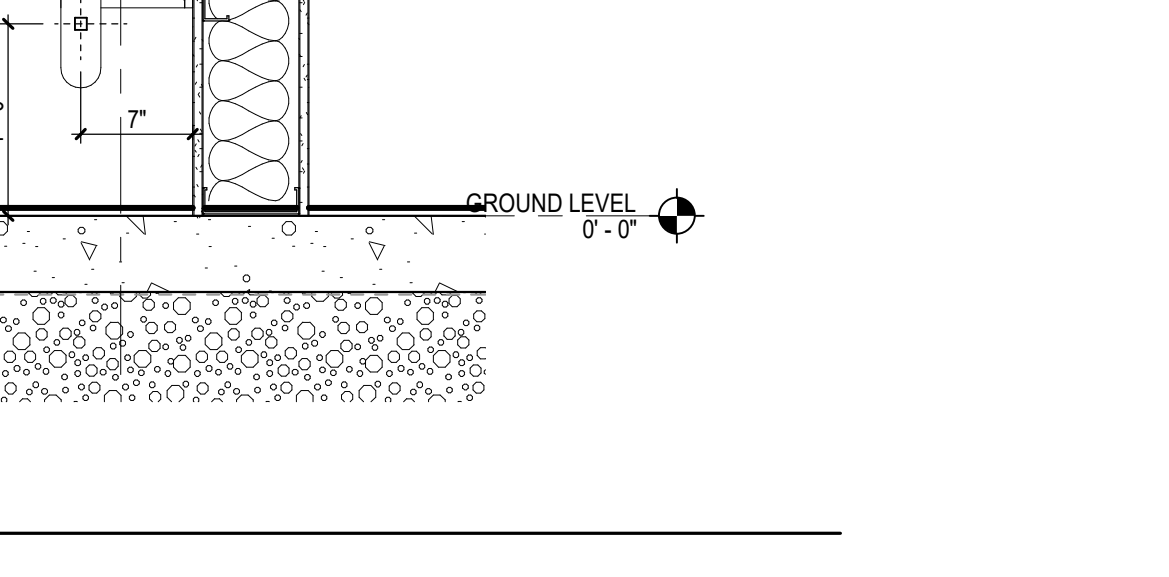
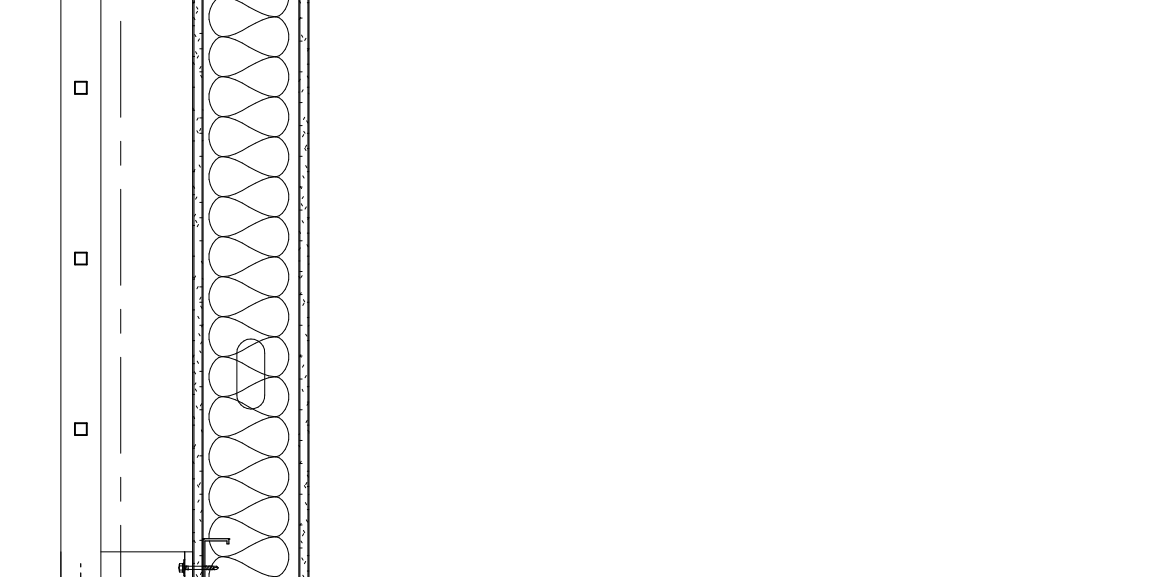
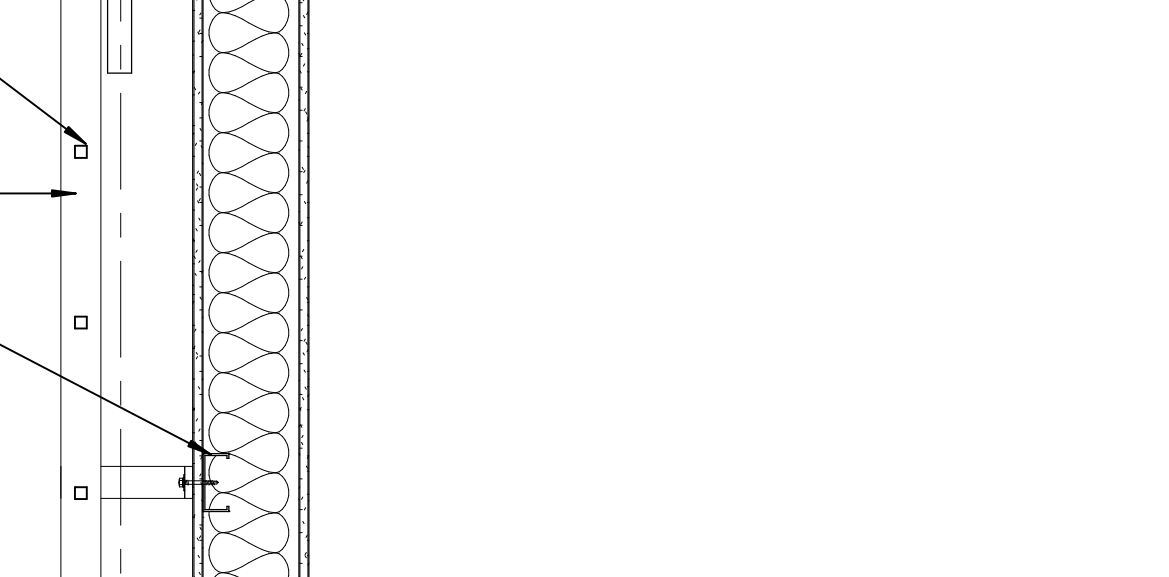
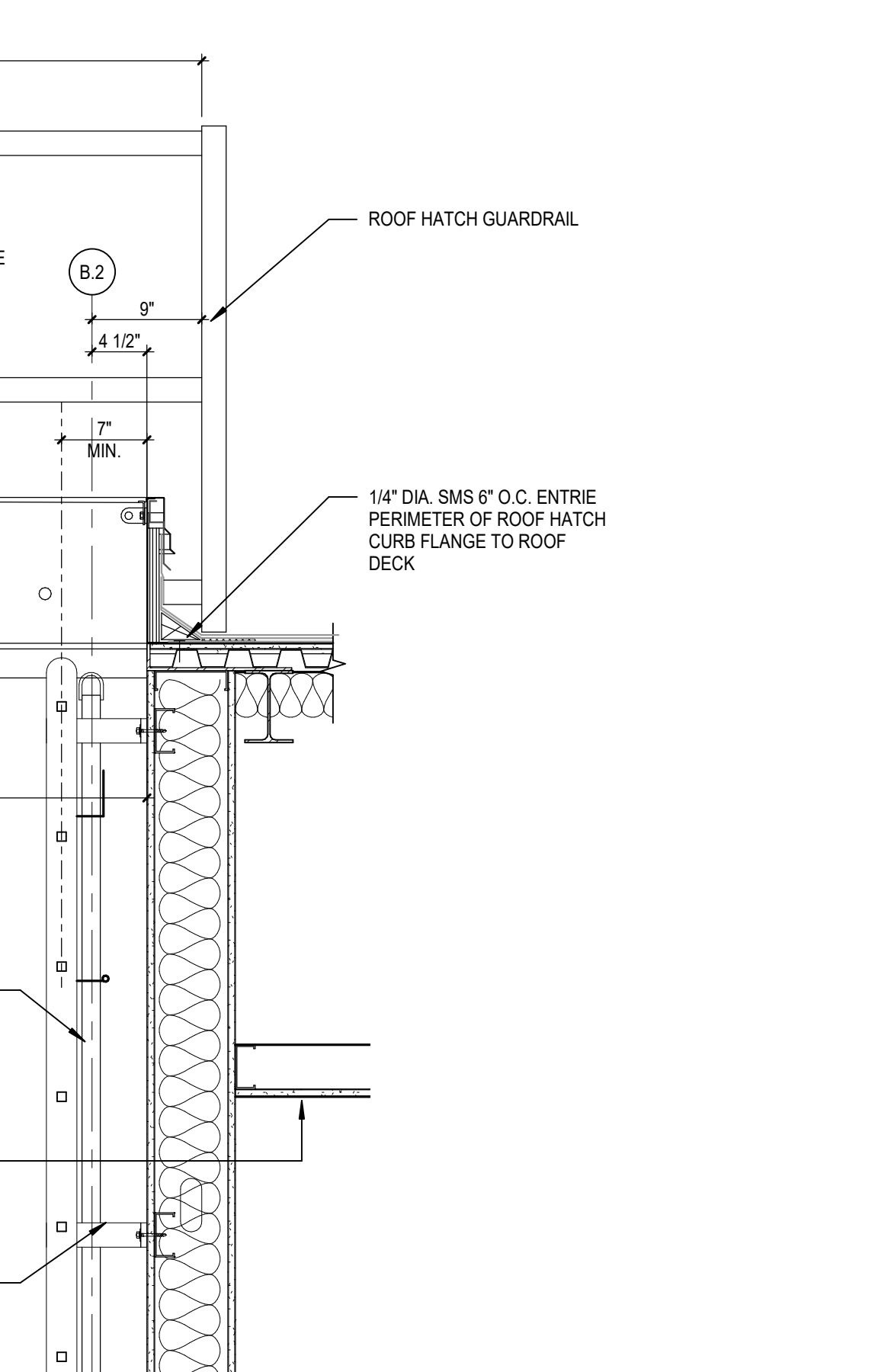
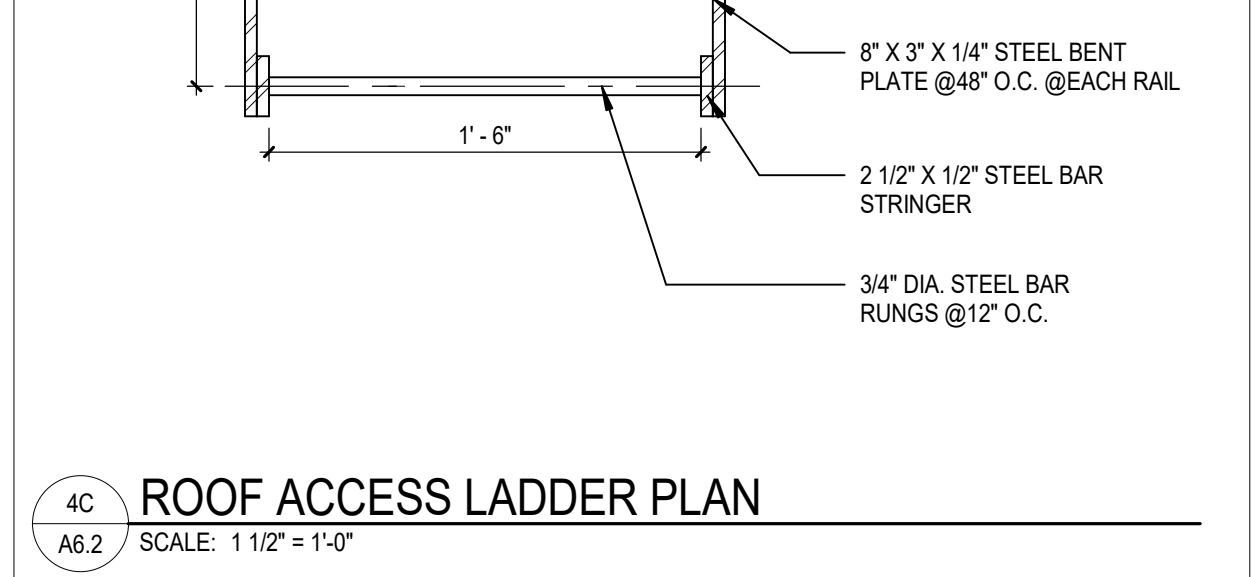
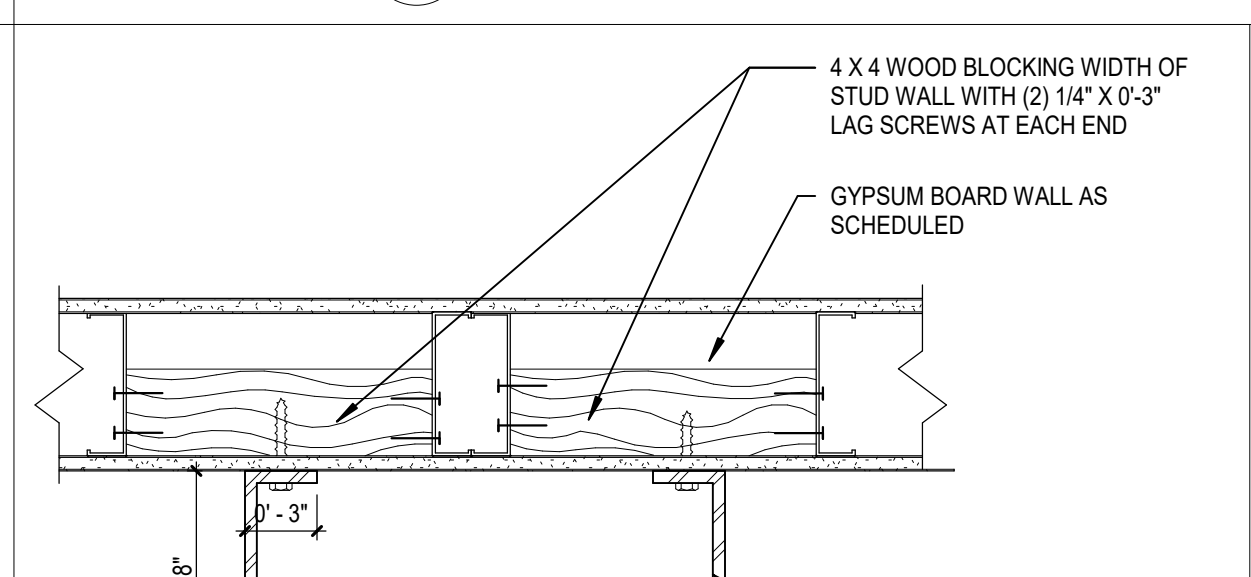
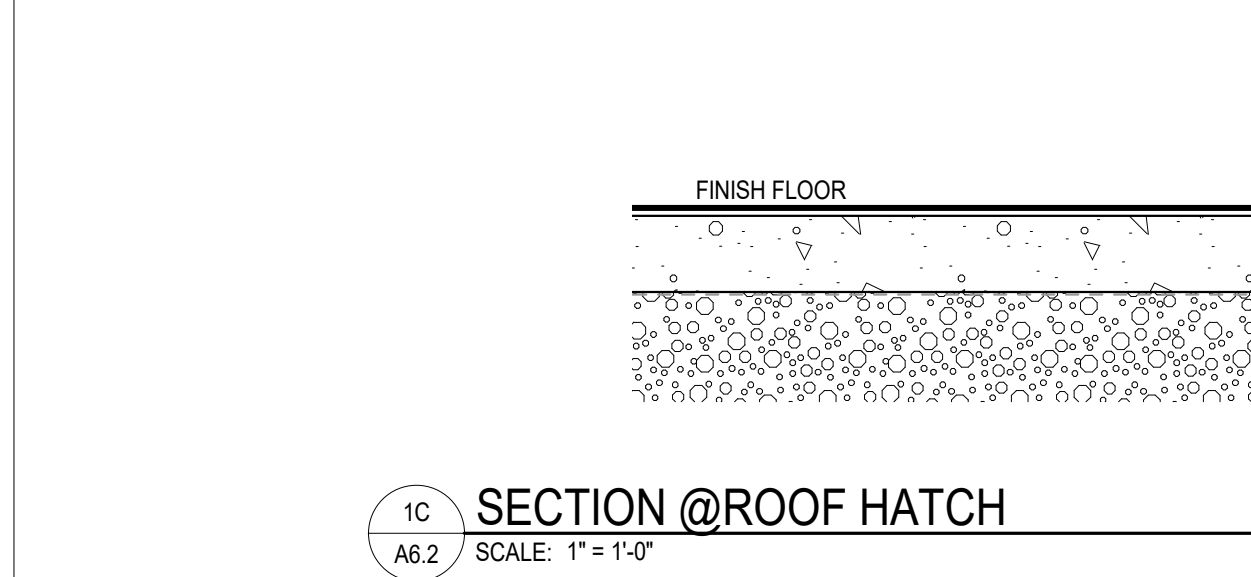
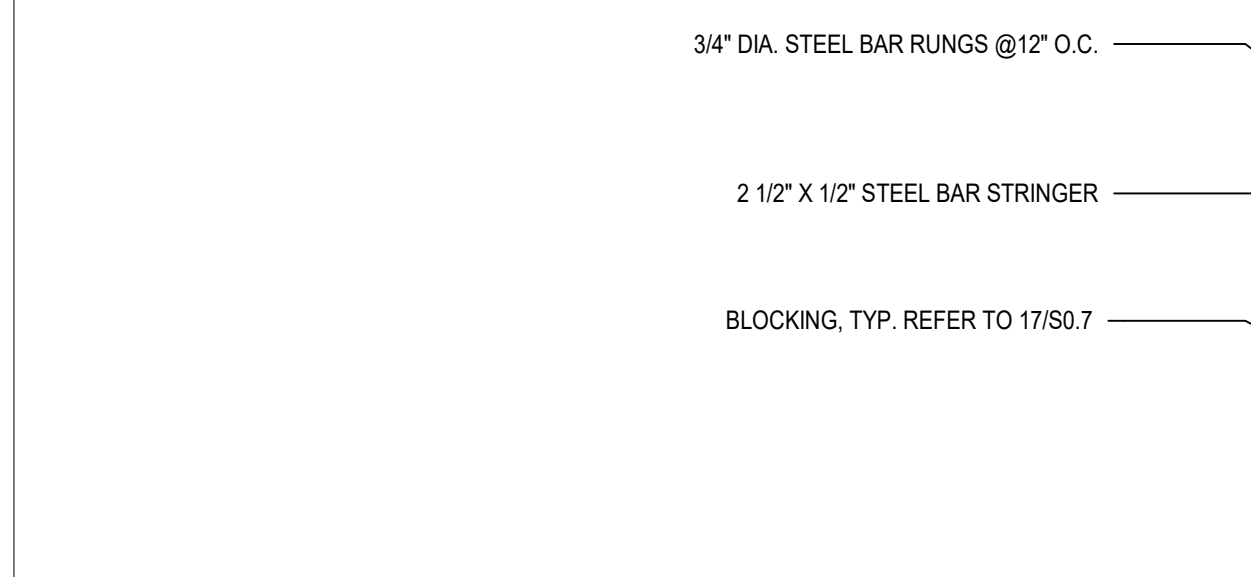
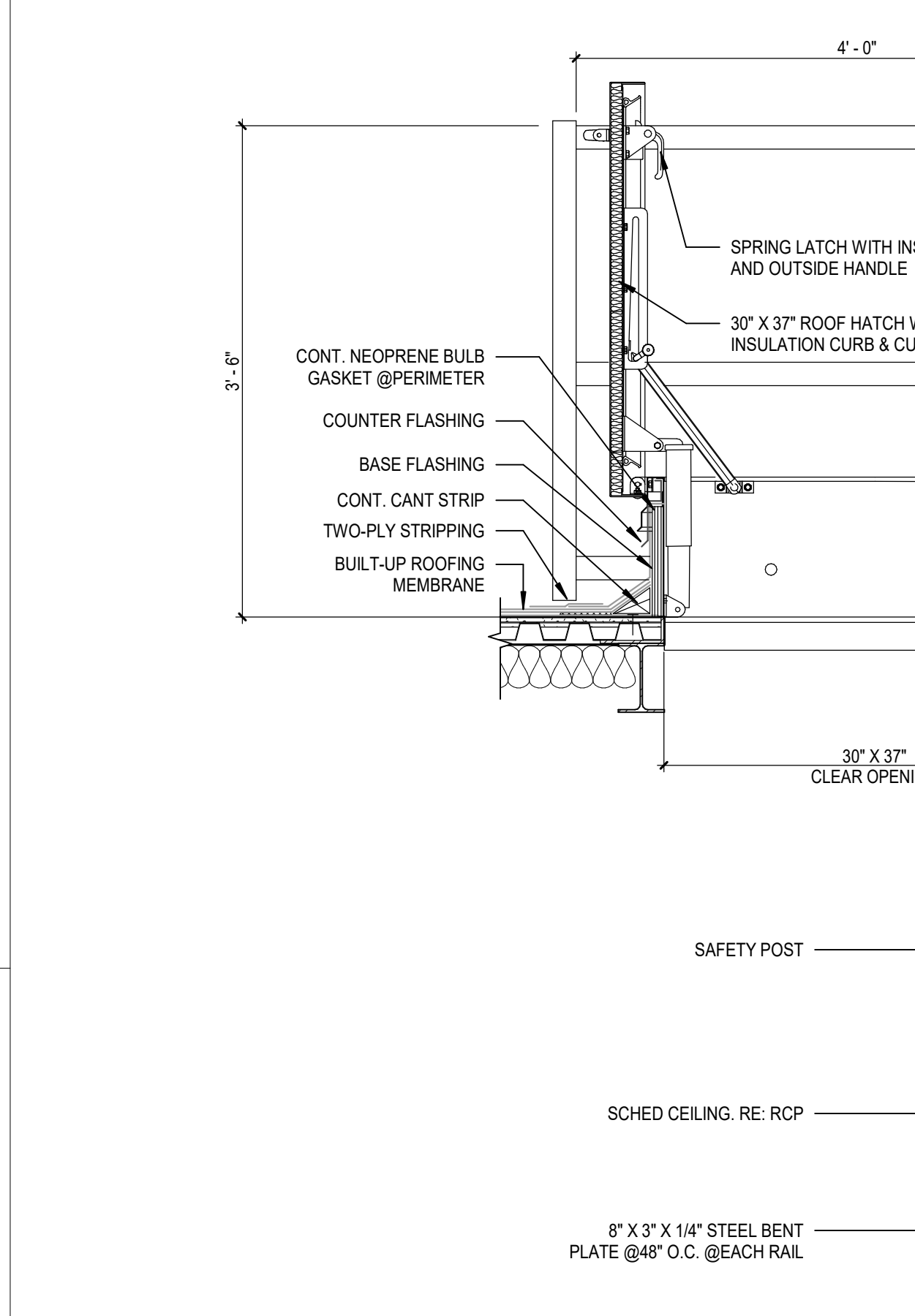
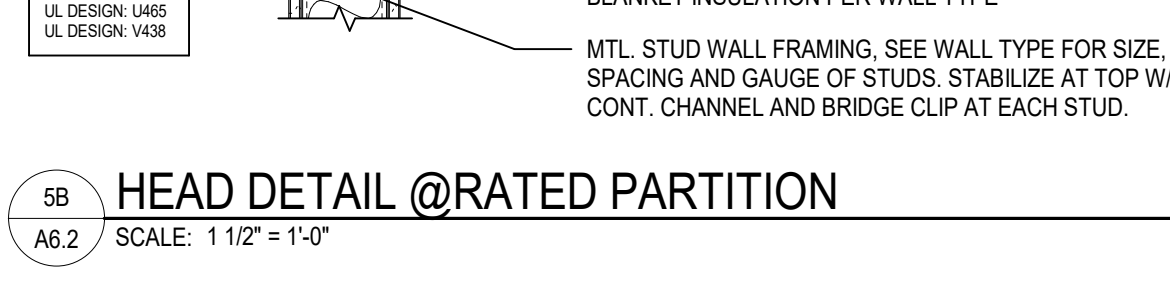
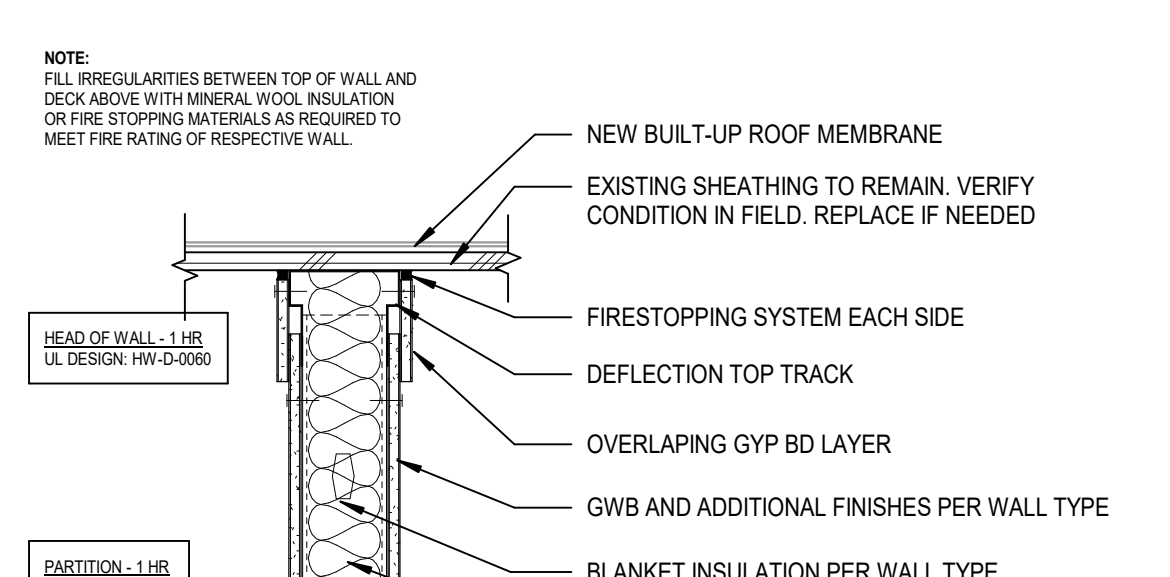
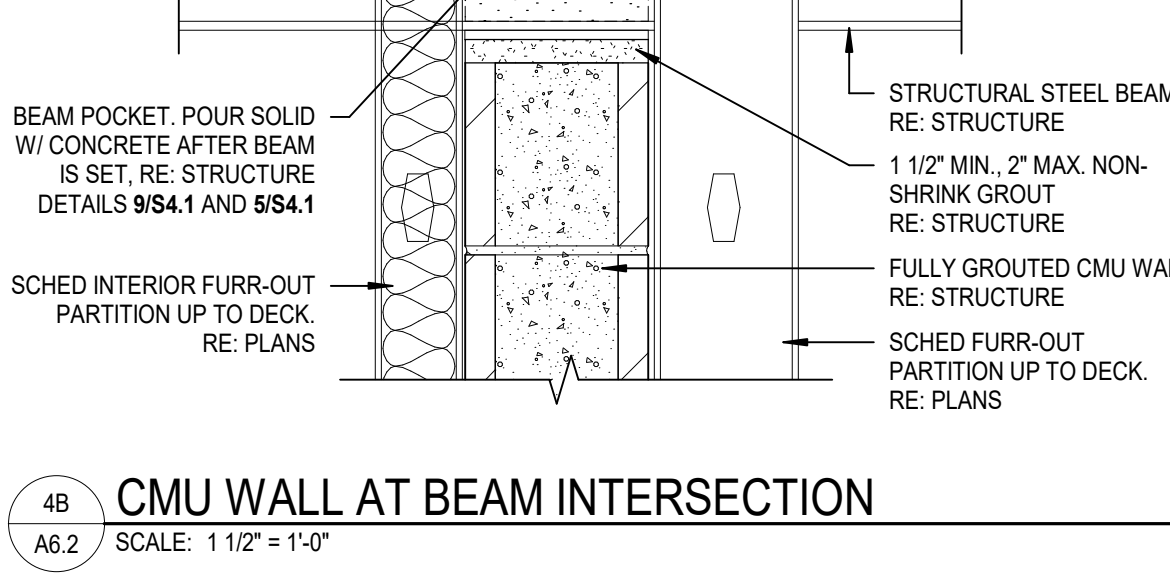
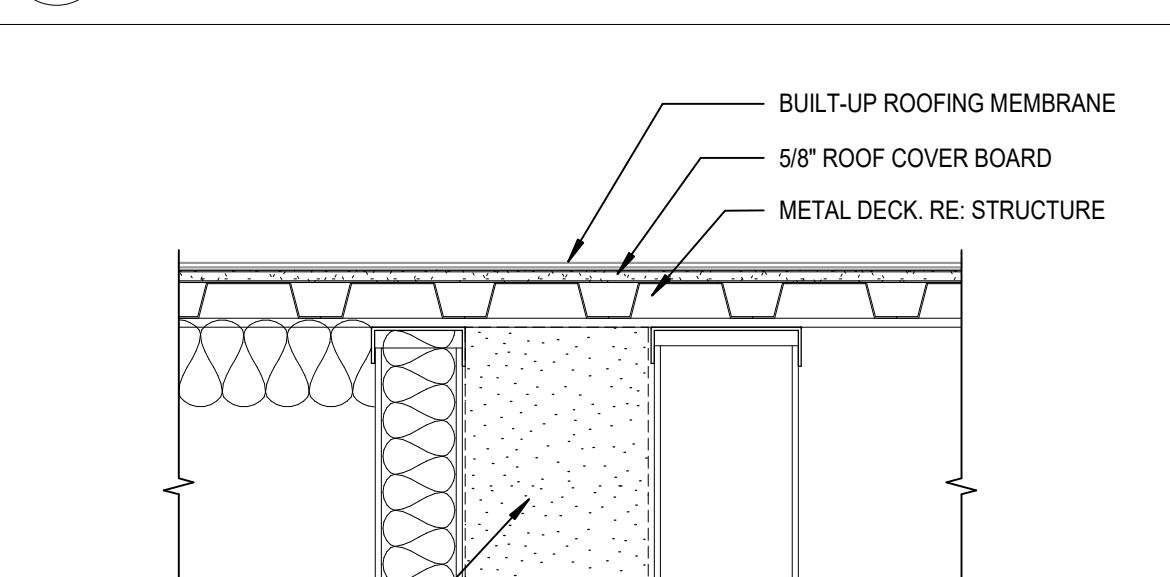
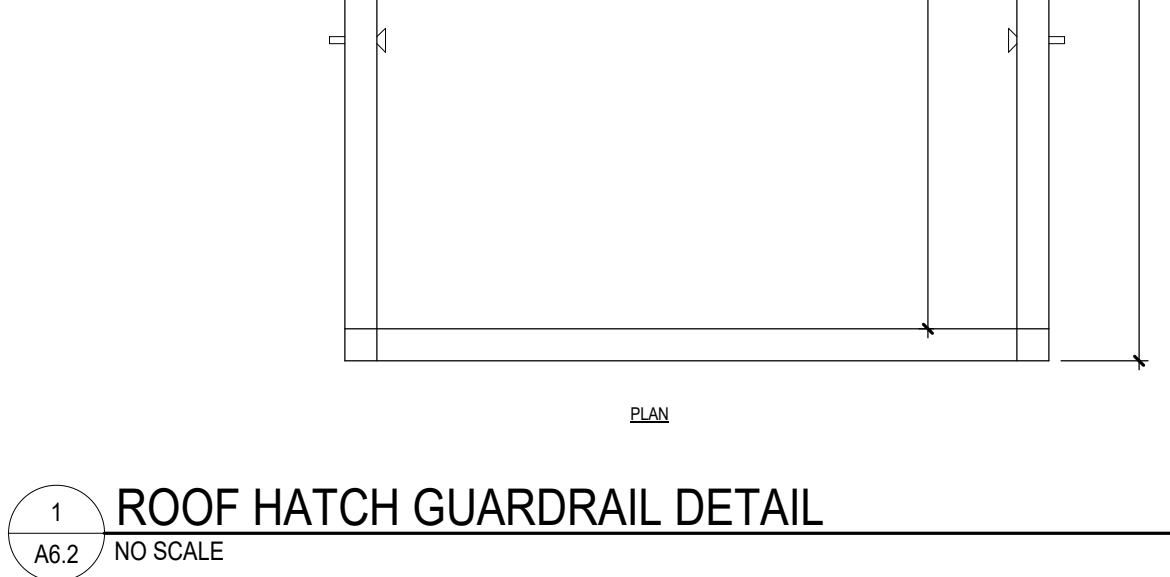
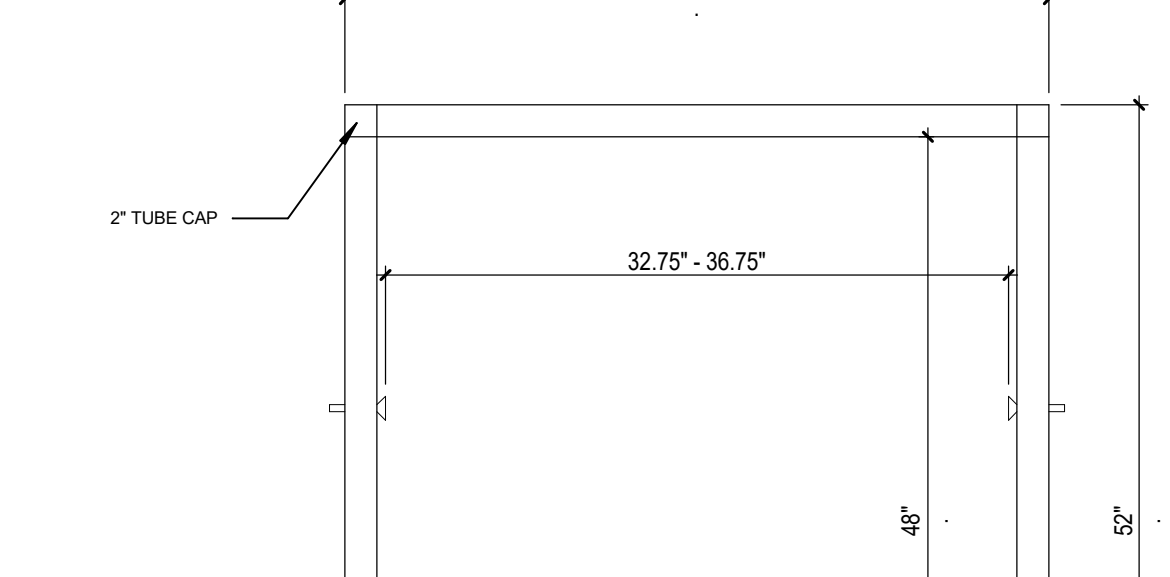
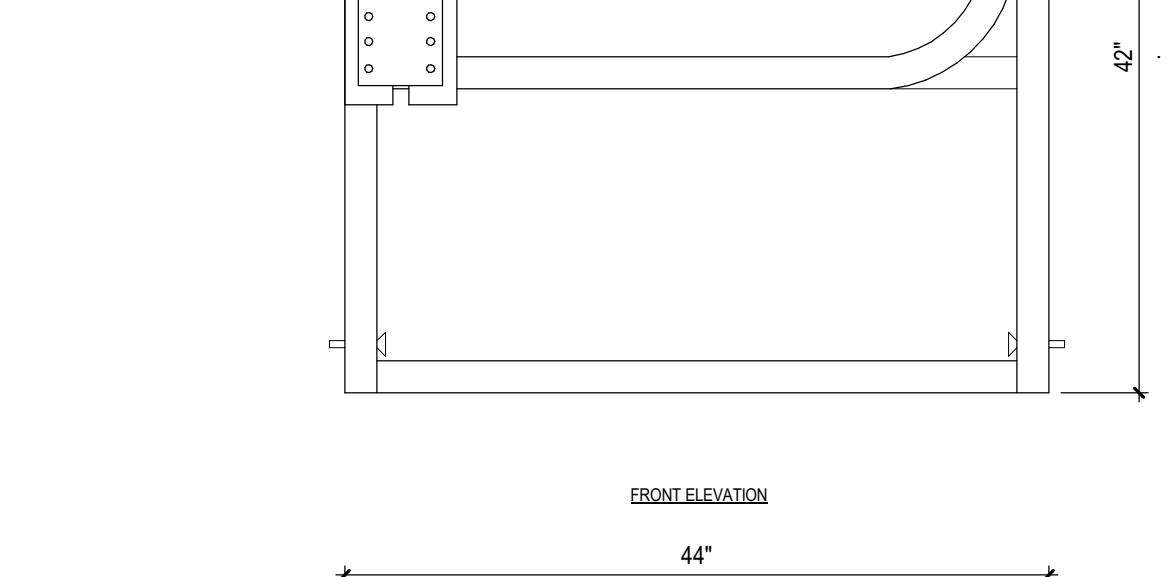
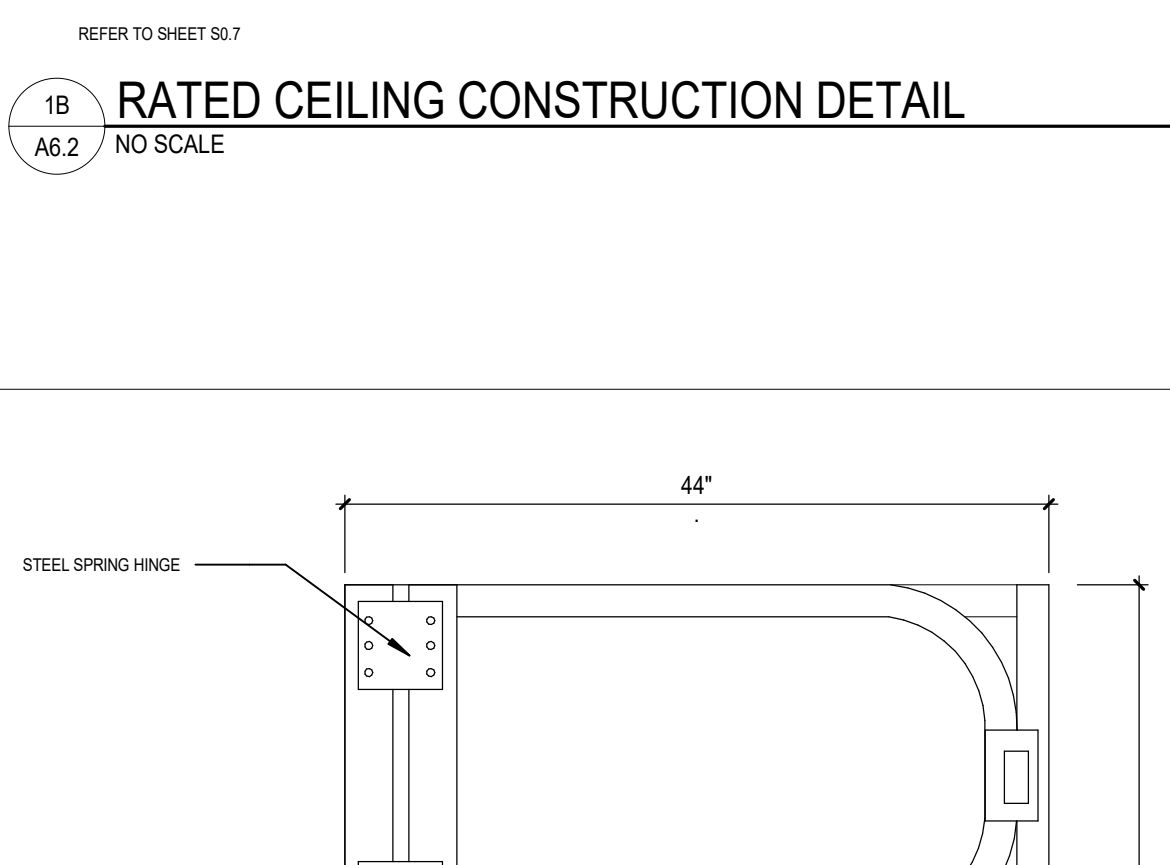
E. COPPER PIPE: NOM. 1/2" DIA. OR SMALLER, REGULAR OR HEAVY COPPER PIPE.

3. FILL VOID OR CAVITY MATERIAL: SEALANT, MIN. 3/8" THICKNESS OF FILL MATERIAL APPLIED WITHIN ANNULUS, FLUSH WITH BOTH SURFACES OF WALL AT THE POINT CONTACT LOCATION BETWEEN PENETRANT AND GYPSUM WALLBOARD. A MIN. 3/8" DIA. BEAD OF FILL MATERIAL SHALL BE APPLIED AT THE GYPSUM WALLBOARD THROUGH PENETRANT INTERFACE ON BOTH SURFACES OF WALL. SPECIFIED TECHNOLOGIES INC., SPECIESAL 100, 101, 102 OR 105 SEALANT.

*BEARING THE UL CLASSIFICATION MARKING.

STUD SIZE, GA	(1) LAYER 5/8" GWB	(2) LAYERS 5/8" GWB
2 1/2" 25 GA	8'-0"	7'-2"
2 1/2" 28 GA	10'-0"	9'-5"
4" 25 GA	10'-0"	9'-5"
4" 25 GA	14'-0"	14'-0"
6" 25 GA	22'-11"	19'-1"

REFER TO SHEET 50.7



DLR GROUP
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LICENSED ARCHITECT
JESSE MILLER
No. C-32306
10/11/2023
STATE OF CALIFORNIA

COVINA VALLEY HS POOL REPLACEMENT
COVINA VALLEY UNIFIED SCHOOL DISTRICT
463 SOUTH HOLLENBECK AVENUE COVINA, CA 91723

DSA SUBMITTAL SET_V2
04/28/2023 REVISIONS

75-22616-00
DSA # 03-122700
DSA FILE # 19-48

BUILDING DETAILS

A6.2

A

B

C

D

E

F

1

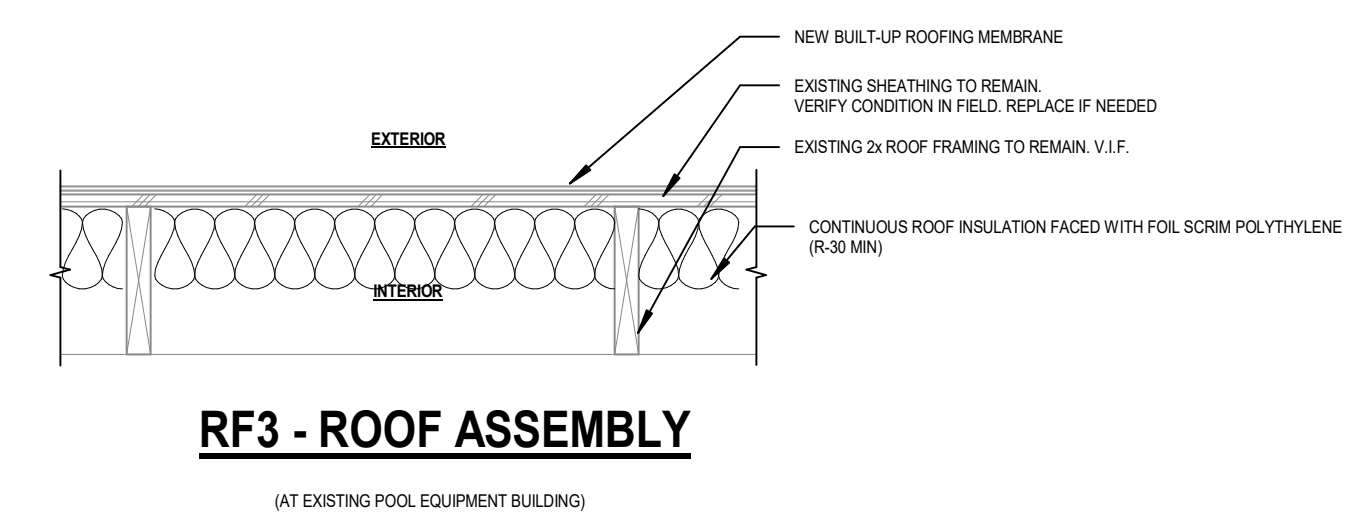
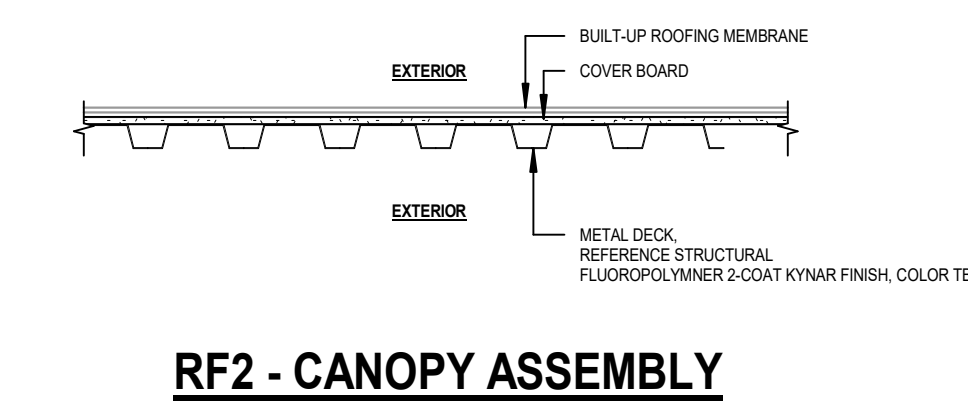
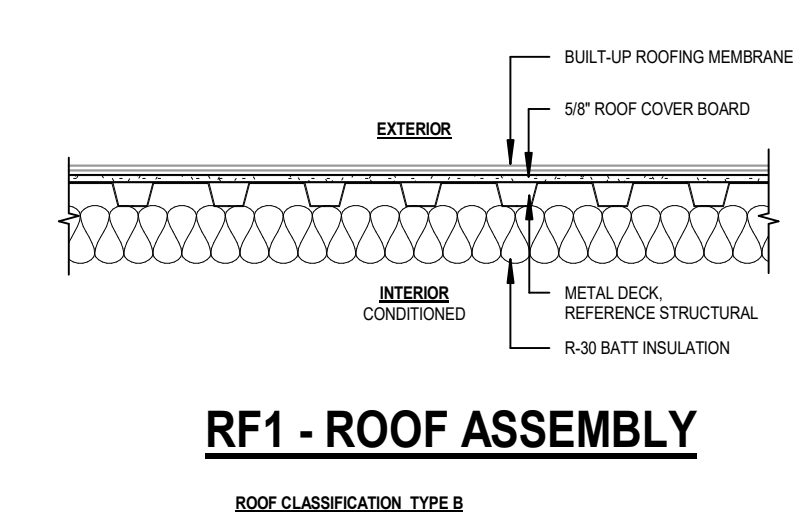
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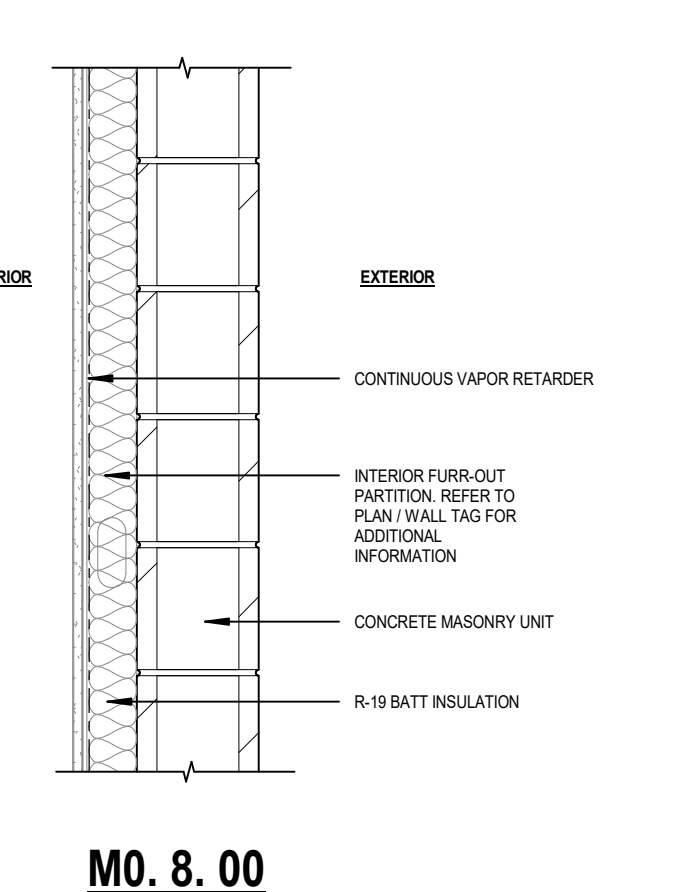
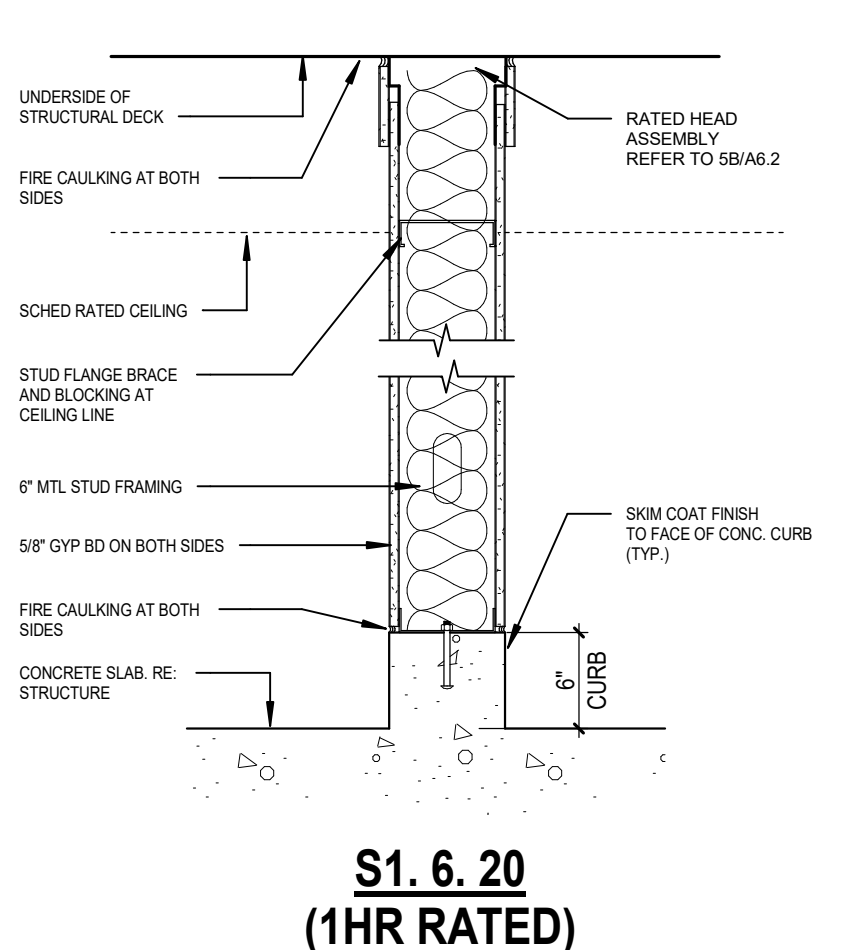
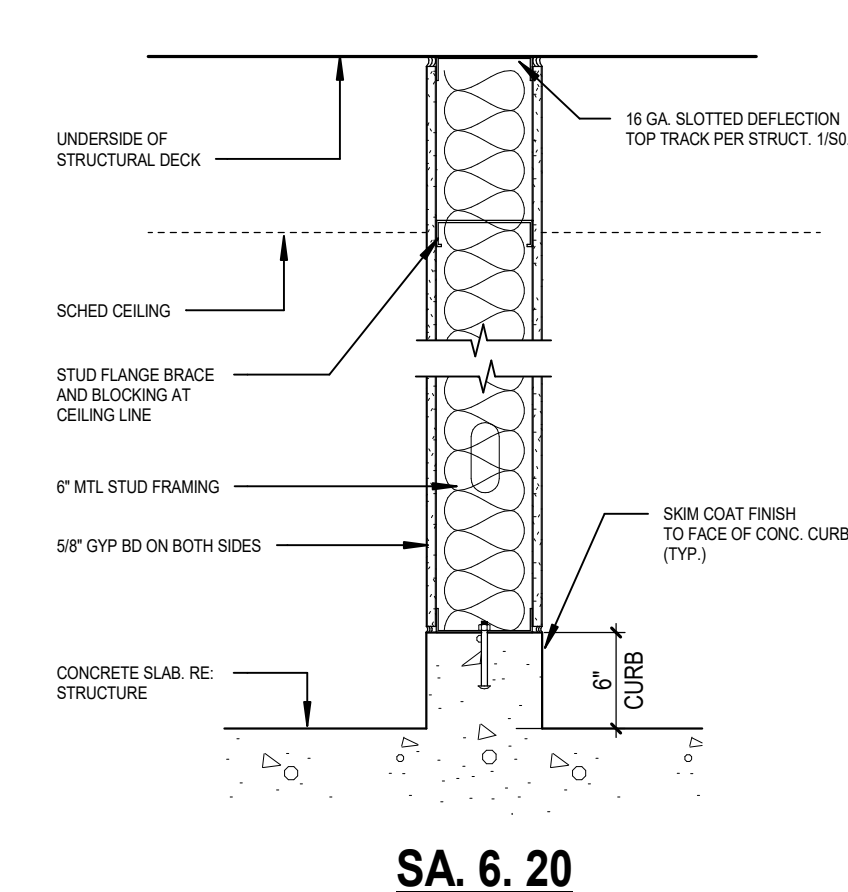
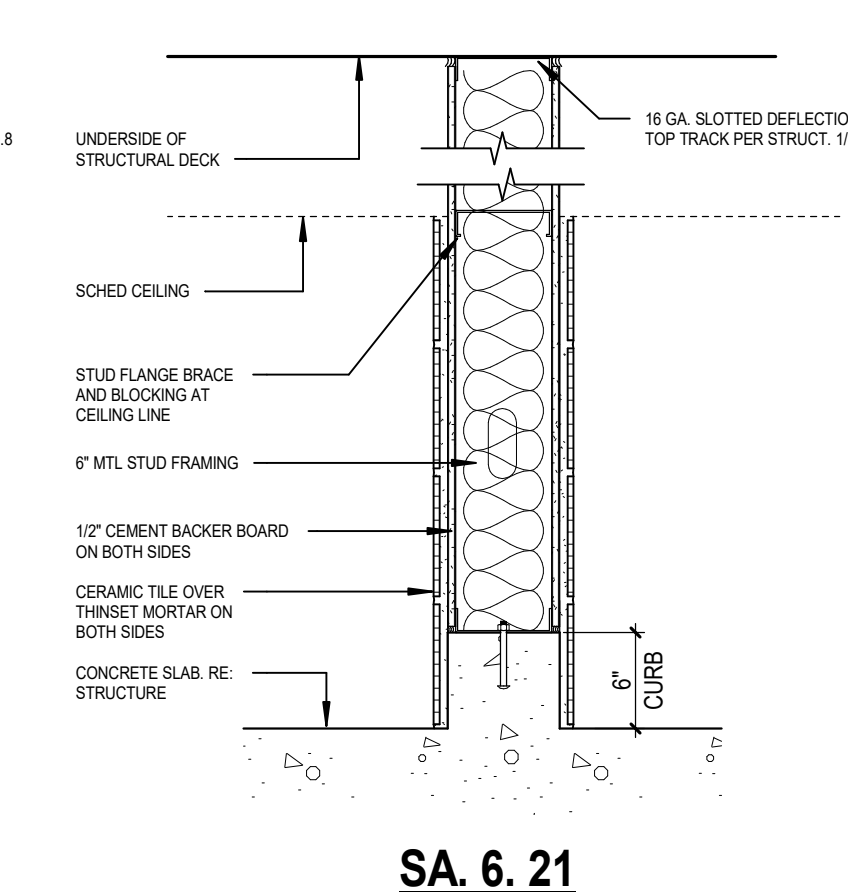
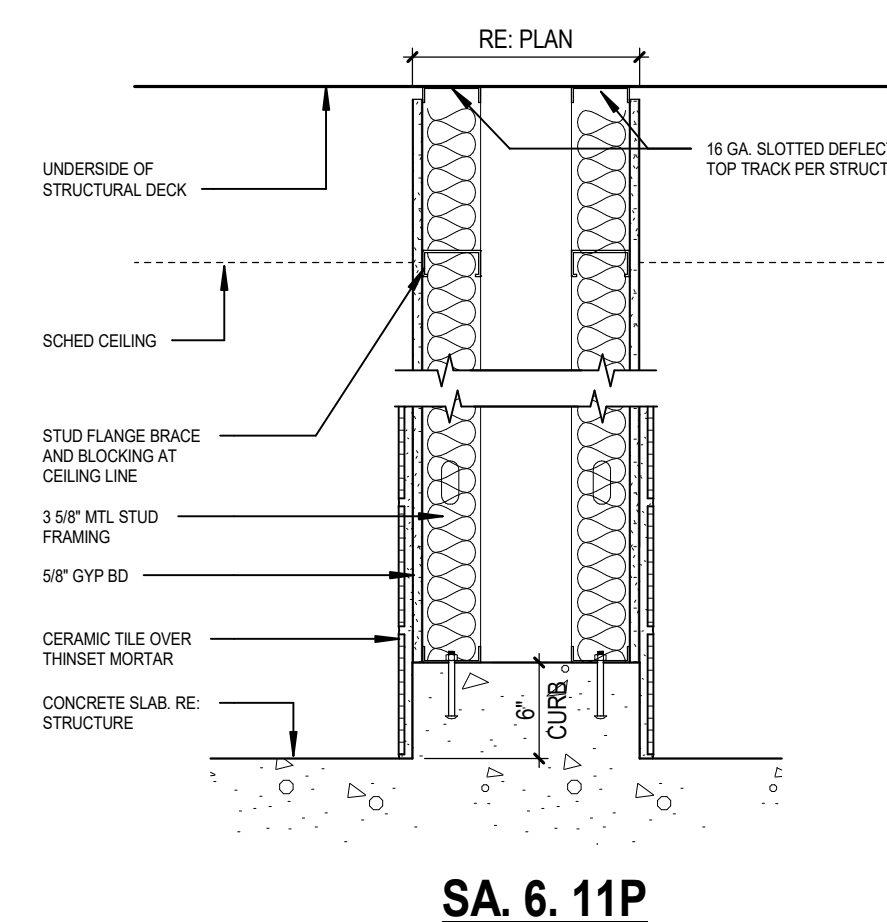
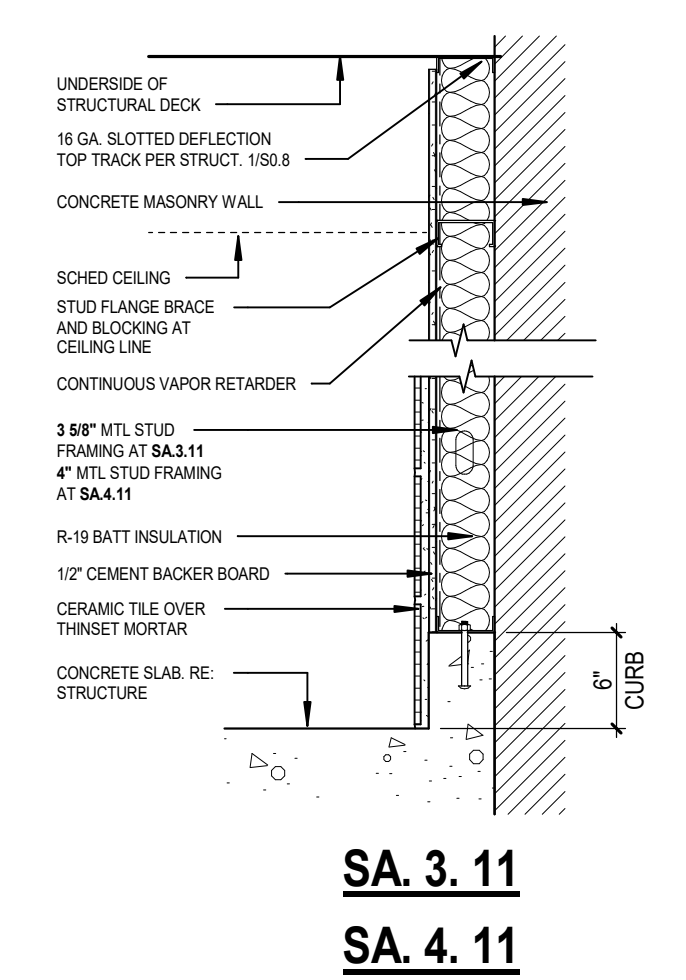
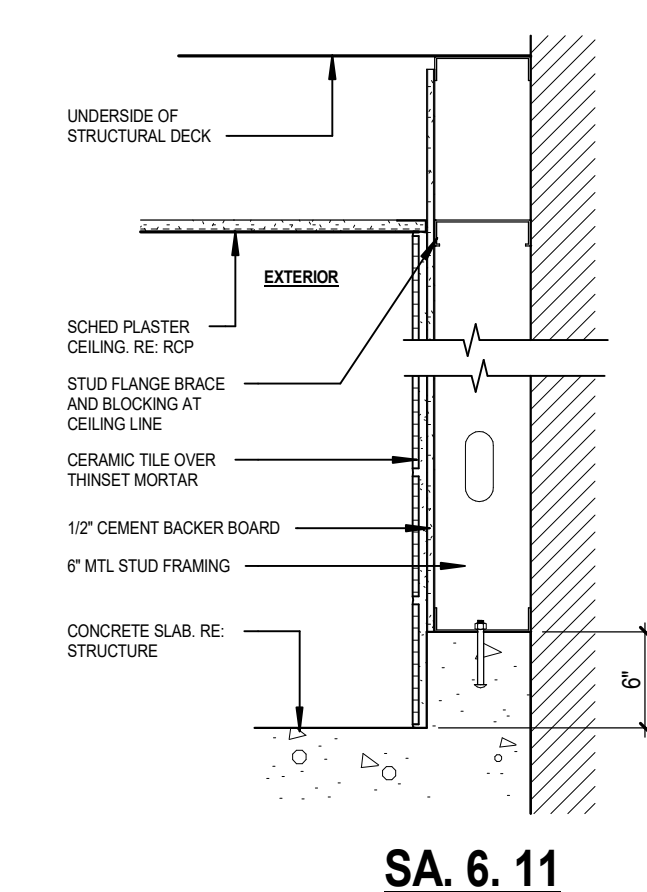
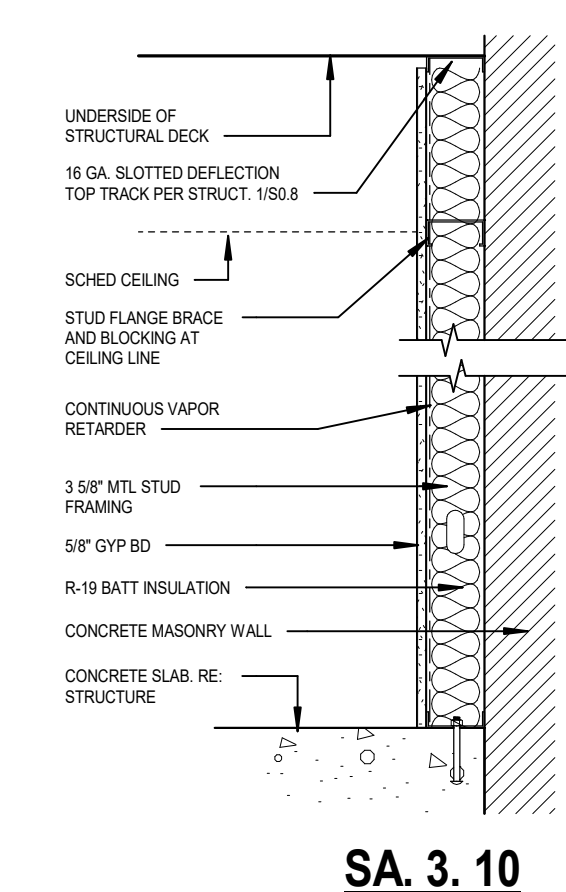
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ROOF ASSEMBLIES

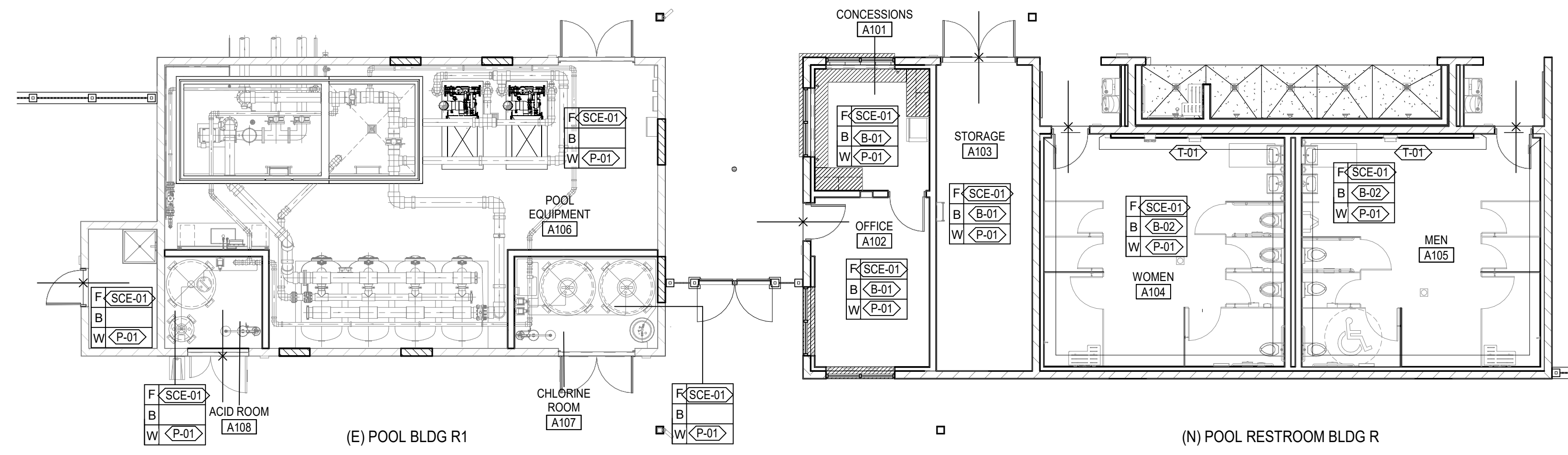


WALL ASSEMBLIES



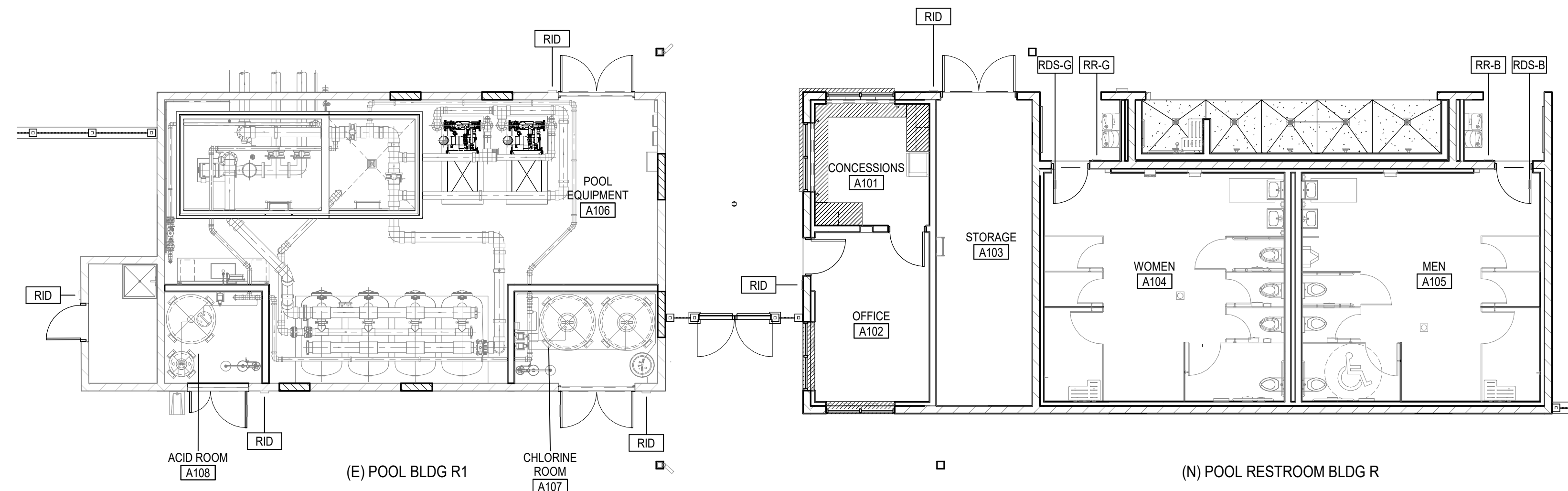
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1A FINISH PLAN - (E) POOL BLDG R1 AND (N) POOL RESTROOM BLDG R
A12.1 SCALE: 1/8" = 1'-0"

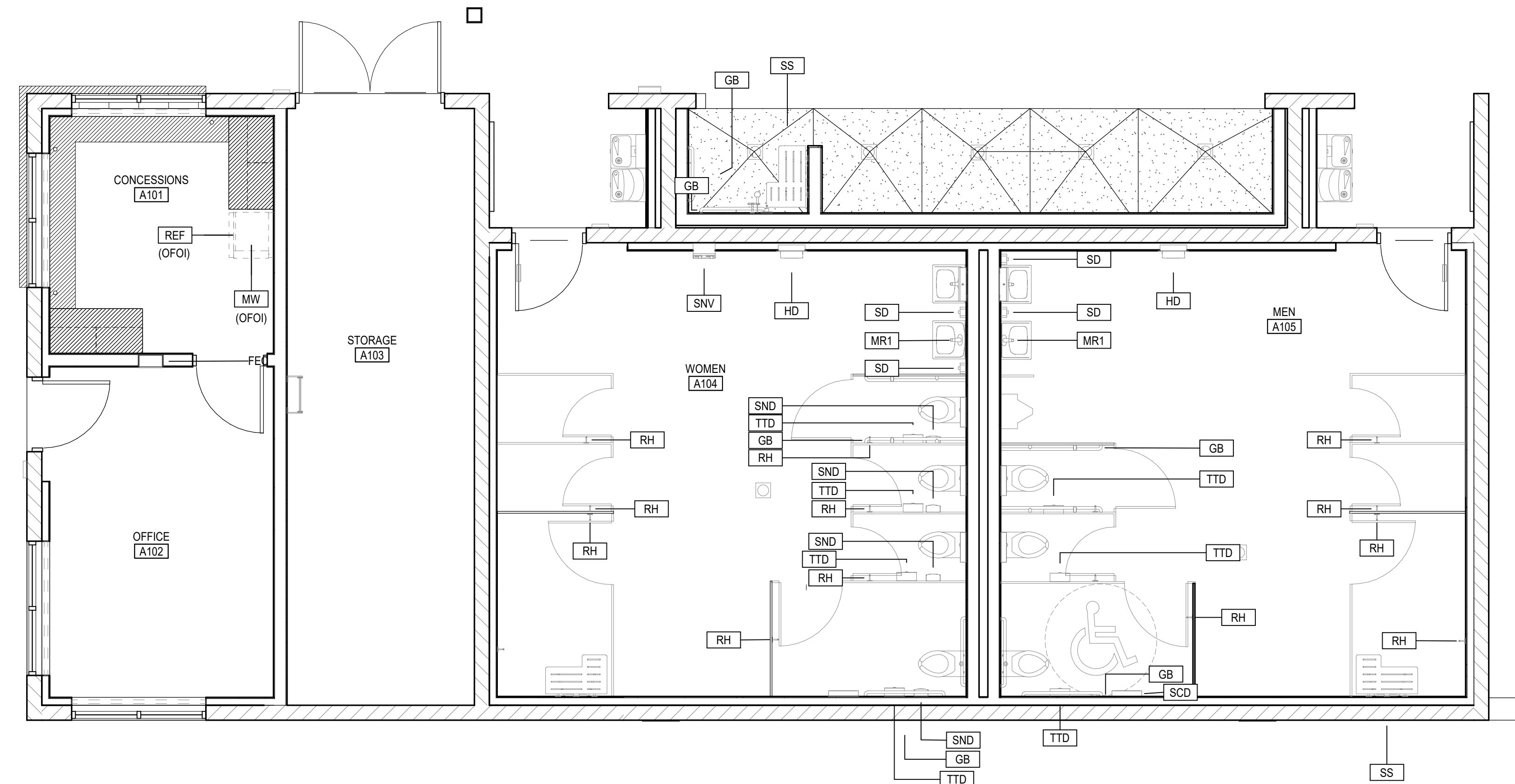
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3A SIGNAGE PLAN - (E) POOL BLDG R1 AND (N) POOL RESTROOM BLDG R
A12.1 SCALE: 1/8" = 1'-0"

3

4



4A EQUIPMENT PLAN - (N) POOL RESTROOM BLDG R
A12.1 SCALE: 1/4" = 1'-0"

5

**INTERIOR FINISH PLAN
GENERAL NOTES**

- A. ROOM FINISH SCHEDULE GENERAL NOTES APPLY TO ALL ROOM FINISH SCHEDULE SHEETS.
- B. INTERIOR FINISH PLAN GENERAL NOTES APPLY TO ALL INTERIOR FINISH PLAN SHEETS.
- C. NOT ALL FLOOR AND WALL FINISHES ARE NOTED ON THE INTERIOR FINISH PLANS. SEE ROOM FINISH SCHEDULE SHEETS FOR FINISHES NOT NOTED.
- D. FLOOR PATTERNS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE. MINOR ADJUSTMENTS MAY BE MADE FOR LAYOUT AND TO MINIMIZE WASTE, AS LONG AS THE DESIGN INTENT IS MAINTAINED.
- E. FOR FLOOR TILE PRODUCTS, ADJUST LAYOUT AS NECESSARY TO AVOID USING CUT WIDTHS THAT EQUAL LESS THAN ONE-HALF OF A TILE AT ROOM PERIMETER.

FINISH PLAN LEGEND

- X FLOOR FINISH TRANSITION SYMBOL
- XX.X FINISH KEY TAG REFER TO FINISH SCHEDULE AND SANITARY ACCESSORIES SCHEDULE SHEET #01.1
- F FLOOR FINISH
- B BASE FINISH
- W WALL FINISH
- MILLWORK
- XXX SANITARY ACCESSORIES TAG REFER SCHEDULE ON SHEET #11.1



COVINA VALLEY HS POOL REPLACEMENT
COVINA VALLEY UNIFIED SCHOOL DISTRICT
483 SOUTH HOLLENBECK AVENUE COVINA, CA 91723

DSA SUBMITTAL SET_V2
04/28/2023 REVISIONS

75-22616-00
DSA # 03-122700
DSA FILE # 19-H8
FINISH PLAN

A12.1

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STRUCTURAL STEEL AND MISCELLANEOUS METAL

- ALL PORTIONS OF WORK PERTAINING TO STRUCTURAL STEEL CONSTRUCTION SHALL CONFORM TO TITLE 24, PART 2, CHAPTER 22A.
- ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A-992, UNLESS NOTED OTHERWISE.
- ROUND HOLLOW STRUCTURAL SECTION (HSS) SHALL CONFORM TO ASTM A-500, GRADE B.
- SQUARE AND RECTANGULAR HOLLOW STRUCTURAL SECTIONS (HSS) SHALL CONFORM TO ASTM A-500, GRADE B.
- CHANNELS, ANGLES AND PLATES SHALL CONFORM TO ASTM A-36, UNLESS NOTED OTHERWISE.
- ALL BOLTS SHALL CONFORM TO THE FOLLOWING, UNLESS NOTED OTHERWISE:
 - ANCHOR BOLT RODS: ASTM F1554, GRADE 36
 - TYPICAL STEEL CONNECTIONS: ASTM F3125, GRADE A325N OR F1852 (NON-SLIP-CRITICAL)
 - MOMENT AND DRAG CONNECTIONS: ASTM F3125, GRADE A325SC OR F1852 (SLIP-CRITICAL)
 - MISCELLANEOUS CONNECTIONS NOT NOTED OTHERWISE: ASTM A-307
- HIGH STRENGTH BOLTS SHALL CONFORM TO THE FOLLOWING, UNLESS NOTED OTHERWISE:
 - JOINT ASSEMBLIES USING HIGH-STRENGTH BOLTS SHALL BE IN ACCORDANCE WITH SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH STRENGTH BOLTS, BY THE RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS.
 - ALL HIGH STRENGTH BOLTS SHALL CONFORM TO ASTM F3125, GRADE A325 OR F1852
 - TWIST OFF TYPE, NUTS SHALL CONFORM TO ASTM A-563, AND WASHERS SHALL CONFORM TO ASTM F-436.
 - PAINT SHALL NOT BE PERMITTED ON CONTACT SURFACES UNLESS NOTED OTHERWISE. CONTACT SURFACES OF BOLTED PARTS SHALL BE DESCALED AND FREE OF DIRT, OIL, BURRS, PITS, AND OTHER DEFECTS WHICH PREVENT SOLID SEATING OF PARTS.
 - SLIP-CRITICAL JOINT ASSEMBLIES SHALL BE FULLY PRE-TENSIONED BY TURN-OF-NUT TIGHTENING, CALIBRATED WRENCH TIGHTENING, INSTALLATION OF ALTERNATE DESIGN BOLTS OR BY DIRECT TENSION INDICATOR TIGHTENING.
- STRUCTURAL STEEL IN SFRS LINES SHALL BE CONNECTED IN SLIP-CRITICAL JOINTS COMPLYING WITH AISC 341-16, SECTION D.2.2, CLASS A FAYING SURFACE.
- ANCHOR BOLTS SHALL BE HEX HEADED. BENT BAR ANCHORS SHALL NOT BE USED.
- STRUCTURAL STEEL SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
- ALL WELDING SHALL CONFORM TO THE STRUCTURAL WELDING CODE - STEEL AWS D1.1 AND STRUCTURAL WELDING CODE SEISMIC SUPPLEMENT AWS D1.8. BY THE AMERICAN WELDING SOCIETY. WELDING RODS SHALL BE E70XX.
- ALL WELDING IN SFRS LINES SHALL COMPLY WITH AWS D1.8 AND AISC 341-16 SECTION A3.4A.
- THE FILLER METAL FOR ALL WELDING SHALL HAVE A NOTCH TOUGHNESS OF NOT LESS THAN 20 FT-LBS AT 0 DEGREES F, AS MEASURED BY A STANDARD CHARPY V-NOTCH TEST, ASTM E23, IN ACCORDANCE WITH THE APPLICABLE FILLER METAL SPECIFICATION REFERENCED IN AWS D1.1 AND SEISMIC SUPPLEMENT AWS D1.8.
- ALL DEMAND CRITICAL WELDS SHALL HAVE A NOTCH TOUGHNESS OF NOT LESS THAN 40 FT-LBS AT 70 DEGREES F, AS MEASURED BY STANDARD CHARPY V-NOTCH TEST, ASTM E23, IN ACCORDANCE WITH THE APPLICABLE FILLER METAL SPECIFICATION REFERENCED IN AWS D1.1 AND SEISMIC SUPPLEMENT AWS D1.8.
- ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS.
- ALL WELDING SHALL HAVE CONTINUOUS INSPECTION BY AN AWS-CWI QUALIFIED INSPECTOR APPROVED BY DSA.
- ALL WELDS NOT SPECIFIED SHALL BE CONTINUOUS FILLET WELDS. SIZE OF WELDS SHALL BE BASED ON AWS D1.1 FOR THICKER PART JOINED.
- BOLT HOLES SHALL BE 1/8" LARGER IN DIAMETER THAN NOMINAL SIZE OF BOLT USED, UNLESS NOTED OTHERWISE. BOLT HOLES AT COLUMN BASEPLATES MAY BE 3/16" MAXIMUM LARGER IN DIAMETER THAN NOMINAL SIZE OF ANCHOR BOLT USED, UNLESS NOTED OTHERWISE.
- DO NOT PAINT STRUCTURAL STEEL SURFACES THAT ARE TO RECEIVE SPRAY-APPLIED FIREPROOFING OR TO BE ENCASED IN CONCRETE OR MASONRY.
- ALL STRUCTURAL STEEL AND MISCELLANEOUS METAL ITEMS, INCLUDING CONNECTORS, EXPOSED TO THE WEATHER SHALL BE HOT-DIPPED GALVANIZED, AFTER FABRICATION.
- STRUCTURAL STEEL SHALL BE DELIVERED TO THE JOB SITE FREE OF EXCESSIVE RUST, MILL SCALE, GREASE, ETC.
- CUTTING, BORING, SAWCUTTING OR DRILLING THROUGH THE NEW OR EXISTING STRUCTURAL ELEMENTS TO BE DONE ONLY WHEN SO DETAILED IN THE DRAWINGS OR ACCEPTED BY THE ARCHITECT AND STRUCTURAL ENGINEER WITH THE APPROVAL OF DSA REPRESENTATIVE.
- THE CONTRACTOR SHALL IDENTIFY THE PROTECTED ZONES USING ANY SUITABLE NON-DESTRUCTIVE MEANS (SUCH AS YELLOW PAINT).
- ONCE THE STEEL DECKING IS IN PLACE, THE CONTRACTOR SHALL USE ANY SUITABLE NON-DESTRUCTIVE MEANS TO IDENTIFY THE PROTECTED ZONES PRIOR TO THE INSTALLATION OF SHEAR STUDS, DECK ATTACHMENTS.
- AFTER SPRAYED ON FIRE-RESISTIVE MATERIAL HAS BEEN APPLIED, THE CONTRACTOR SHALL USE ANY SUITABLE NON-DESTRUCTIVE MEANS TO IDENTIFY THE PROTECTED ZONES FOR OTHER DISCIPLINES TO PRECLUDE UNAUTHORIZED ATTACHMENTS.

STEEL DECKING

- SEE STRUCTURAL STEEL AND MISCELLANEOUS METAL NOTES FOR ADDITIONAL INFORMATION.
- STEEL DECKING SHALL BE OF THE TYPE AND GAUGE AS NOTED ON THE DRAWINGS. DECKING AND ALL ACCESSORIES SHALL BE GALVANIZED AND SHALL CONFORM TO ASTM A-653 SS, GRADE 50 MINIMUM. GALVANIZING SHALL CONFORM TO COATING DESIGNATION G90, UNLESS NOTED OTHERWISE.
- STEEL DECKING TO RECEIVE CONCRETE FILL SHALL BE COMPOSITE TYPE, DEFORMED TO PROVIDE MECHANICAL BOND WITH THE CONCRETE, UNLESS NOTED OTHERWISE.
- STEEL DECKING SHALL HAVE BUILT-IN VENTS. UNITS SHALL HAVE SLOTTED AND VENTED WEBS WITH A MINIMUM 1.5% UNIFORMLY DISTRIBUTED OPEN AREA.
- DECK UNITS SHALL BE CONTINUOUS OVER TWO OR MORE SPANS. PROVIDE SHORING AS REQUIRED BY MANUFACTURER'S CURRENT EVALUATION REPORT FOR NUMBER AND LENGTHS OF SPANS, AND AS REQUIRED BY MANUFACTURER TO SUIT JOB CONDITIONS.
- MINIMUM BEARING OF DECKING ON SUPPORTS SHALL BE 2 INCHES. SHEETS SHALL BE ATTACHED TO ALL SUPPORTING STEEL MEMBERS (INCLUDING MEMBERS PARALLEL TO DECK UNDER UP-FLUTES) BY WELDING AS INDICATED ON DRAWINGS AND IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. ADD METAL PLATE TO MATCH DECK THICKNESS, AS REQUIRED TO FACILITATE WELDING WHERE DECK DOWN FLUTES DO NOT LAND ON PARALLEL SUPPORTING MEMBERS. UPON COMPLETION OF ERECTION, ALL WELDS SHALL BE TOUCHED UP, DE-SLAGGED, CLEANED AND PRIMED WITH A ZINC RICH PRIMER.
- SEE ARCHITECTURAL, MECHANICAL, ELECTRICAL DRAWINGS, ETC., FOR SIZE AND LOCATION OF REQUIRED OPENINGS.
- PROVIDE CLOSURE PLATES AT ALL DECK EDGES, INCLUDING CLOSURES AT COLUMNS, AND SHAFT OPENINGS OR DUCT PENETRATIONS. STEEL DECKING SUBCONTRACTOR SHALL SUPPLY ALL CLOSURES AND ALL SUPPORT FRAMING WHERE NECESSARY FOR SUCH OPENINGS.
- STEEL DECKING SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO FABRICATION. SHOP DRAWINGS SHALL INDICATE LOCATION, GAUGE AND SIZE OF EACH PIECE OF DECKING. SHOP DRAWINGS SHALL ALSO SHOW ALL CLOSURE CONDITIONS, WELDS TO SUPPORTS AND SIDE LAP DETAILS.
- STEEL DECKING SHOP DRAWINGS SHALL INDICATE SHEAR STUD CONNECTOR DETAILS AND STUD LAYOUT FOR EACH BEAM.
- SHEAR STUDS SHALL BE WELDED THROUGH ONLY ONE THICKNESS OF DECK USING APPROVED WELDING METHODS. DECK SHALL BE PREPUNCHED WHERE MORE THAN ONE LAYER OF DECKING OCCURS AT A STUD LOCATION.
- WELDING OF STEEL DECKING SHALL BE IN ACCORDANCE WITH THE STRUCTURAL WELDING CODE - SHEET STEEL, AWS D1.3 BY THE AMERICAN WELDING SOCIETY.

POST-INSTALLED ANCHORS

- ACCEPTABLE EQUIVALENT MANUFACTURERS OF POST-INSTALLED EXPANSION ANCHORS AND SCREW ANCHORS SHALL BE HILTI INC., SIMPSON STRONG-TIE COMPANY INC., OR DEWALT, UNO.
- TESTS FOR POST-INSTALLED ANCHORS IN HARDENED CONCRETE SHALL CONFORM TO TITLE 24, PART 2, CHAPTER 19A, SECTION 1910A.5.
- POST-INSTALLED ANCHOR INSTALLATION SHALL BE INSPECTED BY A SPECIAL INSPECTOR SPECIFICALLY APPROVED BY THE ENFORCEMENT AGENCY FOR THAT PURPOSE.
- POST-INSTALLED ANCHOR TESTING SHALL BE DONE IN THE PRESENCE OF THE PROJECT INSPECTOR.
- TEST QUANTITY OF POST-INSTALLED ANCHORS AS NOTED BELOW:

APPLICATION	QUANTITY
SILL PLATES	10% OF BOLTS
STRUCTURAL	100% OF BOLTS
NON-STRUCTURAL (EQUIP. ANCHORAGE, ETC.)	50% OF BOLTS
- IF ANY ANCHOR FAILS TESTING, TEST ALL ANCHORS OF THE SAME CATEGORY NOT PREVIOUSLY TESTED UNTIL TWENTY (20) CONSECUTIVE ANCHORS PASS, THEN RESUME INITIAL TESTING FREQUENCY.
- TORQUE TESTING SHALL BE APPLIED BY CALIBRATED WRENCH. TENSION TESTING (WHERE INDICATED) SHALL BE APPLIED BY HYDRAULIC JACK OR CALIBRATED SPRING LOADING DEVICE.
- THE FOLLOWING CRITERIA SHALL APPLY FOR THE ACCEPTANCE OF INSTALLED POST-INSTALLED ANCHORS:
 - TORQUE WRENCH METHOD: THE APPLICABLE TEST TORQUE MUST BE ATTAINED WITHIN ONE-HALF (1/2) TURN OF THE NUT. SLEEVE ANCHORS 3/8" INCH DIAMETER OR LESS MUST ATTAIN THE SPECIFIED TEST TORQUE WITHIN ONE-QUARTER (1/4) TURN OF THE NUT, AND THREADED ANCHORS MUST ATTAIN THE SPECIFIED TEST TORQUE WITHIN ONE-QUARTER (1/4) TURN OF THE SCREW AFTER INITIAL SEATING OF THE SCREW HEAD.
 - HYDRAULIC RAM METHOD: (FOR TENSION TESTING WHERE INDICATED) ANCHORS SHALL MAINTAIN THE TENSION TEST LOAD FOR A MINIMUM OF 15 SECONDS AND SHALL EXHIBIT NO DISCERNABLE MOVEMENT DURING THE TENSION TEST. (AN EXAMPLE OF DISCERNABLE MOVEMENT WOULD BE LOSSENING OF THE WASHER UNDER THE NUT).
- TEST LOADS (1)(2)(3)

TORQUE TEST VALUES - EXPANSION ANCHORS NORMAL WEIGHT CONCRETE			
ANCHOR DIAMETER (INCH)	ANCHOR DEPTH (INCHES)	REQ'D. ANCHOR DEPTH (INCHES NOMINAL)	TORQUE (FT-LBF)
3/8	2	2 1/2	30
	2	2 1/2	50
1/2	3 1/4	3 3/4	50
	3 1/4	3 3/4	40
5/8	4	4 1/2	40
	3 3/4	4 1/2	110
3/4	4 3/4	5 1/2	110

- TEST VALUES ARE BASED ON KWIK BOLT T22 (KB-T22) EXPANSION ANCHORS BY HILTI, INC. (ICC EVALUATION REPORT NUMBER ESR-4266).
- TEST VALUES ARE BASED ON CARBON STEEL ANCHORS.
- VERIFY TORQUE VALUES WITH MANUFACTURER FOR SIMPSON STRONG-BOLT 2 (ICC ESR-3037) OR DEWALT POWER-STUD+SD2 (ICC ESR-2502)

TORQUE TEST VALUES - EXPANSION ANCHORS GROUT FILLED CMU			
ANCHOR DIAMETER (INCH)	ANCHOR DEPTH (INCHES)	REQ'D. ANCHOR DEPTH (INCHES NOMINAL)	TORQUE (FT-LBF)
3/8	2 1/2	3	15
	2	2 1/2	25
1/2	3 3/4	3 3/4	25
	2 3/4	3 3/4	35
5/8	4	4 1/2	35
	3 3/4	4	50
3/4	4 3/4	5 1/2	50

- TEST VALUES ARE BASED ON KWIK BOLT T22 (KB-T22) EXPANSION ANCHORS BY HILTI, INC. (ICC EVALUATION REPORT NUMBER ESR-4561).
- TEST VALUES ARE BASED ON CARBON STEEL ANCHORS.
- VERIFY TORQUE VALUES WITH MANUFACTURER FOR SIMPSON WEDGE-ALL (ICC ESR-1396) OR DEWALT POWER-STUD+SD1 (ICC ESR-2966)

TORQUE TEST VALUES - SCREW ANCHORS NORMAL WEIGHT CONCRETE		
ANCHOR DIAMETER (INCH)	ANCHOR DEPTH (INCHES)	TORQUE (FT-LBF)
1/4	1 3/8"	24
	2 1/2"	24
3/8	2 3/4	50
	3 1/2	50
1/2	3 3/4	65
	4 1/2	65
5/8	4 1/2	100
	6	100
3/4	6	150
	6 3/4	150

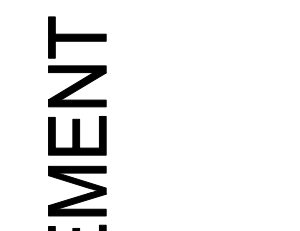
- TEST VALUES ARE BASED ON TITEN HD SCREW ANCHORS BY SIMPSON STRONG-TIE. (ICC EVALUATION REPORT NUMBER ESR-2713).
- VERIFY TORQUE VALUES WITH MANUFACTURER FOR HILTI KWIK HUS-EZ SCREW ANCHORS (ICC ESR-3027) OR DEWALT SCREW-BOLT+SCREW ANCHOR (ICC ESR-3889)

ANCHORS AND/OR DOWELS INSTALLED WITH ADHESIVE

- ANCHORS AND/OR DOWELS SHALL BE INSTALLED WITH ADHESIVE ONLY WHERE INDICATED ON DRAWINGS.
- ANCHORS AND/OR DOWELS SHALL BE INSTALLED IN CONCRETE USING ONE OF THE FOLLOWING PRODUCTS IN ACCORDANCE WITH THE APPLICABLE ICC/IAPMO REPORT:
 - HILTI HIT-HY 200 V3 ADHESIVE ICC NO. ESR-4868
 - SIMPSON SET-XP ADHESIVE ICC NO. ESR-2508
 - DEWALT PURETI10+ ADHESIVE ICC NO. ESR-3298
- ANCHORS AND/OR DOWELS SHALL BE INSTALLED IN GROUTED MASONRY USING ONE OF THE FOLLOWING PRODUCTS IN ACCORDANCE WITH THE APPLICABLE ICC REPORT:
 - HILTI HIT-HY 200 V3 ADHESIVE ICC NO. ESR-4878
 - SIMPSON SET-XP ADHESIVE IAPMO NO. ER-265
- ADHESIVE SYSTEMS OTHER THAN THOSE SPECIFIED SHALL BE SUBMITTED AS A SUBSTITUTION, AND ARE SUBJECT TO THE REVIEW AND APPROVAL OF THE ENFORCEMENT AGENCY, THE ARCHITECT, AND THE STRUCTURAL ENGINEER.
- HOLES SHALL BE DRILLED WITH NON-REBAR-CUTTING DRILL BITS.
- HOLES SHALL BE CLEAN OF CONCRETE DUST AND DEBRIS USING A STEEL WIRE BRUSH AND OIL-FREE COMPRESSED AIR. HOLES SHALL ALSO BE FREE OF STANDING WATER.
- PROJECT INSPECTOR SHALL VERIFY INSTALLATION OF ANCHORS OR DOWELS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, INCLUDING CLEANLINESS OF DRILL HOLES AND PROPER EMBEDMENT.
- ANCHORS SET IN CONCRETE AND GROUTED MASONRY SHALL BE TESTED TO 2 TIMES THE ASD ALLOWABLE TENSION LOAD, 1.25 TIMES THE LRFD STRENGTH CAPACITY, OR 80% OF THE YIELD STRENGTH OF THE BOLT FOR THE SPECIFIC LOCATION OF THE ANCHOR TO BE TESTED, WHICHEVER IS LESS. TORQUE TESTING IS NOT PERMITTED. SEE DETAILS FOR TEST LOADS.
- ADHESIVE ANCHORS INSTALLED IN HORIZONTAL TO VERTICALLY OVERHEAD ORIENTATION TO SUPPORT SUSTAINED TENSION LOADS SHALL BE DONE BY A CERTIFIED ADHESIVE ANCHOR INSTALLER (AA) AS CERTIFIED THROUGH ACI/CRSI (ACI 318-14 17.8.2.2). PROOF OF CURENT CERTIFICATION SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO COMMENCEMENT OF INSTALLATION.
- ADHESIVE ANCHORS MUST BE INSTALLED IN CONCRETE AGED A MINIMUM OF 21 DAYS.

COLD-FORMED STEEL FRAMING

- ALL PORTIONS OF WORK PERTAINING TO COLD-FORMED STEEL CONSTRUCTION SHALL CONFORM TO TITLE 24, PART 2, CHAPTER 22A.
- ALL LIGHT GAUGE METAL FRAMING SHALL BE GALVANIZED AND SHALL CONFORM TO ASTM A-653 SS, GRADE 50, CLASS 1, WITH A MINIMUM YIELD STRENGTH OF 50 KSI FOR 18 GAUGE AND HEAVIER FRAMING, AND ASTM A-653 SS, GRADE 50, WITH A MINIMUM YIELD STRENGTH OF 33 KSI FOR 18 GAUGE AND LIGHTER FRAMING.
- DIMENSIONS, PROPERTIES AND TYPES NOTED ARE BASED ON METAL STUDS AND TRACKS BY STEEL STUD MANUFACTURERS ASSOCIATION, ICC NO. ESR-3064P, UNLESS NOTED OTHERWISE.
- ALL STUDS AT JAMBS OF DOOR AND WINDOW OPENINGS SHALL BE 16 GAUGE, UNLESS NOTED OTHERWISE.
- WELDING SHALL BE IN ACCORDANCE WITH THE STRUCTURAL WELDING CODE - SHEET STEEL, AWS D1.3, BY THE AMERICAN WELDING SOCIETY.
- ALL SHEET METAL SCREWS SHALL PROTRUDE 3 EXPOSED THREADS MINIMUM THROUGH BASE METAL FRAMING.
- ALL METAL STUDS SHALL HAVE STIFFENED FLANGES.
- SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR SIZE AND GAUGE OF STUDS.



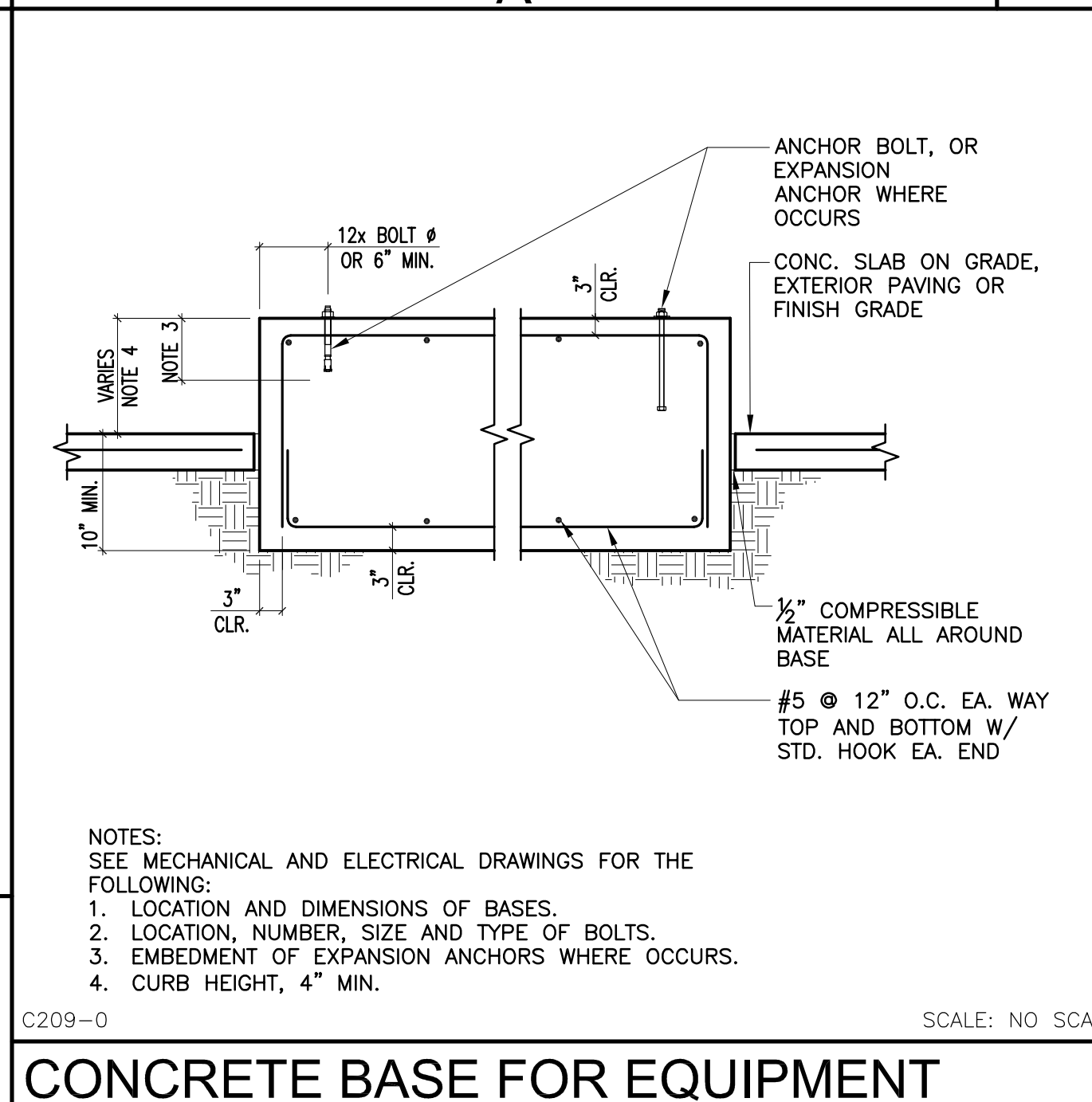
COVINA VALLEY HS POOL REPLACEMENT
COVINA VALLEY UNIFIED SCHOOL DISTRICT
488 S. HOLLEBECK AVENUE COVINA, CA 91723

DSA SUBMITTAL SET_V2
04/28/2023
REVISIONS

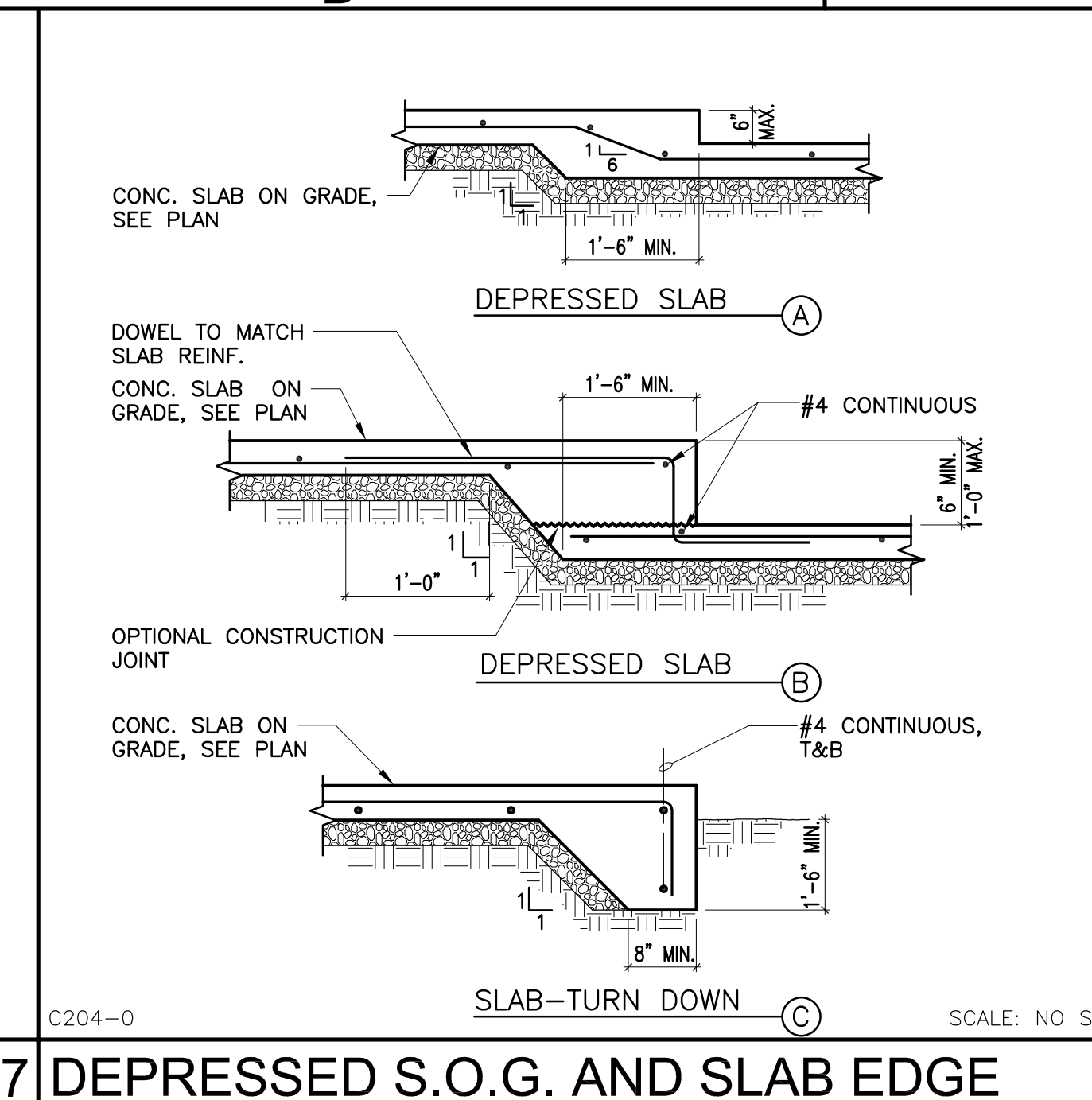
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DSA FILE # 19-HB

GENERAL NOTES

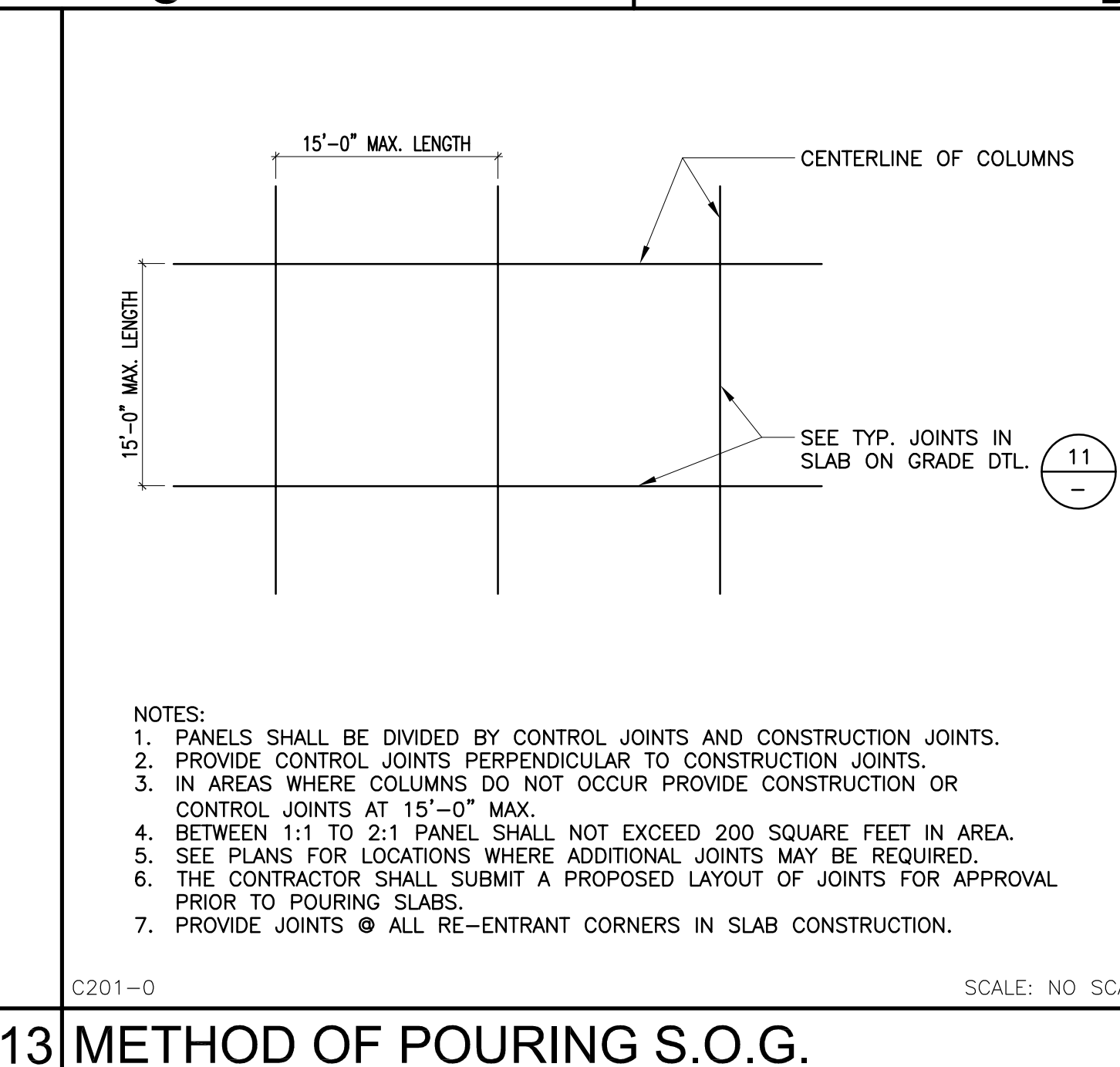
S0.2



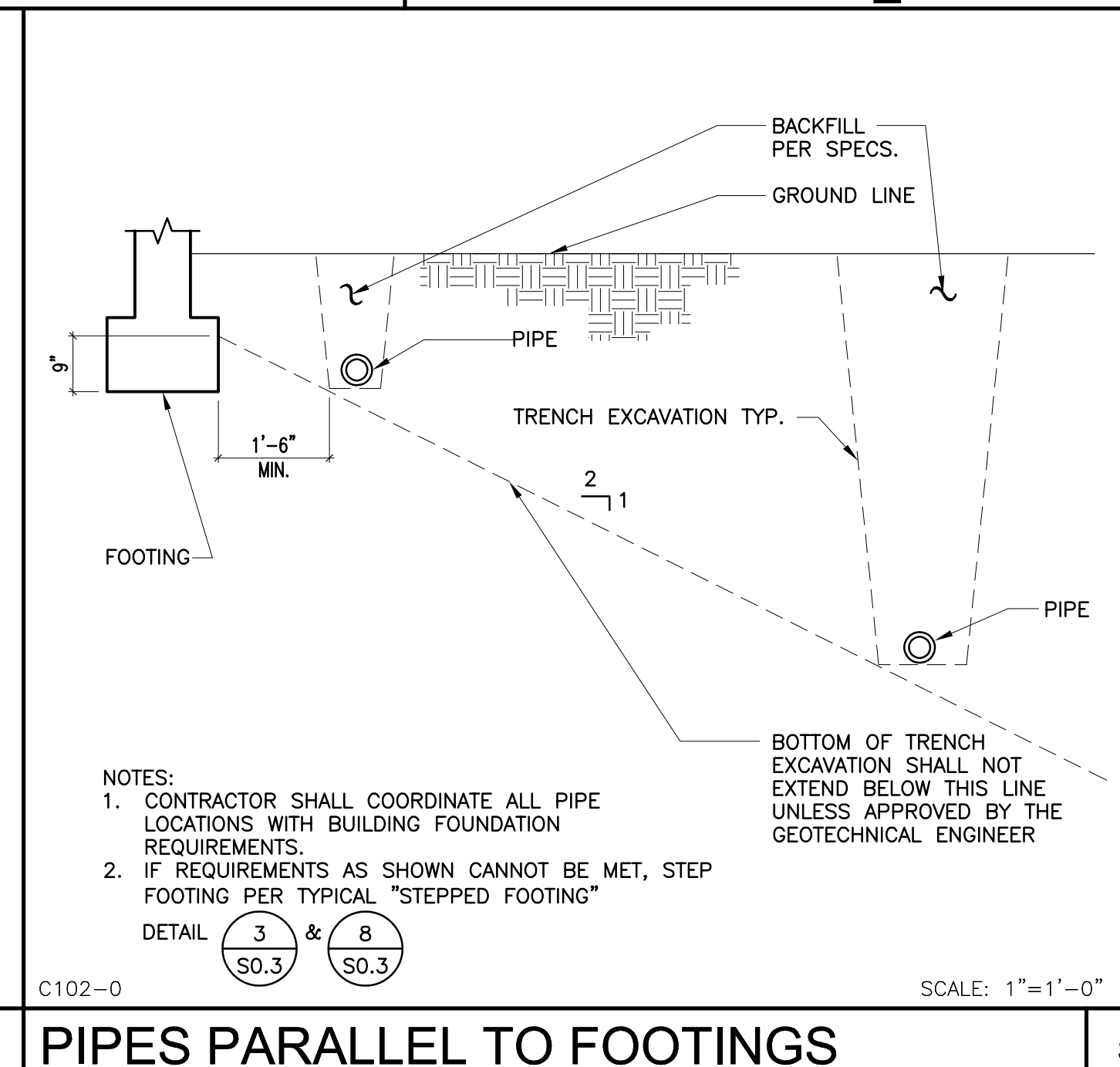
C209-0 CONCRETE BASE FOR EQUIPMENT 17



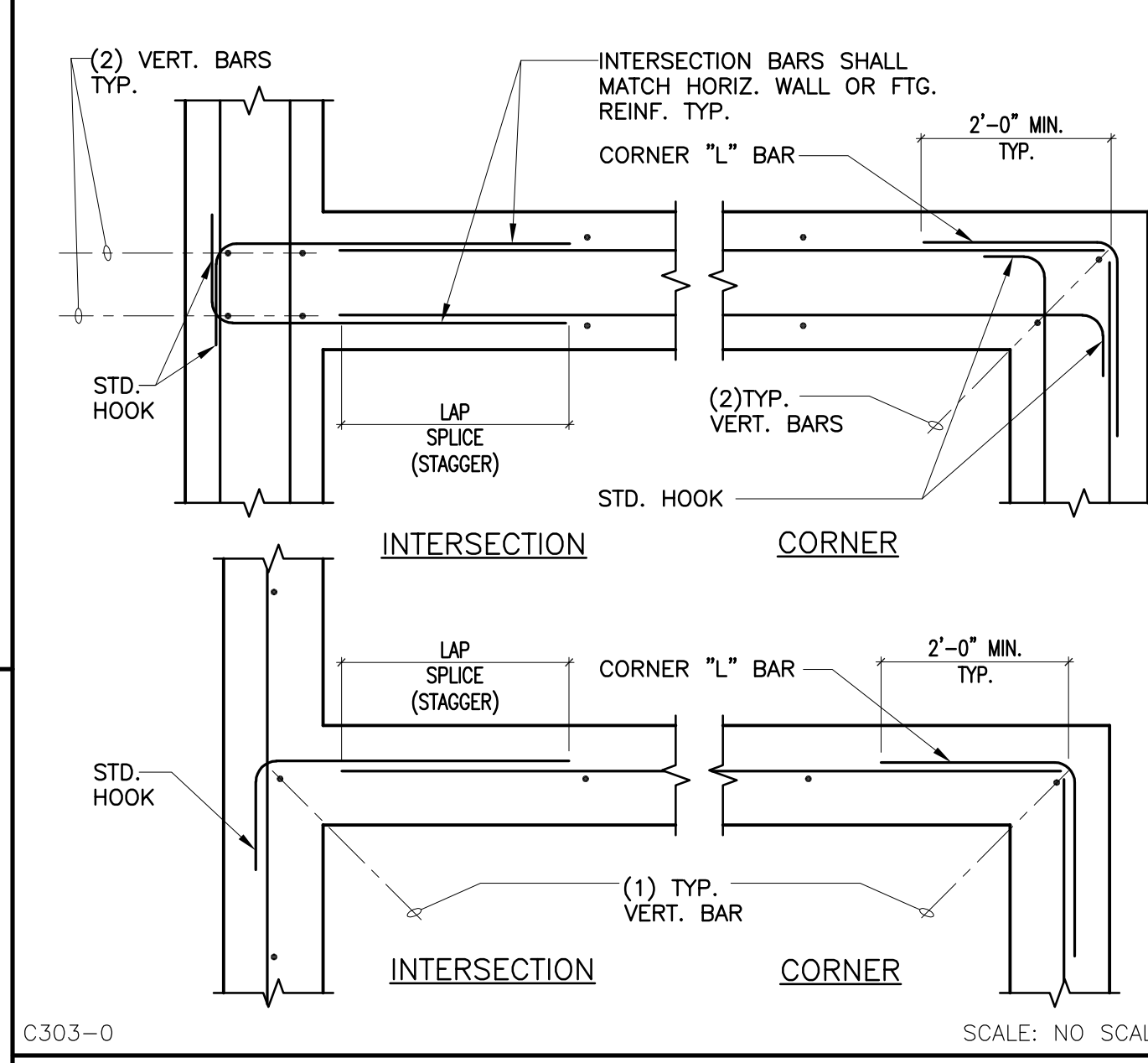
C204-0 DEPRESSED S.O.G. AND SLAB EDGE 13



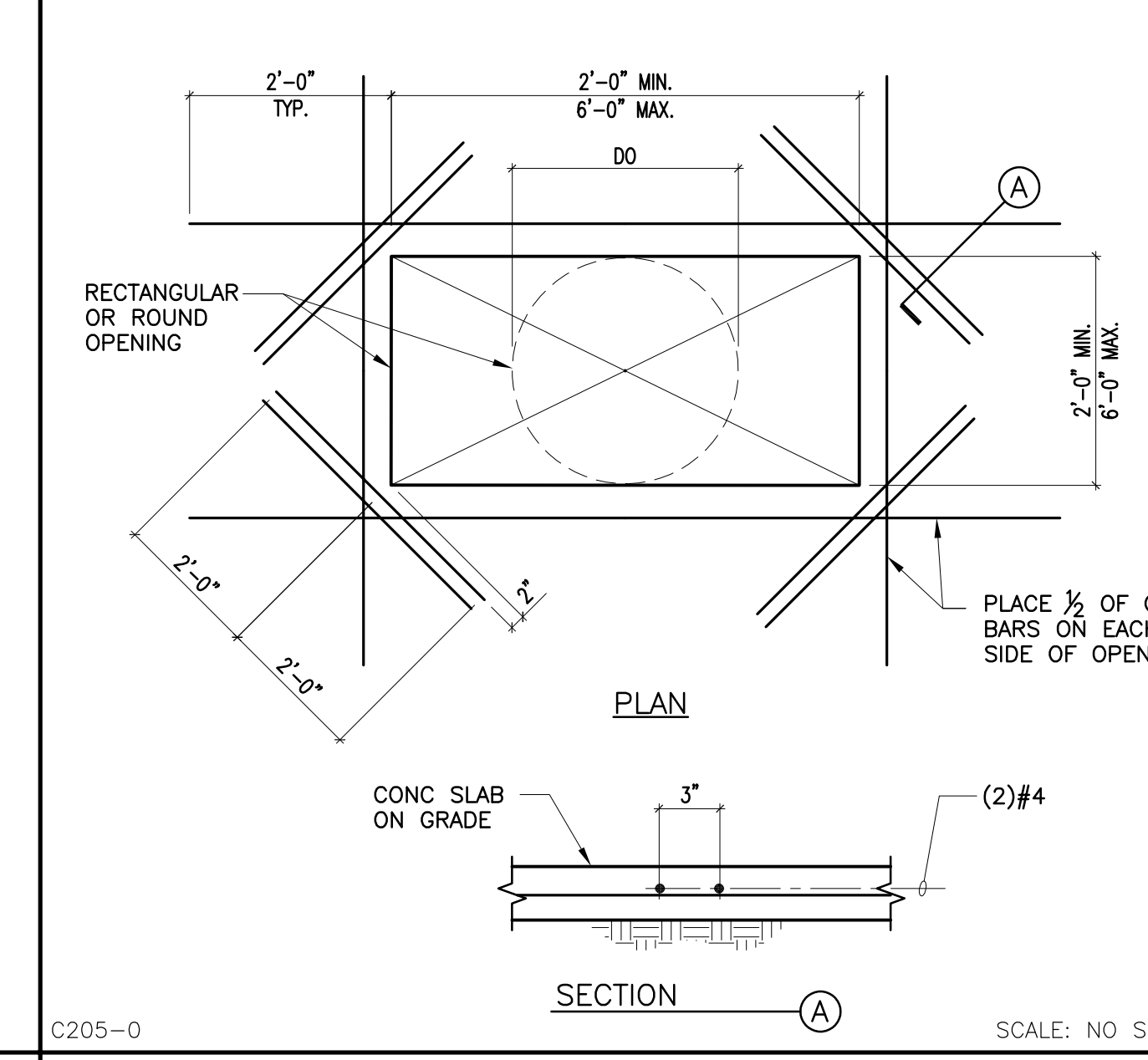
C201-0 METHOD OF POURING S.O.G. 9



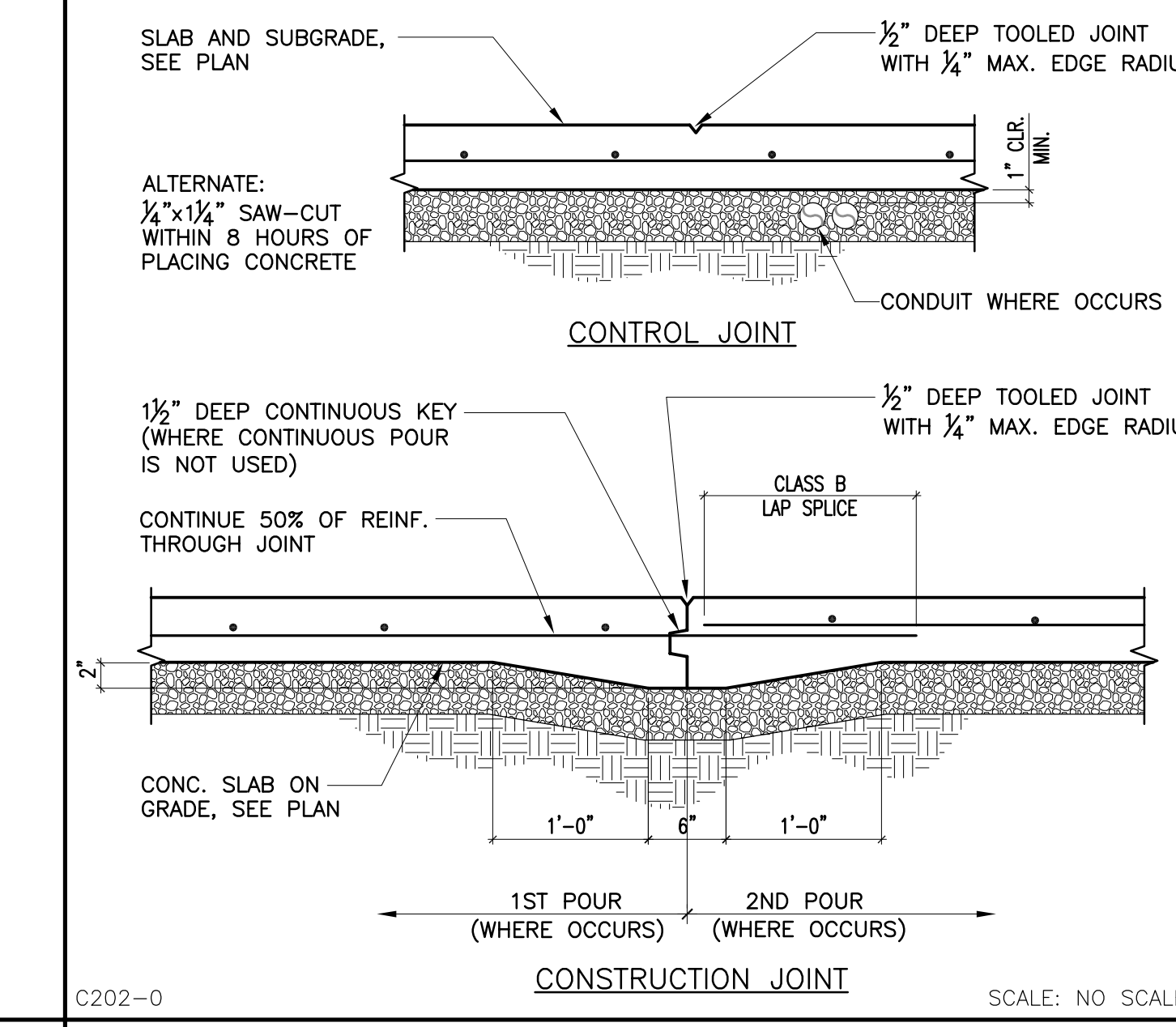
C102-0 PIPES PARALLEL TO FOOTINGS 5



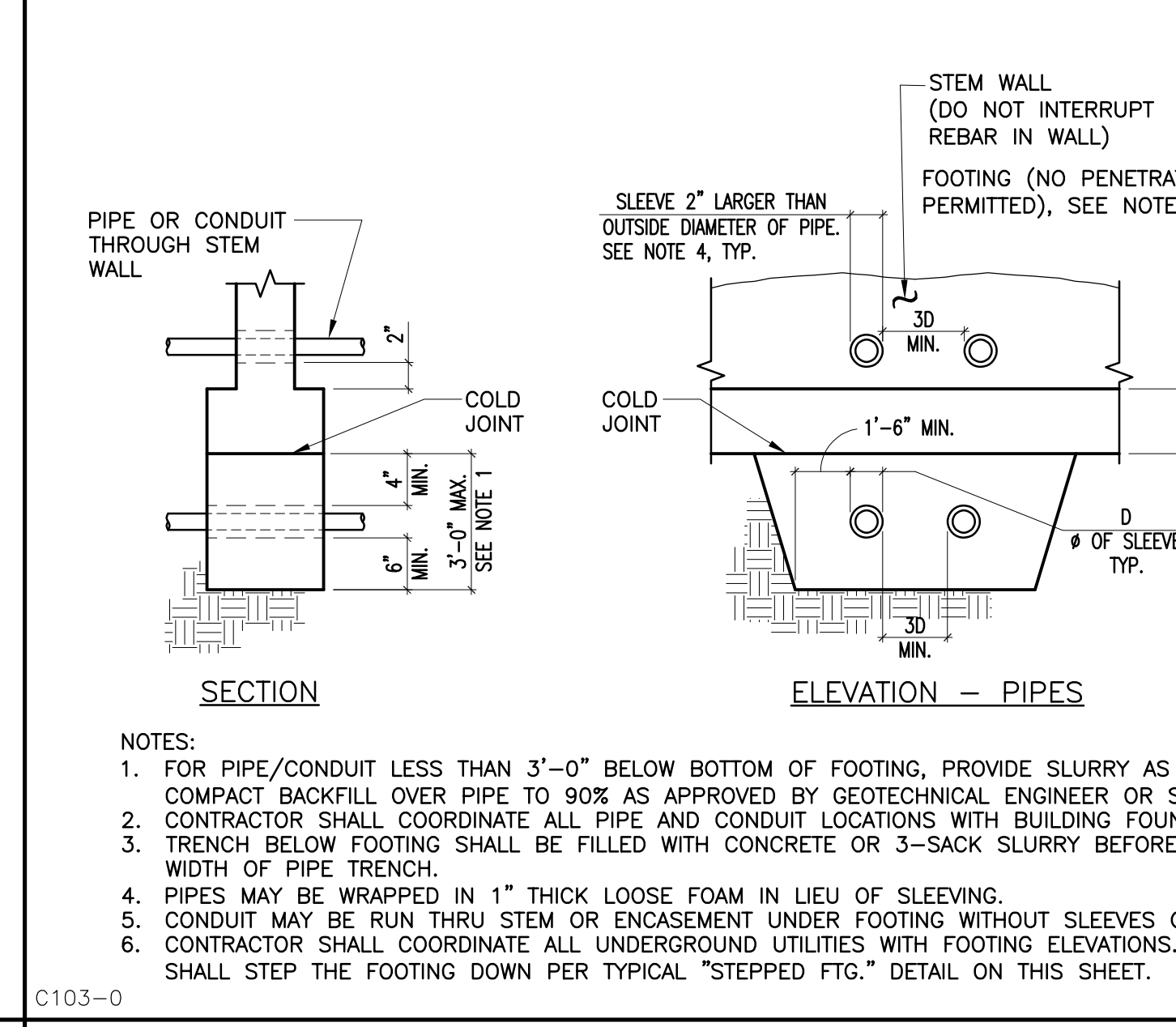
C303-0 REINF. AT FTG. OR WALL INTERSECTION 18



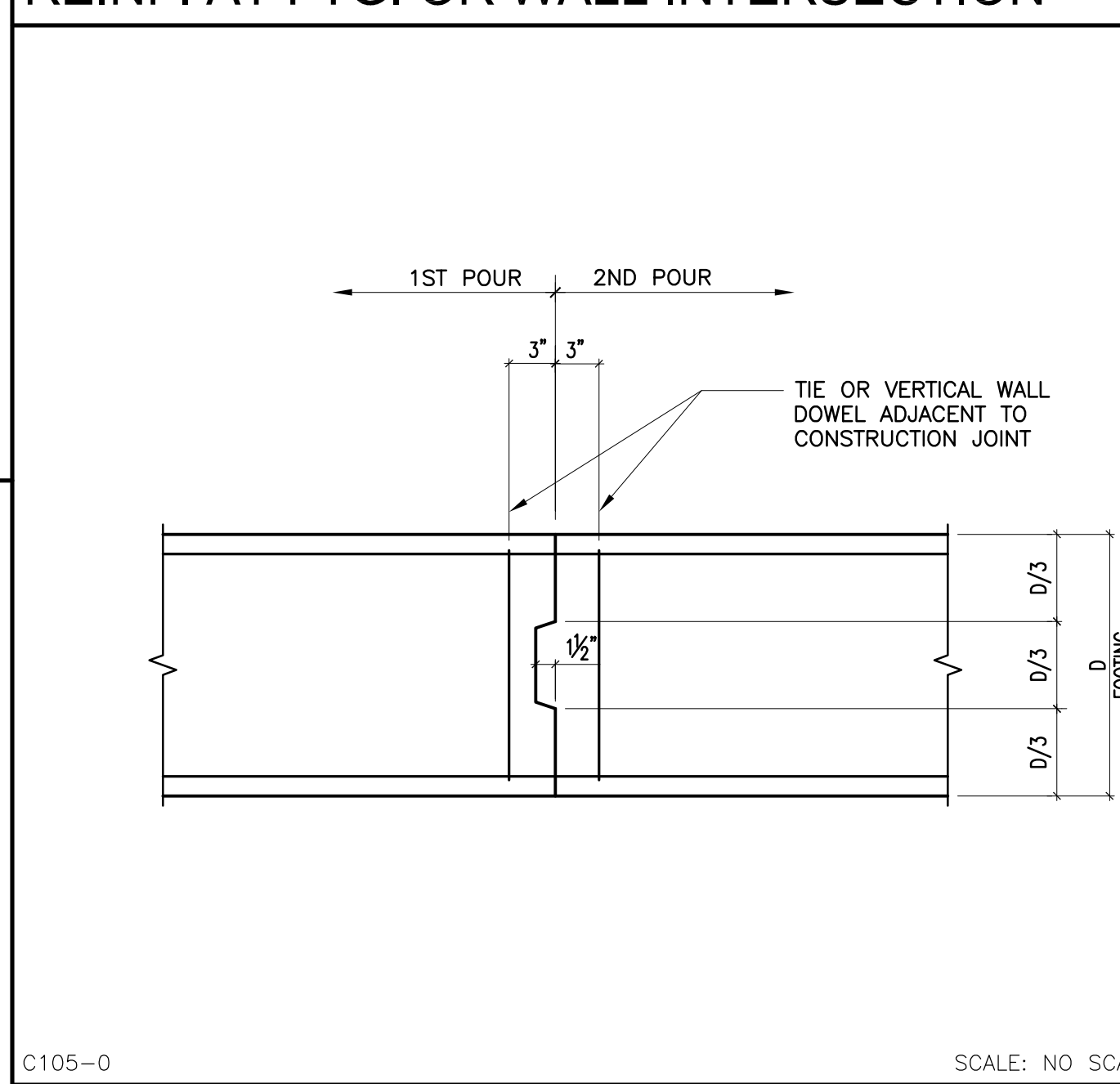
C205-0 OPENING IN SLAB ON GRADE 14



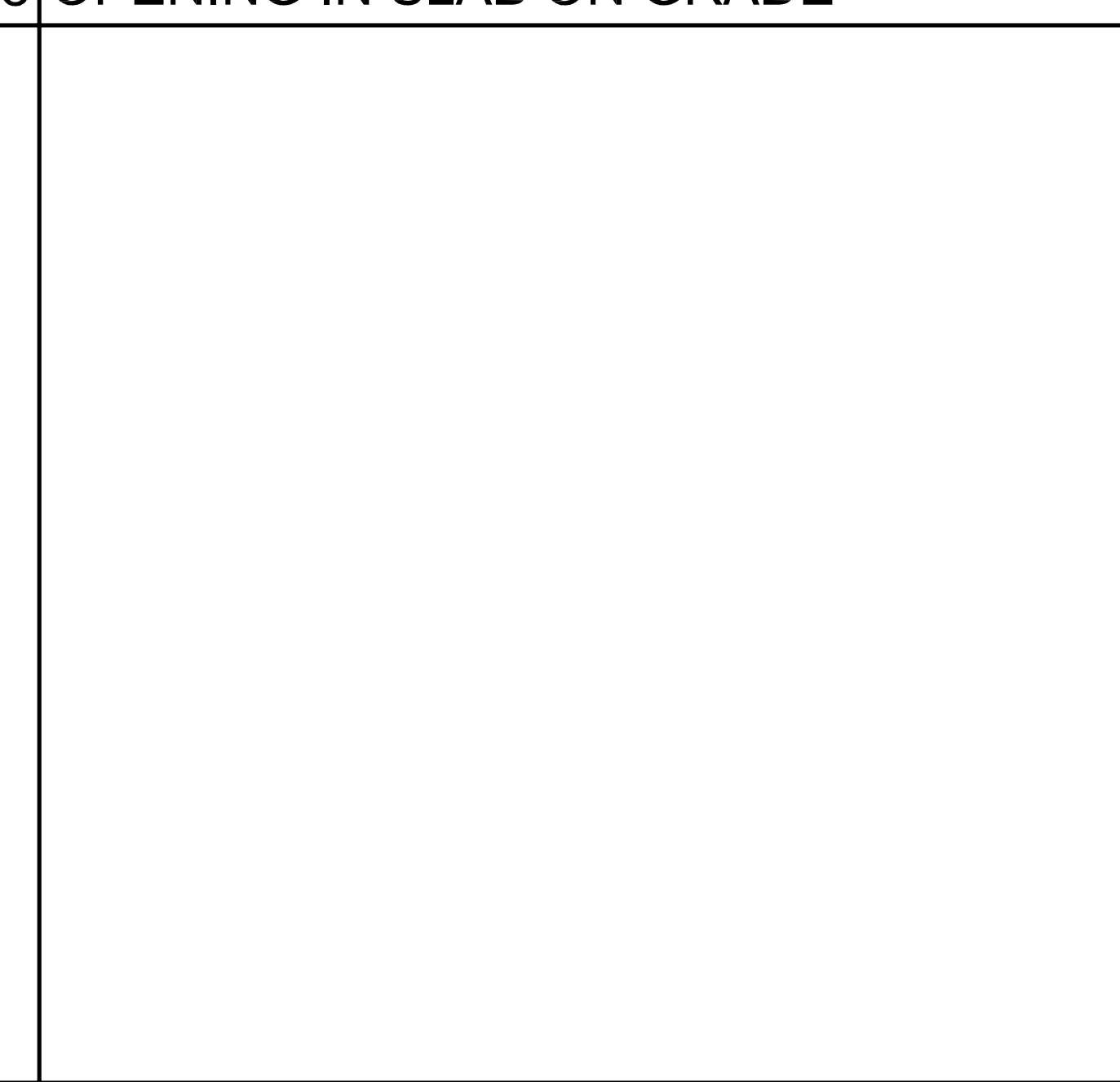
C202-0 JOINT IN SLAB ON GRADE 10



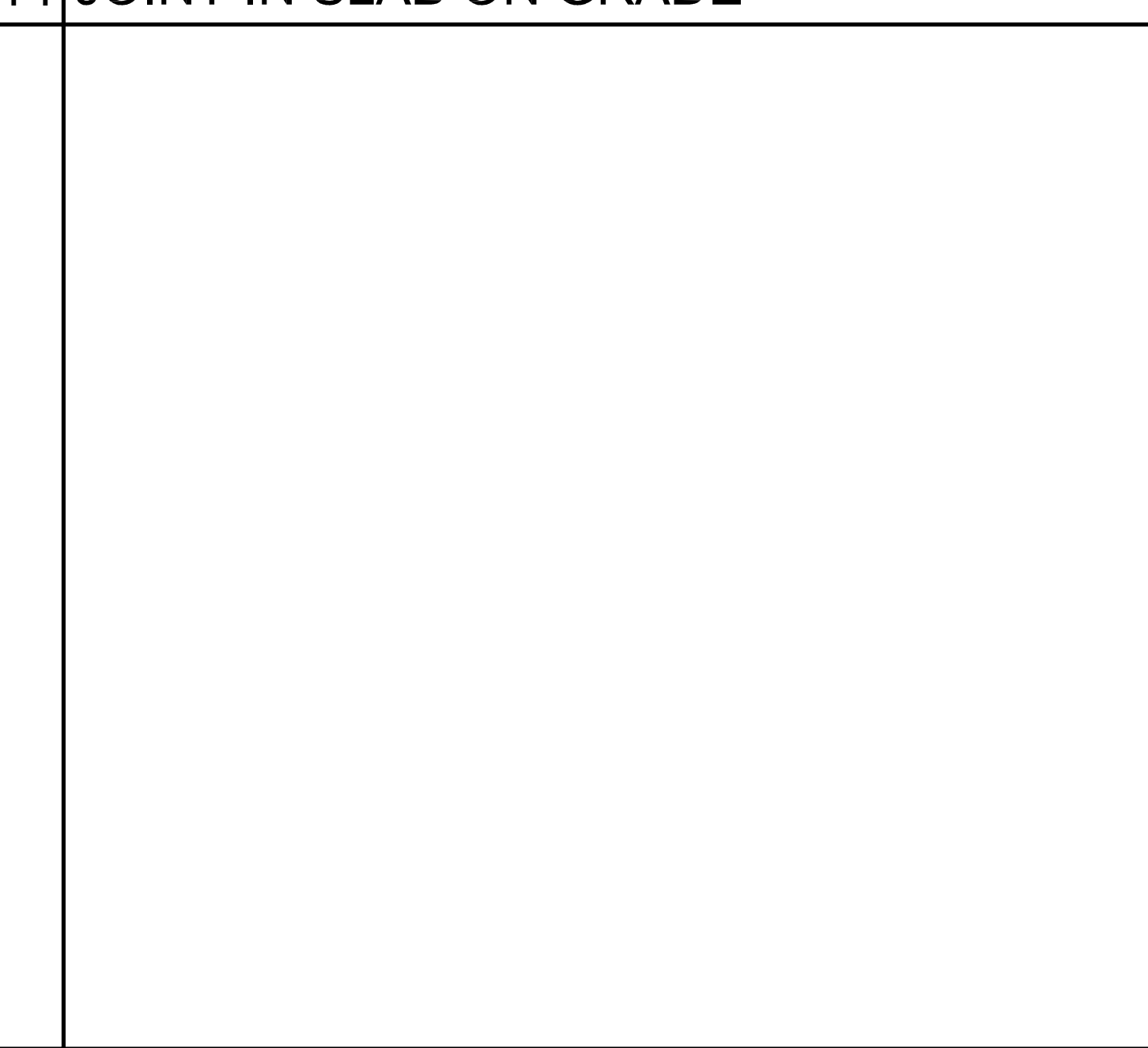
C103-0 PIPES AND CONDUIT PERPENDICULAR TO FOOTINGS 1



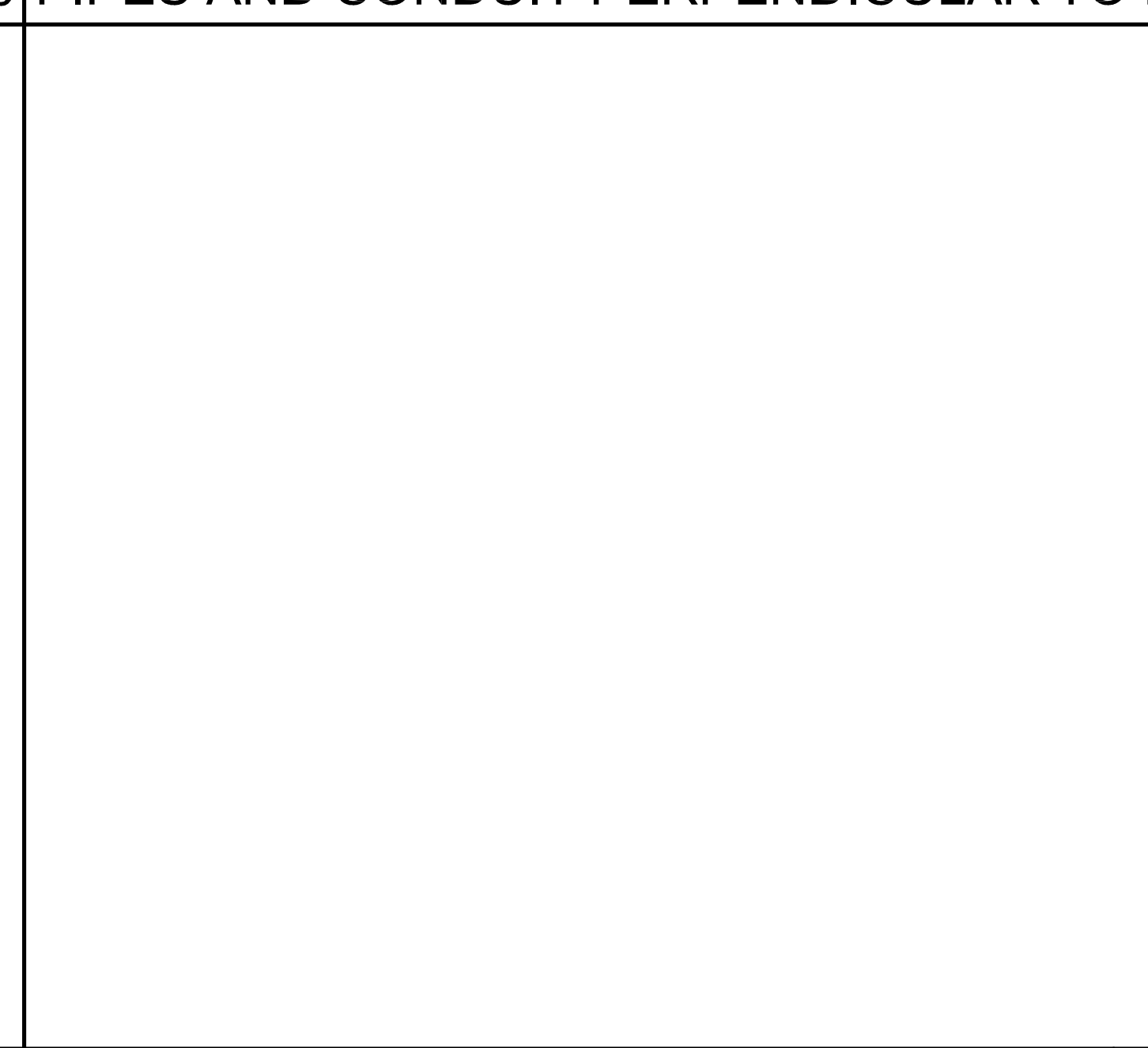
C105-0 CONTINUOUS FOOTING CONST. JOINT 19



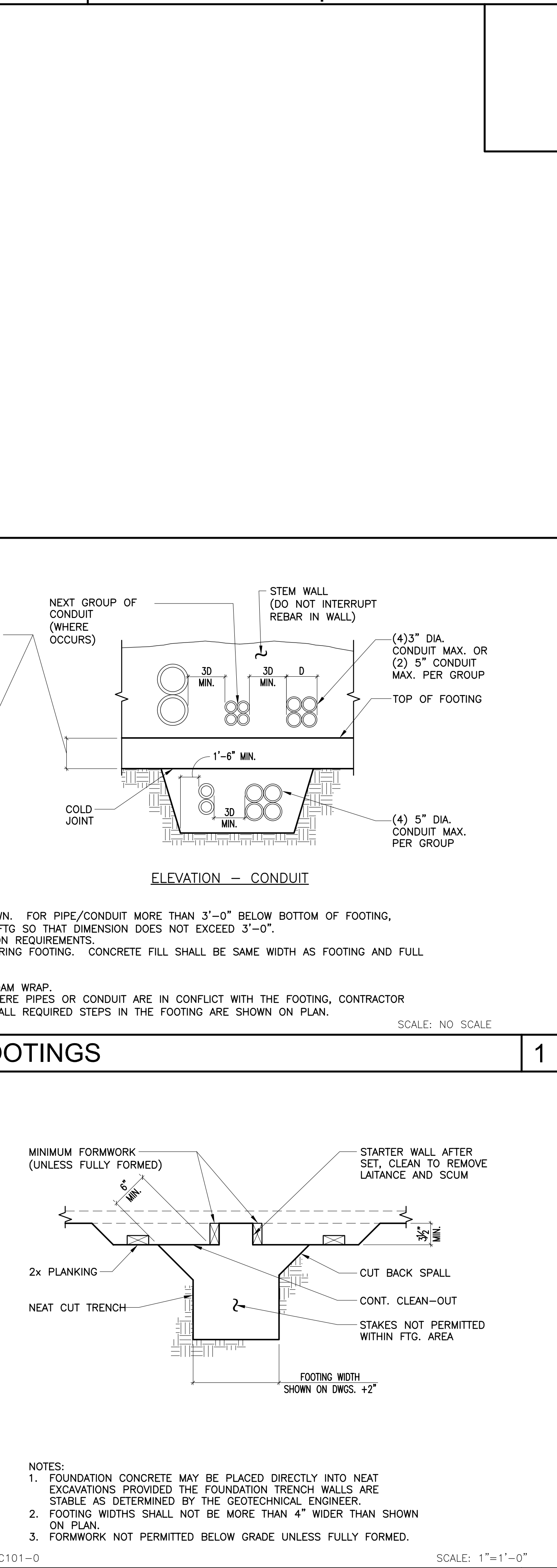
C208-0 CONCRETE CURB AND PADS 16



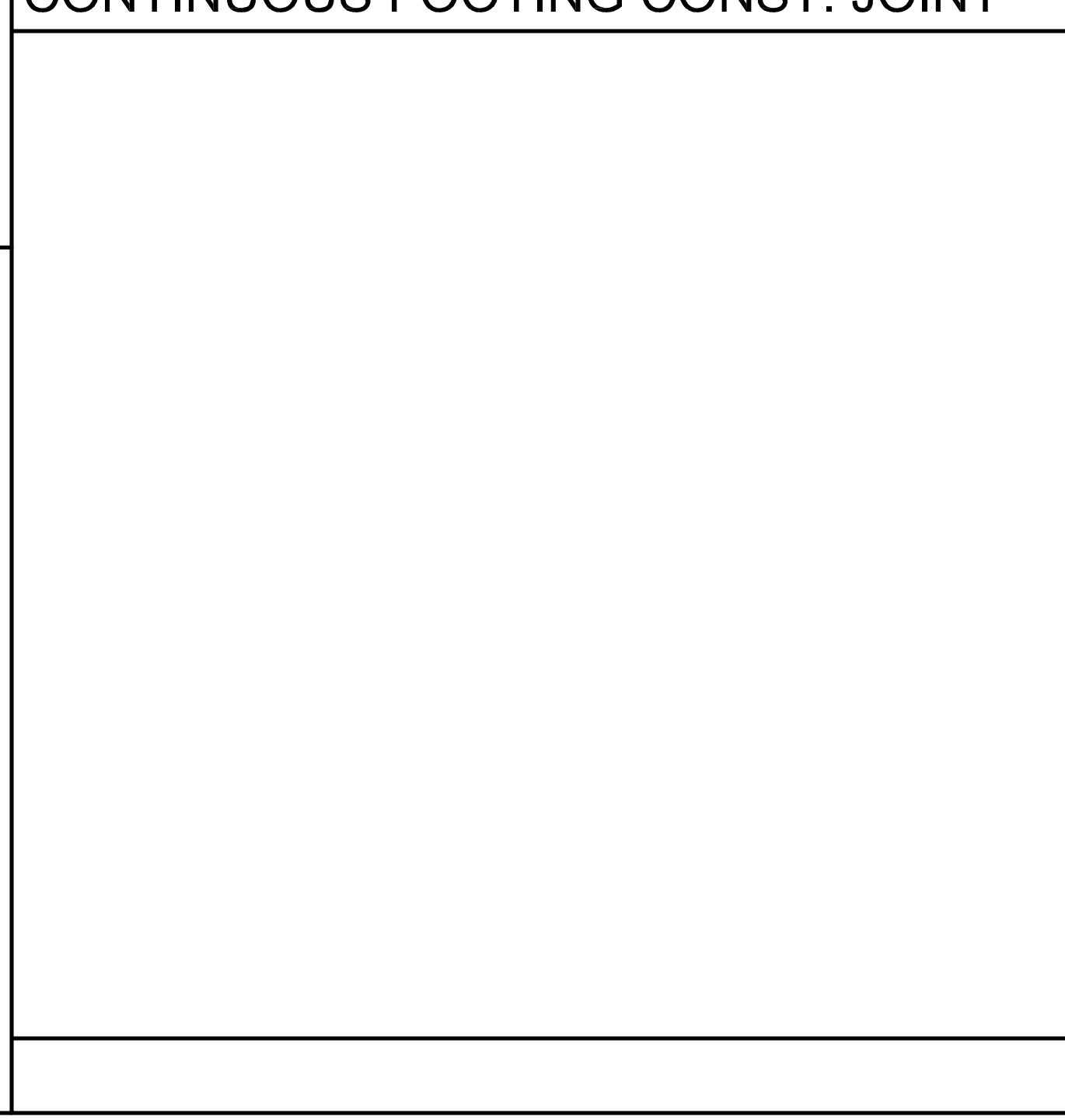
C215-0 CONCRETE PADS 12



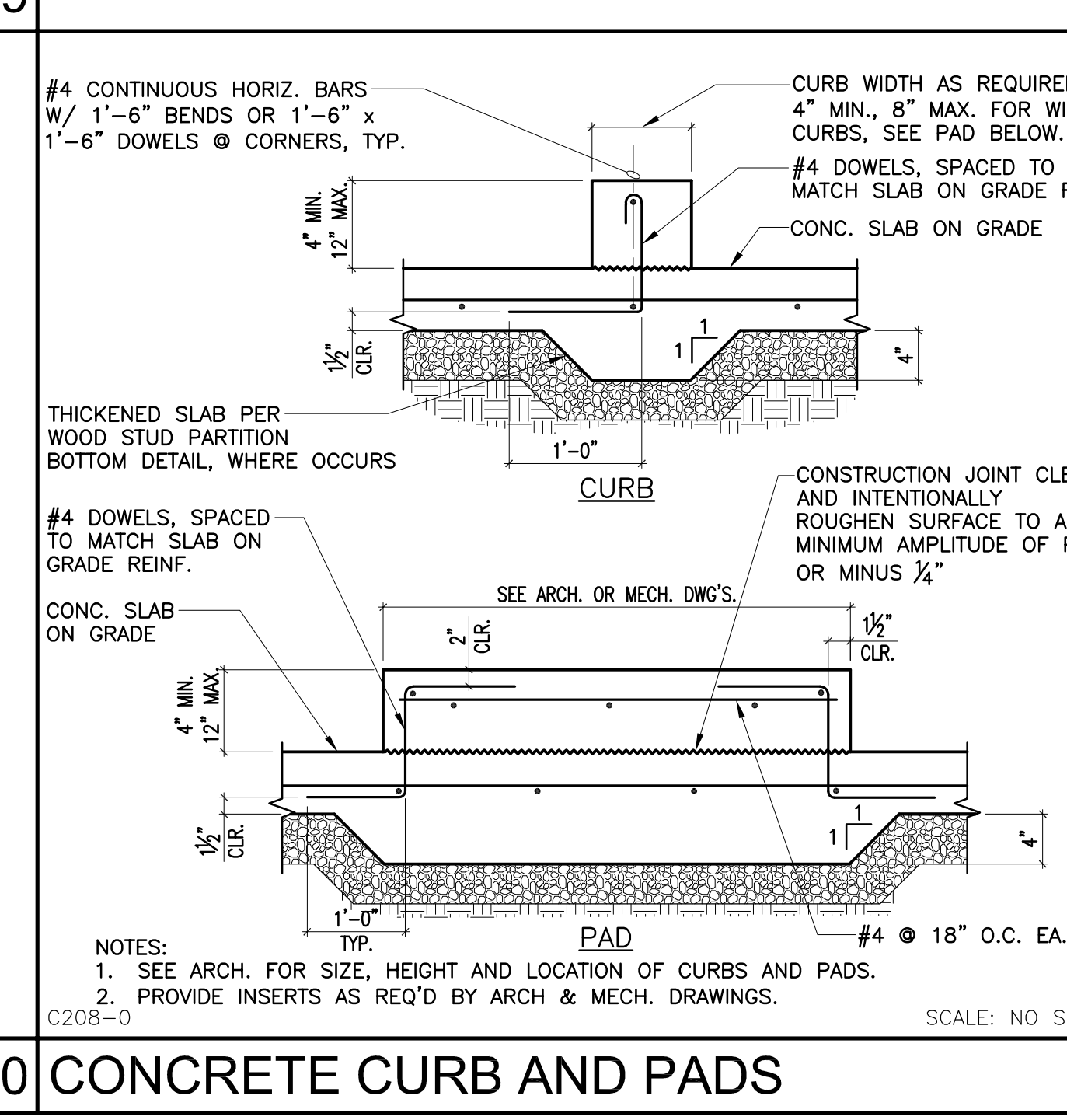
C108-0 STEPPED FTG: ONE LAYER OF REINF. 8



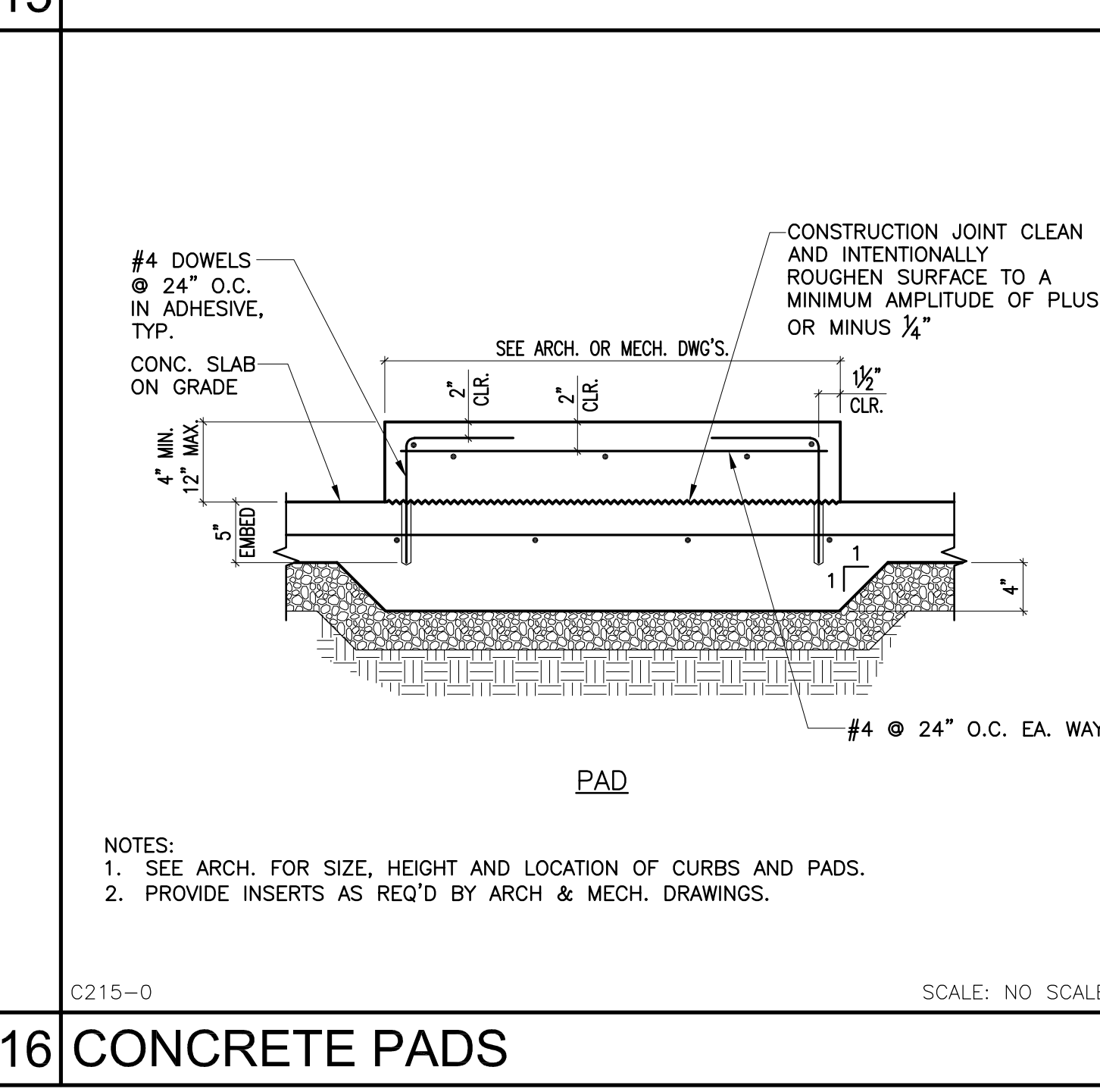
C101-0 FOOTING POURED AGAINST EARTH 2



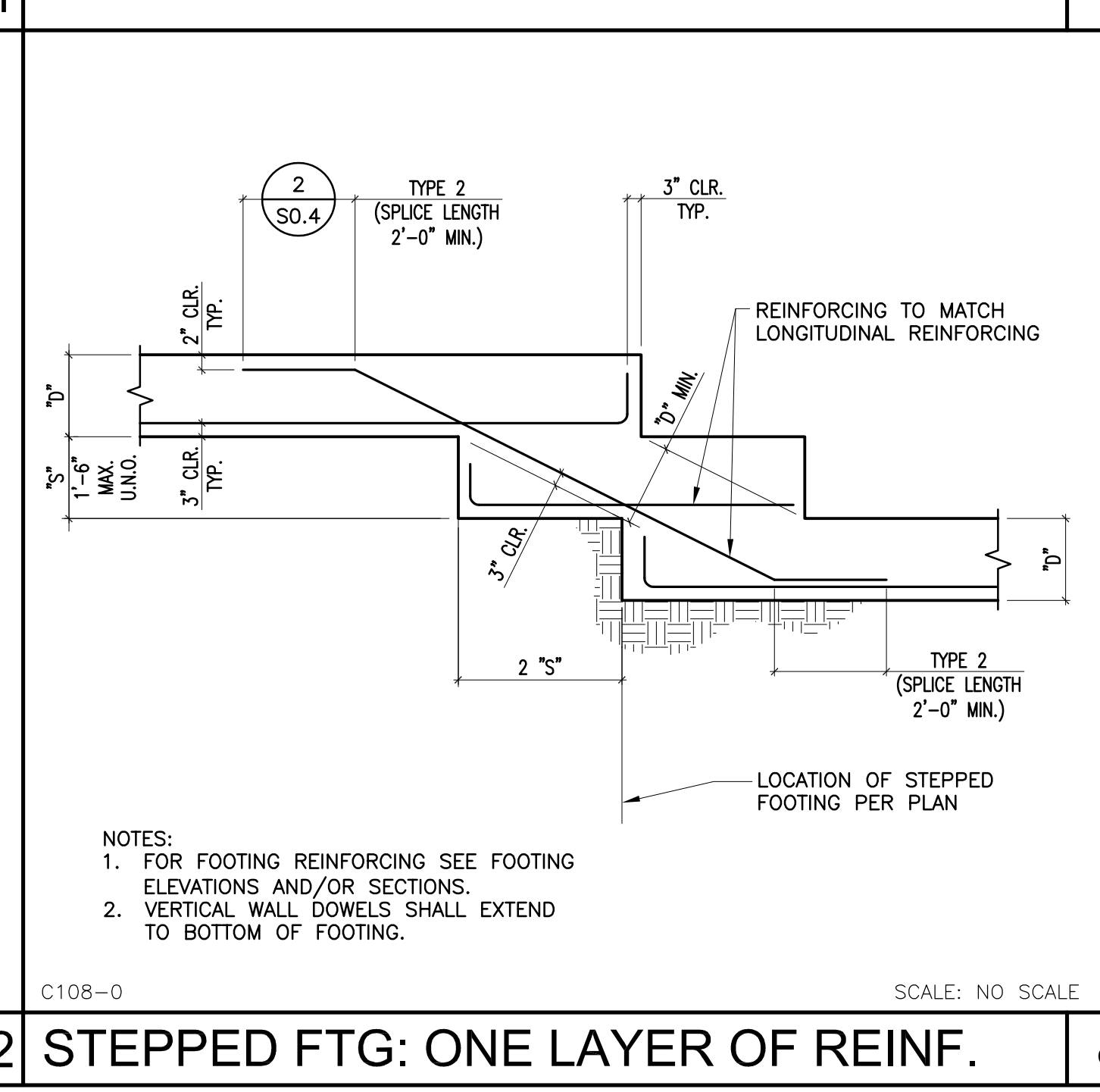
C208-0 CONCRETE CURB AND PADS 20



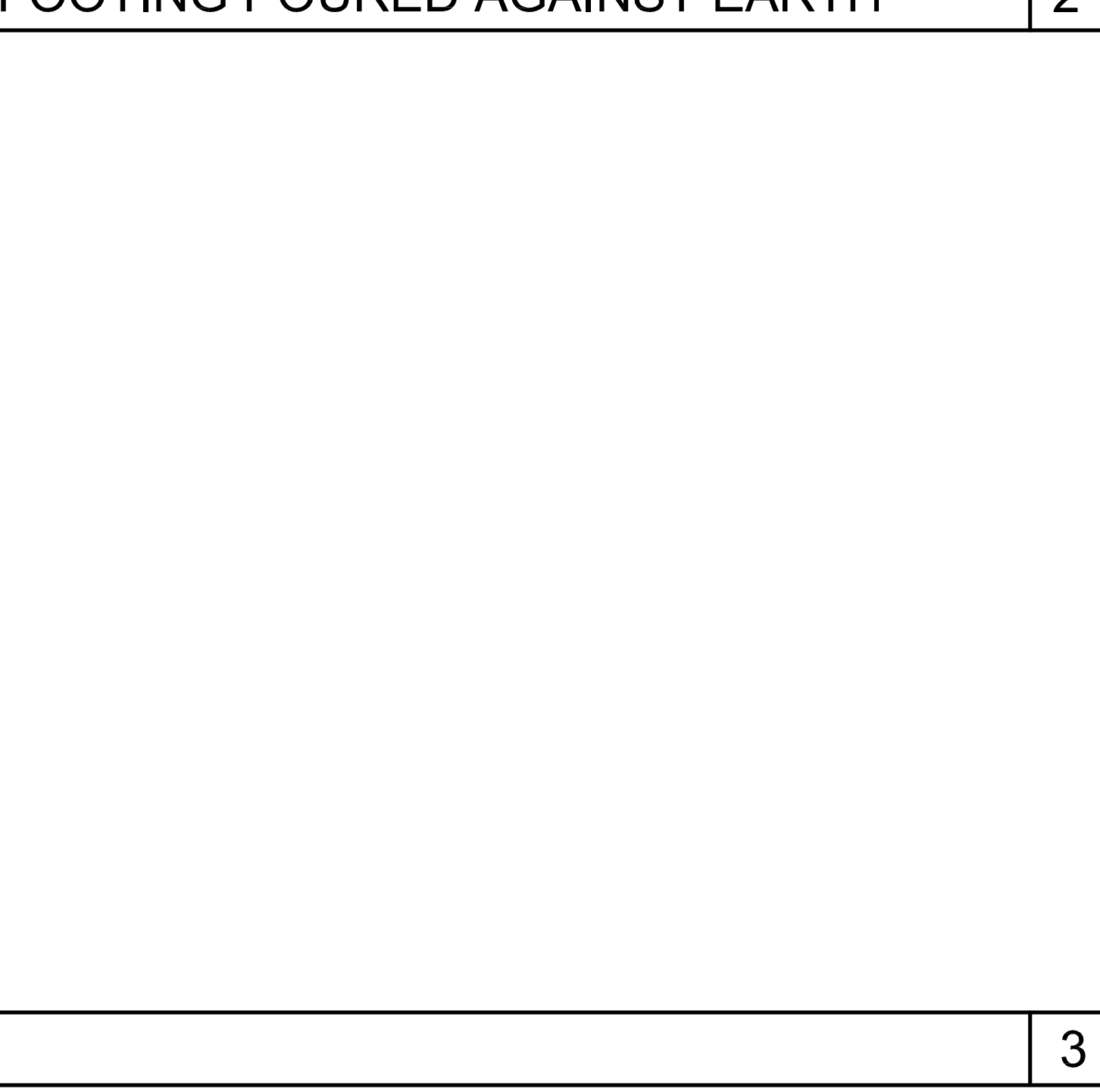
C215-0 CONCRETE PADS 16



C108-0 STEPPED FTG: ONE LAYER OF REINF. 12



C108-0 STEPPED FTG: ONE LAYER OF REINF. 8



C101-0 FOOTING POURED AGAINST EARTH 2

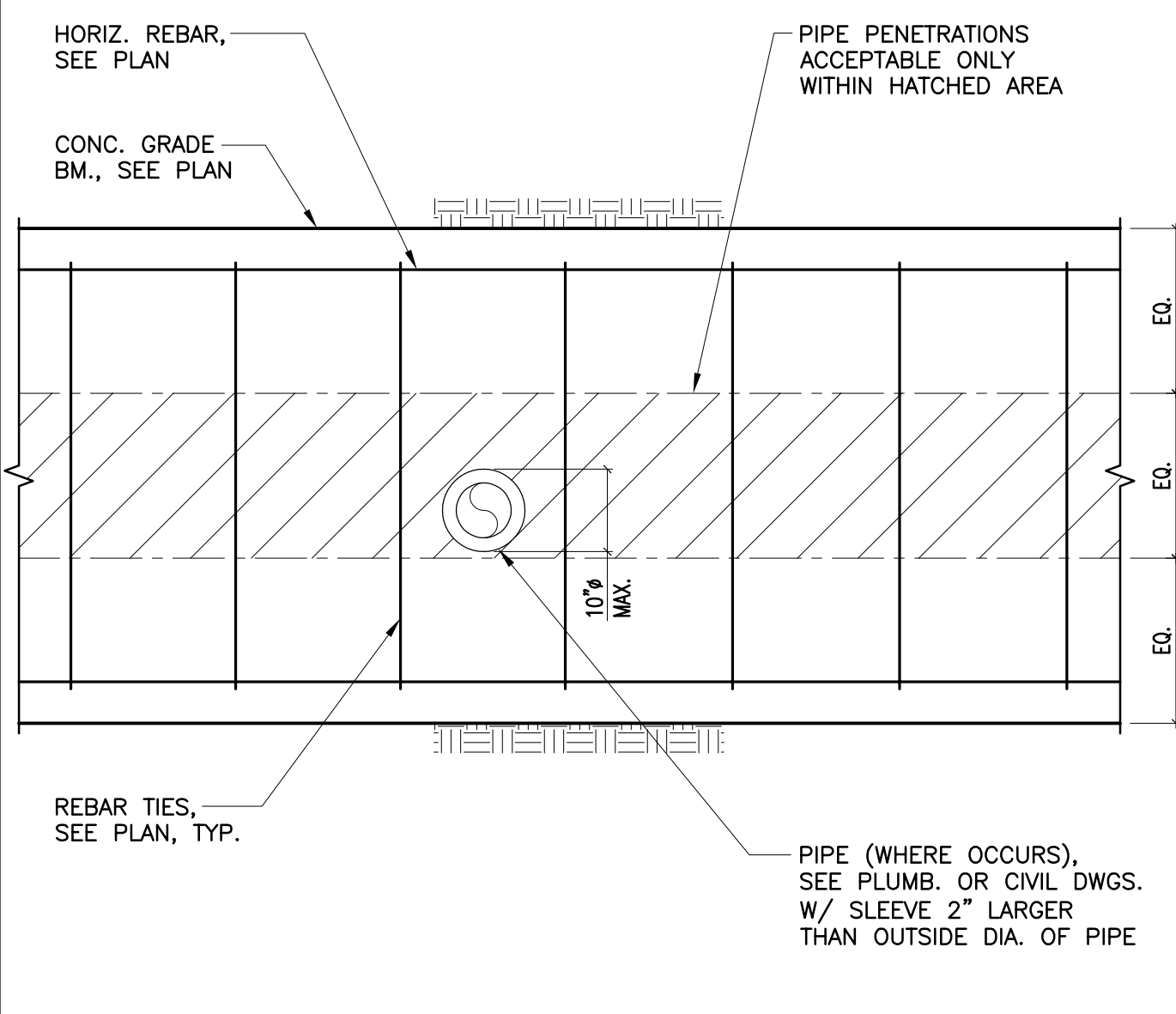
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 483 S. HOLLENBECK AVENUE COVINA, CA 91723

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 04/28/2023 REVISIONS

75-22616-00
 DSA Aff 03-122700
 DSA FILE # 19418

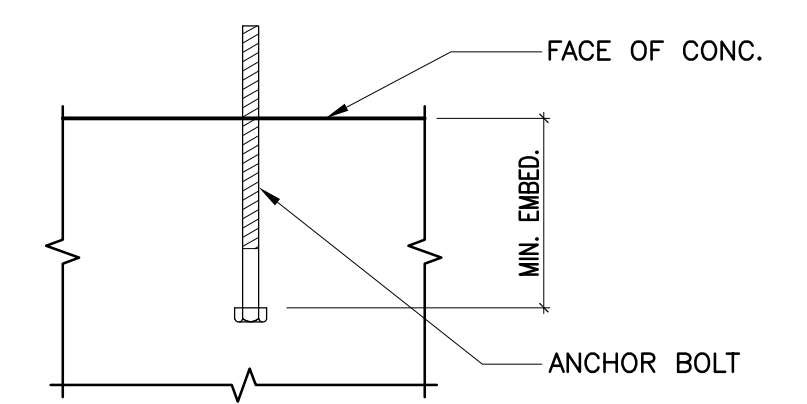
TYPICAL CONCRETE DETAILS

S0.3



C612-0 SCALE: NO SCALE

13 PIPE PENETRATION W/IN GRADE BM.

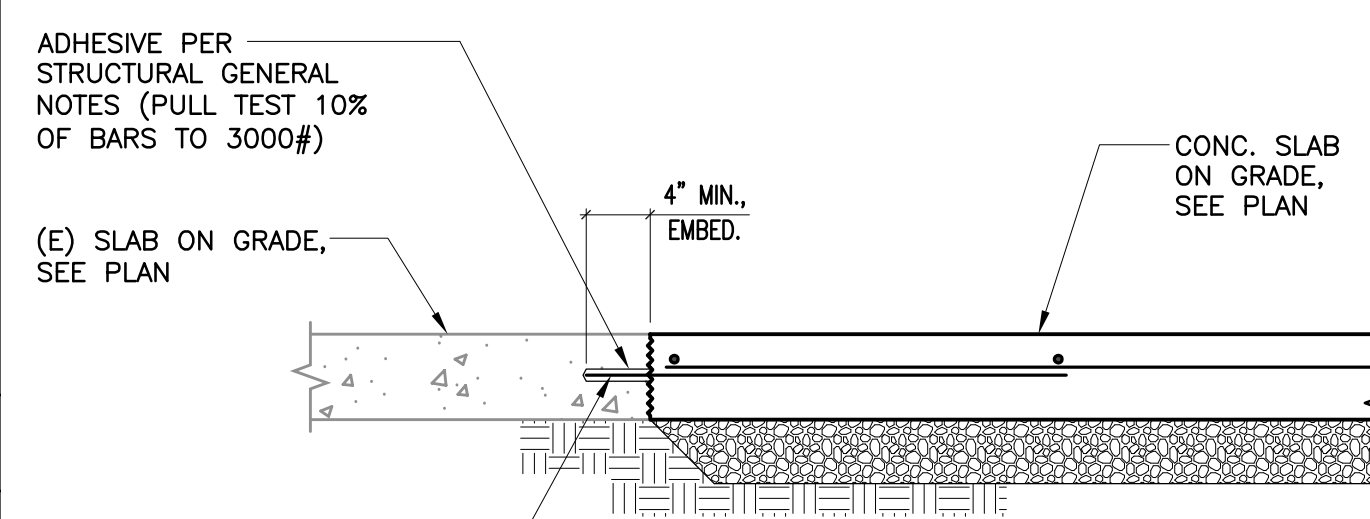
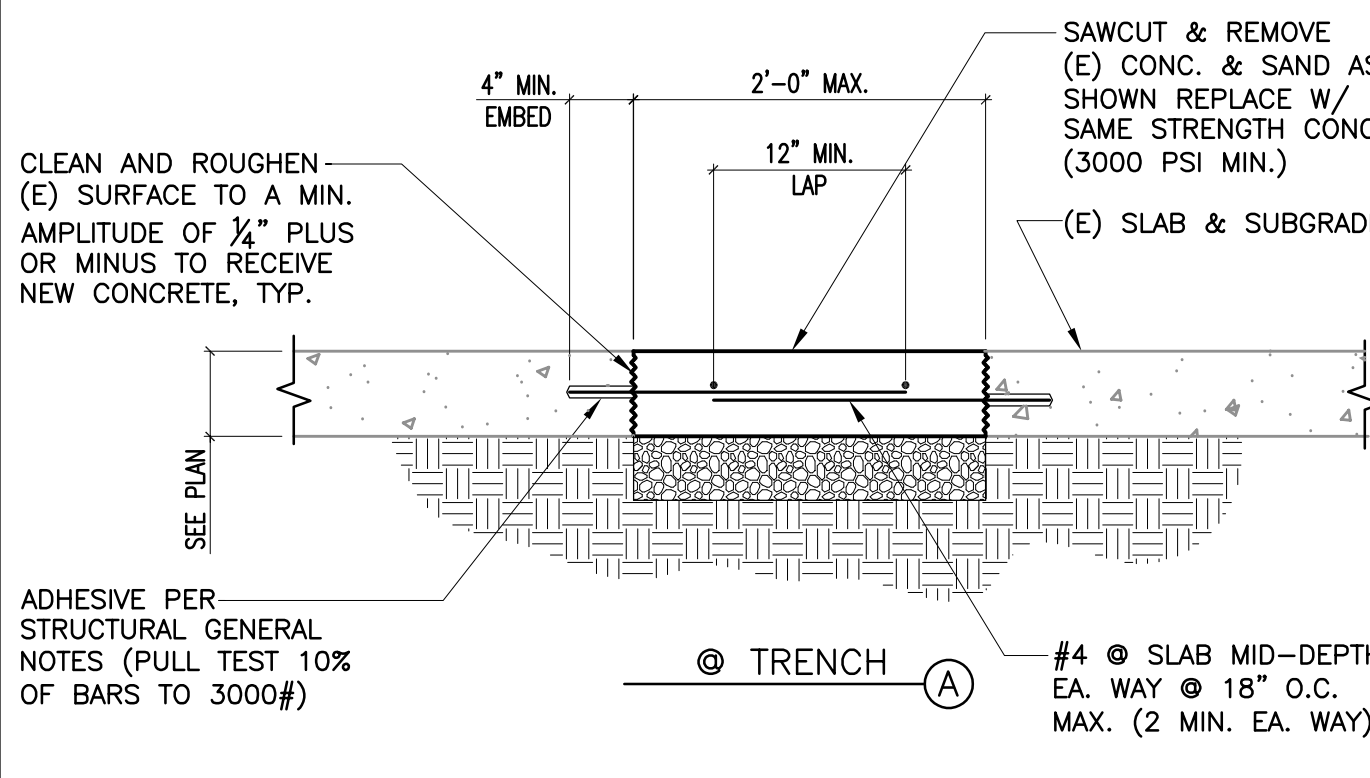


BOLT SIZE	EMBEDMENT FOR CONCRETE U.N.O.	EMBEDMENT FOR CONC. @ SHEAR WALLS
1/2"	4"	6"
3/8"	5"	7 1/2"
3/4"	6"	9"
7/8"	7"	10 1/2"
1"	8"	12"
1 1/8"	9"	13 1/2"
1 1/4"	10"	15"

NOTES:
 1. MINIMUM BOLT SPACING SHALL BE 12 BOLT DIAMETERS WITH A MINIMUM EDGE DISTANCE OF 12 DIAMETERS, UNLESS NOTED OTHERWISE.
 2. PROVIDE AN ADDITIONAL 2" OF EMBEDMENT FOR ANCHOR BOLTS LOCATED IN THE TOP OF COLUMNS.
 3. ANCHOR BOLTS SHALL BE HEX HEADED WITH THE DIMENSIONS OF THE HEX CONFORMING TO ANSI/ASME B18.2.1 BENT BAR ANCHORS SHALL NOT BE USED.

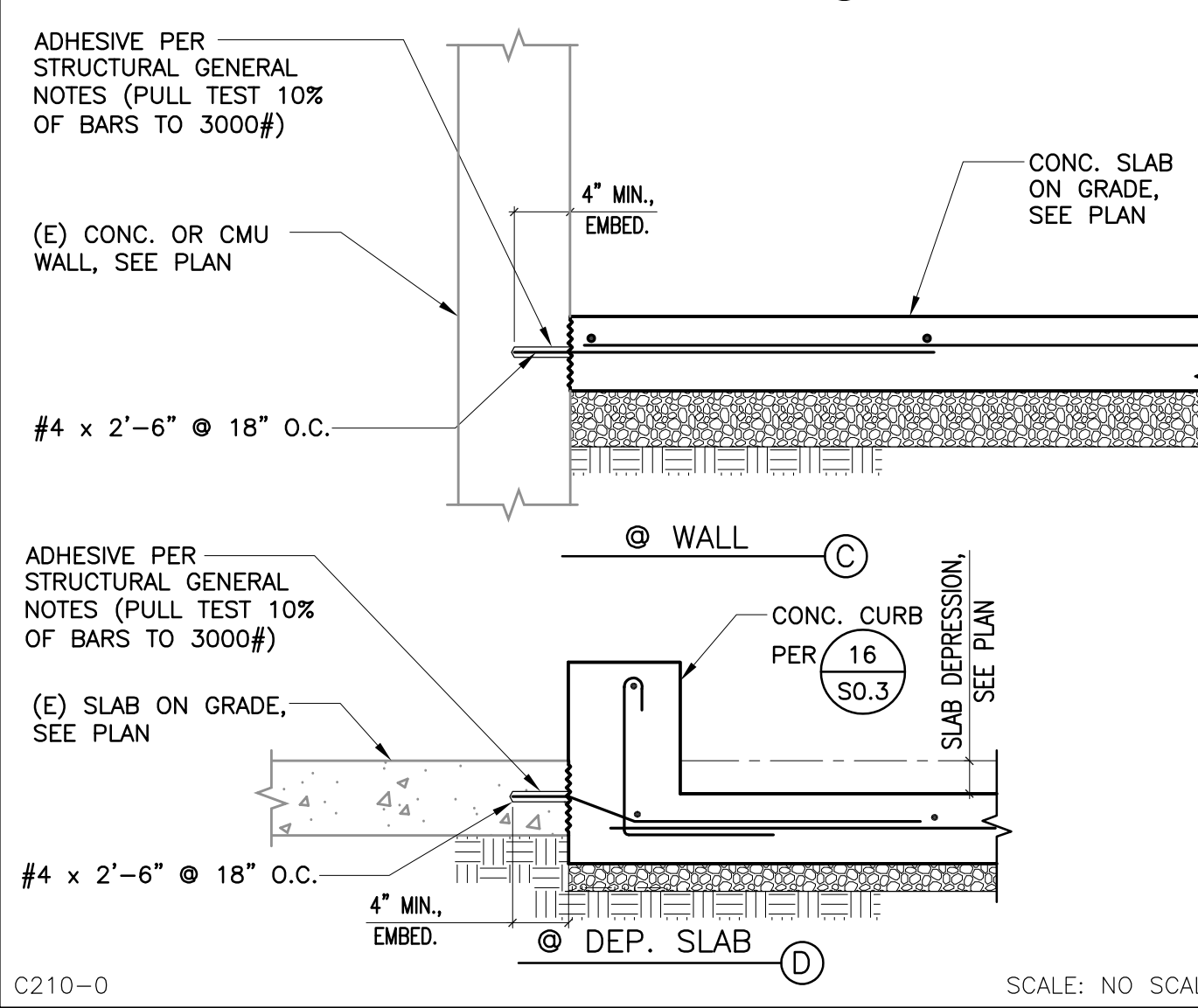
C501-0 SCALE: NO SCALE

9 CONCRETE ANCHOR BOLT SCHEDULE



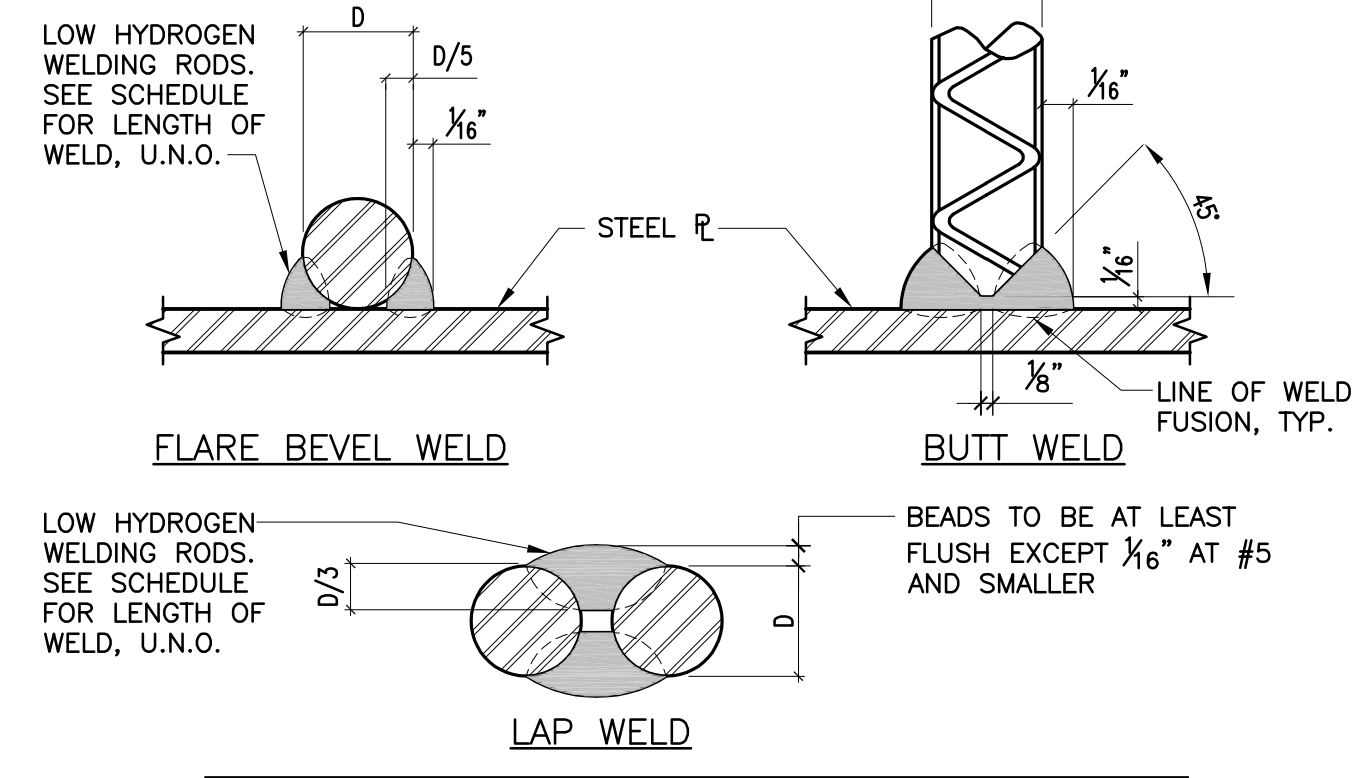
C413-0 SCALE: NO SCALE

14 REBAR WELDING



C210-0 SCALE: NO SCALE

15 TYPICAL SLAB PATCH DETAIL

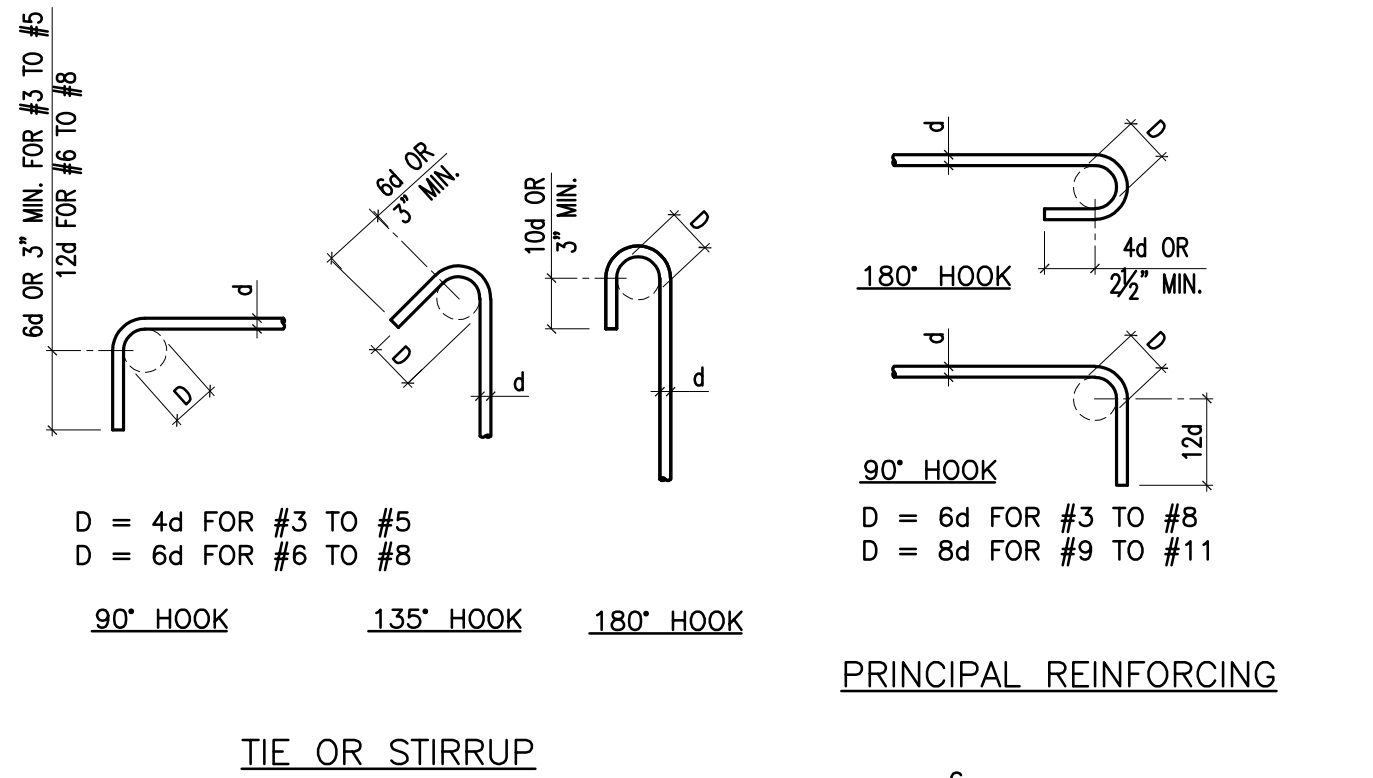


BAR SIZE	WELD LENGTH (EA. SIDE)
#3	2"
#4	2 1/2"
#5	3"
#6	3 1/2"
#7	4"

NOTES:
 1. USE (E80XX) LOW HYDROGEN RODS FOR ALL REBAR WELDING.
 2. ALL WELDING SHALL BE SUBJECT TO CONTINUOUS INSPECTION.

C413-0 SCALE: NO SCALE

6 REBAR WELDING



NOTES:
 1. ALL BAR BENDS SHALL BE MADE COLD.
 2. ALL REINFORCING BARS #5 & LARGER SHALL NOT BE RE-BENT.

C409-0 SCALE: NO SCALE

6 BAR BENDS

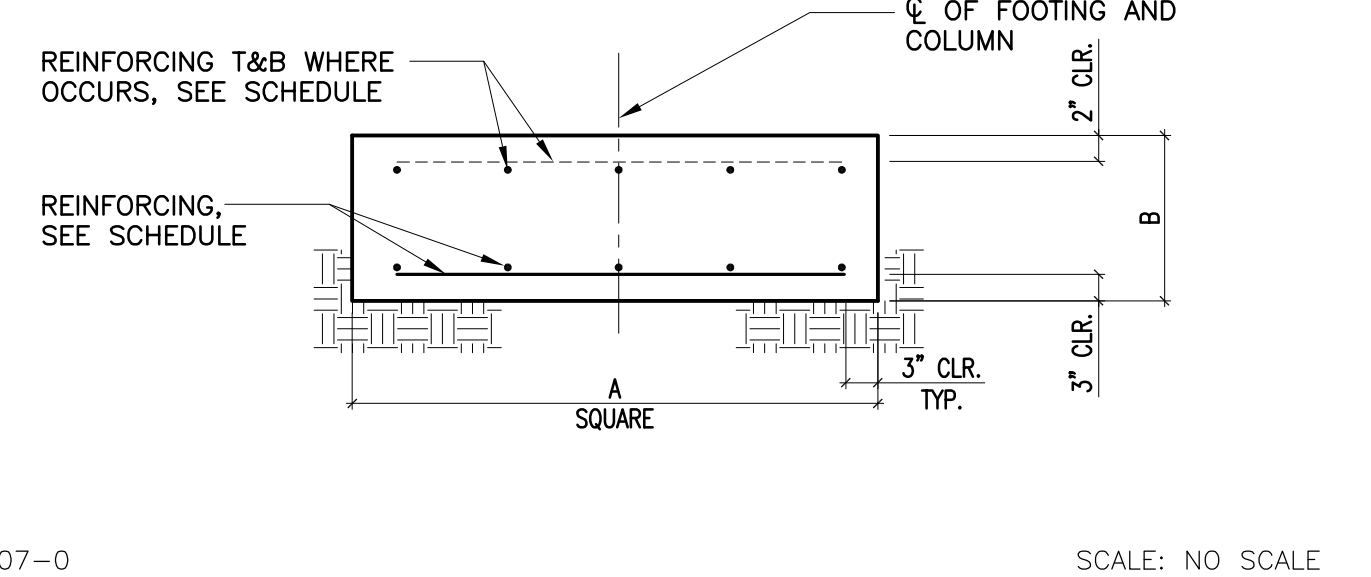
TYPE	BAR LOCATION	REINFORCING DEVELOPMENT & SPLICE LENGTHS (GRADE 60)																												
		CONCRETE		BAR SIZE																										
		TYPE	STRENGTH	#3	#4	#5	#6	#7	#8	#9	#10	#11																		
1	VERT. REINF. IN CONC. WALL	NWC	fc'≥4ksi	14	18	6	19	25	7	24	31	9	28	37	10	42	54	12	47	62	14	54	70	15	61	79	17	67	87	19
2	HORIZ. REINF. IN CONC. WALL, FTGS., BEAMS, MISC. (SEE NOTE 5)	NWC	fc'≥4ksi	18	24	6	25	32	7	31	40	9	37	48	10	54	70	12	62	80	14	70	91	15	79	102	17	87	113	19
3	SLAB ON GRADE (SEE NOTE 6)	NWC	fc'≥4ksi	14	18	6	19	25	7	24	31	9	28	37	10	42	54	12	47	62	14	54	70	15	61	79	17	67	87	19
4	CONC. ROOF OR FLOOR DIAPHRAGMS	LWC	fc'≥3ksi	23	30	8	30	39	12	37	48	12	44	57	13	65	84	16	74	96	19	83	108	20	93	121	23	104	135	25

NOTES:
 1. l_d = DEVELOPMENT
 l_s = LAP SPLICE LENGTH
 l_{dh} = HOOK DEVELOPMENT LENGTH

C415-0 SCALE: NO SCALE

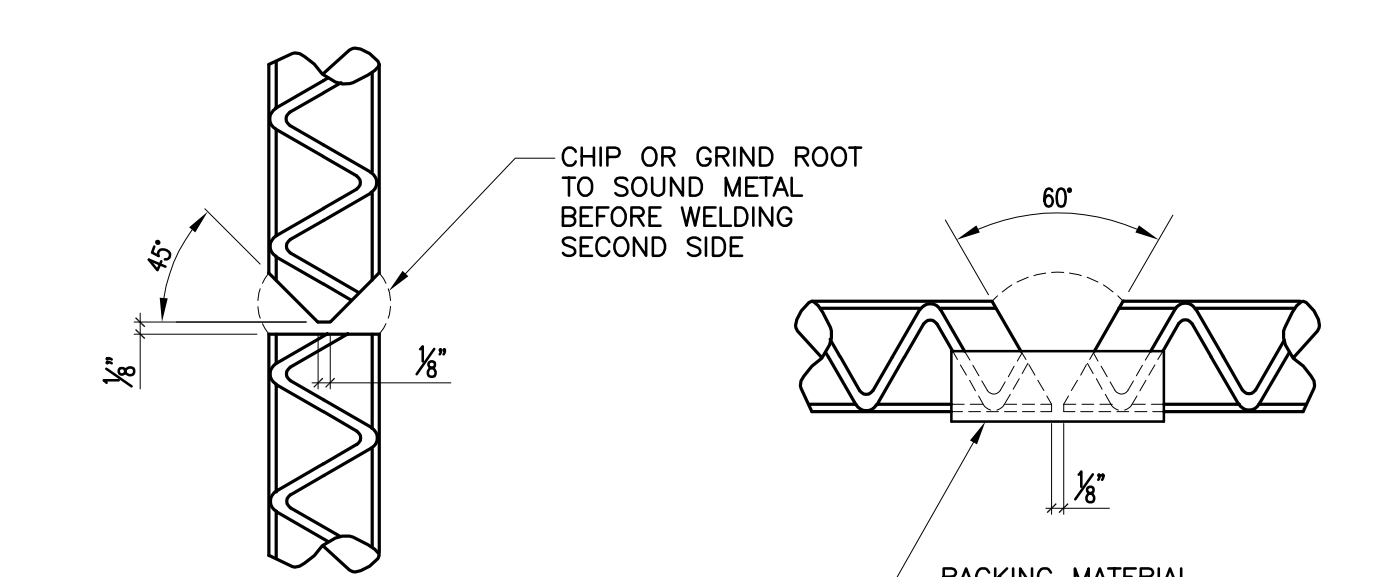
11 REINFORCING DEVELOPMENT & SPLICE LENGTHS

PAD FOOTING SCHEDULE				
	A	B	REINF.	REMARKS
PF-3	3'-0"	2'-0"	(5)#5 EA. WAY	
PF-4	4'-0"	2'-0"	(7)#5 EA. WAY	
PF-5	5'-0"	2'-0"	(9)#5 EA. WAY	
PF-6	6'-0"	2'-0"	(10)#5 EA. WAY	
PF-7	7'-0"	2'-0"	(12)#5 EA. WAY	



C107-0 SCALE: NO SCALE

12 PAD FOOTING SCHEDULE



NOTES:
 1. A PRE-QUALIFICATION TEST SHALL BE MADE BY AN APPROVED TESTING LABORATORY ON SAMPLES OF EACH SIZE BAR BEING WELDED.
 2. WELDING SHALL BE WITH E80XX LOW HYDROGEN ELECTRODES AND SHALL CONFORM TO A.W.S. - D1.4.

C412-0 SCALE: NO SCALE

8 BUTT WELDED REINFORCING BARS

17

18

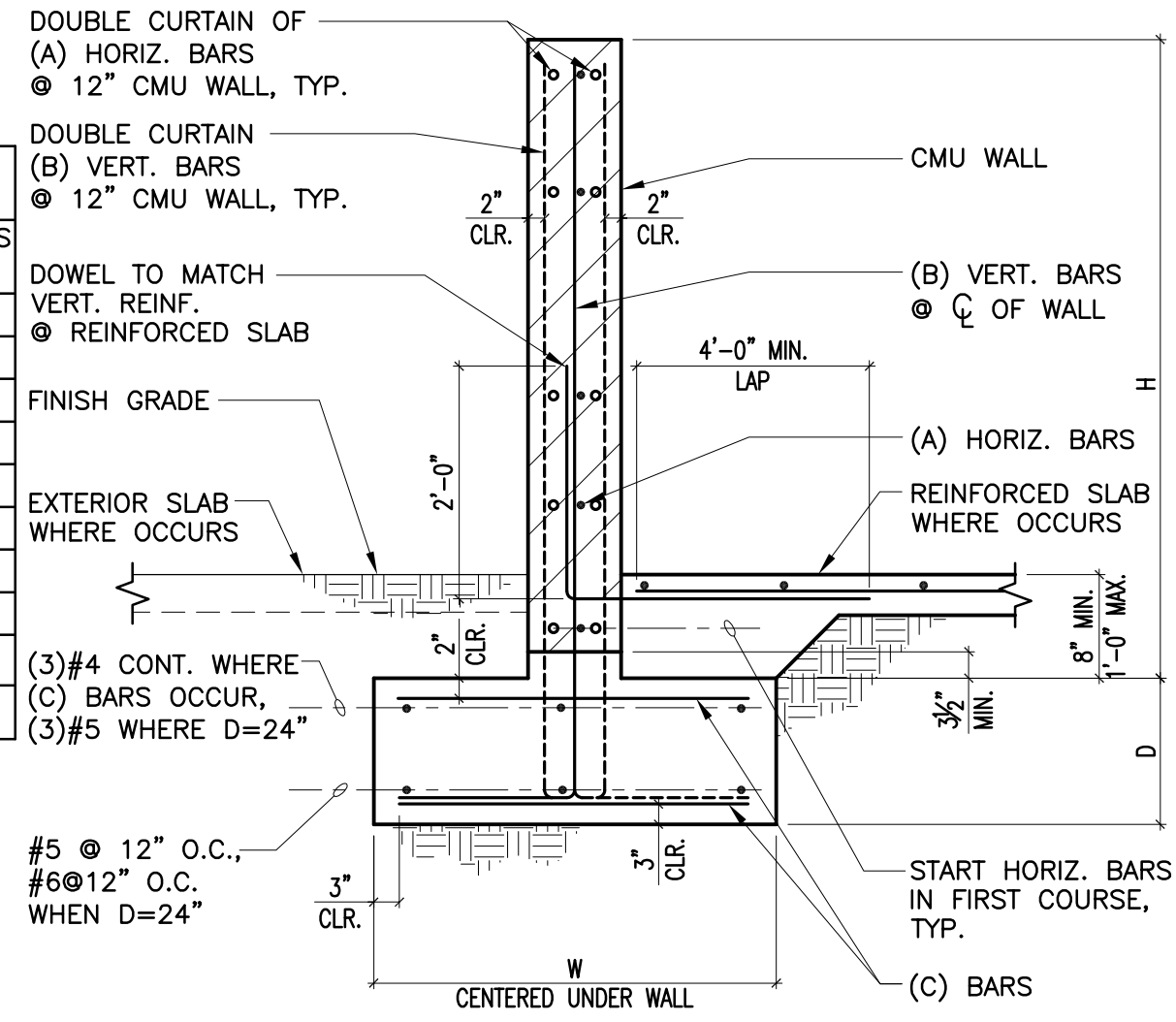
19

20

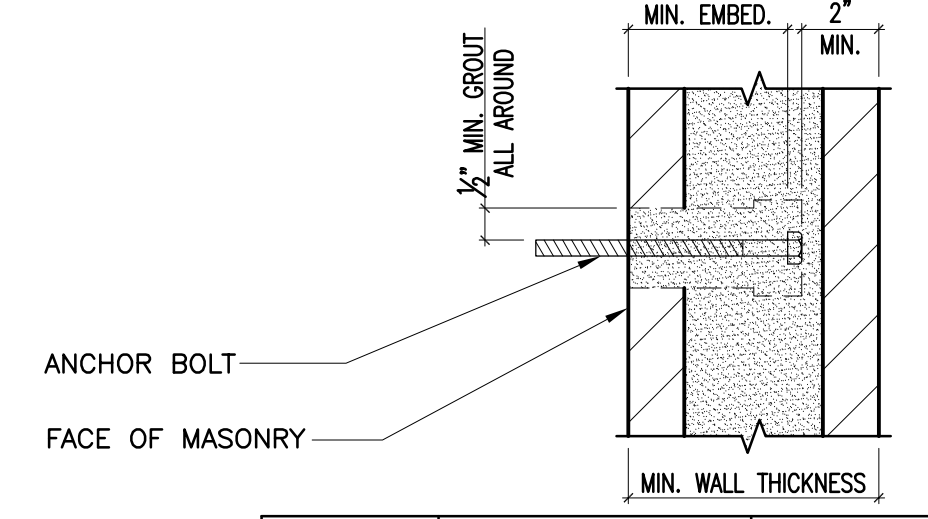
FREESTANDING CMU WALL REINFORCING SCHEDULE

H	W	D	(A)	(B) *	(C)	WALL THICKNESS (NOMINAL)
1'-0" TO 2'-0"	1'-6"	12	#5 @ 24" O.C.	#5 @ 24" O.C.	-	8"
2'-1" TO 3'-0"	2'-0"	12	#5 @ 24" O.C.	#5 @ 24" O.C.	-	8"
3'-1" TO 4'-0"	2'-6"	12	#5 @ 24" O.C.	#5 @ 24" O.C.	#5 @ 24" O.C.	8"
4'-1" TO 5'-0"	2'-6"	12	#5 @ 24" O.C.	#5 @ 24" O.C.	#5 @ 24" O.C.	8"
5'-1" TO 6'-0"	3'-0"	12	#5 @ 24" O.C.	#5 @ 24" O.C.	#5 @ 24" O.C.	8"
6'-1" TO 7'-0"	3'-6"	12	#5 @ 24" O.C.	#5 @ 24" O.C.	#5 @ 24" O.C.	8"
7'-1" TO 8'-0"	4'-0"	12	#5 @ 24" O.C.	#5 @ 24" O.C.	#5 @ 24" O.C.	8"
8'-1" TO 9'-0"	4'-6"	18	#5 @ 24" O.C.	#5 @ 16" O.C.	#5 @ 16" O.C.	8"
9'-1" TO 10'-0"	5'-6"	24	#5 E.F. @ 24" O.C.	#5 E.F. @ 24" O.C.	#5 @ 16" O.C.	12"
10'-1" TO 11'-0"	6'-0"	24	#5 E.F. @ 24" O.C.	#5 E.F. @ 16" O.C.	#6 @ 16" O.C.	12"

* SPACE VERTICAL REINFORCING @ 16" O.C. WHERE STACK BOND PATTERN OCCURS.



M108-0 FREESTANDING CMU WALL SCHEDULE SCALE: NO SCALE



BOLT SIZE	MINIMUM EMBEDMENT	MINIMUM WALL THICKNESS
1/2"	4"	8"
5/8"	5"	8"
3/4"	6"	12"
7/8"	7"	12"
1"	8"	16"
1 1/8"	9"	16"
1 1/4"	10"	16"

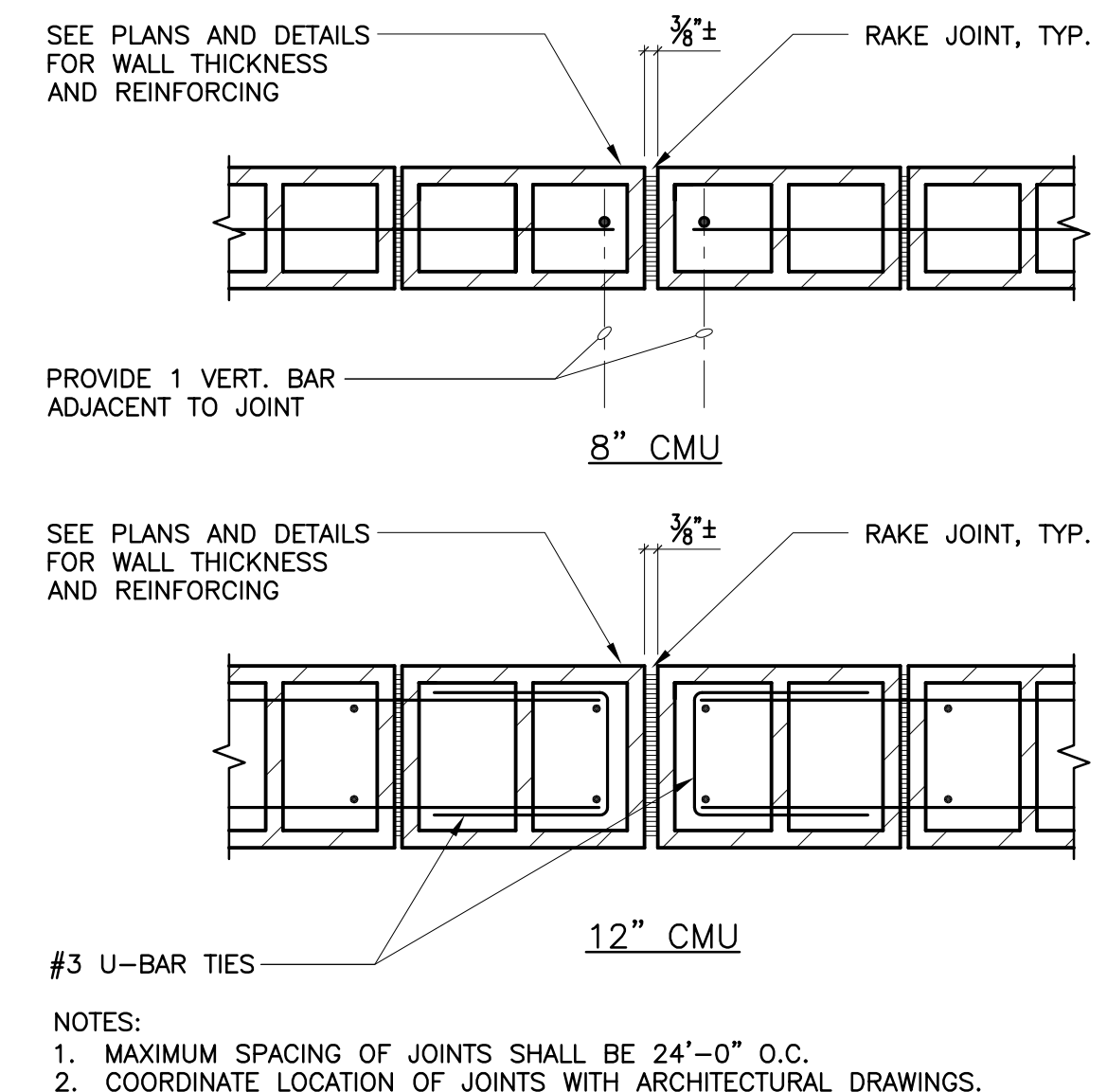
NOTES:
 1. MINIMUM BOLT SPACING SHALL BE 16 BOLT DIAMETERS WITH A MINIMUM EDGE DISTANCE OF 12 DIAMETERS, UNLESS NOTED OTHERWISE.
 2. PROVIDE AN ADDITIONAL 2" OF EMBEDMENT FOR ANCHOR BOLTS LOCATED IN THE TOP OF COLUMNS, WALLS & PILASTERS.
 3. ANCHOR BOLTS SHALL BE HEX HEADED WITH THE DIMENSIONS OF THE HEX CONFORMING TO ANSI/ASME B18.2.1 BENT BAR ANCHORS SHALL NOT BE USED.

M114-0 MASONRY ANCHOR BOLT SCHEDULE SCALE: NO SCALE

17 FREESTANDING CMU WALL SCHEDULE

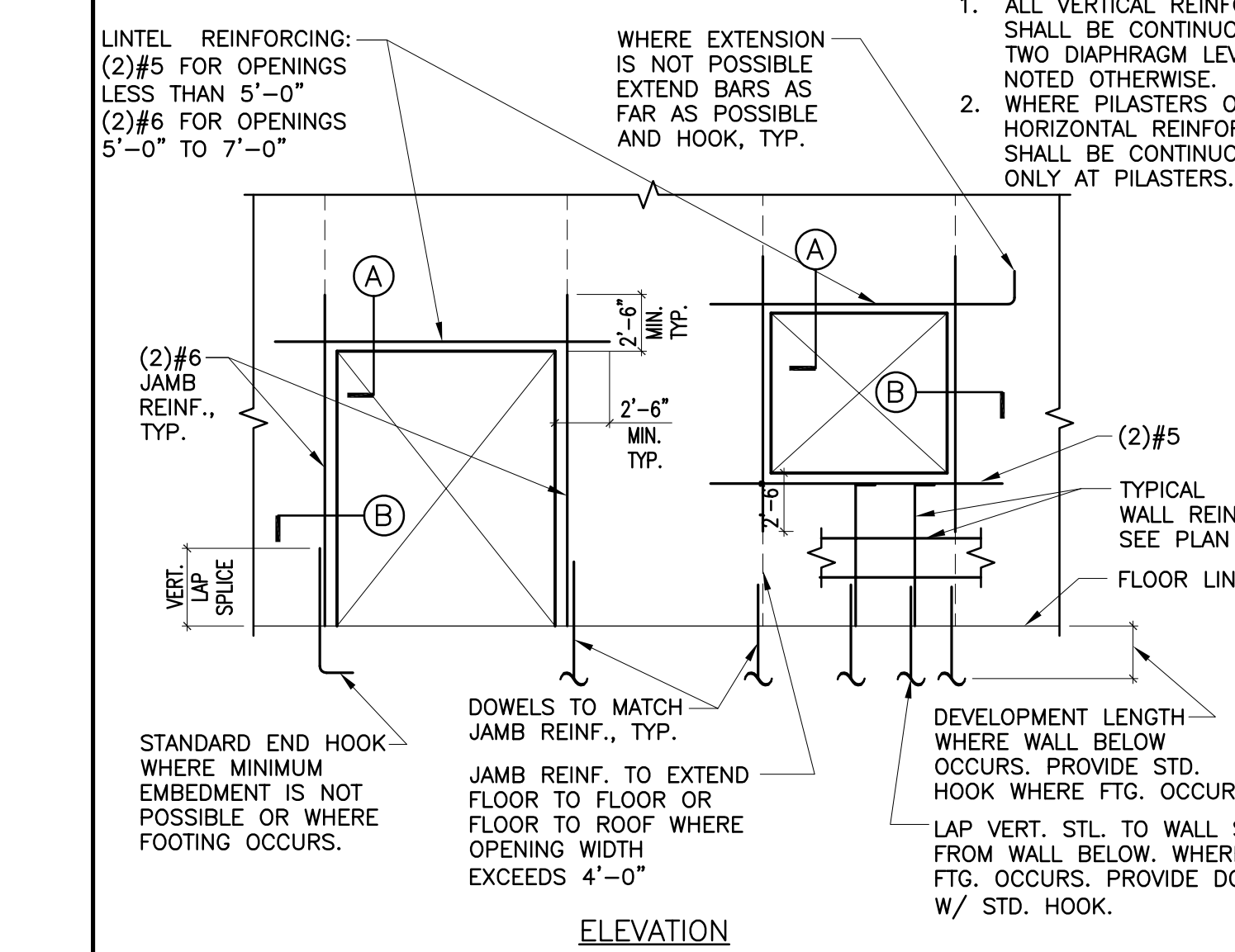
9 MASONRY ANCHOR BOLT SCHEDULE

5



M109-0 TYP. CONTROL JOINT IN FREESTANDING CMU WALL SCALE: NO SCALE

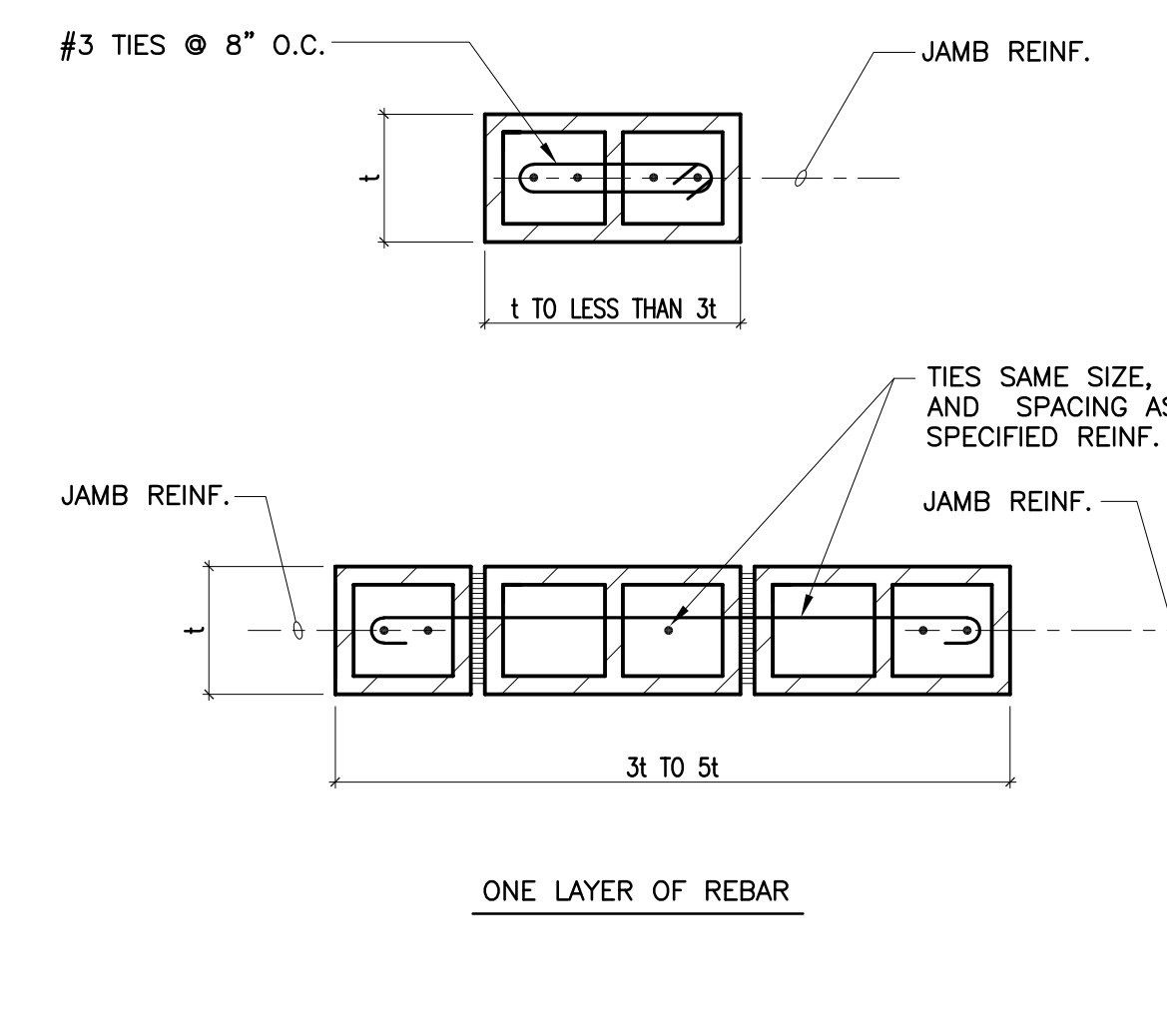
18



M101-0 MINIMUM REINFORCING AT CONCRETE MASONRY WALL OPENINGS SCALE: NO SCALE

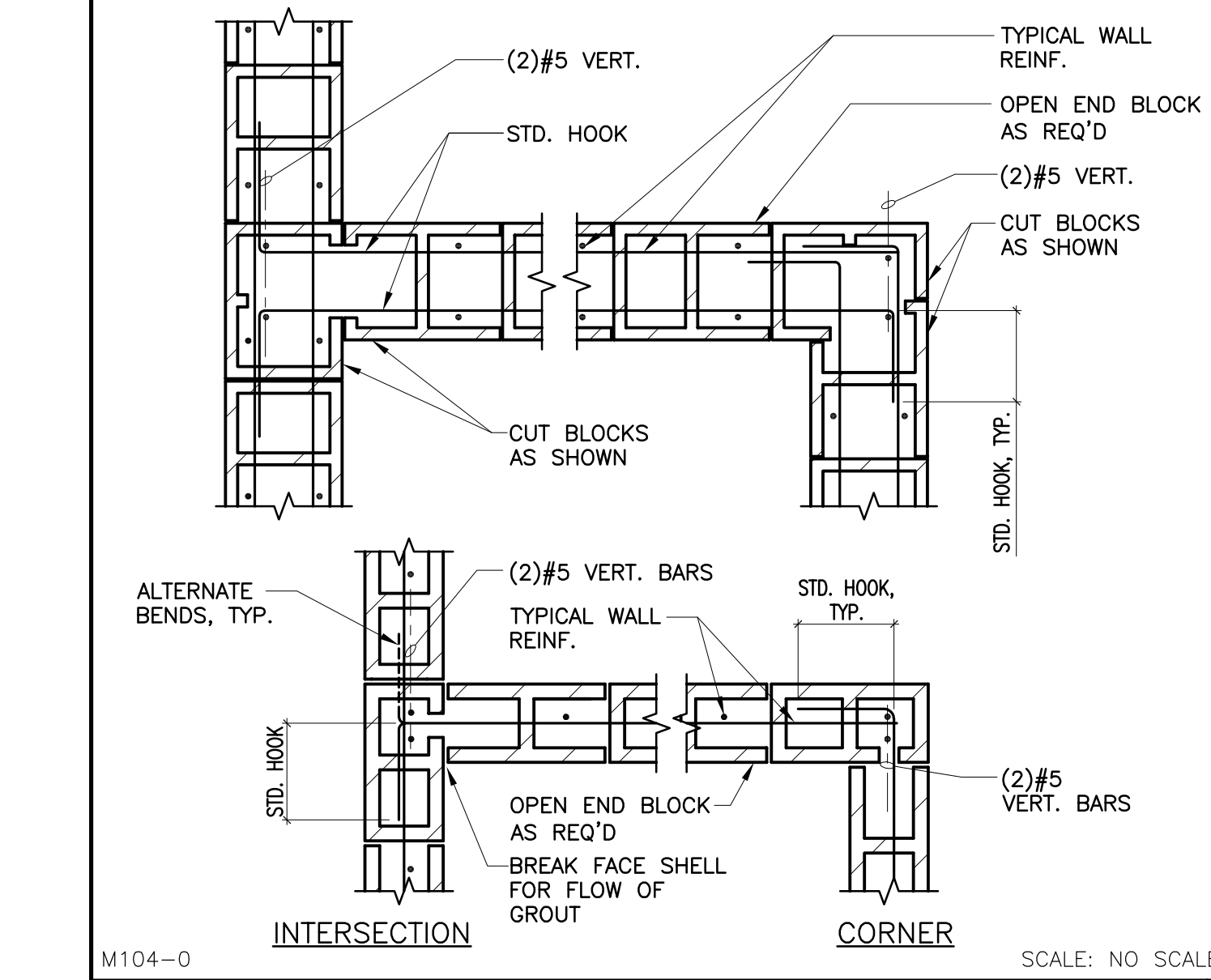
10 MINIMUM REINFORCING AT CONCRETE MASONRY WALL OPENINGS

1



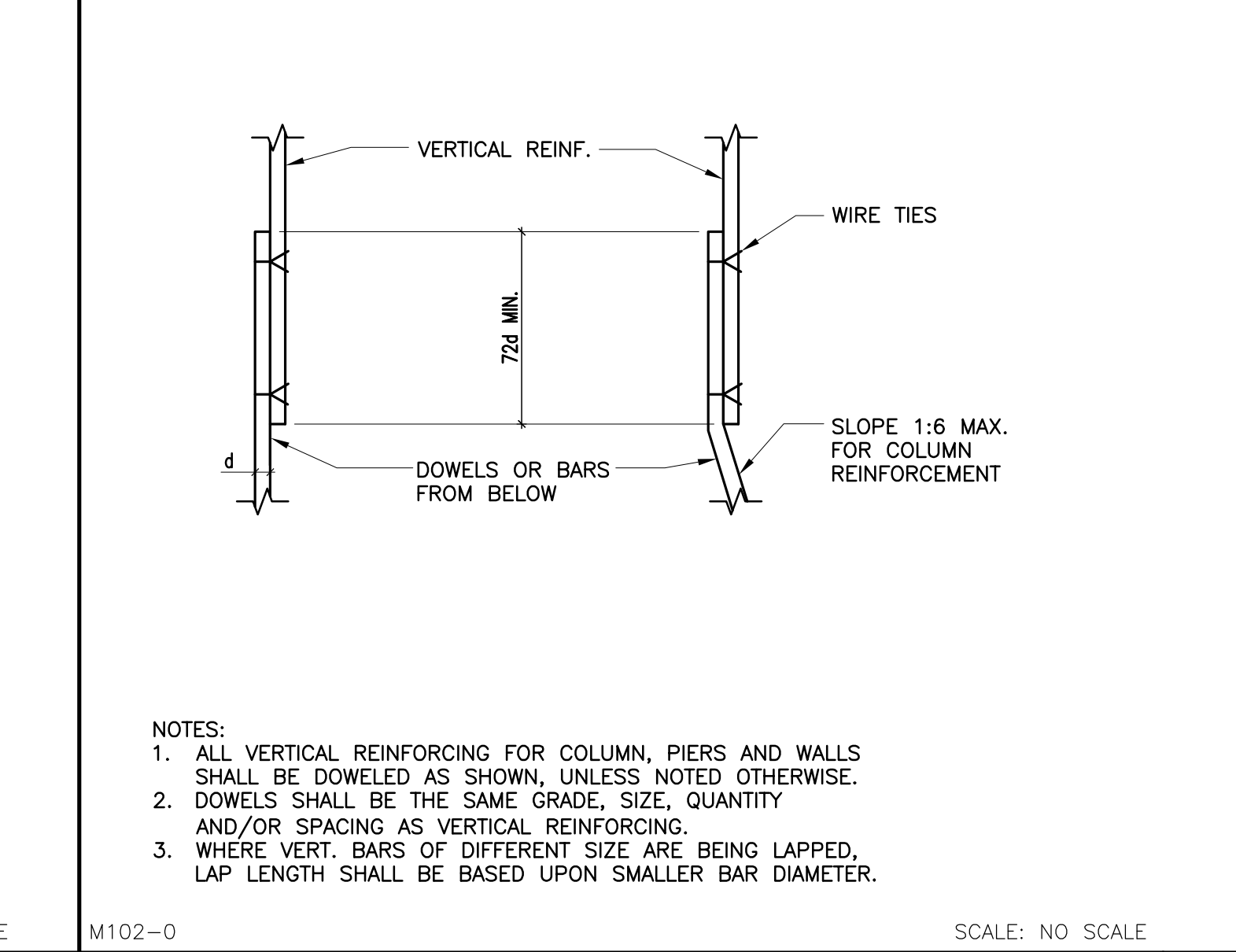
M111-0 CONCRETE MASONRY WALL PIERS SCALE: NO SCALE

19



M104-0 CONC. MAS. WALL INTERSECTIONS SCALE: NO SCALE

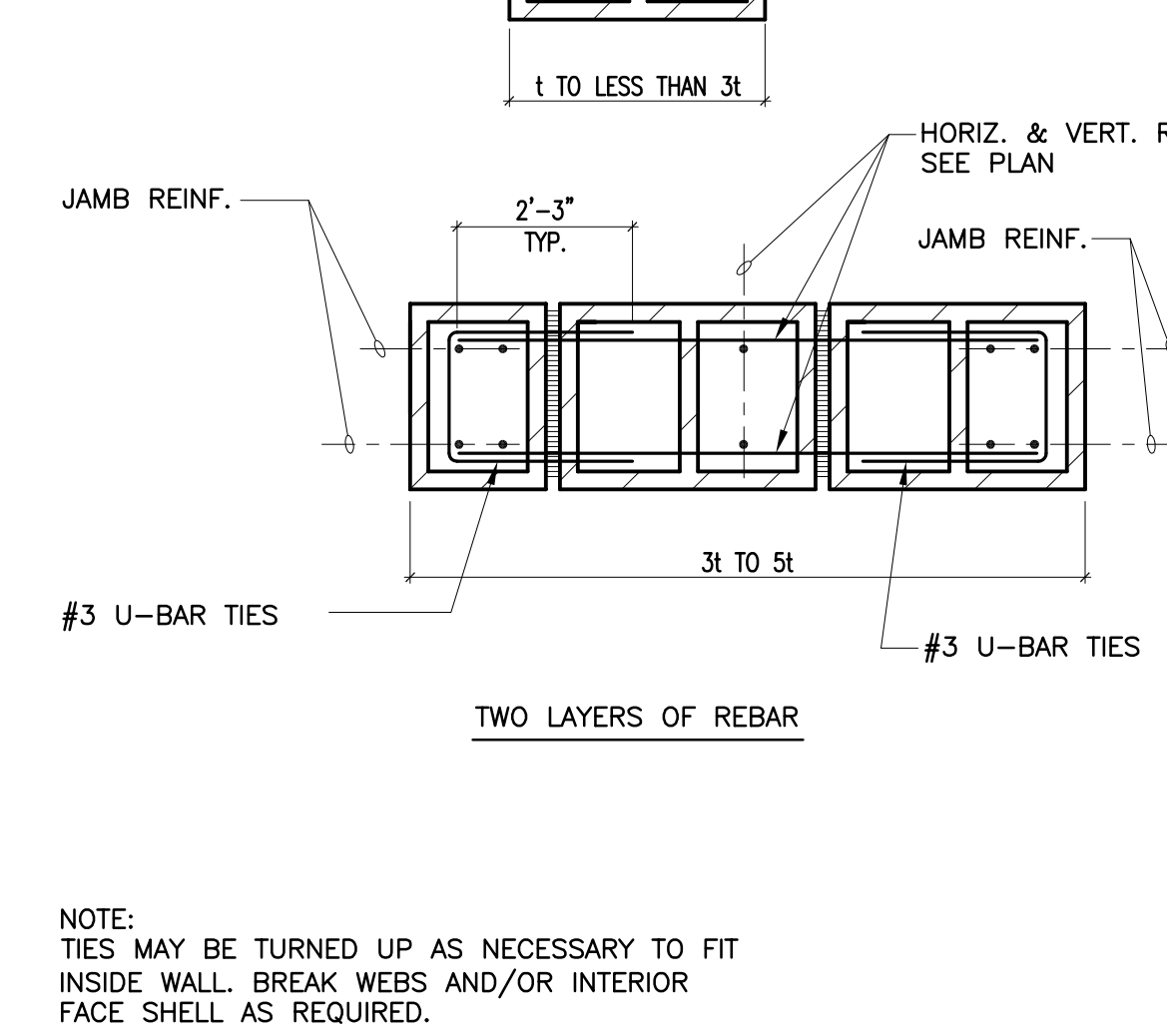
7 CONC. MAS. WALL INTERSECTIONS



M103-0 VERT. REINF. LAP SPLICE-MASONRY SCALE: NO SCALE

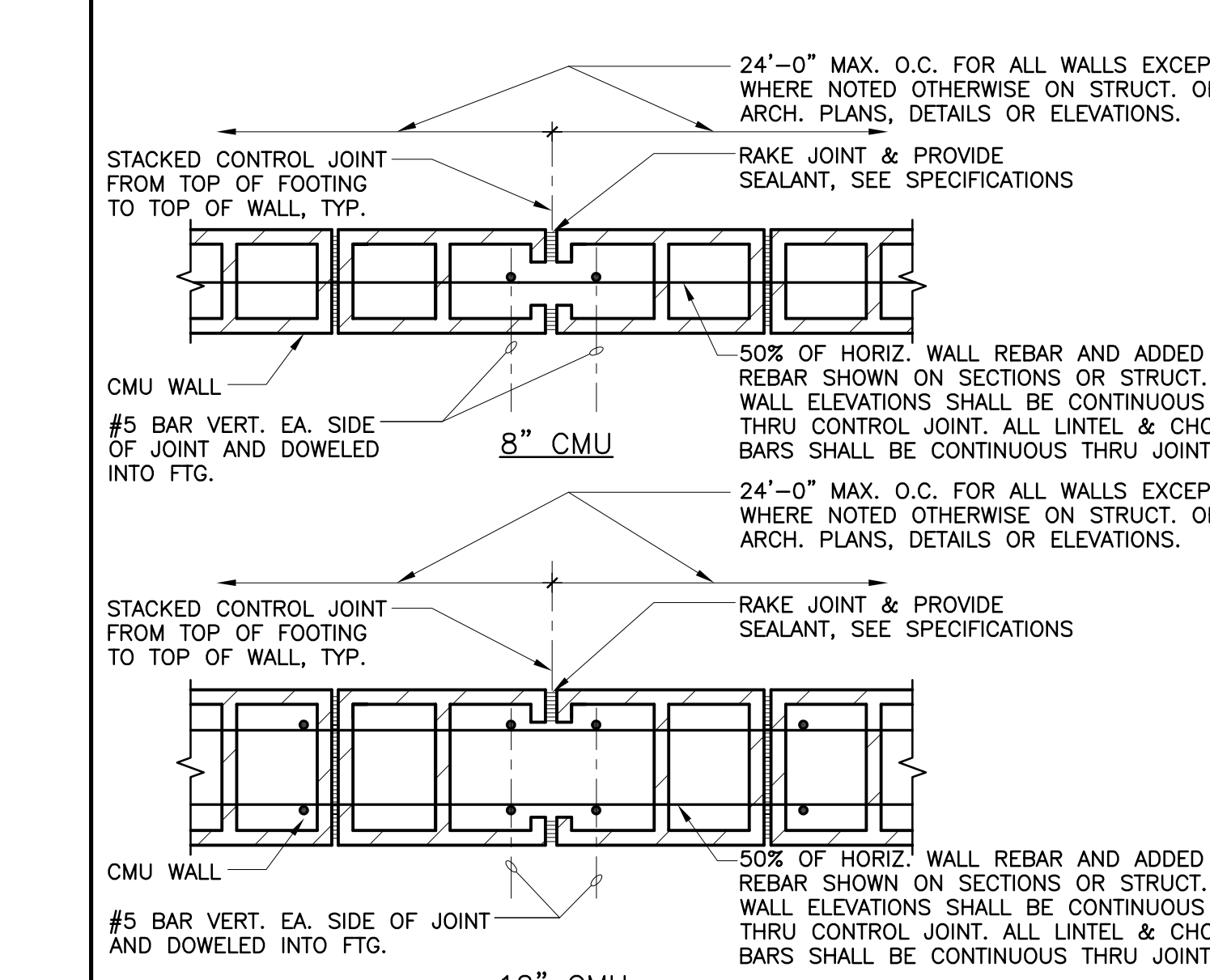
VERT. REINF. LAP SPLICE-MASONRY

2



M110-0 TYPICAL CONTROL JOINT SCALE: NO SCALE

20

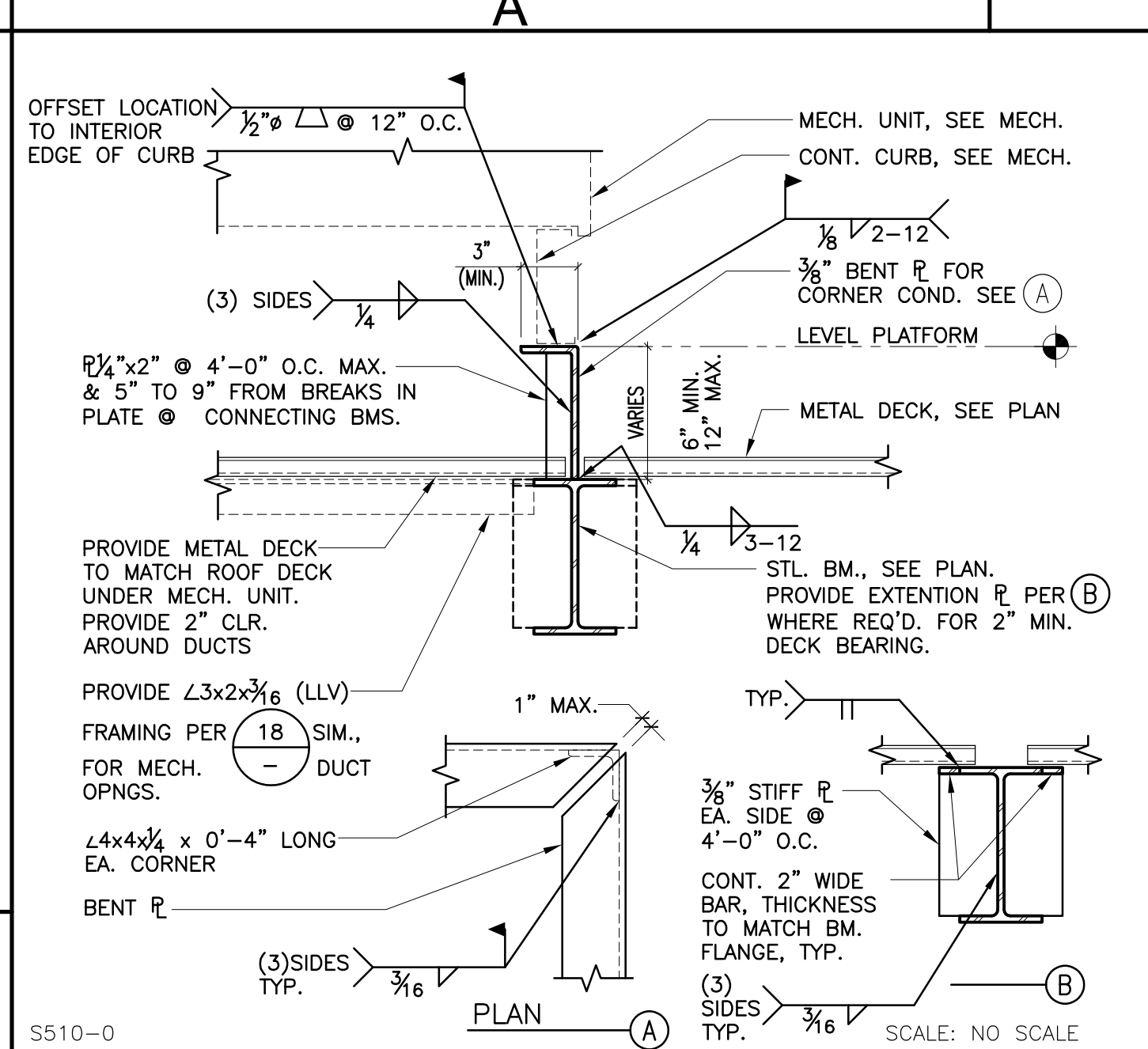


M110-0 HORIZ. REINF. LAP SPLICE - MASONRY SCALE: NO SCALE

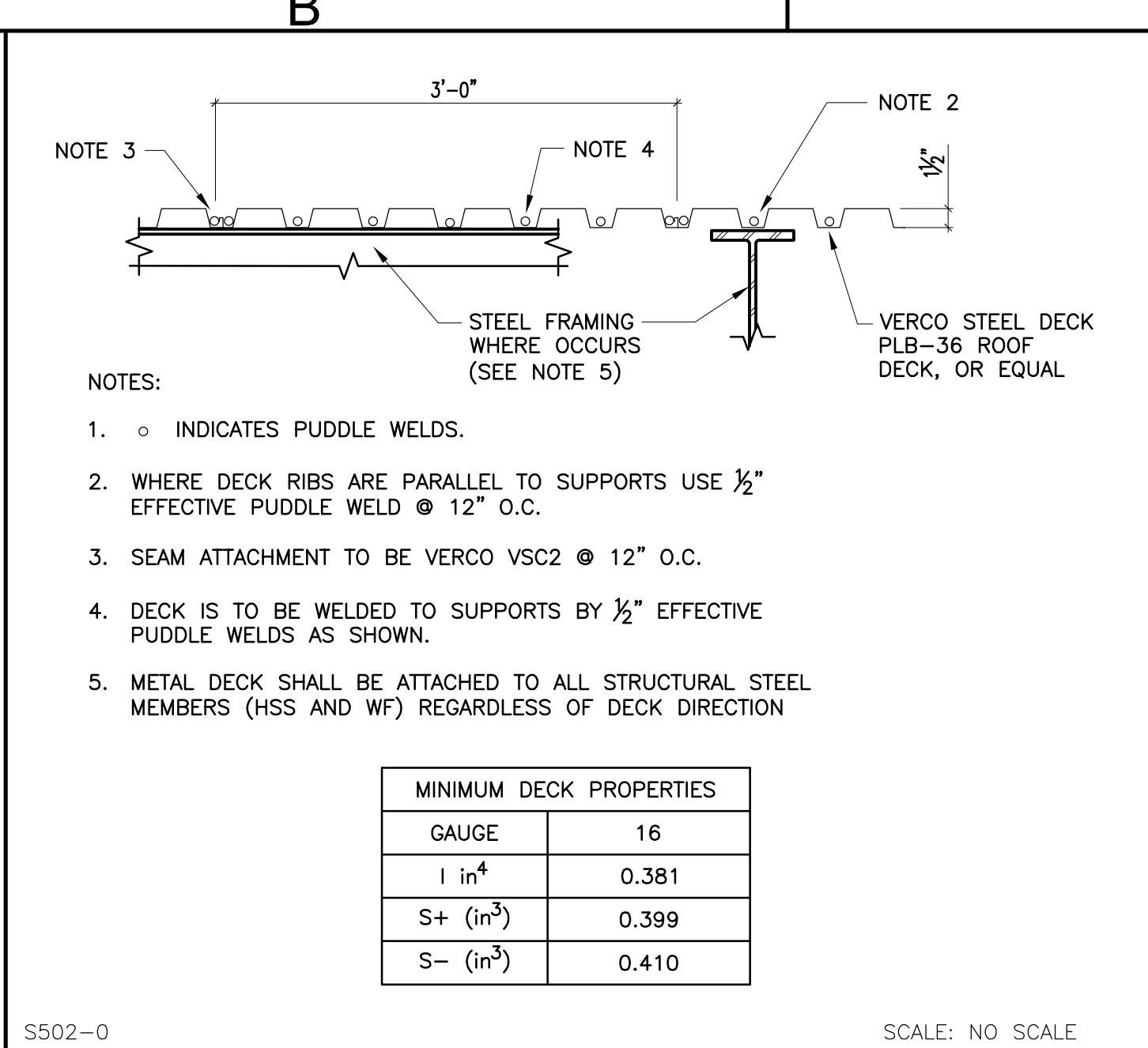
12 TYPICAL CONTROL JOINT

8 HORIZ. REINF. LAP SPLICE - MASONRY

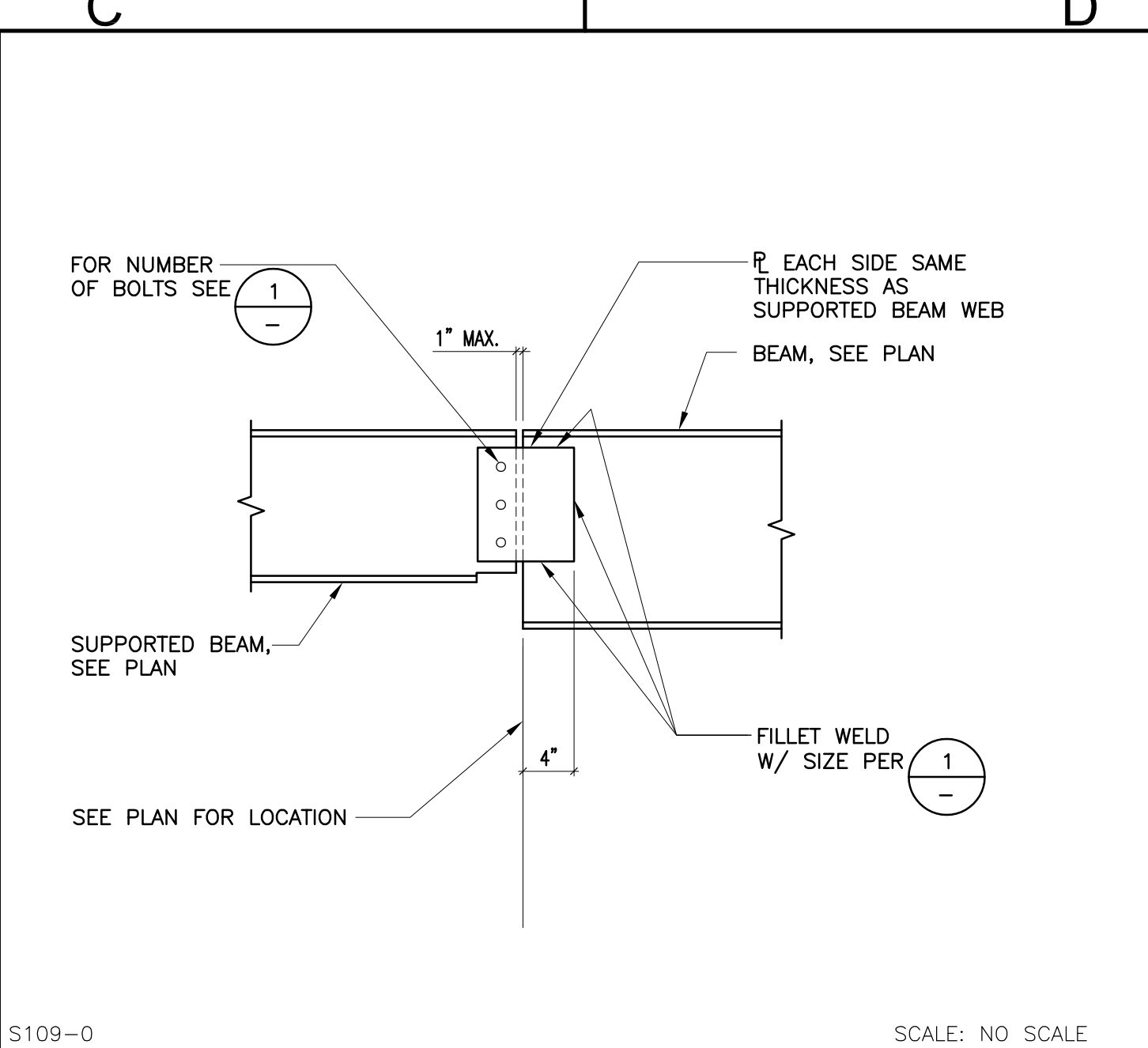
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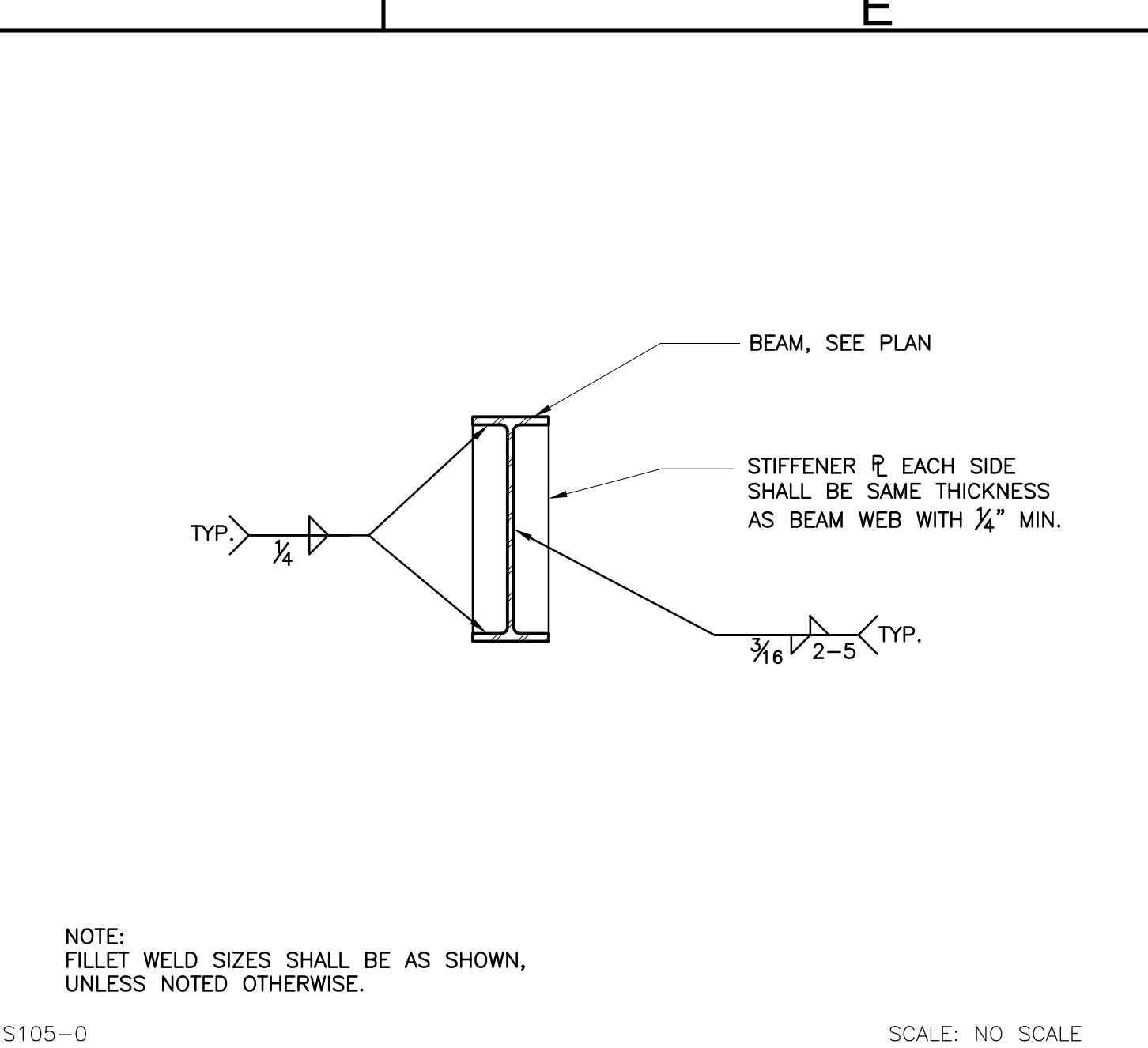
MECH. EQUIP. SUPPORT (WT. > 400#) 17



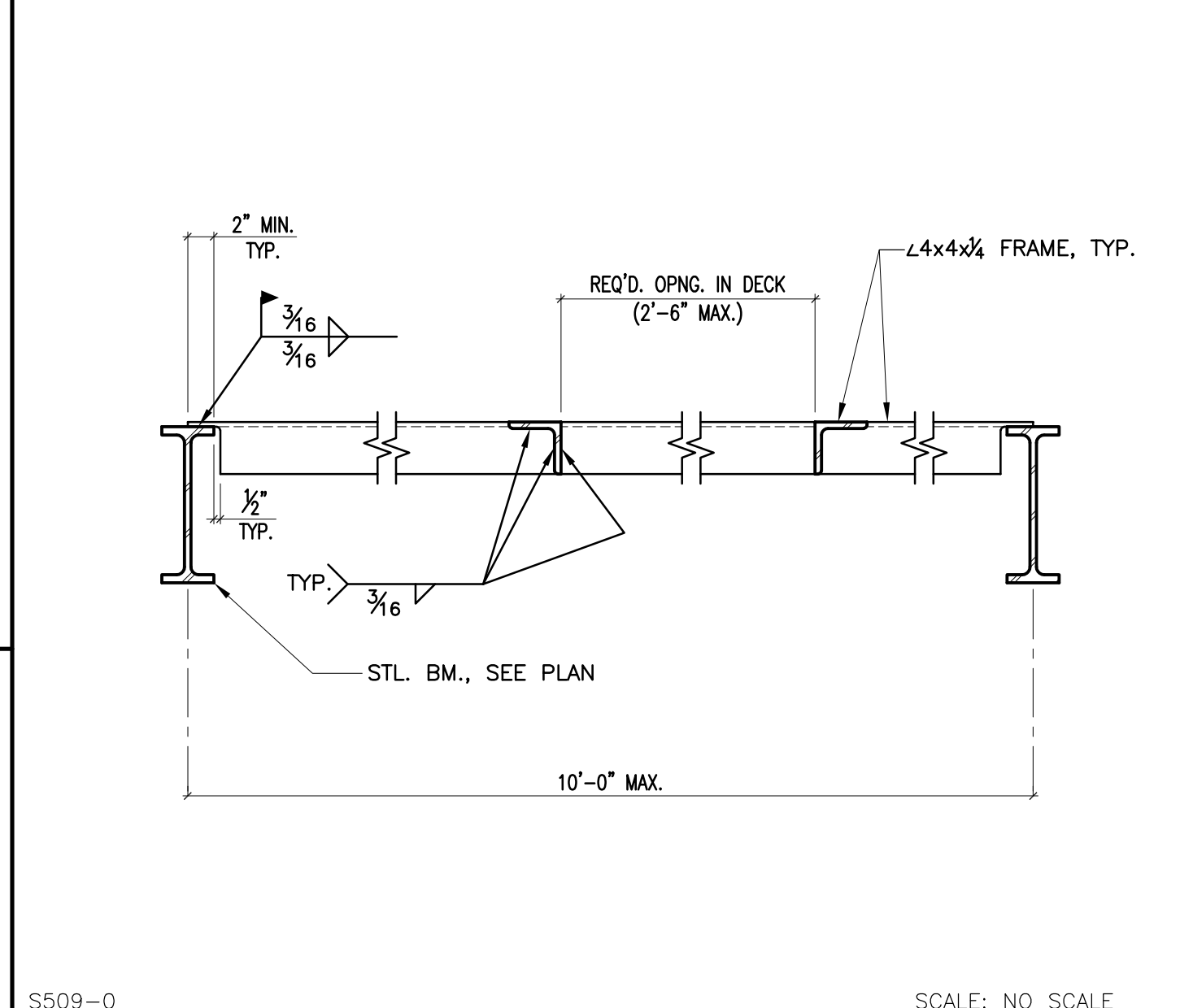
ROOF DECK WELDING & SECT. PROP. 13



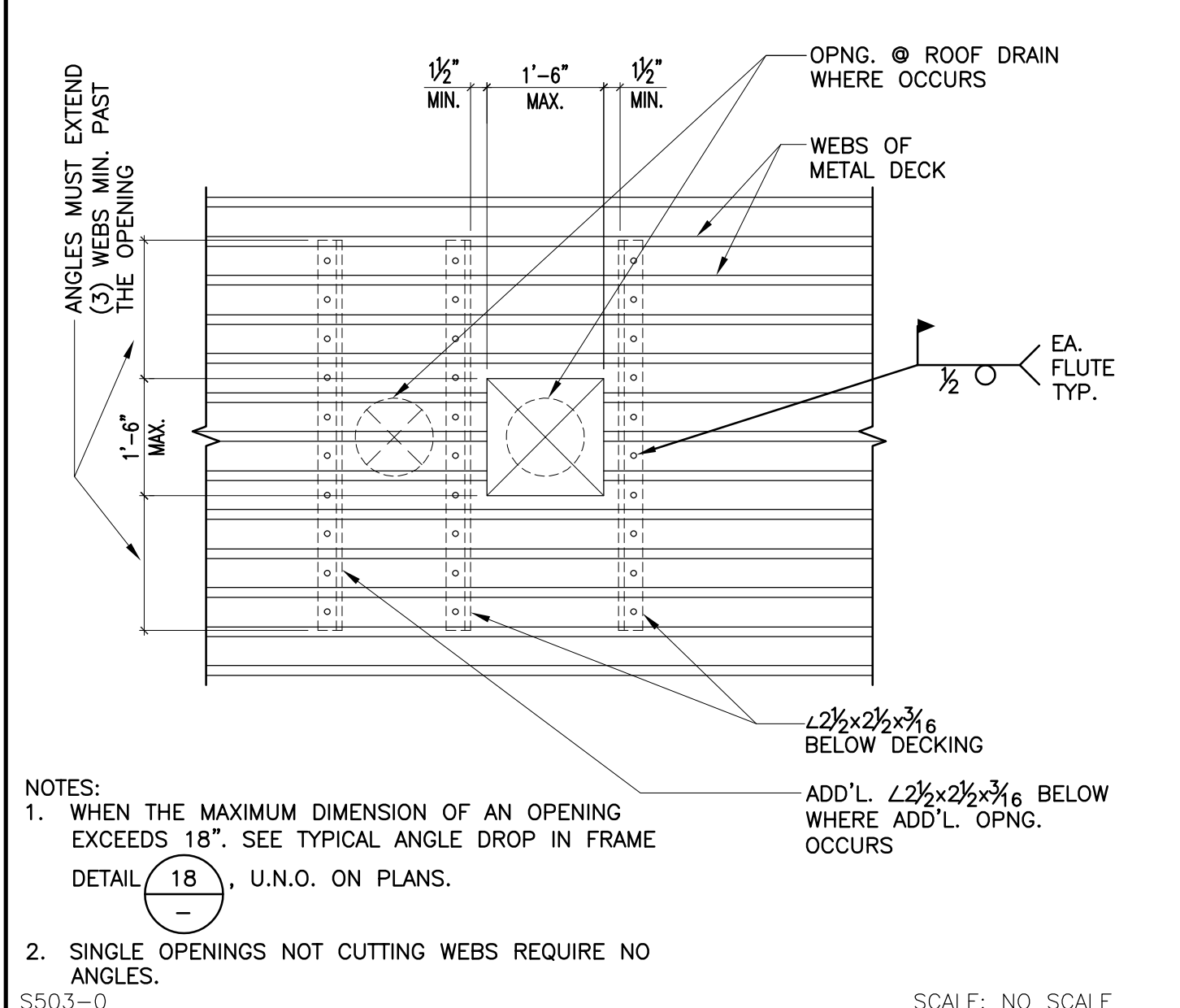
BEAM HINGE 9



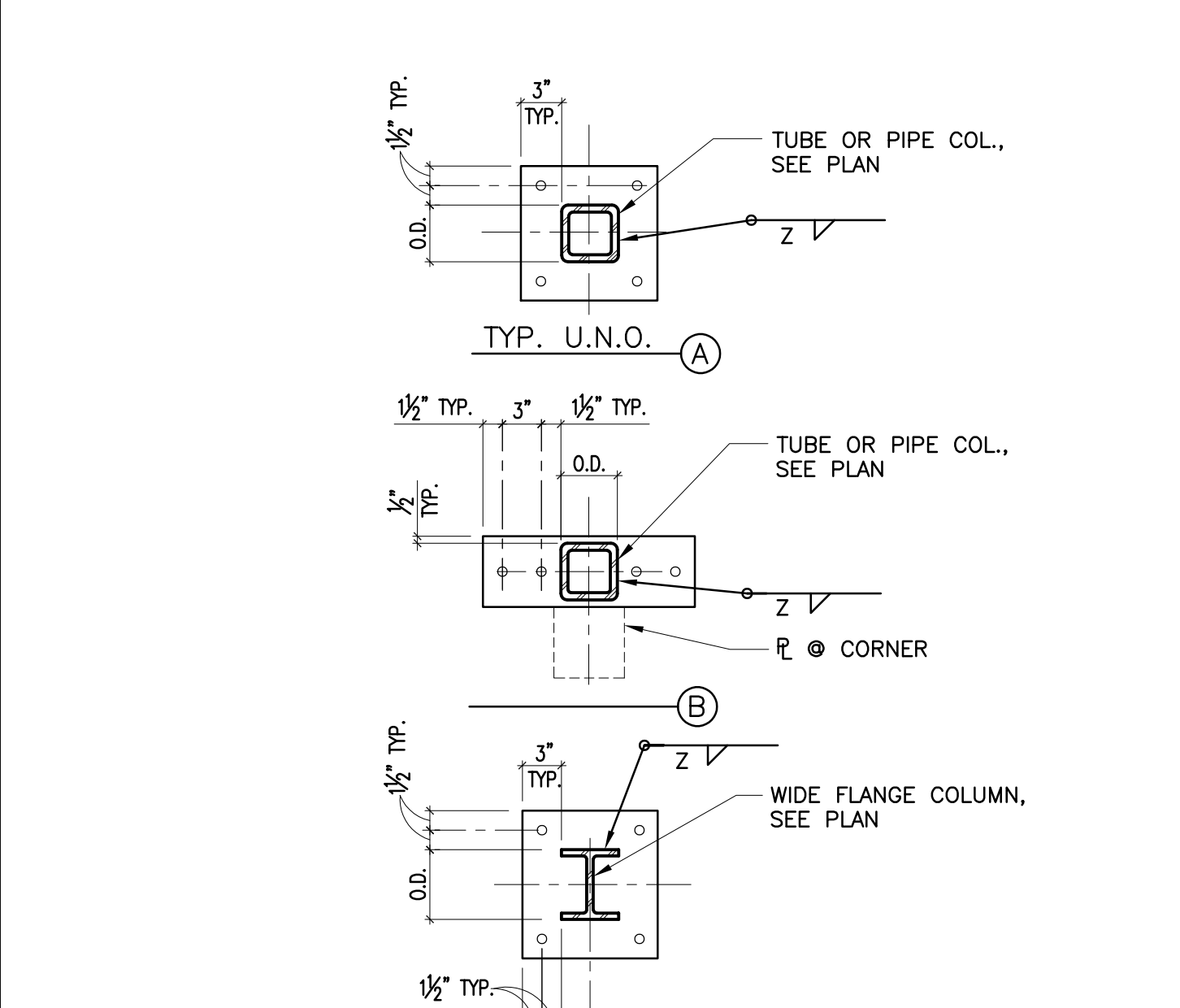
BEAM STIFFENER PLATES 5



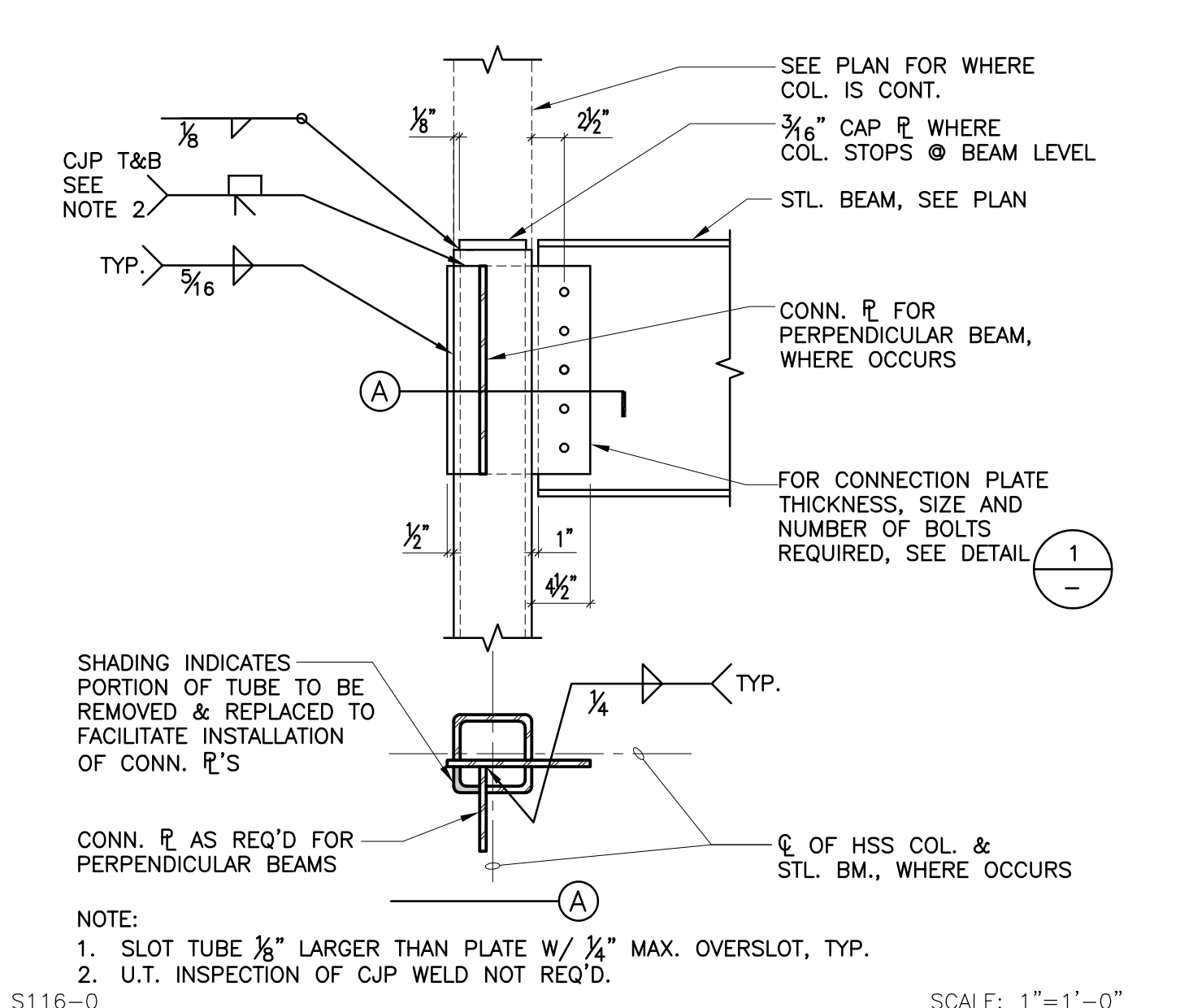
TYPICAL ANGLE DROP IN FRAME 3



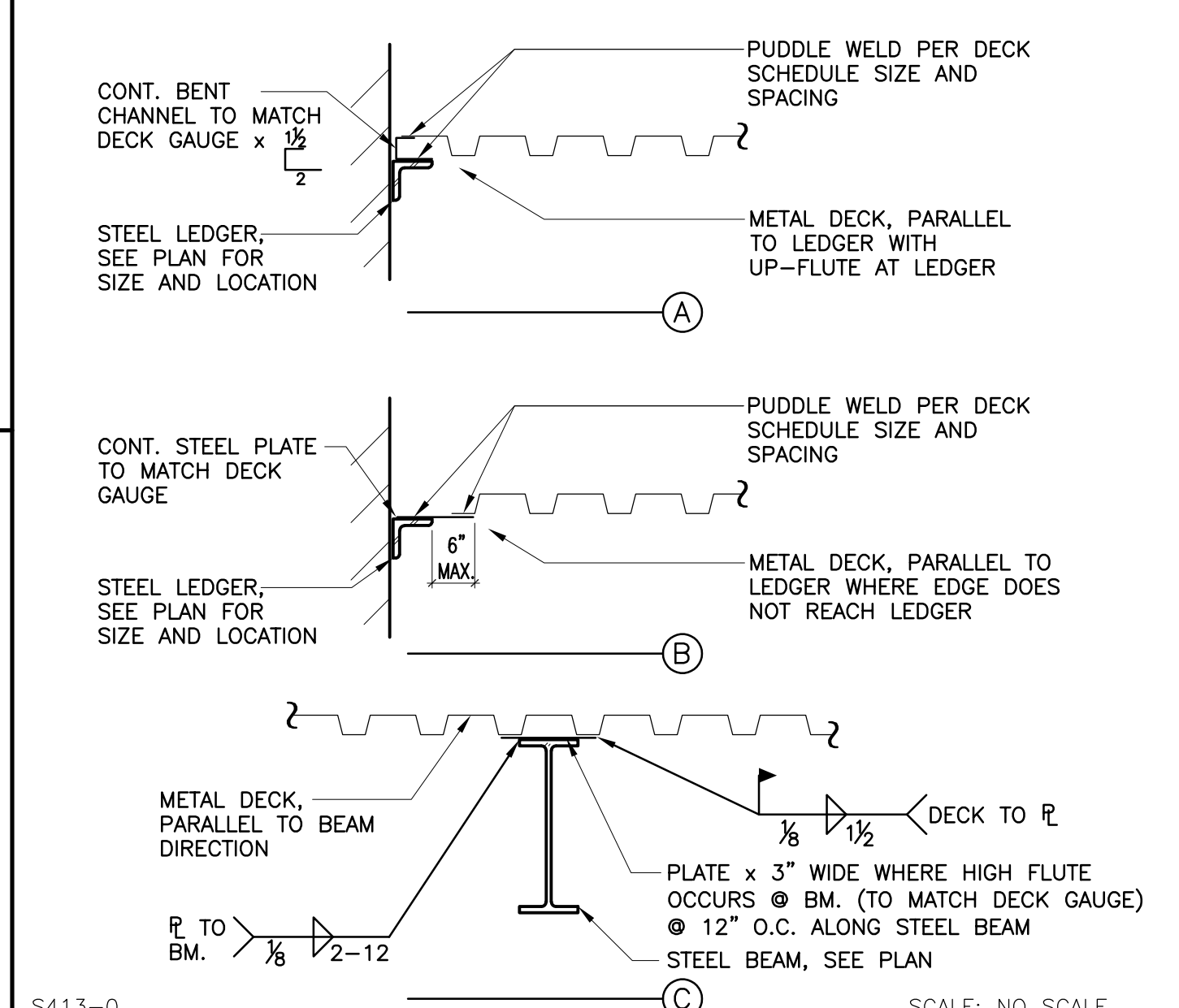
OPENING THRU ROOF DECK 18



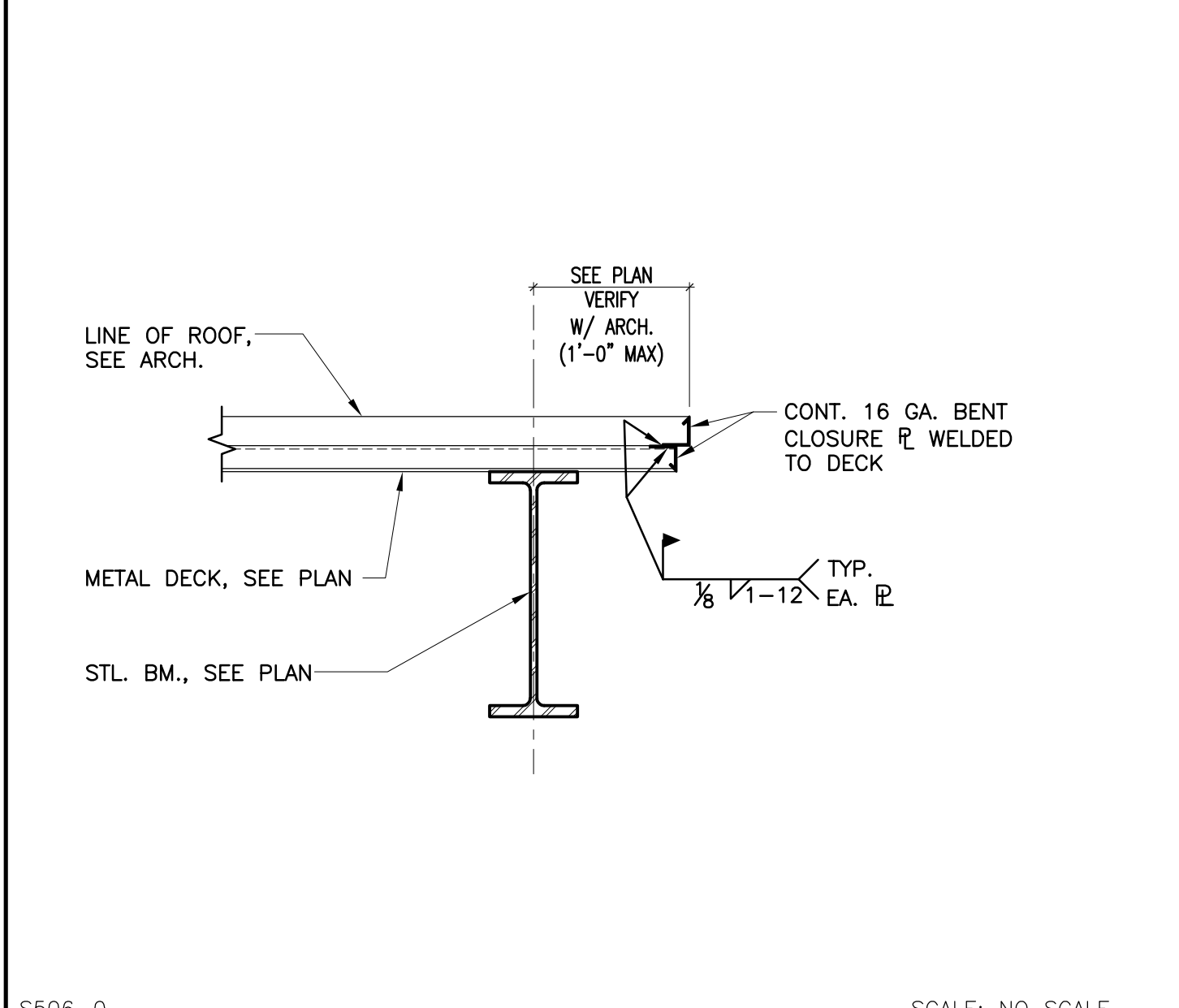
BEAM TO SIDE OF HSS COL. CONN. (ONE SIDE) 6



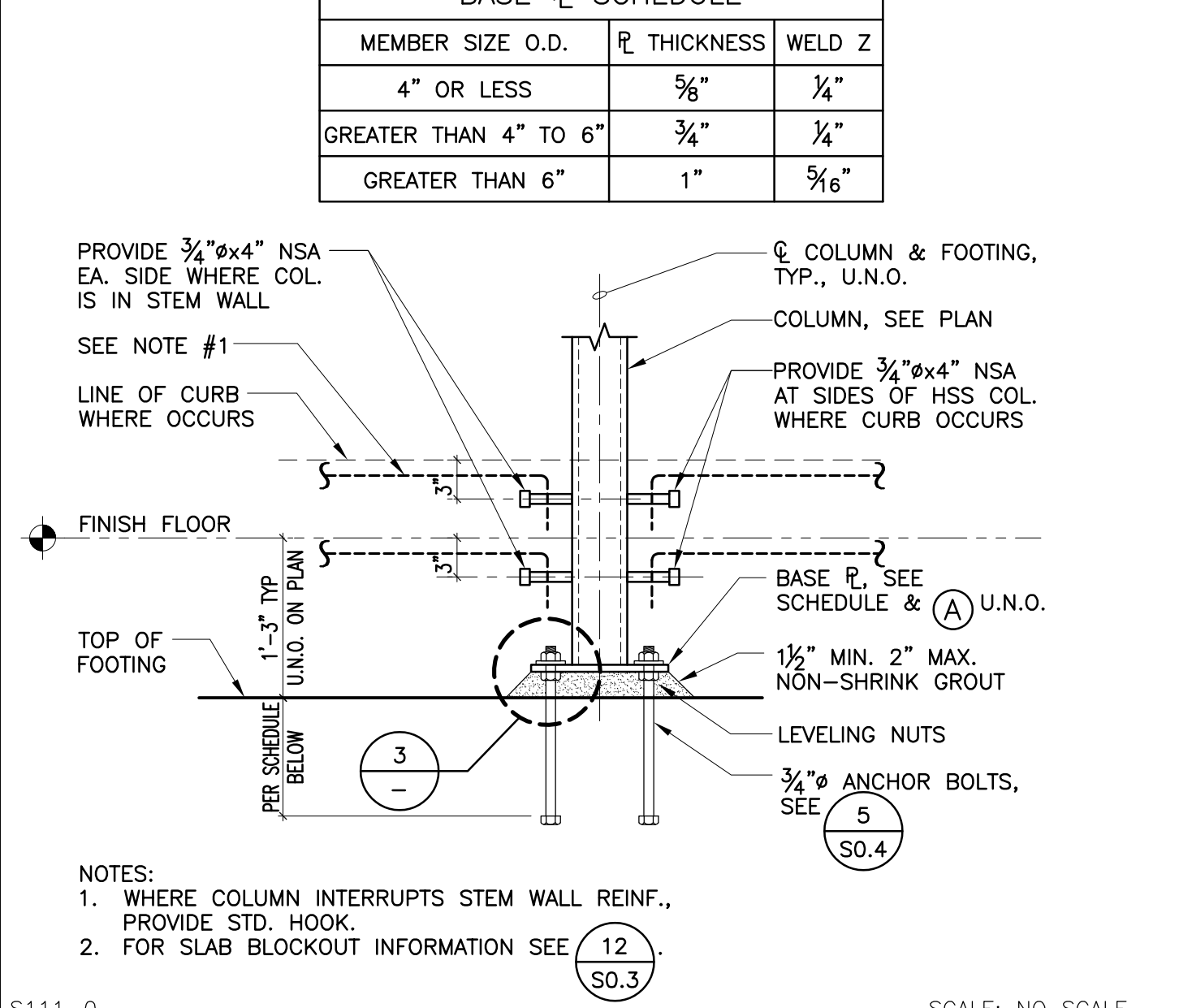
BEAM TO BEAM CONNECTION 1



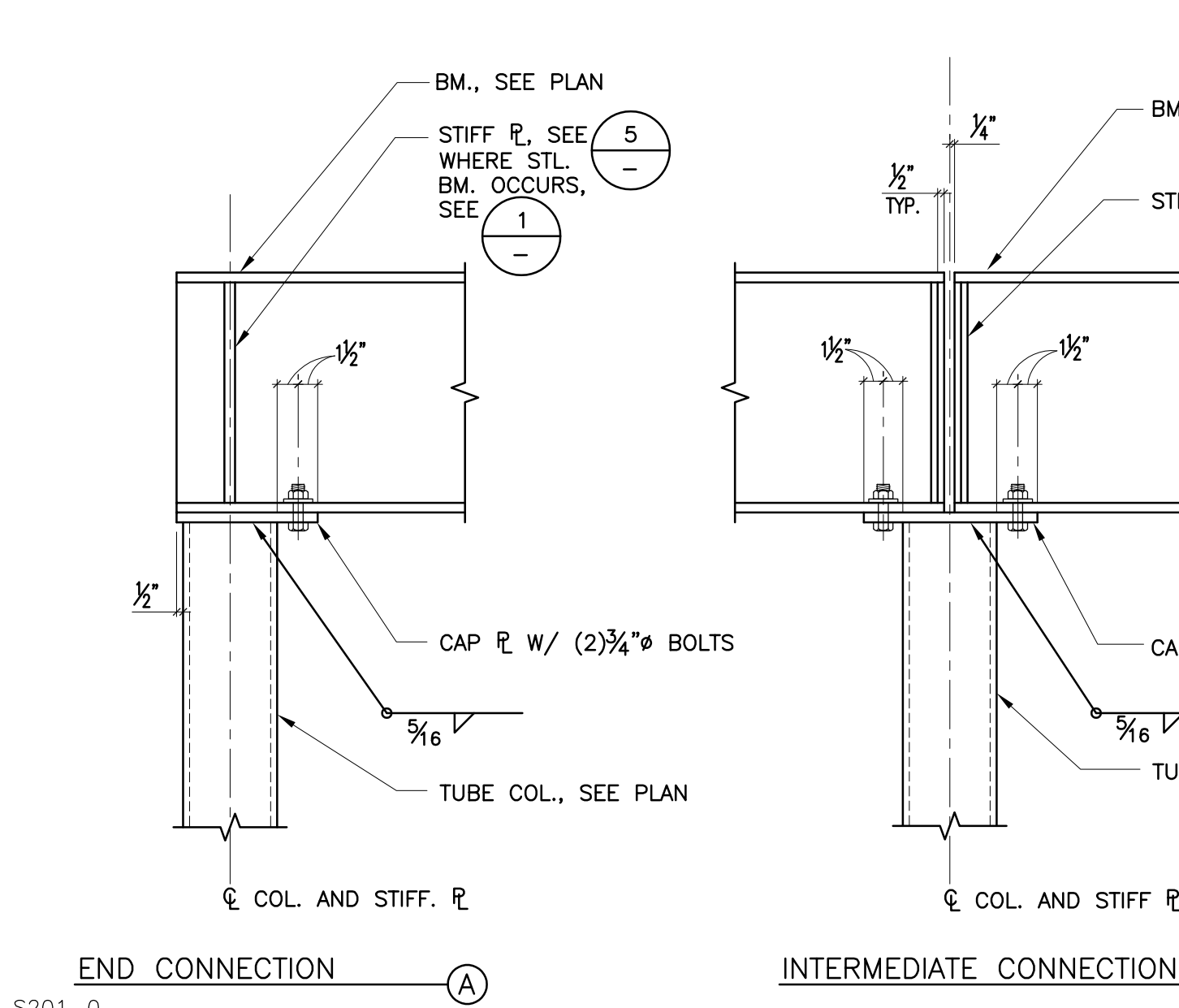
NON-COMPOSITE DECK PARALLEL TO SUPPORT 19



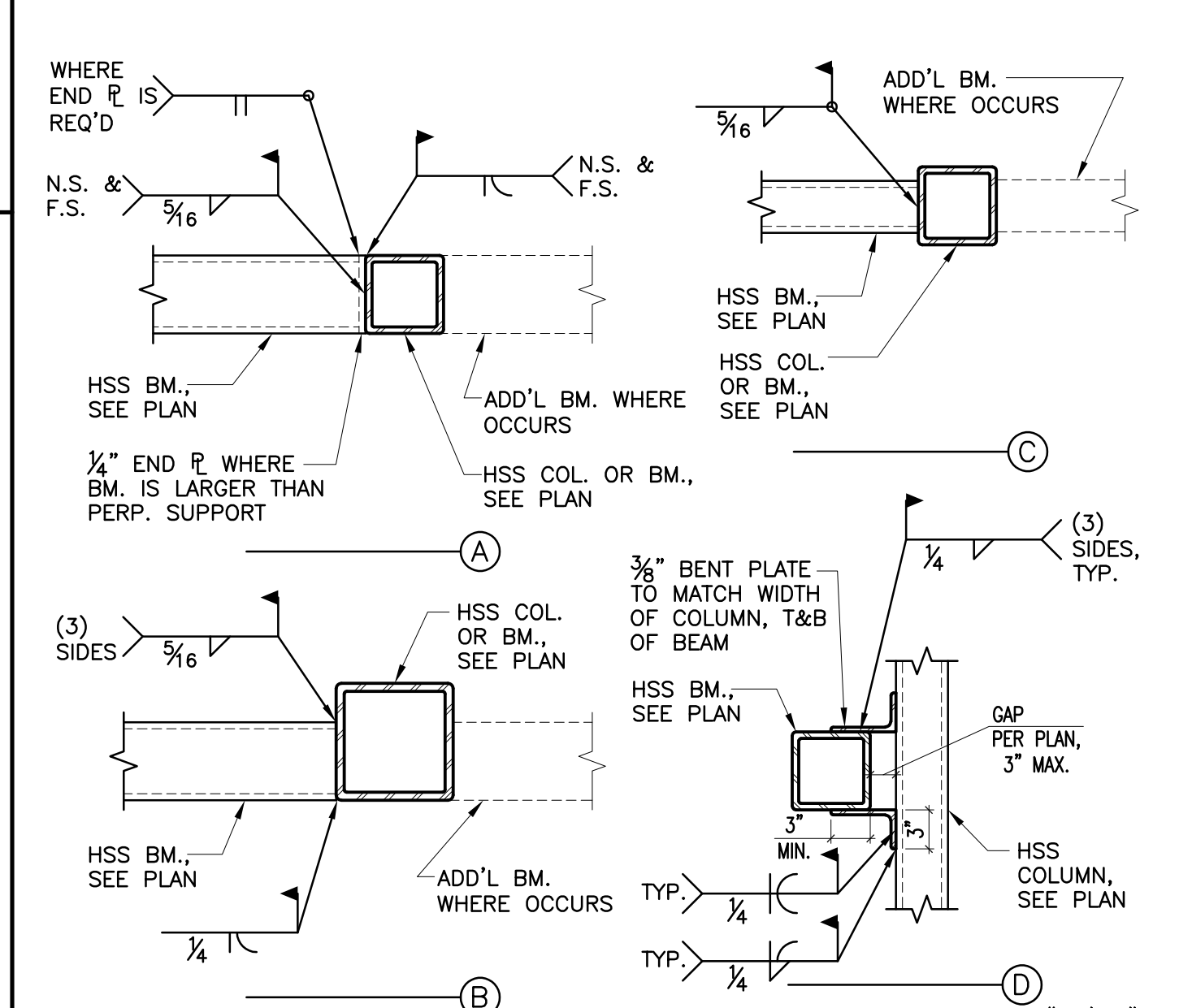
TYPICAL ROOF DECK EDGE 15



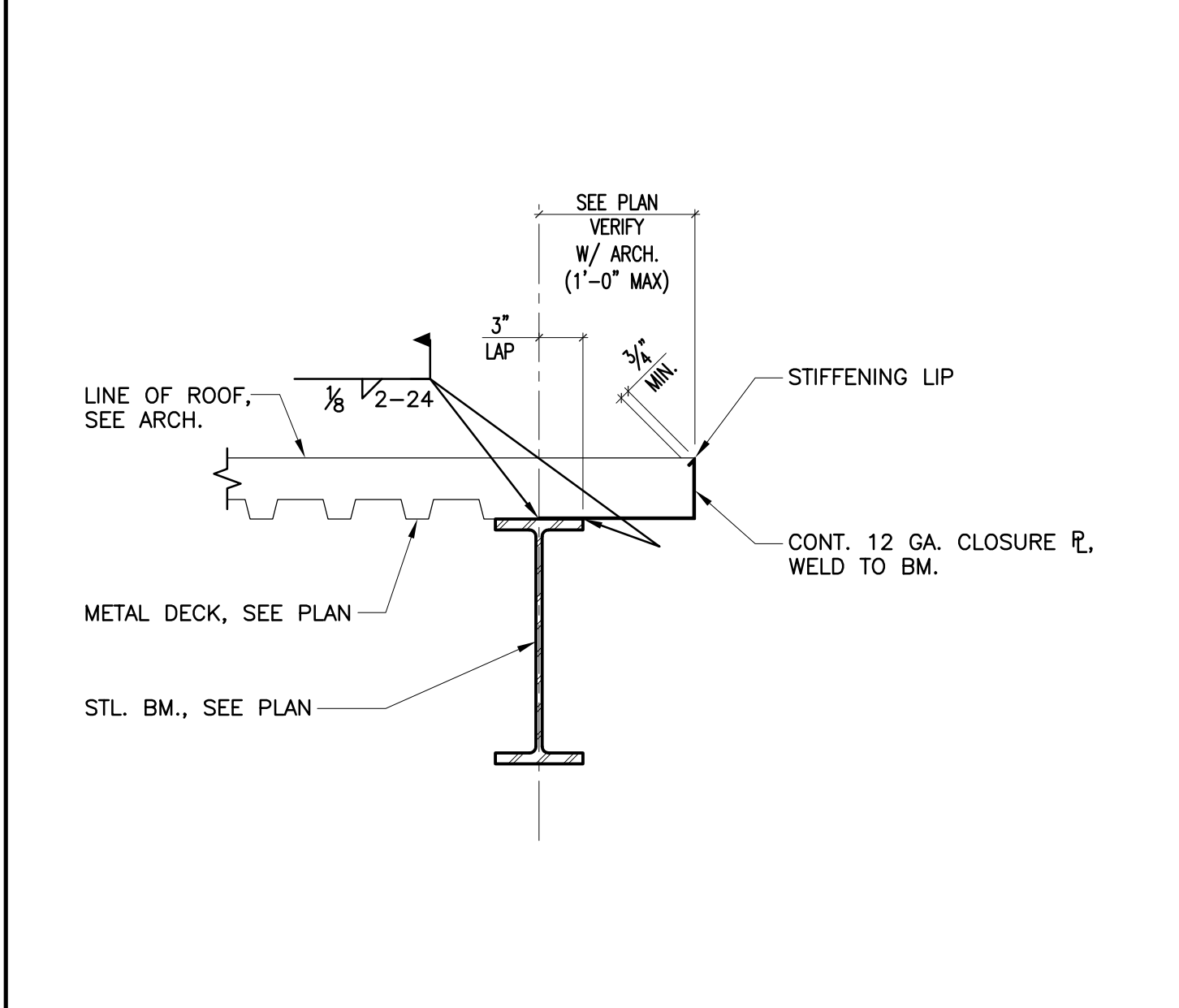
COLUMN BASE PLATES 11



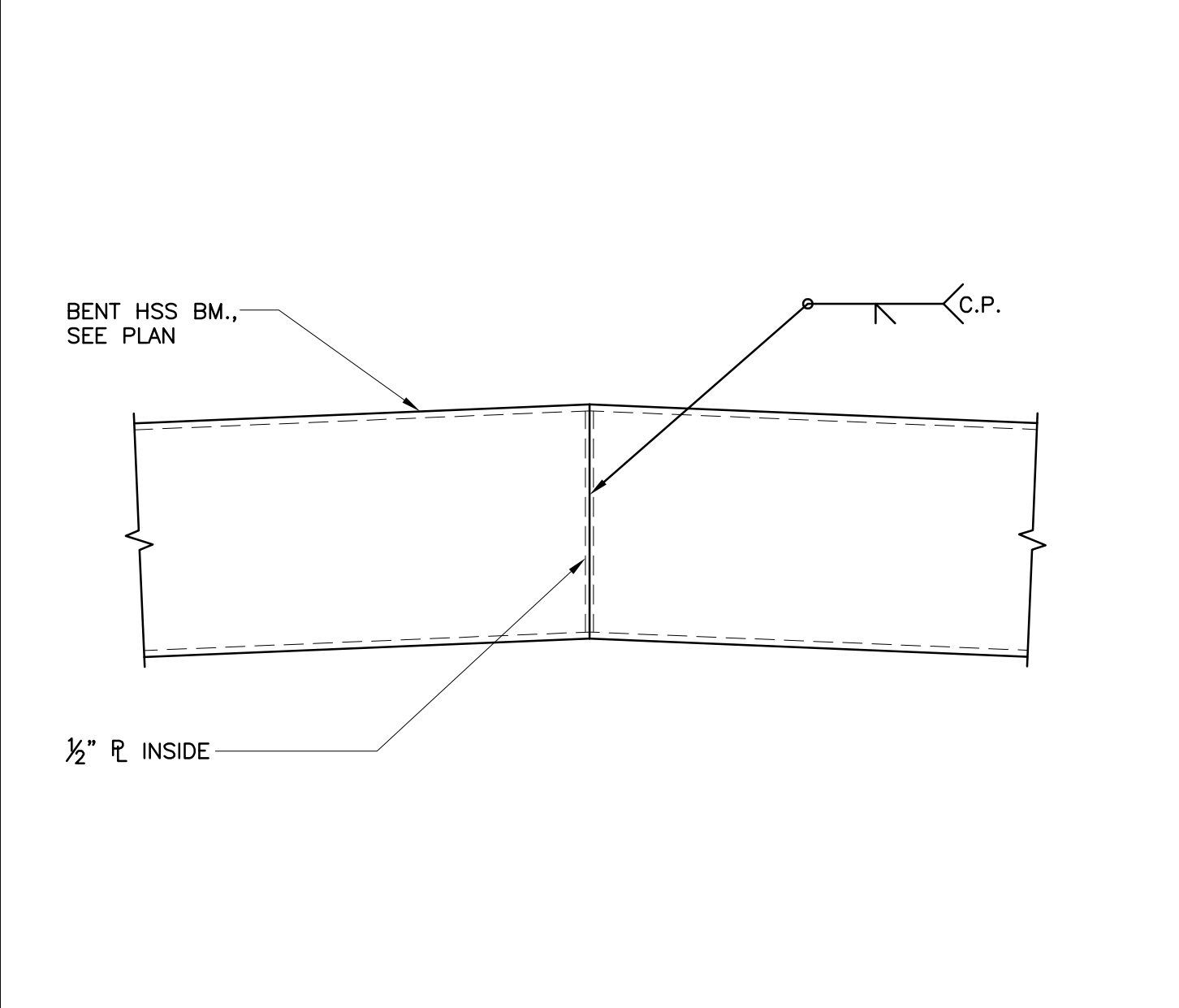
STEEL CONNECTION - BEAM TO COLUMN 2



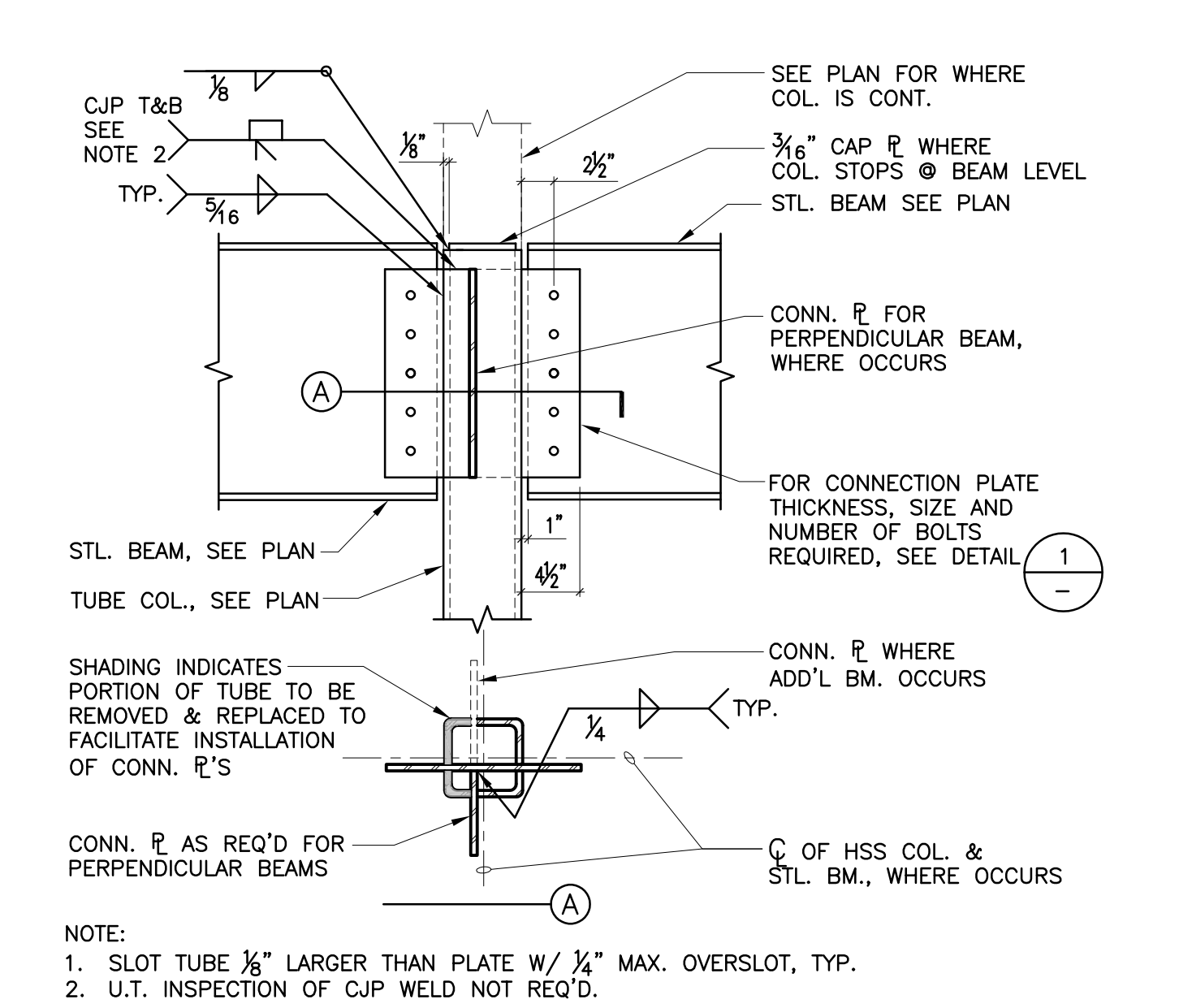
TYP. HSS CONNECTIONS 20



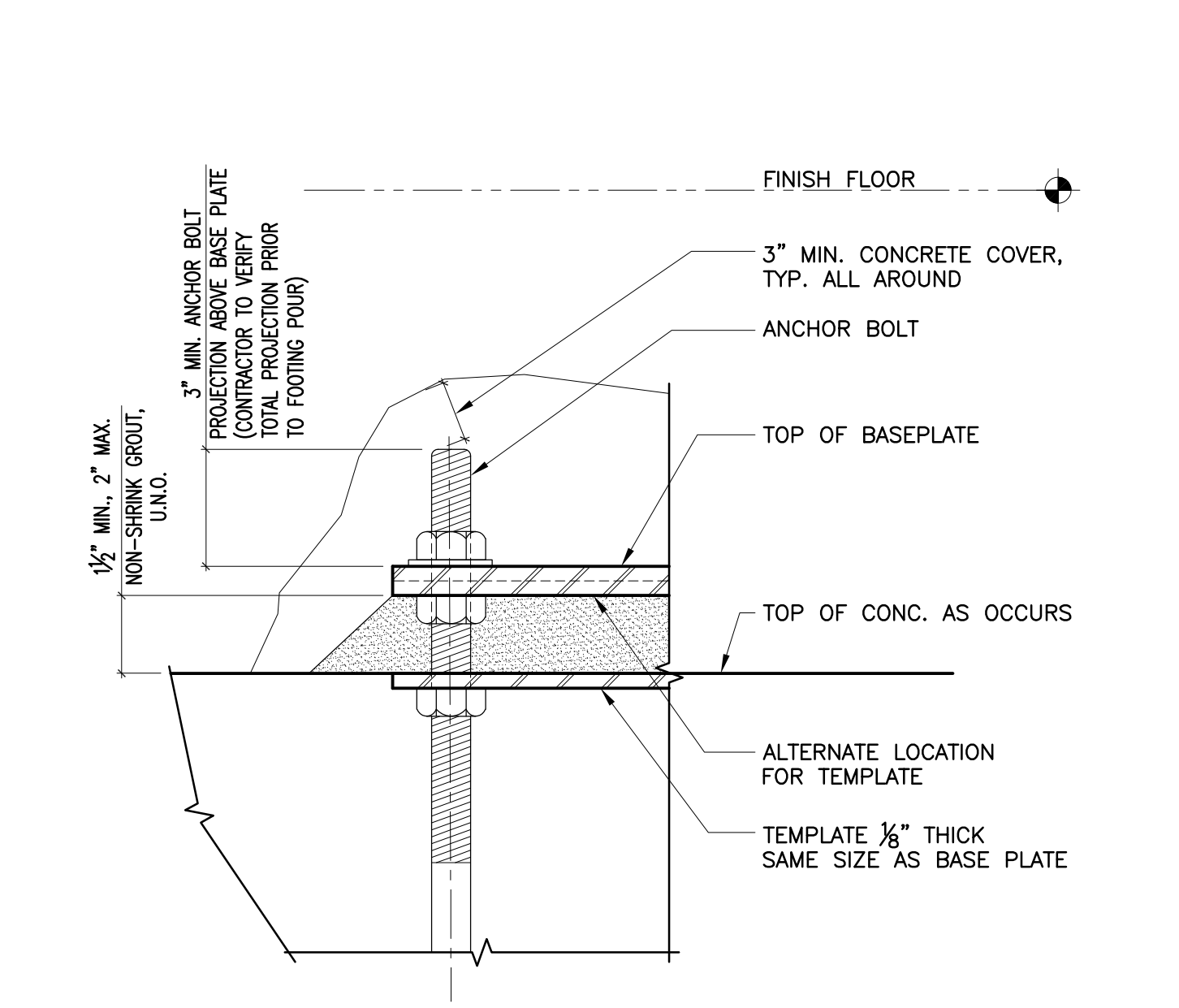
TYPICAL ROOF DECK EDGE 16



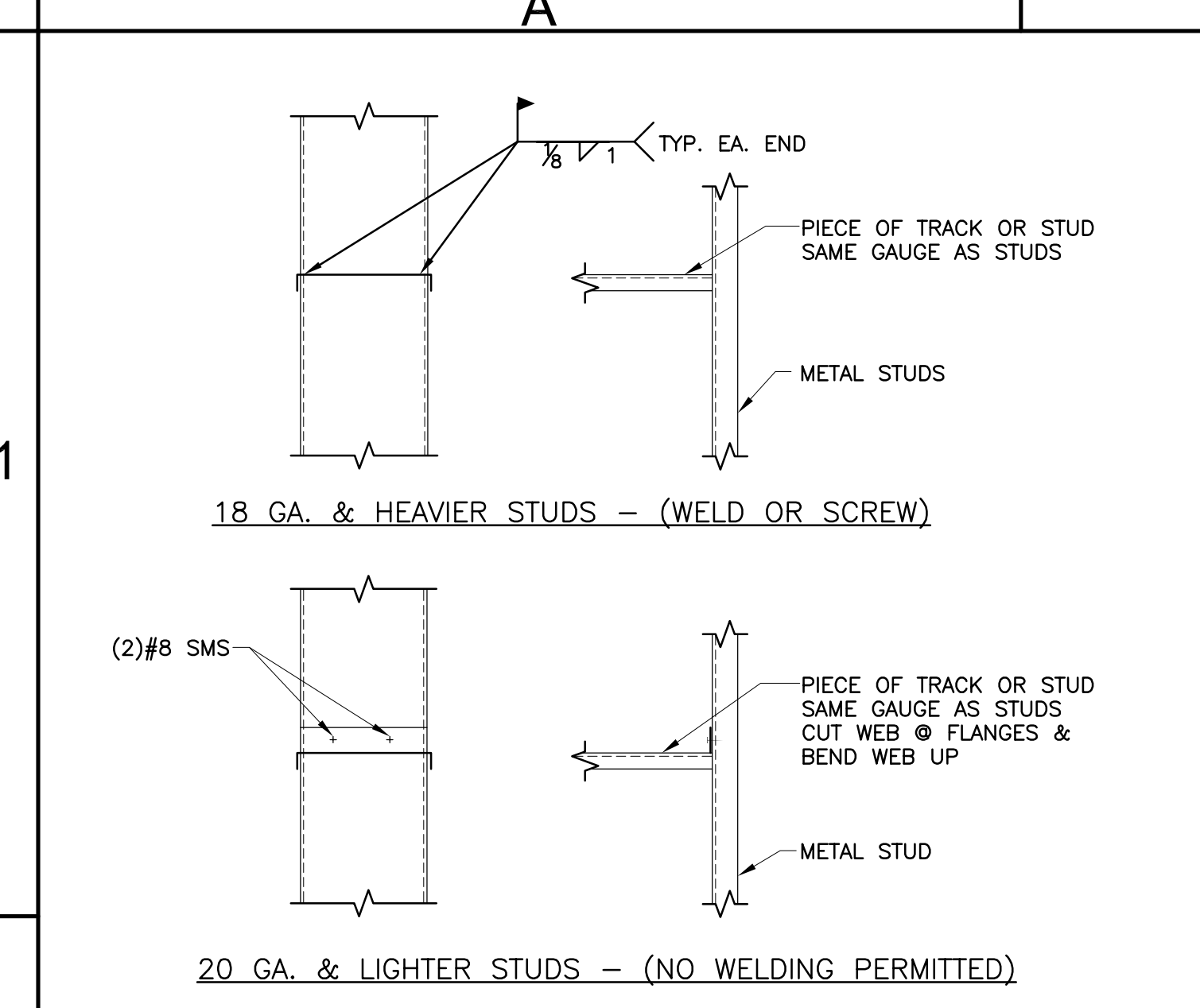
BENT BEAM 12



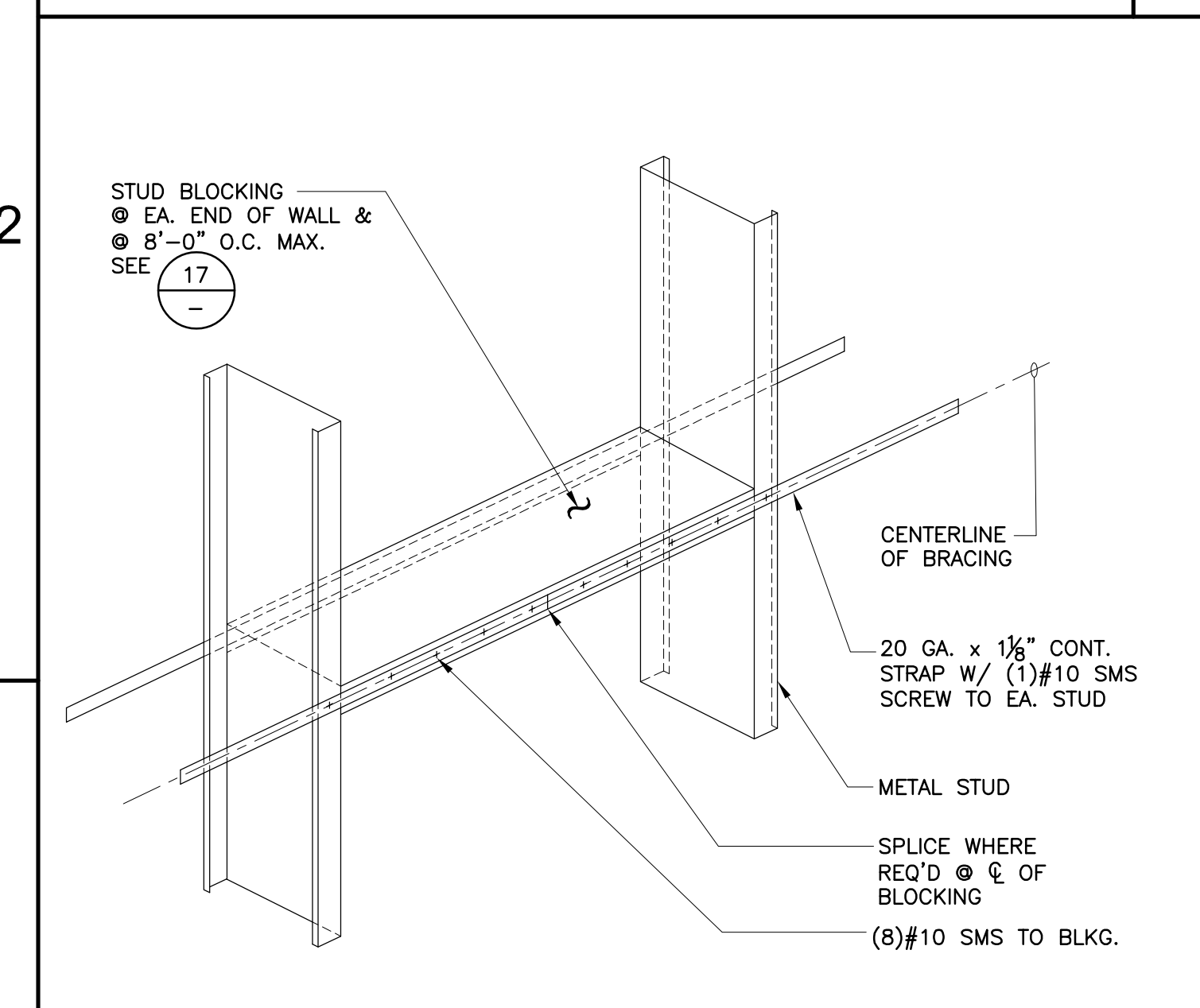
BEAM TO SIDE OF HSS COL. CONN. (2 SIDES) 8



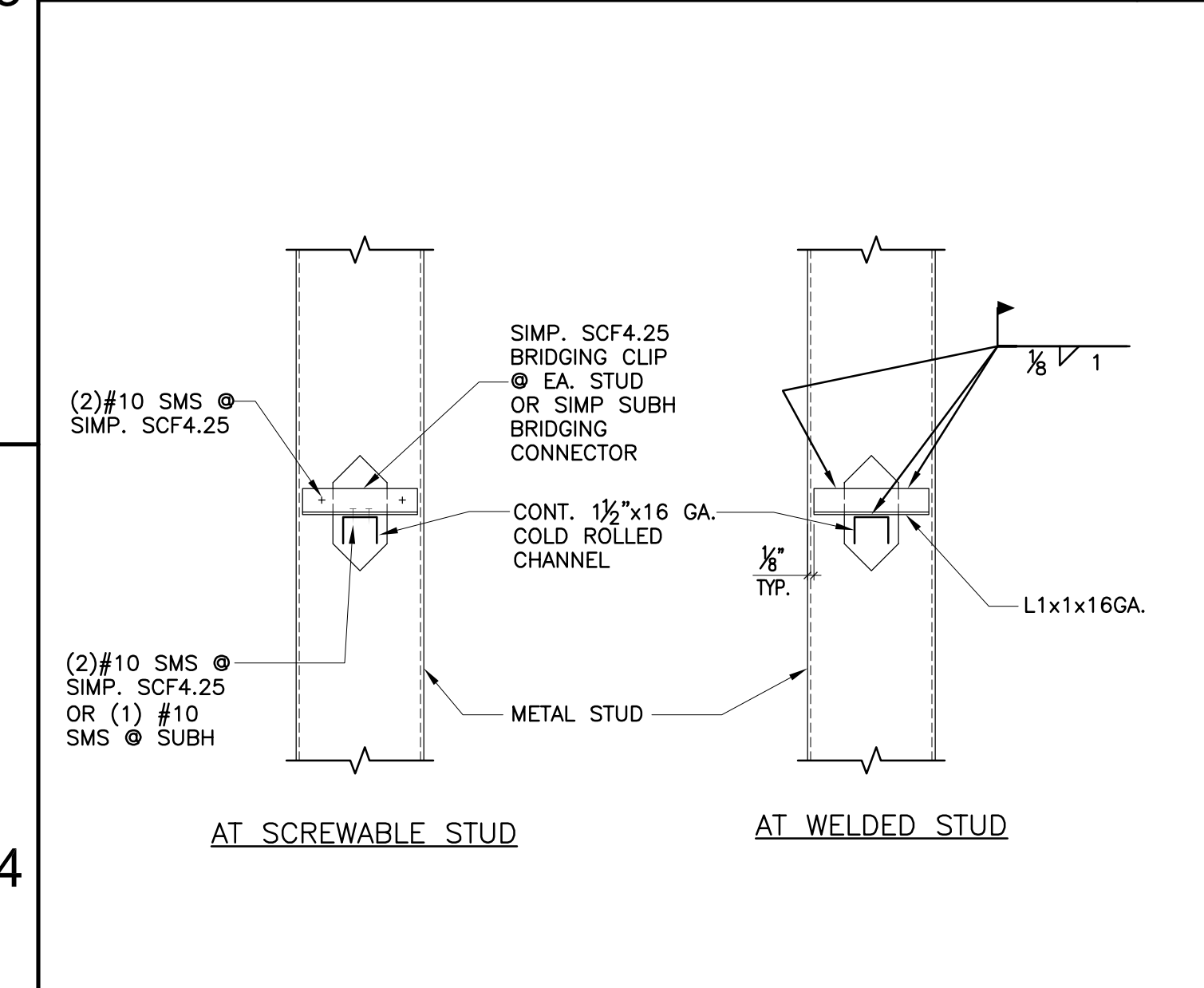
ANCHOR BOLT PROJECTION 3



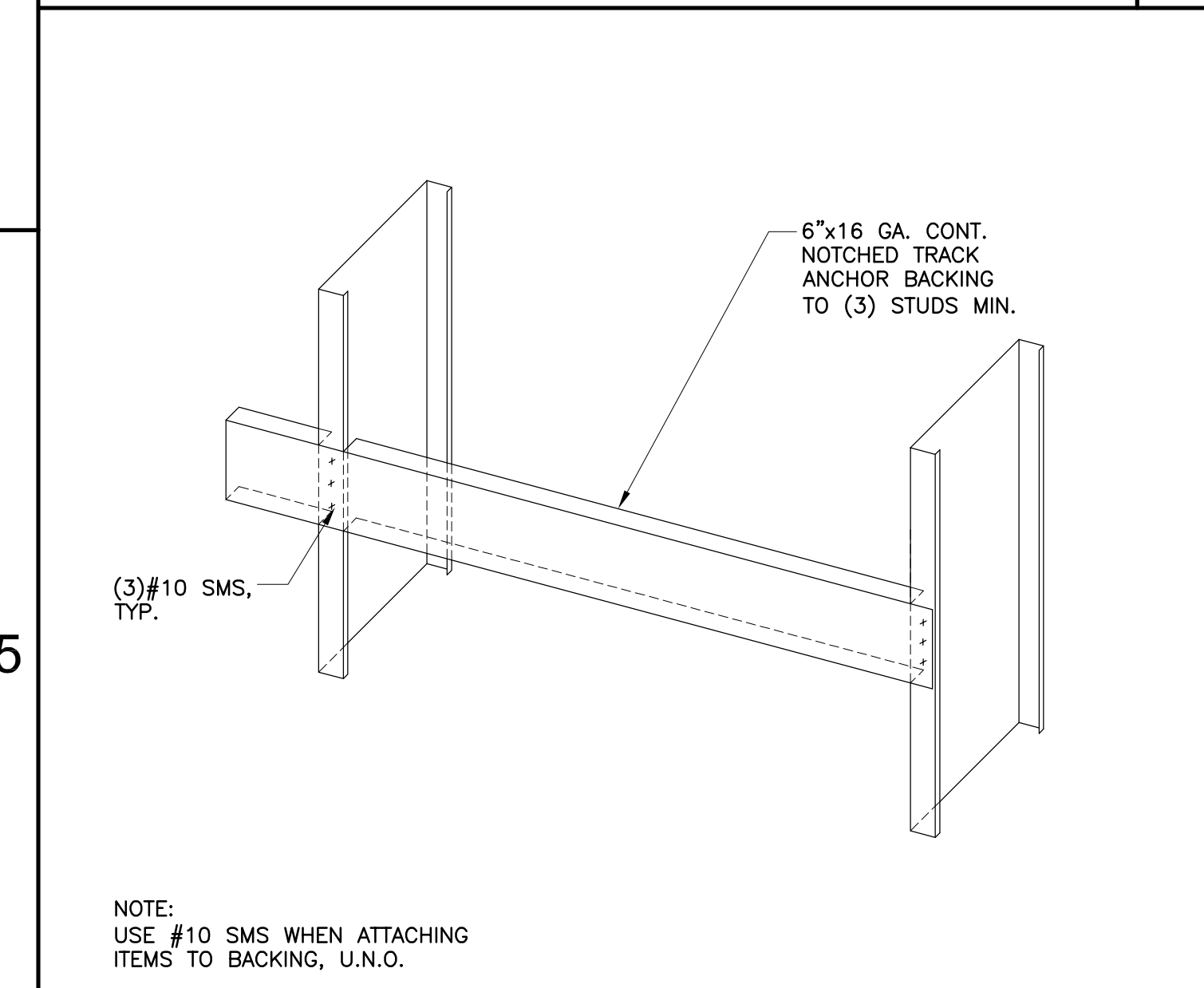
5617-0 SCALE: NO SCALE
METAL STUD BLOCKING 17



5618-0 SCALE: NO SCALE
METAL STUD BRACING 18



5619-0 SCALE: NO SCALE
METAL STUD BRIDGING 19



5620-0 SCALE: NO SCALE
BACKING AT METAL STUDS 20

HDS STUD SCHEDULE

DEPTH	GAUGE	B	A	AREA (IN ²)	I (IN ⁴)	S (IN ³)	MAX SPACING OF STUD BRACING
3 3/8"	16	3	1.0625"	0.715	1.483	0.818	4'-0"
4"	16	3	1.0625"	0.736	1.869	0.934	4'-0"
6"	16	3	2.25"	0.984	4.856	1.619	4'-0"
8"	16	3	2.25"	1.097	9.843	2.461	4'-0"

DIETRICH HDS PER ICC ESR-2374

PRO-X HEADER SCHEDULE

WIDTH	GAUGE	B	AREA (IN ²)	I (IN ⁴)	S (IN ³)	PRO-X CLIP
3 3/8"	16	4 1/4"	0.786	1.182	0.445	362 CLIP-54
4"	16	4 1/4"	0.808	1.230	0.456	400 CLIP-54
6"	16	4 1/4"	0.921	1.452	0.504	600 CLIP-54
8"	16	4 1/4"	1.034	1.625	0.537	800 CLIP-54

BRADY PRO-X HEADER PER IAPMO ES ER-0286

STUD SCHEDULE

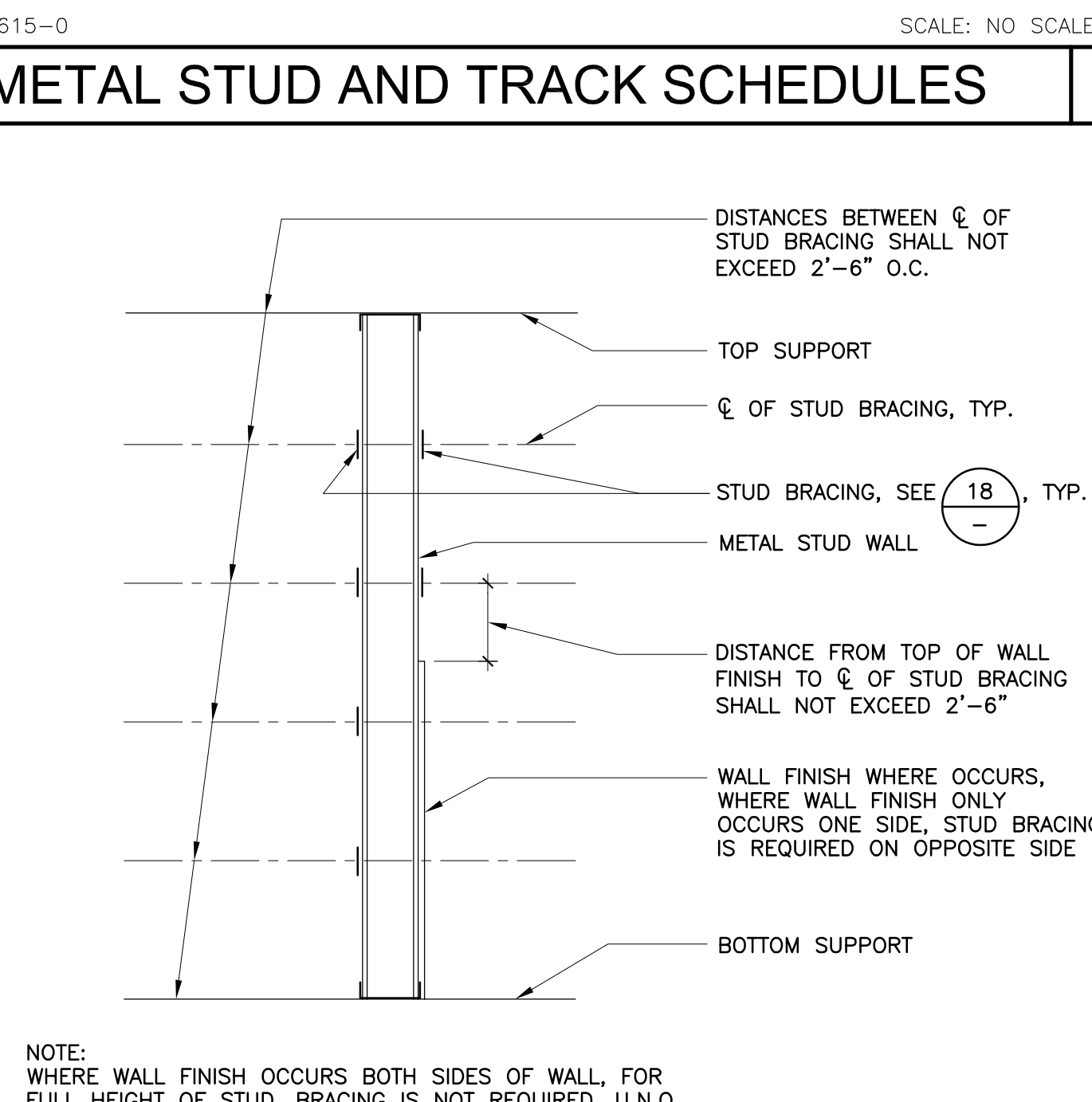
DEPTH	GAUGE	B	AREA (IN ²)	I (IN ⁴)	S (IN ³)	MAX. INTERIOR STUD WALL HT.*	SSMA DESIGNATION
2 1/2"	20	1 1/2"	.223	.235	.188	12'-0"	250S162-33
	18	1 1/2"	.289	.302	.242	13'-0"	250S162-43
	16	1 1/2"	.358	.370	.296	15'-0"	250S162-54
4"	20	1 1/2"	.275	.692	.346	18'-11"	400S162-33
	18	1 1/2"	.357	.892	.446	20'-7"	400S162-43
	16	1 1/2"	.443	1.098	.549	22'-1"	400S162-54
6"	20	1 1/2"	.344	1.793	.598	26'-0"	600S162-33
	18	1 1/2"	.447	2.316	.772	28'-4"	600S162-43
	16	1 1/2"	.556	2.860	.953	30'-4"	600S162-54
8"	20	1 1/2"	.413	3.582	.896	32'-9"	800S162-33
	16	1 1/2"	.670	5.736	1.434	35'-8"	800S162-54
	14	2"	.907	8.140	2.035	38'-4"	800S200-68
10"	16	2"	.839	11.278	2.256	38'-4"	1000S200-54
12"	14	2"	1.192	21.947	3.658	38'-4"	1200S200-68

* MAX. HEIGHT PER SCHEDULE BASED ON SSMA CATALOG FOR INTERIOR, NON-BEARING WALLS WITH 5 PSF LATERAL LOAD @ L/240 @ 16" O.C.

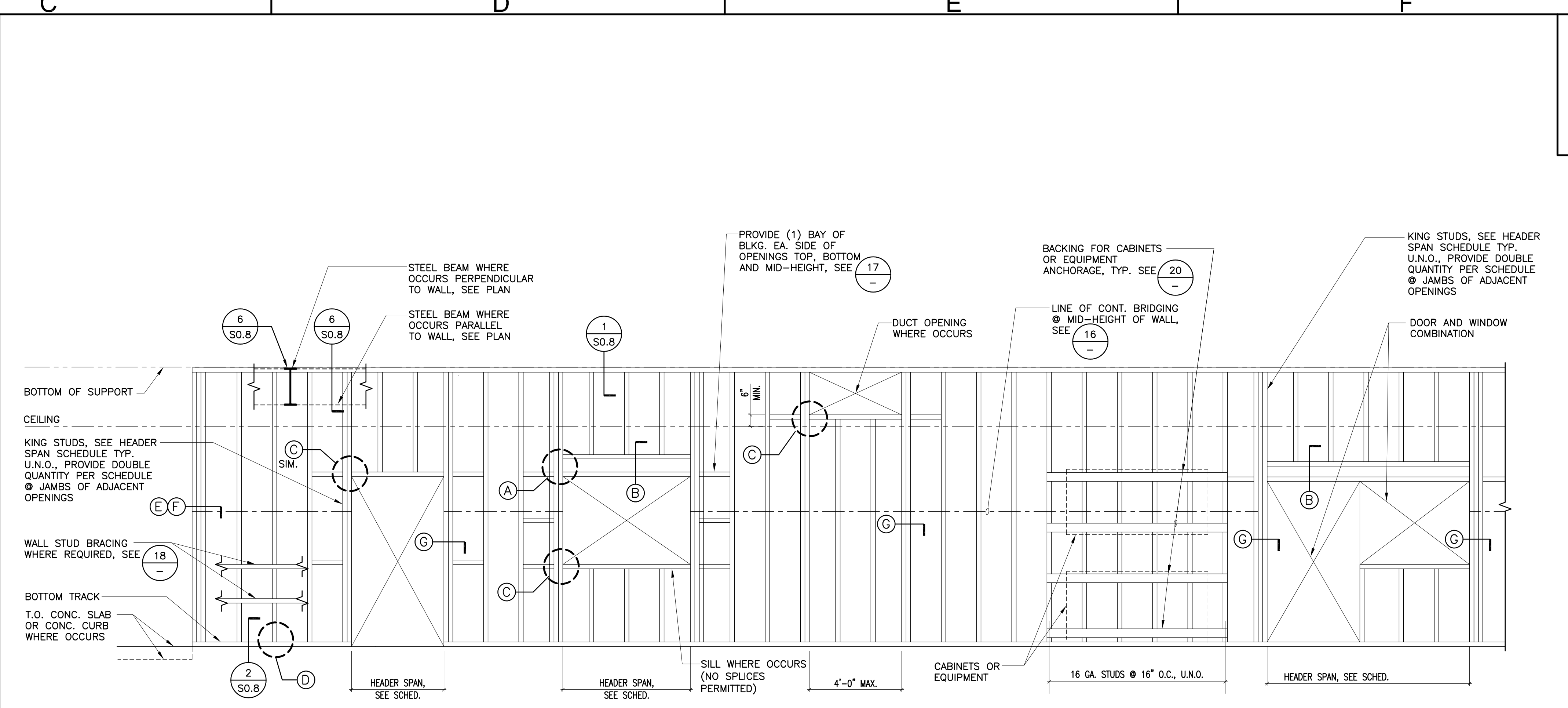
TRACK SCHEDULE

DEPTH	GAUGE	B	AREA (IN ²)	I (IN ⁴)	S (IN ³)	SSMA DESIGNATION
2 1/2"	20	1 1/2"	.190	.221	.167	250T150-33
	18	1 1/2"	.248	.289	.217	250T150-43
	16	1 1/2"	.311	.368	.273	250T150-54
4"	20	1 1/2"	.242	.622	.300	400T150-33
	18	1 1/2"	.315	.811	.390	400T150-43
	16	1 1/2"	.396	1.025	.489	400T150-54
6"	20	1 1/2"	.311	1.590	.517	600T150-33
	18	1 1/2"	.405	2.072	.673	600T150-43
	16	1 1/2"	.509	2.611	.843	600T150-54
8"	20	1 1/2"	.380	3.180	.781	800T150-33
	16	1 1/2"	.622	5.214	1.272	800T150-54
	14	1 1/2"	.783	6.594	1.599	800T150-68
10"	16	1 1/2"	.735	9.061	1.777	1000T150-54
12"	14	1 1/2"	1.068	18.148	2.963	1200T150-68

NOTES:
1. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR SIZE AND GAUGE OF STUDS. PROVIDE MIN. 20 GA. STUDS, U.N.O.
2. DIMENSIONS, PROPERTIES AND TYPES NOTED ARE BASED ON METAL STUDS AND TRACKS BY STEEL STUD MANUFACTURERS ASSOCIATION (SSMA), ICC ER-3064P, U.N.O.



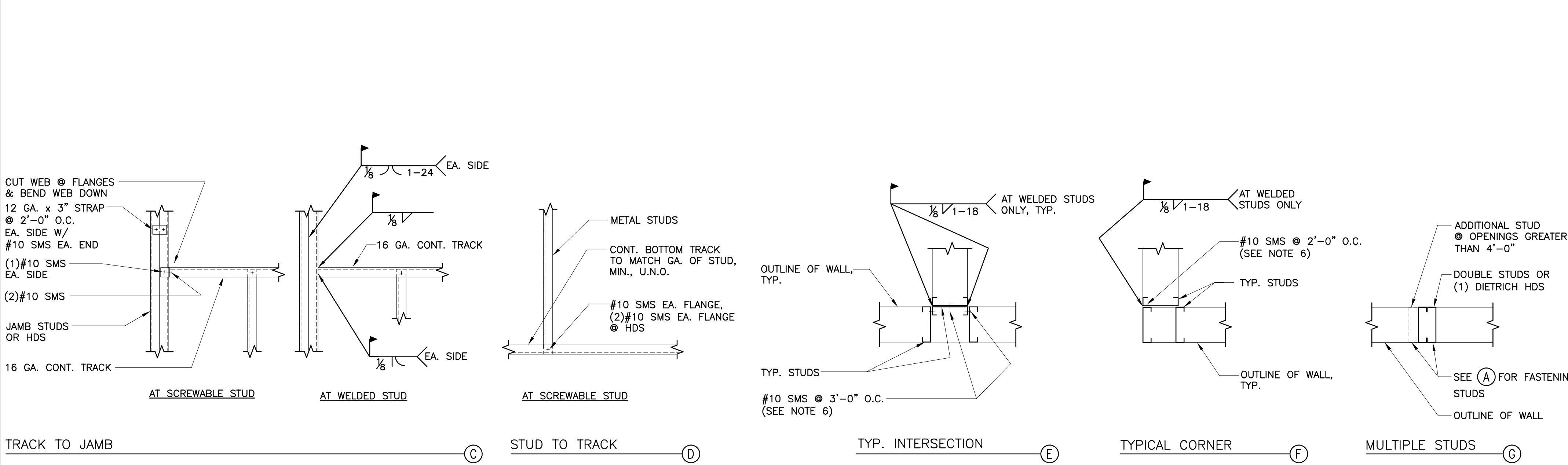
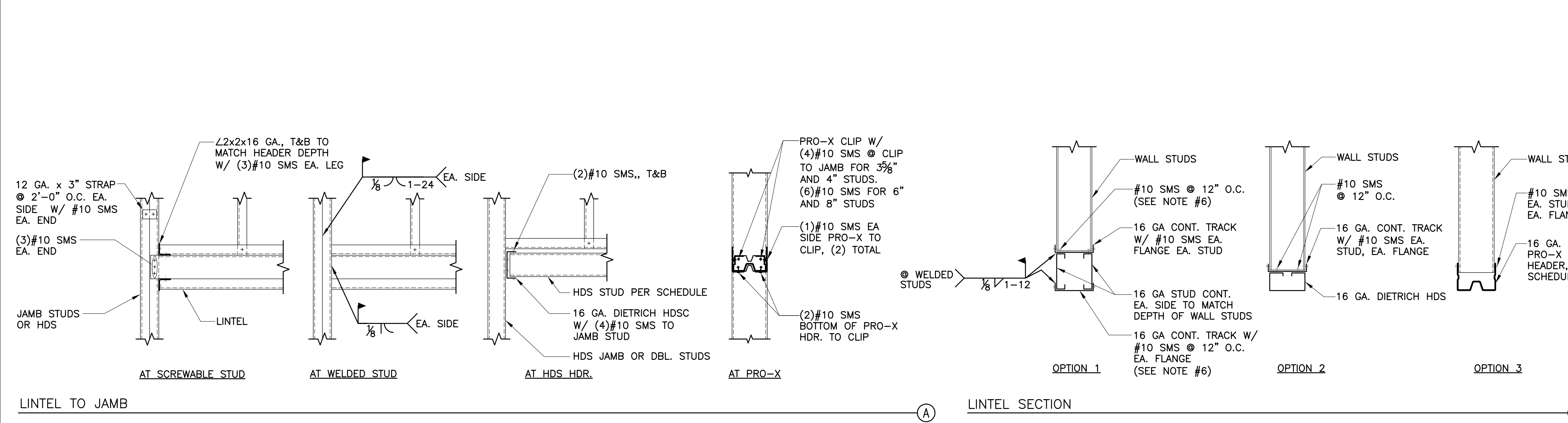
5616-0 SCALE: NO SCALE
WALL STUD BRACING LOCATION 15



HEADER SPAN SCHEDULE

SPAN	CONDITION	HEADER	KING STUDS*
4'-0"	ALL	SINGLE 16GA. TRACK	(2) x 16GA.
4'-1" TO 8'-0"	EXTERIOR	BOX HDR. PER 'B'	(3) x 16GA.
4'-1" TO 12'-0"	INTERIOR	BOC HDR. PER 'B'	(3) x 16GA.
> SPANS NOTED	ALL	SEE SIZE ON PLAN	(3) x 16GA. U.N.O.

*NOTE: (1) 16GA. DIETRICH HDS MAY REPLACE (2) 16GA. KING STUDS



NOTES:
1. SEE "METAL STUD AND TRACK SCHEDULES" ON THIS SHEET FOR ADDITIONAL INFORMATION.
2. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR SIZE OF STUDS.
3. ALL TOP AND BOTTOM TRACKS SHALL BE SAME GAUGE AS STUDS, U.N.O.
4. ALL STUDS AT JAMBS OF DOOR AND WINDOW OPENINGS SHALL BE 16 GAUGE, U.N.O.
5. WELDING SHALL BE IN ACCORDANCE WITH STRUCTURAL WELDING CODE - SHEET STEEL, AWS D1.3, BY THE AMERICAN WELDING SOCIETY.
6. OMIT SHEET METAL SCREWS @ WELDED STUD CONDITIONS.

5604A-0 SCALE: NO SCALE
METAL STUD WALL FRAMING 16

DLR GROUP

KVA STRUCTURAL ENGINEERS

COVINA VALLEY HS POOL REPLACEMENT

COVINA VALLEY UNIFIED SCHOOL DISTRICT

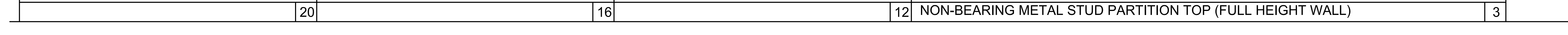
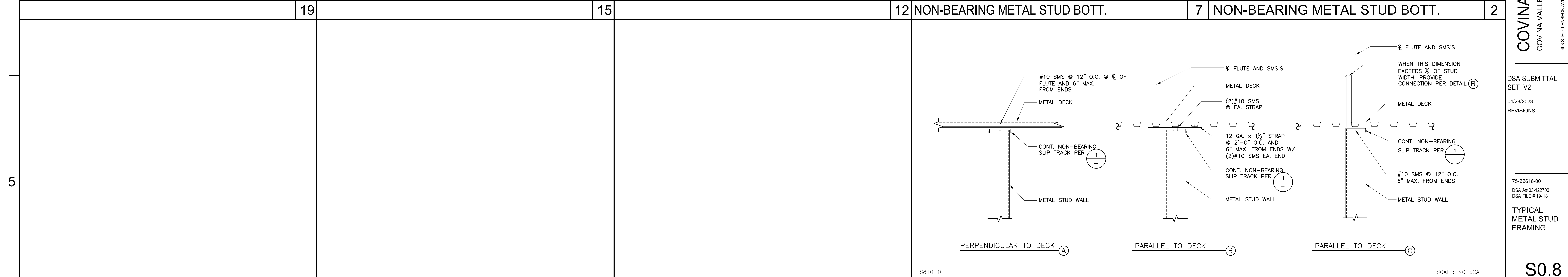
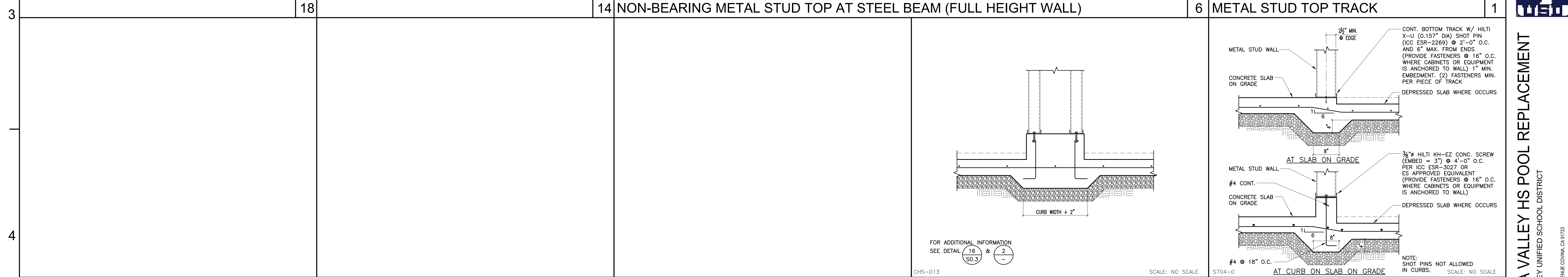
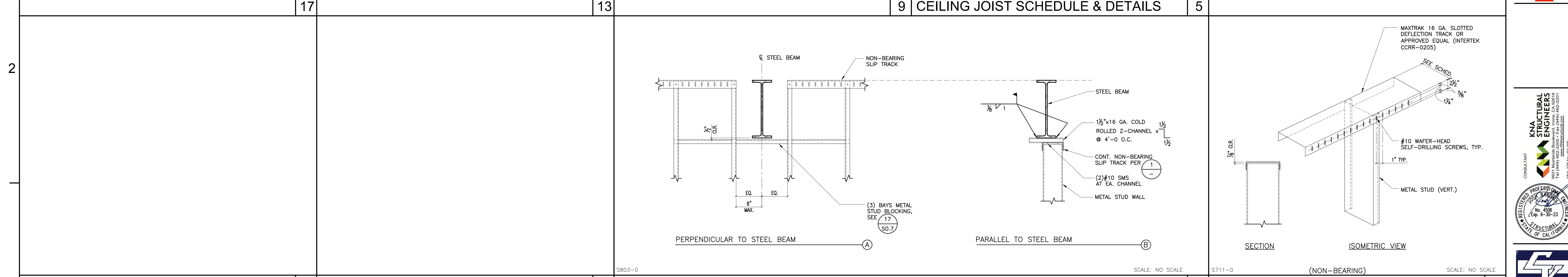
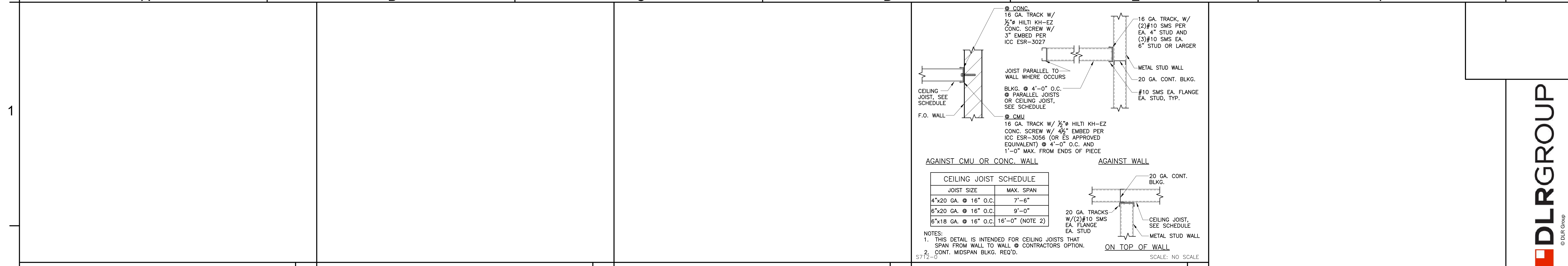
483 S. HOLLENBECK AVENUE COVINA, CA 91723

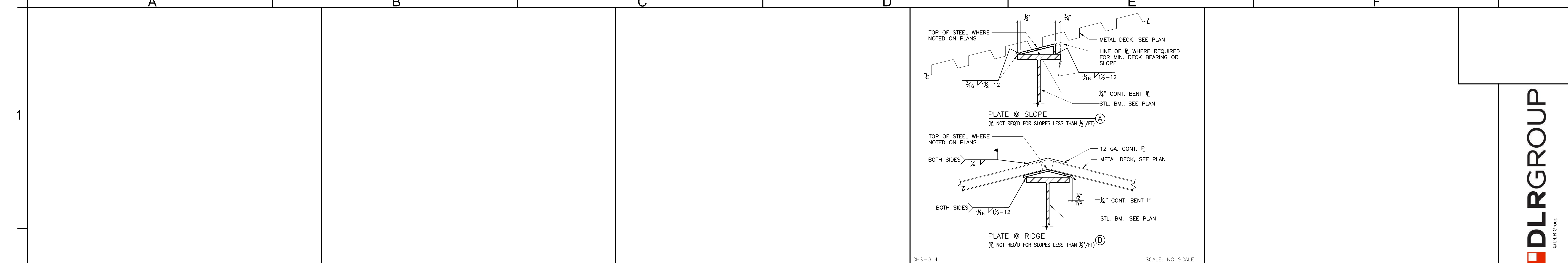
75-22616-00
DSA A# 03-122700
DSA FILE # 19448

TYPICAL METAL STUD FRAMING

S0.7

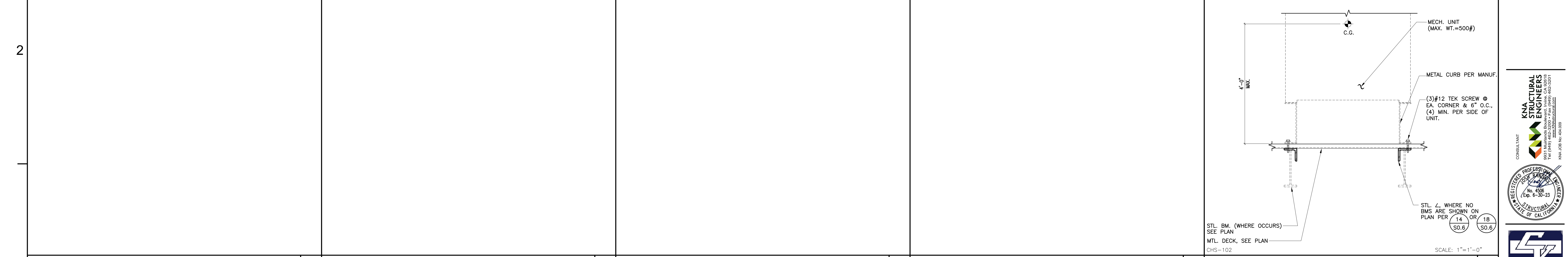
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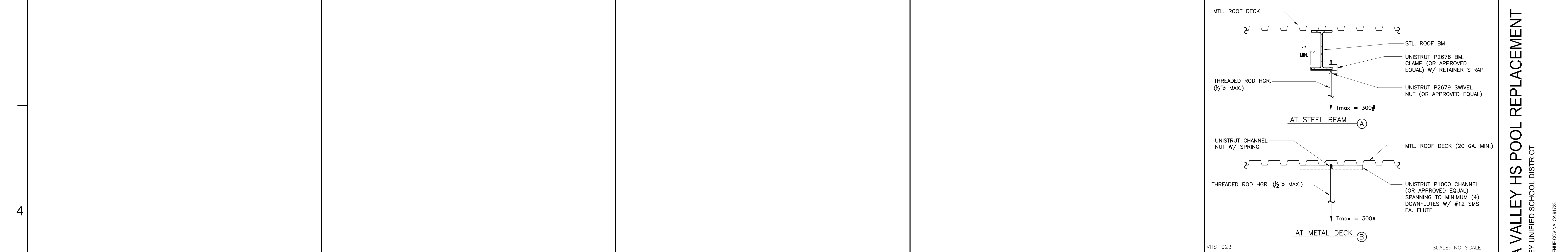
CHS-014 SCALE: NO SCALE

17	13	9	BEAM SLOPE TRANSITION PLATES	5
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CHS-102 SCALE: 1"=1'-0"

18	14	10	MECH. UNIT ANCHORAGE - EXHAUST FAN	1
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VHS-023 SCALE: NO SCALE

19	15	11	THREADED ROD HANGER AT METAL ROOF DECK	2
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CHS-104 SCALE: NO SCALE

20	16	12	TYP. DUCT SUPPORT STRAP ATTACHMENT	3
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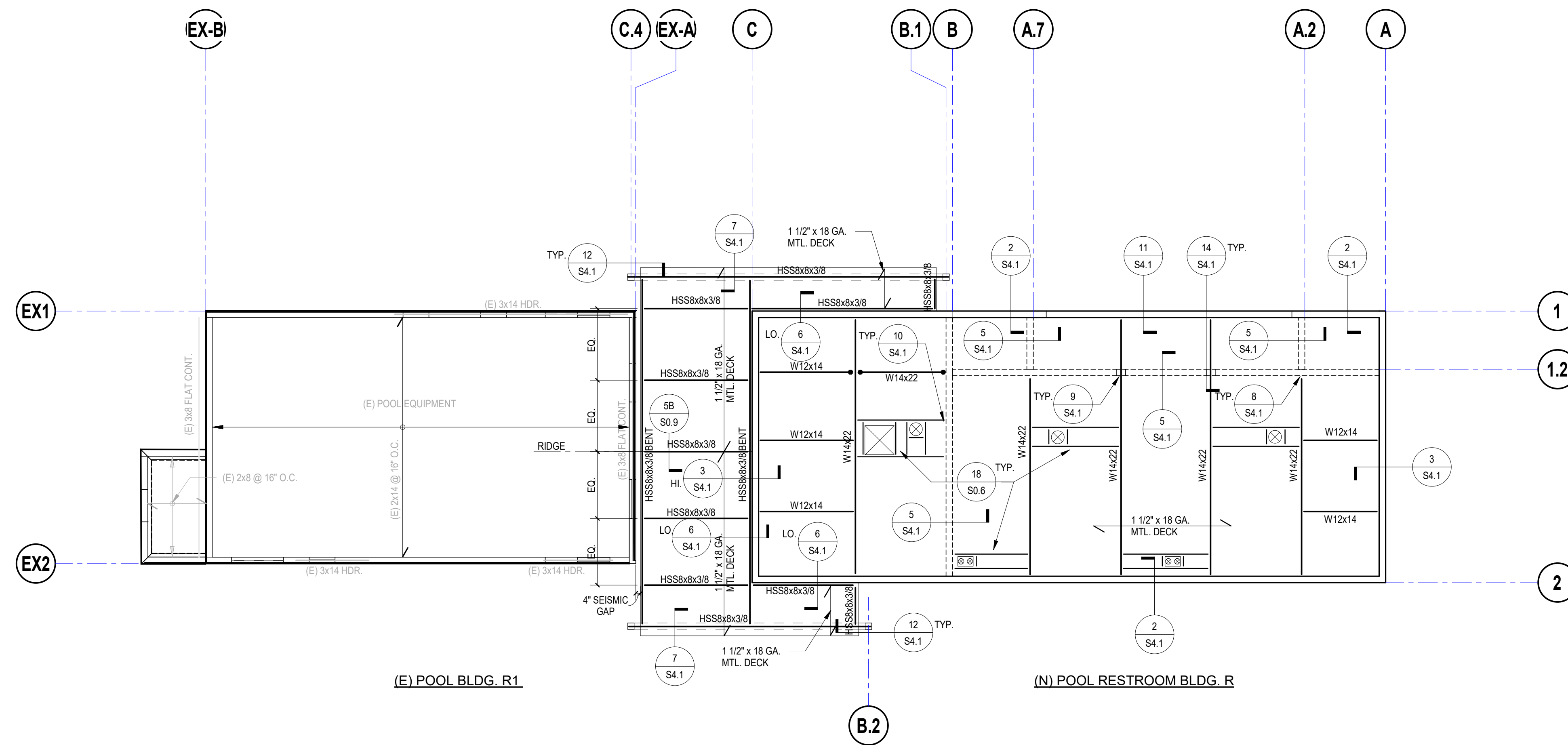
COVINA VALLEY HS POOL REPLACEMENT
 COVINA VALLEY UNIFIED SCHOOL DISTRICT
 463 S. HOLLENBECK AVENUE COVINA, CA 91723

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 04/28/2023 REVISIONS

75-22616-00
 DSA # 03-122700
 DSA FILE # 19418

TYPICAL METAL DECK DETAILS

S0.9



ROOF FRAMING PLAN - (E) POOL BLDG. R1 AND (N) POOL RESTROOM BLDG. R
SCALE: 1/8" = 1'-0"

ROOF FRAMING PLAN NOTES

- SEE SHEETS S0.1 THROUGH S0.8 FOR GENERAL NOTES AND TYPICAL DETAILS.
- FOR ANY DIMENSIONAL INFORMATION NOT SHOWN, SEE ARCHITECTURAL DRAWINGS.
- SEE ARCHITECTURAL, PLUMBING, MECHANICAL AND ELECTRICAL DRAWINGS FOR SIZE AND LOCATION OF ROOF OPENINGS NOT SHOWN ON ROOF FRAMING PLANS. SEE DETAILS 1430.6 FOR TYPICAL OPENINGS, UNLESS NOTED OTHERWISE.
- ALL BEAMS SHALL BE EQUALLY SPACED BETWEEN COLUMNS, UNLESS NOTED OTHERWISE.

LEGEND

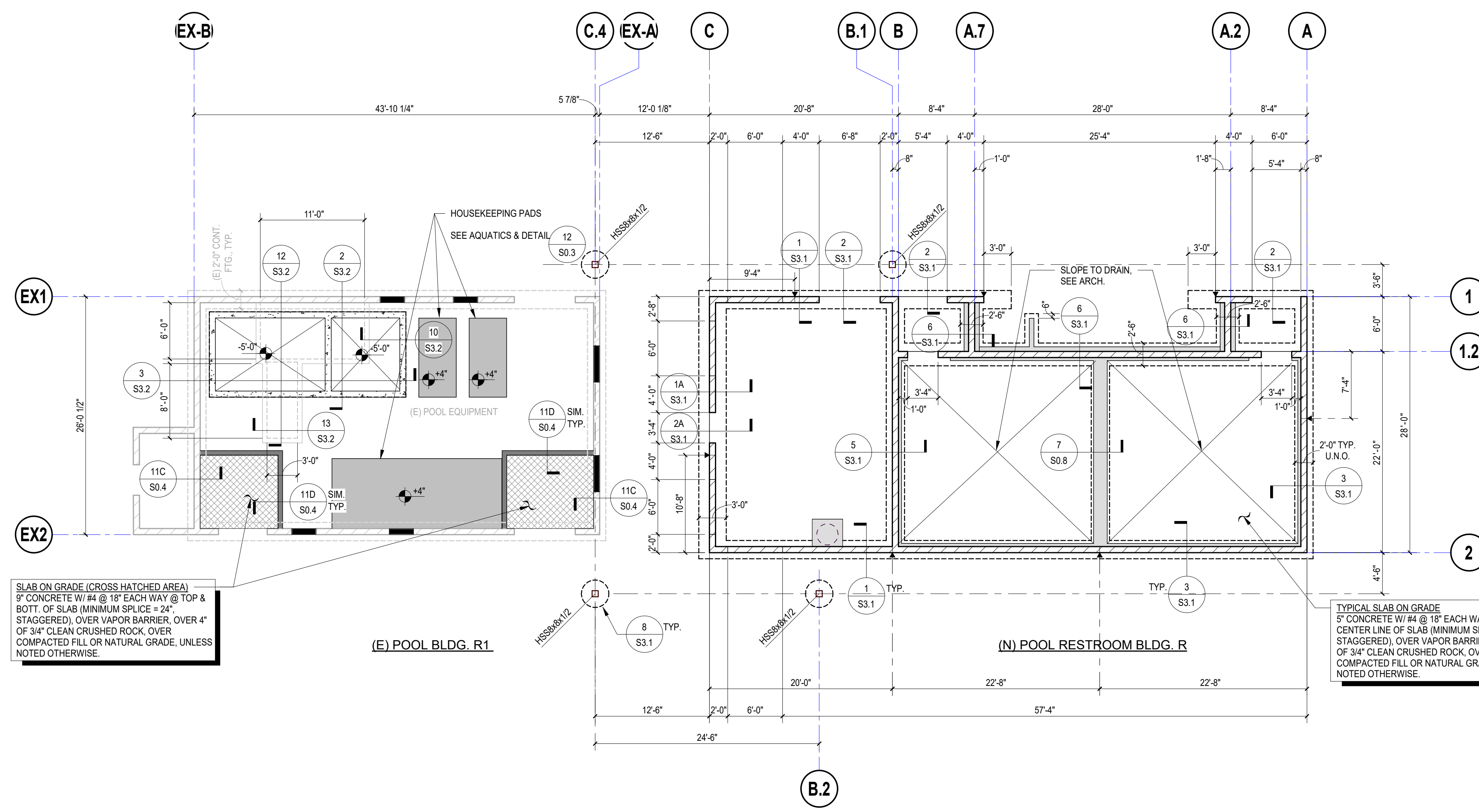
- INDICATES SPAN OF METAL DECK. DECK SPAN INDICATED SHALL BE TYPICAL, UNLESS NOTED OTHERWISE. DECK SHALL SPAN OVER 2 SPANS MINIMUM (3 SUPPORTS) AND 3 SPANS (4 SUPPORTS) WHEREVER POSSIBLE. SEE FLOOR AND ROOF CONSTRUCTION SCHEDULE ON DETAIL 1330.6 FOR STRUCTURAL DECK AND FILL REQUIREMENTS.
- INDICATES TYPICAL CONNECTION WITH ASTM A325SC BOLTS.
- BENT : INDICATES BENT BEAM. WELD PER DETAIL 12/50.6.

FOUNDATION PLAN NOTES

- SEE SHEETS S0.1 THROUGH S0.8 FOR GENERAL NOTES AND TYPICAL DETAILS.
- SEE SPECIFICATIONS FOR ALL SITE AND SUBGRADE PREPARATIONS.
- SEE ARCHITECTURAL AND/OR CIVIL DRAWINGS FOR FINISH FLOOR ELEVATIONS.
- SEE ARCHITECTURAL AND CIVIL DRAWINGS FOR ALL EXTERIOR CONCRETE PAVING, SLABS, BASES, CURBS, SITE WALLS, ETC.
- FOR ANY DIMENSIONAL INFORMATION NOT SHOWN, SEE ARCHITECTURAL DRAWINGS.
- SEE PLANS AND ARCHITECTURAL DRAWINGS FOR SLOPES IN CONCRETE SLABS.
- ALL DIMENSIONS SHOWN ARE FROM FACE OF WALL, CENTER LINE OF COLUMN, OR CENTER LINE OF WALL, UNLESS NOTED OTHERWISE.
- SEE ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATION OF ALL DOOR AND WINDOW OPENINGS IN BEARING AND NON-BEARING WALLS.
- 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.
- SEE ARCHITECTURAL, PLUMBING, MECHANICAL & ELECTRICAL DRAWINGS FOR ADDITIONAL EMBEDDED ITEMS AND SLAB PENETRATIONS.
- FOR TYPICAL SLAB JOINTS, SEE DETAIL 9/50.3.

LEGEND

- INDICATES STEEL COLUMN SIZE. SEE DETAIL 11/50.6 FOR STEEL COLUMN BASE PLATE, U.N.O.
- INDICATES CONCRETE WALL. SEE PLAN FOR THICKNESS AND REINFORCING.
- INDICATES MASONRY WALL. SEE PLAN FOR THICKNESS AND REINFORCING.
- INDICATES CONTROL JOINT IN CMU WALL. SEE DETAIL 9/50.5 FOR ADDITIONAL INFORMATION.
- INDICATES CONCRETE CURB. SEE PLANS AND DETAIL 16/50.3 FOR ADDITIONAL INFORMATION.
- INDICATES CHANGE IN ELEVATION.
- INDICATES TOP OF SLAB ELEVATION (WHERE INDICATED).
- INDICATES IN-FILLED CMU OPENING.
- INDICATES EXISTING IN-FILLED SLUMP PIT.
- INDICATES SLOPED SLAB TO DRAIN, CORR'D. W/ PLUMBING PLANS.
- INDICATES EQUIPMENT HOUSEKEEPING PAD.
- INDICATES NEW CONCRETE SLAB ON GRADE. SEE PLAN.



FOUNDATION PLAN - (E) POOL BLDG. R1 AND (N) POOL RESTROOM BLDG. R
SCALE: 1/8" = 1'-0"



COVINA VALLEY HS POOL REPLACEMENT
COVINA VALLEY UNIFIED SCHOOL DISTRICT
483 S. HOLLENBECK AVENUE COVINA, CA 91723

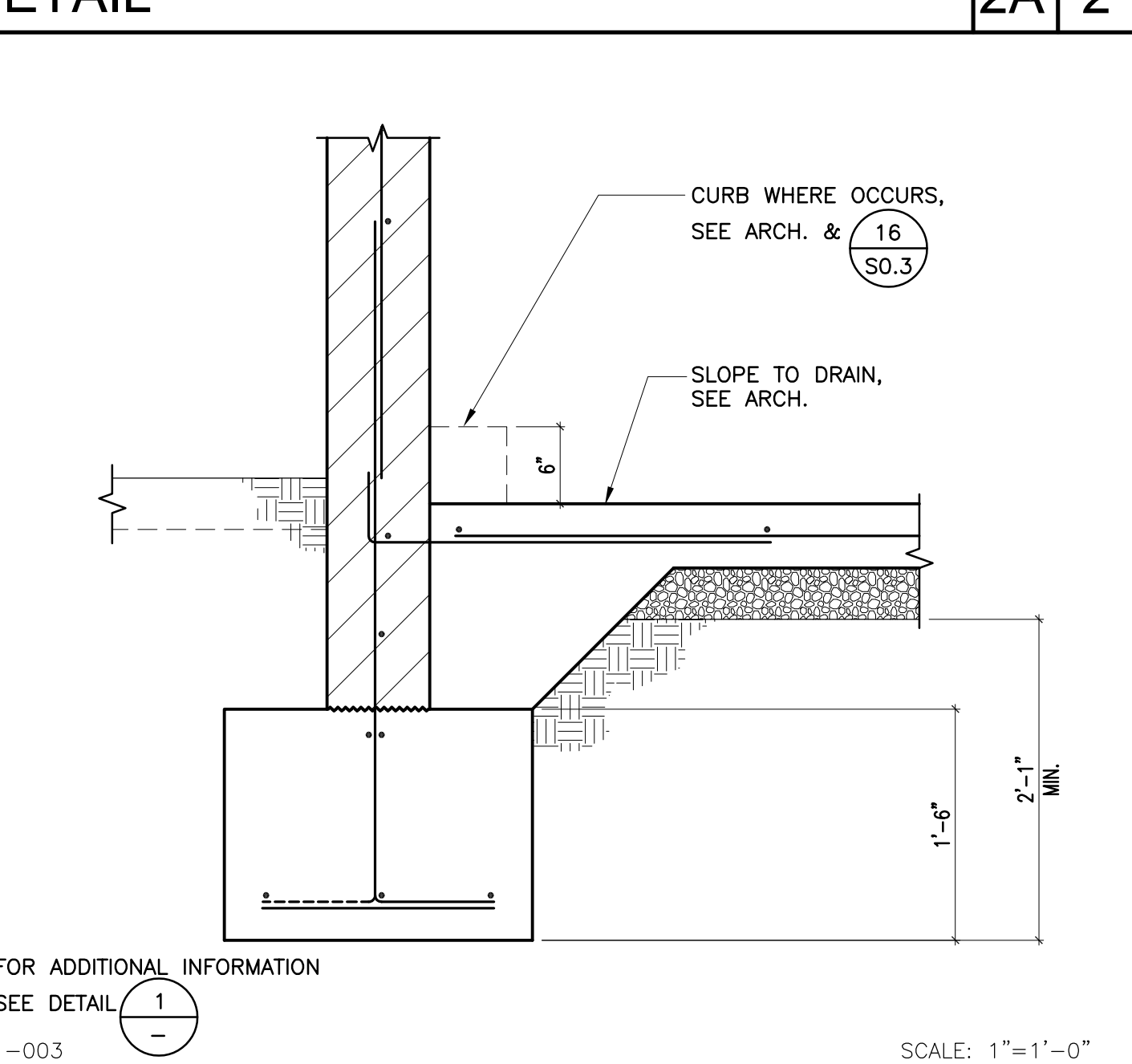
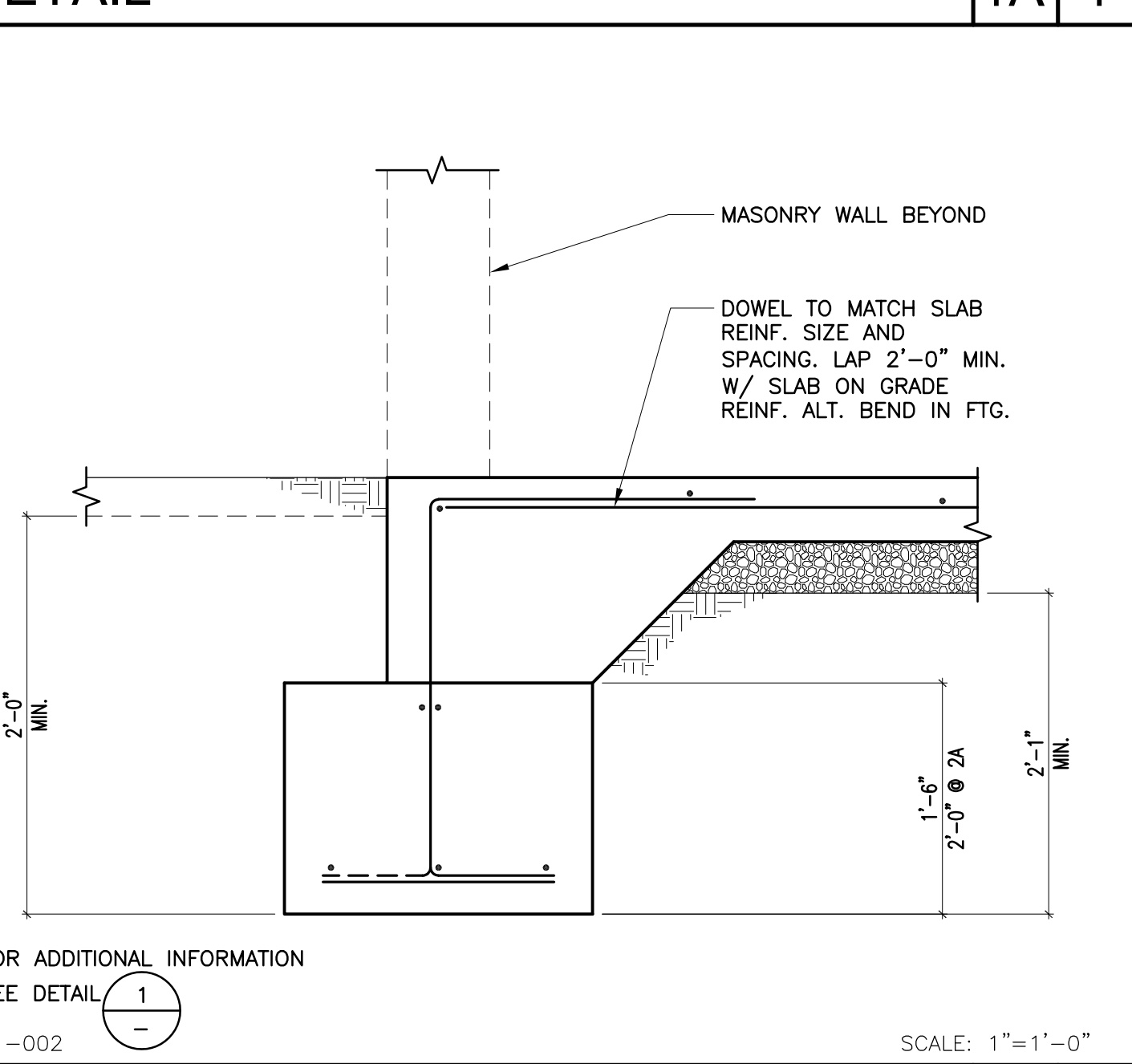
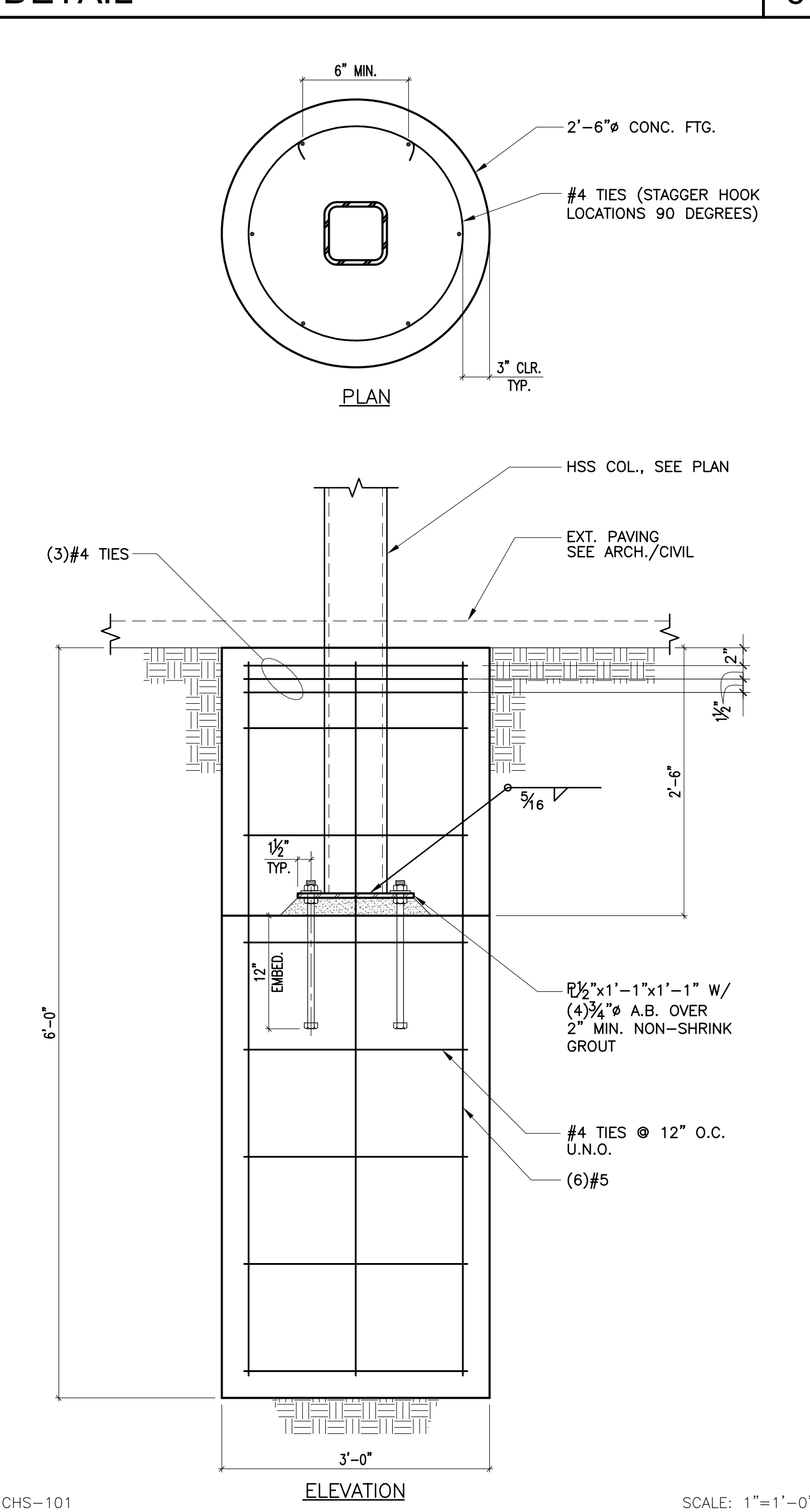
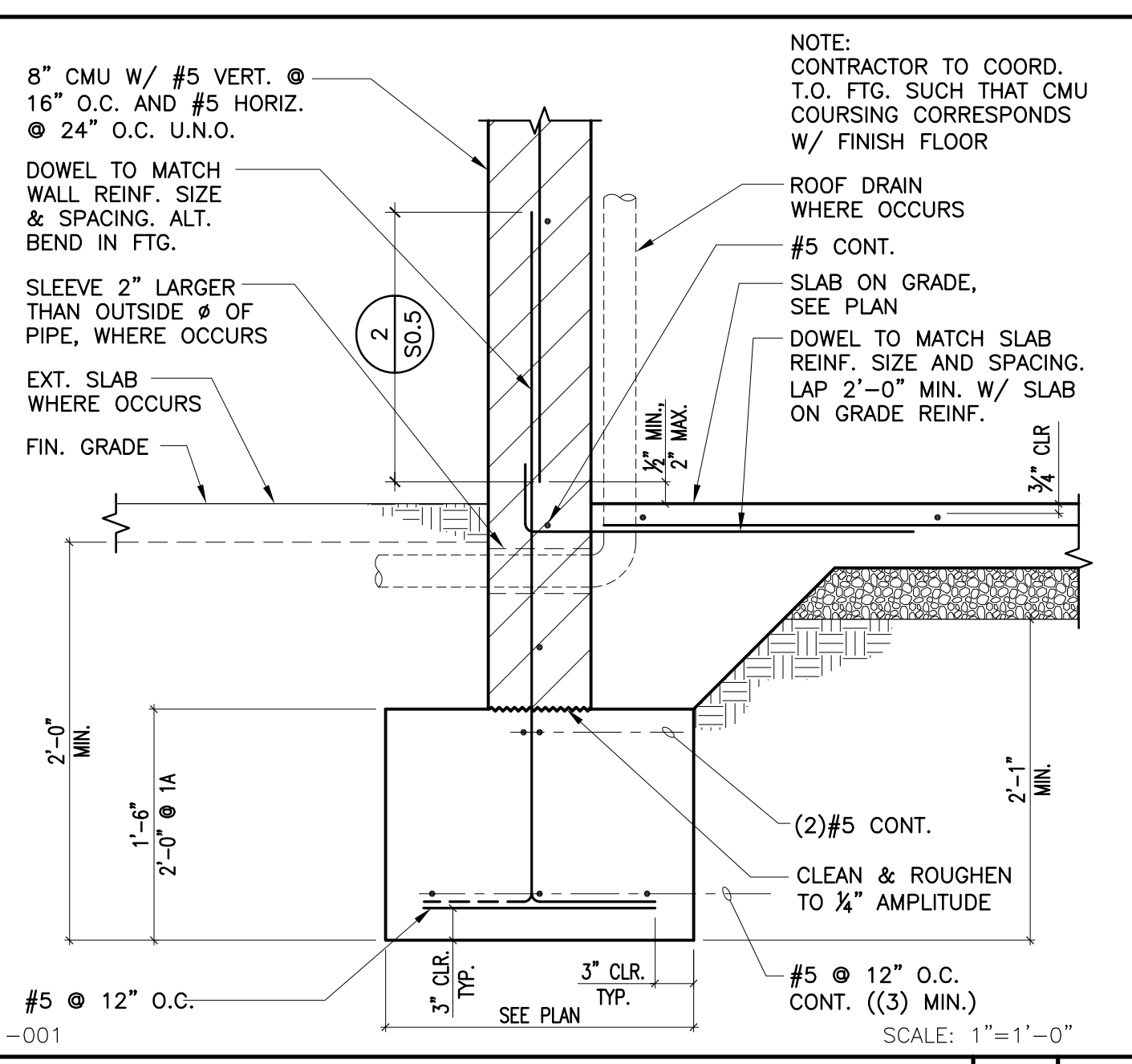
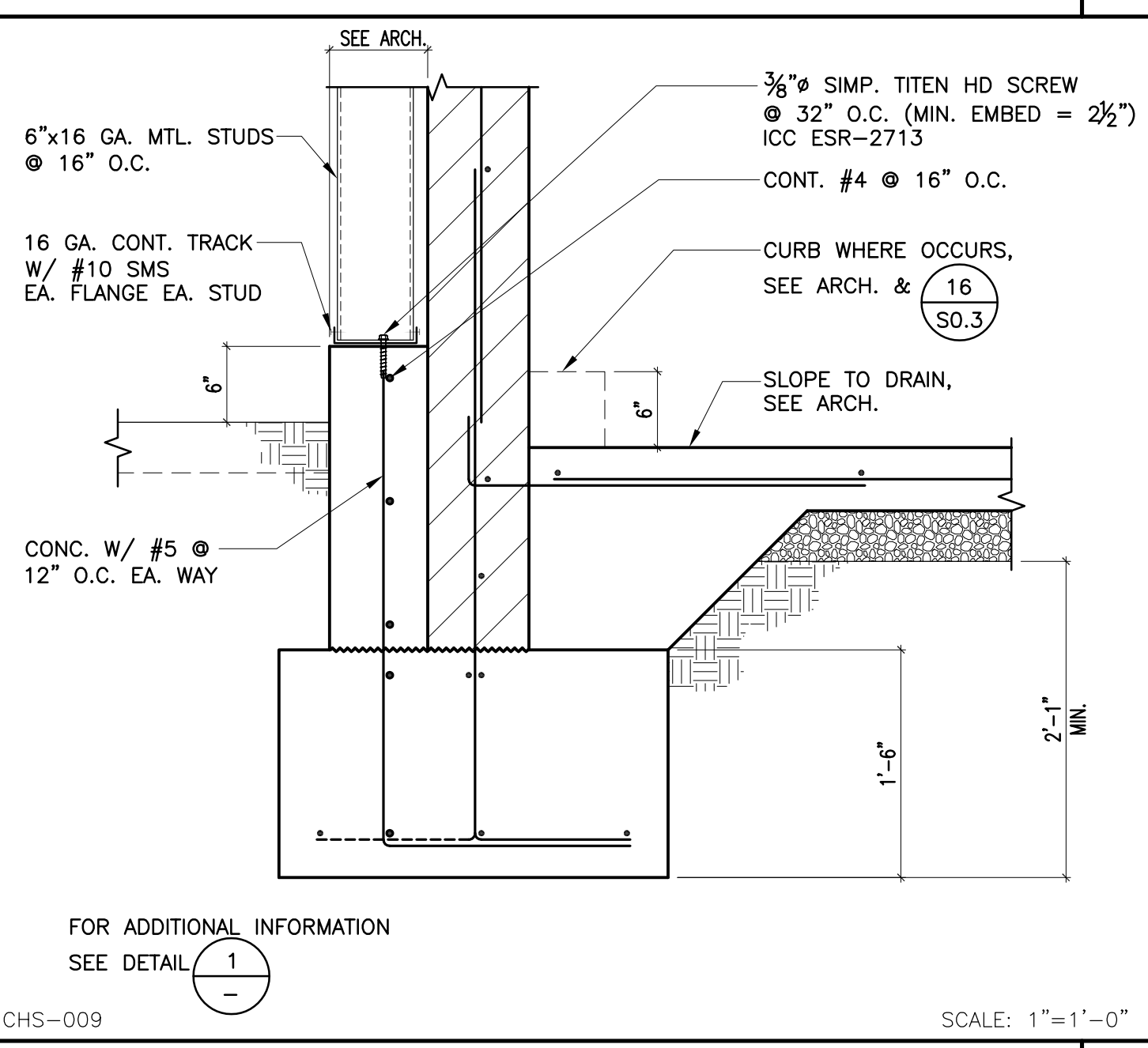
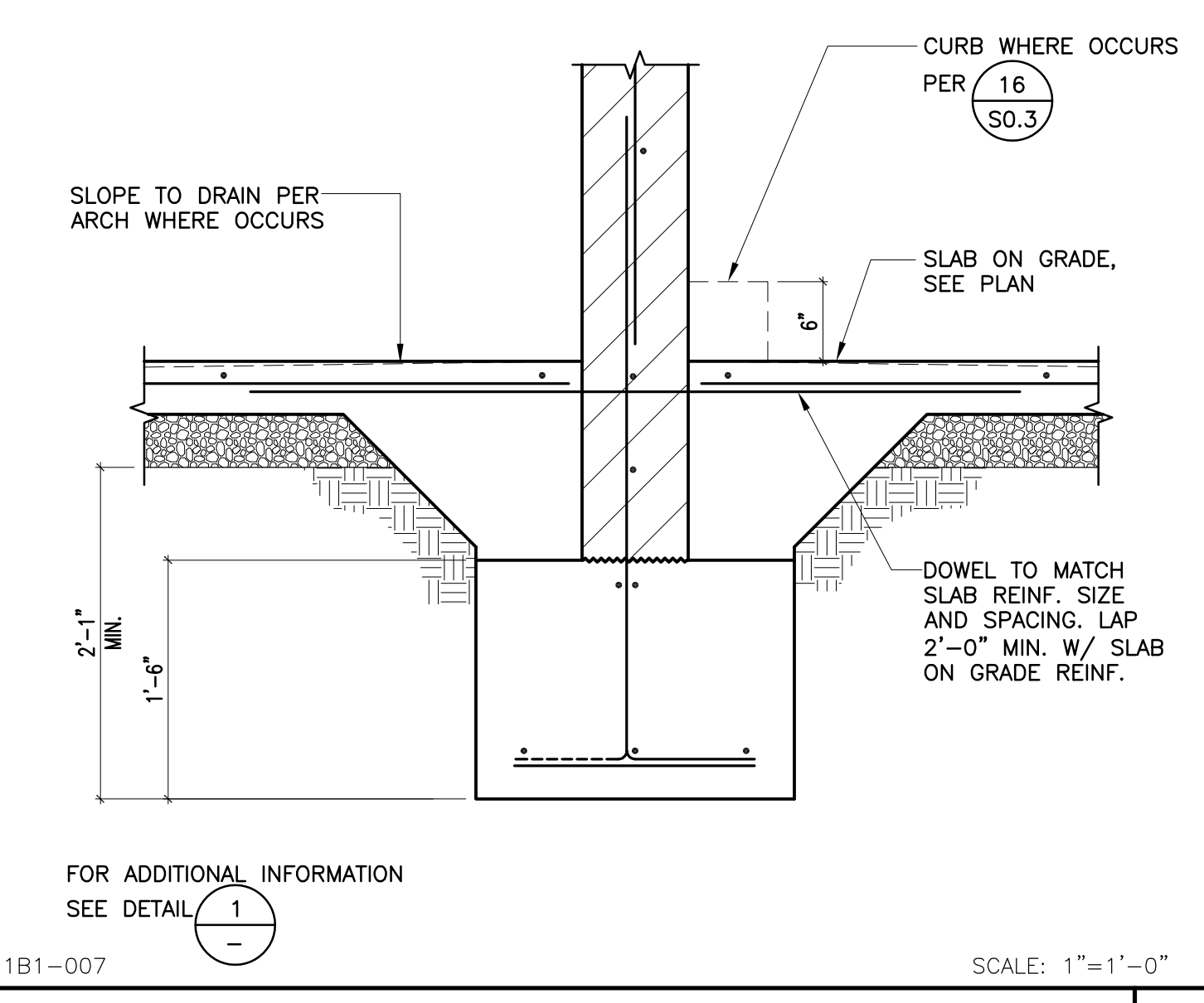
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04/28/2023 REVISIONS

75-22616-00
DSA # 03-122700
DSA FILE# 19-148
FOUNDATION AND ROOF FRAMING PLAN

S2.1

1	17	13	9	5
2	18	14	10	6
3	19	15	11	1A
4	20	16	12	8
5	16	12	8	3



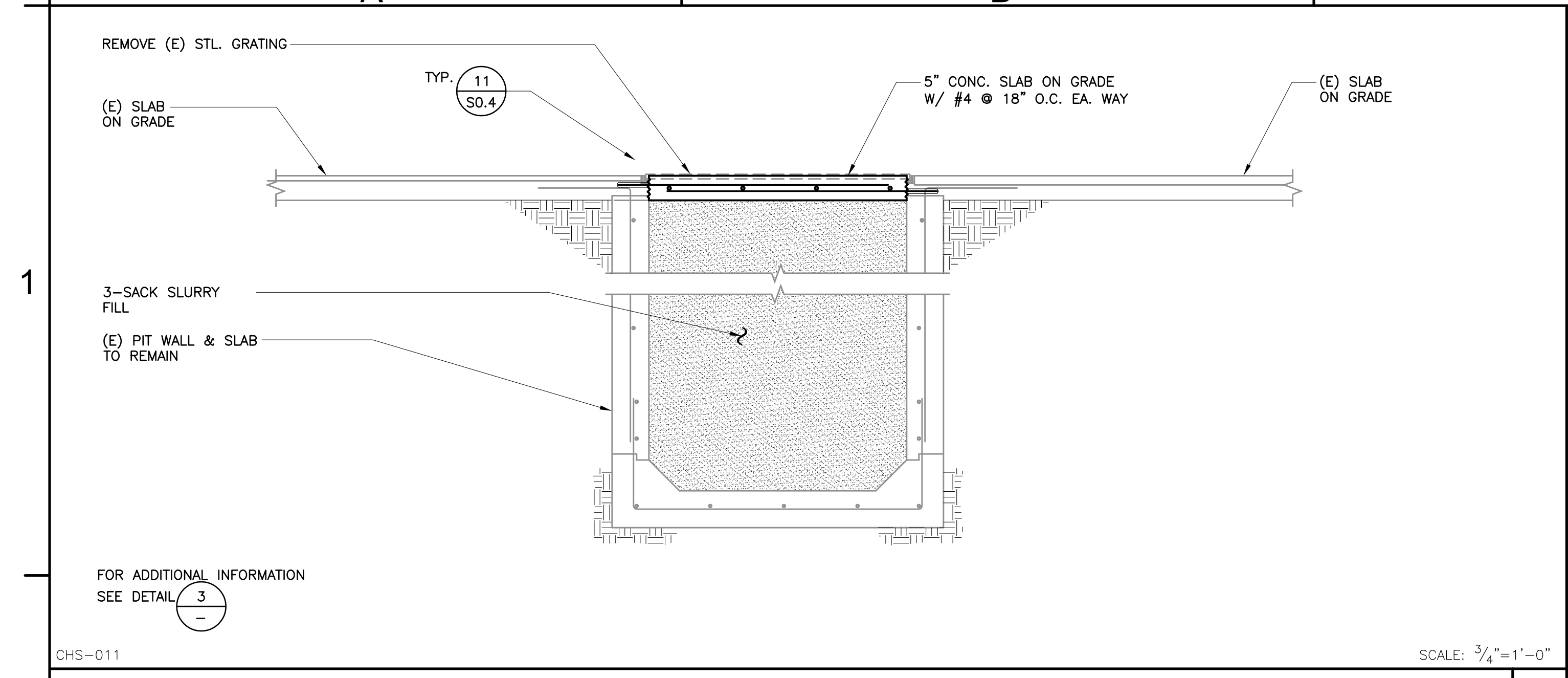
COVINA VALLEY HS POOL REPLACEMENT
 COVINA VALLEY UNIFIED SCHOOL DISTRICT
 483 S. HOLLENBECK AVENUE COVINA, CA 91723

DSA SUBMITTAL SET_V2
 04/28/2023 REVISIONS

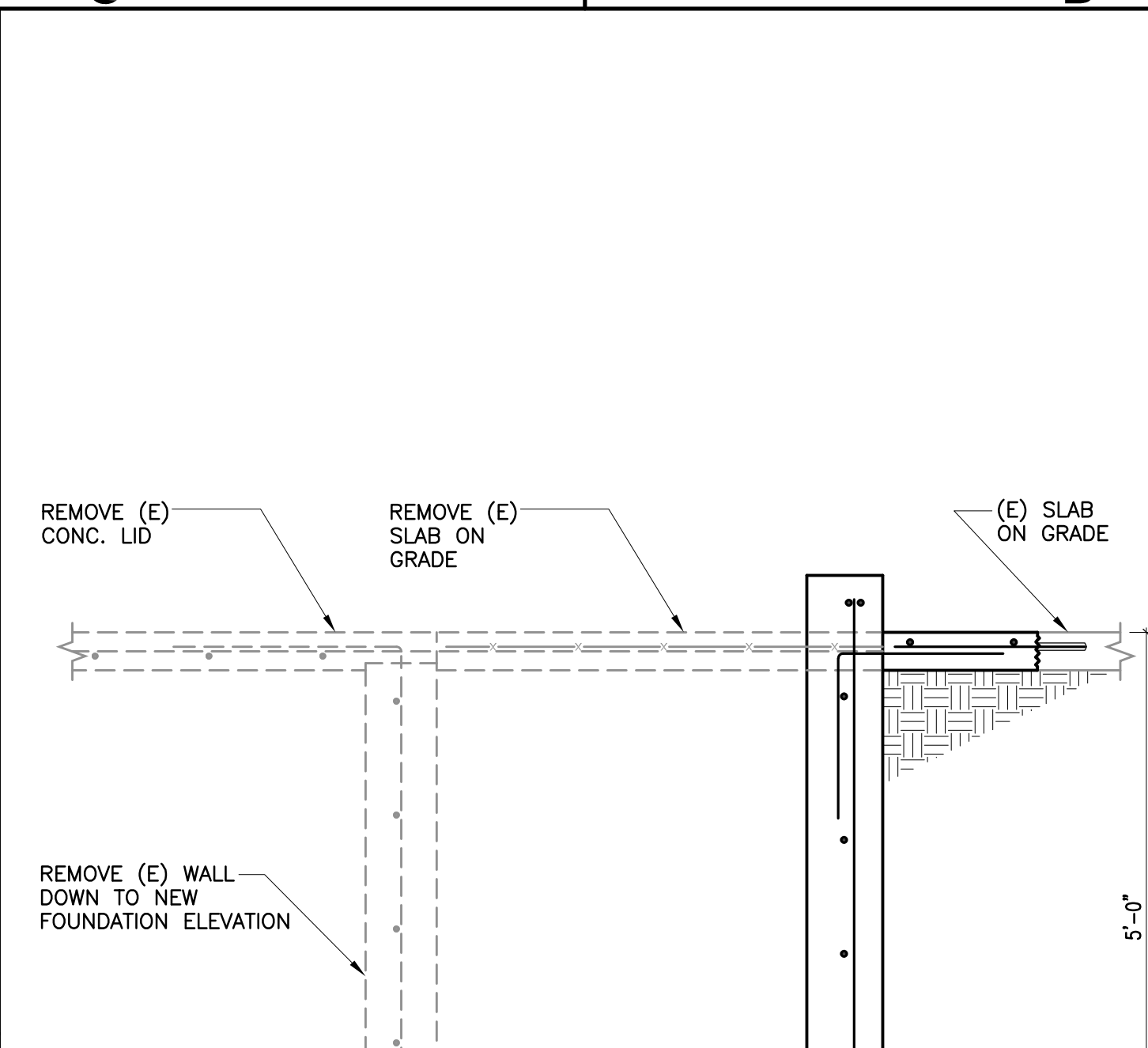
75-22616-00
 DSA A# 03-122700
 DSA FILE # 194-18

FOUNDATION DETAILS

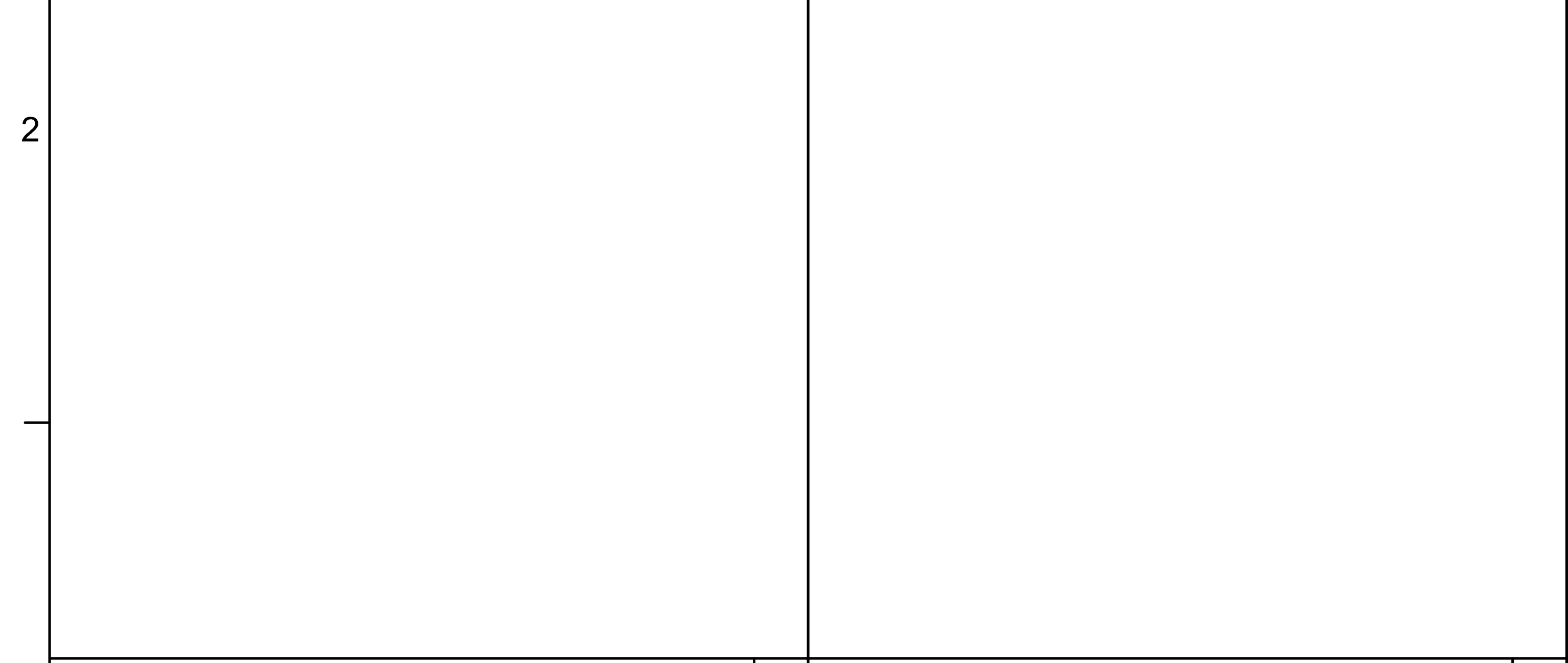
S3.1



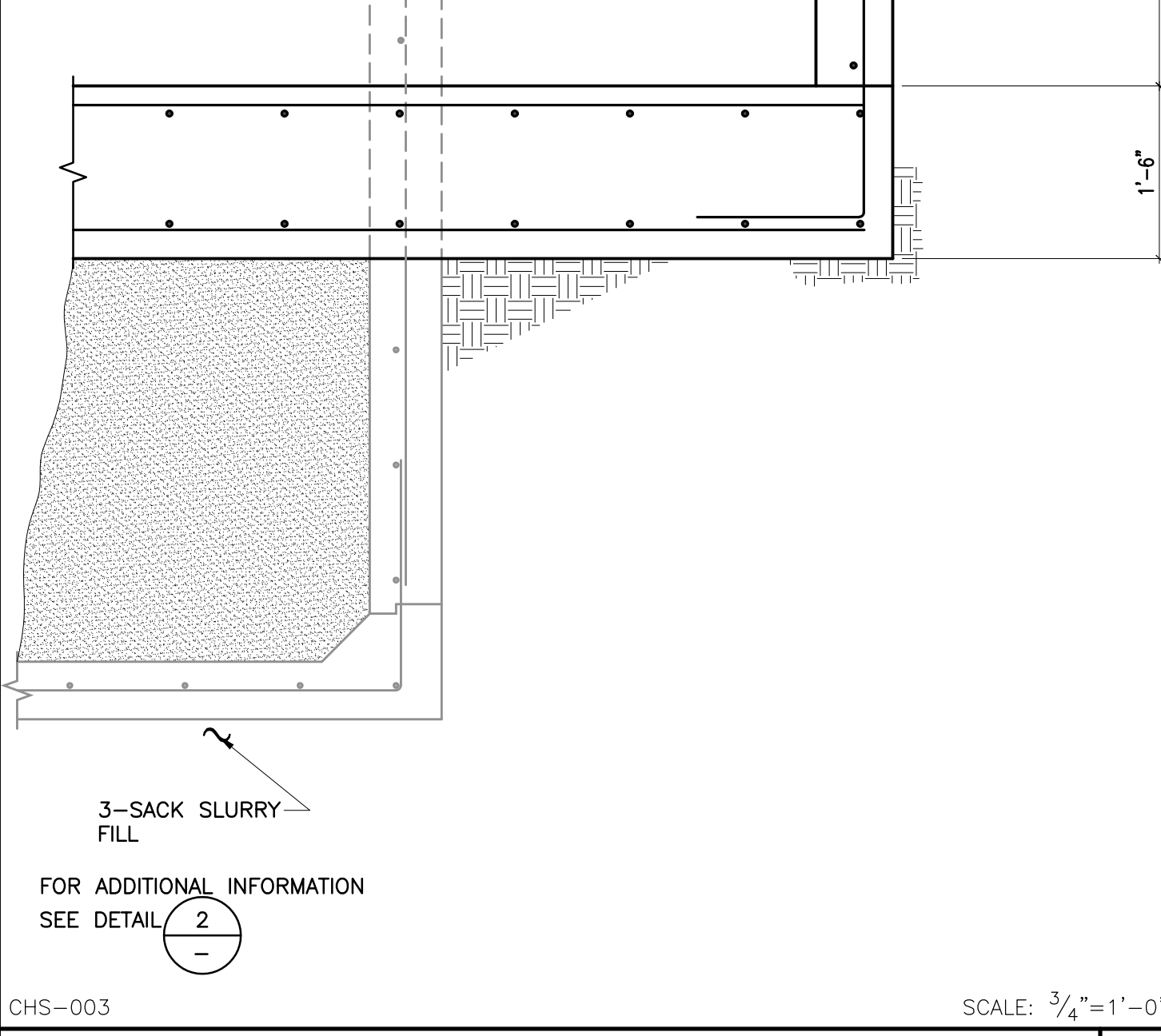
CHS-011 SCALE: 3/4"=1'-0" 13 DETAIL



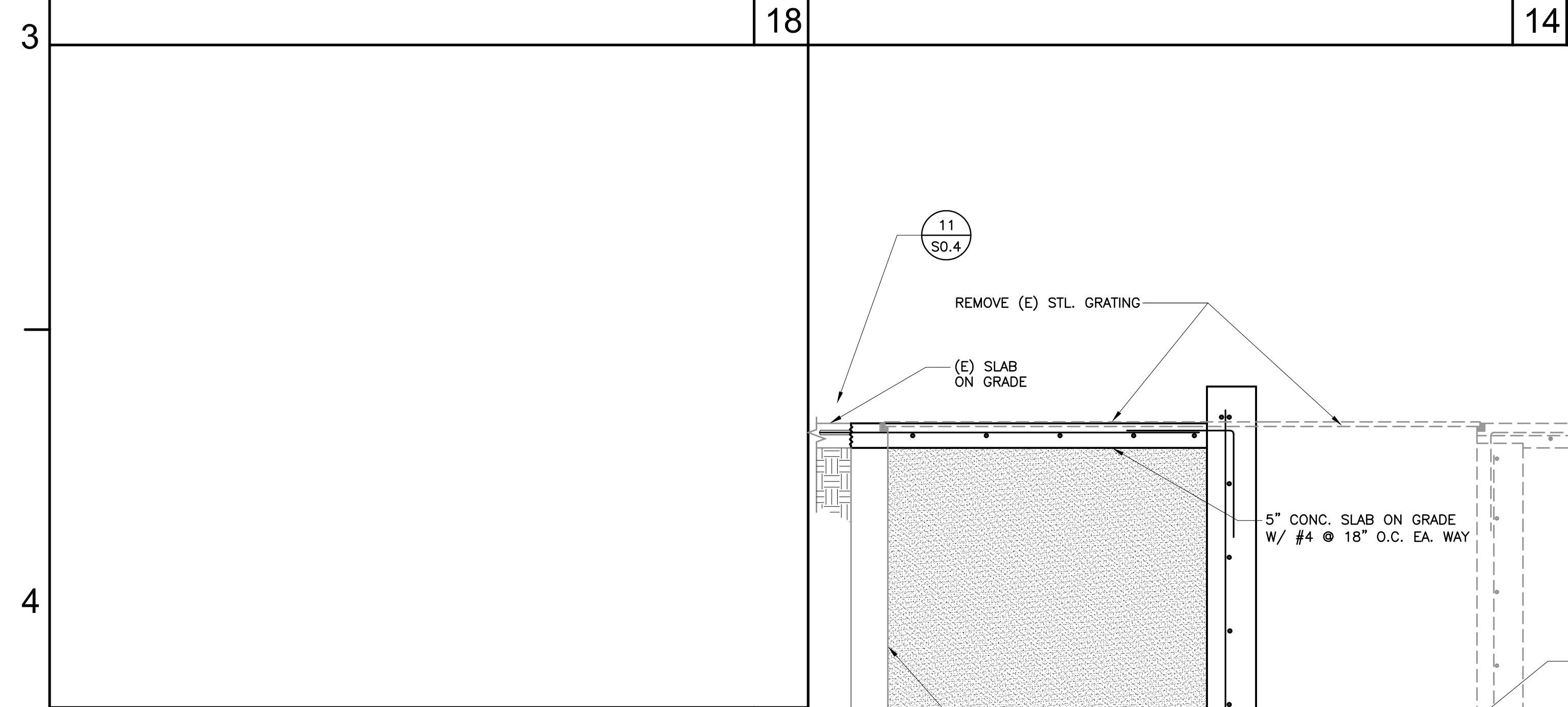
CHS-003 SCALE: 3/4"=1'-0" 14 DETAIL



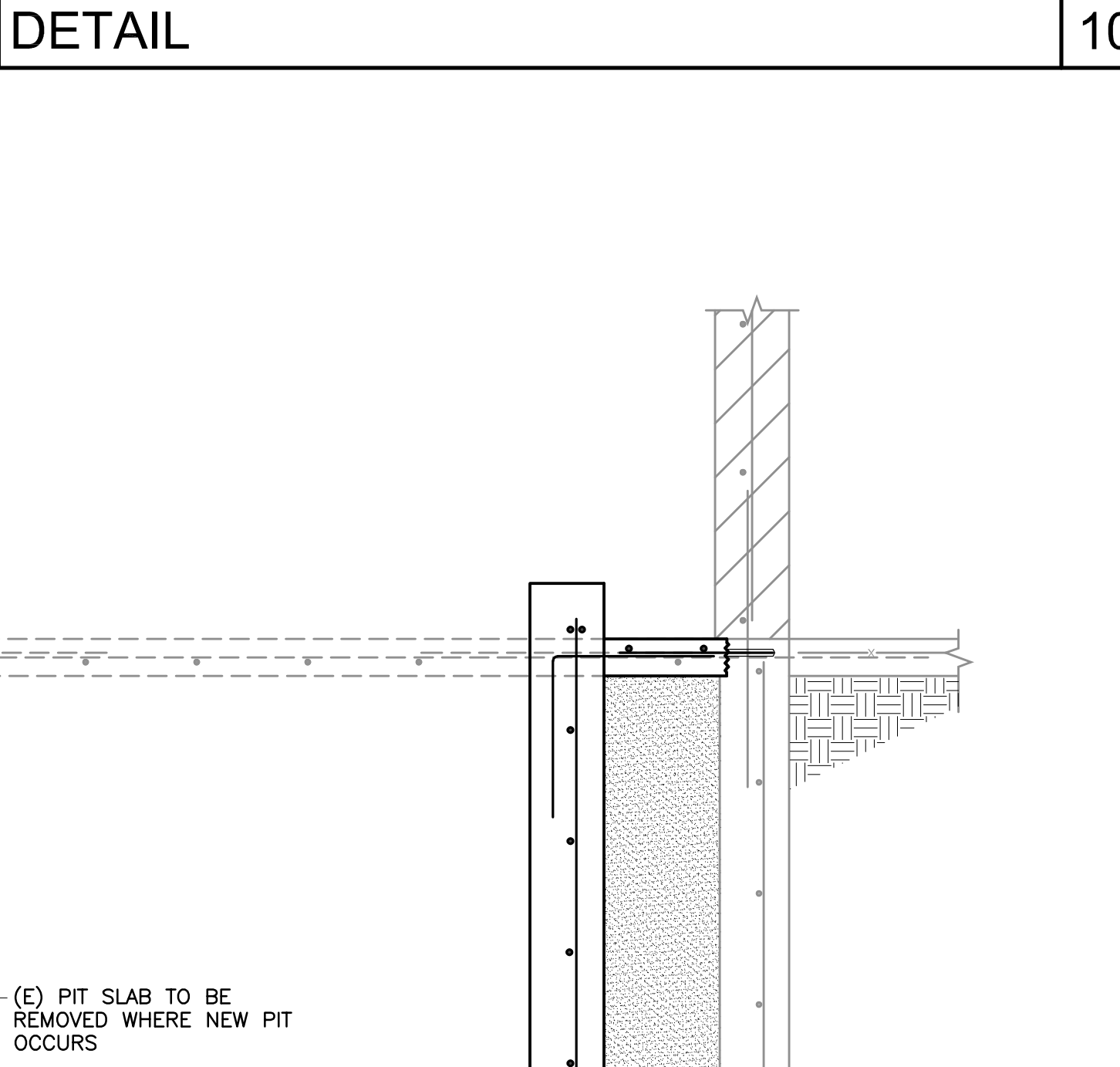
CHS-010 SCALE: 3/4"=1'-0" 18 DETAIL



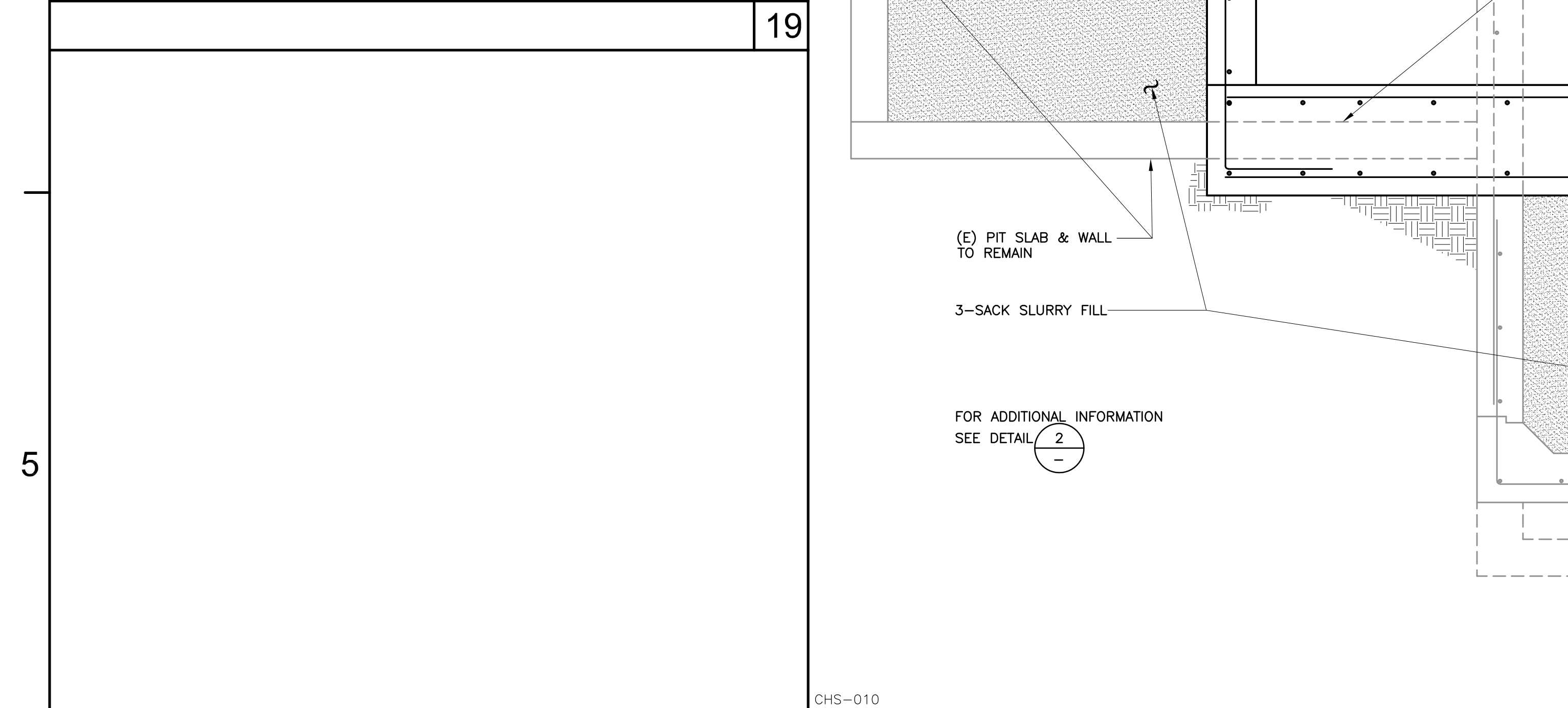
CHS-004 SCALE: 3/4"=1'-0" 10 DETAIL



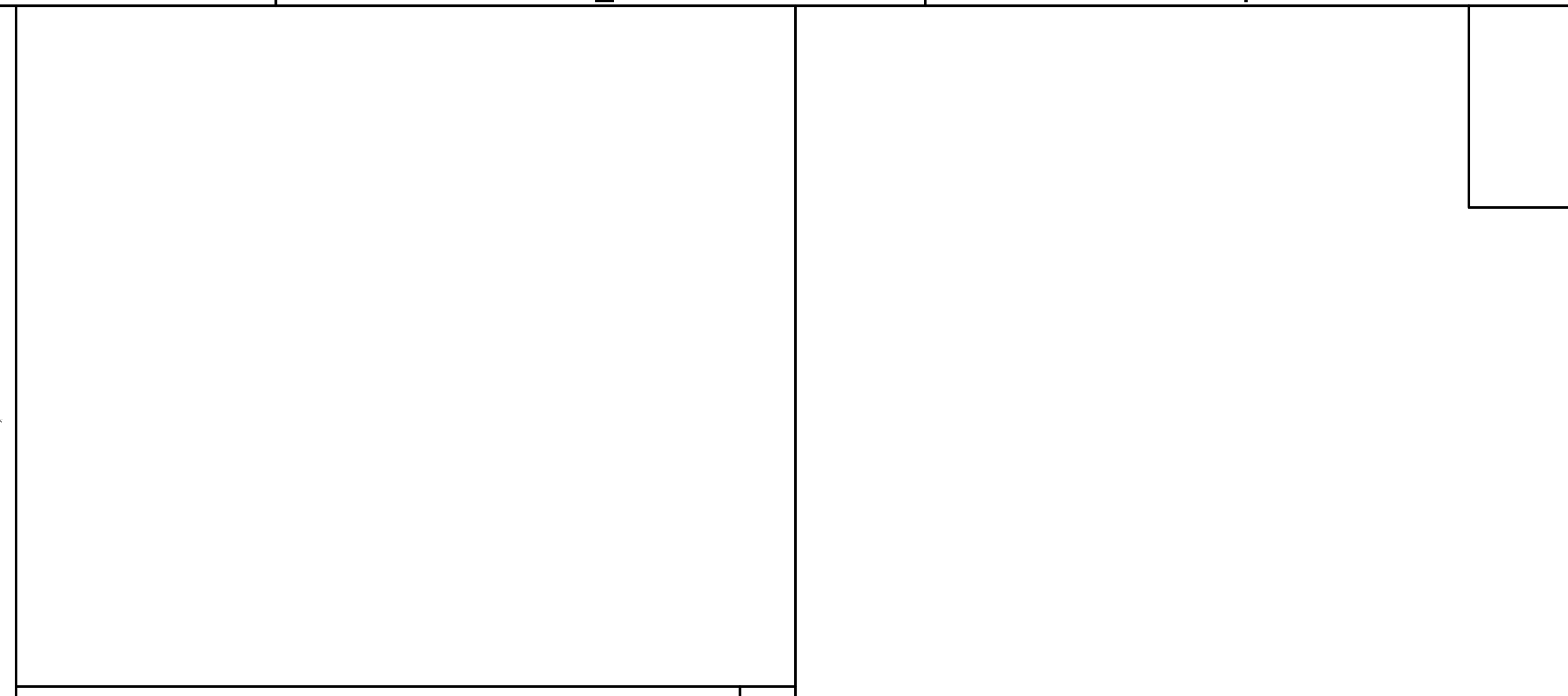
CHS-010 SCALE: 3/4"=1'-0" 19 DETAIL



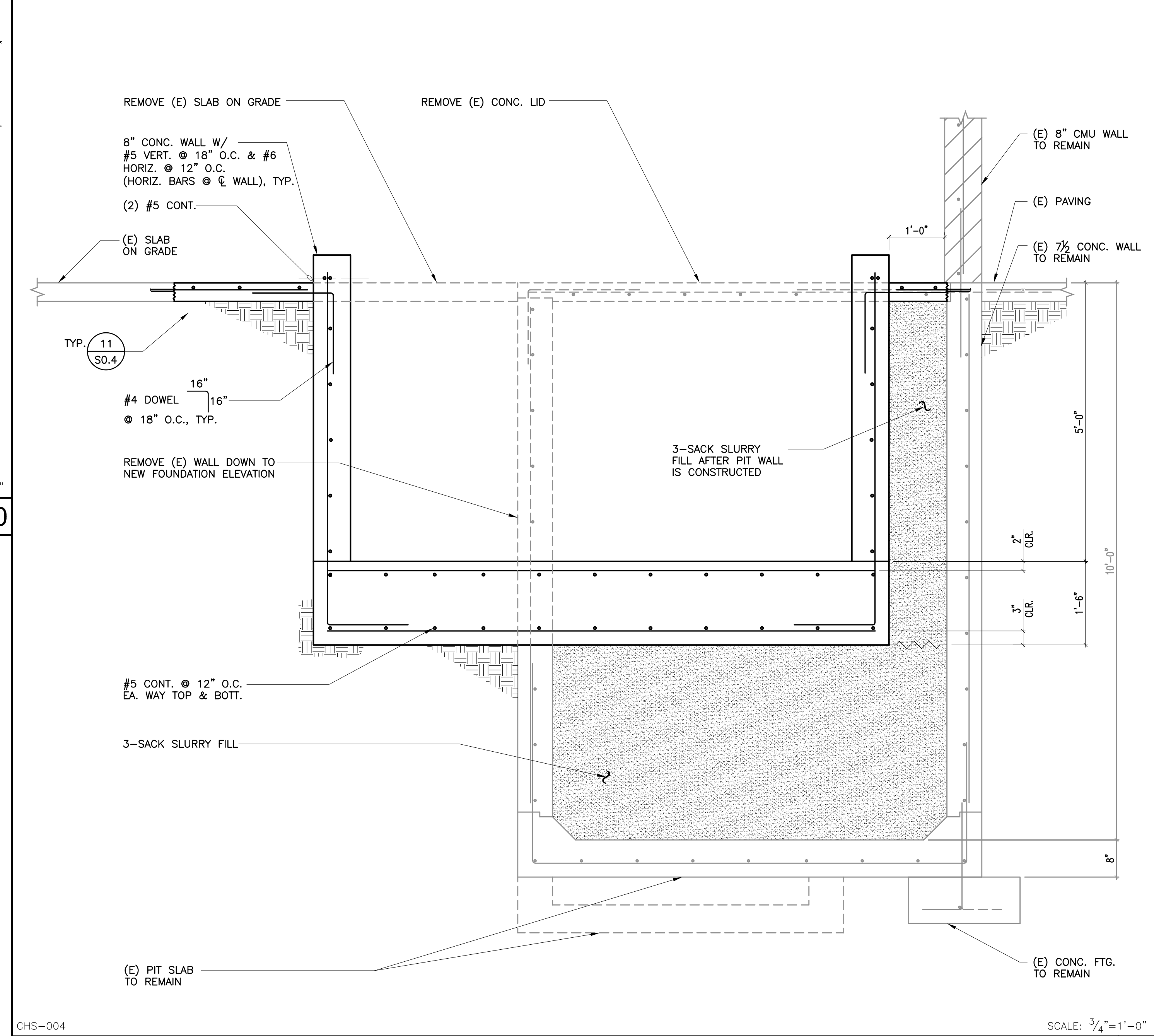
CHS-002 SCALE: 3/4"=1'-0" 12 DETAIL



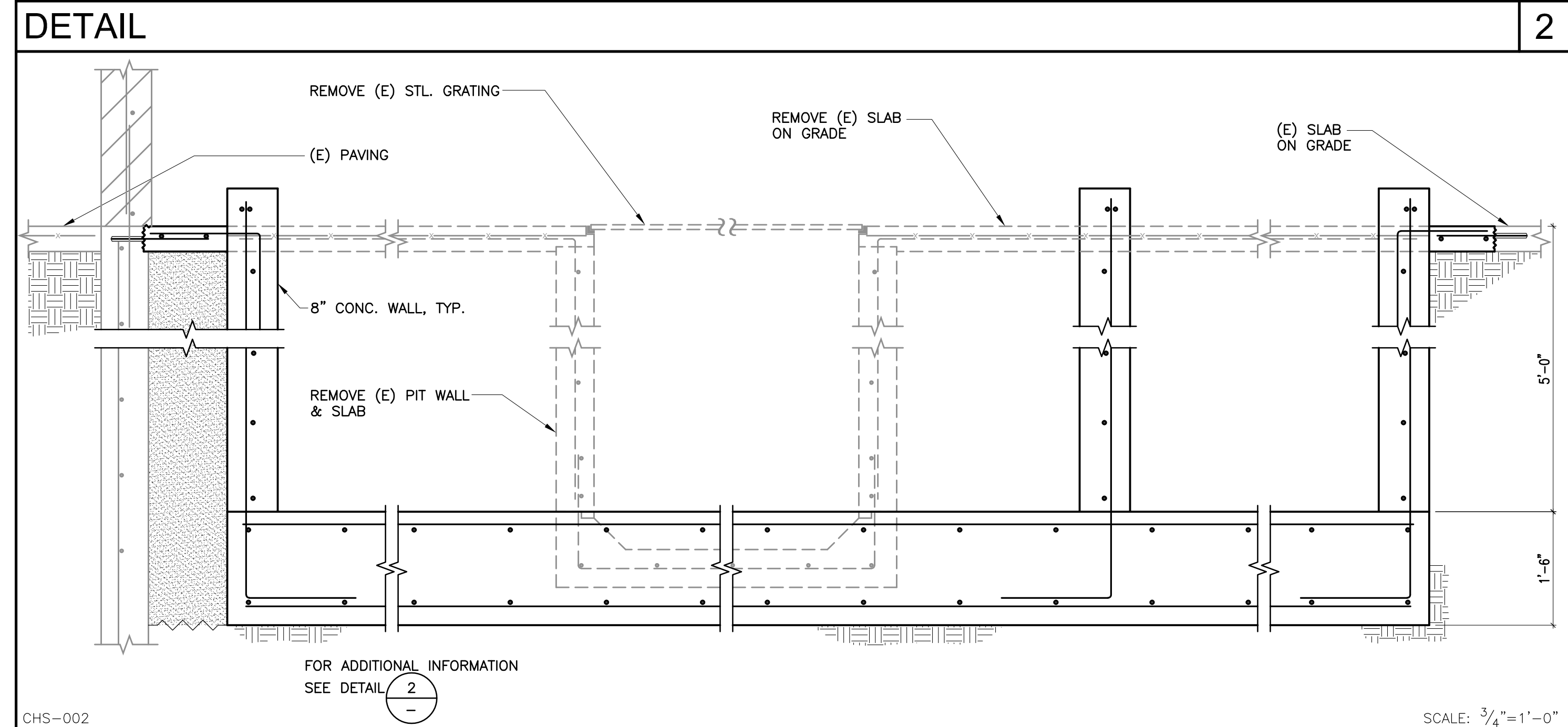
CHS-010 SCALE: 3/4"=1'-0" 20 DETAIL



CHS-004 SCALE: 3/4"=1'-0" 5 DETAIL



CHS-004 SCALE: 3/4"=1'-0" 2 DETAIL



CHS-002 SCALE: 3/4"=1'-0" 3 DETAIL

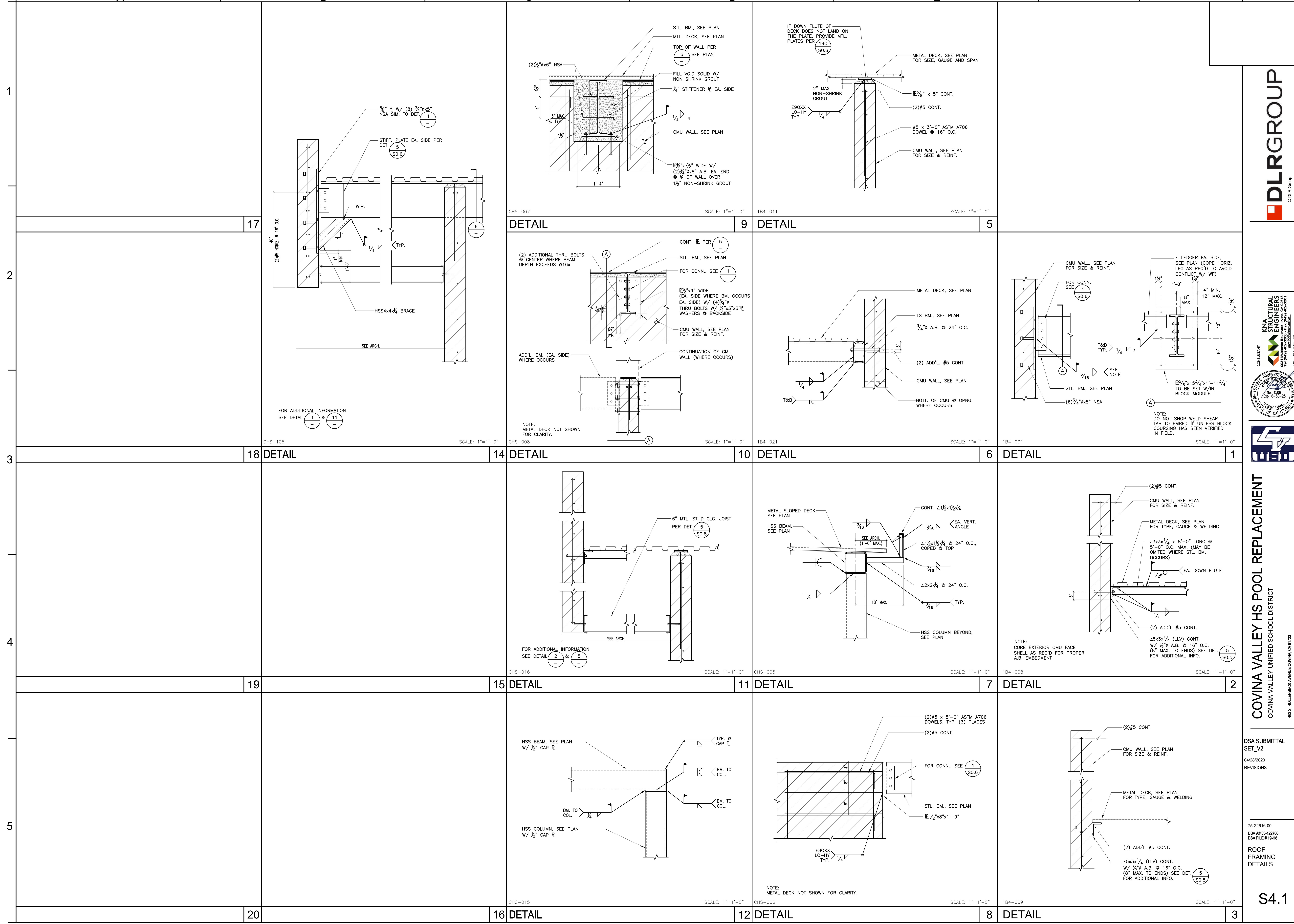


COVINA VALLEY HS POOL REPLACEMENT
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 483 S. HOLLENBECK AVENUE COVINA, CA 91723

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 04/28/2023 REVISIONS

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 DSA A# 03-122700
 DSA FILE # 19418
 FOUNDATION DETAILS

S3.2



GENERAL NOTES

- 1. PROJECT RECORD DOCUMENTS, USE A COMPUTER AIDED DRAFTING (CAD) SYSTEM IN THE PREPARATION OF RECORD DRAWINGS FOR THIS PROJECT. ACCEPTABLE CAD SYSTEMS SHALL BE CAPABLE OF PRODUCING FILES COMPATIBLE WITH THE LATEST VERSION OF AUTOCAD IN DWG OR DXF FORMAT. OWNERS CONSULTANT WILL FURNISH CAD BACKGROUNDS FOR USE BY THE CONTRACTOR AFTER CONSTRUCTION IS 90% COMPLETE EXCEPT WHERE PROHIBITED BY CONTRACT.

- 26. UTILITY PENETRATIONS OF ANY KIND IN FIRE AND SMOKE PARTITIONS AND CEILING ASSEMBLIES, SHALL BE FIRESTOPPED AND SEALED WITH AN APPROVED UL LISTED SYSTEM OR MATERIAL.

- 44. REFER TO ARCHITECTURAL EXTERIOR ELEVATIONS FOR EXTERIOR WALL MOUNTED LIGHTS, SPEAKERS AND FIRE ALARM HORNS.

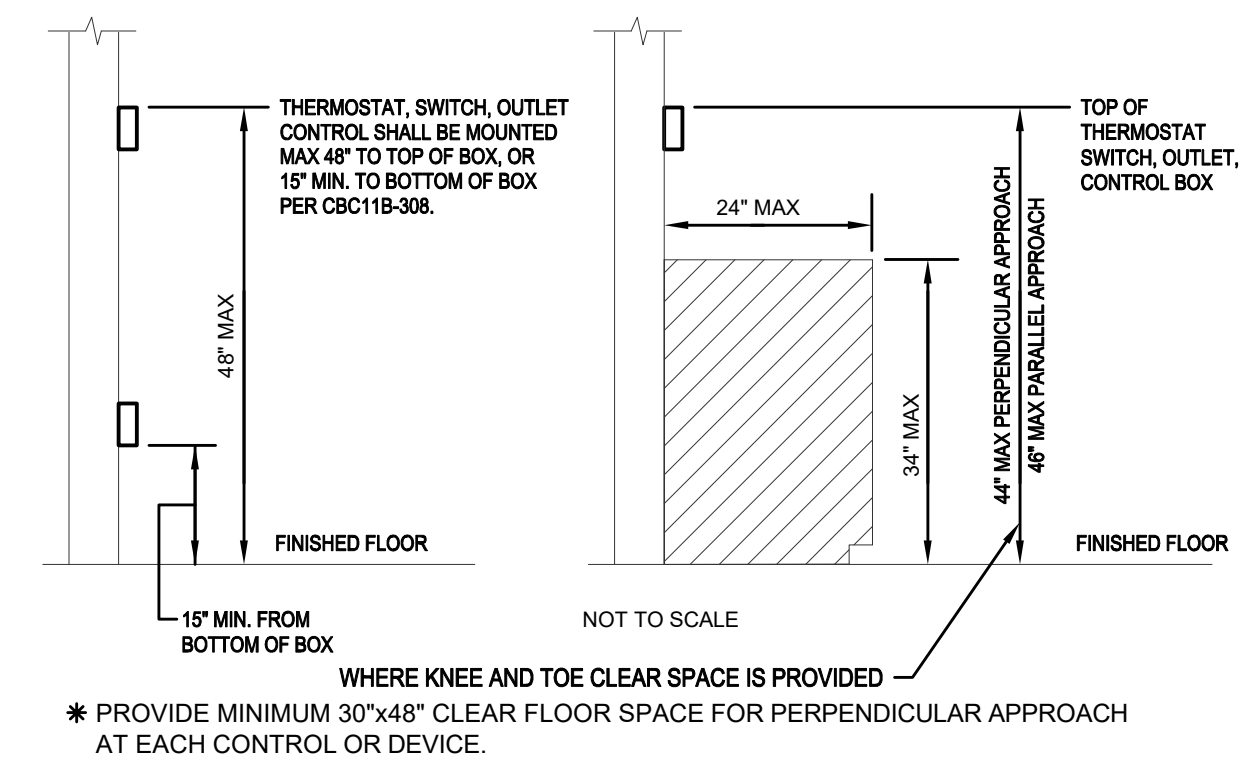
DEMOLITION NOTES

- 1. IN GENERAL, THE DEMOLITION PLAN INDICATES ALL EXISTING EQUIPMENT TO BE REMOVED. HOWEVER, ELECTRICAL EQUIPMENT, WHETHER SHOWN ON THIS DRAWING OR NOT, THAT IS LOCATED IN REMOVED WALLS, FLOORS OR CEILINGS, SHALL BE REMOVED/RELOCATED UNLESS OTHERWISE NOTED.

CODE ANALYSIS

THE CONSTRUCTION OF THIS PROJECT SHALL CONFORM TO THE REQUIREMENTS OF:
1. CALIFORNIA CODE OF REGULATIONS (CCR), TITLE 24, PART 2
- CALIFORNIA BUILDING CODE (CBC) - 2019 EDITION.
2. CALIFORNIA CODE OF REGULATIONS (CCR), TITLE 24, PART 3
- CALIFORNIA ELECTRICAL CODE (CEC) - 2019 EDITION.
3. CALIFORNIA CODE OF REGULATIONS (CCR), TITLE 24, PART 9
- CALIFORNIA FIRE CODE (CFC) - 2019 EDITION.

ACCESSIBLE DEVICE MOUNTING HEIGHTS



SHEET INDEX

Table with columns SHEET and DESCRIPTION. Lists sheets E0.1 through E0.4 and E4.1 through E4.3, including descriptions like ELECTRICAL GENERAL NOTES, LIGHTING FIXTURE SCHEDULE AND NOTES, and ELECTRICAL DETAILS.

STRUCTURAL NOTE

UNLESS SPECIFICALLY SHOWN ON THESE PLANS, STRUCTURAL MEMBERS SHALL NOT BE CUT, DRILLED, OR NOTCHED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER AND THE DIVISION OF THE STATE ARCHITECT.

EQUIPMENT ANCHORAGE NOTES

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 2019 CBC, SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26 AND 30.

MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E)
OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.
OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHDP PRE-APPROVAL (OPPM) #0043-13.

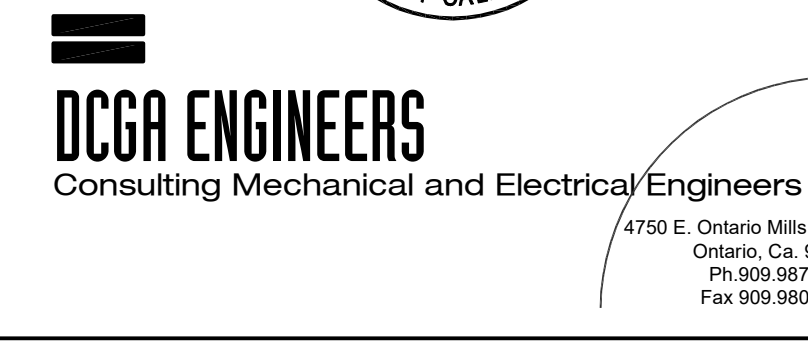


COVINA VALLEY HS SWIMMING POOL
COVINA VALLEY UNIFIED SCHOOL DISTRICT
483 S. HOLLENBECK AVENUE COVINA, CA 91723

DSA SUBMITTAL SET_V2
04/28/2023
REVISIONS

75-22616-00
DSA # 03-12700
DSA FILE # 19-H8
ELECTRICAL GENERAL NOTES

E0.1



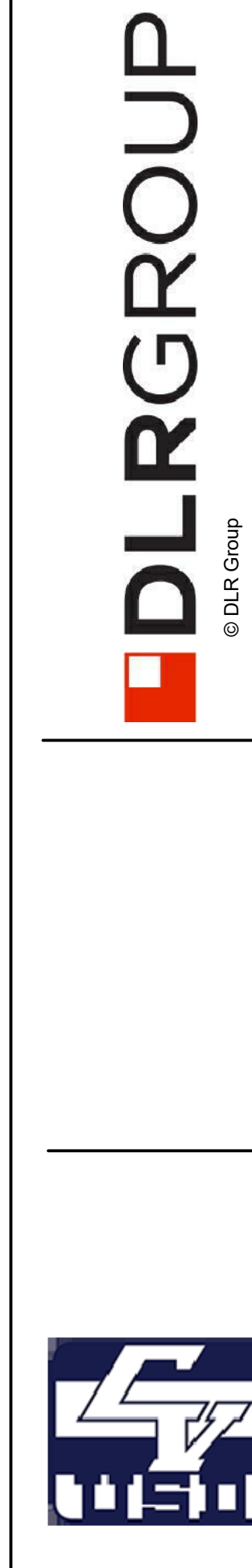
ELECTRICAL ABBREVIATIONS

AF	AMPERE FUSE RATING
AFF	ABOVE FINISHED FLOOR
AIC	AMPS INTERRUPTED CAPACITY RATING (RMS SYMMETRICAL MINIMUM)
AM	AMPERES
AMP, A	AMPERES
APPR	APPROVED
AS	AMPERE SWITCH RATING
AT	AMPERE TRIP RATING OR BREAKER
AUTO	AUTOMATIC
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BRD, BD	BOARD
BFC	BELOW FINISHED CEILING
BKR	BREAKER
C	CONDUIT
CAB	CABINET
CAT	CATEGORY
CC	CENTER TO CENTER
CD	CANDELA
CHLOR	CHLORINE, CHLORINATION
CKT	CIRCUIT
CMH	COMMUNICATION MANHOLE
C.O.	CONDUIT ONLY
COMPT	COMPARTMENT
COMPR	COMPRESSOR
CPB	COMMUNICATION PULLBOX
CPT	CURRENT TRANSFORMER
CR	CONTROL RELAY (MAGNETICALLY HELD U.O.)
CSFM	CALIFORNIA STATE FIRE MARSHALL
CT	CURRENT TRANSFORMER
CJ	COPPER
DOCA	DOUBLE DETECTOR CHECK ASSEMBLY
DISC	DISCONNECT
DISTR	DISTRIBUTION
DWG	DRAWING
ELEV	ELEVATION
EMERG, EM	EMERGENCY
ENCL	ENCLOSURE
EQPT	EQUIPMENT
EXH	EXHAUST
E	EXISTING
FAA	FIRE ALARM ANNUCIATOR
FDR	FEDER
FF	FINISHED FLOOR
FG	FINISHED GRADE
FS	FLOW SWITCH
FLEX	FLEXIBLE
FLUOR	FLUORESCENT
FOC	FIBER OPTIC CABLE
FUIT	FUSE
FUP	FUSE, OPT PRIMARY
FUS	FUSE, OPT SECONDARY
GND, GRD	GROUND
HH	HAND HOLE
HOA	HAND-OFF-AUTOMATIC
HTR	HEATER
HZ	HERTZ
IDF	INTERMEDIATE DISTRIBUTION FRAME
ICBPF	INTERCEPT COMMUNICATION PULLBOX
ID	IMPERIAL VALLEY IRRIGATION DISTRICT
INC	INCANDESCENT
IND	INDICATION
INSTR	INSTRUMENT
IPB	INTERCEPT POWER PULLBOX
ISC	SHORT CIRCUIT CURRENT
J.B.	JUNCTION BOX
K	THOUSAND (KILO)
KV	KILOVOLTS
KW	KILOWATTS
KVA	KILOVOLT AMPERES
KVAR	KILOVOLT AMPERES REACTIVE
KWH	KILOWATT HOURS
KWHD	KILOWATT HOUR DEMAND METER
LCP	LIGHTING CONTROL PANEL
LOS	PUSH BUTTON WITH "LOCK-OUT-STOP"
LS	LIMIT SWITCH
LT, LTS	LIGHT, LIGHTS
LTG	LIGHTING
MA	MILLIAMPS
MAN	MANUAL
MAG	MAGNETIC
MAX	MAXIMUM
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCM	THOUSAND CIRCULAR MILS
MCP	MOTOR CIRCUIT PROTECTOR
MD	MAIN DISTRIBUTION FRAME
MDF	MANHOLE
MS	MANUAL MOTOR STARTER
MIN	MINUTES, MINIMUM
MOV	MOTOR OPERATED VALVE, METAL OXIDE VARISTOR
MT, MTD, MTG	MOUNT, MOUNTED, MOUNTING
N.A.P.	NEUTRALIZATION ALARM PANEL
NO, NOS	NUMBER, NUMBERS
NP	NAMEPLATE
NTS	NOT TO SCALE
OC	ON CENTER
OFOI	OWNER FURNISHED OWNER INSTALLED
OL	OVERLOAD
PB	PULLBOX
PV	POST INDICATOR VALVE
PMH	POWER MANHOLE
PNL	PANEL
PNLBD	PANELBOARD
POS	POSITION
PPB	PANEL PULLBOX
PRI	PRIMARY
PS	PRESSURE SWITCH
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE
PW	PART WINDING
PWR	POWER
REC	RECEPTACLE
RECP	RECEPTACLES
REQD	REQUIRED
SA	STATUS ANNUNCIATOR
SCH	SCHEDULE
SEC	SECONDS, SECONDARY
SECT	SECTION
SEL SW	SELECTOR SWITCH
SEQ	SEQUENCE
SHLD	SHIELDED
SHT	SHEET
SIG	SIGNAL
SM	START CONTACTOR COIL
SPECS	SPECIFICATIONS
SP HTR	SPACE HEATER
ST	SHUNT TRIP
STA	STATION
STD	STANDARD
STL	STEEL
STR	STARTER
SV	SOLENOID VALVE
SW	SWITCH
SYS	SYSTEM
TACH	TACHOMETER
TDOD	TIME DELAY ON DE-ENERGIZATION
TDCE	TIME DELAY ON ENERGIZATION
TEMP	TEMPERATURE
TERM	TERMINAL
THERM	THERMOSTAT
TR	TIME DELAY RELAY
TS	TAMPER SWITCH
TSP	TWISTED SHIELDED PAIR
TSTAT	THERMOSTAT
TYP.	TYPICAL
U.O.	UNLESS NOTED OTHERWISE
UCPS	UNDERGROUND PULL SECTION
UTP	UNSHIELDED TWISTED PAIR
VFD	VARIABLE FREQUENCY DRIVE
V	VOLTS
VM	VOLTMETER
VS	VOLTMETER SWITCH
W	WATTS
WHM	WATT HOUR METER
WP	WEATHERPROOF
WPL	WEATHERPROOF LOCKING
XFRM	TRANSFORMER
XMTR	TRANSMITTER

ELECTRICAL SYMBOLS LIST

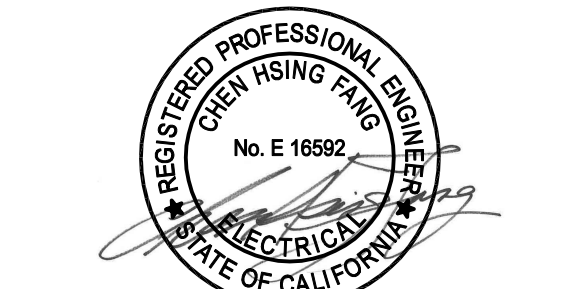
(E) ⊕	EQUIPMENT WITH "E" ADJACENT IS EXISTING TO REMAIN.	⊕	LOW VOLTAGE PHOTOCELL. REFER TO DETAIL #4E4.03 FOR MANUFACTURER AND MODEL NUMBER. LOWER CASE LETTER ADJACENT INDICATES LIGHT FIXTURES CONTROLLED. NUMERAL ADJACENT INDICATES DAYLITE ZONE CONTROL.	⊕	COMBINATION MAGNETIC MOTOR STARTER AND FUSED DISCONNECT SWITCH. TYPE AS INDICATED ABOVE.	
(R) ⊕	EXISTING EQUIPMENT WITH "R" ADJACENT IS TO BE COMPLETELY DISCONNECTED AND REMOVED.	⊕ A1	EXISTING EQUIPMENT WITH "RR" ADJACENT IS TO BE DISCONNECTED, REMOVED AND RELOCATED TO NEW LOCATION AND RECONNECTED AS REQUIRED.	⊕ A-1	COMBINATION MAGNETIC MOTOR STARTER AND CIRCUIT BREAKER. TYPE AS INDICATED ABOVE.	
(RR) ⊕	EXISTING EQUIPMENT WITH "RRR" ADJACENT IS TO BE DISCONNECTED, REMOVED AND RELOCATED TO NEW LOCATION AND RECONNECTED AS REQUIRED.	⊕	RELOCATED EQUIPMENT SHOWN IN NEW LOCATION.	⊕	COMBINATION MAGNETIC MOTOR STARTER AND MOTOR CIRCUIT PROTECTOR. TYPE AS INDICATED ABOVE.	
(ER) ⊕	EXISTING CONDUIT RUN TO REMAIN. EXISTING CONDUCTORS TO REMAIN UNLESS NOTED OTHERWISE ON DRAWINGS.	⊕	EXISTING CONDUIT RUN TO BE REMOVED. REFER TO PLANS FOR WIRING REQUIREMENTS.	⊕	SINGLE PHASE FRACTIONAL OR INTEGRAL HORSEPOWER	
—E—	EXISTING CONDUIT RUN TO BE REMOVED. REFER TO PLANS FOR WIRING REQUIREMENTS.	—E—	EXISTING CONDUIT RUN TO BE REMOVED. REFER TO PLANS FOR WIRING REQUIREMENTS.	—E—	—WM—	SURFACE NON-METAL RACEWAY FOR COMMUNICATIONS (AND POWER WHERE CALLED FOR ON DRAWINGS). WIREMOLD 5400 SERIES, WITH ALL OFFSETS, ANCHORING ATTACHMENTS, ENDCAPS, ETC. AS REQUIRED FOR A COMPLETE INSTALLATION. SOLID SQUARE INDICATES WIREMOLD DROP FROM CEILING.
—R—	EXISTING CONDUIT AND WIRE RUN TO BE COMPLETELY DISCONNECTED AND REMOVED BACK TO LAST REMAINING OUTLET OR DEVICE.	—R—	*"X" INDICATES APPROXIMATE POINT OF INTERCEPTION OF EXISTING CONDUIT RUN. CONDUIT TO BE REMOVED AT "R" SIDE OF "X". REMOVE ALL CONDUCTORS PRIOR TO CUTTING CONDUIT. EXACT LOCATION OF ALL CONDUITS SHALL BE FIELD VERIFIED.	—R—	—PM—	SURFACE MOUNTED NON-METAL PLUGMOLD RACEWAY WITH 20 AMP GROUNDING DUPLEX ISOLATED GROUND RECEPTACLES AT 12" ON CENTER. (2 CKT. TYPE - HUBBELL #PT206212)
—R-X-E—	*"X" INDICATES APPROXIMATE POINT OF INTERCEPTION OF EXISTING CONDUIT RUN. CONDUIT TO BE REMOVED AT "R" SIDE OF "X". REMOVE ALL CONDUCTORS PRIOR TO CUTTING CONDUIT. EXACT LOCATION OF ALL CONDUITS SHALL BE FIELD VERIFIED.	—R-X-E—	CONDUIT RUN CONCEALED IN WALLS OR UNDER FLOORS.	—R-X-E—	⊠	DOOR CONTACT SWITCH FOR SECURITY SYSTEM ACCESS POINT. FLUSH MOUNTED IN DOOR JAMB.
— ---	CONDUIT RUN EXPOSED.	— ---	CONDUIT RUN UNDERGROUND.	— ---	⊠	SECURITY SYSTEM MOTION SENSOR MOUNTED AT +96".
— - -	CONDUIT STUBBED OUT AND CAPPED. PULL LINE IN PLACE.	— - -	CROSS LINES ON CONDUIT RUNS INDICATE NUMBER OF #12 CURRENT CARRYING CONDUCTORS CONTAINED THEREIN. TWO #12 AND MINIMUM OF ONE #12 GROUND WIRE ARE INDICATED WHEN CROSS LINES ARE NOT SHOWN. NUMERALS ADJACENT TO CROSS LINES ON CONDUIT RUNS INDICATE SIZE OF CONDUCTORS IN LIEU OF #12. ALL CONDUITS SHALL CONTAIN ONE GROUND WIRE SIZED PER C.E.C. TABLE 250.122 BUT NOT SMALLER THAN #12. WHERE ISOLATED GROUND RECEPTACLES ARE INDICATED, PROVIDE ADDITIONAL #12 GROUND WIRE IN CONDUIT RUNS. CONNECTED FROM ISOLATED GROUND BUS IN PANEL TO DEVICE.	— - -	⊠	SECURITY SYSTEM CONDUIT. 3/4" CONDUIT MINIMUM WITH WIRING.
— — — — —	CONDUIT HOMERUN TO PANELBOARD. LETTER AND NUMERALS INDICATE ELECTRICAL PANEL AND CIRCUIT NUMBER.	— — — — —	SURFACE MOUNTED BRANCH CIRCUIT PANELBOARD.	— — — — —	⊠	SECURITY SYSTEM CONDUIT. 3/4" CONDUIT MINIMUM WITH WIRING.
— — — — —	RECESSED BRANCH CIRCUIT PANELBOARD.	— — — — —	PANEL DESIGNATION.	— — — — —	⊠	SECURITY SYSTEM CONDUIT. 3/4" CONDUIT MINIMUM WITH WIRING.
— — — — —	SURFACE MOUNTED COMMUNICATION TERMINAL CABINET. REFER TO DRAWINGS AND SPECIFICATIONS.	— — — — —	RECESSED COMMUNICATION TERMINAL CABINET. REFER TO DRAWINGS AND SPECIFICATIONS.	— — — — —	⊠	SECURITY SYSTEM CONDUIT. 3/4" CONDUIT MINIMUM WITH WIRING.
⊕	JUNCTION BOX IN ACCESSIBLE CEILING SPACE OR FLUSH IN WALL WITH BLANK COVER PLATE TO MATCH DEVICE PLATES.	⊕	JUNCTION BOX FLOOR MOUNTED.	⊕	⊠	SECURITY SYSTEM CONDUIT. 3/4" CONDUIT MINIMUM WITH WIRING.
⊕	JUNCTION BOX PEDESTAL TYPE FLOOR MOUNTED.	⊕	THREE PHASE FRACTIONAL OR INTEGRAL HORSEPOWER MOTOR. NUMERAL IN PLACE OF "M" INDICATES HORSEPOWER. (SINGLE LINE DIAGRAM ONLY)	⊕	⊠	SECURITY SYSTEM CONDUIT. 3/4" CONDUIT MINIMUM WITH WIRING.
⊕	MOLDED CASE CIRCUIT BREAKER AND NUMBER OF POLES AS INDICATED. "A" INDICATES TRIP RATING. SUBSCRIPT INDICATES TYPE.	⊕	NO SUBSCRIPT - THERMAL MAGNETIC NA - NON-AUTOMATIC MO - MAGNETIC ONLY CL - CURRENT LIMITING SS - SWITCH STATE	⊕	⊠	SECURITY SYSTEM CONDUIT. 3/4" CONDUIT MINIMUM WITH WIRING.
100AS ⊕	FUSED SWITCH. "AS" INDICATES AMPERE SWITCH RATING. "A" INDICATES AMPERE FUSE RATING. NUMBER OF POLES AS INDICATED.	100AS ⊕	ENCLOSED VOLTAGE TRANSFORMER PER SPECS. COPPER WOUND, DRY TYPE, U.O.	⊕	⊠	SECURITY SYSTEM CONDUIT. 3/4" CONDUIT MINIMUM WITH WIRING.
⊕	UTILITY METER SOCKET, WITH C.T.'S, CLIPS, ETC., PER SERVING UTILITY COMPANY.	⊕	GROUND, "GRD", "GND".	⊕	⊠	SECURITY SYSTEM CONDUIT. 3/4" CONDUIT MINIMUM WITH WIRING.
⊕	BREAKER EQUIPPED WITH THE GROUND FAULT PROTECTION	⊕	"GROUND FAULT INTERRUPTER"	⊕	⊠	SECURITY SYSTEM CONDUIT. 3/4" CONDUIT MINIMUM WITH WIRING.
EM	LED LIGHT FIXTURE AND OUTLET. LOWER CASE LETTER INDICATES CONTROLLING SWITCH, NUMERAL AND PANEL ID INDICATES CIRCUIT. "EM" ADJACENT INDICATES FIXTURE WITH EMERGENCY POWER PROVISIONS.	EM	LED LIGHT FIXTURE AND OUTLET. LOWER CASE LETTER INDICATES CONTROLLING SWITCH, NUMERAL AND PANEL ID INDICATES CIRCUIT. "EM" ADJACENT INDICATES FIXTURE WITH EMERGENCY POWER PROVISIONS.	EM	⊠	SECURITY SYSTEM CONDUIT. 3/4" CONDUIT MINIMUM WITH WIRING.
EM	ILLUMINATED EXIT LIGHT FIXTURE. SIDE, BACK, CEILING, OR PENDANT MOUNTED. SINGLE OR DOUBLE FACED AS NOTED BY SHADED ARC. WITH OR WITHOUT DIRECTIONAL ARROW AS NOTED ON THE DRAWINGS. EXIT SIGN SHALL NOT BE USED AS JUNCTION BOX OR "THROUGH-WIRE"	EM	LOW LEVEL EXIT LIGHT FIXTURE, WALL MOUNTED WITH OR WITHOUT DIRECTIONAL ARROW AS NOTED ON THE DRAWINGS. BOTTOM OF FIXTURE AT +10" ABOVE FINISHED FLOOR AND WITHIN FOUR INCHES OF DOOR FRAME WHERE APPLICABLE.	EM	⊠	SECURITY SYSTEM CONDUIT. 3/4" CONDUIT MINIMUM WITH WIRING.
EM	LIGHTING FIXTURE IDENTIFICATION SYMBOL. LETTER INDICATES FIXTURE TYPE. NUMERALS IN LOWER HALF OF HEXAGON INDICATE FIXTURE WATTAGE (INCLUDING BALLAST WHERE APPLICABLE). NUMERAL OUTSIDE TOP OF HEXAGON INDICATES NUMBER OF FIXTURES USED FOR LOAD CALCULATIONS. NUMERAL OUTSIDE BOTTOM OF HEXAGON INDICATES MOUNTING HEIGHT FROM FLOOR TO BOTTOM OF FIXTURE. OMISSION OF MOUNTING HEIGHT INDICATES CEILING MOUNTING.	EM	WALL MOUNTED DUAL HEAD EMERGENCY LIGHTING FIXTURE UNIT.	EM	⊠	SECURITY SYSTEM CONDUIT. 3/4" CONDUIT MINIMUM WITH WIRING.
EM	BRACKET OR WALL MOUNTED SURFACE OR RECESSED LIGHT FIXTURE AND OUTLET. LED. LOWER CASE LETTER INDICATES CONTROLLING SWITCH, NUMERAL AND PANEL ID INDICATES CIRCUIT. "EM" ADJACENT INDICATES FIXTURE WITH EMERGENCY POWER PROVISIONS.	EM	INFRARED/ULTRASONIC DUAL TECHNOLOGY TYPE OCCUPANCY SENSOR COMPLETE WITH ALL POWER SUPPLIES, RELAY PACKS AND CONNECTIONS. REFER TO DETAIL #4E4.03 FOR MANUFACTURER AND MODEL NUMBER.	EM	⊠	SECURITY SYSTEM CONDUIT. 3/4" CONDUIT MINIMUM WITH WIRING.
EM	DIGITAL ROOM CONTROLLER/POWER PACK WITH 0-10V DIMMING AND LOW VOLTAGE CABLE CONNECTIONS. REFER TO DETAIL #4E4.03 FOR MANUFACTURER AND MODEL NUMBER. LOWER CASE LETTER ADJACENT INDICATES LIGHT FIXTURES CONTROLLED.	EM	INFRARED/ULTRASONIC DUAL TECHNOLOGY TYPE OCCUPANCY SENSOR COMPLETE WITH ALL POWER SUPPLIES, RELAY PACKS AND CONNECTIONS. REFER TO SHEET E4.3 FOR MANUFACTURE AND MODEL NUMBER.	EM	⊠	SECURITY SYSTEM CONDUIT. 3/4" CONDUIT MINIMUM WITH WIRING.
EM	LOW VOLTAGE WALL SWITCH WITH "ON/OFF" AND DIMMING CAPABILITY. REFER TO DETAIL #4E4.03 FOR MANUFACTURERS AND MODEL NUMBERS. NUMERAL ADJACENT INDICATES QUANTITY OF BUTTONS. LOWER CASE LETTER AT BOTTOM INDICATES FIXTURES CONTROLLED. MOUNT AT +48" PER DETAIL #1E01.01.	EM	WALL MOUNTED PASSIVE INFRARED OCCUPANCY SENSOR. MOUNT AT +48". LEVITON #055MT-GDW OR APPROVED EQUAL.	EM	⊠	SECURITY SYSTEM CONDUIT. 3/4" CONDUIT MINIMUM WITH WIRING.
EM	MOUNT MOUNTED PASSIVE INFRARED OCCUPANCY SENSOR. MOUNT AT +48". LEVITON #055MT-GDW OR APPROVED EQUAL.	EM	MOUNT AT +48". LEVITON #055MT-GDW OR APPROVED EQUAL.	EM	⊠	SECURITY SYSTEM CONDUIT. 3/4" CONDUIT MINIMUM WITH WIRING.
EM	INFRARED/ULTRASONIC DUAL TECHNOLOGY TYPE OCCUPANCY SENSOR COMPLETE WITH ALL POWER SUPPLIES, RELAY PACKS AND CONNECTIONS. REFER TO DETAIL #4E4.03 FOR MANUFACTURER AND MODEL NUMBER.	EM	INFRARED/ULTRASONIC DUAL TECHNOLOGY TYPE OCCUPANCY SENSOR COMPLETE WITH ALL POWER SUPPLIES, RELAY PACKS AND CONNECTIONS. REFER TO SHEET E4.3 FOR MANUFACTURE AND MODEL NUMBER.	EM	⊠	SECURITY SYSTEM CONDUIT. 3/4" CONDUIT MINIMUM WITH WIRING.
EM	DIGITAL ROOM CONTROLLER/POWER PACK WITH 0-10V DIMMING AND LOW VOLTAGE CABLE CONNECTIONS. REFER TO DETAIL #4E4.03 FOR MANUFACTURER AND MODEL NUMBER. LOWER CASE LETTER ADJACENT INDICATES LIGHT FIXTURES CONTROLLED.	EM	DIGITAL ROOM CONTROLLER/POWER PACK WITH 0-10V DIMMING AND LOW VOLTAGE CABLE CONNECTIONS. REFER TO DETAIL #4E4.03 FOR MANUFACTURER AND MODEL NUMBER. LOWER CASE LETTER ADJACENT INDICATES LIGHT FIXTURES CONTROLLED.	EM	⊠	SECURITY SYSTEM CONDUIT. 3/4" CONDUIT MINIMUM WITH WIRING.
EM	INFRARED/ULTRASONIC DUAL TECHNOLOGY TYPE OCCUPANCY SENSOR COMPLETE WITH ALL POWER SUPPLIES, RELAY PACKS AND CONNECTIONS. REFER TO SHEET E4.3 FOR MANUFACTURE AND MODEL NUMBER.	EM	INFRARED/ULTRASONIC DUAL TECHNOLOGY TYPE OCCUPANCY SENSOR COMPLETE WITH ALL POWER SUPPLIES, RELAY PACKS AND CONNECTIONS. REFER TO SHEET E4.3 FOR MANUFACTURE AND MODEL NUMBER.	EM	⊠	SECURITY SYSTEM CONDUIT. 3/4" CONDUIT MINIMUM WITH WIRING.
EM	DIGITAL ROOM CONTROLLER/POWER PACK WITH 0-10V DIMMING AND LOW VOLTAGE CABLE CONNECTIONS. REFER TO DETAIL #4E4.03 FOR MANUFACTURER AND MODEL NUMBER. LOWER CASE LETTER ADJACENT INDICATES LIGHT FIXTURES CONTROLLED.	EM	DIGITAL ROOM CONTROLLER/POWER PACK WITH 0-10V DIMMING AND LOW VOLTAGE CABLE CONNECTIONS. REFER TO DETAIL #4E4.03 FOR MANUFACTURER AND MODEL NUMBER. LOWER CASE LETTER ADJACENT INDICATES LIGHT FIXTURES CONTROLLED.	EM	⊠	SECURITY SYSTEM CONDUIT. 3/4" CONDUIT MINIMUM WITH WIRING.
EM	INFRARED/ULTRASONIC DUAL TECHNOLOGY TYPE OCCUPANCY SENSOR COMPLETE WITH ALL POWER SUPPLIES, RELAY PACKS AND CONNECTIONS. REFER TO SHEET E4.3 FOR MANUFACTURE AND MODEL NUMBER.	EM	INFRARED/ULTRASONIC DUAL TECHNOLOGY TYPE OCCUPANCY SENSOR COMPLETE WITH ALL POWER SUPPLIES, RELAY PACKS AND CONNECTIONS. REFER TO SHEET E4.3 FOR MANUFACTURE AND MODEL NUMBER.	EM	⊠	SECURITY SYSTEM CONDUIT. 3/4" CONDUIT MINIMUM WITH WIRING.

**FOR FIRE ALARM LEGEND
SEE SHEETS E3.01**



DSA SUBMITTAL
SET_V2

04/28/2023
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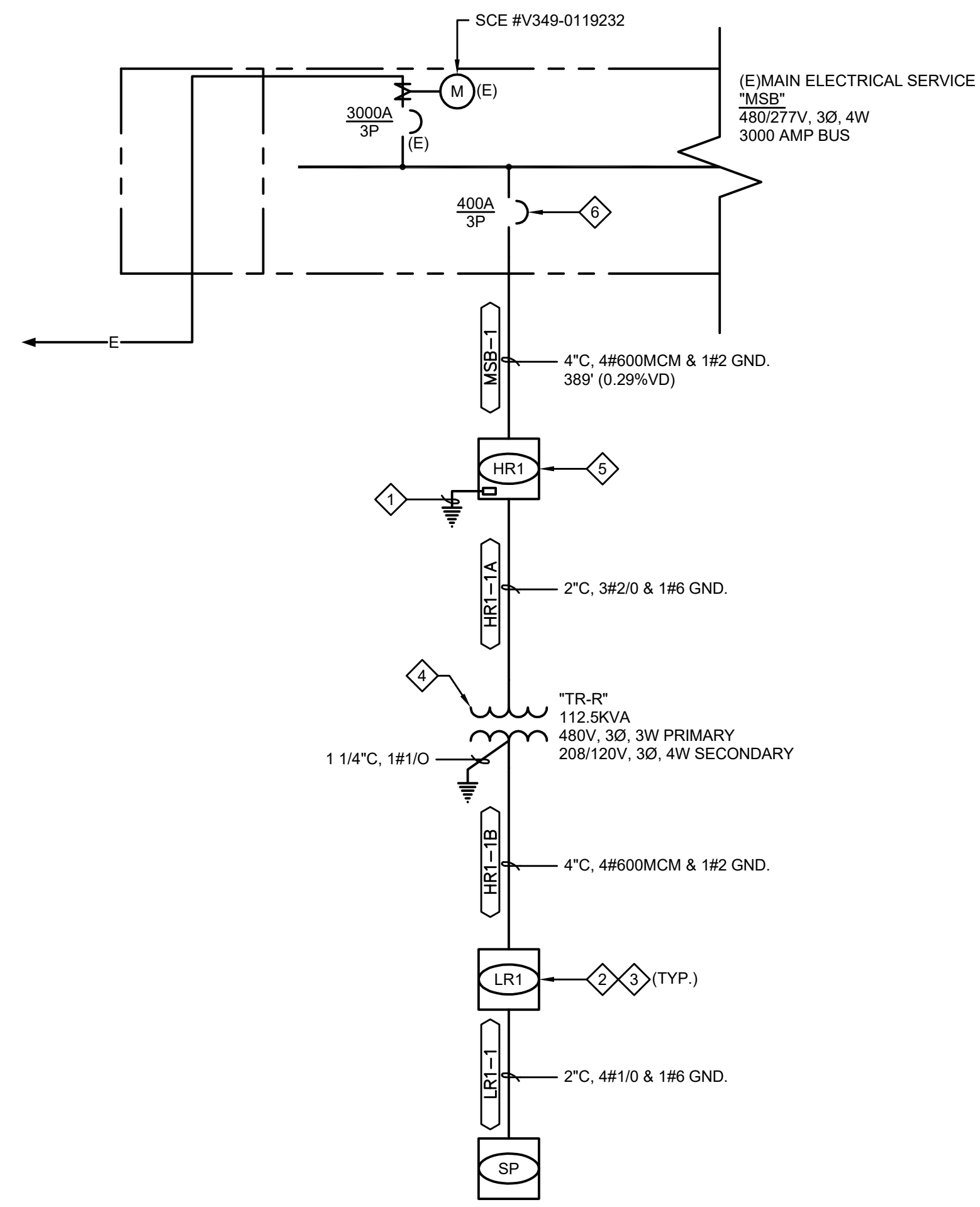
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DSA #03-122700
DSA FILE # 19-18

**ELECTRICAL
SYMBOLS LIST
AND ABBREVIATIONS**

SHEET NOTES

- 1 INSTALL 1" CONDUIT AND #4X0 TO ACCESSIBLE COLD WATER AND GAS LINES WITH 6" OF LINES ENTERING BUILDING. BOND TO BUILDING STEEL USING EXOTHERMIC WELD PROCESS AND APPROVED GROUNDING CLAMPS TO BUILDING WATER AND GAS LINES.
- 2 ALL CIRCUIT BREAKERS SHALL BE FULLY RATED. NO SERIES RATED CIRCUIT BREAKERS SHALL BE USED. TYPICAL.
- 3 FURNISH GROUND BUS IN EACH BRANCH CIRCUIT PANEL. ALL PANELS 480/277 VOLT AND 208/120 VOLT SHALL HAVE THE FEEDER EQUIPMENT GROUNDING CONDUCTOR CONNECTED TO GROUND BUS. FURNISH EQUIPMENT GROUNDING CONDUCTOR EVERY FEEDER AND BRANCH CIRCUIT. RUN TO LAST OUTLET AND CONNECT TO BUS. CONDUIT GROUND IS NOT ACCEPTABLE AS A SUBSTITUTE. TYPICAL ALL PANELS, SWITCHBOARDS, DISTRIBUTION PANELBOARDS, AND SWITCHGEAR.
- 4 FURNISH GROUND BUS IN EACH TRANSFORMER. CONNECT PRIMARY FEEDER EQUIPMENT GROUNDING CONDUCTORS, SECONDARY NEUTRAL, SECONDARY FEEDER EQUIPMENT GROUNDING CONDUCTOR, GROUNDING ELECTRODE CONDUCTOR AND TRANSFORMER FRAME TO GROUND BUS. CONNECT GROUND BUS TO BUILDING STEEL OR CENTRAL GROUND POINT AS APPLICABLE. CONNECTION TO BUILDING STEEL SHALL BE WITH EXOTHERMIC WELDS. TYPICAL ALL TRANSFORMERS.
- 5 PROVIDE DIGITAL "OWNER METER" WITH ALL SENSORS AND HARDWARE TO COMPLY WITH THE MINIMUM 2019 CALIFORNIA ENERGY CODE REQUIREMENTS PER 130.5(A) AND TABLE 130.5-A FOR KW AND KWH TRACKING.
- 6 PROVIDE AND INSTALL NEW CIRCUIT BREAKER TO MATCH EXISTING TYPE.

LOAD SUMMARY "MSB"	
EXISTING LOAD PER BILLING INFORMATION @ 85PF	= 236 KW = 277.65 KVA
NO NEW LOAD ADDED "HR1"	= 83.8 KVA
TOTAL LOAD = 361.45 KVA	
361.45 KVA @ 480V, 3Ø	= 434.96 AMPS
434.96 AMPS @ 125%	= 543.70 AMPS
3000 AMP SERVICE IS ADEQUATE	



SINGLE LINE DIAGRAM
SCALE = N.T.S.

Size-Ampacity	Copper AWG 12 (Max ampacity - 25 amps 60')																Copper AWG 10 (Max ampacity - 30 amps 60')															
Strands	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7				
Voltage	120	120	208	208	208	208	240	240	240	240	277	277	480	480	480	480	480	120	120	208	208	208	208	240	240	240	240	277	277	480	480	480
Amps	Maximum lengths of wire at 3% voltage drop in feet																Maximum lengths of wire at 3% voltage drop in feet															
1	909.1	932.6	1675.8	1616.6	1819.5	1866.7	1818.2	1865.3	2099.5	2153.8	2096.5	2152.8	3638.4	3730.6	4198.9	4307.7	1451.6	1487.8	2516.1	2578.5	2905.4	2977.4	2903.2	2975.2	3352.4	3435.5	3350.8	3433.9	5806.5	5950.4	6704.7	6870.9

BRANCH CIRCUIT VOLTAGE DROP CALCULATION

$VD = \frac{2 \times L \times R \times I}{1000}$

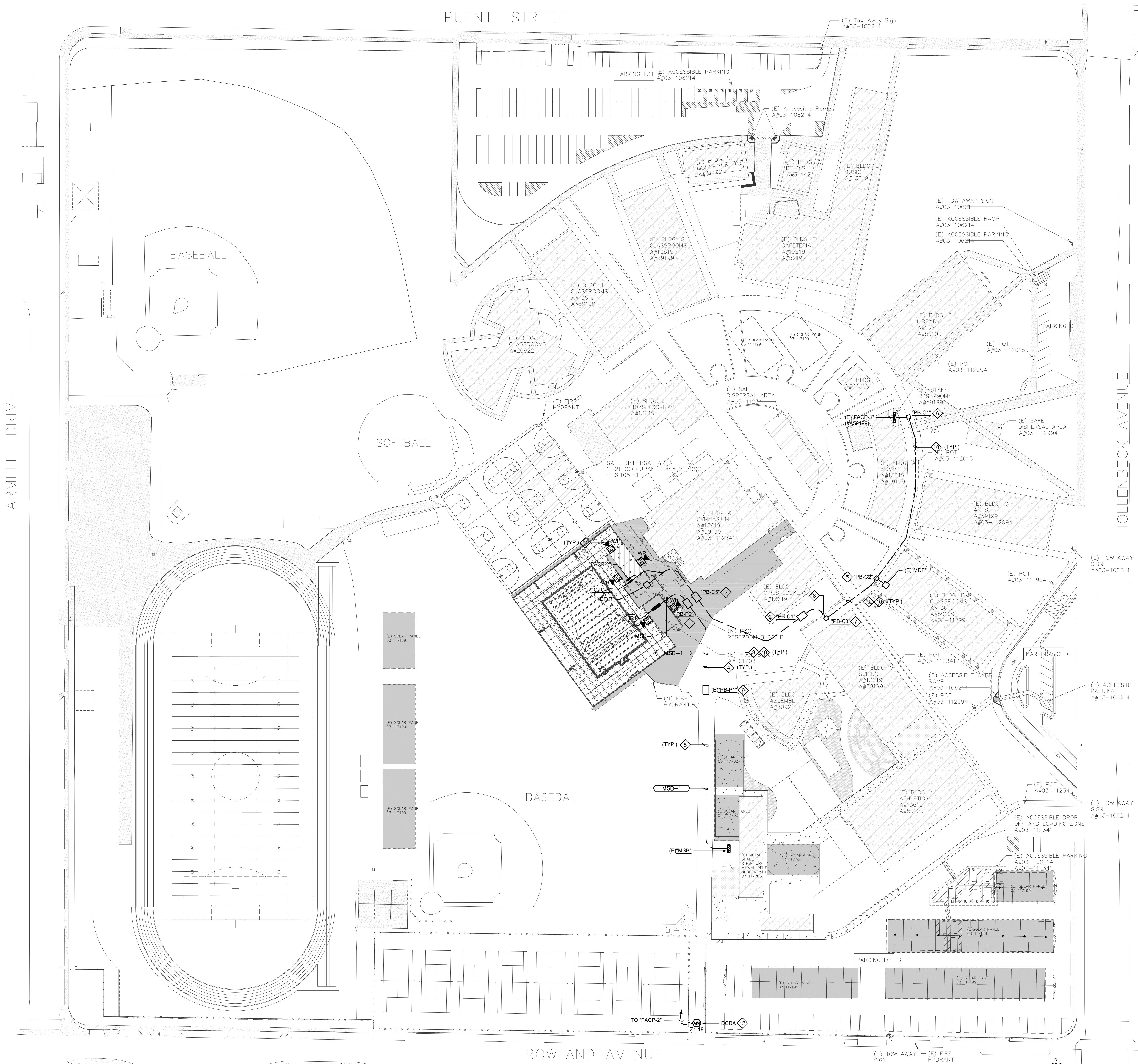
VD = VOLTAGE DROP
L = ONE WAY LENGTH OF CONDUCTOR
R = CONDUCTOR RESISTANCE IN OHMS PER THOUSAND FEET
I = LOAD CURRENT (AMPERES)

Size-Ampacity	Copper AWG 8 (Max ampacity - 40 amps 60')																Copper AWG 6 (Max ampacity - 55 amps 60')																Copper AWG 4 (Max ampacity - 70 amps 60')															
Strands	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7															
Voltage	120	120	208	208	208	240	240	240	240	277	277	480	480	480	480	120	120	208	208	208	208	240	240	240	240	277	277	480	480	480	120	120	208	208	208	240	240	277	277	480	480							
Amps	Maximum lengths of wire at 3% voltage drop in feet																Maximum lengths of wire at 3% voltage drop in feet																Maximum lengths of wire at 3% voltage drop in feet															
1	2313.6	2360.0	4010.3	4063.8	4630.7	4715.5	4627.2	4712.0	5343.1	5441.0	5340.6	5438.5	9254.5	9424.1	10862.2	10862.0	3666.0	3654.4	7337.4	7332.0	8466.2	8462.3	9771.4	14664.0	16932.6	5844.2	10129.9	11097.0	11688.3	13496.5	13490.3	23376.6	26993.0															

NOTICE TO CONTRACTOR:
THIS BRANCH CIRCUIT VOLTAGE DROP SCHEDULE IS TO BE USED WHEN SIZING CONDUCTORS FOR ACTUAL INSTALLED FIELD CONDITION CIRCUIT LENGTHS. SPECIFIC CONDUCTOR SIZING ON PLANS SHALL BE THE MINIMUM SIZE CONDUCTOR USED FOR INSTALLATION UNLESS INSTALLED CONDITION EXCEEDS CIRCUIT LENGTH ALLOWED ON TABLE AND SHALL BE INCREASED TO THE NEXT SIZE CONDUCTOR SCHEDULED. ALL CONDUCTORS AS DESIGNED OR AS REQUIRED PER INSTALLED CONDITION IS PART OF THE CONTRACTORS BASE BID.



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- SHEET NOTES**
- 1 2'X3'DEPTH REQUIRED PRECAST CONCRETE PULLBOX WITH TRAFFIC RATED COVER ENGRAVED "POWER". SET FLUSH WITH GRADE ON 6" COMPACTED CRUSHED ROCK.
 - 2 2'X3'DEPTH REQUIRED PRECAST CONCRETE PULLBOX WITH TRAFFIC RATED COVER ENGRAVED "COMMUNICATION". SET FLUSH WITH GRADE ON 6" COMPACTED CRUSHED ROCK.
 - 3 REFER TO THE COMMUNICATION RISER DIAGRAM FOR CONDUIT SIZES AND CABLE REQUIREMENTS.
 - 4 SAWCUT, TRENCH AND EXCAVATE AS REQUIRED TO INSTALL CONDUITS AND FEEDERS AS INDICATED. BACKFILL, TAMP AND RESURFACE TO ORIGINAL CONDITION.
 - 5 REFER TO THE SINGLE LINE DIAGRAMS FOR FEEDER REQUIREMENTS.
 - 6 12"X12"X6"D MINIMUM NEMA 3R PULLBOX
 - 7 24"X24"X12"D MINIMUM NEMA 3R PULLBOX
 - 8 ROUTE CONDUITS DOWN FROM CANOPY TO UNDERGROUND PULLBOX. PAINT CONDUITS AND SUPPORTS PER THE ARCHITECTS REQUIREMENTS.
 - 9 CORE DRILL INTO EXISTING PULLBOX FOR INSTALLATION OF NEW CONDUITS. SEAL ALL PENETRATIONS.
 - 10 REFER TO THE FIRE ALARM RISER DIAGRAM FOR CONDUIT SIZES AND CABLE REQUIREMENTS.
 - 11 FIRE ALARM DEVICES SHOWN ARE FOR REFERENCE ONLY. REFER TO FIRE ALARM DRAWINGS FOR EXACT LOCATIONS & QUANTITIES.
 - 12 MAKE CONNECTION TO THE DOUBLE CHECK DETECTOR ASSEMBLY (DCCA) PER THE MANUFACTURERS REQUIREMENTS. VERIFY EXACT LOCATION CIVIL PRIOR TO INSTALLATION.

1 ELECTRICAL SITE PLAN
 ES1.1 SCALE: 1" = 50'-0"



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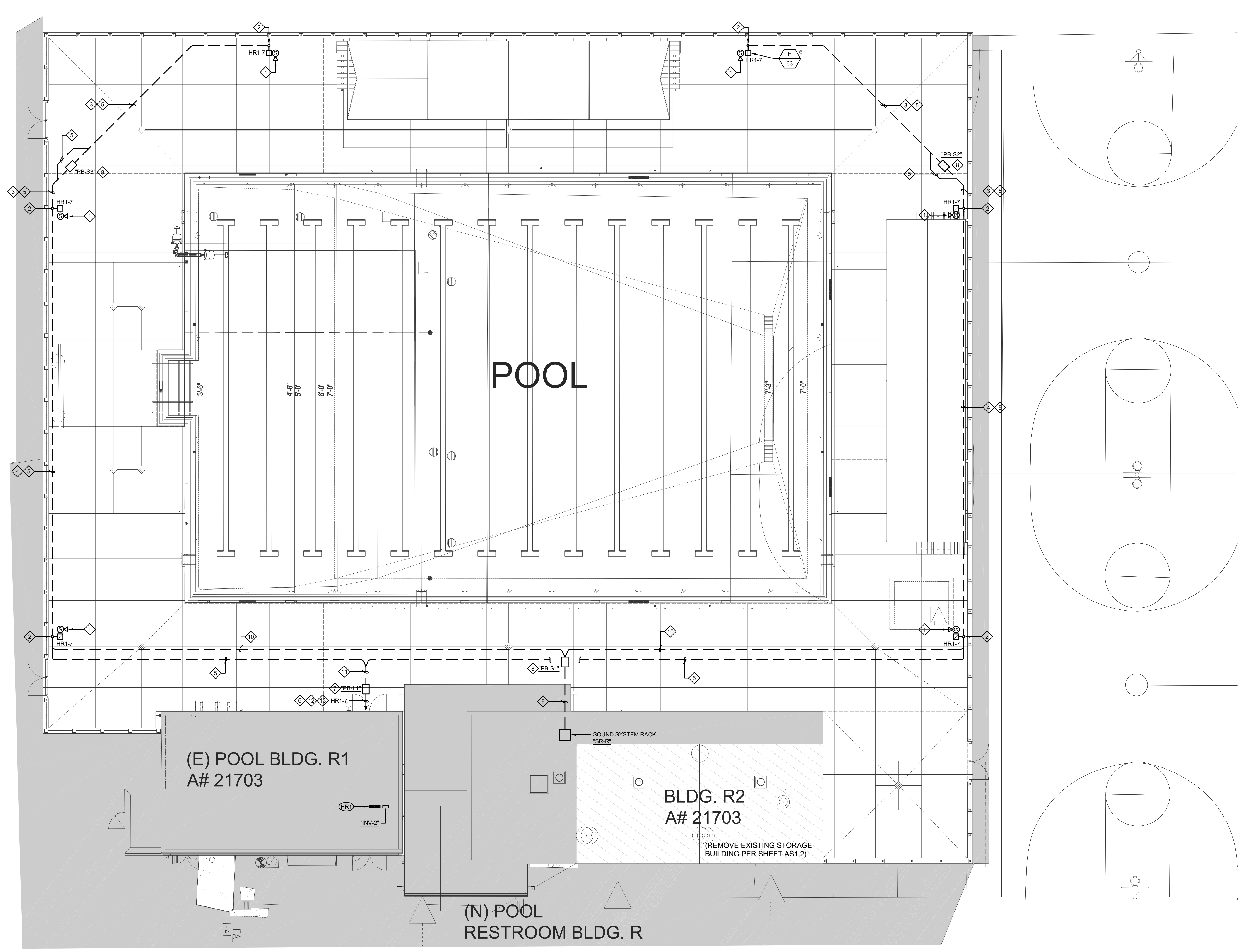
COVINA VALLEY HS SWIMMING POOL
 COVINA VALLEY UNIFIED SCHOOL DISTRICT
 483 S. HOLLENBECK AVENUE COVINA, CA 91723

DSA SUBMITTAL SET_V2
 04/28/2023
 REVISIONS

75-22616-00
 DSA AF 03-122700
 DSA FILE # 194-H8
 ELECTRICAL SITE PLAN

ES1.1

1
2
3
4
5



- SHEET NOTES**
- 1. SOUND SYSTEM SPEAKER ATTACHED TO LIGHTING POLE. VERIFY EXACT LOCATION AND MOUNTING HEIGHT WITH THE SOUND SYSTEM CONTRACTOR PRIOR TO INSTALLATION. PROVIDE SPEAKER, BACKBOX, MOUNTING HARDWARE, ETC. FOR A COMPLETE INSTALLATION.
 - 2. ROUTE SOUND SYSTEM CONDUIT UP POLE TO SPEAKER BACKBOX.
 - 3. (1) 1" C. FOR SOUND SYSTEM CABLE.
 - 4. (2) 1" C. FOR SOUND SYSTEM CABLE.
 - 5. (1) C. WITH 2#12 & 1#12 GND FOR LIGHTING.
 - 6. ROUTE CIRCUIT VIA LIGHTING CONTROL PANEL "LCP-1" FOR CONTROL. REFER TO SHEET E2.1 FOR LOCATION.
 - 7. PROVIDE AND INSTALL 1'X2'DEPTH REQUIRED PRECAST CONCRETE PULLBOX WITH TRAFFIC RATED METAL COVER ENGRAVED "LIGHTING" SET FLUSH WITH GRADE ON 6" COMPACTED CRUSHED ROCK.
 - 8. PROVIDE AND INSTALL 1'X2'DEPTH REQUIRED PRECAST CONCRETE PULLBOX WITH TRAFFIC RATED METAL COVER ENGRAVED "SOUND SYS" SET FLUSH WITH GRADE ON 6" COMPACTED CRUSHED ROCK.
 - 9. (6) 1" C. FOR SOUND SYSTEM CABLE.
 - 10. (3) 1" C. FOR SOUND SYSTEM CABLE.
 - 11. (2) C. WITH 2#12 & 1#12 GND FOR LIGHTING.
 - 12. (1) C. WITH 4#12 & 2#12 GND FOR LIGHTING.
 - 13. ROUTE LIGHTING CIRCUIT THROUGH INVERTER "INV-2" FOR EMERGENCY POWER.



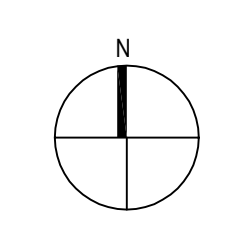
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75-22616-00
 DSA A# 03-122700
 DSA FILE # 19-H8
 ENLARGED ELECTRICAL POOL PLAN

ES1.2

1 ENLARGED ELECTRICAL POOL PLAN
 ES1.2 / SCALE: 1/8" = 1'-0"



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A

B

C

D

E

F

1

2

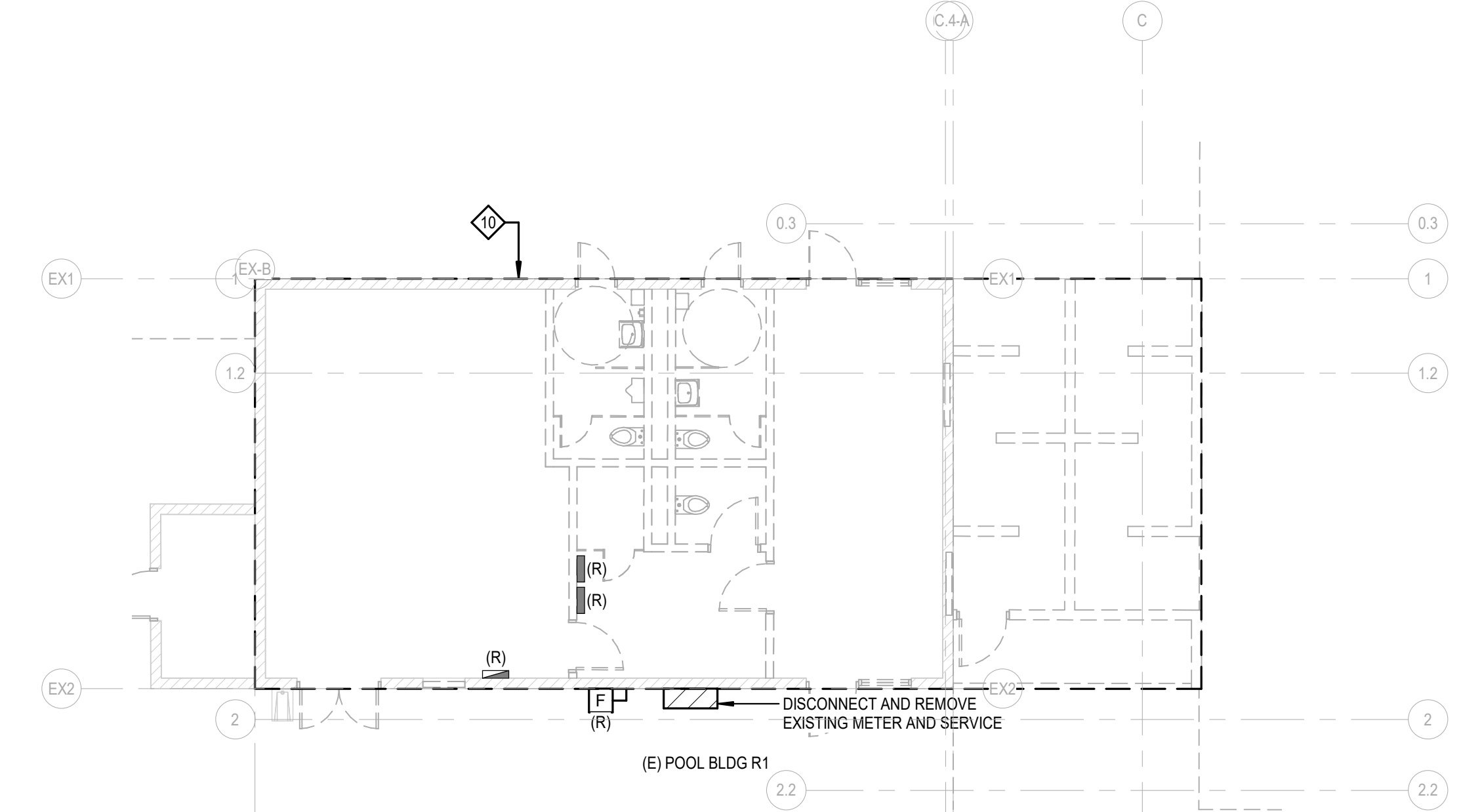
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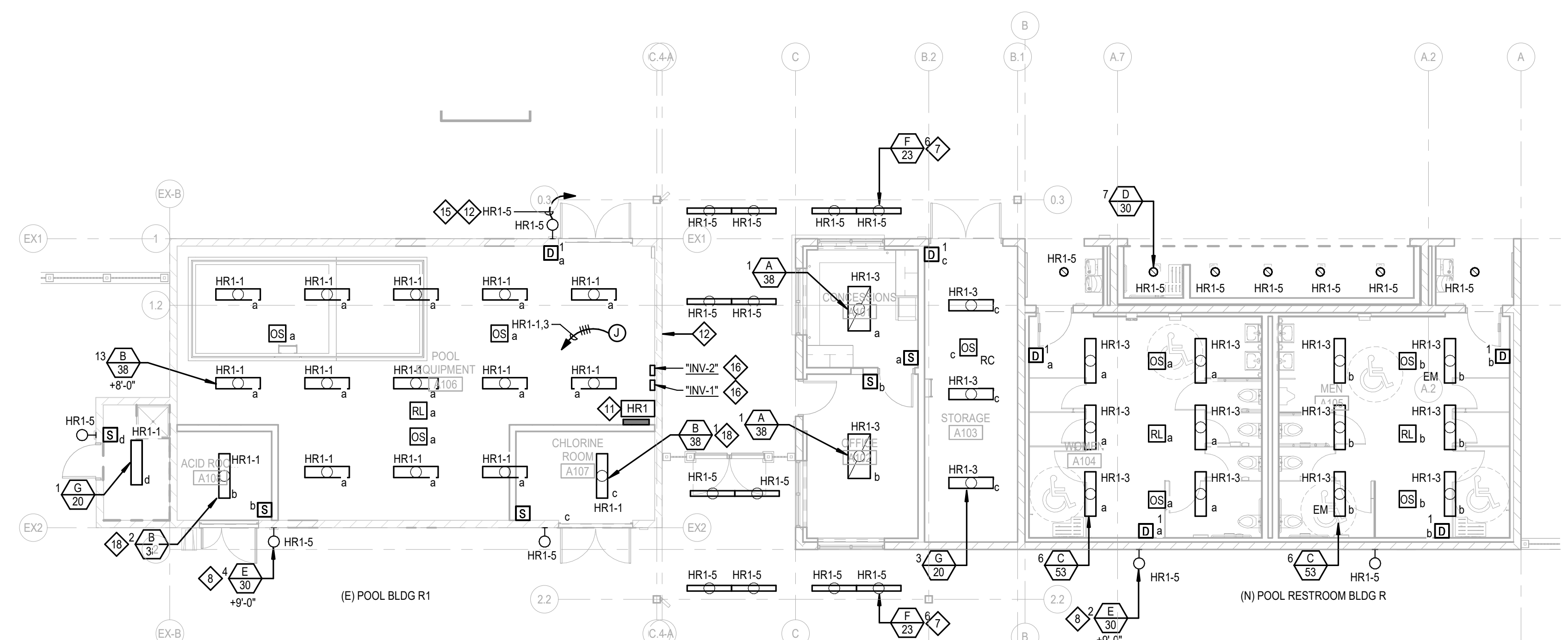
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SHEET NOTES

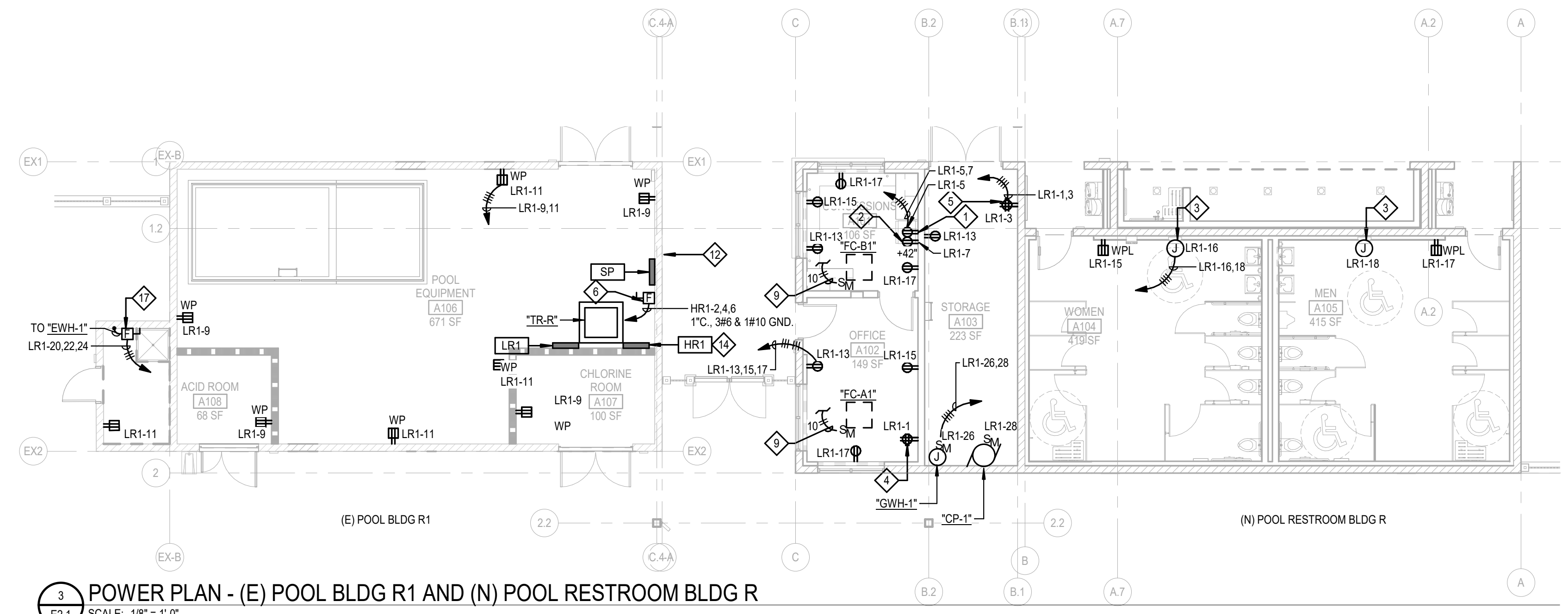
- 1. FOR REFRIGERATOR, VERIFY EXACT LOCATION WITH THE ARCHITECT PRIOR TO INSTALLATION.
- 2. FOR MICROWAVE, VERIFY EXACT LOCATION WITH THE ARCHITECT PRIOR TO INSTALLATION.
- 3. FOR HAND DRYER, VERIFY EXACT LOCATION WITH THE ARCHITECT PRIOR TO INSTALLATION.
- 4. FOR "10" RACK.
- 5. FOR SOUND SYSTEM RACK.
- 6. MAKE CONNECTION TO SWIMMING POOL CIRCULATING PUMP CONTROLLER PER THE MANUFACTURER'S REQUIREMENTS. PROVIDE A 60AMP WEATHERPROOF DISCONNECT SWITCH WITH FUSES SIZED PER THE MANUFACTURER'S NAMEPLATE RATING.
- 7. MOUNT LIGHT FIXTURES TO SIDE OF STEEL BEAM. REFER TO ARCHITECTURAL DETAIL 4#A2.4 FOR MOUNTING.
- 8. CONDUIT FOR LIGHT FIXTURES SHALL NOT BE ROUTED EXPOSED ON BUILDING EXTERIOR. ROUTE CONDUIT INSIDE BUILDING AND CORE DRILL THROUGH CMU AT FIXTURE LOCATION.
- 9. ROUTE HOMERUN TO ROOF TOP UNIT FOR POWER AND CONTROL. REFER TO THE MECHANICAL DRAWINGS FOR ADDITION REQUIREMENTS.
- 10. DISCONNECT AND REMOVE ALL EXISTING ELECTRICAL DEVICES LOCATED INSIDE AND OUTSIDE OF BUILDING INCLUDING BUT NOT LIMITED TO PANELS, RECEPTACLES, RACEWAYS, CONDUCTORS, LIGHT FIXTURES, SWITCHES, ETC. RACEWAYS AND CONDUCTORS SHALL BE REMOVED BACK TO SOURCE.
- 11. LOCATE LIGHTING CONTROL PANEL "LCP-1" ABOVE PANEL HR1 "LCP-1" SHALL BE EQUAL TO LEVITON #RE4BD-104-PCOUT-000.
- 12. CONDUITS ROUTED BETWEEN BUILDINGS SHALL BE ROUTED THROUGH VENT OPENING AT THIS LOCATION ABOVE CANOPY. COORDINATE LOCATION WITH THE ARCHITECT PRIOR TO INSTALLATION.
- 13. ROUTE CIRCUIT VIA LIGHTING CONTROL PANEL "LCP-1" FOR CONTROL. REFER TO SHEET E2.1 FOR LOCATION.
- 14. UNDERGROUND FEEDER FOR PANEL SHALL BE ROUTED THROUGH CHLORINE STORAGE ROOM WHERE FLOOR IS BEING REMOVED.
- 15. ROUTE LIGHTING CIRCUIT THROUGH INVERTER "INV-1" FOR EMERGENCY POWER.
- 16. PROVIDE AND INSTALL WALL MOUNTED EMERGENCY LIGHTING INVERTER EQUAL TO EMERGLITE #EMU-1000-4-LD.
- 17. MAKE CONNECTION TO ELECTRIC WATER HEATER PER THE MANUFACTURER'S REQUIREMENTS. PROVIDE A 30 AMP WEATHERPROOF DISCONNECT SWITCH WITH FUSES SIZED PER THE EQUIPMENT NAMEPLATE RATING.
- 18. LIGHT FIXTURE SHALL BE SURFACE MOUNTED. PROVIDE CORRECT MOUNTING HARDWARE FOR SURFACE APPLICATION.



1 ELECTRICAL DEMOLITION PLAN - (E) POOL BLDG R1
SCALE: 1/8" = 1'-0"



2 LIGHTING PLAN - (E) POOL BLDG R1 AND (N) POOL RESTROOM BLDG R
SCALE: 1/8" = 1'-0"



3 POWER PLAN - (E) POOL BLDG R1 AND (N) POOL RESTROOM BLDG R
SCALE: 1/8" = 1'-0"

CIRCUITING NOTE:
CIRCUITS SHOWN ON HOMERUNS SHALL BE EXTENDED TO LIGHT FIXTURES WHERE CIRCUITS ARE IDENTIFIED. PROVIDE SWITCHING AS SHOWN ON THE DRAWINGS. ALL CONDUCTORS SHALL BE ROUTED IN CONDUIT. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL CONDUIT, BOXES, CONDUCTORS, SUPPORTS, ETC. REQUIRED FOR A COMPLETE INSTALLATION. REFER TO THE SPECIFICATIONS FOR MINIMUM CONDUIT AND CONDUCTOR REQUIREMENTS.

CIRCUITING NOTE:
CIRCUITS SHOWN ON HOMERUNS SHALL BE EXTENDED TO DEVICES WHERE CIRCUITS ARE IDENTIFIED. ALL CONDUCTORS SHALL BE ROUTED IN CONDUIT. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL CONDUIT, BOXES, CONDUCTORS, SUPPORTS, ETC. REQUIRED FOR A COMPLETE INSTALLATION. REFER TO THE SPECIFICATIONS FOR MINIMUM CONDUIT AND CONDUCTOR REQUIREMENTS.

CONDUIT NOTE:
CONDUITS INSTALLED IN POOL EQUIPMENT ROOM, CHLORINE ROOM AND ACID ROOM SHALL BE GALVANIZED RIGID STEEL WITH LIQUID TIGHT CONNECTORS. ALL BOXES SHALL BE NEMA 3R. REFER TO THE AQUATIC DRAWINGS FOR ADDITIONAL REQUIREMENTS.



COVINA VALLEY HS POOL REPLACEMENT
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DSA # 03-122700
DSA FILE # 19-H8

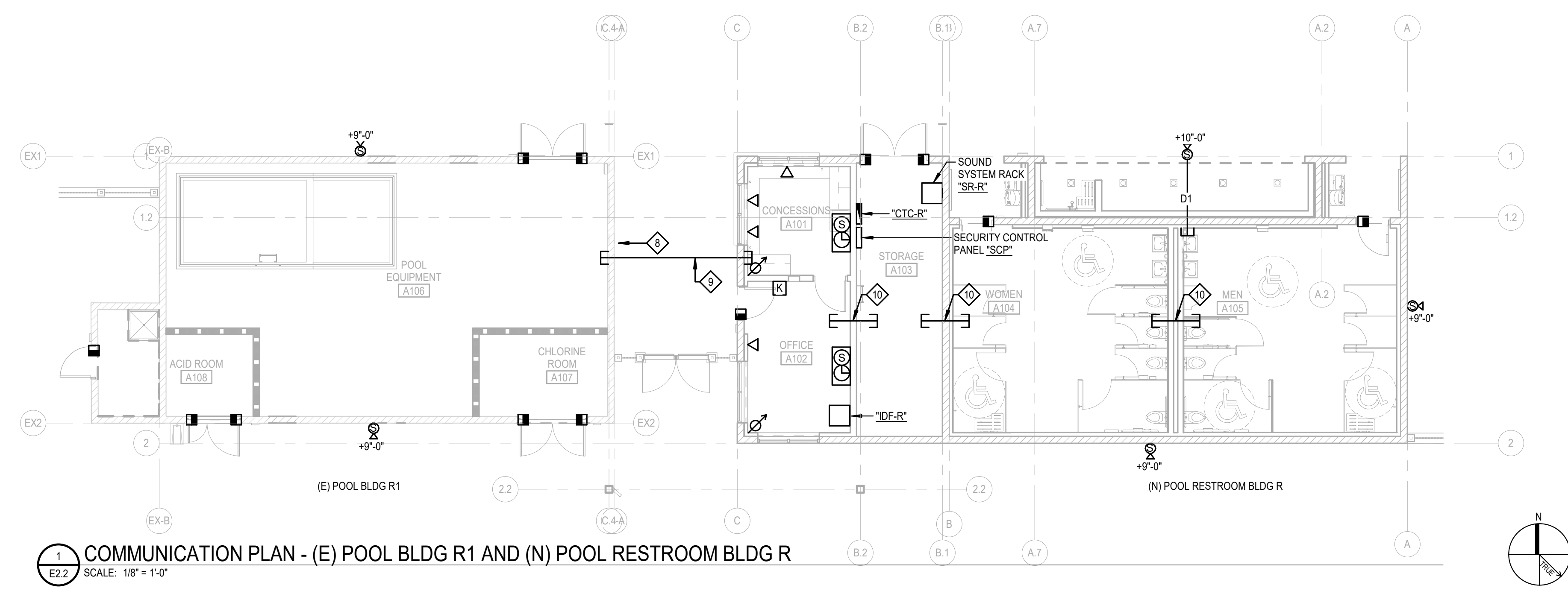
ELECTRICAL DEMOLITION, LIGHTING & POWER PLANS

E2.1



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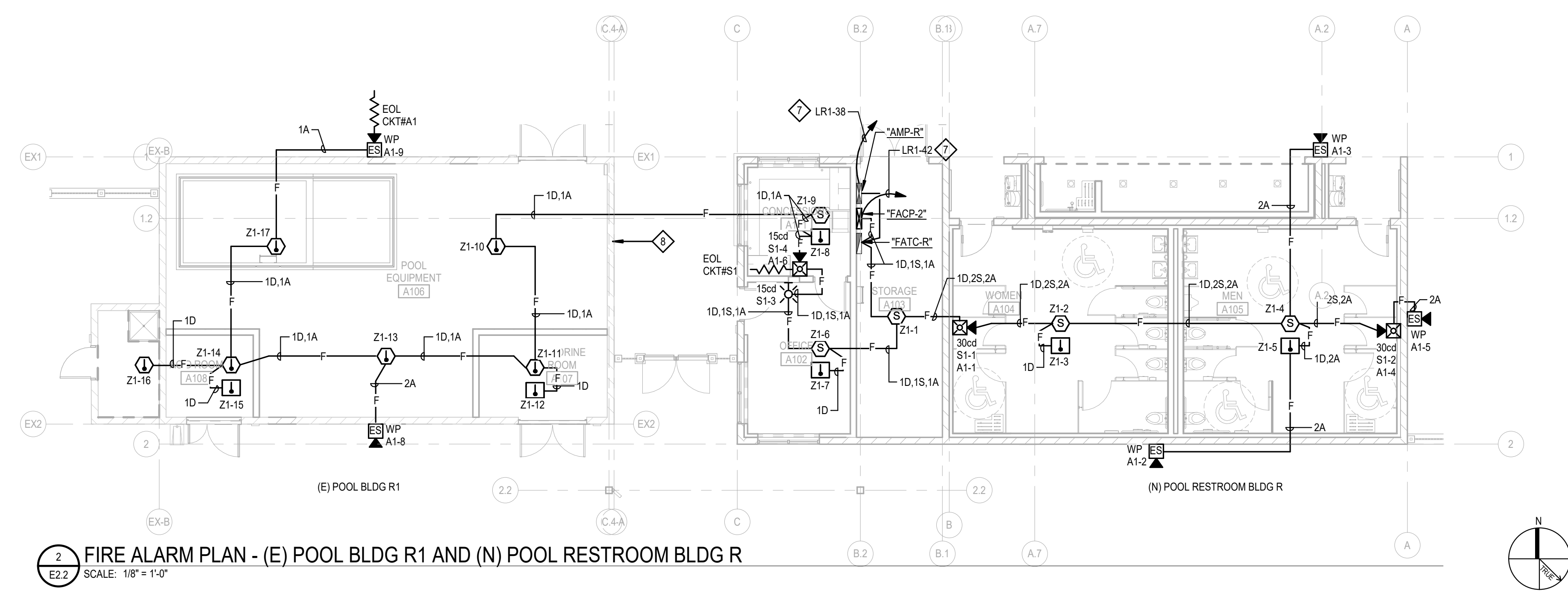
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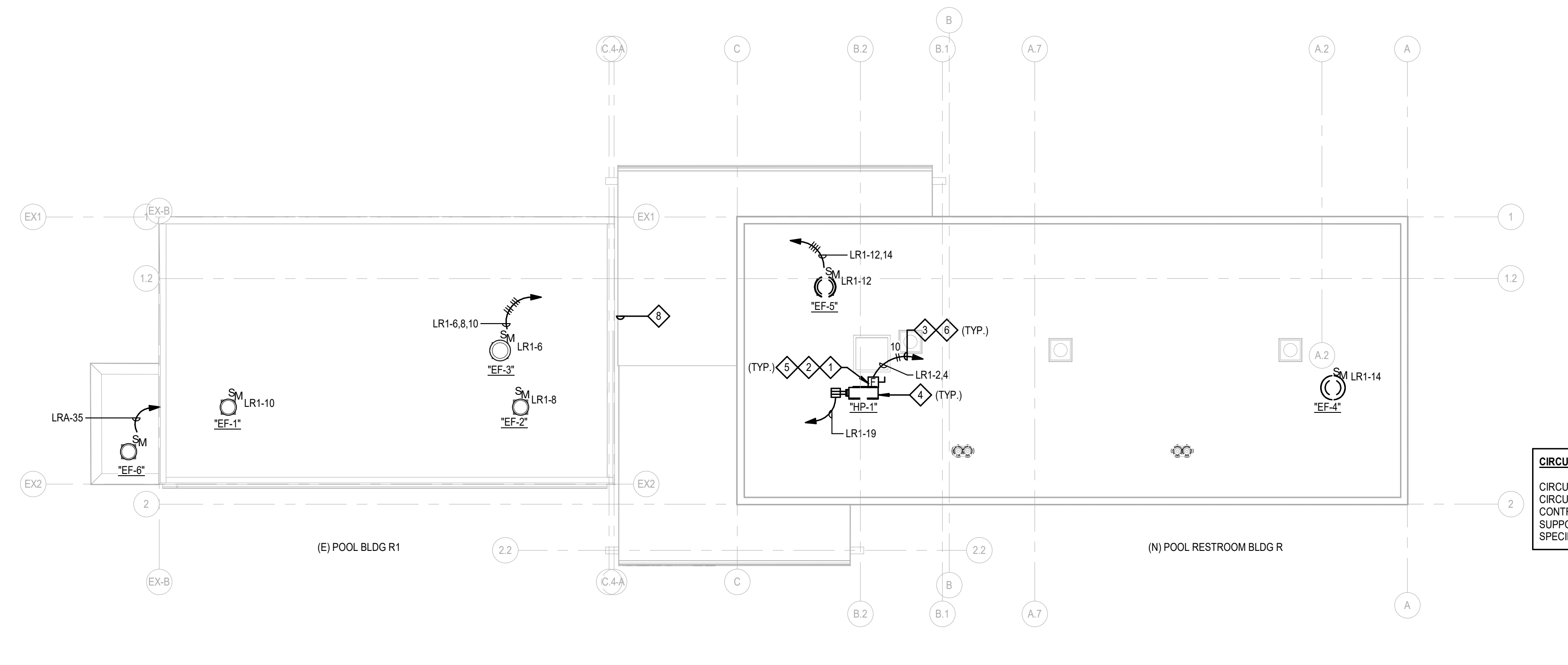
1 COMMUNICATION PLAN - (E) POOL BLDG R1 AND (N) POOL RESTROOM BLDG R
SCALE: 1/8" = 1'-0"

PORTABLE ASSISTIVE LISTENING SYSTEMS
A COMPLETE WILLIAMS WPM-360 WITH MMIC100 MICROPHONE SHALL BE FURNISHED TO MEET THE ADA REQUIREMENTS FOR HARD-OF-HEARING. FURNISH #PMPAR36 RECEIVERS IN NUMBER EQUAL TO 4% OF THE SEATING OR MINIMUM OF 2, 1 WHICH WILL NEED TO BE HEARING AID COMPATIBLE. MINIMUM (1) COMPLETE SYSTEM SHALL BE PROVIDED.

- SHEET NOTES**
- 1 ALL EQUIPMENT ON ROOF SHALL BE WEATHERPROOF. ALL BOXES, CONDUITS, SWITCHES, RECEPTACLES, ETC. SHALL BE WEATHERPROOF. SEAL ALL OPENINGS.
 - 2 UNIT DISCONNECT SHALL BE MOUNTED TO MAINTAIN ALL CODE REQUIRED CLEARANCES. WHERE DISCONNECT IS MOUNTED ON A/C UNIT, MOUNT TO AVOID ACCESS PANELS.
 - 3 ROUTE "SEAL TITE" CONDUIT FEEDERS TO RELATED DISCONNECT SWITCH AND/OR RECEPTACLE, ETC.
 - 4 ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE MECHANICAL CONTRACTOR FOR EXACT EQUIPMENT LOCATION AND ELECTRICAL CONNECTION POINTS TO ALL EQUIPMENT PRIOR TO ROUGH-IN, TYPICAL.
 - 5 30 AMP WEATHERPROOF FUSED DISCONNECT SWITCH WITH FUSES SIZED PER THE EQUIPMENT NAMEPLATE REQUIREMENTS, U.N.O. TYPICAL.
 - 6 NO CONDUIT SHALL BE RUN EXPOSED ON THE ROOF. RUN ALL CONDUIT IN CEILING SPACE AND STUB THROUGH ROOF AT CONNECTION POINT. VERIFY ROUGH-IN LOCATIONS WITH EQUIPMENT MANUFACTURER, TYPICAL.
 - 7 CIRCUIT SHALL BE RED IN COLOR AND PROVIDED WITH A "LOCK-ON" DEVICE.
 - 8 CONDUITS ROUTED BETWEEN BUILDINGS SHALL BE ROUTED THROUGH VENT OPENING AT THIS LOCATION ABOVE CANOPY. COORDINATE LOCATION WITH THE ARCHITECT PRIOR TO INSTALLATION.
 - 9 PROVIDE (2) 2" C. FOR ROUTING OF LOW VOLTAGE CONDUITS. STUB OUT CONDUITS IN CEILING SPACE WHERE APPLICABLE. REFER TO SHEET E3.0 FOR ADDITIONAL REQUIREMENTS.
 - 10 PROVIDE 2" C. SLEEVE FOR ROUTING OF LOW VOLTAGE CABLES. STUB OUT CONDUITS IN CEILING SPACE WHERE APPLICABLE.



2 FIRE ALARM PLAN - (E) POOL BLDG R1 AND (N) POOL RESTROOM BLDG R
SCALE: 1/8" = 1'-0"



3 ELECTRICAL ROOF PLAN - (E) POOL BLDG R1 AND (N) POOL RESTROOM BLDG R
SCALE: 1/8" = 1'-0"

CIRCUITING NOTE:
CIRCUITS SHOWN ON HOMERUNS SHALL BE EXTENDED TO DEVICES WHERE CIRCUITS ARE IDENTIFIED. ALL CONDUCTORS SHALL BE ROUTED IN CONDUIT. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL CONDUIT, BOXES, CONDUCTORS, SUPPORTS, ETC. REQUIRED FOR A COMPLETE INSTALLATION. REFER TO THE SPECIFICATIONS FOR MINIMUM CONDUIT AND CONDUCTOR REQUIREMENTS.

CONDUIT NOTE:
CONDUITS INSTALLED IN POOL EQUIPMENT ROOM, CHLORINE ROOM AND ACID ROOM SHALL BE GALVANIZED RIGID STEEL WITH LIQUID TIGHT CONNECTORS. ALL BOXES SHALL BE NEMA 3R. REFER TO THE AQUATIC DRAWINGS FOR ADDITIONAL REQUIREMENTS.



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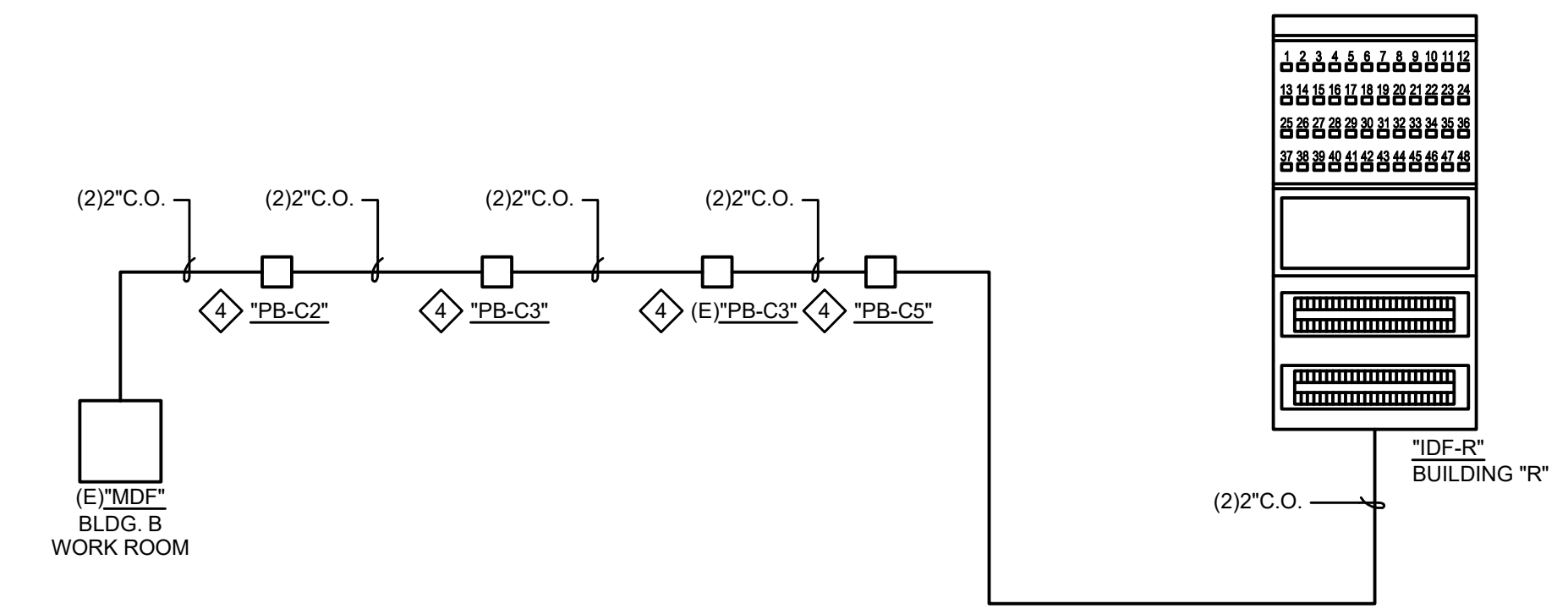
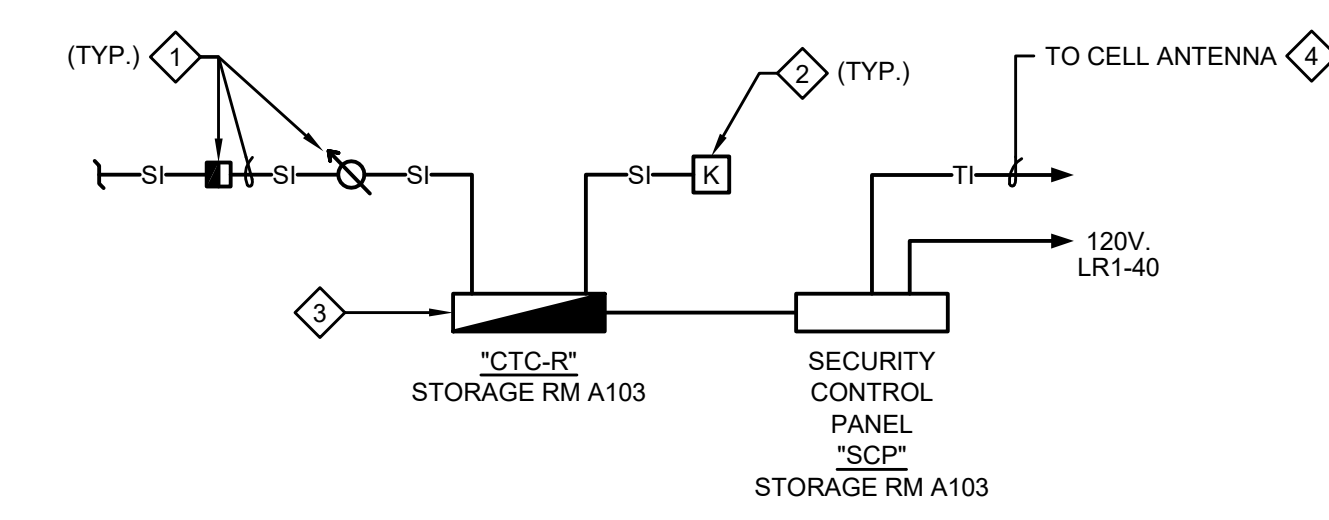
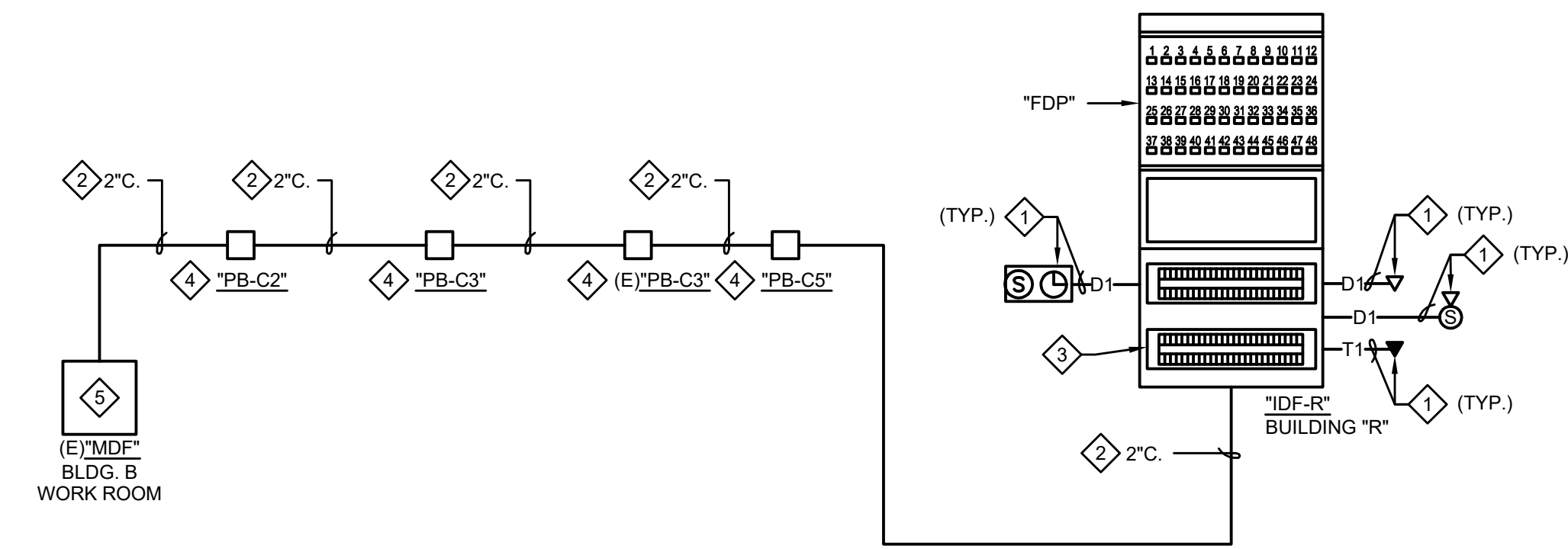
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DSA FILE # 19-HB

COMMUNICATION, FIRE ALARM & ELECTRICAL ROOF PLANS

E2.2

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2
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4
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- NOTES:
- 1 ROUTE MINIMUM OF (1) CATEGORY 6 RATED 24 GA. 4 PAIR UTP CABLE TO EACH DATA JACK/TELEPHONE JACK, IP SPEAKER AND IP SPEAKER/CLOCK AND TERMINATE ON CATEGORY 6 RATED JACK. SEE DRAWINGS FOR QUANTITIES AND LOCATIONS AND SPECIFICATIONS FOR REQUIREMENTS ALL CABLE SHALL BE RUN CONTINUOUS FROM JACK TO IDF WITH NO SPLICES VIA CONDUITS AND J-HOOKS.
 - 2 ROUTE (1) 6 STRAND SINGLE-MODE (6SM) FIBER OPTIC CABLE (F.O.C.) FROM "MDF" TO EACH "IDF" INDICATED F.O.C. SHALL BE TERMINATED ON FIBER DISTRIBUTION PANELS "FDP". PROVIDE 6'-0" F.O.C. PATCH CORDS FOR QUANTITY OF TERMINATED F.O.C.
 - 3 CATEGORY 6 RATED PATCH PANELS WITH NUMBERS OF PORTS AND 6'-0" PATCH CORDS REQUIRED TO TERMINATE ALL CABLES INDICATED ON DRAWINGS PLUS 25% SPARE CAPACITY.
 - 4 PULLBOXES PER SITE PLAN.
 - 5 PROVIDE ALL REQUIRED MODIFICATIONS AT EXISTING "MDF" RACK(S) REQUIRED TO INSTALL ALL NEW CABLING INDICATED. PROVIDE ALL REQUIRED COMPONENTS, PROGRAMMING, ETC. FOR A COMPLETE SYSTEM.

- NOTES:
- 1 INTRUSION DETECTION DEVICES AND FEEDER. SEE DRAWINGS FOR EXACT LOCATIONS AND QUANTITIES. ROUTE CABLES VIA CONDUIT AND J-HOOKS. REFER TO THE SPECIFICATION AS REQUIRED.
 - 2 INTRUSION SYSTEM KEYPAD PER SPECIFICATIONS. COORDINATE EXACT KEYPAD LOCATION AND QUANTITIES WITH THE OWNER IN THE FIELD PRIOR TO ROUGH-IN.
 - 3 PROVIDE ALL POWER SUPPLIES ZONE CONTROLLERS, TERMINAL STRIPS AS REQUIRED FOR INSTALLATION.
 - 4 PROVIDE CELLULAR ANTENNA FOR PHONE SERVICE FOR PANEL. COORDINATE EXACT ANTENNA AND CELL SERVICE REQUIREMENTS WITH THE DISTRICT PRIOR TO INSTALLATION.

ALL CABLING SHALL BE ROUTED IN CONDUIT

COORDINATE ARMING SEQUENCE AND CONTROL ZONES OF ALL KEYPADS WITH THE OWNER PRIOR TO INSTALLATION.

STRUCTURED CABLING RISER DIAGRAM

SCALE
N.T.S. 1

SECURITY SYSTEM RISER DIAGRAM

SCALE
N.T.S. 2

SPARE CONDUIT RISER DIAGRAM

SCALE
N.T.S. 3

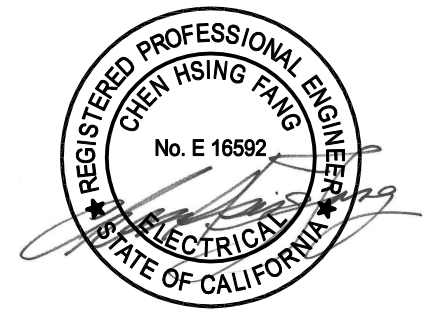
SCALE
N.T.S. 4

SCALE
N.T.S. 5



COVINA VALLEY HS SWIMMING POOL
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DSA A# 03-122700
DSA FILE # 19-18

COMMUNICATION
RISER DIAGRAM

E3.0

SEQUENCE OF OPERATION					
	DEVICE	SMOKE DETECTOR	HEAT DETECTOR	120VAC POWER FAILURE	DOUBLE DETECTOR CHECK ASSEMBLY
ACTION					
SOUND CONTROL PANEL TROUBLE BUZZER		ON WIRING FAULT	YES	YES	YES
ANNUNCIATE AT ADMINISTRATION BUILDING		YES	YES	YES	YES
ANNUNCIATE AT FIRE CONTROL PANEL (ALARM OR TROUBLE)		YES	YES	YES	YES
ACTIVATE AUDIBLE/VISUAL ALARM SIGNAL THROUGH-OUT BUILDINGS		YES	YES	NO	NO
ALERT OFF-SITE MONITORING COMPANY		YES	YES	NO	NO

FIRE ALARM WIRE LEGEND		
SYMBOL	DESCRIPTION	TYPE
D	DATA LINE - INITIATING DEVICE	16/2 UNSHIELDED TWISTED PR (UTSP) DATA LOOP
P	POWER CIRCUIT	2#12 THWN
S	SIGNAL (STROBE) CIRCUIT	2#12 THWN
A	AUDIBLE (SPEAKER) CIRCUIT	2#16 THWN SHIELDED
SB	S-BUS COMMUNICATION CIRCUIT	16/4 UNSHIELDED TWISTED PR (UTSP)
VB	V-BUS COMMUNICATION CIRCUIT (VOICE)	16/2 UNSHIELDED TWISTED PR (UTSP)
FO	NETWORK CONNECTION	INDOOR/OUTDOOR FIBER OPTIC CABLE, 6-STRAND, MULTIMODE, OM1, 62.5/125

* ALL WIRING USED IN CONDUIT ON THE EXTERIOR OF THE BUILDING SHALL BE U.L. LISTED FOR WET LOCATION.

FIRE ALARM LEGEND FIRE ALARM REQUIREMENTS FIRE ALARM NOTES

<p style="text-align: center;">FIRE ALARM LEGEND</p> <table border="0"> <tr> <td></td> <td>FIRE ALARM CONTROL PANEL WITH VOICE CONTROL</td> <td>SILENT KNIGHT: IFP-2000ECS CSFM #7165-0559.0174</td> </tr> <tr> <td></td> <td>SUPERVISED REMOTE MICROPHONE</td> <td>SILENT KNIGHT: ECS-RPU CSFM #7300-0559.0175</td> </tr> <tr> <td></td> <td>INTELLIGENT 50 WATT AMPLIFIER</td> <td>SILENT KNIGHT: ECS-50W CSFM #7300-0559.0173</td> </tr> <tr> <td></td> <td>FIRE ALARM ANNUNCIATOR</td> <td>SILENT KNIGHT: RA-2000 CSFM #7165-0559.0158</td> </tr> <tr> <td></td> <td>PHOTOELECTRIC SMOKE DETECTOR & BASE (#* ADJACENT INDICATES RELAY BASE)</td> <td>SILENT KNIGHT: IDP-PHOTO CSFM #7272-0559.0149 * CSFM #7300-1653.0109</td> </tr> <tr> <td></td> <td>HEAT DETECTOR MOUNTED ON CEILING</td> <td>SILENT KNIGHT: IDP-HEAT CSFM #7270-0559.0147</td> </tr> <tr> <td></td> <td>190° FIXED TEMPERATURE HEAT DETECTOR MOUNTED IN CEILING SPACE. 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ELECTRICAL CONTRACTOR'S AND FIRE ALARM SYSTEM INSTALLER'S NAME, ADDRESS, PHONE NUMBER AND C-10 LICENSE NUMBER. LIST OF SYSTEM COMPONENTS, EQUIPMENT AND DEVICES, INCLUDING MANUFACTURERS' MODEL NUMBER(S) AND CALIFORNIA STATE FIRE MARSHALL LISTING NUMBERS. ORIGINAL COPIES OF MANUFACTURERS' SPECIFICATION SHEETS FOR ALL EQUIPMENT AND DEVICES INDICATED. VOLTAGE DROP CALCULATIONS -- INCLUDE THE FOLLOWING INFORMATION FOR THE WORST CASE: <ol style="list-style-type: none"> POINT-TO-POINT OR OHMS LAW CALCULATIONS. IDENTIFICATION OF ZONE USED IN CALCULATIONS. VOLTAGE DROP PERCENT (NOT TO EXCEED MANUFACTURERS' REQUIREMENTS). <p>NOTE: IF VOLTAGE DROP EXCEEDS 10% INDICATE MANUFACTURERS' LISTED OPERATING VOLTAGE RANGE(S) OR EQUIPMENT AND DEVICES.</p> NOTE CIRCUIT NUMBER FOR WORST CASE CALCULATION. BATTERY TYPE(S), AMP HOURS AND LOAD CALCULATIONS -- INCLUDE THE FOLLOWING INFORMATION: <ol style="list-style-type: none"> NORMAL OPERATION: 100% OF APPLICABLE DEVICES FOR 24 HOURS = CONTROL PANEL AMPS PLUS LIST OF AMPS PER DEVICE WHICH DRAW POWER FROM THE PANEL DURING STANDBY POWER CONDITION -- I.E.: <ol style="list-style-type: none"> ZONE MODULES DETECTORS OTHER DEVICES (IDENTIFY) ALARM CONDITION: 100% OF APPLICABLE DEVICES FOR 15 MINUTES = CONTROL PANEL AMPS PLUS LIST OF AMPS PER DEVICE WHICH DRAW POWER FROM THE PANEL DURING ALARM CONDITION -- I.E.: <ol style="list-style-type: none"> ZONE MODULES SIGNAL MODULES DETECTORS SIGNAL DEVICES ANNUNCIATOR OTHER DEVICES (IDENTIFY) NORMAL OPERATION + ALARM OPERATION <ol style="list-style-type: none"> TOTAL AMP HOURS REQUIRED. TOTAL AMP HOURS PROVIDED. 	<p style="text-align: center;">FIRE ALARM NOTES</p> <ol style="list-style-type: none"> SCOPE OF WORK: PROVIDE A COMPLETE AUTOMATIC FIRE ALARM SYSTEM WITH VOICE EVACUATION IN ACCORDANCE TO 2016 NFPA-72 AND CCR TITLE 24, PART 2, SECTION 907.2.3. 907.5.2.2. A FIRE ALARM SYSTEM IS BEING INSTALLED IN OCCUPANCIES LISTED. PROVIDE NEW SILENT KNIGHT FIRE ALARM CONTROL PANEL AS INDICATED. PLANS AND SPECIFICATIONS FOR THE SYSTEM SHALL BE APPROVED BY DSA-FIRE AND LIFE SAFETY PRIOR TO SYSTEM INSTALLATION. UPON RECEIPT OF THE CERTIFICATE OF COMPLIANCE, THE MANUFACTURER AND OR INSTALLER SHALL SUPPLY THE OWNER WITH WRITTEN OPERATING, TESTING AND MAINTENANCE INSTRUCTIONS, POINT-TO-POINT AS-BUILT DRAWINGS, AND EQUIPMENT SPECIFICATIONS. THE SYSTEM SHALL CONFORM TO TITLE 19 AND TITLE 24 AS APPLICABLE TO THIS PROJECT. ALL THE DEVICES OF THE FIRE ALARM SYSTEM SHALL BE APPROVED AND LISTED BY THE CALIFORNIA STATE FIRE MARSHAL. A STAMPED SET OF APPROVED PLANS SHALL BE ON THE JOB SITE AND USED FOR INSTALLATION. ANY DEVIATION FROM APPROVED PLANS, SHALL BE APPROVED AND SIGNED BY THE DSA INSPECTOR OF RECORD. ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE CODE OR RECOGNIZED STANDARDS SHALL BE BROUGHT TO THE ATTENTION OF THE INSPECTOR OR ARCHITECT/ENGINEER OF RECORD. CONDUIT SYSTEM TO BE FURNISHED AND INSTALLED PER PLANS AND SPECIFICATIONS. UPON COMPLETION OF SYSTEM INSTALLATION, THE SYSTEM SHALL BE TESTED IN THE PRESENCE OF AND IN A MANNER ACCEPTABLE TO THE ENFORCING AGENCY. PENETRATIONS OF FIRE-RATED WALLS SHALL BE PROTECTED IN ACCORDANCE WITH 2016 EDITION CALIFORNIA BUILDING CODE, CHAPTER 7. ALL EQUIPMENT SHALL BE U.L. AND C.S.F.M. LISTED. ALL WIRING SHALL BE IN ACCORDANCE WITH THE C.E.C. AND AUTHORITIES HAVING JURISDICTION. ALL FIRE ALARM CONDUIT SHALL BE 3/4" MIN., U.N.O. ALL FIRE ALARM CONDUIT INSTALLED UNDERGROUND SHALL BE 1" MIN. U.N.O. ALL FIRE ALARM CONDUCTORS SHALL BE INSTALLED IN AN APPROVED RACEWAY. ALL AUDIBLE DEVICES SHALL BE IN SYNCHRONOUS. VISUAL DEVICES SHALL NOT EXCEED 2 FLASHES PER SECOND AND SHALL NOT BE SLOWER THAN 1 FLASH EVERY SECOND. THE DEVICE SHALL HAVE A PULSING LIGHT SOURCE NOT LESS THAN 15 CANDELA VISUAL DEVICES WITHIN 55' FROM EACH OTHER SHALL BE SYNCHRONIZED. UNDERGROUND AND EXTERIOR CONDUITS SHALL HAVE WATERTIGHT FITTINGS AND WIRE TO BE APPROVED FOR WET LOCATIONS. AUDIBLE DEVICES SHALL BE AT LEAST 15dBA ABOVE THE EQUIVALENT SOUND LEVEL BUT NOT LESS THAN 75dBA AT 10' OR MORE THAN 110dBA AT THE MINIMUM HEARING DISTANCE. SOUND LEVEL SHALL BE MAINTAINED FOR DURATION OF AT LEAST 60 SECONDS. 5dBA MUST BE MAINTAINED. AUDIBLE DEVICES SHALL SOUND A PRERECORDED MESSAGE AS DIRECTED BY THE OWNER. COORDINATE EXACT LOCATION OF ALL CEILING FIRE ALARM DEVICES IN FIELD. CIRCUIT LENGTH INDICATED ON DRAWINGS IS FOR PLAN CHECK PURPOSES ONLY. CONTRACTOR SHALL FIELD VERIFY EXACT LENGTH. ALL JUNCTION BOXES SHALL BE SIZED IN ACCORDANCE WITH THE C.E.C. ELECTRICAL CONTRACTOR SHALL FURNISH ACCESS PANELS TO AREAS THAT REQUIRE SERVICING, TROUBLE SHOOTING, ETC., AS REQUIRED. COORDINATE WITH ARCHITECT FOR ACCESS PANELS. ALL 120VAC POWER REQUIREMENTS FOR THE FIRE ALARM SYSTEM SHALL BE FURNISHED BY CONTRACTOR AND SHALL MEET ALL REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION. ALL WIRING, ANNUNCIATING DEVICES AND ANNUNCIATOR PANEL SHALL BE SUPERVISED TO THE PRINCIPLE POINT OF ANNUNCIATION. THE FIRE ALARM CONTROL PANEL TO SUPERVISE THE ANNUNCIATOR PANEL, ALL INITIATING AND INDICATING DEVICES CIRCUITS. AUTOMATIC FIRE ALARM SYSTEMS SHALL TRANSMIT THE ALARM, SUPERVISORY AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION AS REQUIRED BY CFC 907.6.5.3. THE SUPERVISING STATION SHALL BE LISTED AS EITHER ULFVX OR ULJIS BY UNDERWRITERS LABORATORY OR SHALL MEET THE REQUIREMENTS OF FACTORY MUTUAL RESEARCH APPROVAL STANDARD 3011. SUPERVISION OF SYSTEM AND LEASED TELEPHONE LINES SHALL BE ARRANGED BY OWNER. ALL FIRE ALARM WIRING IN PULLBOXES SHALL BE ROUTED WITHIN INNERDUCT AND IDENTIFIED AS FIRE ALARM. PROVIDE ACCESSIBLE OPERATING HARDWARE AT INITIATIVE DEVICE (E.G., NOT REQUIRING TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST AND FORCE LESS THAN 5 LBS.) SEE SHEET E3.2 FOR TYPICAL DEVICE MOUNTING HEIGHT DETAIL. INSTALLATION OF THE SYSTEMS SHALL NOT BE STARTED UNTIL DETAILED DESIGN DOCUMENTS AND SPECIFICATION, INCLUDING STATE FIRE MARSHAL LISTING NUMBERS FOR EACH COMPONENT OF THE SYSTEM HAS BEEN APPROVED BY DSA. DSA ARCHITECT AND OWNER SHALL BE NOTIFIED MINIMUM OF 48 HOURS PRIOR TO THE FINAL INSPECTION AND/OR TESTING. THE CONTRACTOR SHALL ADJUST/INSTALL ALL DEVICES TO MAXIMIZE PERFORMANCE AND TO MINIMIZE FALSE ALARMS. ALL FIRE ALARM WIRING SHALL BE FLP OR FPLP (FIRE POWER LIMITED OR FIRE POWER LIMITED PLENUM) AS REQUIRED FOR APPLICATION. WIRING IN CONDUIT ABOVE GROUND MAY BE THHN OR THWN. PER CEC STANDARDS, ALL WIRING IS TO BE PULLED THROUGH EACH JUNCTION BOX AND CONNECTED DIRECTLY TO EACH FIRE DEVICE. DO NOT SPLICE THE WIRE. THERE MUST BE AT LEAST 6" OF LEAD WIRE FROM THE BOX TO THE DEVICE. ALL BOXES TO BE SIZED PER CEC. SMOKE DETECTORS SHALL NOT BE ANY CLOSER THAN 1' FROM FIRE SPRINKLERS OR 3' FROM ANY SUPPLY DIFFUSER. IN AREA OF CONSTRUCTION OR POSSIBLE DAMAGE/CONTAMINATION ON NEWLY INSTALLED FIRE ALARM, DEVICES SHALL BE COVERED UNTIL THAT AREA IS READY TO BE TURNED OVER TO THE OWNER. ALL FIRE ALARM CIRCUITS SHALL BE IN CONDUIT OR SURFACE RACEWAY, UNDER FLOORS AND IN WALLS IN A NEAT AND PROTECTED MANNER AS INDICATED ON DESIGN DOCUMENTS. EXPOSED CIRCUITS ARE ONLY PERMITTED WHEN NOTED AS EXPOSED ON DESIGN DOCUMENTS. FIRE ALARM PANELS, REMOTES AND COMPONENTS SHALL BE SECURED TO MOUNTING SURFACES PER MANUFACTURERS SPECIFICATIONS. NO SINGLE DEVICE SHALL EXCEED THE WEIGHT OF 20lbs WITHOUT SPECIAL MOUNTING DETAILS. A DEDICATED BRANCH CIRCUIT SHALL BE PROVIDED FOR FIRE ALARM EQUIPMENT. THIS CIRCUIT SHALL BE ENERGIZED FROM THE COMMON USE AREA PANEL AND SHALL HAVE NO OTHER OUTLETS. THE BREAKER SHALL HAVE A RED LOCKING DEVICE TO BLOCK THE HANDLE IN THE "ON" POSITION. THE CIRCUIT BREAKER SHALL BE LABELED "FIRE ALARM CIRCUIT CONTROL". CIRCUIT ID TO BE LABELED AT FIRE PANEL/EXTENDERS. THE INSTALLING CONTRACTOR SHALL PROVIDE A RECORD OF COMPLETION PER NFPA 72, FIGURES 7.8.2(a) - 7.8.2(f). FIRE ALARM CONTROL PANELS AND REMOTE ANNUNCIATIONS SHALL BE INSTALLED WITH THEIR BOTTOMS MOUNTED AT 48" ABOVE THE FINISHED FLOOR. MICROPHONES ASSOCIATED WITH EMERGENCY VOICE ALARM COMMUNICATION SYSTEMS (EVAC) SHALL BE ACCESSIBLE FOR USE, INSTALLED IN COMPLIANCE WITH CBC SECTIONS 11B-305 AND 11B-308. THE INSTALLING CONTRACTOR SHALL PROVIDE SYSTEM PROGRAMMING FOR SUPERVISORY MONITORING PER CBC SECTION 901.6.2. THE INSTALLING CONTRACTOR SHALL PERFORM A VOICE MESSAGE INTELLIGIBILITY TEST USING INTELLIGIBILITY MEASUREMENT METHODS 1 AND/OR 2 TO COMPLY WITH NFPA-72 24.3.1 AND 18.4.10. INTELLIGIBILITY TEST SHALL BE WITNESSED BY THE INSPECTOR OF RECORD.
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1
2
3
4
5



COVINA VALLEY HS SWIMMING POOL
 COVINA VALLEY UNIFIED SCHOOL DISTRICT
 483 S. HOLLENBECK AVENUE COVINA, CA 91723

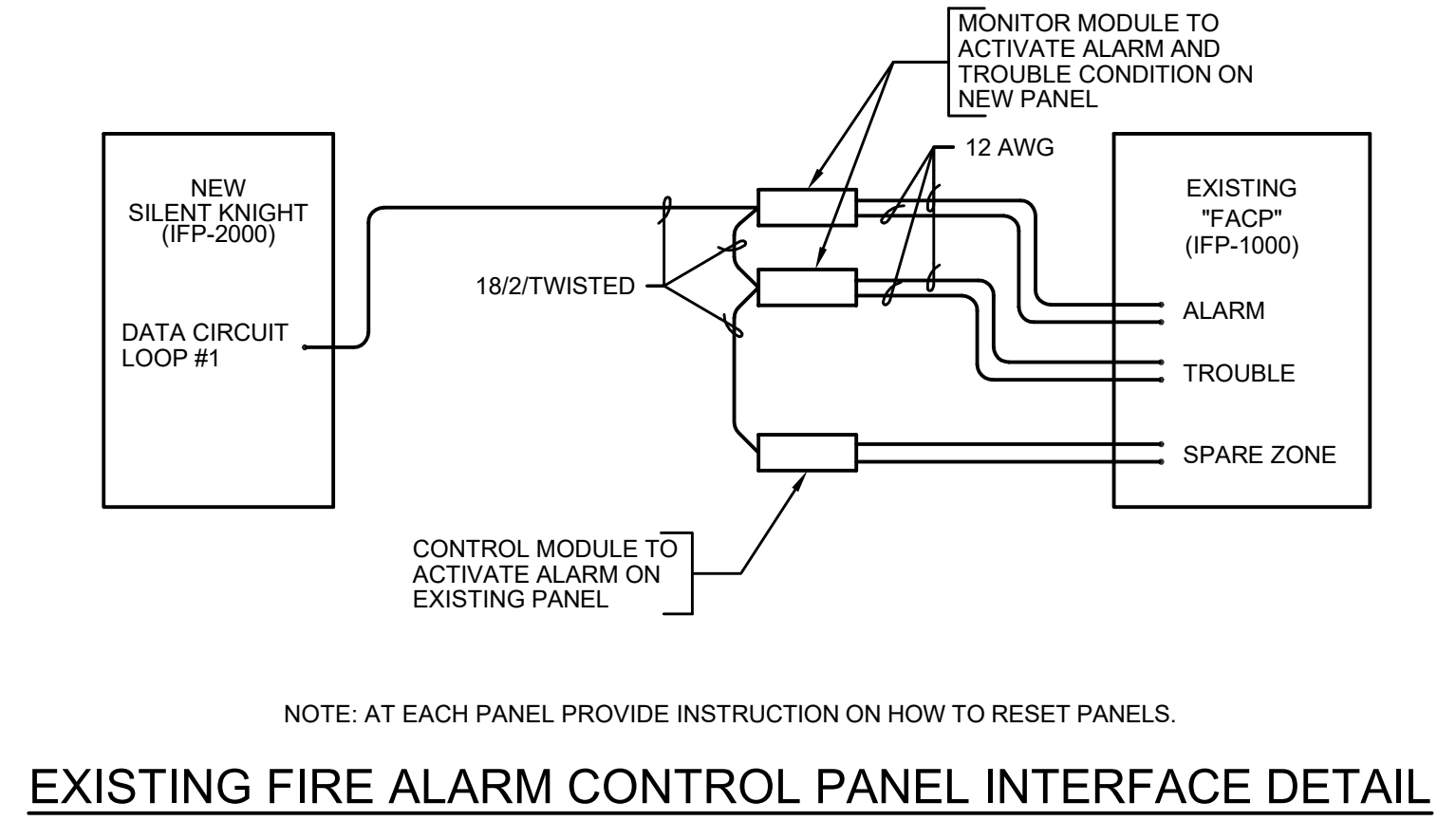
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 REVISIONS



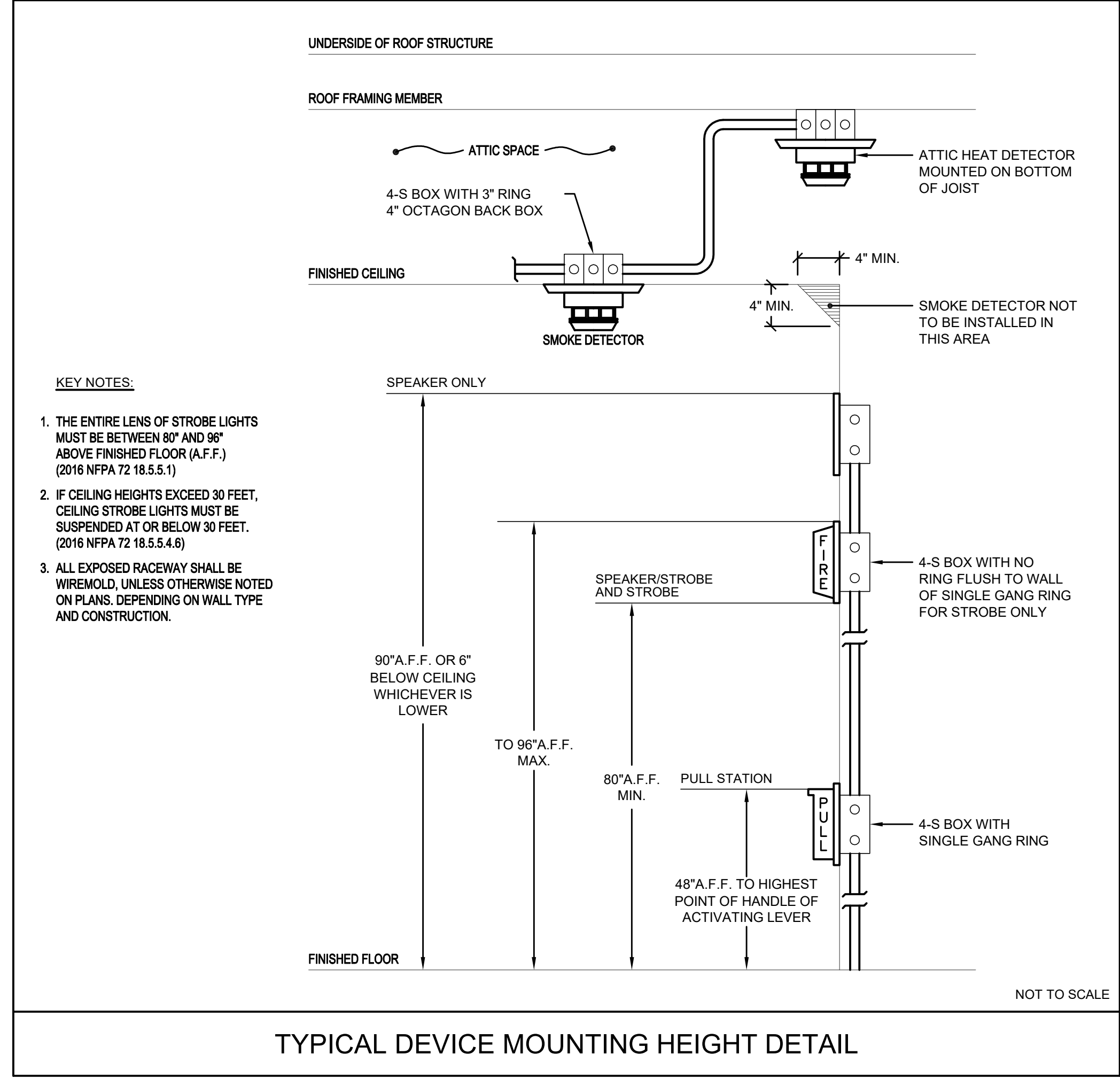
DCGA ENGINEERS
 Consulting Mechanical and Electrical Engineers
 4750 E. Ontario Mills Pkwy
 Ontario, Ca. 91764
 Ph: 909.987.9917
 Fax: 909.989.7523

75-22616-00
 DSA #03-122700
 DSA FILE # 19-1H
 FIRE ALARM SYMBOLS AND NOTES

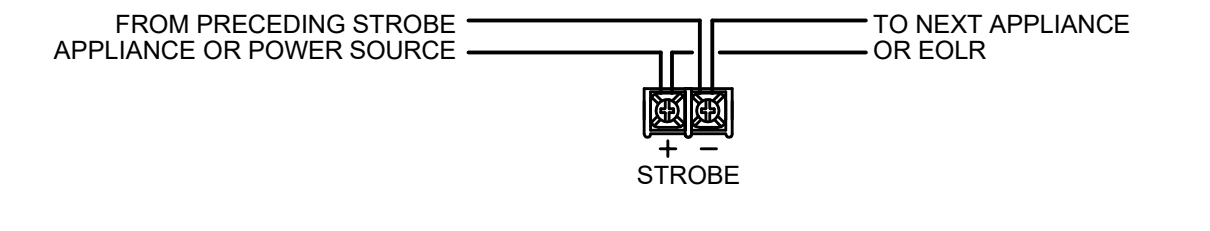
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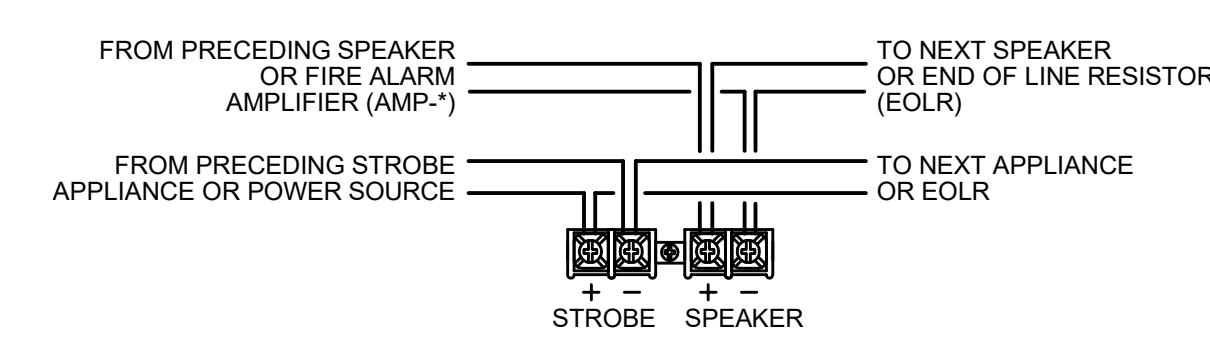
EXISTING FIRE ALARM CONTROL PANEL INTERFACE DETAIL



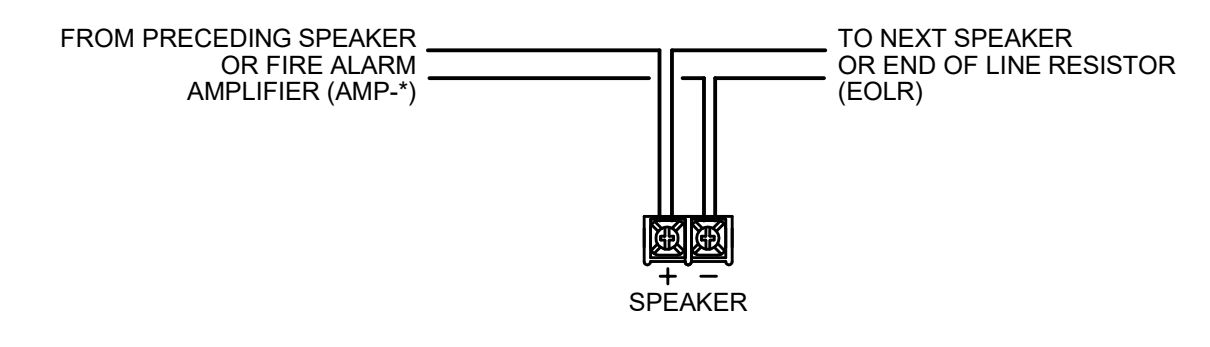
TYPICAL DEVICE MOUNTING HEIGHT DETAIL



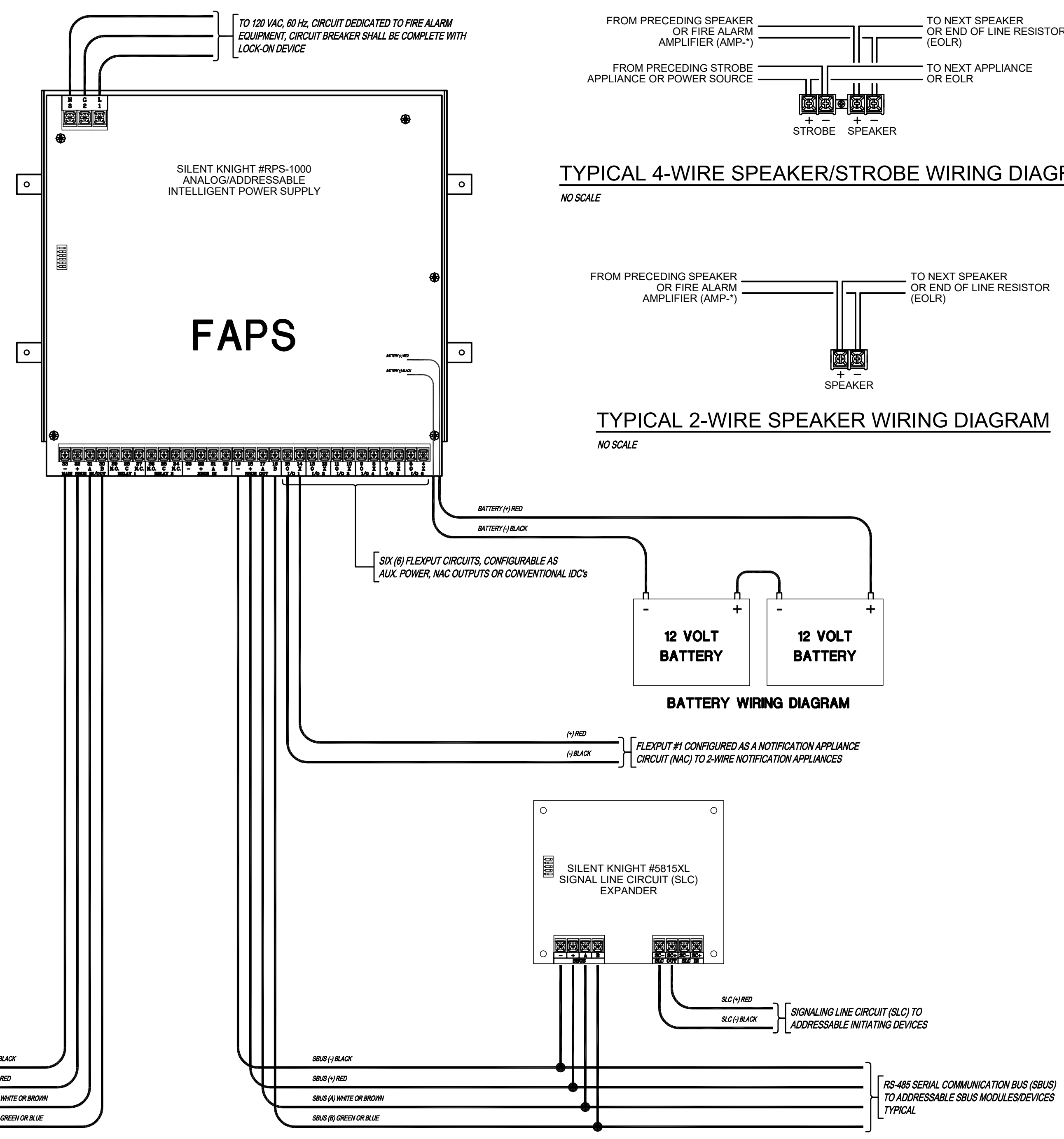
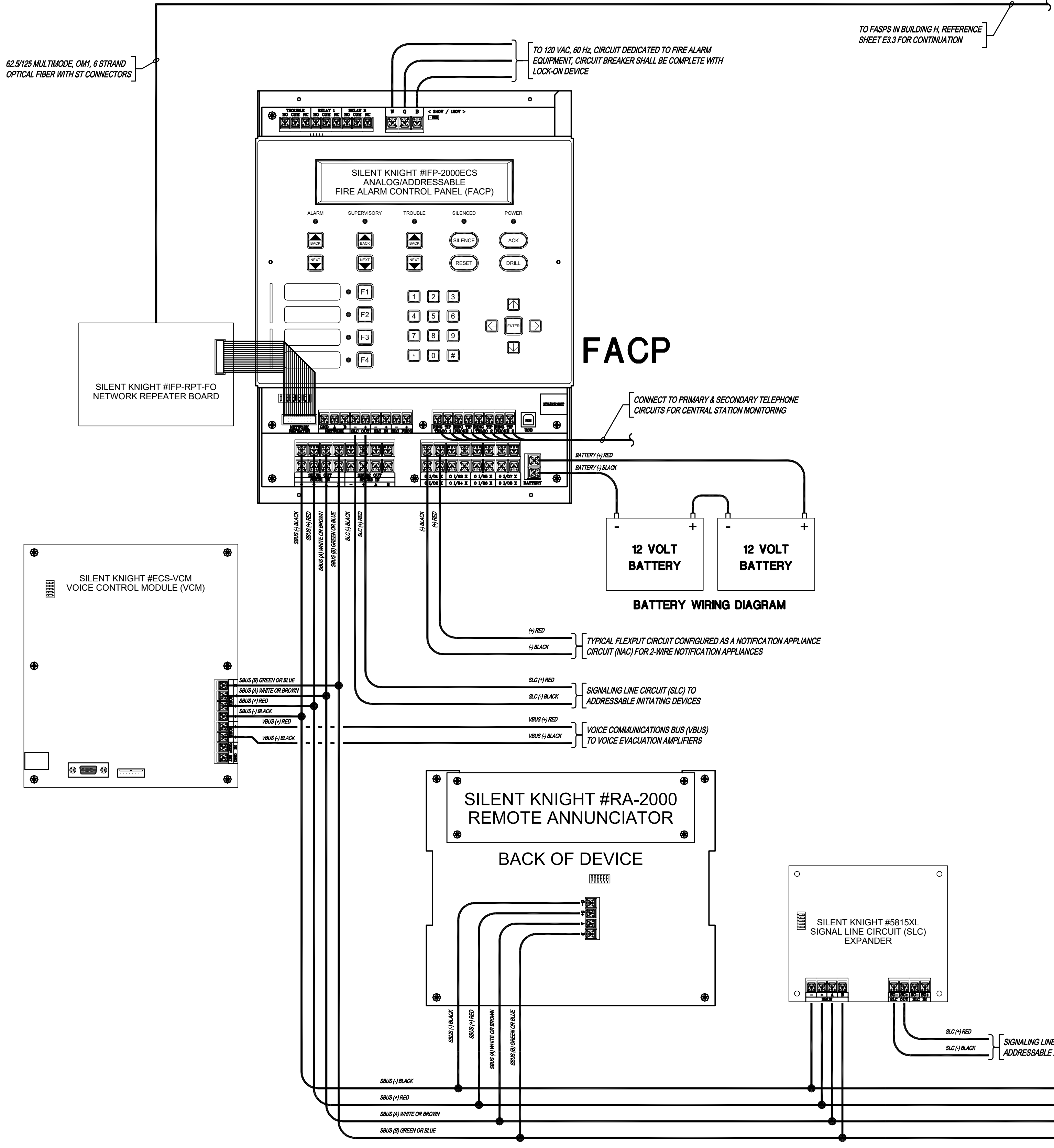
TYPICAL 2-WIRE STROBE WIRING DIAGRAM

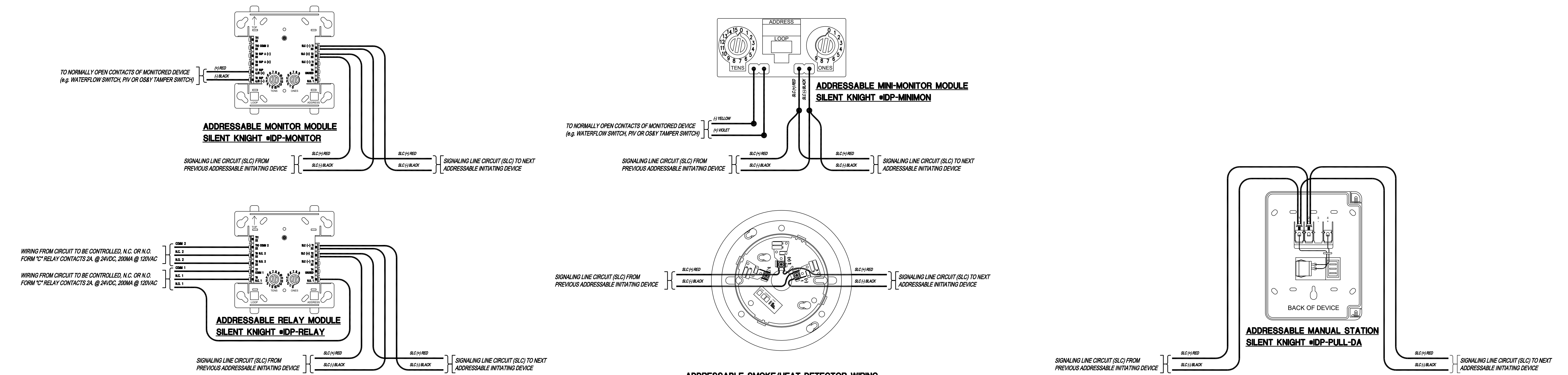
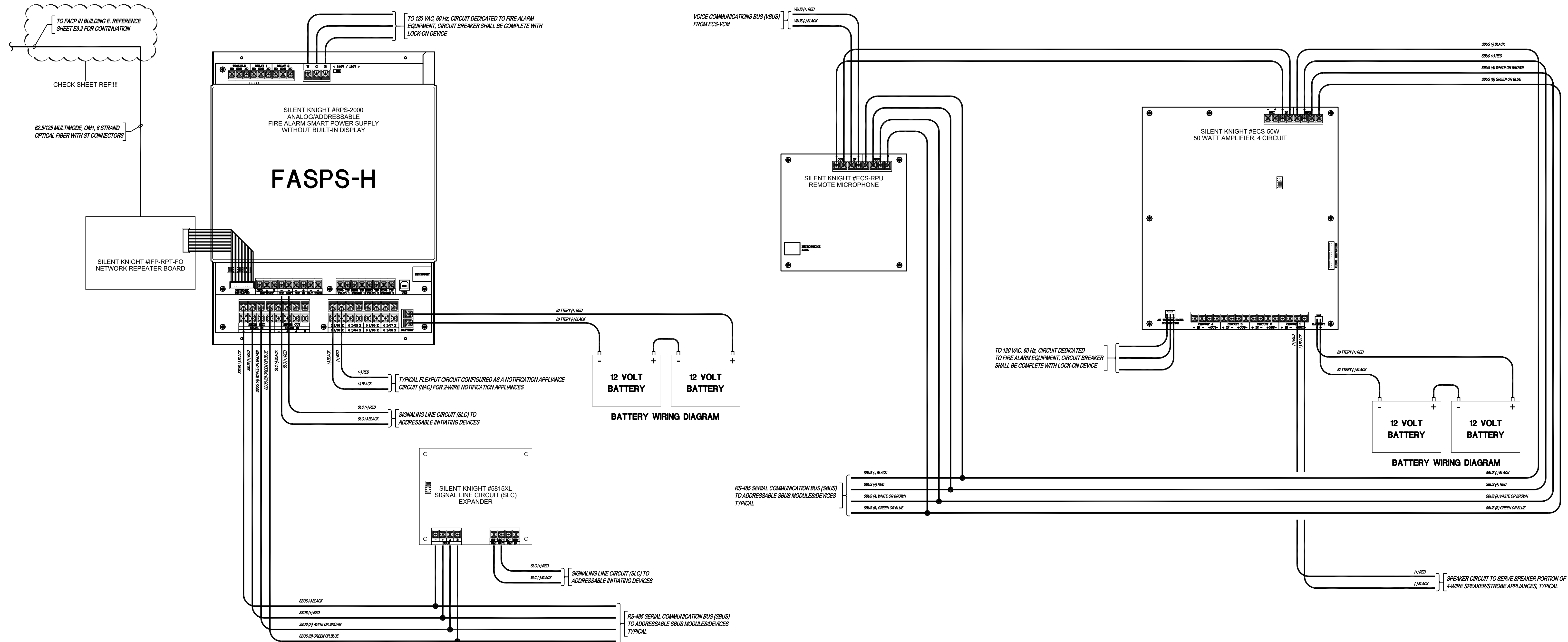


TYPICAL 4-WIRE SPEAKER/STROBE WIRING DIAGRAM

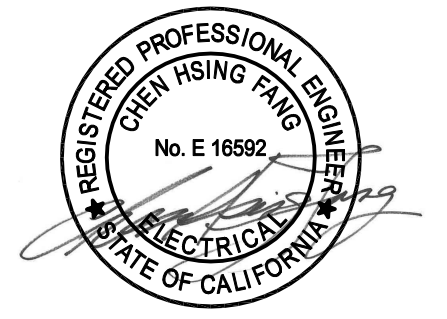


TYPICAL 2-WIRE SPEAKER WIRING DIAGRAM





TYPICAL INITIATION DEVICE WIRING DIAGRAMS
NO SCALE



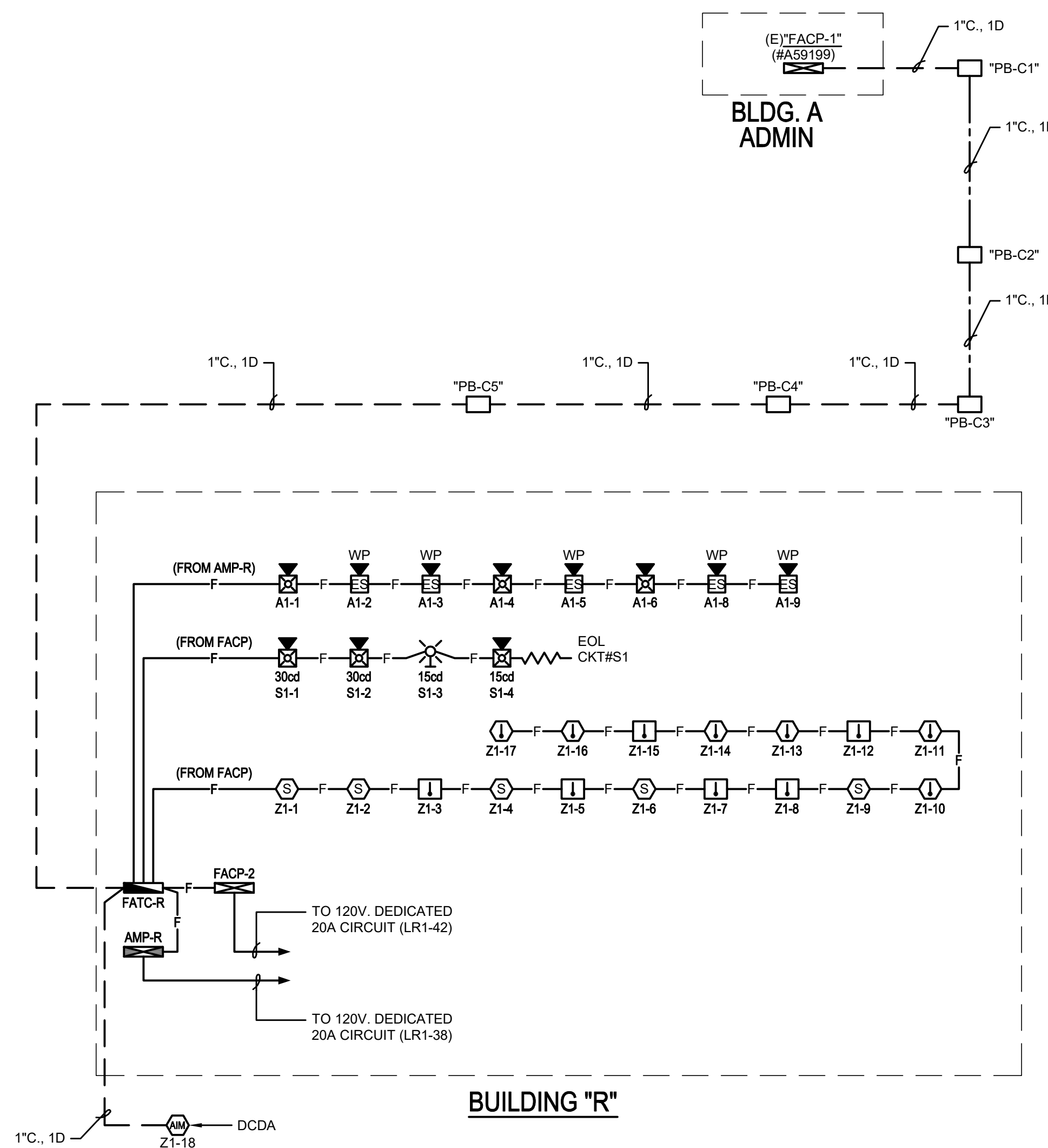
IFP-2000ECS Battery Calculations COVINA HS POOL REPLACEMENT FACP Data Loops Z1, Signal Circuits S1					
Description	Quantity	Standby (Amps)	Total Standby (Amps)	Alarm (Amps)	Total Alarm (Amps)
CONTROL PANEL	1	x 0.290000	0.290000	0.570000	0.570000
ECS-RVM	1	x 0.070000	0.070000	0.100000	0.100000
ECS-VCM	1	x 0.070000	0.070000	0.100000	0.100000
ECS-RFU	1	x 0.070000	0.070000	0.100000	0.100000
ECS-50W	1	x 0.010000	0.010000	0.010000	0.010000
IFP-RPT-FO	1	x 0.013000	0.013000	0.013000	0.013000
RA-2000	1	x 0.025000	0.025000	0.050000	0.050000
815XL SLC EXPANDER	1	x 0.055000	0.055000	0.055000	0.055000
IDP-PULL-DA	0	x 0.000300	0.000000	0.000300	0.000000
IDP-PHOTO	5	x 0.000300	0.001500	0.006500	0.032500
IDP-FIRE-CO	0	x 0.000300	0.000000	0.000300	0.000000
B200S	0	x 0.000300	0.000000	0.000300	0.000000
B200S (AUX POWER)	0	x 0.000500	0.000000	0.035000	0.000000
IDP-HEAT	6	x 0.000300	0.001800	0.006500	0.039000
IDP-HEAT-HT	6	x 0.000200	0.001200	0.006500	0.039000
IDP-RELAY	0	x 0.000300	0.000000	0.000500	0.000000
IDP-MONITOR	3	x 0.000400	0.001200	0.005500	0.016500
IDP-CONTROL	1	x 0.000400	0.000400	0.006500	0.006500
SR/SCW 15cd Strobe	1	x 0.000000	0.000000	0.066000	0.066000
SR/SCW 30cd Strobe	0	x 0.000000	0.000000	0.094000	0.000000
SR/SCW 75cd Strobe	0	x 0.000000	0.000000	0.158000	0.000000
SPSR/SPSCW 15cd Spkr St.	1	x 0.000000	0.000000	0.066000	0.066000
SPSR/SPSCW 30cd Spkr St.	2	x 0.000000	0.000000	0.094000	0.188000
SPSR/SPSCW 75cd Spkr St.	0	x 0.000000	0.000000	0.158000	0.000000
SPSR/SPSCW 110cd Spkr St.	0	x 0.000000	0.000000	0.202000	0.000000
Total:			0.609100		1.451500
Battery Calculation	Time Multiplier		Amp Hours		
Supervisory Hours	24	x 0.609100	= 14.618400		
Alarm Hours	0.250	x 1.451500	= 0.362875		
Total Amp Hours			= 14.981275		
Battery Used (AH)			= 36.000000		
Battery Spare (AH)			= 21.018725		

Voltage Drop Calculations COVINA HS POOL REPLACEMENT FACP Signal Circuit S1			
Description	Quantity	Alarm (Amps)	Total Alarm (Amps)
SR/SCW 15cd Strobe	1	x 0.066000	0.066000
SR/SCW 30cd Strobe	0	x 0.094000	0.000000
SR/SCW 75cd Strobe	0	x 0.158000	0.000000
SR/SCW 110cd Strobe	0	x 0.202000	0.000000
SPSR/SPSCW 15cd Spkr St.	1	x 0.066000	0.066000
SPSR/SPSCW 30cd Spkr St.	2	x 0.094000	0.188000
SPSR/SPSCW 75cd Spkr St.	0	x 0.158000	0.000000
SPSR/SPSCW 110cd Spkr St.	0	x 0.202000	0.000000
Total Current Draw:			= 0.320000
Wire Size 14	0	x 4110	= 0
Wire Size 12	1	x 6530	= 6530
Wire Used Circular Mills			= 6530
Distance to End of Circuit:			= 139
Multiplier			= 21.6
Voltage			= 24
Multiplier			= 4.166
Percentage Voltage Drop			= 0.613

ECS-50W Amplifier Calculation COVINA HS POOL REPLACEMENT AMP-R					
Description	Quantity	Standby (Amps)	Total Standby (Amps)	Total Alarm (Amps)	
ECS-50W-25	0	x 0.085000	0.000000	0.525000	0.000000
ECS-50W-70.7	1	x 0.100000	0.100000	0.580000	0.580000
ECS-CE4	1	x 0.020000	0.020000	0.180000	0.180000
WATTS @ 25Vrms	0	x 0.000000	0.000000	0.040000	0.000000
WATTS @ 70.7Vrms	12	x 0.000000	0.000000	0.014000	0.168000
Total:			0.120000	0.928000	0.928000
Battery Calculation	Time Multiplier		Amp Hours	Total Watts	Total Watts
Supervisory Hours	24	x 0.120000	= 2.880000	Used	Spare
Alarm Hours	0.250	x 0.928000	= 0.232	12	38
Total Amp Hours			= 3.112000		
Battery Used (AH)			= 7.000000		
Battery Spare (AH)			= 3.888000		

COVINA HS POOL REPLACEMENT - SPEAKER CIRCUIT LOAD CALCULATION													
SPEAKER CIRCUIT DESCRIPTION	PANEL CIRCUIT NUMBER	WIRE GAUGE (18, 16, 14, 12)	CIRCUIT VOLTAGE (25 OR 70 VRMS)	APPLIANCES QUANTITIES / TAP VALUES					TOTAL CIRCUIT LOAD (WATTS)	ESTIMATED CIRCUIT LENGTH (FEET)	MAXIMUM -3 dB DROP PER CIRCUIT		
				SPSR / CW TAP 25 Watt	SPSR / CW TAP 5 Watt	SPSR / CW TAP 1 Watt	SPSR / CW TAP 2 Watt	SPRKTAP 2 Watt			ACTUAL WIRE LOSS (dB)	MAXIMUM ALLOWABLE CKT. LENGTH (FEET)	TOTAL CIRCUIT RESISTANCE (OHMS)
Pool Building Speakers (AMP-R)	A1	16	70 vrms	0	3	0	0	5	11.5 Watts	388 ft.	-07 db	19621 ft.	3.47 Ohms
Appliance Summary				0	3	0	0	5	Total Load (Watts) 11.50				

NOTE:
LUMP SUM METHOD WAS USED TO CALCULATE MAXIMUM ALLOWABLE CIRCUIT LENGTH. THIS METHOD ALLOWS FOR A SMALL MARGIN OF SAFETY, TAKING INTO CONSIDERATION THE ACTUAL INSTALLED CIRCUIT ROUTING MAY DIFFER FROM WHAT IS SHOWN ON THE SHOP DRAWINGS.



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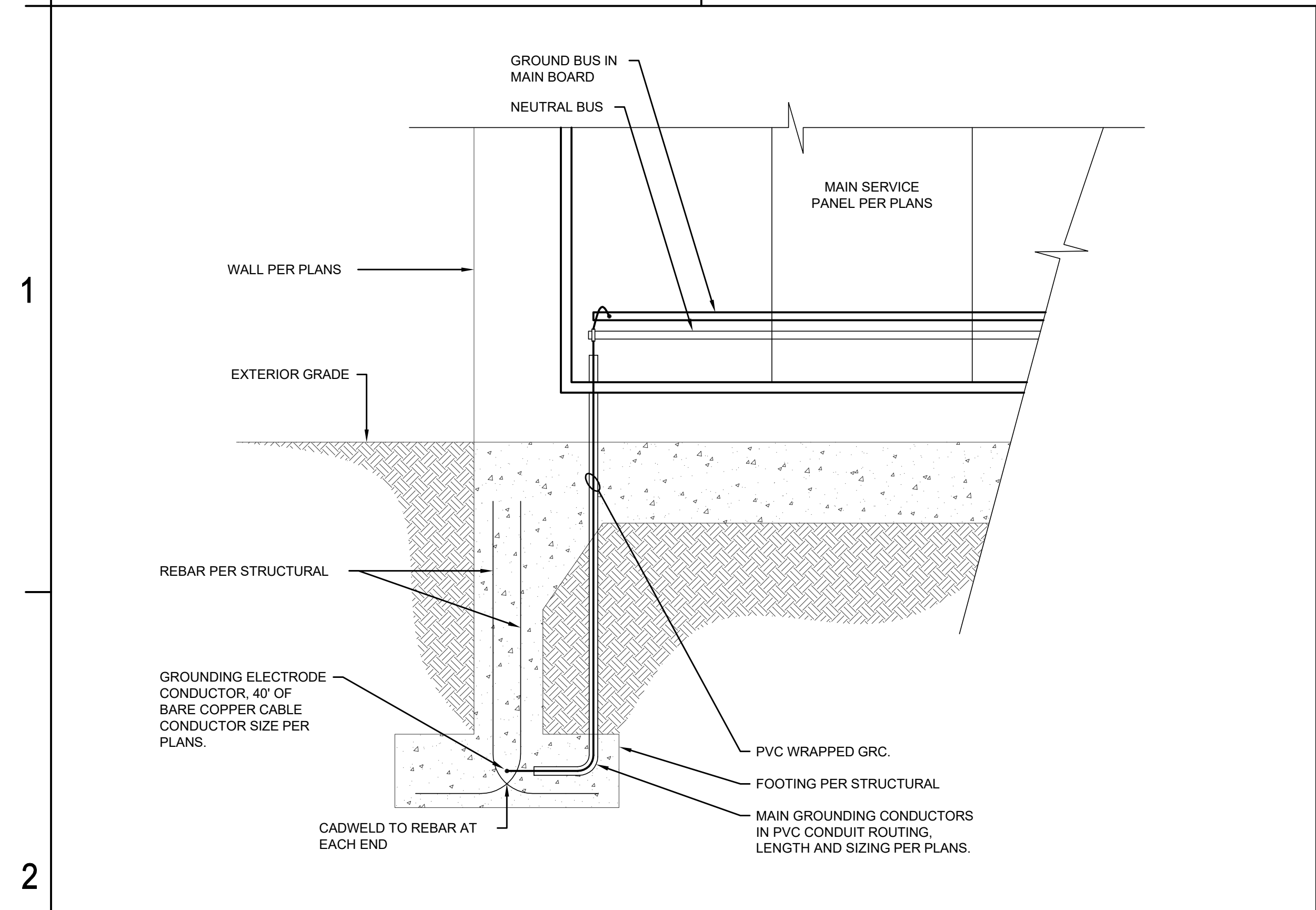


COVINA VALLEY HS SWIMMING POOL
COVINA VALLEY UNIFIED SCHOOL DISTRICT
483 S. HOLLENBECK AVENUE COVINA, CA 91723

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DSA AH 03-122700
DSA FILE # 19-1H8

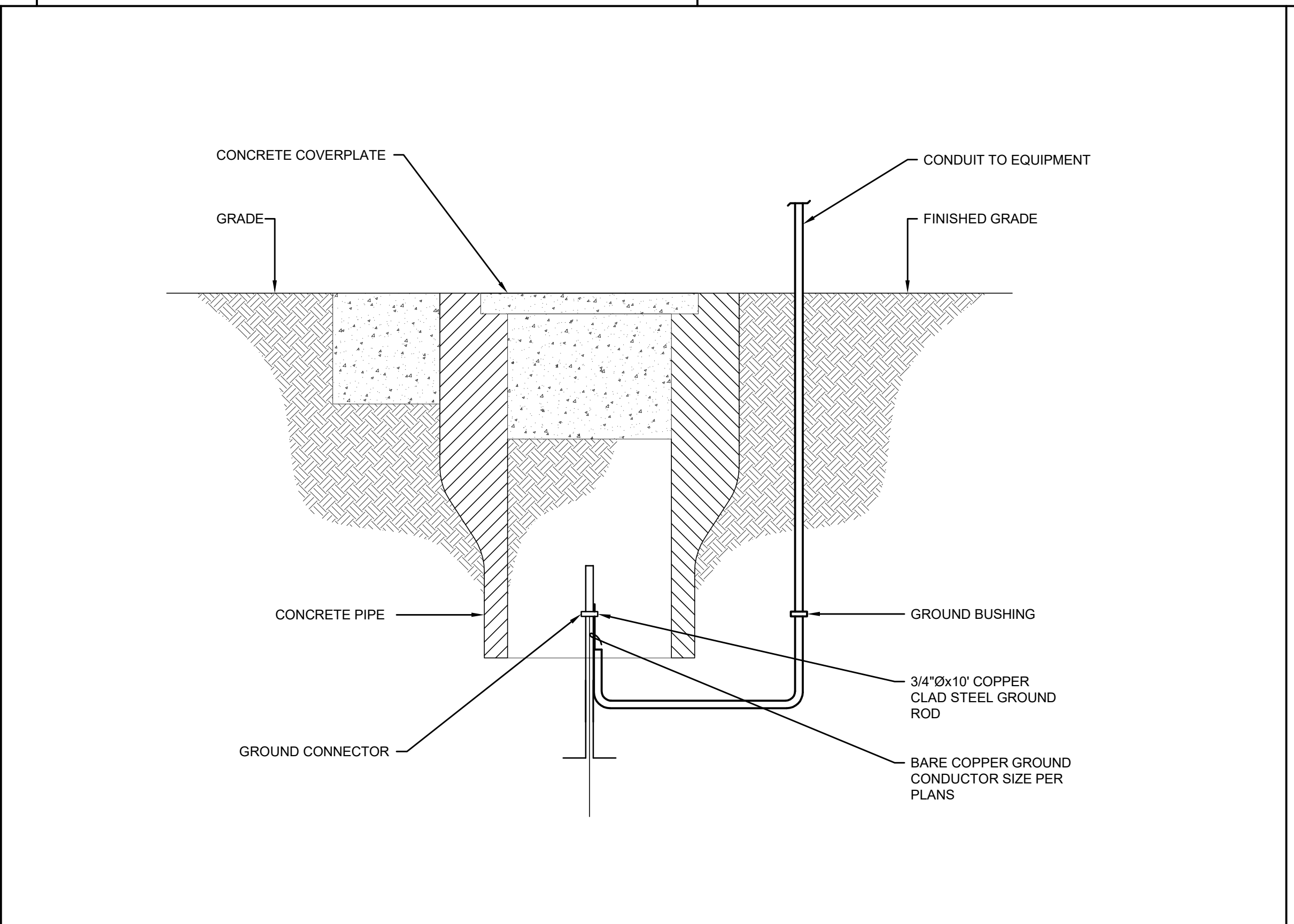
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FIRE ALARM RISER DIAGRAM
E3.4



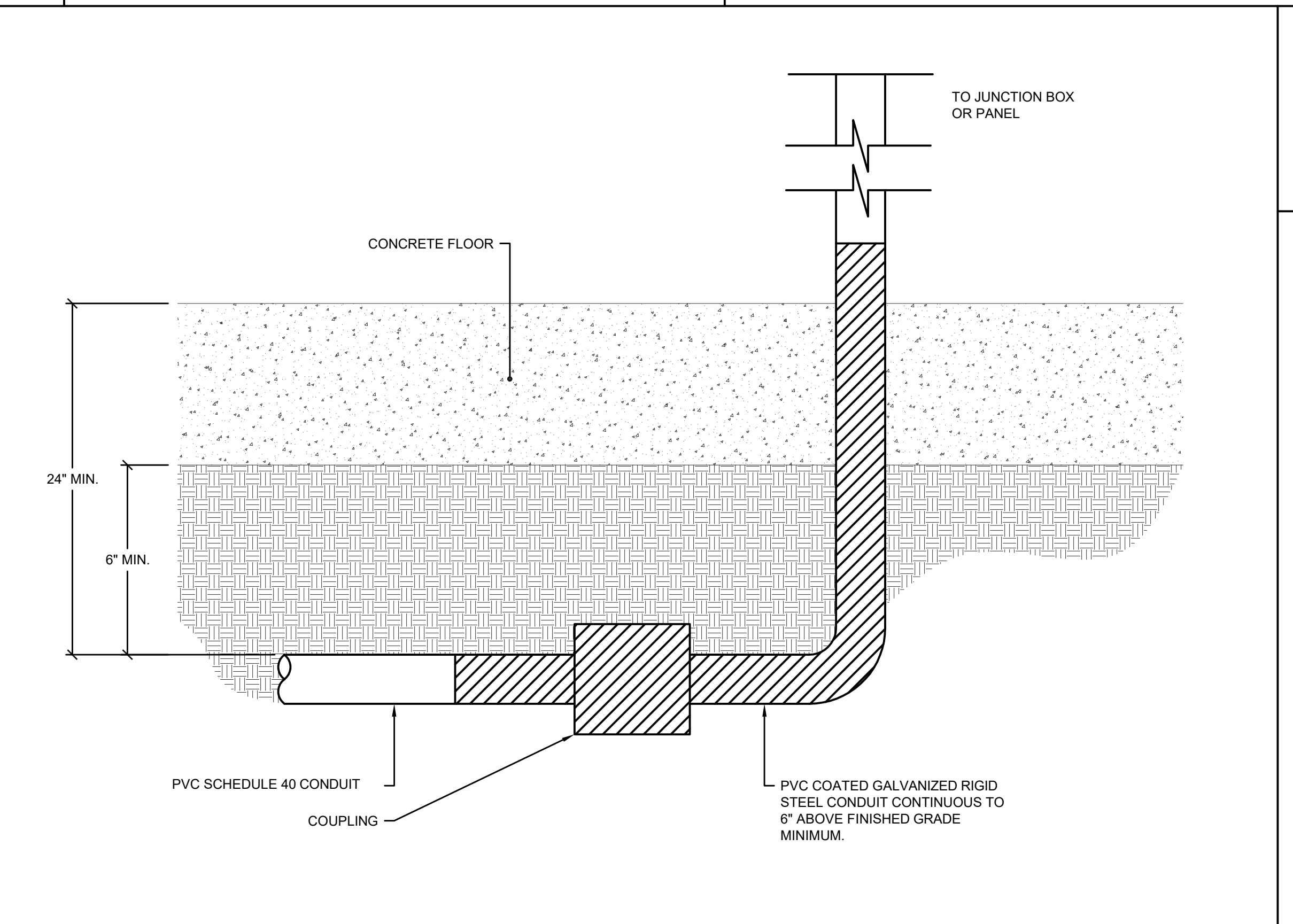
"UFER" GROUNDING DETAIL

NOT TO SCALE	1
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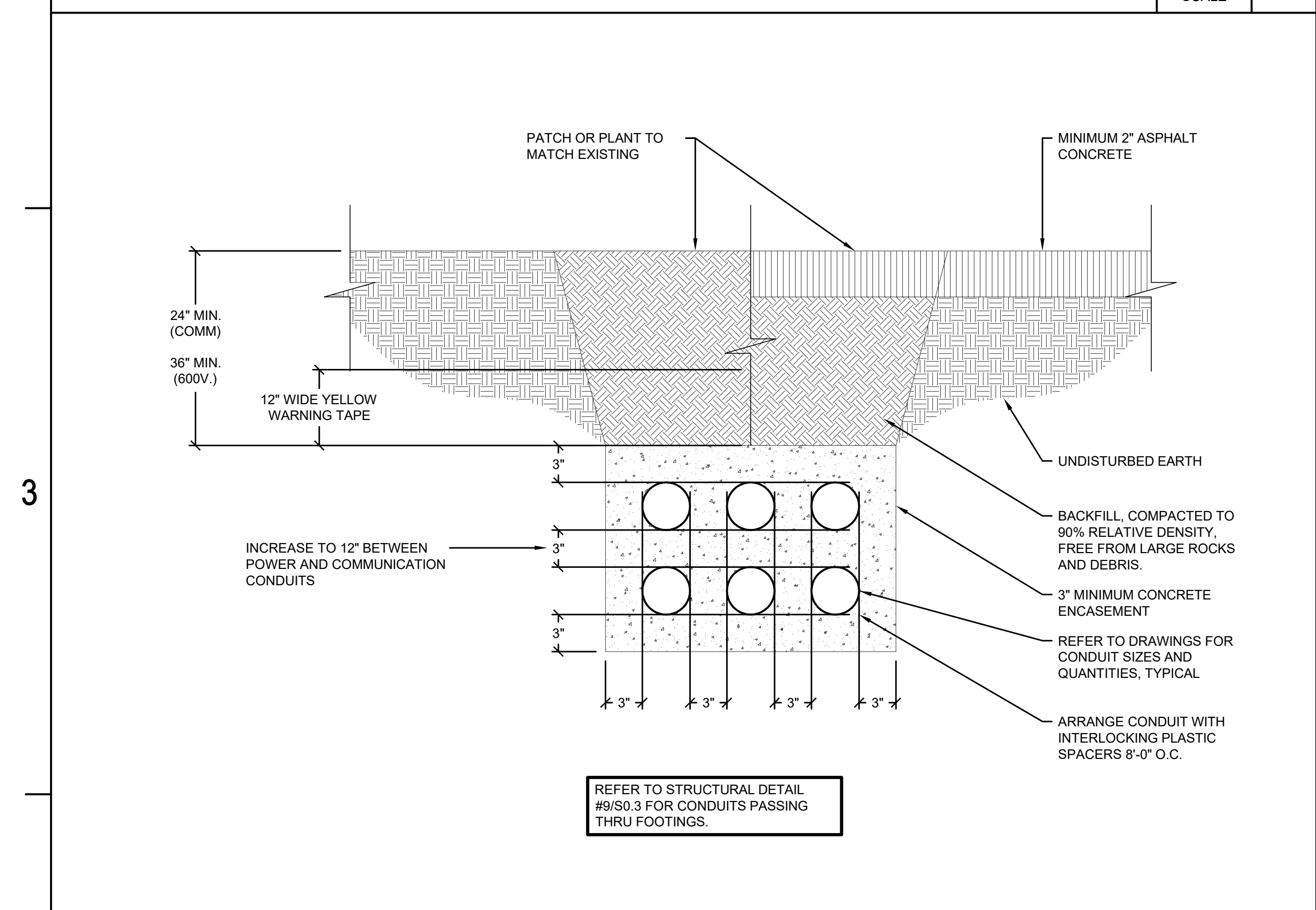
GROUND ROD DETAIL

NOT TO SCALE	2
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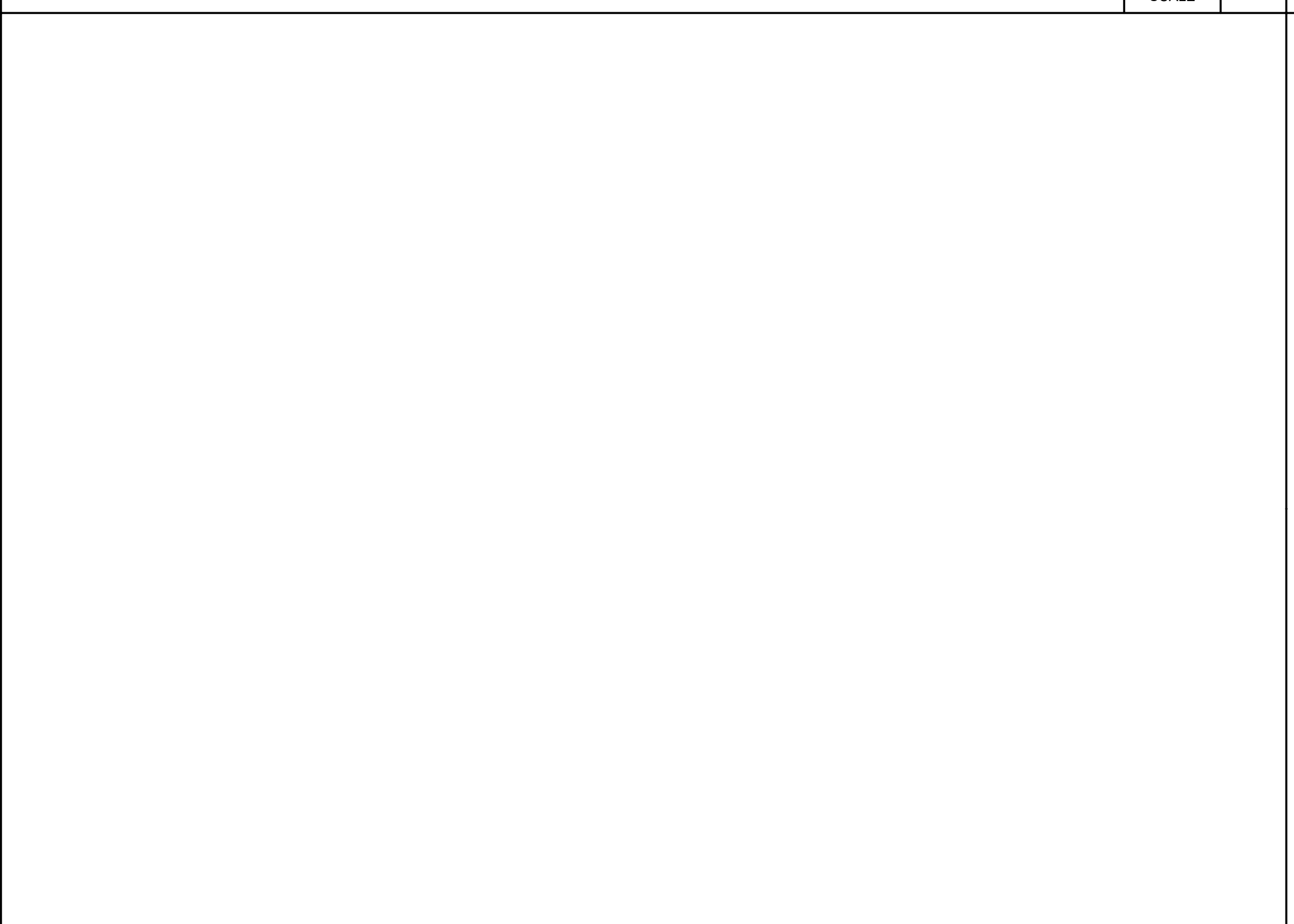
CONDUIT RISER INSTALLATION DETAIL

NOT TO SCALE	3
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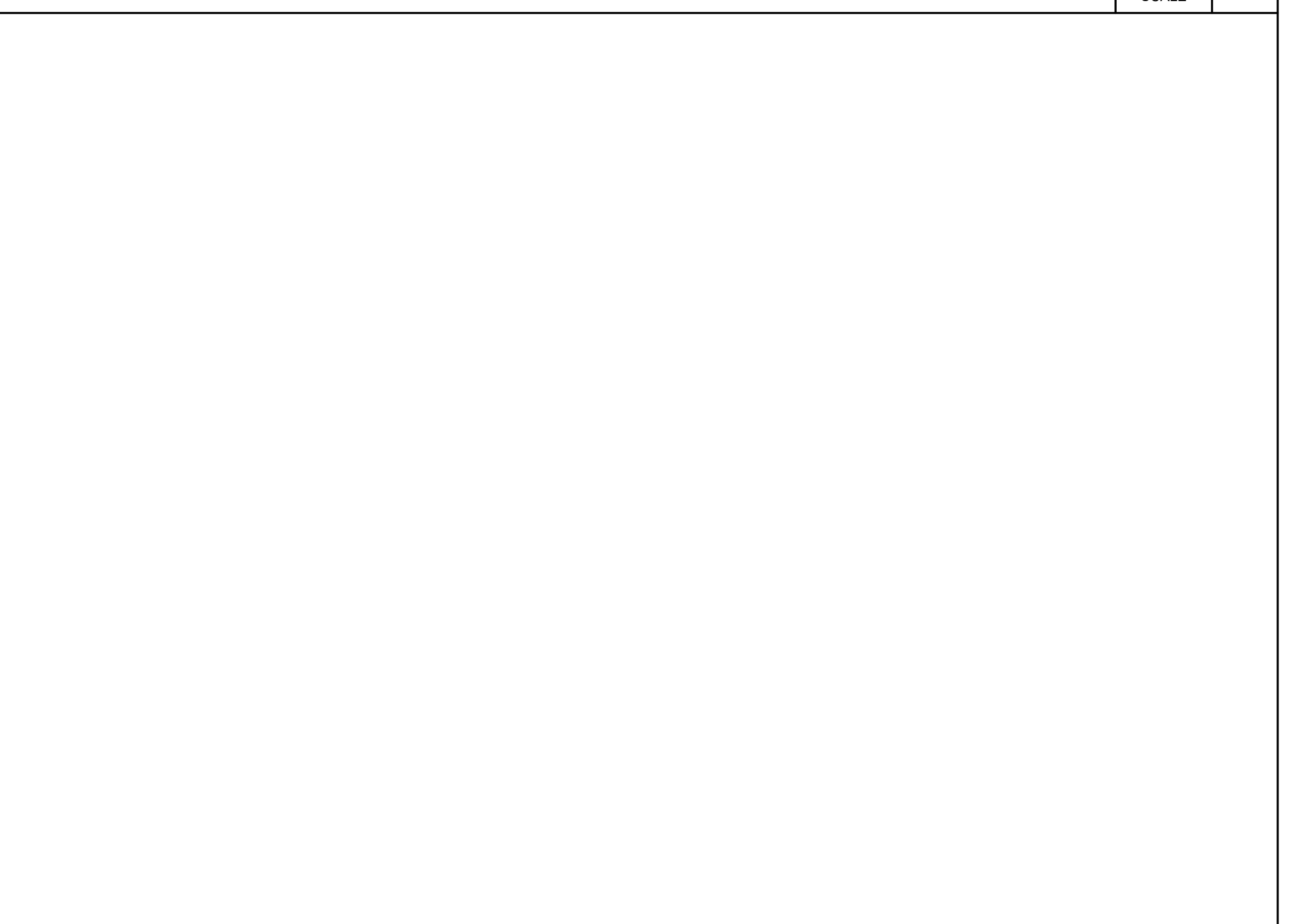


TYPICAL MULTI-CONDUIT PLACEMENT DETAIL

NOT TO SCALE	4
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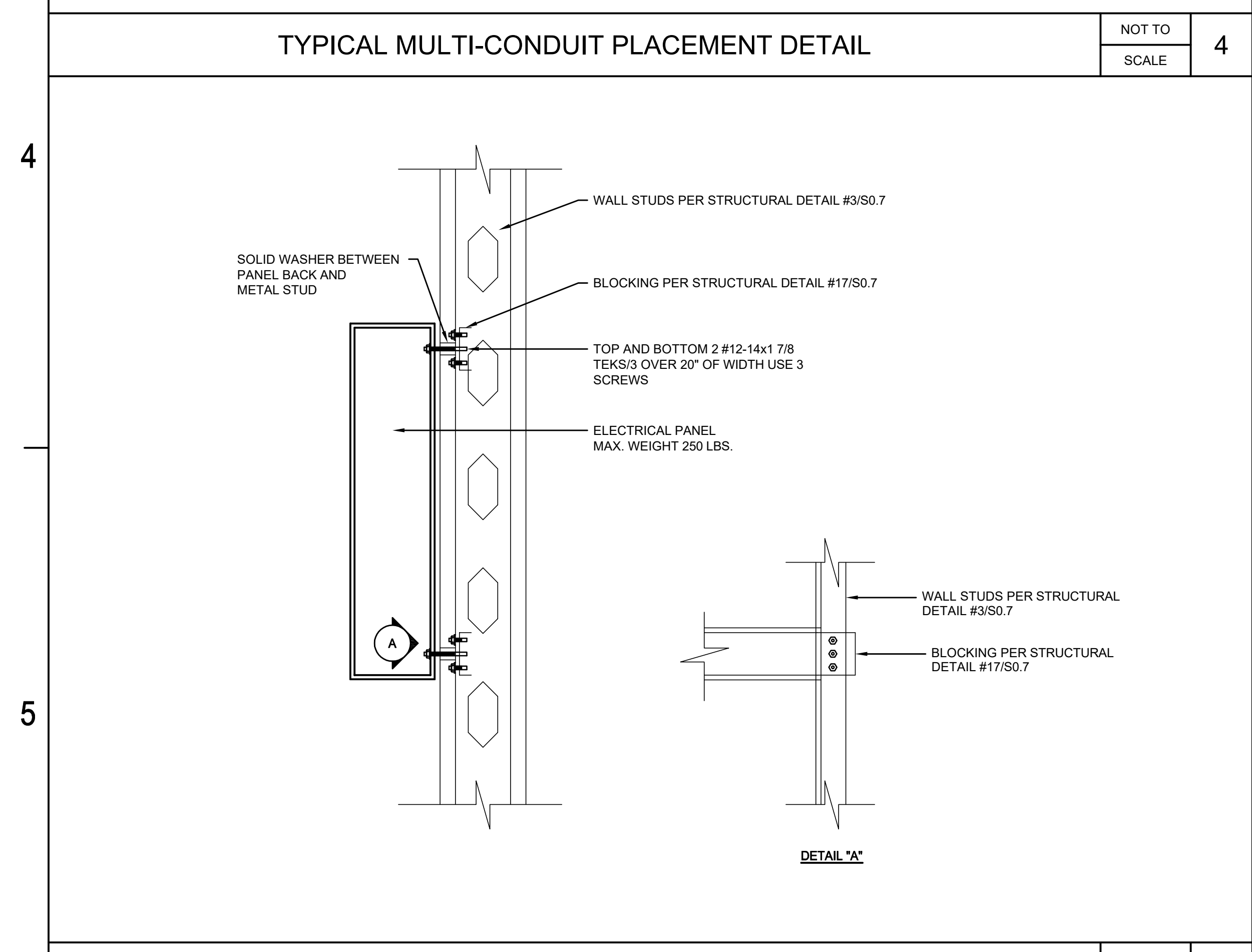


NOT TO SCALE	5
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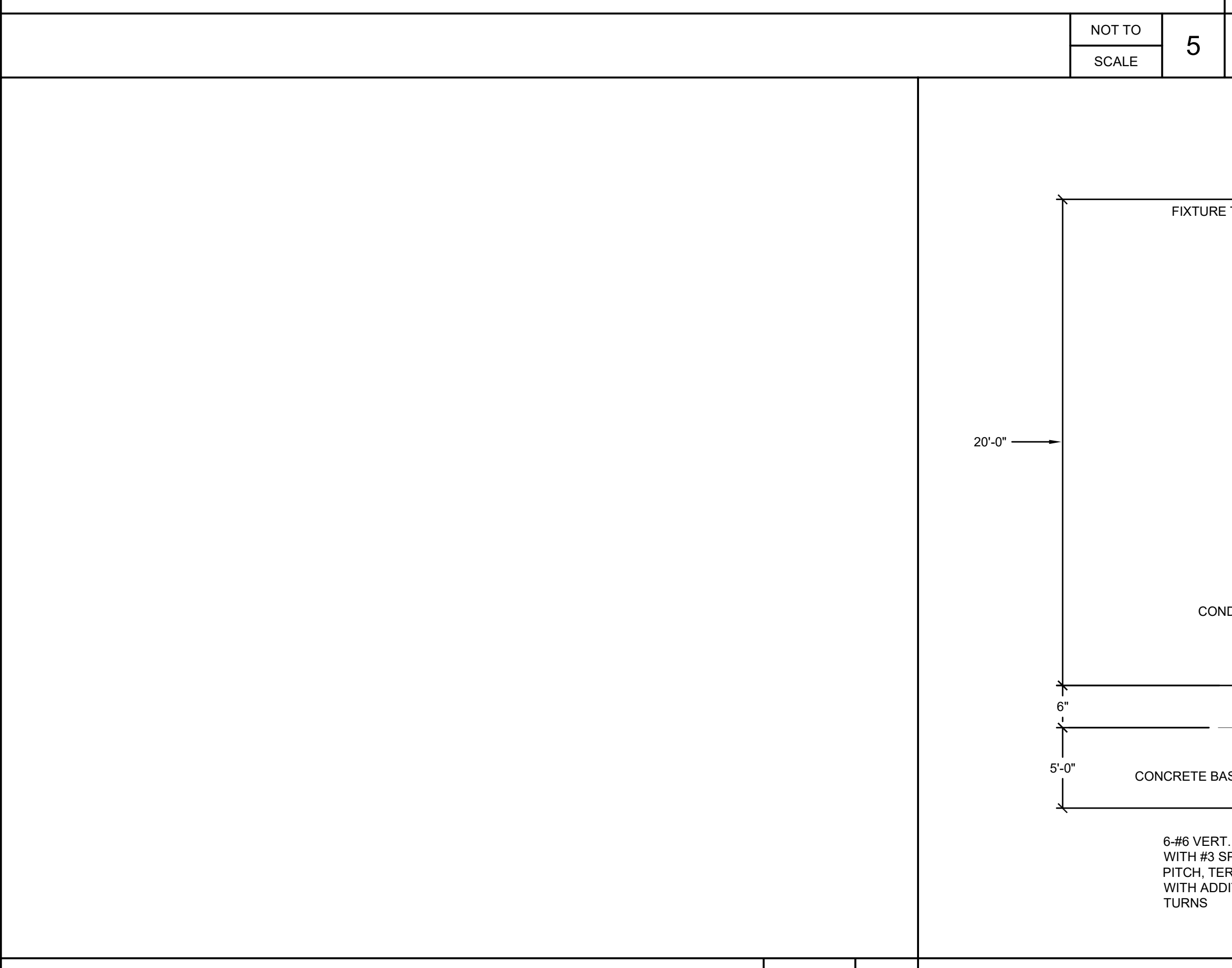
NOT USED

NOT TO SCALE	6
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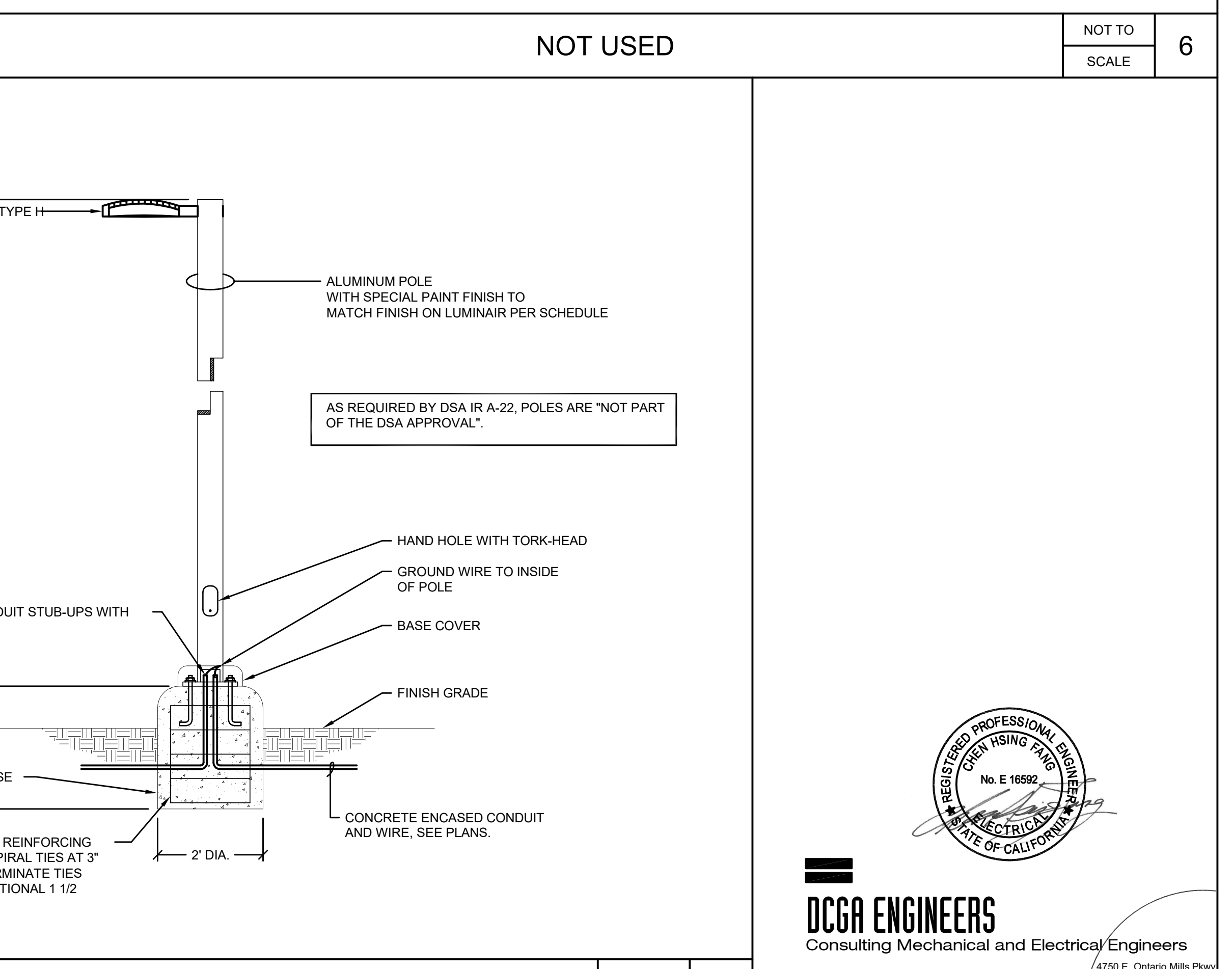
SURFACE MOUNTED PANEL/CABINET STEEL FRAMING

NOT TO SCALE	7
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NOT USED

NOT TO SCALE	8
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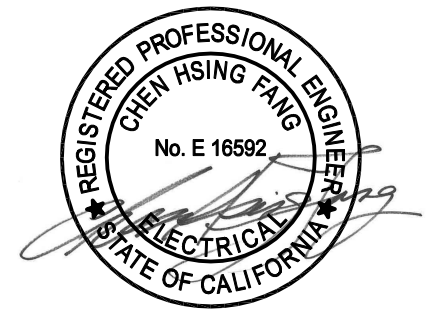
POLE MOUNTED LIGHTING FIXTURE BASE MOUNTING DETAIL

NOT TO SCALE	9
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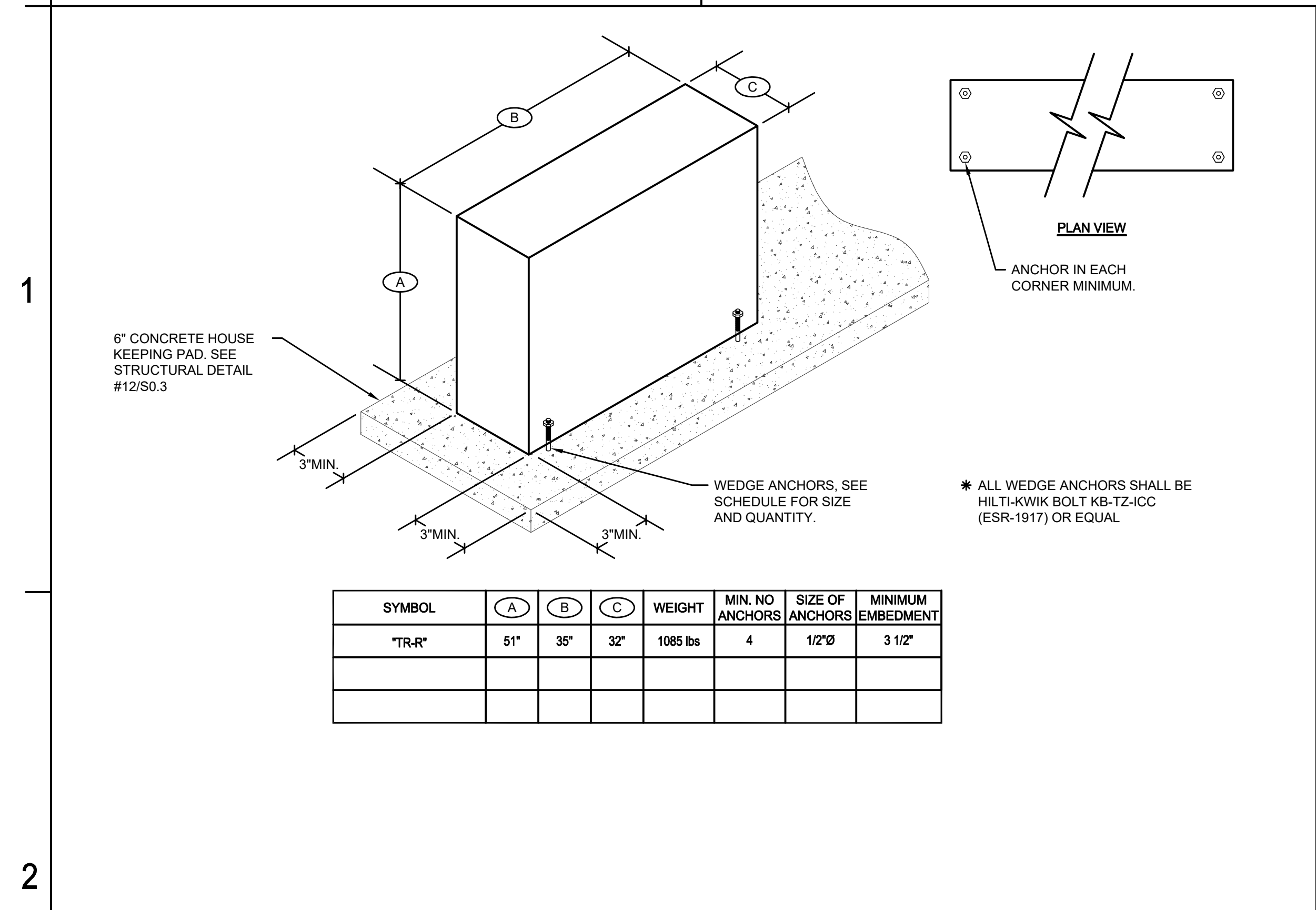
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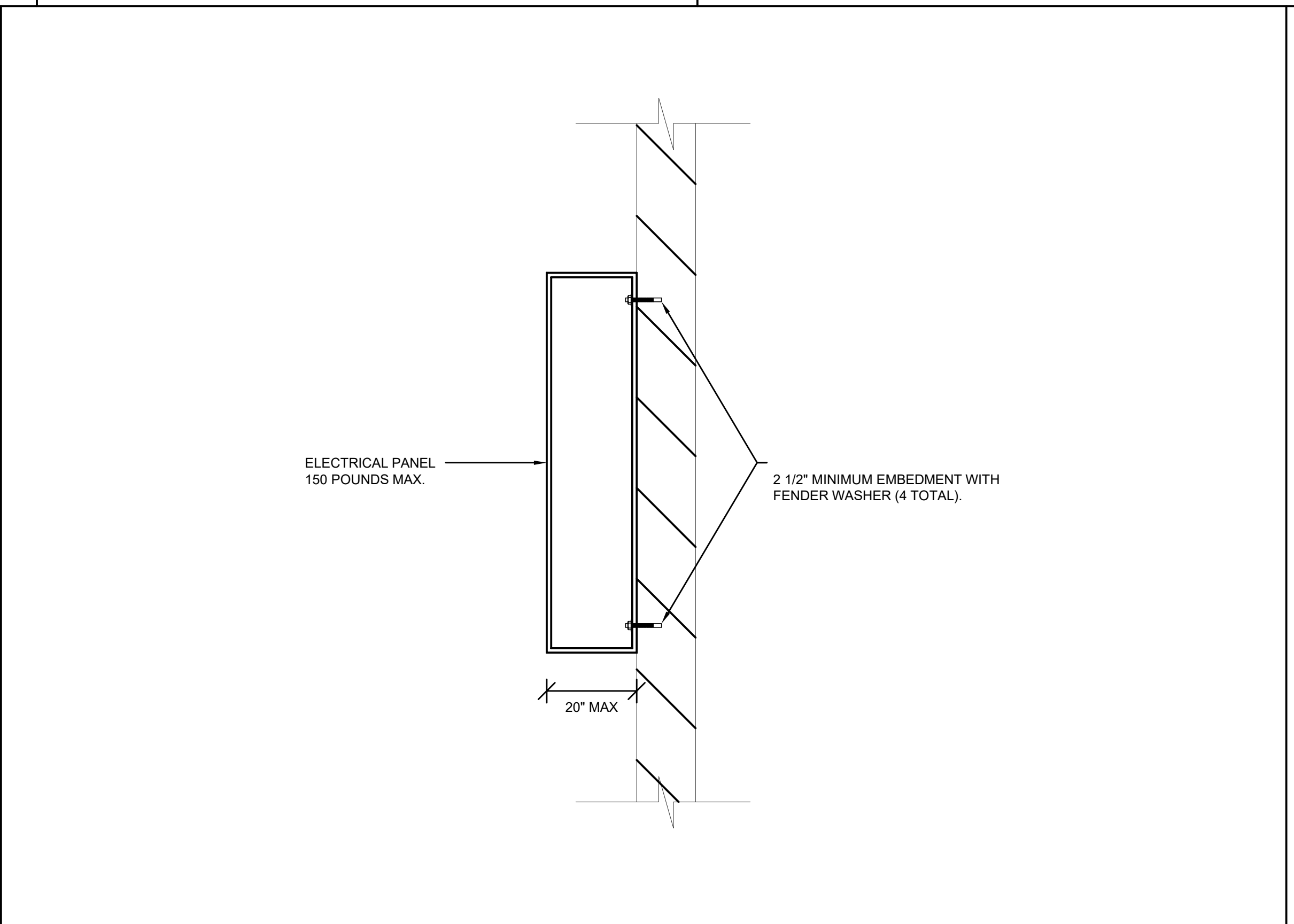
75-22616-00
 DSA AH 03-122700
 DSA FILE # 19-188
 ELECTRICAL DETAILS

E4.1

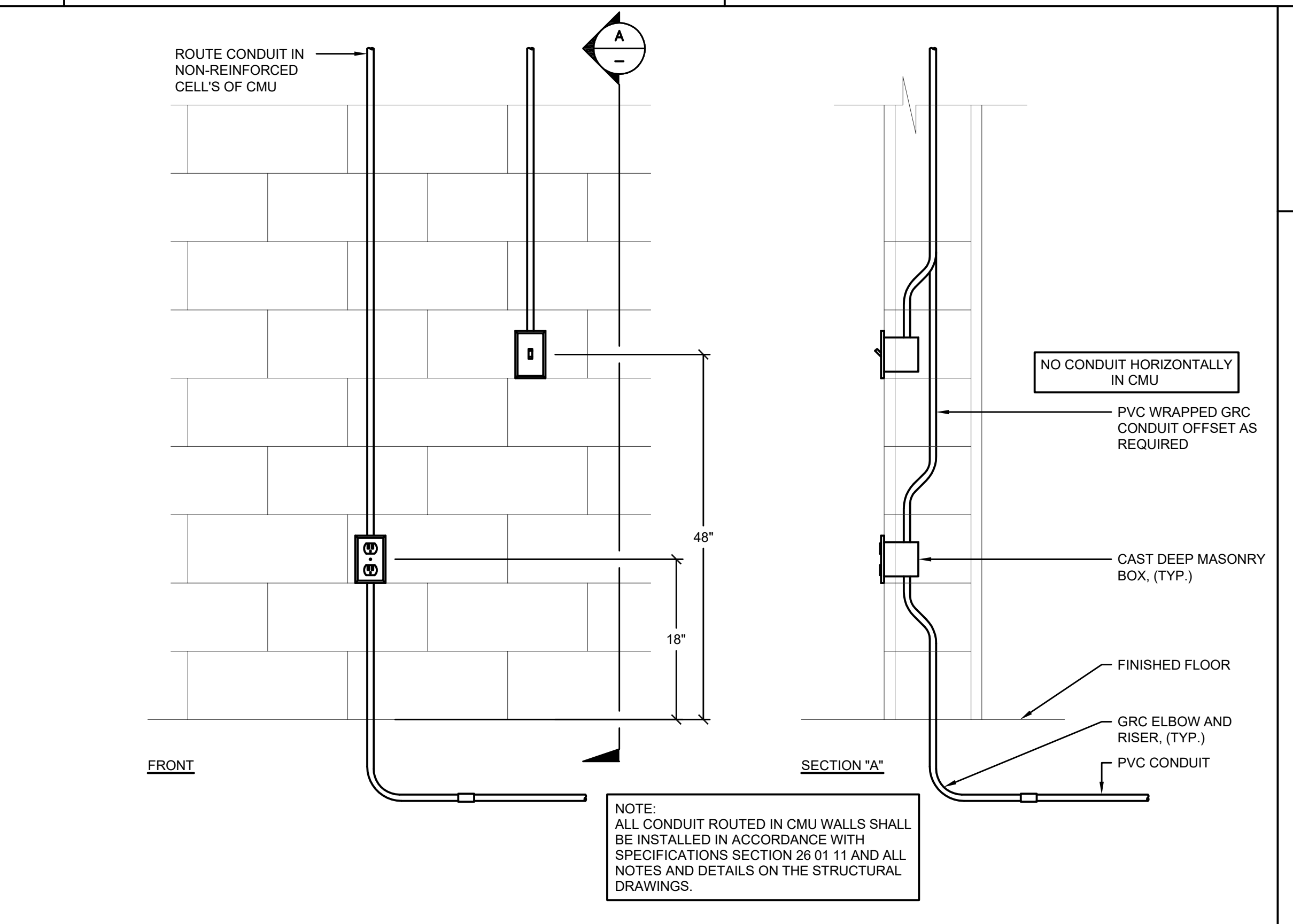


SYMBOL	A	B	C	WEIGHT	MIN. NO ANCHORS	SIZE OF ANCHORS	MINIMUM EMBEDMENT
"TR-R"	51"	35"	32"	1085 lbs	4	1/2"	3 1/2"

* ALL WEDGE ANCHORS SHALL BE HILTI KWIK BOLT KB-TZ-1CC (ESR-1917) OR EQUAL.

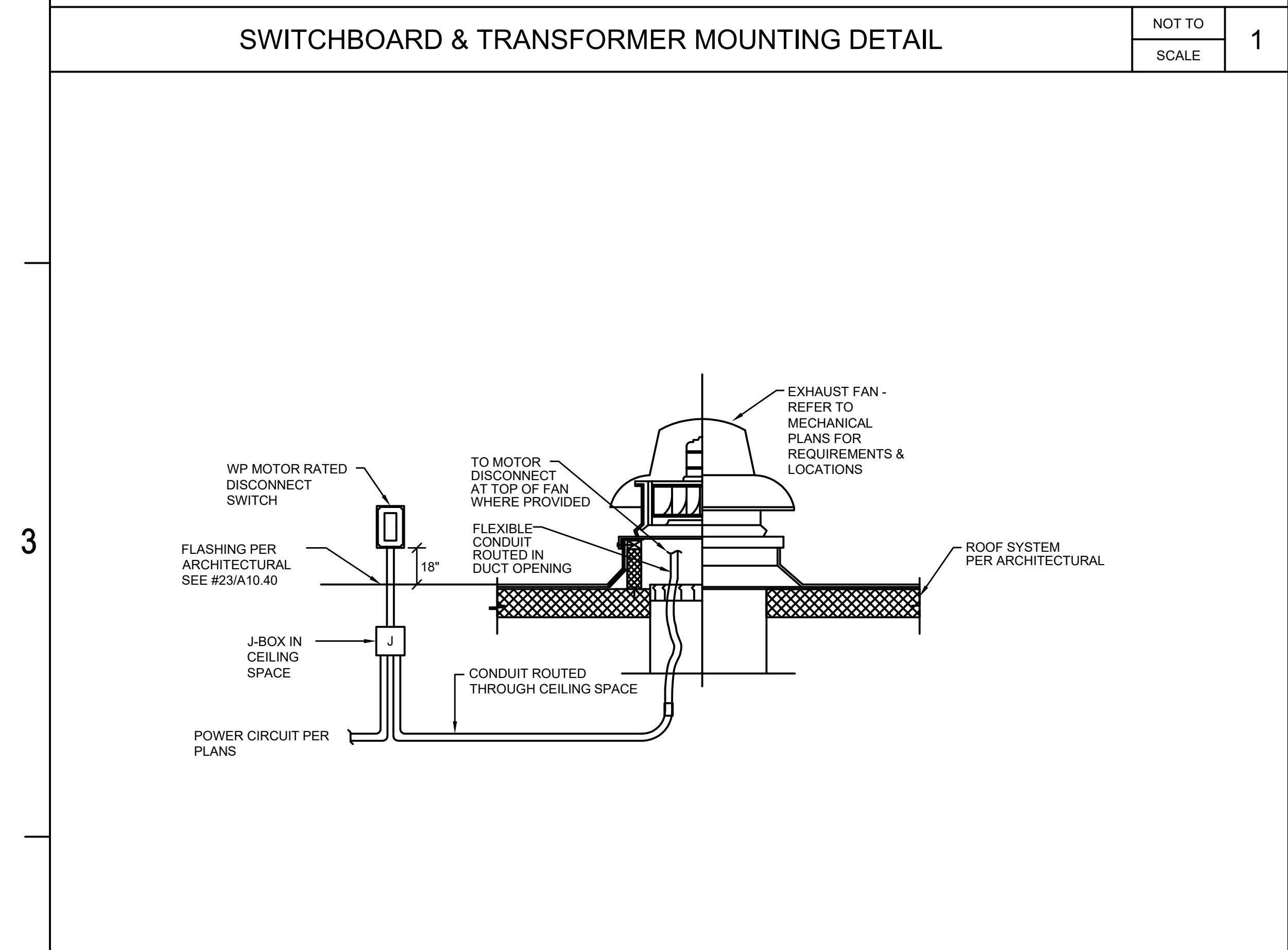


SURFACE MOUNTED PANEL @ MASONRY WALL

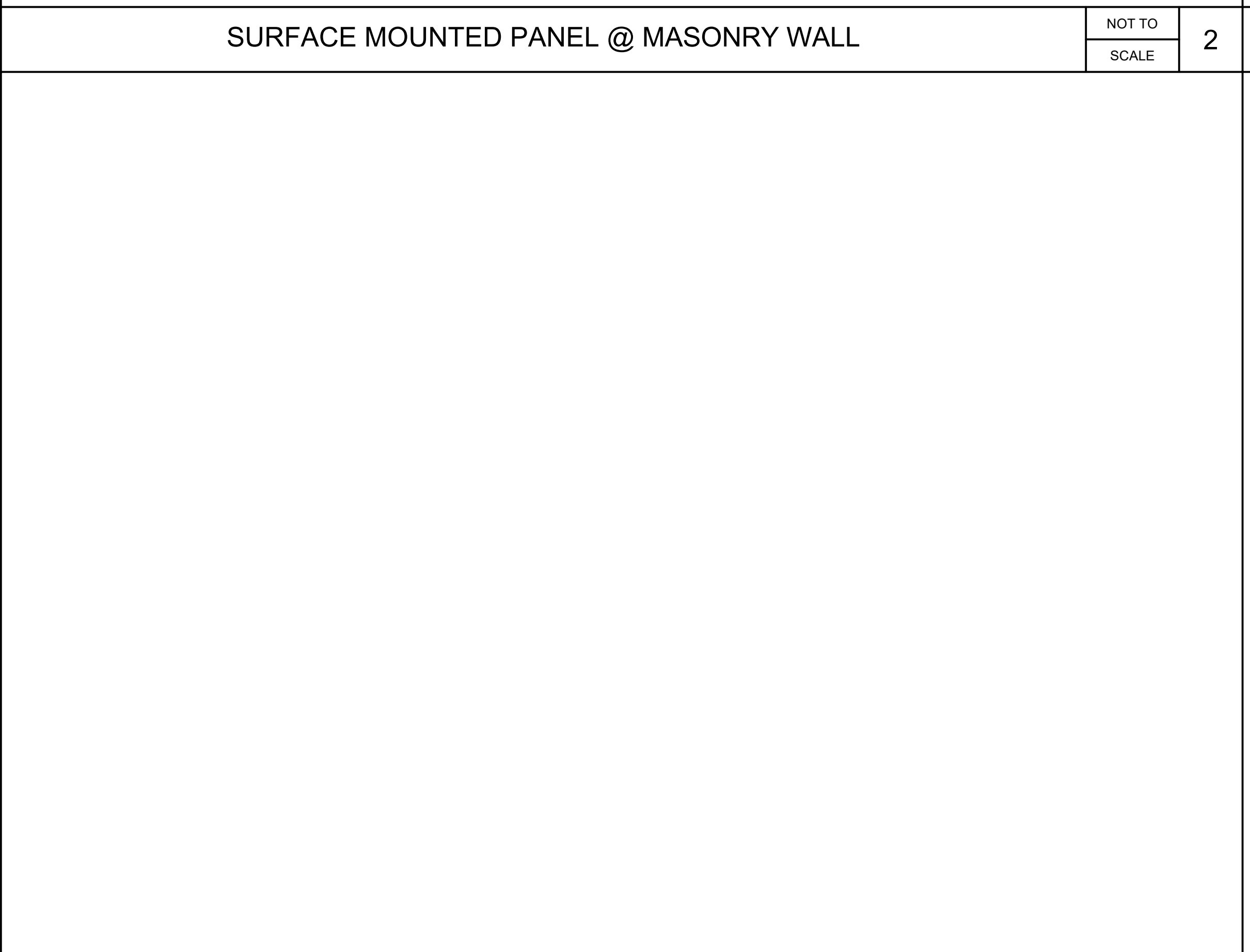


NOTE: ALL CONDUIT ROUTED IN CMU WALLS SHALL BE INSTALLED IN ACCORDANCE WITH SPECIFICATIONS SECTION 28 01 11 AND ALL NOTES AND DETAILS ON THE STRUCTURAL DRAWINGS.

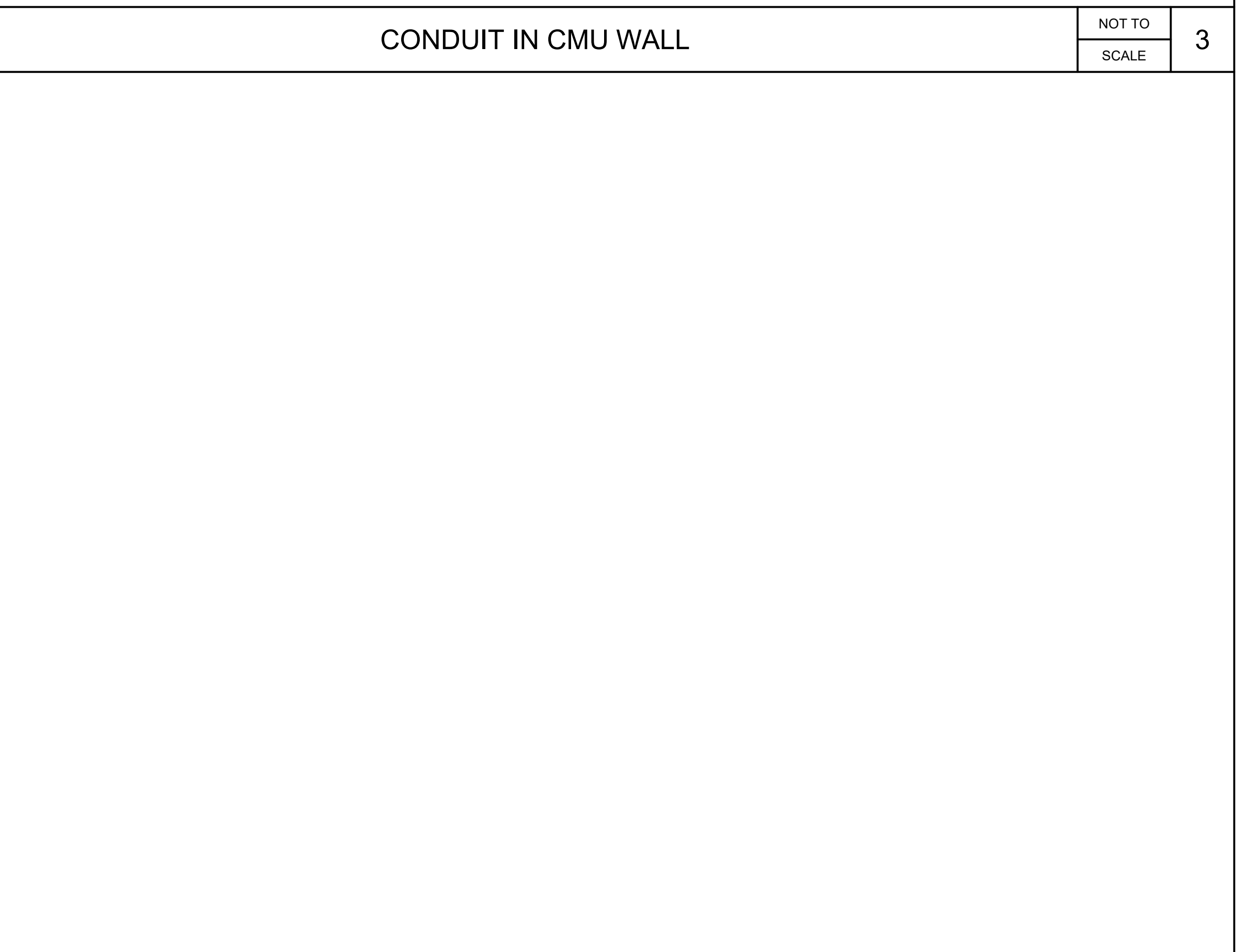
CONDUIT IN CMU WALL



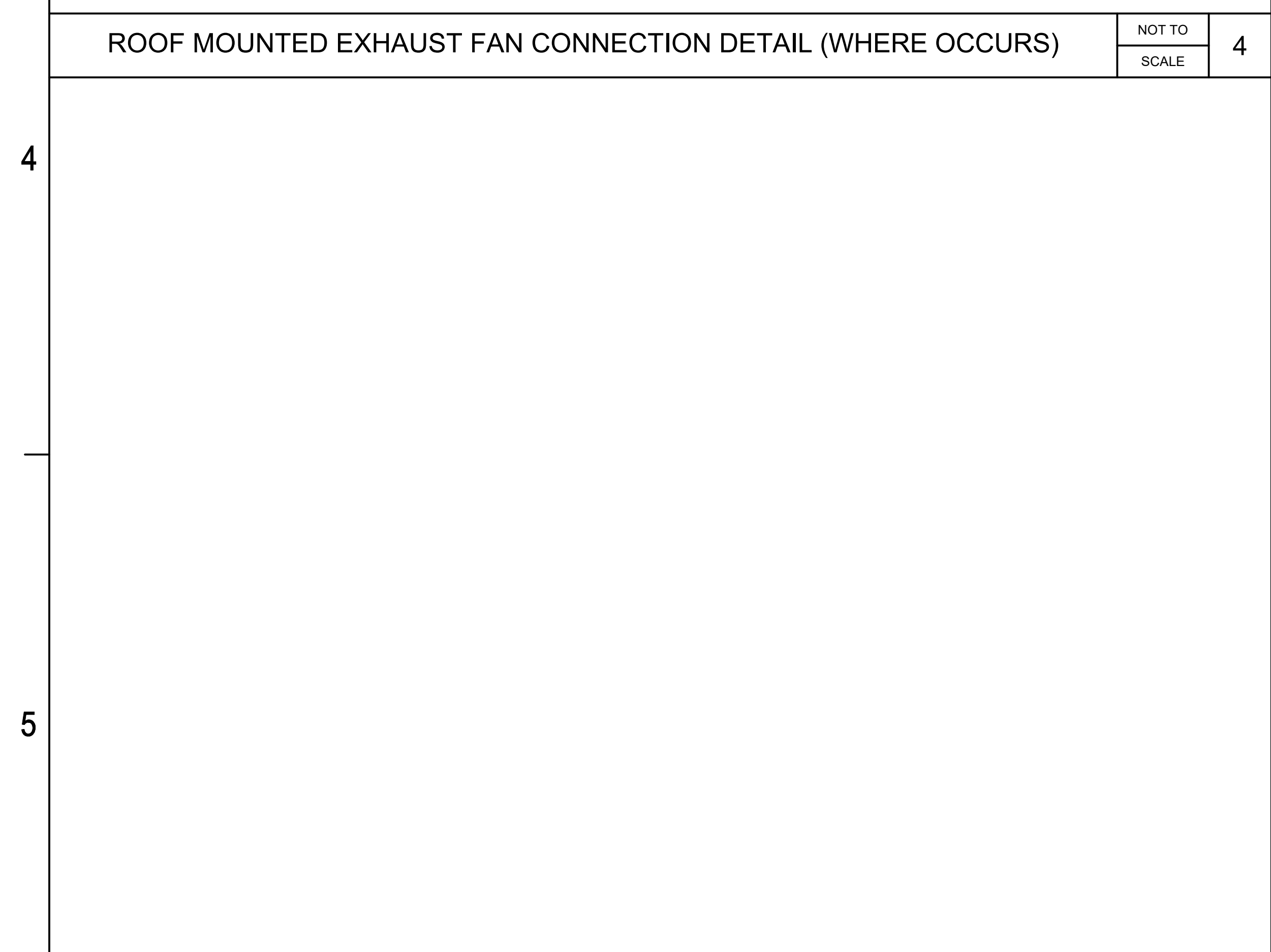
ROOF MOUNTED EXHAUST FAN CONNECTION DETAIL (WHERE OCCURS)



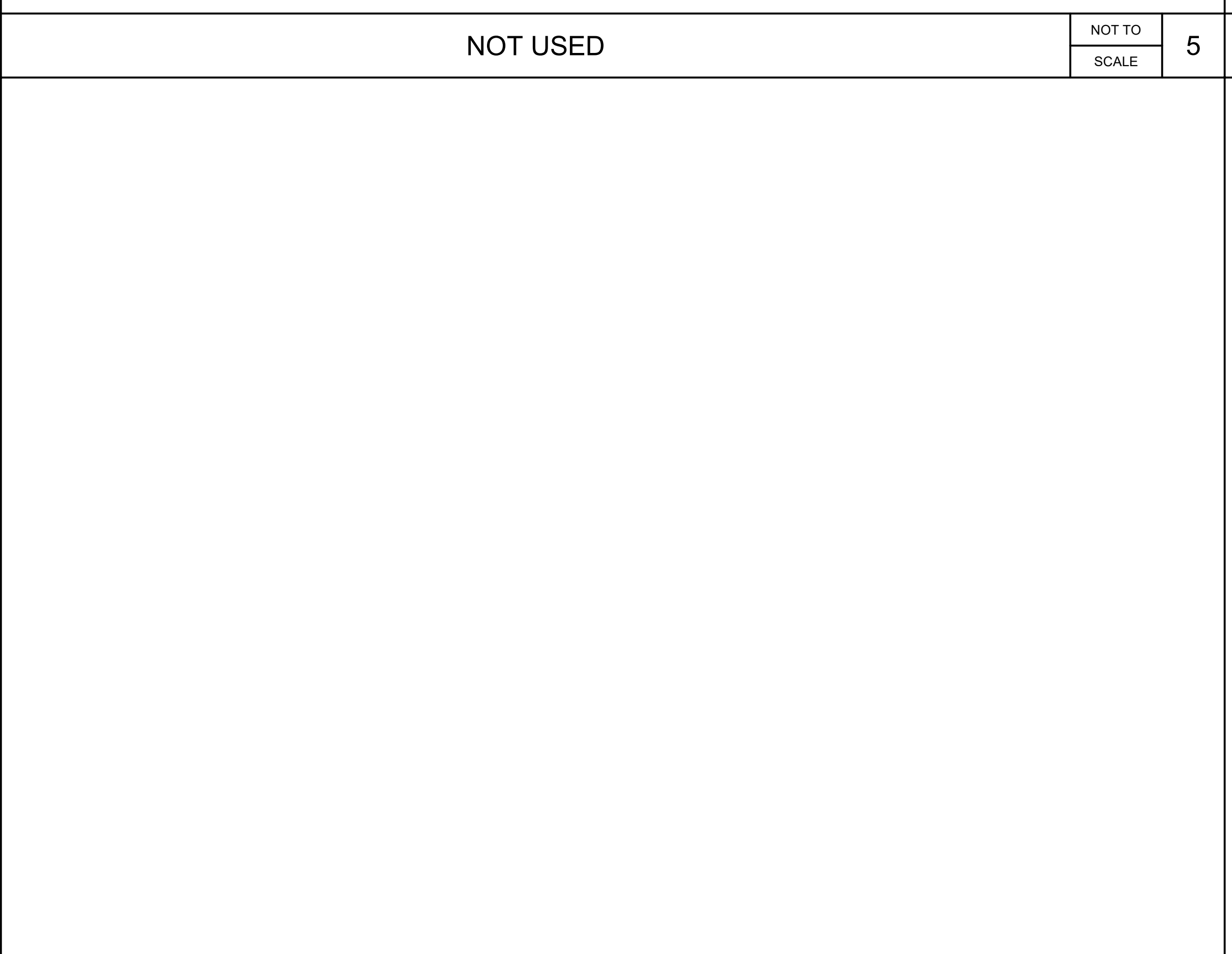
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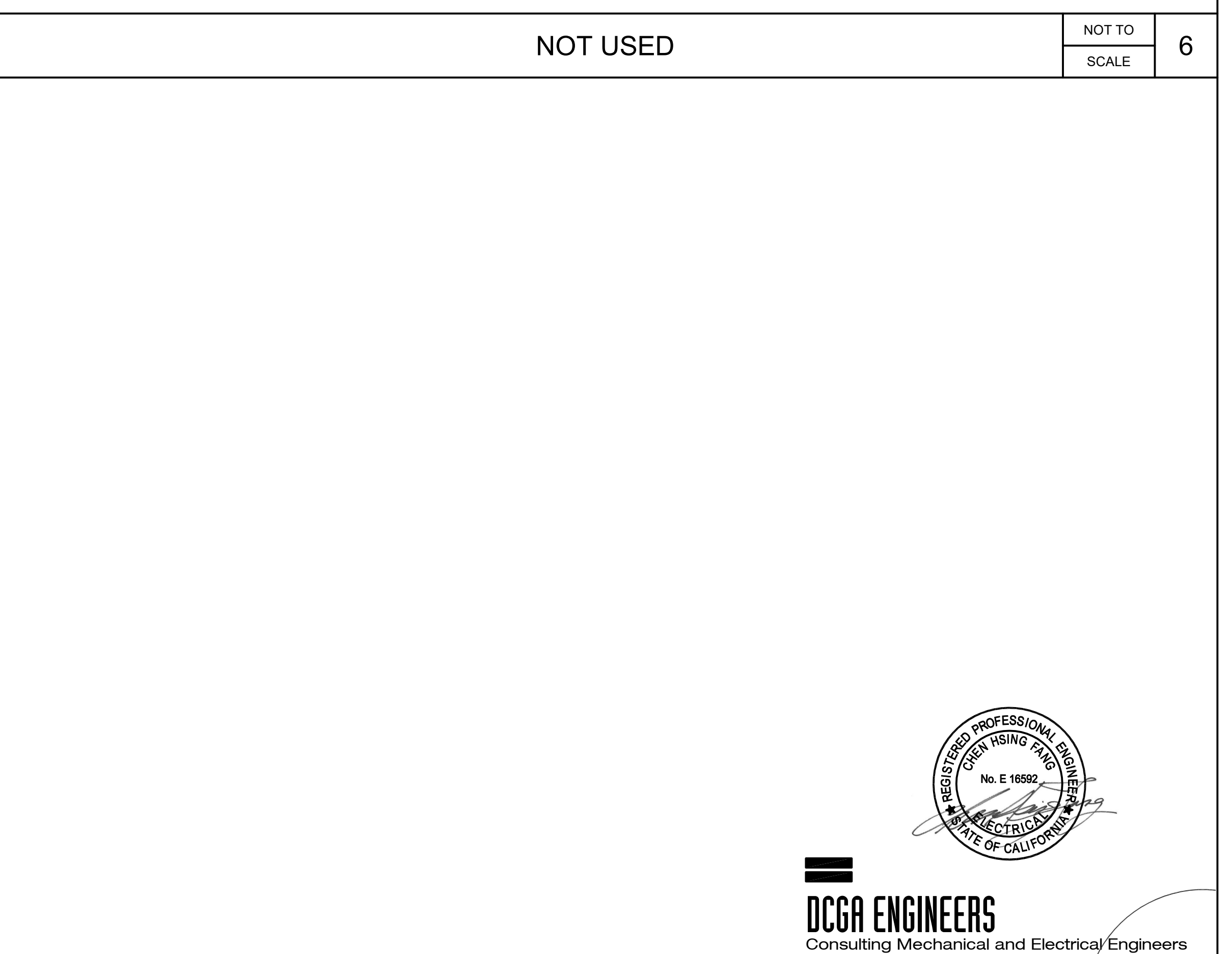
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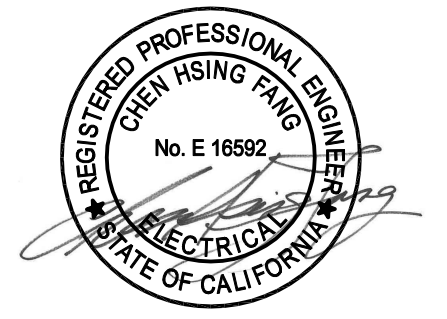
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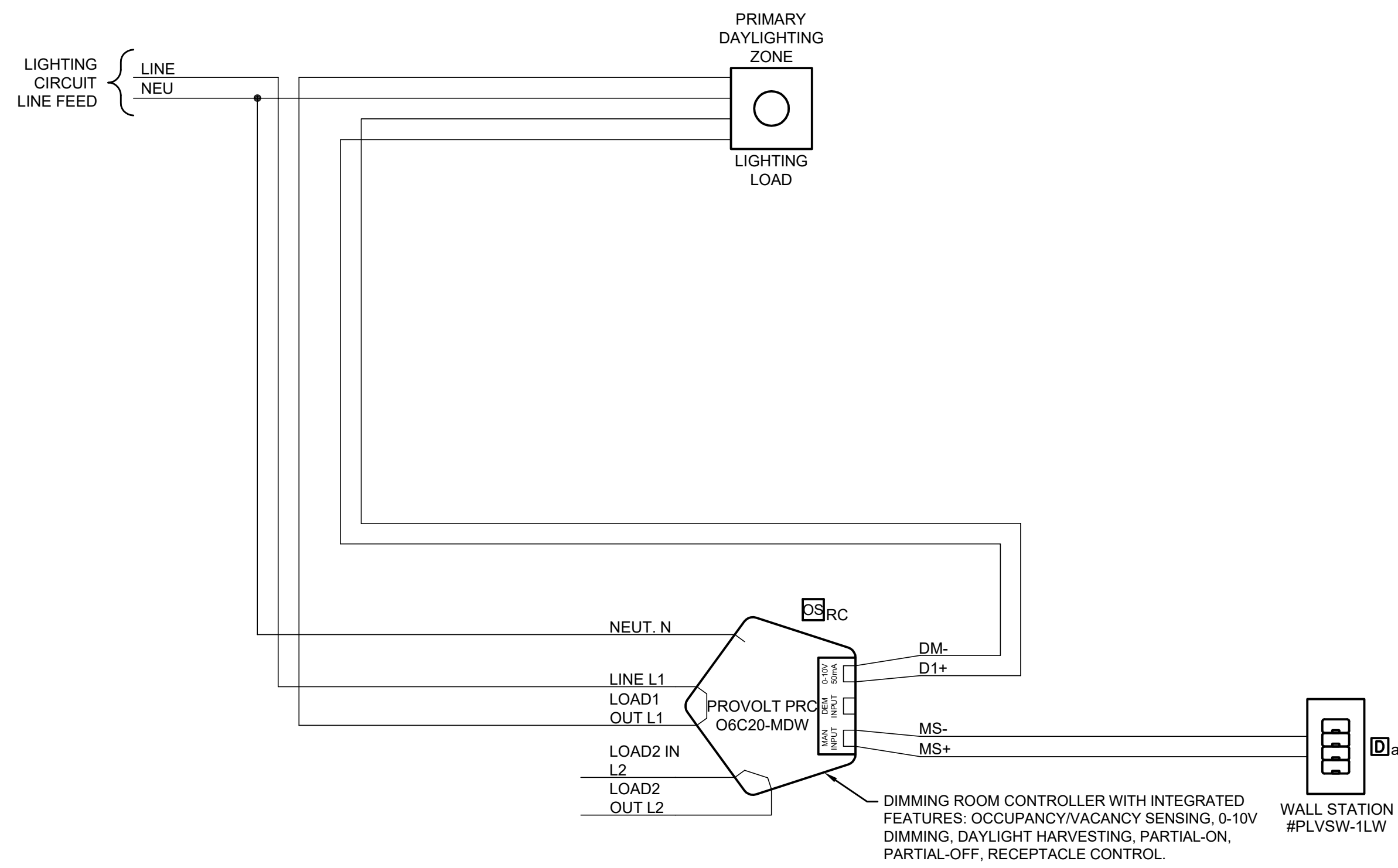


COVINA VALLEY HS SWIMMING POOL
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DSA FILE # 194-H8
ELECTRICAL DETAILS

E4.2



RESTROOM - SINGLE ZONE

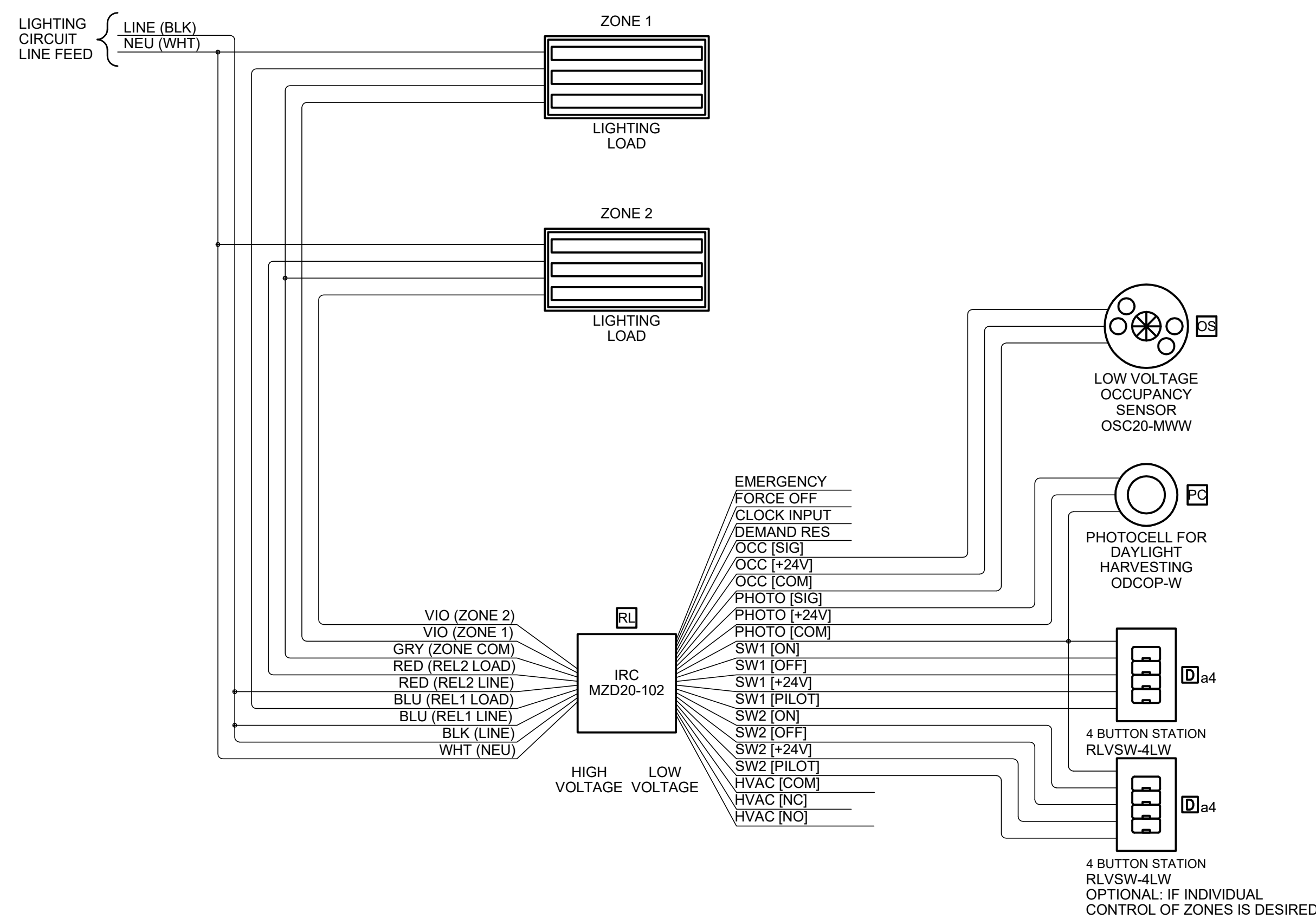
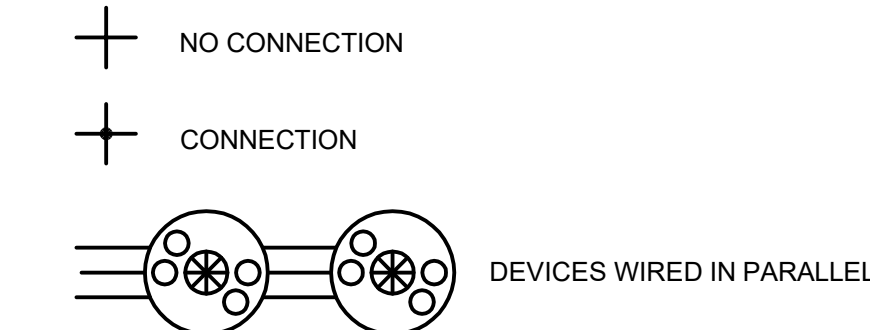
NOTES: (UNLESS OTHERWISE SPECIFIED)

- REFER TO MANUFACTURER'S DATA SHEETS AND INSTALLATION INSTRUCTIONS PRIOR TO INSTALLATION.
- LINE FEED 120/230/277 VAC, 60Hz.
- GROUND NOT SHOWN. GROUND DEVICES PER APPLICABLE NATIONAL AND LOCAL CODES AND BEST PRACTICES.
- LINE VOLTAGE LOAD NOT TO EXCEED CONTACT RATING PER DEVICE SPECIFICATIONS.
- POWER PACKS RECEIVING SEPARATE FEEDS FOR SWITCHED LOADS AND SELF POWER MUST HAVE BOTH FEEDS ON THE SAME PHASE.
- ALL LOW-VOLTAGE DEVICES CONSUME CURRENT. DEVICE POWER BUDGET IS ESTIMATED FOR THESE DETAILS - ADDITIONAL POWER SOURCES MAY BE REQUIRED. SEE PRODUCT LITERATURE FOR POWER SPECIFICATIONS.
- MAXIMUM RUN LENGTH FOR ANALOG WIRING IS 1000' @ #18 AWG.
- SENSORS WIRED IN PARALLEL WILL CAUSE LINE VOLTAGE RELAY CLOSURE WHEN OCCUPANCY IS DETECTED BY ANY UNIT.
- DEVICES IN SERIES REQUIRING CONTACT CLOSURE FROM A SINGLE DEVICE, (CLOCK INPUT, DEMAND RESPONSE, EMERGENCY, ETC.), MUST FOLLOW THESE WIRING CONVENTIONS:
 - FIRST DEVICE IN SEQUENCE PROVIDES THE +V TO THE TRIGGERING RELAY.
 - SIGNAL FROM CLOSURE ATTACHED TO ALL DEVICES IN SEQUENCE INPUT.
 - COM FROM FIRST DEVICE IN SEQUENCE ATTACHED TO COM ON ALL DEVICES IN SEQUENCE.
- APPLICATIONS REQUIRING MULTIPLE POWER PACKS/POWER SUPPLIES AT THE SAME VDC:
 - +V MUST NEVER BE TIED TOGETHER BETWEEN POWER PACKS/ POWER SUPPLIES.
 - COM / DCC MUST BE TIED TOGETHER TO ALL POWER PACKS/ POWER SUPPLIES AND ALL POWERED DEVICES.
- ULTRASONIC CEILING MOUNT SENSORS SHOULD BE LOCATED A MINIMUM OF SIX (6) FEET FROM HVAC SUPPLY/RETURN VENTS.
- TROUGH MOUNTED, PENDANT MOUNTED, AND PENDANT MOUNTED INDIRECT LIGHTING SOURCES AFFECT THE OPERATION OF LOCALLY MOUNTED SENSORS. CONTRACTOR IS RESPONSIBLE FOR ADJUSTING SENSOR LOCATIONS TO ALLOW FOR PROPER OPERATION.
- CONTRACTOR IS RESPONSIBLE FOR PROPER SENSITIVITY AND TIME DELAY SETTINGS FOR NON-ADAPTIVE PRODUCTS, FOLLOWING THE MANUFACTURER'S RECOMMENDED PLACEMENT, AND FIELD VERIFICATION OF CIRCUITS WITH RESPECT TO POWER PACK PLACEMENT.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE OPERATIONAL OPTIONS OF SENSORS AND POWER PACKS WITH THE SPECIFIC WORK REQUIREMENTS.
 - WORK RELEVANT ENERGY CODE REQUIREMENTS AFFECT CIRCUITS TO BE CONTROLLED AND THEIR CONTROL CHARACTERISTICS.
 - ONE POWER PACK IS REQUIRED FOR EACH CONTROLLED CIRCUIT.
 - REFER TO POWER PACK DATA SHEET FOR POWER OUTPUT AND INSTALLATION GUIDE FOR MAXIMUM NUMBER OF SENSORS CONNECTED TO A POWER PACK.
 - IF MULTIPLE CIRCUITS ARE TO BE CONTROLLED BY A SENSOR, AUXILIARY RELAYS MAY BE USED IN CONJUNCTION WITH A POWER PACK.
- CEILING SENSORS MOUNTED OVER DOORWAYS SHOULD BE PLACED ONE (1) FOOT INSIDE THE THRESHOLD.
- UP TO 100 MARK VII STYLE BALLASTS MAY BE CONTROLLED PER DAYLIGHTING ZONE BY MINI-Z.
- ALL RELAYS SHOWN IN DE-ENERGIZED STATE.
- INDIVIDUALLY CAP OFF UNUSED LEADS.
- ONE-LINE PARENTHESIS USE:
 - (X) - FUNCTION
 - (#) - TERMINAL
- PLUG LOAD CONTROL - COMMERCIAL RECEPTACLE PINS:
 - STANDARD DUPLEX:
 - SPLIT CONTROL (1 OUTLET) CR015-1PX, CR020-1PX, FULL CONTROL (2 OUTLETS) CR015-2PX, CR020-2PX.
 - DECORA:
 - SPLIT CONTROL (1 OUTLET) 16252-1PX, 16352-1PX, FULL CONTROL (2 OUTLETS) 16252-2PX, 16352-2PX.
- CONTROL RECEPTACLE:
 - QUANTITY PER APPLICABLE CODES.
 - RECEPTACLE MARKINGS PER APPLICABLE ENERGY CODES.

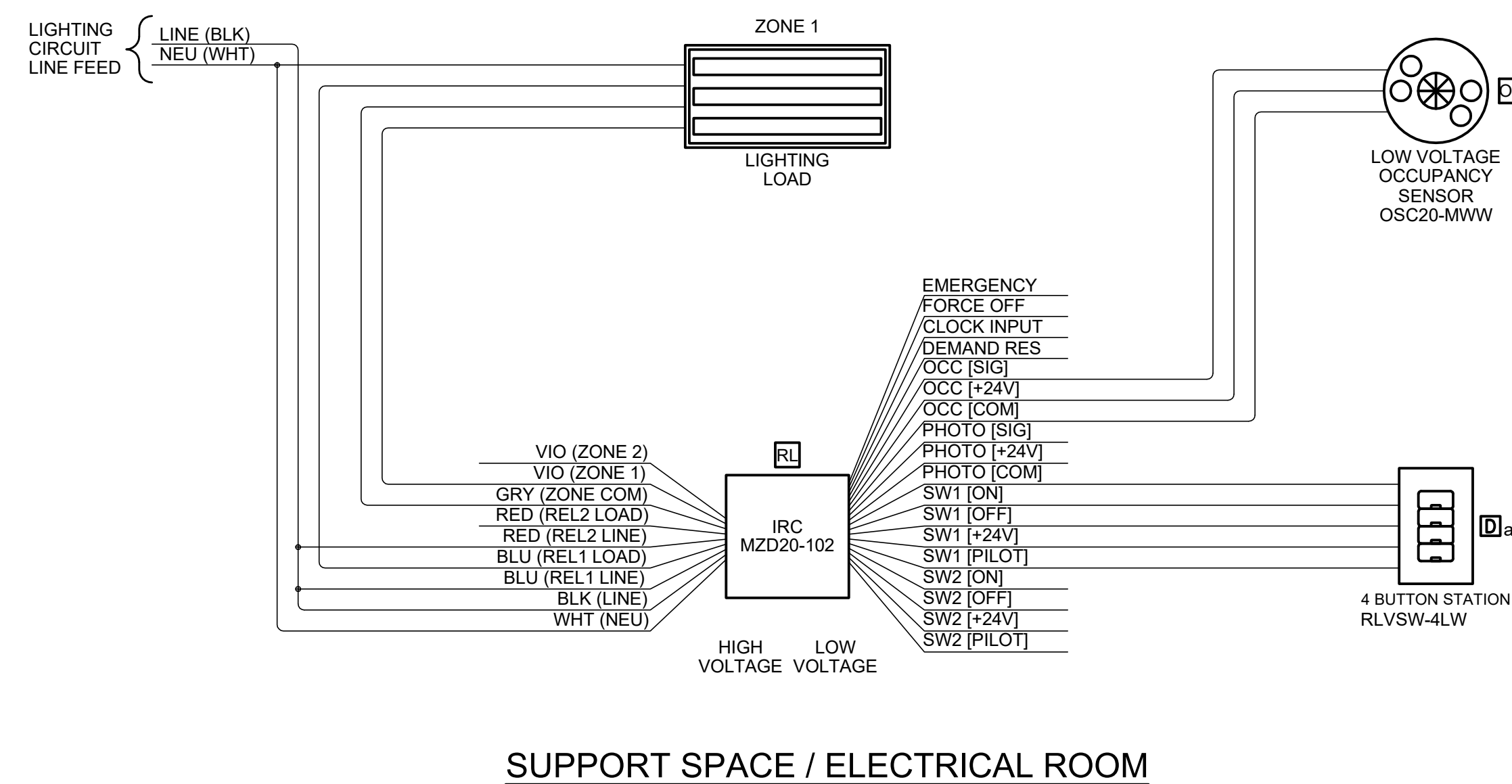
ABBREVIATIONS:

- LC LUMA-CAN
- LV LOW VOLTAGE
- HV HIGH VOLTAGE SWITCH (MAINTAINED)
- LVM LOW VOLTAGE SWITCH (MOMENTARY) EQUAL TO LEVITON: 1081 (TOGGLE) OR 56081 (DECORA)
- LVT LOW VOLTAGE SWITCH (MAINTAINED) EQUAL TO LEVITON: 12021-2 (TOGGLE) OR 56021-2 (DECORA)
- LV2 IRC LOW VOLTAGE SWITCH EQUAL TO LEVITON: RLVSWS-1LW (1 BUTTON) OR RLVSWS-2LW (2 BUTTON) OR RLVSWS-4LW (4 BUTTON)
- UON UNLESS OTHERWISE NOTED
- BLK BLACK
- WHT WHITE
- BLU BLUE
- YEL YELLOW
- ORG ORANGE
- VIO VIOLET
- BRN BROWN

SYMBOLS:



OFFICE/CONCESSION SPACE - DUAL ZONE



SUPPORT SPACE / ELECTRICAL ROOM

WALL SWITCH BUTTON ASSIGNMENTS (4 BUTTON SWITCH)		
BUTTON	ENGRAVING	ASSIGNMENT
1	ON/OFF	ALL LIGHTS "ON" OR "OFF"
2	DIM UP	RAISE LIGHT LEVELS INCREMENTALLY
3	DIM DOWN	LOWER LIGHT LEVELS INCREMENTALLY

ALL LIGHTING CONTROL COMPONENTS SHALL BE LEVITON OR EQUAL BY WATTSTOPPER OR STEINEL.

WALL SWITCH BUTTON ASSIGNMENTS (1 BUTTON SWITCH)		
BUTTON	ENGRAVING	ASSIGNMENT
1	ON/OFF	ALL LIGHTS "ON" OR "OFF"

ALL LINE VOLTAGE AND 0-10 VOLT CONDUCTORS SHALL BE ROUTED IN 3/4" CONDUIT, MINIMUM

REFER TO THE LIGHTING PLANS FOR QUANTITIES AND LOCATIONS OF ALL LIGHTING CONTROL DEVICES UNLESS NOTED OTHERWISE.



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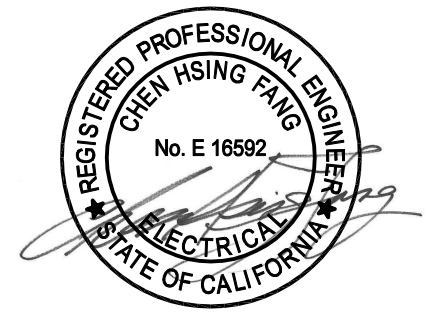
75-22616-00
DSA A# 03-122700
DSA FILE # 19-148
ELECTRICAL DETAILS

E4.3

PANEL: "R1"			BRANCH: POOL EQUIPMENT A106			NORMAL: 480/277V			CKT CODE: 1-(CONTINUOUS LOAD)													
LOCATION: POOL EQUIPMENT A106			PHASE & WIRE: "MSB"			MIN. BUS: MCS			400 AMPS													
MOUNTING: SURFACE NEMA-1			MCS			400 AMPS			4-(RECEPTACLES)													
AC RATINGS: 4000			MCS			400 AMPS			4-(NOTCHEN)													
CIRCUIT	NO	CODE	TRIP	POLE	LOAD TYPE & DESIGNATION	LOAD			LOAD TYPE & DESIGNATION			NO. OF EQUIP:										
						MISC	REC	LTG	VA	A	B	C	VA	LTG	REC	MISC	DESCRIPTION	POLE	TRIP	CODE	NO	
1	1	20	1		LTG. POOL EQUIP. BLDG.			16	590	11870					1	POOL CTR. PUMP	3	60	2	2		
3	1	20	1		LTG. RM A101-A105			17	772	11882										2	4	
5	1	20	1		LTG. EXIT BLDG.			23	670	11750											2	6
7	1	20	1		LTG. POOL DECK			6	378	378												8
9	20	1			SPARE					0												10
11	20	1			SPARE					0												12
13	20	1			SPARE					0												14
15	20	1			SPARE					0												16
17	20	1			SPARE					0												18
19	20	1			SPARE					0												20
21	20	1			SPARE					0												22
23	20	1			SPARE					0												24
25	20	1			SPARE					0												26
27	20	1			SPARE					0												28
29	20	1			SPARE					0												30
31	20	1			SPARE					0												32
33	20	1			SPARE					0												34
35	2	20	1		LCP-1					500												36
37	2	175	3		"TR-R"					15504	15504											38
39	2	-	-	-						14787	14787											40
41	2	-	-	-						14476	14476											42
TOTAL										27852	26630	28728										

PANEL: "LR1"			BRANCH: POOL EQUIPMENT A106			NORMAL: 208/120V			CKT CODE: 1-(CONTINUOUS LOAD)													
LOCATION: POOL EQUIPMENT A106			PHASE & WIRE: "R1"			MIN. BUS: MCS			400 AMPS													
MOUNTING: SURFACE NEMA-1			MCS			400 AMPS			4-(RECEPTACLES)													
AC RATINGS: 1500			MCS			400 AMPS			4-(NOTCHEN)													
CIRCUIT	NO	CODE	TRIP	POLE	LOAD TYPE & DESIGNATION	LOAD			LOAD TYPE & DESIGNATION			NO. OF EQUIP:										
						MISC	REC	LTG	VA	A	B	C	VA	LTG	REC	MISC	DESCRIPTION	POLE	TRIP	CODE	NO	
1	3	20	1		EP-R					500	2487											2
3	3	20	1		SOUND RICH SPA					500	2487											4
5	3	20	1		REFRIGERATOR A101					500	2487											6
7	3	20	1		MICROWAVE A101					1000	1321											8
9	3	20	1		RECEPT. POOL EQUIP. A106					540	852											10
11	3	20	1		RECEPT. POOL EQUIP. A106					540	852											12
13	3	20	1		RECEPT. RM A101-A105					540	1176											14
15	3	20	1		RECEPT. RM A101-A105					540	1070											16
17	3	20	1		RECEPT. RM A101-A105					540	1070											18
19	3	20	1		RECEPT. ROOF					180	1180											20
21	20	1			SPARE					1000	1000											22
23	20	1			SPARE					1000	1000											24
25	20	1			SPARE					100	100											26
27	20	1			SPARE					52	52											28
29	20	1			SPARE					0	0											30
31	20	1			SPARE					0	0											32
33	20	1			SPARE					0	0											34
35	2	20	1		"EF-R"					312	312											36
37	2	150	3		PANEL "EP"					8700	9200											38
39	2	-	-	-						8526	9326											40
41	2	-	-	-						6286	6286											42
TOTAL										16004	14787	14476										

FUTURE METERING.
 PROVIDE PROVISIONS FOR FUTURE METERING OF THE ELECTRICAL ENERGY OF EACH BRANCH CIRCUIT BY MEASURING AND REPORTING THE USAGE OF LOAD TYPES UNDER 2016 CALIFORNIA ENERGY CODE 130.5(B) AND TABLE 130.5-B. PROVIDE PROVISIONS FOR FUTURE INTEGRATION OF EATON #PX-BCM (OR APPROVED EQUAL), CTS, ETC. INTO THE PANELBOARD CONSTRUCTION.



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75-22616-00
 DSA AF 03-122700
 DSA FILE # 154-H8
 PANEL SCHEDULES

E5.1

1

2

3

4

5

Certificate of Compliance for Electrical Power Distribution. Project Name: Covina HS Pool Replacement. Project Address: 463 South Hollenbeck Ave. Includes sections for General Information, Project Scope, Compliance Results, and Exceptional Conditions.

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance. Registration Date/Time: Report Version: 2019.1.003. Registration Provider: Energysoft. Report Generated: 2022-12-08 16:28:15

Certificate of Compliance for Indoor Lighting. Project Name: Covina HS Pool Replacement. Project Address: 463 South Hollenbeck Ave. Includes sections for Compliance Results, Exceptional Conditions, and Additional Remarks.

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance. Registration Date/Time: Report Version: 2019.1.003. Registration Provider: Energysoft. Report Generated: 2022-12-08 16:28:15

Certificate of Compliance for Electrical Power Distribution (Page 2 of 8). Includes sections for Compliance Results, Exceptional Conditions, and Additional Remarks.

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance. Registration Date/Time: Report Version: 2019.1.003. Registration Provider: Energysoft. Report Generated: 2022-12-08 16:28:15

Certificate of Compliance for Electrical Power Distribution (Page 2 of 8). Includes sections for Compliance Results, Exceptional Conditions, and Additional Remarks.

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance. Registration Date/Time: Report Version: 2019.1.003. Registration Provider: Energysoft. Report Generated: 2022-12-08 16:28:15

Documentation Author's Declaration Statement. Certifies that the certificate of compliance documentation is accurate and complete. Includes section for Responsible Person's Declaration Statement.

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance. Registration Date/Time: Report Version: 2019.1.003. Registration Provider: Energysoft. Report Generated: 2022-12-08 16:28:15

Certificate of Compliance for Indoor Lighting (Page 3 of 8). Includes sections for Compliance Results, Exceptional Conditions, and Additional Remarks.

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance. Registration Date/Time: Report Version: 2019.1.003. Registration Provider: Energysoft. Report Generated: 2022-12-08 16:28:15

Certificate of Compliance for Electrical Power Distribution (Page 3 of 8). Includes sections for Compliance Results, Exceptional Conditions, and Additional Remarks.

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance. Registration Date/Time: Report Version: 2019.1.003. Registration Provider: Energysoft. Report Generated: 2022-12-08 16:28:15

Certificate of Compliance for Indoor Lighting (Page 4 of 8). Includes sections for Compliance Results, Exceptional Conditions, and Additional Remarks.

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance. Registration Date/Time: Report Version: 2019.1.003. Registration Provider: Energysoft. Report Generated: 2022-12-08 16:28:15

Certificate of Compliance for Indoor Lighting (Page 4 of 8). Includes sections for Compliance Results, Exceptional Conditions, and Additional Remarks.

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DCGA ENGINEERS Consulting Mechanical and Electrical Engineers. 4750 E. Ontario Mills Pkwy, Ontario, CA 91764. Ph: 909.987.0017. Fax: 909.985.7020.



COVINA VALLEY HS SWIMMING POOL. COVINA VALLEY UNIFIED SCHOOL DISTRICT. 463 S. HOLLENBECK AVENUE COVINA, CA 91723.

DSA SUBMITTAL SET_V2. 04/28/2023. REVISIONS.

75-22616-00. DSA #03-122700. DSA FILE # 19-H8.

TITLE 24. E6.1

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STATE OF CALIFORNIA
Indoor Lighting
NRC-414 CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
Project Name: Covina HS Pool Replacement Report Page: (Page 5 of 8)
Project Address: 463 South Hollenbeck Ave Date Prepared: 12/8/2022

I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS
This section does not apply to this project.

01	02	03	04	05	06
Area Description	Complete Building or Area Category Primary Function Area	Allowed Density (W/ft²)	Area (ft²)	Allowed Wattage (Watts)	Additional Allowance / Adjustment Area Category
Whole Building	School Building	0.65	2,523	1,640	No
		TOTALS:	2,523	1,640	See Tables L or P for detail

J. ADDITIONAL ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM
This section does not apply to this project.

K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE
This section does not apply to this project.

L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY
This section does not apply to this project.

M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LIGHTING
This section does not apply to this project.

N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED ORNAMENTAL/SPECIAL EFFECTS
This section does not apply to this project.

O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE
This section does not apply to this project.

P. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUSTMENT FACTOR (PAF))
This section does not apply to this project.

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance
Report Version: 2319.1.003
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STATE OF CALIFORNIA
Indoor Lighting
NRC-414 CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
Project Name: Covina HS Pool Replacement Report Page: (Page 4 of 8)
Project Address: 463 South Hollenbeck Ave Date Prepared: 12/8/2022

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Bryan Martinez
Signature: [Signature]
Signature Date: 2022-12-08
Company: DCGA Engineers
Address: 4750 East Ontario Mills Parkway
City/State: Ontario CA 91764
Phone: (909)987-0017
CEA/HSB Certification Identification (if applicable):

RESPONSIBLE PERSON'S DECLARATION STATEMENT
I certify the following under penalty of perjury under the laws of the State of California:

- The information provided on this Certificate of Compliance is true and correct.
- I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
- The building features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 2 of the California Code of Regulations.
- The building design features or system design features identified on the Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
- With this filing, I completed signed copy of this Certificate of Compliance that is made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: Chen Hsing Fong
Signature: [Signature]
Company: DCGA Engineers
Address: 4750 E. Ontario Mills Parkway
City/State: Ontario CA 92324
Phone: (909)987-0017

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance
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STATE OF CALIFORNIA
Outdoor Lighting
NRC-410 CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
Project Name: Covina HS Pool Replacement Report Page: (Page 3 of 7)
Project Address: 463 South Hollenbeck Ave Date Prepared: 12/8/2022

F. OUTDOOR LIGHTING FIXTURE SCHEDULE
This table includes all new and existing lighting fixtures that are being installed and any existing luminaires remaining or being moved within the spaces covered by the permit application are included in the Table below. For altered lighting systems using the Existing Power method per 1447.10, only new luminaires being installed and replacement luminaires being installed as part of the project scope are included (i.e., existing luminaires remaining or existing luminaires being moved are not included).

01	02	03	04	05	06	07	08	09	10
Name or Item Tag	Complete Luminaire Description	Watts per luminaire ¹	How is Wattage determined ²	Total number luminaires ³	Luminaire Status ⁴	Excluded per 1447.10(a)	Design Watts	Cutoff Req. > 6,200 Initial Lumen output 1447.2(b) 4	Field Inspector
F	4' LED Exterior Surface	28	Mfr Spec	12	New		336	NA; < 6200 lumens	Pass
G	6" Round LED Downlight	30	CEC Default		New		210	NA; < 6200 lumens	Pass
H	Post Top LED Head	63	CEC Default	6	New		378	NA; < 6200 lumens	Pass
Total Design Watts: 924									

¹ NOTES: Selections with a "*" require a note in the space below explaining how compliance is achieved.
² For luminaire lighting systems, EXCEPTION 1 or 1447.10.
³ FOOTNOTES: Authority Having Jurisdiction may ask for luminaire cut sheets to confirm wattage used for compliance per 1447.10(a).
⁴ For linear luminaires, wattage should be indicated as W/ft instead of Watts/Luminaire. Total linear feet should be indicated in column 05 instead of number of luminaires.
⁵ Select "New" for new luminaires in a new outdoor lighting project, or for added luminaires in an alteration. Select "Altered" for replacement luminaires in an alteration. Select "Existing to Remain" for existing luminaires within the project scope that are not being altered and are remaining. Select "Existing to Be Removed" for existing luminaires which are being removed and reinstalled as part of the project scope.
⁶ Compliance with mandatory cutoff requirements is required for luminaires with initial lumen output >= 6,200 unless exempted by 1447.2(b).

G. CUTOFF REQUIREMENTS (BUG)
This section does not apply to this project.

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance
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STATE OF CALIFORNIA
Outdoor Lighting
NRC-410 CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
Project Name: Covina HS Pool Replacement Report Page: (Page 4 of 7)
Project Address: 463 South Hollenbeck Ave Date Prepared: 12/8/2022

A. GENERAL INFORMATION

01 Project Location (City): Covina
02 Climate Zone: 3
03 Outdoor Lighting Zone per Title 24 Part 1 1447.106 or as designated by Authority Having Jurisdiction (AHJ):
 L-2: Very Low - Undeveloped Parkland L-2: Moderate - Rural Areas L-2: High - Must be reviewed by CA Energy Commission for Approval
 L-1: Low - Developed Parkland L-3: Moderately High - Urban Areas

B. PROJECT SCOPE
This table includes outdoor lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 1447.2 or 1447.10(a) for alterations.

My Project Consists of:

01	02
New Lighting System	Must Comply with Allowances from 1447.2
Altered Lighting System	Is your alteration increasing the corrected lighting load (Watts)?
<input type="checkbox"/>	<input type="radio"/> Yes <input type="radio"/> No

% of Existing Luminaires Being Altered⁴ Sum Total of Luminaires Being Added or Altered
 < 10% >= 10% and < 50% >= 50% Calculation Method

Please proceed to Table F, Outdoor Lighting Fixture Schedule to define the project's luminaires.
⁴ FOOTNOTES: % of Existing Luminaires Being Altered = (Sum Total of Luminaires Being Added or Altered / Existing Luminaires within the Scope of the Permit Application) x 100.

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Project Name: Covina HS Pool Replacement Report Page: (Page 5 of 7)
Project Address: 463 South Hollenbeck Ave Date Prepared: 12/8/2022

H. OUTDOOR LIGHTING CONTROLS
This table demonstrates compliance with control requirements for all new or altered luminaires installed as part of the permit application. For alteration projects, luminaires which are existing to remain (re-surfaced) and luminaires which are removed and reinstalled (twined only) do not need to be included in this table even if they are within the spaces covered by the permit application. When an action having a "*" is selected, the notes section of this table must be completed. The lighting controls section of the Compliance Summary Table on the first page will show "DOES NOT COMPLY" if the notes are left blank.

01	02	03	04	05	
				Field Inspector	Pass/Fail
Area Description	Shut-Off 1447.2(c)1	Auto Schedule 1447.2(c)2	Motion Sensor 1447.2(c)3		
Pool Deck	Astronomical Timer	Yes	NA: Facade, etc. >=24 ft	<input type="checkbox"/>	<input type="checkbox"/>

FIELD NOTES: Controls with a "*" require a note in the space below explaining how compliance is achieved.
¹ Not permitted by health & safety to be turned off. EXCEPTION 1 to 1447.2(c).

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CERTIFICATE OF COMPLIANCE
Project Name: Covina HS Pool Replacement Report Page: (Page 6 of 7)
Project Address: 463 South Hollenbeck Ave Date Prepared: 12/8/2022

I. LIGHTING POWER ALLOWANCE (per 1447.2)
This table includes areas using allowance calculations per 1447.2. General Hardship Allowance is per Table 1447.2(A) while "Use it or lose it" Allowances are per Table 1447.2(B). Indicate which allowances are being used to expand sections for user input. Luminaires that qualify for one of the "Use it or lose it" allowances shall not qualify for another "Use it or lose it" allowance.

01	02	03	04	05	06	07	08	09	10
General Hardship Allowance 1447.2(A)1 (See Table I)	Per Application Allowance 1447.2(B)2 (See Table J)	Sales Frontage Allowance 1447.2(B)2 (See Table K)	Ornamental Allowance 1447.2(B)2 (See Table L)	Per Specific Area Allowance 1447.2(B)2 (See Table M)	OR Existing Power Allowance 1447.2(B)2 (See Table N)	Total Allowed (Watts)	Total Actual (Watts)	07 must be >= 08	COMPLIES
1,080.73	---	---	---	---	---	1,080.73	924	COMPLIES	

Cutoff Compliance (See Table G for Details) N/A
 Controls Compliance (See Table H for Details) COMPLIES

D. EXCEPTIONAL CONDITIONS
This table auto-fills with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS
This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance
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CERTIFICATE OF COMPLIANCE
Project Name: Covina HS Pool Replacement Report Page: (Page 7 of 7)
Project Address: 463 South Hollenbeck Ave Date Prepared: 12/8/2022

J. LIGHTING ALLOWANCE: PER APPLICATION
This section does not apply to this project.

K. LIGHTING ALLOWANCE: SALES FRONTAGE
This section does not apply to this project.

L. LIGHTING ALLOWANCE: ORNAMENTAL
This section does not apply to this project.

M. LIGHTING ALLOWANCE: PER SPECIFIC AREA
This section does not apply to this project.

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance
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Project Name: Covina HS Pool Replacement Report Page: (Page 6 of 8)
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Q. RATEE POWER REDUCTION COMPLIANCE FOR ALTERATIONS
This section does not apply to this project.

R. 80% LIGHTING POWER FOR ALL ALTERATIONS - CONTROLS EXCEPTIONS
This section does not apply to this project.

S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF)
This section does not apply to this project.

T. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION
Selections have been made based on information provided in this document. If any selection have been changed by the permit applicant, an explanation should be included in Table E, Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at: https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRC/

Yes	No	Form/Title	Field Inspector
			Pass/Fail
<input type="radio"/>	<input type="radio"/>	NRC-ITI-01-E - Must be submitted for all buildings	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	NRC-ITI-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	NRC-ITI-04-E - Must be submitted for two interlocked systems serving an auditorium, a convention center, a conference room, a multipurpose room or a theater to be recognized for compliance.	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	NRC-ITI-05-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance.	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	NRC-ITI-06-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance.	<input type="checkbox"/>

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Project Name: Covina HS Pool Replacement Report Page: (Page 4 of 7)
Project Address: 463 South Hollenbeck Ave Date Prepared: 12/8/2022

C. COMPLIANCE RESULTS
Results in this table are automatically calculated from data input and calculations in Tables F through I. Note: If any cell on this table says "COMPLIES with Exceptional Conditions" refer to Table E Exceptional Conditions for guidance or an applicable Table referenced below.

Calculations of Total Allowed Lighting Power (Watts) 1447.2 or 1447.2(B)2							Compliance Results		
01	02	03	04	05	06	07	08	09	
General Hardship Allowance 1447.2(A)1 (See Table I)	Per Application Allowance 1447.2(B)2 (See Table J)	Sales Frontage Allowance 1447.2(B)2 (See Table K)	Ornamental Allowance 1447.2(B)2 (See Table L)	Per Specific Area Allowance 1447.2(B)2 (See Table M)	OR Existing Power Allowance 1447.2(B)2 (See Table N)	Total Allowed (Watts)	Total Actual (Watts)	07 must be >= 08	
1,080.73	---	---	---	---	---	1,080.73	924	COMPLIES	

Cutoff Compliance (See Table G for Details) N/A
 Controls Compliance (See Table H for Details) COMPLIES

D. EXCEPTIONAL CONDITIONS
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E. ADDITIONAL REMARKS
This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

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CERTIFICATE OF COMPLIANCE
Project Name: Covina HS Pool Replacement Report Page: (Page 4 of 7)
Project Address: 463 South Hollenbeck Ave Date Prepared: 12/8/2022

I. LIGHTING POWER ALLOWANCE (per 1447.2)
This table includes areas using allowance calculations per 1447.2. General Hardship Allowance is per Table 1447.2(A) while "Use it or lose it" Allowances are per Table 1447.2(B). Indicate which allowances are being used to expand sections for user input. Luminaires that qualify for one of the "Use it or lose it" allowances shall not qualify for another "Use it or lose it" allowance.

01	02	03	04	05	06	07	08	09	10
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1,080.73	---	---	---	---	---	1,080.73	924	COMPLIES	

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CERTIFICATE OF COMPLIANCE
Project Name: Covina HS Pool Replacement Report Page: (Page 5 of 7)
Project Address: 463 South Hollenbeck Ave Date Prepared: 12/8/2022

J. LIGHTING ALLOWANCE: PER APPLICATION
This section does not apply to this project.

K. LIGHTING ALLOWANCE: SALES FRONTAGE
This section does not apply to this project.

L. LIGHTING ALLOWANCE: ORNAMENTAL
This section does not apply to this project.

M. LIGHTING ALLOWANCE: PER SPECIFIC AREA
This section does not apply to this project.

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Project Name: Covina HS Pool Replacement Report Page: (Page 7 of 7)
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CERTIFICATE OF COMPLIANCE
Project Name: Covina HS Pool Replacement Report Page: (Page 7 of 8)
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U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION
Selections have been made based on information provided in this document. If any selection have been changed by the permit applicant, an explanation should be included in Table E, Additional Remarks. These documents must be provided to the building inspector during construction and any with a "*" in the form name must be completed through an Acceptance Test Technician Certification Provider (ATCP). For more information visit: http://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRC/

Yes	No	Form/Title	Field Inspector
			Pass/Fail
<input type="radio"/>	<input type="radio"/>	NRC-A-IT-01-A - Must be submitted for occupancy sensors and automatic time switch controls.	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	NRC-A-IT-03-A - Must be submitted for automatic daylight controls.	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	NRC-A-IT-04-A - Must be submitted for demand responsive lighting controls.	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	NRC-A-IT-05-A - Must be submitted for institutional tuning power adjustment factor (PAF).	<input type="checkbox"/>

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance
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1,080.73	---	---	---	---	---	1,080.73	924	COMPLIES	

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NRC-410 CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
Project Name: Covina HS Pool Replacement Report Page: (Page 4 of 7)
Project Address: 463 South Hollenbeck Ave Date Prepared: 12/8/2022

J. LIGHTING ALLOWANCE: PER APPLICATION
This section does not apply to this project.

K. LIGHTING ALLOWANCE: SALES FRONTAGE
This section does not apply to this project.

L. LIGHTING ALLOWANCE: ORNAMENTAL
This section does not apply to this project.

M. LIGHTING ALLOWANCE: PER SPECIFIC AREA
This section does not apply to this project.

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance
Report Version: 2319.1.003
Schema Version: cv 20200601
Registration Date/Time: Report Generated: 2022-12-08 16:26:15
Registration Provider: Energysoft

STATE OF CALIFORNIA
Outdoor Lighting
NRC-410 CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
Project Name: Covina HS Pool Replacement Report Page: (Page 5 of 7)
Project Address: 463 South Hollenbeck Ave Date Prepared: 12/8/2022

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CERTIFICATE OF COMPLIANCE
Project Name: Covina HS Pool Replacement Report Page: (Page 7 of 7)
Project Address: 463 South Hollenbeck Ave Date Prepared: 12/8/2022

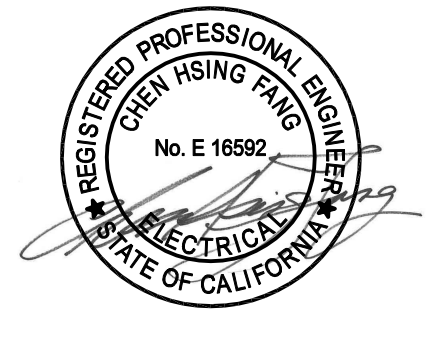
J. LIGHTING ALLOWANCE: PER APPLICATION
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4
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STATE OF CALIFORNIA
Outdoor Lighting
NRCCLD-4

CALIFORNIA ENERGY COMMISSION
NRCCLD-4
Project Name: Covina HS Pool Replacement Report Page: (Page 5 of 7)
Project Address: 463 South Hollenbeck Ave Date Prepared: 1/26/2023

N. EXISTING CONDITIONS POWER ALLOWANCE (alterations only)
This section does not apply to this project.

O. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION
Selections have been made based on information provided in this document. If any selection have been changed by permit applicant, an explanation should be included in Table E.
Additional Remarks: These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRC/

Yes	No	Form/Title	Field Inspector	
			Pass	Fail
<input checked="" type="checkbox"/>	<input type="checkbox"/>	NRC-LTO-01-E - Must be submitted for all buildings	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	NRC-LTO-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.	<input type="checkbox"/>	<input type="checkbox"/>

P. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE
Selections have been made based on information provided in this document. If any selection have been changed by permit applicant, an explanation should be included in Table E.
Additional Remarks: These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: <https://www.energy.ca.gov/title24/attcc/providers.html>

Yes	No	Form/Title	Field Inspector	
			Pass	Fail
<input checked="" type="checkbox"/>	<input type="checkbox"/>	NRCA-LTO-02-A - Must be submitted for all outdoor lighting controls except for alterations where controls are added to c-20 luminaires.	<input type="checkbox"/>	<input type="checkbox"/>

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance
Registration Date/Time: Report Version: 2319.1.003
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Report Generated: 2022-12-08 16:26:15

STATE OF CALIFORNIA
Outdoor Lighting
NRCCLD-4

CALIFORNIA ENERGY COMMISSION
NRCCLD-4
Project Name: Covina HS Pool Replacement Report Page: (Page 7 of 7)
Project Address: 463 South Hollenbeck Ave Date Prepared: 1/26/2023

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
I certify that this Certificate of Compliance documentation is accurate and complete.

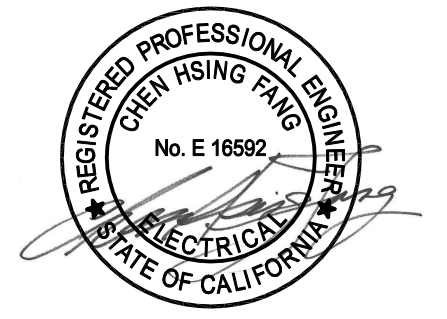
Documentation Author Name: Bryan Martinez
Documentation Author Signature: 
Registration Date: 2022-11-08
Company: DCGA Engineers
Address: 4750 East Ontario Mills Parkway
City/State/Zip: Ontario, CA 91764
Phone: 909987-0017

RESPONSIBLE PERSON'S DECLARATION STATEMENT
I certify the following under penalty of perjury under the laws of the State of California:

- The information provided on this Certificate of Compliance is true and correct.
- I am eligible under Division 1 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance conform to the requirements of this 24, Part 1 and Part 6 of the California Code of Regulations.
- The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of this 24, Part 1 and Part 6 of the California Code of Regulations.
- The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
- I warrant that a completed signed copy of this Certificate of Compliance shall be made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: Chen Heung Fahg
Responsible Designer Signature: 
Date Signed: 2022-11-08
Company: DCGA Engineers
Address: 4750 E. Ontario Mills Parkway
City/State/Zip: Ontario, CA 91764
Phone: 909987-0017

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance
Registration Date/Time: Report Version: 2319.1.003
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DCGA ENGINEERS
Consulting Mechanical and Electrical Engineers
4750 E. Ontario Mills Pkwy
Ontario, CA 91764
Ph: 909.987.0017
Fax: 909.986.7222



COVINA VALLEY HS SWIMMING POOL
COVINA VALLEY UNIFIED SCHOOL DISTRICT
463 S. HOLLENBECK AVENUE COVINA, CA 91723

DSA SUBMITTAL SET_V2
04/28/2023
REVISIONS

75-22616-00
DSA AF 03-122700
DSA FILE # 194-H8
TITLE 24

E6.3

MECHANICAL SYMBOLS		
	CD	CEILING DIFFUSER - SUPPLY
	SAD	SUPPLY AIR DUCT - RISER
	SAD	SUPPLY AIR DUCT - DROP
	RAG	RETURN AIR GRILLE
	RAD	RETURN AIR DUCT - RISER
	RAD	RETURN AIR DUCT - DROP
	EAG	EXHAUST AIR GRILLE
	EAD	EXHAUST AIR DUCT - RISER
	EAD	EXHAUST AIR DUCT - DROP
	SWS	SIDE WALL SUPPLY GRILLE
	SWR	SIDE WALL RETURN/EXHAUST GRILLE
		DUCT OFFSET UP
		DOUBLE WALL DUCT
		DUCT OR EQUIPMENT TO BE REMOVED
		EXISTING DUCT TO REMAIN
		DUCT
		DUCT TRANSITION
	MVD	MANUAL VOLUME DAMPER
	BDD	BACKDRAFT DAMPER
	AFD	AUTOMATIC FIRE DAMPER
	CSFD	COMBINATION SMOKE/FIRE DAMPER
	CHWS	CHILLED WATER SUPPLY PIPE
	CHWR	CHILLED WATER RETURN PIPE
	HWS	HOT WATER SUPPLY PIPE
	HWR	HOT WATER RETURN PIPE
	CWS	CONDENSER WATER SUPPLY PIPE
	CWR	CONDENSER WATER RETURN PIPE
		PRESSURE REDUCING VALVE
		ISOLATION VALVE (BALL)
		ISOLATION VALVE (BUTTERFLY)
		MOTORIZED CONTROL VALVE
		CHECK VALVE
		THERMOMETER
		PRESSURE GAUGE
		SMACNA DUCT STATIC PRESSURE CLASS
	POD	POINT OF DEMOLITION
	POC	POINT OF CONNECTION
	M	MOTORIZED DAMPER
	T / TS	THERMOSTAT / SENSOR MOUNT @ 48" AFF (IF MOUNTED OVER CASEWORK OR OTHER OBSTRUCTION 46" TO TOP OF DEVICE)
	TC	TIME CLOCK
	DD	DUCT SMOKE DETECTOR (MOUNT BELOW ROOF)
	CO2	CARBON DIOXIDE SENSOR FOR OUTSIDE AIR MODULATION
	DL	DOOR LOUVER W/ MINIMUM FREE AREA (SQ. FT.)
	UC	UNDER CUT DOOR
	X	DETAIL NUMBER
	M-X	DETAIL DESIGNATION
		DRAWING NUMBER
		EQUIPMENT DESCRIPTION
		EQUIPMENT DESIGNATION
		EQUIPMENT NUMBER

MECHANICAL ABBREVIATIONS			
- A -	ABOVE	- M -	MIXED AIR
ABV	AIR CONDITIONER	MA	MAXIMUM
A/C	ABOVE FINISH FLOOR	MAX	MACHINE BOLT
AFF	ANNUAL FUEL UTILIZATION EFFICIENCY	MBH	1000 BRITISH THERMAL UNITS PER HOUR
AFUE	ANALOG INPUT	MCA	MINIMUM CIRCUIT AMPACITY
AI	ANALOG OUTPUT	MECH	MECHANICAL
AO	ACCESS PANEL	MF	MANUFACTURER
AP	- B -	MIN	MINIMUM
- B -	BDD	MOCP	MAXIMUM OVERCURRENT PROTECTION
BDD	BACKDRAFT DAMPER	MS	MOTOR STARTER
BEL	BELOW	MTD	MOUNTED
BLDG	BUILDING	- N -	NOISE CRITERIA
BTUH	BRITISH THERMAL UNITS PER HOUR	NC	NORMALLY CLOSED
- C -	CD	NG	NATURAL GAS
CD	CEILING DIFFUSER	NIC	NOT IN CONTACT
CFM	CUBIC FEET PER MINUTE	NO	NORMALLY OPEN
CFM	COMPRESSOR	NPS	NOMINAL PIPE SIZE
COMP	CONTINUATION	NTS	NOT TO SCALE
CONT	- D -	OA	OUTSIDE AIR
- D -	DDC	OC	ON CENTER
DDC	DIRECT DIGITAL CONTROL	ODP	OUTDOOR DRIP PROOF
DEG	DEGREE	OPER	OPERATING
DI	DIGITAL INPUT	OSA	OUTSIDE AIR
DIA	DIAMETER	- P -	PRESSURE DROP
DN	DOWN	PH	PHASE
DO	DIGITAL OUTPUT	PBI	POUNDS PER SQUARE INCH
DTR	DOWN THRU ROOF	- Q -	QUANTITY
DWD	DOUBLE WALL DUCT	QTY	QUANTITY
DWG	DRAWING	RA	RETURN AIR
DX	DIRECT EXPANSION	RAD	RETURN AIR DUCT
- E -	(E)	RG	RETURN GRILLE
(E)	EXISTING	RL	REFRIGERATION LIQUID
EA	EXHAUST AIR	RPM	REVOLUTIONS PER MINUTE
EAD	EXHAUST AIR DUCT	RS	REFRIGERATION SUCTION
EAT	ENTERING AIR TEMPERATURE	- S -	SUPPLY AIR
EER	ENERGY EFFICIENCY RATIO	SAD	SUPPLY AIR DUCT
EFF	EFFICIENCY	SENS	SENSIBLE
EG	EXHAUST GRILLE	SF	SUPPLY FAN
EHS	ENERGY MANAGEMENT SYSTEM	SMS	SHEET METAL SCREW
EQUIP	EQUIPMENT	SOV	SHUT OFF VALVE
ESP	EXTERNAL STATIC PRESSURE	S.P.	STATIC PRESSURE
EWT	ENTERING WATER TEMPERATURE	SQ	SQUARE
- F -	FAI	S/S	STAINLESS STEEL
FAI	FRESH AIR INTAKE	SWR	SIDEWALL RETURN GRILLE
FLR	FLOOR	SWS	SIDEWALL SUPPLY GRILLE
FPI	FPI'S PER INCH	SYM	SYMBOL
FT	FOOT, FEET	- T -	TOTAL DYNAMIC HEAD
- G -	GA	TDH	TOTAL DYNAMIC HEAD
GA	GALVANIZED IRON	TG	TRANSFER GRILLE
GI	GALLONS PER MINUTE	TSTAT	THERMOSTAT
GPM	HORSEPOWER	TYP	TYPICAL
HP	HOUR	U -	UNLESS NOTED OTHERWISE
HR	HEATING VENTILATING AND AIR CONDITIONING	UTR	UP THRU ROOF
HVAC	HOT WATER	- V -	VOLTS ALTERNATING CURRENT
HW	HERTZ	VAC	VOLTS ALTERNATING CURRENT
HZ	- H -	VFD	VARIABLE FREQUENCY DRIVE
- H -	IN	- W -	WEIGHT
IN	INCHES	WT	WEIGHT
- K -	KW	W	WITH
KW	KILOWATT		
- L -	(L)		
(L)	LINED DUCT		
LB	LEAVING AIR TEMPERATURE		
LWT	LEAVING WATER TEMPERATURE		

EQUIPMENT ANCHORAGE NOTE

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 2019 CBC SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTER 13, 26 AND 30.

- ALL PERMANENT EQUIPMENT AND COMPONENTS.
- 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.
- 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 TRAVERSE AND LONGITUDINAL DIRECTIONS.

- 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.
- 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 THE 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 THE 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 2019 CBC, SECTIONS 1617A.1.24, 1617A.1.25, AND 1617A.1.26.

THE METHOD OF SHOWING BRACINGS AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PRE-APPROVED INSTALLATION GUIDE (E.G. OSHPD OPN FOR 2019 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 □ OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.

MP □ MD □ PP X E □ OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL (OPM#) #043-13.

ACCEPTANCE TESTING

MANDATORY ACCEPTANCE TESTING PER TITLE 24, PART 6 SHALL BE AS FOLLOWS:

AN AABC AGENCY SHALL ACT AS THE ACCEPTANCE AGENT AND PERFORM WORK REQUIRED IN THE FOLLOWING ACCEPTANCE TESTS AS DESCRIBED IN CHAPTER 13 OF THE 2019 NONRESIDENTIAL COMPLIANCE MANUAL. THIS SHALL INCLUDE FILLING OUT, SIGNING, AND SUBMITTING APPLICABLE FORMS LISTED HEREIN.

- NRCA-MCH-02-A - OUTDOOR AIR ACCEPTANCE
- NRCA-MCH-03-A - CONSTANT VOLUME, SINGLE ZONE, UNITARY AIR CONDITIONER AND HEAT PUMP SYSTEMS.
- NRCA-MCH-04-A - AIR DISTRIBUTION SYSTEMS ACCEPTANCE
- NRCA-MCH-05-A - AIR ECONOMIZER CONTROLS ACCEPTANCE
- NRCA-MCH-06-A - DEMAND CONTROL VENTILATION SYSTEMS ACCEPTANCE
- NRCA-MCH-07-A - SUPPLY FAN VFD ACCEPTANCE
- NRCA-MCH-08-A - VALVE LEAKAGE TEST
- NRCA-MCH-09-A - SUPPLY WATER TEMPERATURE RESET CONTROLS ACCEPTANCE
- NRCA-MCH-10-A - HYDRONIC SYSTEM VARIABLE FLOW CONTROL ACCEPTANCE
- NRCA-MCH-11-A - AUTOMATIC DEMAND SHED CONTROL ACCEPTANCE
- NRCA-MCH-12-A - FAULT DETECTION & DIAGNOSTICS (FDD) FOR PACKAGED DIRECT EXPANSION UNITS
- NRCA-MCH-13-A - AUTOMATIC FAULT DETECTION & DIAGNOSTICS (FDD) FOR AIR HANDLING UNITS & ZONE TERMINAL UNITS ACCEPTANCE
- NRCA-MCH-14-A - DISTRIBUTED ENERGY STORAGE DX AC SYSTEMS ACCEPTANCE
- NRCA-MCH-15-A - THERMAL ENERGY STORAGE (TES) SYSTEM ACCEPTANCE
- NRCA-MCH-16-A - SUPPLY AIR TEMPERATURE RESET CONTROLS ACCEPTANCE
- NRCA-MCH-17-A - CONDENSER WATER SUPPLY TEMPERATURE RESET CONTROLS ACCEPTANCE
- NRCA-MCH-18-A - ENERGY MANAGEMENT CONTROL SYSTEM ACCEPTANCE

SPECIFIC REQUIREMENTS AND ACCEPTANCE TESTING FORMS ARE AVAILABLE IN THE 2019 NONRESIDENTIAL COMPLIANCE MANUAL WHICH CAN BE DOWNLOADED FROM www.energy.ca.gov/files24/2019standards/

MECHANICAL GENERAL NOTES

- ALL DUCT INSULATION TO HAVE MINIMUM R-VALUE. DUCT INSULATION SHALL HAVE FLAME SPREAD RATING NOT EXCEEDING 25, AND A SMOKE DEVELOPED RATING NOT EXCEEDING 50 WHEN TESTED IN ACCORDANCE WITH ASTM E84, NFPA 255 AND U.L. 723.
- DUCT CONSTRUCTION SHALL BE GALVANIZED STEEL IN ACCORDANCE WITH CHAPTER 6 OF THE C.M.C.S. SUSPENSION SHALL CONFORM TO 008-2006 SMACNA STANDARDS. SEAL ALL SEAMS AND JOINTS AIR AND WATERTIGHT. FLEXIBLE ALUMINUM DUCT WORK IS NOT ALLOWED. DUCT TAPE IS NOT ALLOWED.
- FLEXIBLE DUCTWORK AND DUCTLINER SHALL HAVE FLAME SPREAD RATING NOT EXCEEDING 25, AND A SMOKE DEVELOPED RATING NOT EXCEEDING 50 WHEN TESTED IN ACCORDANCE WITH ASTM E84, NFPA 255 AND U.L. 723.
- FLEXIBLE DUCTS SHALL CONSIST OF AN EXTERIOR REINFORCED LAMINATED VAPOR BARRIER, 3" FIBERGLASS INSULATION (R-8.0), ENCAPSULATED SPRING STEEL WIRE HELIX AND IMPERVIOUS, SMOOTH, NON-PERFORATED INTERIOR VINYL LINER. INDIVIDUAL LENGTHS OF FLEXIBLE DUCTS SHALL CONTAIN FACTORY FABRICATED STEEL CONNECTION COLLARS.
- FLEXIBLE DUCTS SHALL BE SUPPORTED AT OR NEAR MID-LENGTH WITH 2" WIDE 28 GA. STEEL HANGER COLLAR ATTACHED TO THE STRUCTURE WITH AN APPROVED DUCT HANGER. INSTALLATION SHALL MINIMIZE SHARP RADIUS TURNS OR OFFSETS. 5' MAXIMUM LENGTH CONNECTING TO TERMINAL OUTLETS.
- PROVIDE BACKDRAFT DAMPERS AT ALL EXHAUST AND FRESH AIR INTAKES.
- THERMOSTATS SHALL BE AUTOMATIC CHANGEOVER TYPE TO SEQUENCE HEATING AND COOLING. SET POINT RANGE SHALL BE 10 DEG. F BETWEEN FULL HEATING AND FULL COOLING. ADJUSTABLE TEMPERATURE DIFFERENTIAL SHALL BE 1-1/2 DEG. F. THERMOSTAT CONTROL RANGE SHALL BE 55 DEG. F TO 85 DEG. F. CONTROLS SHALL HAVE CAPABILITY OF TERMINATING HEATING AT NO HIGHER THAN 78 DEG. F. AND COOLING AT NO LOWER THAN 70 DEG. F. FANS SHALL RUN CONTINUOUSLY DURING OCCUPIED HOURS.
- LINE VOLTAGE WIRING, LINE VOLTAGE CONDUIT, UNDERGROUND LOW VOLTAGE CONDUIT, DISCONNECT SWITCHES AND FINAL CONNECTION BY ELECTRICAL CONTRACTOR. LOW VOLTAGE WIRING, ABOVE GROUND LOW VOLTAGE CONDUIT AND FINAL CONNECTION BY CONTROLS CONTRACTOR.
- PROVIDE PERMANENT LABEL ON EACH A/C UNIT IDENTIFYING AREA/SPACE SERVED PER CMC 303.6. COORDINATE ROOM NUMBERS WITH OWNER. SEE 230553 FOR ADDITIONAL REQUIREMENTS.
- SYSTEM AIR BALANCE SHALL BE PERFORMED BY AN INDEPENDENT AGENCY CERTIFIED BY THE AABC. THIS WORK SHALL CONFORM TO CURRENT AABC SPECIFICATIONS AND STANDARDS.
- PROVIDE WRITTEN WARRANTY TO REPLACE ALL FAULTY MATERIALS AND/OR LABOR AT NO COST TO OWNER, FOR A PERIOD OF ONE YEAR FROM DATE OF OWNER ACCEPTANCE. PROVIDE 5 YEAR COMPRESSOR WARRANTY AND 10 YEAR HEAT EXCHANGER WARRANTY FOR ALL A/C EQUIPMENT.
- FOR THE PURPOSE OF CLEARNESS AND LEGIBILITY, THE DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND ALTHOUGH SIZES AND LOCATION OF EQUIPMENT IS DRAWN TO SCALE WHEREVER POSSIBLE, THE CONTRACTOR SHALL MAKE USE OF ALL DATA IN ALL OF THE CONTRACTOR DOCUMENTS AND VERIFY THIS INFORMATION BEFORE ORDERING, FABRICATING OR INSTALLING OF ANY MATERIALS.
- CUTTING, BORING, SAWCUTTING OR BORING THROUGH NEW OR EXISTING STRUCTURAL ELEMENTS TO BE DONE WHEN SO DETAILED IN THE DRAWINGS OR ACCEPTED BY THE ARCHITECT AND STRUCTURAL ENGINEER WITH THE APPROVAL OF DSA REPRESENTATIVE.
- ALL DUCT SIZES SHOWN ARE NET INSIDE DIMENSIONS AND DO NOT ACCOUNT FOR DUCT LINER THICKNESS WHERE APPLICABLE. ALL PIPE DIMENSIONS SHOWN ARE NOMINAL SIZES.
- ALL BRANCH DUCTS SHALL BE PROVIDED WITH ACCESSIBLE MANUAL VOLUME DAMPERS.
- PROVIDE FLEXIBLE CONNECTIONS TO ALL HVAC EQUIPMENT (A/C UNIT, FANS, ETC.).
- ALL WORK SHALL BE IN CONFORMANCE WITH TITLE 24, 2019 CALIFORNIA CODE OF REGULATIONS (CCR), 2019 CALIFORNIA BUILDING CODE, PART 2, TITLE 24 CCR, 2019 CALIFORNIA MECHANICAL CODE, PART 4, TITLE 24 CCR.
- CONTRACTOR SHALL PROVIDE AS-BUILTS, CAD GENERATED AND DRAWN TO 1/8" = 1'-0" SCALE. SUBMIT 6 SETS OF HARD COPIES AND 1 ELECTRONIC COPY ON CD-ROM. CAD DRAWINGS SHALL BE AUTOCAD, LATEST VERSION. COORDINATE REQUIREMENTS WITH OWNER.
- VERIFY EXACT LOCATION OF THERMOSTATS AND SENSORS WITH FURNITURE PLANS AND OWNERS REPRESENTATIVE PRIOR TO INSTALLATION.

MECHANICAL MANDATORY MEASURES

EQUIPMENT AND SYSTEMS EFFICIENCY

ANY APPLIANCE FOR WHICH THERE IS A CALIFORNIA STANDARD ESTABLISHED IN THE APPLIANCE EFFICIENCY STANDARDS SHALL COMPLY WITH THAT STANDARD.

PIPING, EXCEPT THOSE CONVEYING FLUIDS WITH A DESIGN OPERATING TEMPERATURE BETWEEN 60° F AND 105° F, OR WITHIN SPACE-CONDITIONING EQUIPMENT CERTIFIED UNDER §110.1 OR §110.2, SHALL BE INSULATED IN ACCORDANCE WITH §120.3.

ALL AIR DISTRIBUTION SYSTEM DUCTS AND PLENUMS ARE REQUIRED TO BE INSTALLED, SEALED, AND INSULATED IN ACCORDANCE WITH THE CALIFORNIA MECHANICAL CODE (CMC) SECTIONS 601, 602, 603, 604, 605 AND ANSISMACNA-006-2006 HVAC DUCT CONSTRUCTION STANDARDS METAL AND FLEXIBLE 3RD EDITION.

VENTILATION

CONTROLS SHALL BE PROVIDED TO ALLOW OUTSIDE AIR DAMPERS OR DEVICES TO BE OPERATED AT THE VENTILATION RATES AS SPECIFIED IN THESE PLANS.

ALL GRAVITY VENTILATING SYSTEMS SHALL BE PROVIDED WITH AUTOMATIC OR READILY ACCESSIBLE MANUALLY OPERATED DAMPERS IN ALL OPENINGS TO THE OUTSIDE.

AIR BALANCING: ALL SPACE CONDITIONING AND VENTILATION SYSTEMS SHALL BE BALANCED TO THE QUANTITIES SPECIFIED IN THESE PLANS, IN ACCORDANCE WITH THE ASSOCIATED AIR BALANCE COUNCIL (AABC) NATIONAL STANDARDS.

GRAVITY OR AUTOMATIC DAMPERS INTERLOCKED AND CLOSED ON FAN SHUTDOWN SHALL BE PROVIDED ON THE OUTSIDE AIR INTAKES AND DISCHARGES OF ALL SPACE CONDITIONING AND EXHAUST SYSTEMS.

FANS USED FOR VENTILATION SHALL OPERATE CONTINUOUSLY DURING OCCUPIED HOURS.

THE MINIMUM OUTDOOR AIR LISTED OR THREE COMPLETE AIR CHANGES SHALL BE SUPPLIED TO THE ENTIRE BLDG. DURING THE ONE HOUR PERIOD IMMEDIATELY BEFORE THE BLDG IS NORMALLY OCCUPIED.

CONTROLS

EACH SPACE CONDITIONING ZONE SHALL BE CONTROLLED BY AN INDIVIDUAL THERMOSTATIC CONTROL THAT RESPONDS TO THE SUPPLY OF HEATING AND COOLING ENERGY WITHIN THAT ZONE (§202(a)). WHEN USED TO CONTROL HEATING, THE THERMOSTATIC CONTROL MUST BE ADJUSTABLE DOWN TO 55° F OR LOWER. FOR COOLING, THE THERMOSTATIC CONTROL MUST BE ADJUSTABLE UP TO 85° F OR HIGHER. WHEN USED TO CONTROL BOTH HEATING AND COOLING, THE THERMOSTATIC CONTROL MUST BE ADJUSTABLE FROM 55° F TO 85° F AND ALSO PROVIDE A DEAD BAND OF AT LEAST 5" F WITHIN WHICH THE SUPPLY OF HEATING AND COOLING IS SHUT OFF OR REDUCED TO A MINIMUM.

EACH SPACE CONDITIONING SYSTEM SERVING BUILDING TYPES SUCH AS OFFICES AND MANUFACTURING FACILITIES (AND ALL OTHERS NOT EXPLICITLY EXEMPT FROM THE REQUIREMENTS OF SECTION 112 (D)) SHALL BE INSTALLED WITH AN AUTOMATIC TIME SWITCH WITH AN ACCESSIBLE MANUAL OVERRIDE THAT ALLOWS OPERATION OF THE SYSTEM DURING OFF-HOURS FOR UP TO 4 HOURS. THE TIME SWITCH SHALL BE CAPABLE OF PROGRAMMING DIFFERENT SCHEDULES FOR WEEKDAYS OR WEEKENDS; INCORPORATE AN AUTOMATIC HOLIDAY "SHUTOFF" FEATURE THAT TURNS OFF ALL LOADS FOR AT LEAST 24 HOURS, THEN RESUMES THE NORMALLY SCHEDULED OPERATION; AND HAS PROGRAM BACKUP CAPABILITIES THAT PREVENT THE LOSS OF THE DEVICES PROGRAM AND TIME SETTING FOR AT LEAST 10 HOURS IF POWER IS INTERRUPTED.

SYSTEM WITH DDC TO THE §110.2(c) ARE ALSO REQUIRED TO HAVE AUTOMATIC DEMAND SHED CONTROLS.

EACH SPACE CONDITIONING SYSTEM MUST BE PROVIDED WITH CONTROLS THAT CAN AUTOMATICALLY SHUT OFF THE EQUIPMENT DURING UNOCCUPIED HOURS. WHEN SHUT DOWN, THE CONTROLS SHALL AUTOMATICALLY RESTART THE SYSTEM TO MAINTAIN A SETBACK HEATING THERMOSTAT SETPOINT. IF THE SYSTEM PROVIDES MECHANICAL HEATING AND SETUP COOLING THERMOSTAT SETPOINT, IF THE SYSTEM PROVIDES MECHANICAL COOLING.

THERMOSTATS SHALL HAVE NUMERIC SETPOINTS IN DEGREES FAHRENHEIT (F) AND ADJUSTABLE STOPS ACCESSIBLE ONLY BY AUTHORIZED PERSONNEL.

MECHANICAL SHEET INDEX

SHEET NO.	DESCRIPTION
M0.1	MECHANICAL GENERAL NOTES, SYMBOLS & ABBREVIATIONS
M0.2	MECHANICAL SCHEDULES & DETAIL
M0.3	TITLE 24
M0.4	TITLE 24
M2.1	MECHANICAL DEMOLITION, REMODEL & MECHANICAL ROOF PLANS
TOTAL SHEETS:	5



DCGA ENGINEERS
Consulting Mechanical and Electrical Engineers

4750 E. Ontario Mills Pkwy
Ontario, CA 91774
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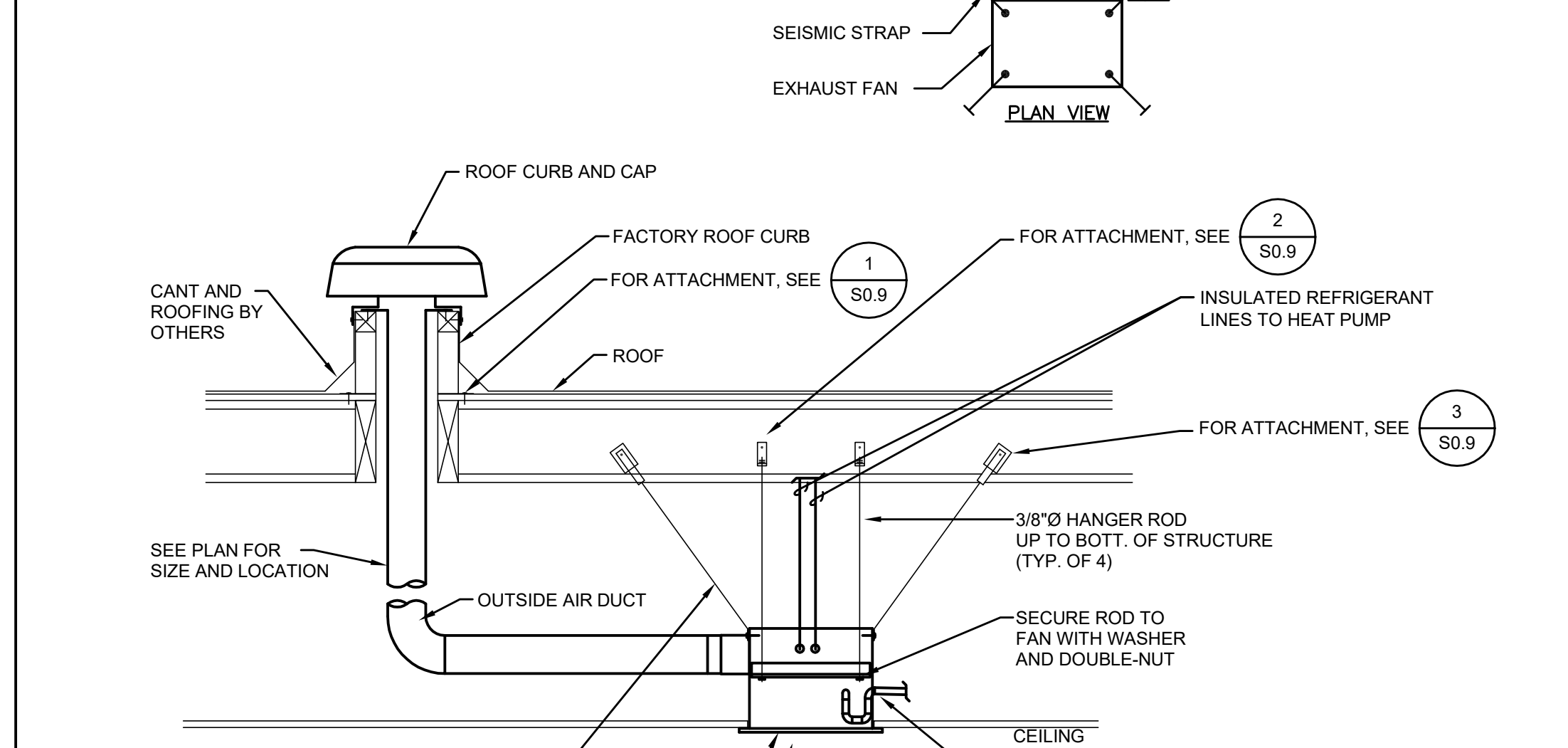
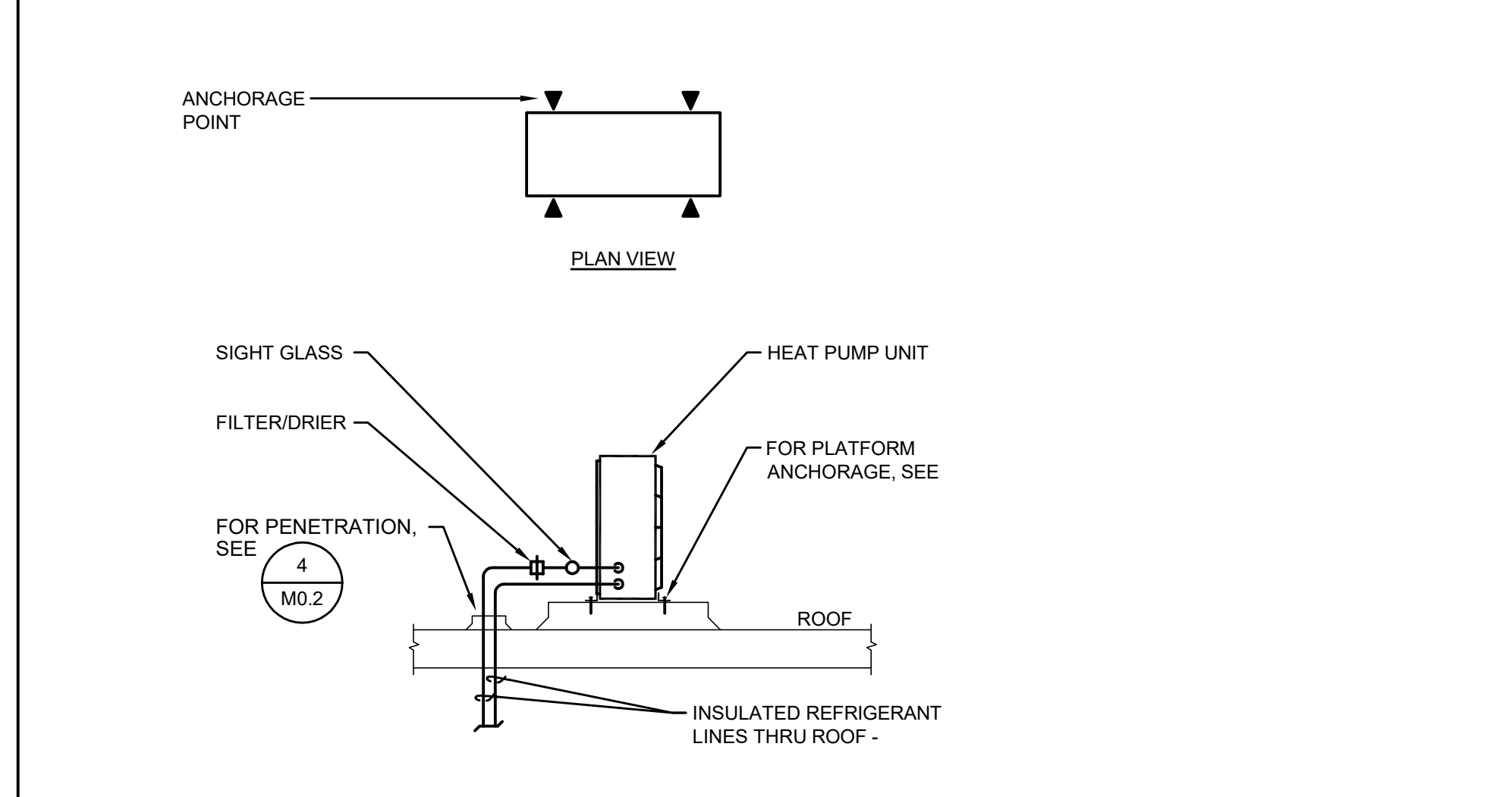
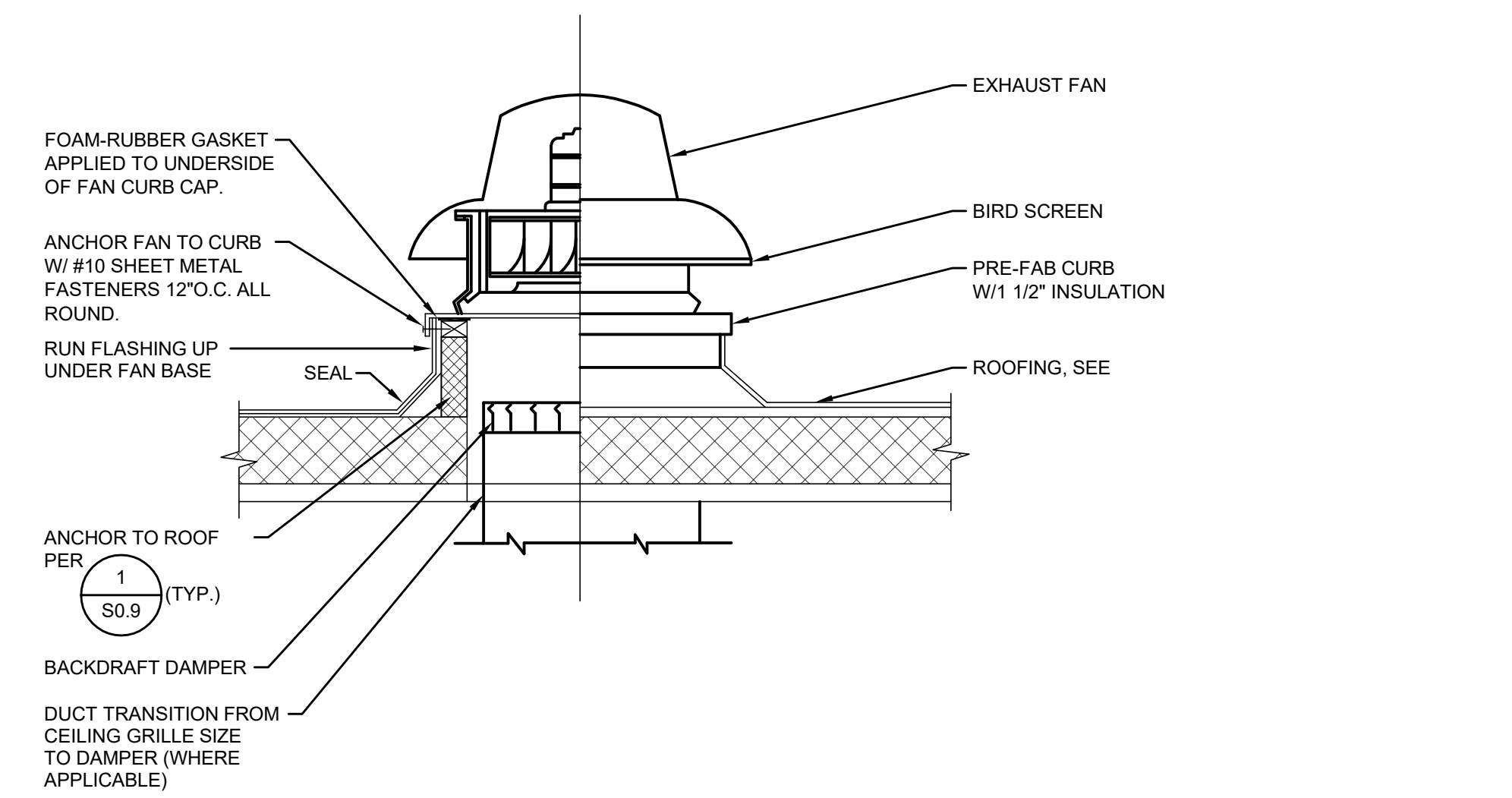
MULTI-SPLIT SYSTEM SCHEDULE																				
SYM.	MFR./MODEL	AREA SERVED	COOLING		HEATING		ELECTRICAL		OPER WT. (LBS.)	SYM.	MFR./MODEL	CFM	OSA CFM	ELECTRICAL		OPER WT. (LBS.)	REMARKS	BLDG. LOCATION	ANCHOR DETAIL REF.	
			MBH	SEER	MBH	HSPF	MCA	VOLTAGE/PHASE						MCA	VOLTAGE/PHASE					
HP-1	DAIKEN ZMXL18Q	OFFICE CONGRESSION	18.0	17.0	18.9	10.3	17.1	208	1	FC-1A	DAIKEN FFQ09	375	25	1.0	208	1	40	INDOOR UNIT SHALL BE POWERED BY OUTDOOR UNIT WITH UNIT POWERED CONDENSATE PUMP, WALL MOUNTED BAS THERMOSTAT, 24V INTERFACE KIT.	ROOF/ROOM	20 M0.2
										FC-1B	DAIKEN FFQ09	375	25	1.0	208	1	40	INDOOR UNIT SHALL BE POWERED BY OUTDOOR UNIT WITH UNIT POWERED CONDENSATE PUMP, WALL MOUNTED BAS THERMOSTAT, 24V INTERFACE KIT.	ROOF/ROOM	20 M0.2

EXHAUST FAN SCHEDULE													
SYM.	MFR./MODEL	TYPE	CFM	S.P. INCHES	FAN RPM	SONES	ELECTRICAL			OPER WT. (LBS.)	REMARKS	BLDG. LOCATION	ANCHOR DETAIL REF.
							WATT	HP	VOLTAGE/PHASE				
EF-1	GREENHECK CUE-070-VG	ROOF CENTRIF.	200	0.25"	1390	3.2	-	1/15	120	1	150	ROOF	1 M0.2
EF-2	GREENHECK CUE-070-VG	ROOF CENTRIF.	200	0.25"	1390	3.2	-	1/15	120	1	150	ROOF	1 M0.2
EF-3	GREENHECK CUE-130-VG	ROOF CENTRIF.	1700	0.50"	1455	14.5	-	3/4	120	1	100	ROOF	1 M0.2
EF-4	GREENHECK G-130-VG	ROOF CENTRIF.	1625	0.50"	1365	12.6	-	1/2	120	1	80	ROOF	1 M0.2
EF-5	GREENHECK G-060-VG	ROOF CENTRIF.	60	0.25"	1342	2.6	-	1/15	120	1	45	ROOF	1 M0.2
EF-6	GREENHECK G-060-VG	ROOF CENTRIF.	200	0.125"	1725	4.9	-	1/15	120	1	45	ROOF	1 M0.2

AIR DISTRIBUTION SCHEDULE									
SYM.	CFM	MAX. P.D. INCHES	MAX. NC	NECK SIZE	MFR./MODEL	REMARKS			
CD-1	50-350	0.10	30	8"	PRICE SPD	SQUARE PLAQUE DIFFUSER, STEEL CONSTRUCTION, WHITE POWDER COAT FINISH.			
	351-500	0.10	30	10"					
	501-700	0.10	30	12"					
RG-1/ EG-1/ TG-1	50-375	0.10	30	10"x10"	PRICE #30	LOUVERED FACE, 3/4" BLADE SPACING, STEEL CONSTRUCTION, WHITE POWDER COAT FINISH.			
	376-550	0.10	30	12"x12"					
SDGE-1	425	0.10	30	20"x12"	PRICE #SDGE	SPIRAL DUCT EXHAUST GRILLE, ALUMINUM FINISH			

NOTE: • CEILING DIFFUSER THROWS SHALL BE 4-WAY UNLESS OTHERWISE NOTED.
 • PROVIDE REMOTE MOTOR OPERATED DAMPER AT HARD CEILINGS AND LOCATIONS WHERE DAMPER IS LOCATED ABOVE ARCHITECTURAL CLOUDS.
 • ALL AIR DISTRIBUTION DEVICES TO HAVE CONCEALED MOUNTING OPTION.
 • FOR 1, 2, OR 3-WAY PATTERN, INSTALL QUADRANT BLANKS.
 • PROVIDE FILLER PANEL FOR AIR DISTRIBUTION INSTALLED IN LAY-IN CEILINGS.

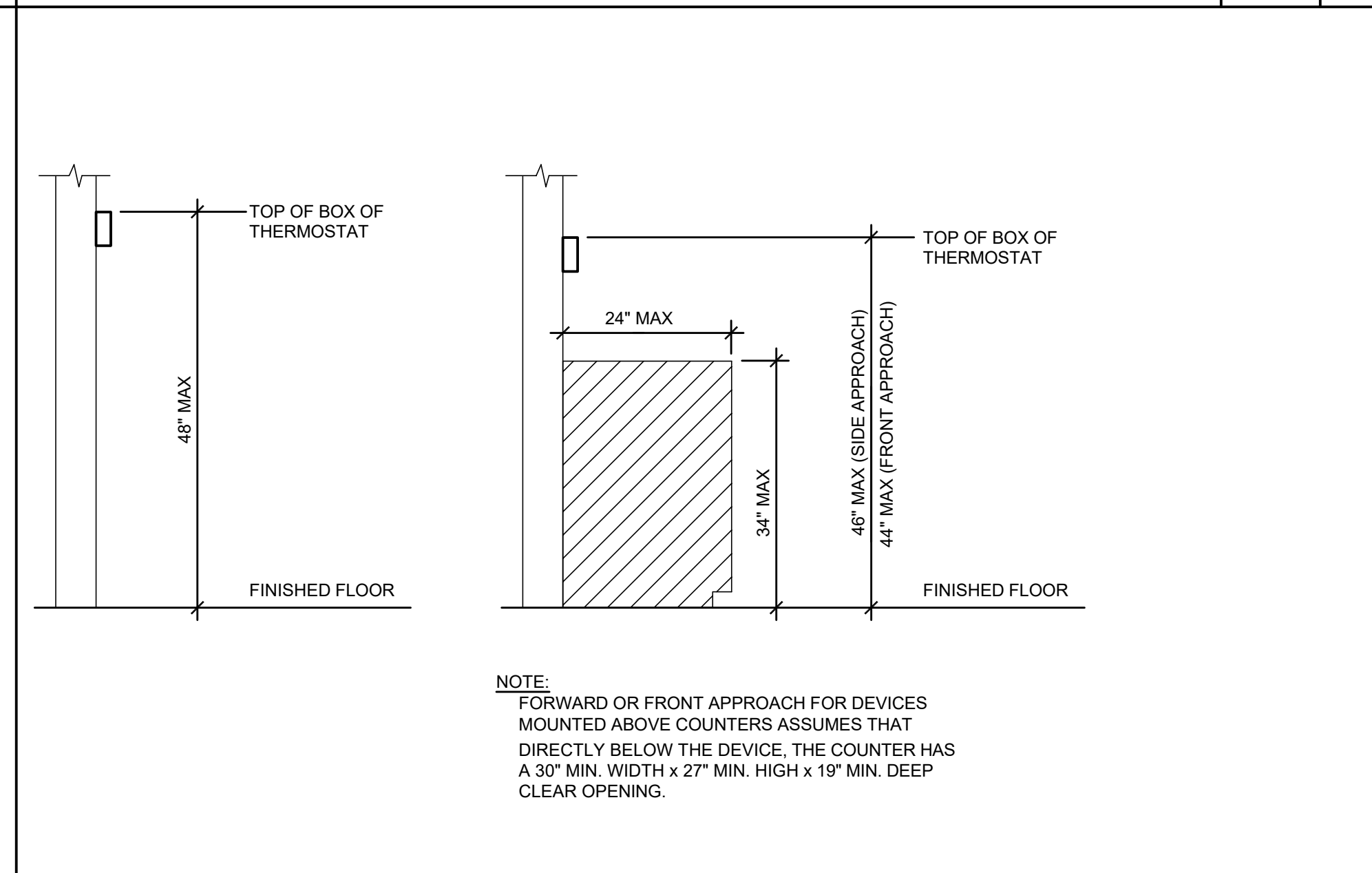
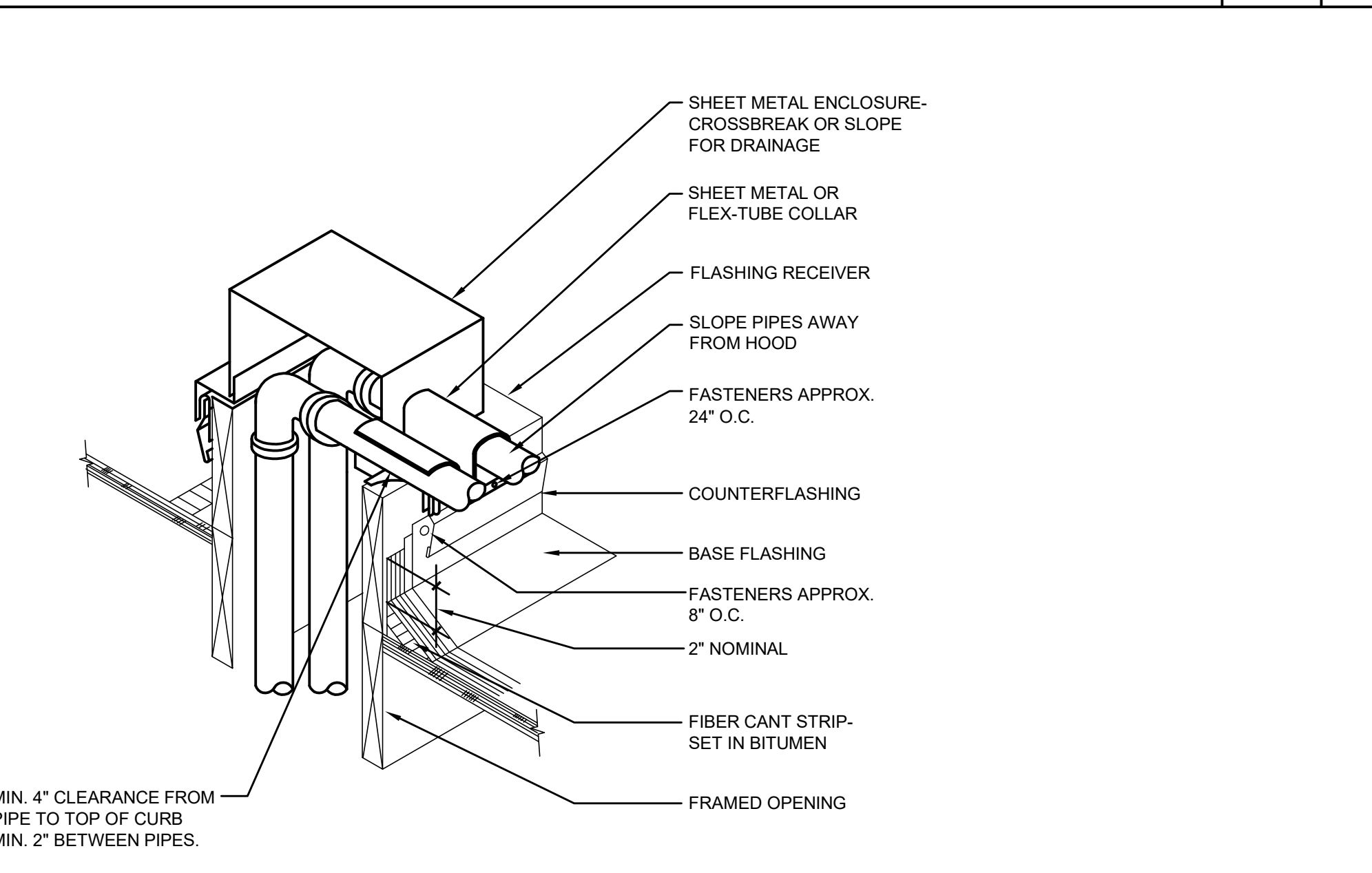
DESIGN CONDITIONS						
LOCATION	ELEVATION	INDOOR		OUTDOOR		
		HEATING DB °F	COOLING DB °F	HEATING DB °F	COOLING DB °F	WB °F
COVINA, CA	558	70	74	36	97	72



EXHAUST FAN MOUNTING DETAIL SCALE: NONE 1

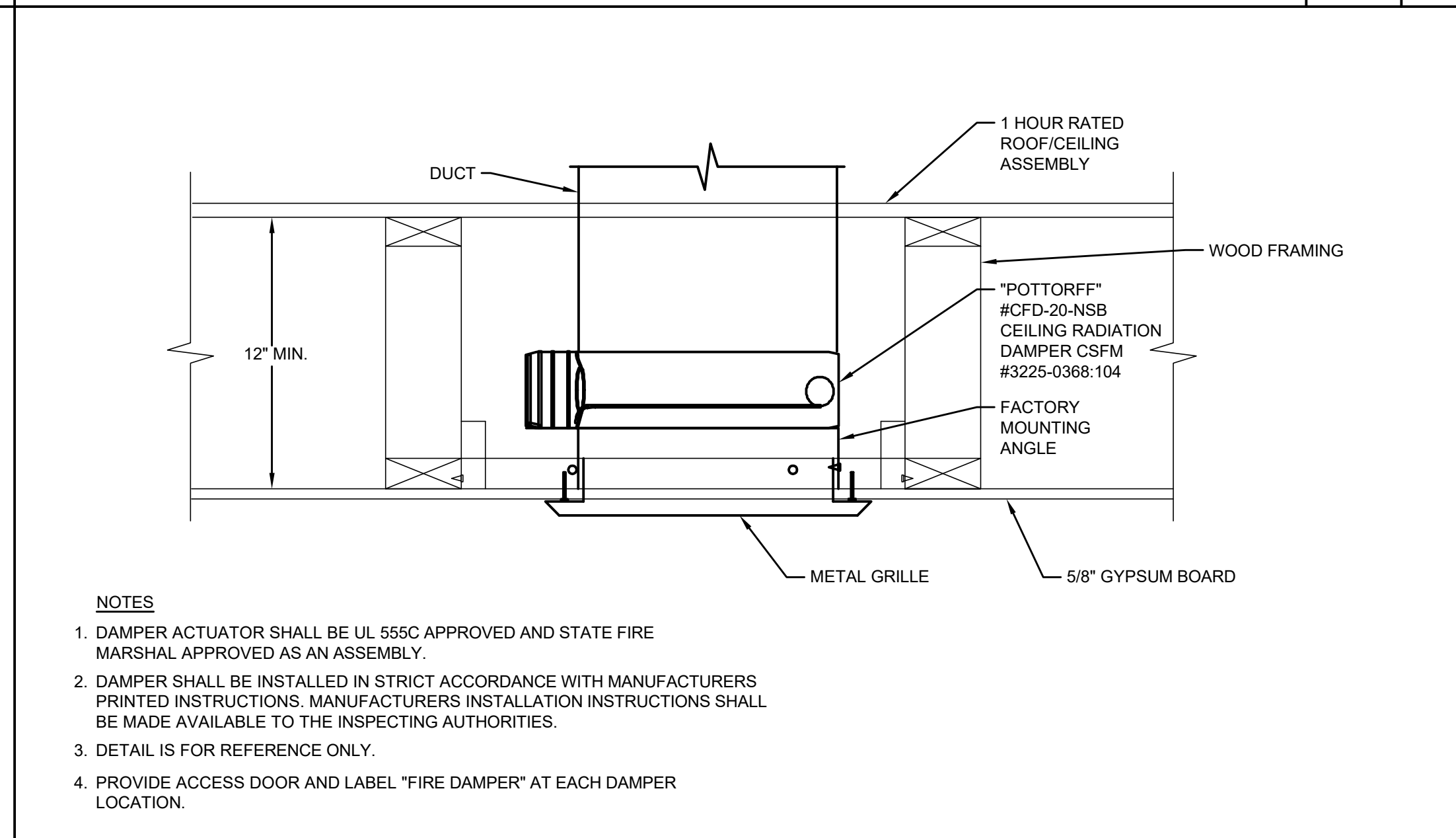
HEAT PUMP UNIT MOUNTING DETAIL SCALE: NONE 2

FAN COIL MOUNTING DETAIL SCALE: NONE 3

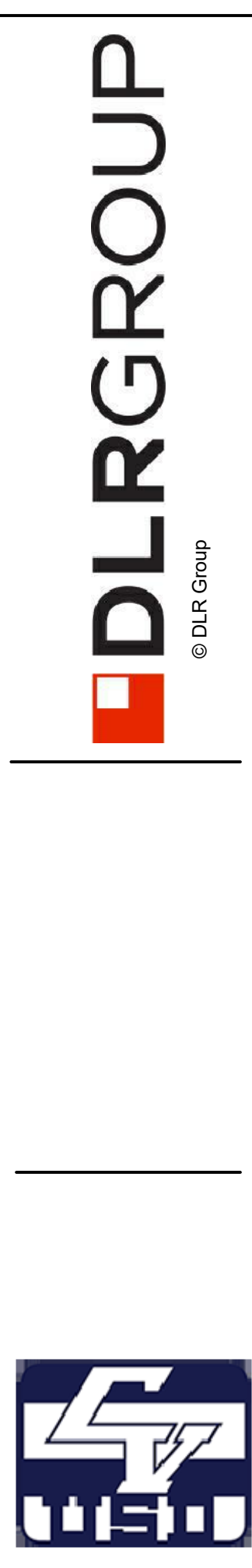


REFRIGERANT PIPING THRU ROOF DETAIL SCALE: NONE 4

THERMOSTAT MOUNTING DETAIL SCALE: NONE 5



CEILING RADIATION DAMPER DETAIL SCALE: NONE 6



COVINA VALLEY HS SWIMMING POOL
 COVINA VALLEY UNIFIED SCHOOL DISTRICT
 483 S. HOLLENBECK AVENUE COVINA, CA 91723

DSA SUBMITTAL SET_V2
 04/28/2023 REVISIONS

75-22616-00
 DSA A# 03-122700
 DSA FILE # 19-1H8
 MECHANICAL SCHEDULES AND DETAILS

M0.2



DCGA ENGINEERS
 Consulting Mechanical and Electrical Engineers
 4750 E. Ontario Mills Pkwy
 Ontario, CA 91764
 Ph: 909.987.9017
 Fax: 909.980.7223

STATE OF CALIFORNIA Mechanical Systems CERTIFICATE OF COMPLIANCE... Table C will indicate if the project data input into the compliance document is compliant with mechanical requirements... A. GENERAL INFORMATION... B. PROJECT SCOPE... Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance

STATE OF CALIFORNIA Mechanical Systems CERTIFICATE OF COMPLIANCE... Table C will indicate if the project data input into the compliance document is compliant with mechanical requirements... D. EXCEPTIONAL CONDITIONS... E. ADDITIONAL REMARKS... Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance

STATE OF CALIFORNIA Mechanical Systems CERTIFICATE OF COMPLIANCE... F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)... This table is used to demonstrate compliance for mechanical equipment with mandatory requirements... G. PUMPS... H. FAN SYSTEMS & AIR ECONOMIZERS... Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance

STATE OF CALIFORNIA Mechanical Systems CERTIFICATE OF COMPLIANCE... I. SYSTEM CONTROLS... J. VENTILATION AND INDOOR AIR QUALITY... This table is used to demonstrate compliance with mandatory ventilation requirements... K. TERMINAL BOX CONTROLS... L. DISTRIBUTION (DUCTWORK AND PIPING)... Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance

STATE OF CALIFORNIA Mechanical Systems CERTIFICATE OF COMPLIANCE... D. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE... Selections have been made based on information provided in previous tables of this document... Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance

STATE OF CALIFORNIA Mechanical Systems CERTIFICATE OF COMPLIANCE... O. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION... Selections have been made based on information provided in previous tables of this document... Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance

STATE OF CALIFORNIA Mechanical Systems CERTIFICATE OF COMPLIANCE... L. DISTRIBUTION (DUCTWORK AND PIPING)... M. COOLING TOWERS... N. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION... Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance

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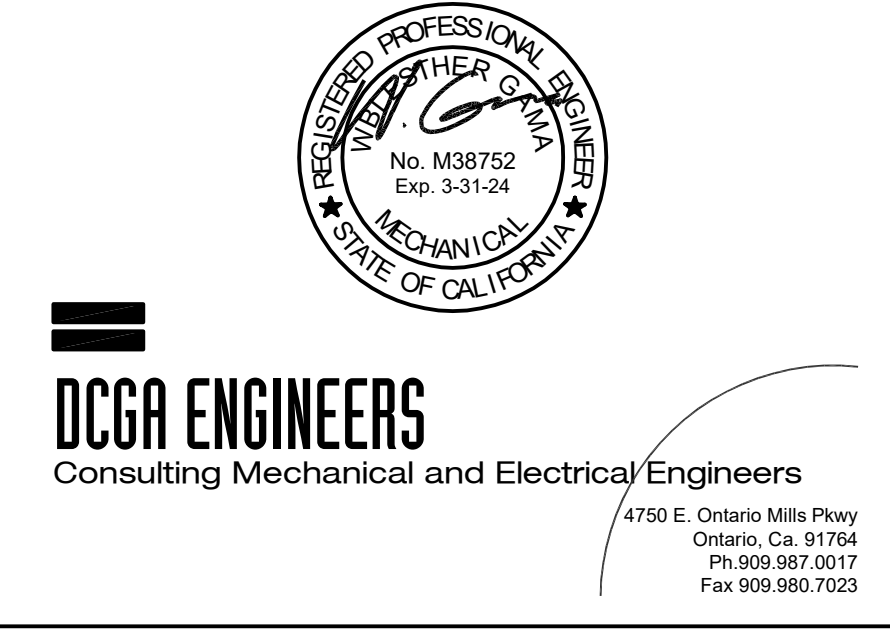
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COVINA VALLEY HS SWIMMING POOL
COVINA VALLEY UNIFIED SCHOOL DISTRICT
483 S. HOLLENBECK AVENUE COVINA, CA 91723

DSA SUBMITTAL SET_V2
04/28/2023 REVISIONS

75-22616-00
DSA #03-122700
DSA FILE # 19-1H8
TITLE 24
MO.3



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STATE OF CALIFORNIA
Mechanical Systems
NRC-PLB-4 CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
Project Name: Covina HS Pool Replacement Report Page: (Page 10 of 10)
Project Address: 463 South Hollenbeck Ave Date Prepared: 12/8/2022

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Bryan Martinez
Signature Date: 2022-12-08
Company: DCGA Engineers
Address: 4750 East Ontario Mills Parkway
City/State/Zip: Ontario CA 91764
Phone: 909-987-0017

RESPONSIBLE PERSON'S DECLARATION STATEMENT
I certify the following under penalty of perjury, under the laws of the State of California:
1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of the 2019 Title 24 Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: Wheeler Gama
Signature: [Signature]
Company: DCGA ENGINEERS
Address: 4750E ONTARIO MILLS PKWY
City/State/Zip: ONTARIO CA 91764
Phone: 909-987-0017

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance
Registration Date/Time: Report Version: 2319.1.003
Registration Provider: Energysoft
Schema Version: sv 20200401
Report Generated: 2022-12-08 16:26:15

STATE OF CALIFORNIA
Domestic Water Heating System
NRC-PLB-E CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
Project Name: Covina HS Pool Replacement Report Page: (Page 1 of 6)
Project Address: 463 South Hollenbeck Ave Date Prepared: 12/8/2022

F. DOMESTIC HOT WATER EQUIPMENT
This table is used to demonstrate compliance with mandatory equipment requirements in §120.1 and §130.3. For high-rise residential and hotel/motel occupancies, compliance with prescriptive requirements in §120.3(c) must also be demonstrated with §150.2 for addition and alteration scopes.

Equipment Schedule: Individual Systems		03	04	05	06
Name or Item Tag	Equipment Type	Volume (gal)	Max GPM / First Hour Rating (FHR)	Rated Uniform Energy Factor (UEF)	Minimum Required Uniform Energy Factor (UEF)
DELLOS	Electric Storage	<=30	0 or FHR <18	0.95	0.93

FOOTNOTES: Compliant equipment may be found in the Modernized Appliance Efficiency Database System (MAEDS) on the Energy Commission website: <https://ceerappliance.energy.ca.gov/ProgramSearch/DatabaseSearch.aspx>

Water Heating Equipment All Occupancies

	Yes	No	Not Applicable	Requirement
18	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Unfired storage tank insulation shall have internal + External =R-26 OR External =R-12. Label required per §130.3(c).
19	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	New state buildings: 65% of energy for service water heating from site solar energy or recovered energy per §130.3(c).
20	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Insulation valves for instantaneous water heater with input rating <= 8.8 BTU/H or 2 kW has been specified per §130.3(c).

G. DOMESTIC HOT WATER DISTRIBUTION SYSTEM
This table is used to demonstrate compliance for nonresidential occupancies with distribution requirements in §120.1 and §160.5. For high-rise residential and hotel/motel occupancies, compliance is demonstrated with requirements §120.3(c), §120.3, §150.6 and §150.4.

Mandatory Pipe Insulation All Occupancies

12	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	For systems serving nonresidential spaces, pipe insulation for the following applications is specified to comply with Table 120.3.4 (see below) per §120.3: • Recirculating system piping, including supply and return piping of the water heater • The first 8 ft of hot and cold outlet piping, including between storage tank and heat trap, for a nonrecirculating storage system • Pipes that are externally heated
13	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Insulation shall be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather shall be installed with a cover suitable for outdoor service per §120.3(b) and §130.0(c).

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance
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STATE OF CALIFORNIA
Domestic Water Heating System
NRC-PLB-E CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
Project Name: Covina HS Pool Replacement Report Page: (Page 5 of 6)
Project Address: 463 South Hollenbeck Ave Date Prepared: 12/8/2022

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
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RESPONSIBLE PERSON'S DECLARATION STATEMENT
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3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of the 2019 Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
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STATE OF CALIFORNIA
Domestic Water Heating System
NRC-PLB-E CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
Project Name: Covina HS Pool Replacement Report Page: (Page 1 of 6)
Project Address: 463 South Hollenbeck Ave Date Prepared: 12/8/2022

A. GENERAL INFORMATION

01 Project Location (city): Covina
02 Climate Zone: 9

03 Occupancy Types Within Project (select all that apply):
 Nonresidential
 High-Rise Residential
 Hotel/Motel
 State Building
 Healthcare Facility
 Other (Write in):

B. PROJECT SCOPE
This table includes domestic water heating systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive paths outlined in §160.5, §150.1(c), §141.0(a), or §141.0(b)(2) for addition or alterations. Solar water heating systems are documented on the NRC-SA compliance document. Combined hydronic water heating systems are documented on the NRC-HCV compliance document.

My project consists of (check all that apply):
 New system (DHW system being installed for the first time in newly constructed building)
 System Alteration (equipment, distribution or controls)
 System Replacement (equipment, distribution or controls)
 Equipment
 Distribution
 Controls

FOOTNOTES: Point of use water heaters, or other non-central systems used to serve nonresidential spaces, are considered individual systems.
Dwelling units refers to hotel/motel guest rooms and units in a high-rise residential occupancy.

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance
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STATE OF CALIFORNIA
Domestic Water Heating System
NRC-PLB-E CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
Project Name: Covina HS Pool Replacement Report Page: (Page 4 of 6)
Project Address: 463 South Hollenbeck Ave Date Prepared: 12/8/2022

G. DOMESTIC HOT WATER DISTRIBUTION SYSTEM

Fluid Temperature Range (°F)	Conductivity Range (Btu-in per hour per ft² per °F)	Insulation Mean Rating Temp (°F)	Nominal Pipe Diameter (in)		
			< 1	1 to < 1.5	1.5 to < 4
105-140	0.22 - 0.28	100	1.0 in or R-7.7	1.5 in or R-13.5	1.5 in or > 11

H. DOMESTIC HOT WATER CONTROLS
This table is used to demonstrate compliance with control requirements in §110.3 for all occupancies. For high-rise residential and hotel/motel occupancies, compliance is also demonstrated with requirements in §150.1(b).

	Yes	No	Not Applicable	Requirement
01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Construction documents require manufacturer certification that service water heating systems are equipped with automatic temperature controls capable of adjusting temperature settings per §110.3(a).
02	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Systems with capacity > 167,000 BTU/H equipped with outlet temperature controls per §110.3(c), unless covered by California Plumbing Code §13.0.
03	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Controls for circulating pumps or electrical heat trace systems are capable of automatically turning off the system per §110.3(c)(2), unless systems serve healthcare facility.
04	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	For recirculation systems serving multiple dwelling units, design includes automatic pump controls per §150.1(c)(88) or §150.2 for additions or alterations.
05	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	For recirculation systems serving individual dwelling units, design includes manual on/off controls as specified in Reference.
06	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	For replacement single heat pump water heaters serving individual dwelling units in climate zone 1-15, design includes communication interface that meets demand responsive control requirements of §110.1(x) per §150.2(b)(1)(ii).

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance
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STATE OF CALIFORNIA
Domestic Water Heating System
NRC-PLB-E CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
Project Name: Covina HS Pool Replacement Report Page: (Page 2 of 6)
Project Address: 463 South Hollenbeck Ave Date Prepared: 12/8/2022

C. COMPLIANCE RESULTS
Table C will indicate if the project data input into the compliance document is compliant with water heating requirements. If this table says "DOES NOT COMPLY" or "COMPLIES WITH EXCEPTIONAL CONDITIONS" refer to Table D, or the table indicated as not compliant for guidance.

	01	02	03	04
Domestic Hot Water Equipment	Distribution Systems	Controls	Table H	Compliance Results
Table F	Table G	Table H	Table H	COMPLIES
Yes	Yes	Yes	Yes	COMPLIES

D. EXCEPTIONAL CONDITIONS
This table is auto-filled with unedited comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS
This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance
Registration Date/Time: Report Version: 2319.1.003
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Schema Version: sv 20190401
Report Generated: 2022-12-08 16:26:15

STATE OF CALIFORNIA
Domestic Water Heating System
NRC-PLB-E CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
Project Name: Covina HS Pool Replacement Report Page: (Page 5 of 6)
Project Address: 463 South Hollenbeck Ave Date Prepared: 12/8/2022

I. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION
Selections have been made based on information provided in this document. If any selection have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRC/

Yes	No	Form/Title	Field Inspector	
			Pass	Fail
<input checked="" type="checkbox"/>	<input type="checkbox"/>	NRC-PLB-01-E - Must be submitted for all buildings.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRC-PLB-02-E - Must be submitted for high-rise residential and hotel/motel central hot water distribution systems to be recognized for compliance.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRC-PLB-03-E - Must be submitted for high-rise residential and hotel/motel single dwelling unit hot water distribution systems to be recognized for compliance.	<input type="checkbox"/>	<input type="checkbox"/>

J. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE
There are no Certificates of Acceptance applicable to service water heating requirements.

K. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION
Selections have been made based on information provided in this document. If any selection have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be completed by a HERS Rater and provided to the building inspector during construction. The final documents must be created by a HERS Providers registry, but drafts can be found online at https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRC/

Yes	No	Form/Title	Field Inspector	
			Pass	Fail
<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCV-PLB-21-H High-Rise Residential Central Hot Water Distribution HERS Verification	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCV-PLB-22-H High-Rise Residential Individual Dwelling Unit Hot Water Distribution HERS Verification	<input type="checkbox"/>	<input type="checkbox"/>

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance
Registration Date/Time: Report Version: 2319.1.003
Registration Provider: Energysoft
Schema Version: sv 20190401
Report Generated: 2022-12-08 16:26:15

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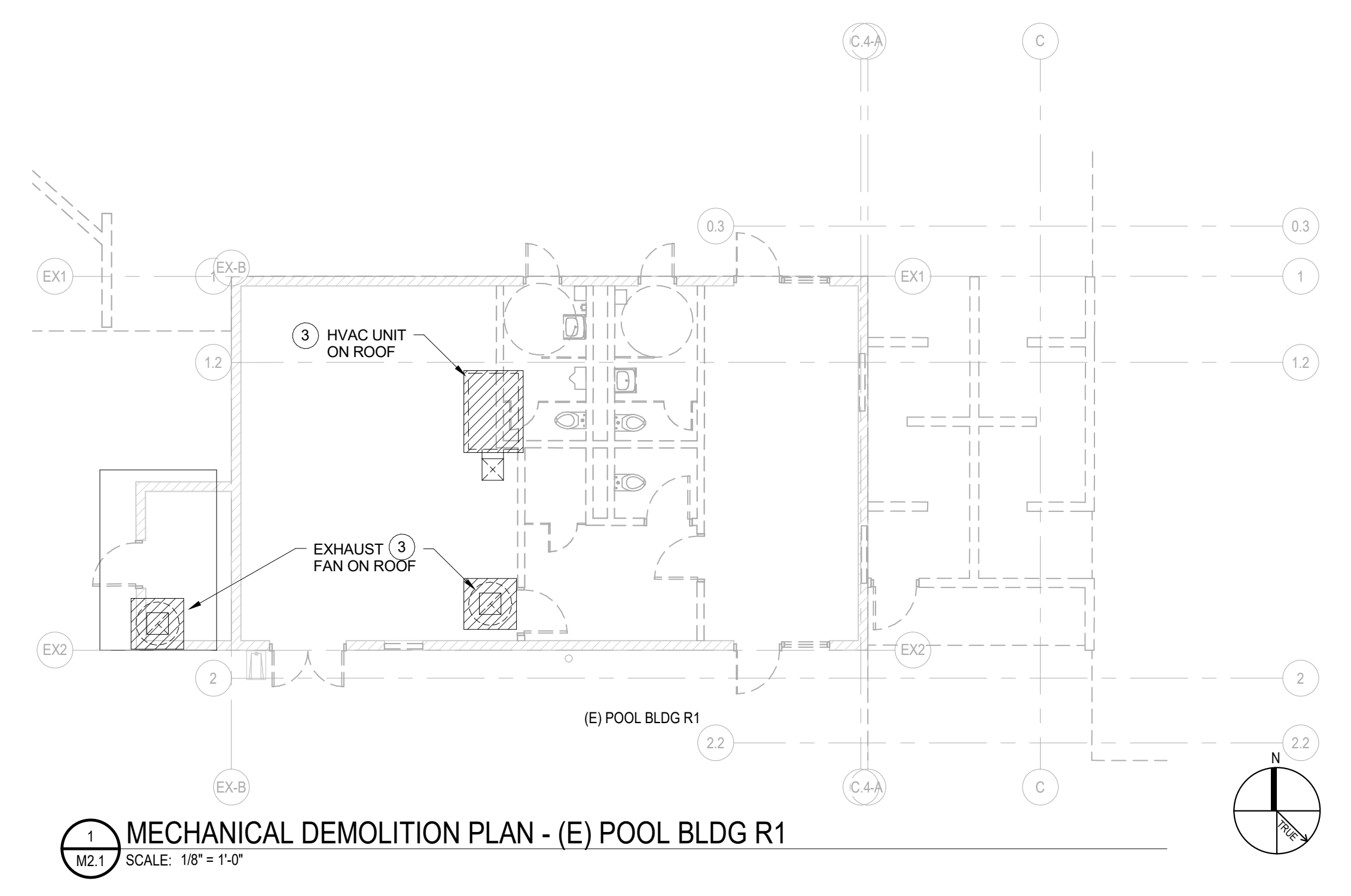
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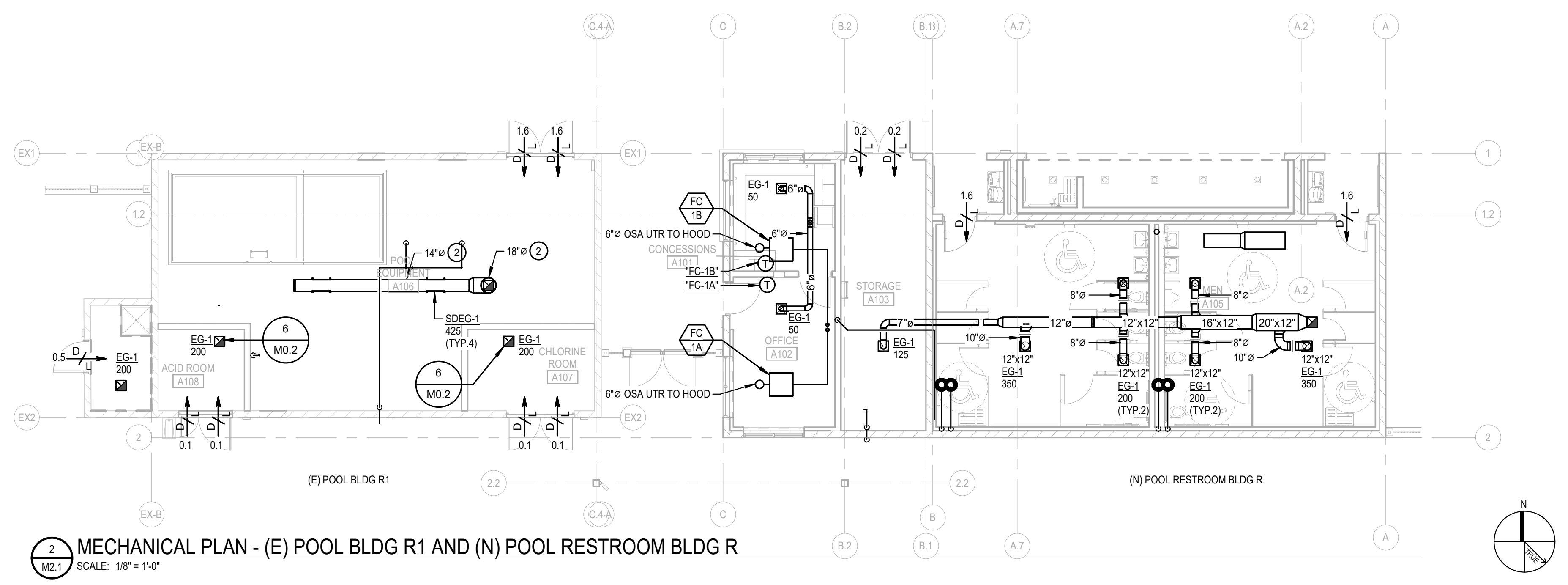
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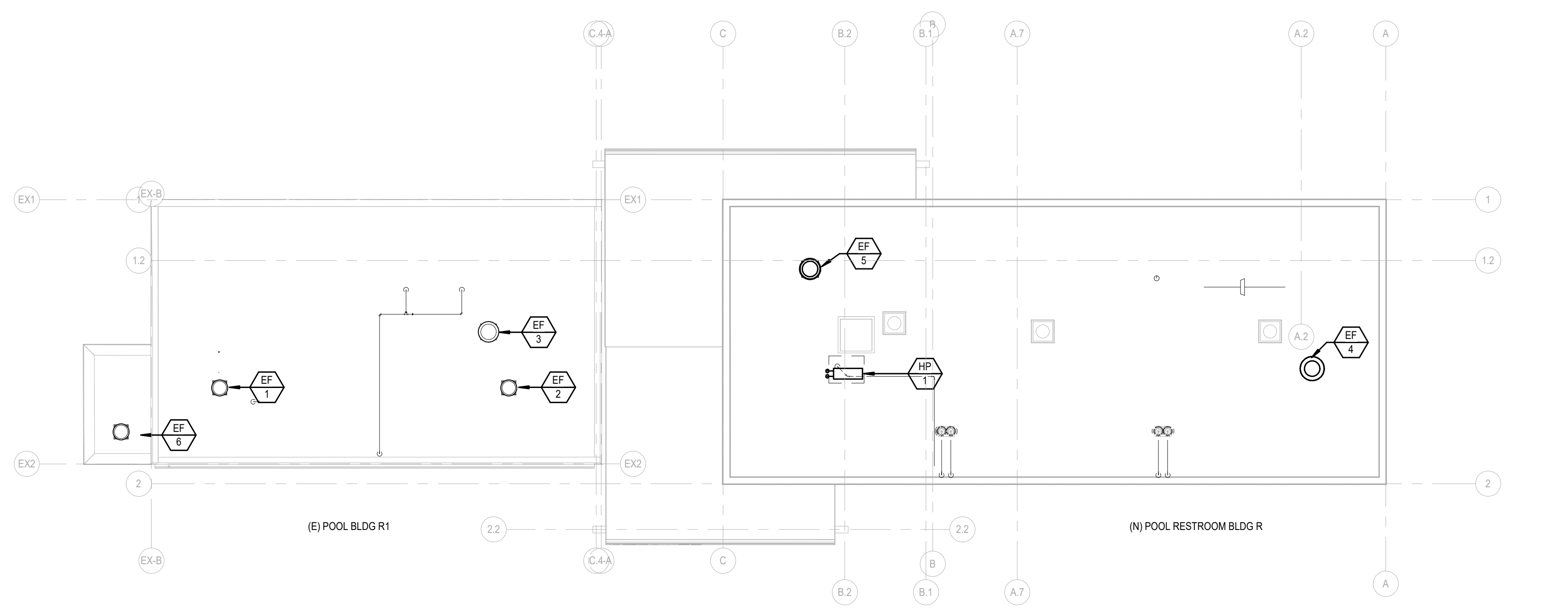
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1 MECHANICAL DEMOLITION PLAN - (E) POOL BLDG R1
SCALE: 1/8" = 1'-0"



2 MECHANICAL PLAN - (E) POOL BLDG R1 AND (N) POOL RESTROOM BLDG R
SCALE: 1/8" = 1'-0"



3 MECHANICAL ROOF PLAN - (E) POOL BLDG R1 AND (N) POOL RESTROOM BLDG R
SCALE: 1/8" = 1'-0"

SHEET NOTES

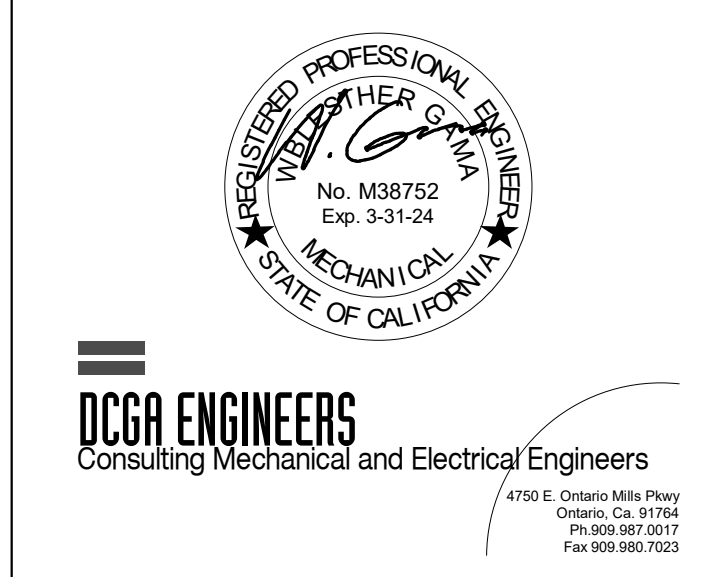
- 1 10"x6" STAINLESS STEEL DUCT DOWN TO 12" A.F.F.
- 2 STAINLESS STEEL DUCT IN POOL EQUIPMENT ROOM.
- 3 REMOVE EQUIPMENT, CURB, WIRING & CONTROLS. PATCH ROOF TO MATCH EXISTING.



COVINA VALLEY HS POOL REPLACEMENT
COVINA VALLEY UNIFIED SCHOOL DISTRICT
483 SOUTH HOLLENBECK AVENUE COVINA, CA 91723

DSA SUBMITTAL SET_V2
04/28/2023 REVISIONS

75-22616-00
DSA # 03-122700
DSA FILE # 19-HB
MECHANICAL DEMOLITION, REMODEL & MECHANICAL ROOF PLANS



M2.1

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4/27/2023 1:28:42 PM

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PLUMBING SYMBOLS	
	REDUCED PRESSURE BACKFLOW PREVENTER (RPBFP)
	FLOOR DRAIN, AREA DRAIN
	ROOF DRAIN, OVERFLOW DRAIN
	FLOOR SINK
	REDUCER
	UNION
	FLEXIBLE CONNECTOR
	STRAINER
	WATER HAMMER ARRESTER BEHIND ACCESS PANEL
	TRAP PRIMER BEHIND ACCESS PANEL
	PRESSURE GAUGE WITH PET COCK
	THERMOMETER
	TEMPERATURE/PRESSURE RELIEF VALVE & PRESSURE RELIEF VALVE
	AIR RELIEF VALVE
	CHECK VALVE
	SHUT-OFF VALVE
	BALANCING VALVE
	VALVE IN YARD BOX
	SOLENOID VALVE (ELECTRIC)
	GAS COCK
	GAS PRESSURE REGULATOR
	HOSE BIBB
	DIRECTION OF FLOW
	PLUGGED OUTLET
	PIPING BREAK
	SQUARE FEET (SQ FT)
	FLOOR CLEANOUT
	FLOOR CLEANOUT IN YARDBOX
	CLEANOUT (CO)
	PIPING RISE OR DROP
	PIPING DOWN
	PIPING UP
	BRANCH CONNECTION
	BRANCH-BOTTOM CONNECTION
	FIRE LINE
	DRAINAGE ABOVE GROUND
	DRAINAGE BELOW GROUND
	SANITARY VENT
	GREASE WASTE
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	DOMESTIC HOT WATER RETURN
	NATURAL GAS (LOW PRESSURE)
	NATURAL GAS (MEDIUM PRESSURE)
	STORM DRAINAGE ABOVE GROUND
	STORM DRAINAGE BELOW GROUND
	OVERFLOW DRAIN ABOVE GROUND
	CONDENSATE DRAIN
	NON-POTABLE COLD WATER
	DETAIL NUMBER
	DETAIL DESIGNATION
	DRAWING NUMBER
	EQUIPMENT DESCRIPTION
	EQUIPMENT DESIGNATION
	EQUIPMENT NUMBER

ADA COMPLIANCE NOTES	
1.	COVER EXPOSED HOT & COLD WATER PIPING AND WASTE PIPING AT ALL LAVATORIES WITH NEATLY PRE-FORMED PIPE INSULATION, PLUMBEREX "PRO-EXTREME" MODEL X4333 OR X4444 OR APPROVED EQUIVALENT.
2.	ALL PIPING UNDER LAVATORIES SHALL BE INSULATED OR OTHERWISE COVERED. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES.
3.	FAUCET CONTROLS AND OPERATING MECHANISMS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST.
4.	THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 LB. LEVER-OPERATED, PUSH TYPE AND ELECTRONICALLY CONTROLLED MECHANISMS ARE EXAMPLES OF ACCEPTABLE DESIGNS. SELF-CLOSING VALVES ARE ALLOWED IF THE FAUCET REMAINS OPEN FOR AT LEAST 10 SECONDS.
5.	ACCESSIBLE PLUMBING FIXTURES SHALL COMPLY WITH ALL OF THE REQUIREMENTS OF CBC 2019-CHAPTER 11B-DIVISION 6 HEIGHTS AND LOCATION OF ALL FIXTURES SHALL BE ACCORDING TO CBC TABLE 11B-604.9. FIXTURE CONTROLS SHALL COMPLY WITH CHAPTER SECTION 11B-309.4.

PLUMBING ABBREVIATIONS			
- A -	ABOVE	- I -	INDUSTRIAL COLD WATER
ABV	AIR CONDITIONING (HVAC)	IW	INDIRECT WASTE
ACC	ACCESSIBLE	IE	INVERT ELEVATION
AFF	ABOVE FINISH FLOOR	INT	INTEGRAL
AFSR	AUTOMATIC FIRE SPRINKLER RISER	- K -	KILOWATT
AP	ACCESS PANEL	- L -	LAVATORY
AV	ACID VENT	LAV	LAVATORY
AW	ACID WASTE	- M -	MEDIUM PRESSURE GAS
- B -	BEHIND	MPC	MOUNTED
BEH	BEHIND	MTD	MOUNTED
BEL	BELOW	- N -	NOT TO SCALE
BTUH	BRITISH THERMAL UNITS PER HOUR	NC	NORMALLY CLOSED
- C -	CONDENSATE DRAIN	NO	NORMALLY OPEN
CFH	CUBIC FEET PER HOUR	- O -	ON CENTER
CFM	CUBIC FEET PER MINUTE	OC	ON CENTER
CLG	CEILING	ODT	OVERFLOW DRAIN
CO	CLEANOUT	- P -	PHASE
CONT	CONTINUATION	PO	PLUGGED OUTLET
COTG	CLEANOUT TO GRADE	POC	POINT OF CONNECTION
CU FT	CUBIC FEET	PSI	POUNDS PER SQUARE INCH
CW	COLD WATER (DOMESTIC)	- R -	ROOF DRAIN
- D -	DOWN	RPM	REVOLUTIONS PER MINUTE
DN	DOWN	- S -	SANITARY SEWER
DF	DRINKING FOUNTAIN	SD	STORM DRAIN
DR	DRIP	SK	SINK
DS	DOWN SPOUT	SOV	SHUT-OFF VALVE
DWG	DRAWING	SO	SQUARE
- E -	EXISTING	SS	SERVICE SINK
(E)	ELEVATION	- T -	THERMOSTATIC MIXING VALVE
EQUIP	EQUIPMENT	TMV	TRAP PRIMER
ESEW	EMERGENCY SHOWER EYE WASH	TF	TRAP PRIMER LINE
EWC	ELECTRIC WATER COOLER	TPL	TYPICAL
- F -	FIRE LINE	TW	TEMPERED WATER
FCO	FLOOR CLEANOUT	TWR	TEMPERED WATER RETURN
FD	FLOOR DRAIN	UR	URINAL
FFE	FINISHED FLOOR ELEVATION	- U -	URINAL
FLR	FLOOR	V	VENT
FS	FLOOR SINK	VERT	VERTICAL
FT	FOOT, FEET	VTR	VENT THROUGH ROOF
FU	FIXTURE UNIT	VB	VACUUM BREAKER
FLV	FLUSH VALVE	- W -	WASTE
- G -	GAS (LOW PRESSURE)	W	WITH
GAL	GALLON	WC	WATER CLOSET
GC	GAS COCK	WCO	WALL CLEANOUT
GPF	GALLONS PER FLUSH	WH	WALL HYDRANT
GPH	GALLONS PER HOUR	WHA	WATER HAMMER ARRESTOR
GPM	GALLONS PER MINUTE	- Y -	YARD BOX
GPR	GAS PRESSURE REGULATOR	YB	YARD BOX
GWH	GAS WATER HEATER		
GW	GREASE WASTE		
- H -	HOSE BIBB		
HP	HORSEPOWER		
HW	HOT WATER (DOMESTIC)		
HWR	HOT WATER RETURN (DOMESTIC)		

EQUIPMENT ANCHORAGE NOTE	
<u>MEP COMPONENT ANCHORAGE NOTE</u>	
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 2019 CBC SECTIONS 1617A.1, 18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTER 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 COMPONENTS AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRAVERSE 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 THE 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 THE ABOVE REQUIREMENTS.	
<u>PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE</u>	
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 2019 CBC, SECTIONS 1617A.1.24, 1617A.1.25, AND 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 PRE-APPROVED INSTALLATION GUIDE (E.G., OSHPD 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):	
<input type="checkbox"/> MP <input type="checkbox"/> MD <input type="checkbox"/> PP <input type="checkbox"/> E	OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.
<input type="checkbox"/> MP <input type="checkbox"/> MD <input type="checkbox"/> PP <input type="checkbox"/> E	OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL (OPM) #0043-13.

GENERAL NOTES										
1.	ALL WORK SHALL BE IN ACCORDANCE WITH THE 2019 CALIFORNIA PLUMBING CODES, CALIFORNIA STATE FIRE MARSHAL, CALIFORNIA OFFICE OF THE STATE ARCHITECT, AND CALIFORNIA ADMINISTRATIVE CODES, TITLE 17, 24 AND AUTHORITIES HAVING JURISDICTIONS.									
2.	CONTRACTOR SHALL VERIFY ALL UTILITIES LOCATION, SIZE AND ELEVATIONS WITH CIVIL ENGINEER'S DRAWINGS PRIOR TO START OF WORK.									
3.	CONTRACTOR SHALL COORDINATE WITH ALL OTHER TRADES FOR CLEARANCES AND WORK INCLUDED PRIOR TO START OF WORK.									
4.	KEEP ALL PIPING CLEAR FROM LOAD BEARING FOOTINGS.									
5.	REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS, MOUNTING HEIGHTS AND COLORS OF ALL PLUMBING FIXTURES.									
6.	ALL VENTS SHALL TERMINATE NOT LESS THAN 10 FEET FROM, OR NOT LESS THAN 3 FEET ABOVE, FRESH AIR INTAKE, WINDOWS, DOORS OR OTHER OPENINGS.									
7.	PROVIDE AND INSTALL ACCESS PANELS AT ALL LOCATION OF WATER HAMMER ARRESTORS. - PANELS TO 12 X 12 OR AS REQUIRED, FINISH SELECTED BY ARCHITECT.									
8.	CLEANOUTS SHALL BE INSTALLED PER CALIFORNIA PLUMBING CODE SECTION 707, 719 AND 803.									
9.	SLOPE OF BUILDING SEWERS SHALL NOT BE LESS THAN 2% UNLESS NOTED OTHERWISE.									
10.	ALL DOMESTIC HOT WATER PIPING SHALL BE INSULATED AS REQUIRED BY CALIFORNIA ENERGY COMMISSION TABLE 120.3.A OF THE BUILDING ENERGY EFFICIENCY STANDARDS. INSULATION SHALL HAVE A FIRE HAZARD CLASSIFICATION 25/50 COMPOSITE RATING.									
	<table border="1"> <thead> <tr> <th>PIPE SIZE</th> <th>INSULATION THICKNESS</th> <th>INSULATION VALUE</th> </tr> </thead> <tbody> <tr> <td>< 1"</td> <td>1"</td> <td>K FACTOR = 0.25</td> </tr> <tr> <td>1" <</td> <td>1-1/2"</td> <td>K FACTOR = 0.25</td> </tr> </tbody> </table>	PIPE SIZE	INSULATION THICKNESS	INSULATION VALUE	< 1"	1"	K FACTOR = 0.25	1" <	1-1/2"	K FACTOR = 0.25
PIPE SIZE	INSULATION THICKNESS	INSULATION VALUE								
< 1"	1"	K FACTOR = 0.25								
1" <	1-1/2"	K FACTOR = 0.25								
11.	CIRCULATING HOT WATER SYSTEMS SHALL BE EQUIPPED WITH A CONTROL CAPABLE OF AUTOMATICALLY TURNING OFF THE CIRCULATING PUMPS WHEN HOT WATER IS NOT REQUIRED (TIME CLOCK).									
12.	ALL SERVICE WATER HEATING EQUIPMENT TO BE IN COMPLIANCE WITH THE CALIFORNIA ENERGY COMMISSIONS (CEC) REQUIREMENTS AND BE SO LABELED.									
13.	COORDINATE WITH ELECTRICAL TRADE PRIOR TO ORDERING EQUIPMENT FOR AVAILABLE VOLTAGES AT EQUIPMENT LOCATIONS.									
14.	ALL HOSE BIBBS, WALL HYDRANTS AND JANITORIAL SERVICE SINKS SHALL BE EQUIPPED WITH APPROVED, PROPERLY INSTALLED ATMOSPHERIC TYPE VACUUM BREAKER.									
15.	ALL WATER CONNECTIONS TO HVAC EQUIPMENT SHALL BE PROTECTED BY APPROVED, REDUCED PRESSURE BACKFLOW PREVENTION DEVICES. DEVICES SHALL BE ACCESSIBLE FOR TEST AND MAINTENANCE. PROVIDE FURNEL DRAIN AND INDIRECT WASTE PIPING FOR BACKFLOW DEVICES DISTANCE FROM FLOOR SINKS.									
16.	NATURAL GAS LINES SHALL NOT BE LOCATED UNDER ANY STRUCTURE. 2019 CPC SECTION 1210.1.6									
17.	DO NOT USE METALLIC GAS LINES TO GROUND ELECTRICAL SYSTEM.									
18.	PROVIDE COATED 12 GAUGE COPPER WIRE ATTACHED TO POLYETHYLENE GAS YARD PIPING FOR TRACING PURPOSE. TERMINAL WIRES SHALL BE IDENTIFIED IN LABELED ACCESS BOXES.									
19.	FOR LOCATION OF PIPING SLEEVES AND FLOOR OPENINGS THROUGH STRUCTURAL FLOOR SLABS, REFER TO DETAILS INDICATED IN STRUCTURAL DRAWINGS.									
20.	CONTRACTOR SHALL PATCH AND REPAIR ALL SURFACE AREAS DAMAGED BY HIS OPERATION.									
21.	ALL VALVES, UNIONS, ETC. TO BE LINE SIZE UNLESS OTHERWISE INDICATED ON DRAWINGS.									
22.	UNIONS SHALL BE PROVIDED AND INSTALLED AFTER EACH THREADED TYPE VALVE AND PRIOR TO EQUIPMENT CONNECTIONS.									
23.	ANY DEVIATION FROM THE DRAWINGS OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER PRIOR TO INSTALLATION.									
24.	CUTTING, BORING, SAWCUTTING OR DRILLING THROUGH THE NEW OR EXISTING STRUCTURAL ELEMENTS TO BE DONE ONLY WHEN SO DETAILED IN THE DRAWINGS OR ACCEPTED BY THE ARCHITECT AND STRUCTURAL ENGINEER WITH THE APPROVAL OF DSA REPRESENTATIVE.									
25.	FOR THE PURPOSE OF CLEARNESS AND LEGIBILITY, THE DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND ALTHOUGH SIZES AND LOCATION OF EQUIPMENT IS DRAWN TO SCALE WHEREVER POSSIBLE, THE CONTRACTOR SHALL MAKE USE OF ALL DATA IN ALL OF THE CONTRACTOR DOCUMENTS AND VERIFY THIS INFORMATION BEFORE ORDERING, FABRICATING OR INSTALLING OF ANY MATERIALS.									
26.	ALL INTERIOR CONDENSATE PIPING SHALL BE INSULATED WITH CLOSED CELL FOAM INSULATION, WITH SURFACE BURNING CHARACTERISTIC FIRE HAZARD CLASSIFICATION 25/50 PER ASTM E84, UL 723, NFPA 255.									
27.	CONTRACTOR SHALL PROVIDE AS-BUILTS, CAD GENERATED AND DRAWN TO THE SAME SCALE THAT CONSTRUCTION DRAWINGS INDICATE (I.E. ENLARGED PLANS @ 1/4"=1'-0") SUBMIT 6 SETS OF HARD COPIES AND 1 ELECTRONIC COPY ON CD-ROM. CAD DRAWINGS SHALL BE AUTOCAD LATEST VERSION. COORDINATE REQUIREMENTS WITH OWNER.									
28.	PROVIDE WRITTEN WARRANTY TO REPLACE ALL FAULTY MATERIALS AND/OR LABOR, AT NO COST TO OWNER, FOR A PERIOD OF ONE YEAR FROM DATE OF OWNERS ACCEPTANCE.									
29.	ALL WORK SHALL BE IN ACCORDANCE WITH TITLE 24, 2019 CALIFORNIA CODE OF REGULATIONS (CCR), 2019 CALIFORNIA BUILDING CODE, PART 2, TITLE 24 CCR, 2019 CALIFORNIA PLUMBING CODE, PART 5, TITLE 24 CCR.									
30.	ALL DEMOLITION WORK SHALL COMPLY WITH CBC CHAPTER 33 AND CFC CHAPTER 33.									

PLUMBING SHEET INDEX	
SHEET NO.	DESCRIPTION
P0.1	PLUMBING GENERAL NOTES, SYMBOLS AND ABBREVIATIONS
P0.2	PLUMBING SCHEDULES AND DETAILS
PS1.1	PLUMBING SITE PLAN
P2.1	PLUMBING DEMOLITION, REMODEL & PLUMBING ROOF PLANS
TOTAL SHEETS:	4



COVINA VALLEY HS SWIMMING POOL
COVINA VALLEY UNIFIED SCHOOL DISTRICT
483 S. HOLLENBECK AVENUE COVINA, CA 91723

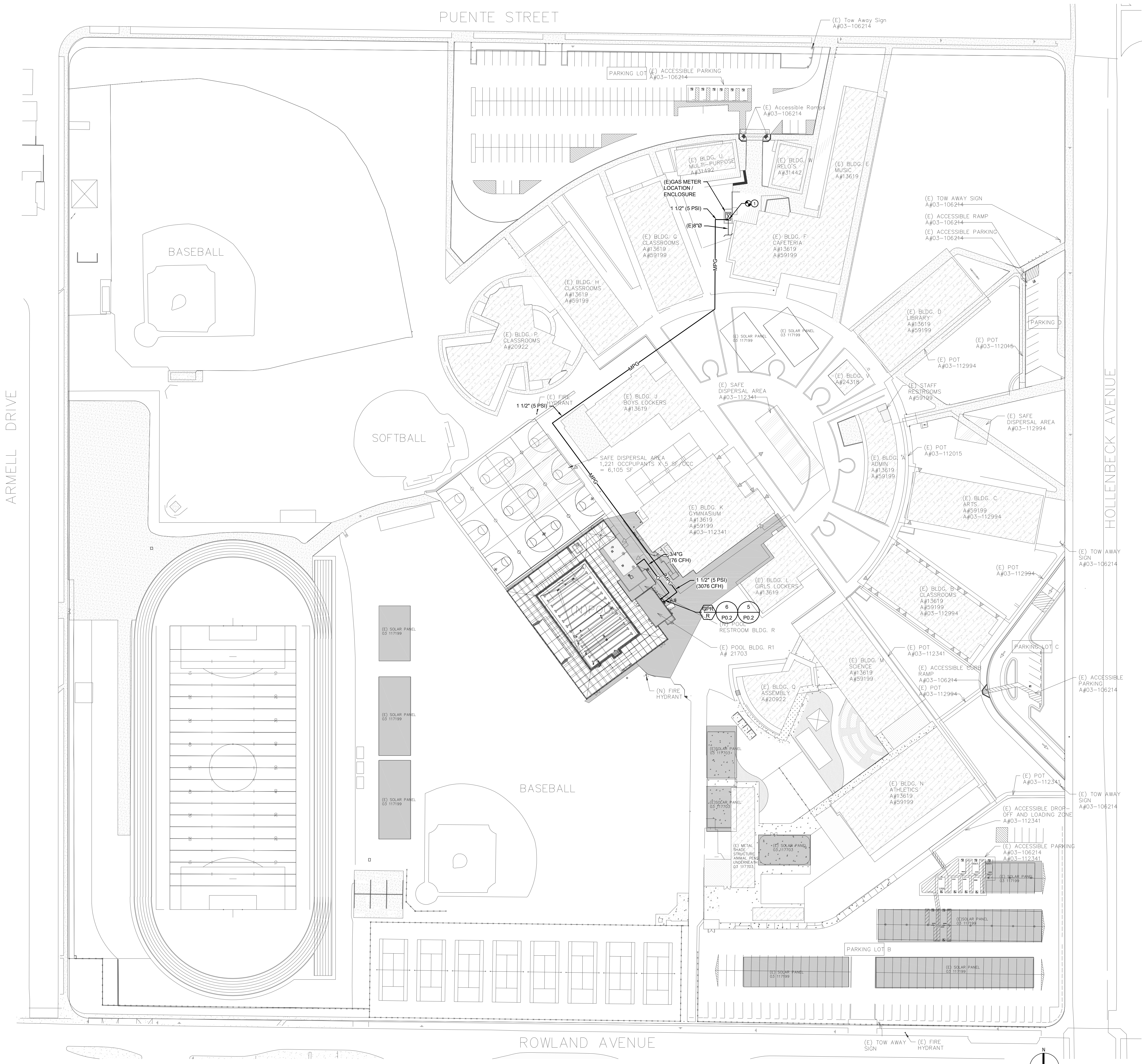
DSA SUBMITTAL SET_V2
04/28/2023
REVISIONS



DCGA ENGINEERS
Consulting Mechanical and Electrical Engineers
4750 E. Ontario Mills Pkwy
Ontario, CA 91764
Ph: 909.987.0017
Fax: 909.980.7223

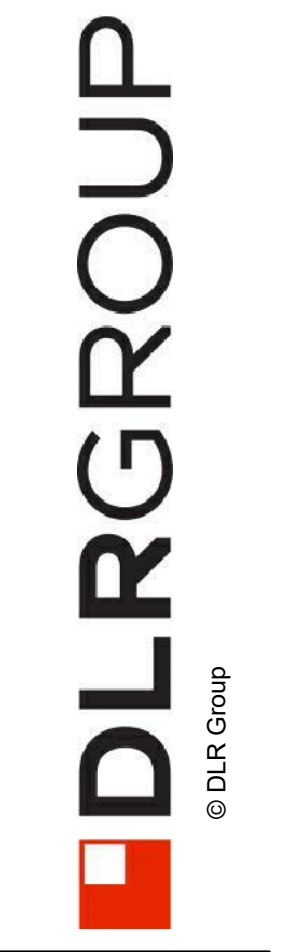
75-22616-00
DSA # 03-127700
DSA FILE # 19-18
PLUMBING GENERAL NOTES, SYMBOLS AND ABBREVIATIONS

P0.1



SHEET NOTES

1. CONTRACTOR SHALL COORDINATE WITH SOUTHERN CALIFORNIA GAS COMPANY FOR POTENTIAL GAS METER CHANGE OUT.



COVINA VALLEY HS SWIMMING POOL
 COVINA VALLEY UNIFIED SCHOOL DISTRICT
 483 S. HOLLENBECK AVENUE COVINA, CA 91723

DSA SUBMITTAL SET_V2
 04/28/2023 REVISIONS

75-22616-00
 DSA AF 03-122700
 DSA FILE # 194-H8
PLUMBING SITE PLAN

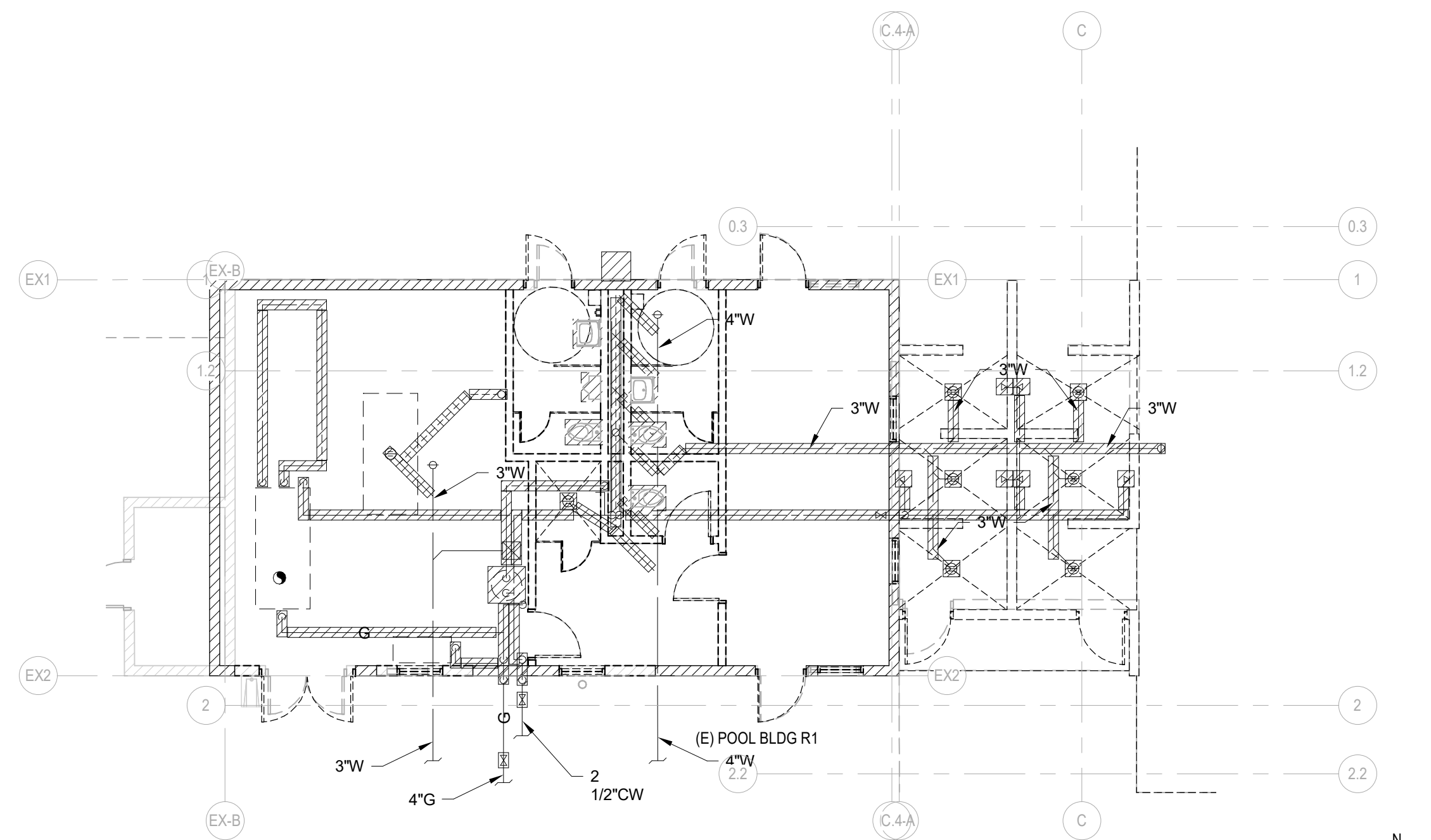
PS1.1

1 PLUMBING SITE PLAN
 ES11 SCALE: 1" = 50'-0"

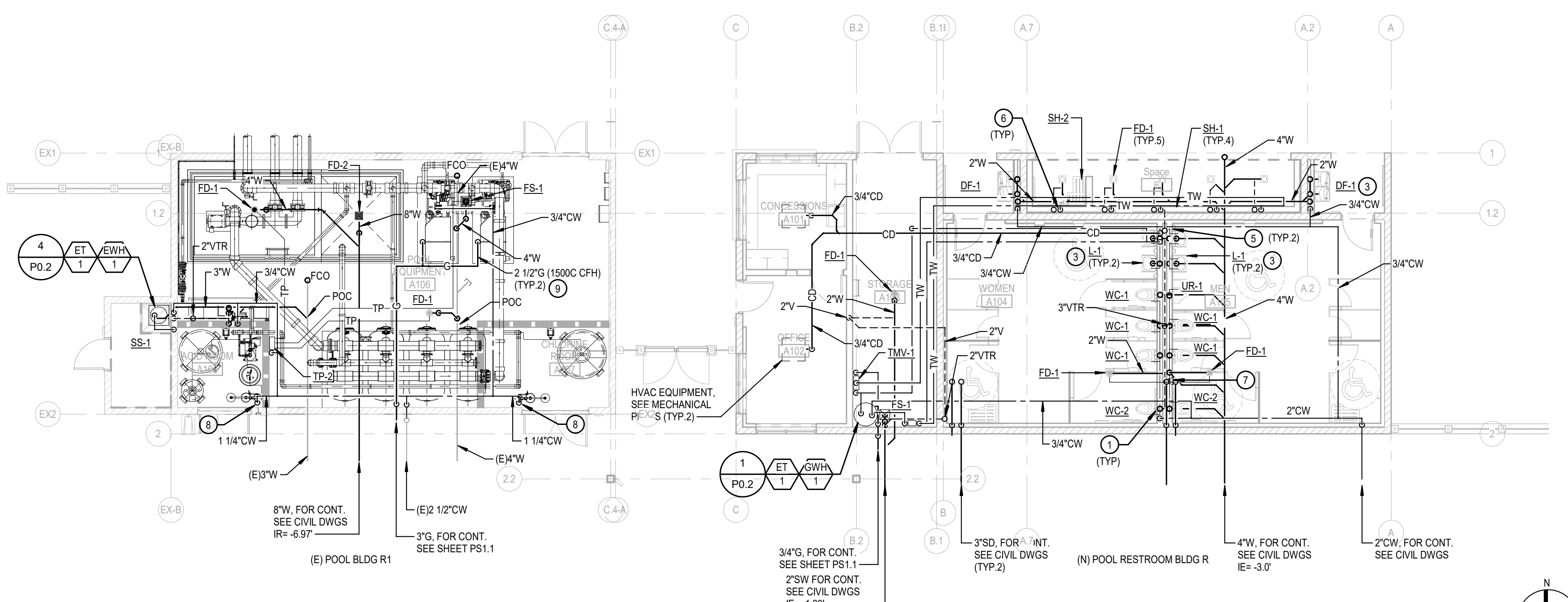
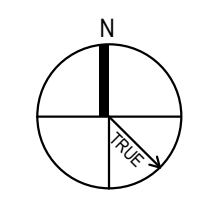


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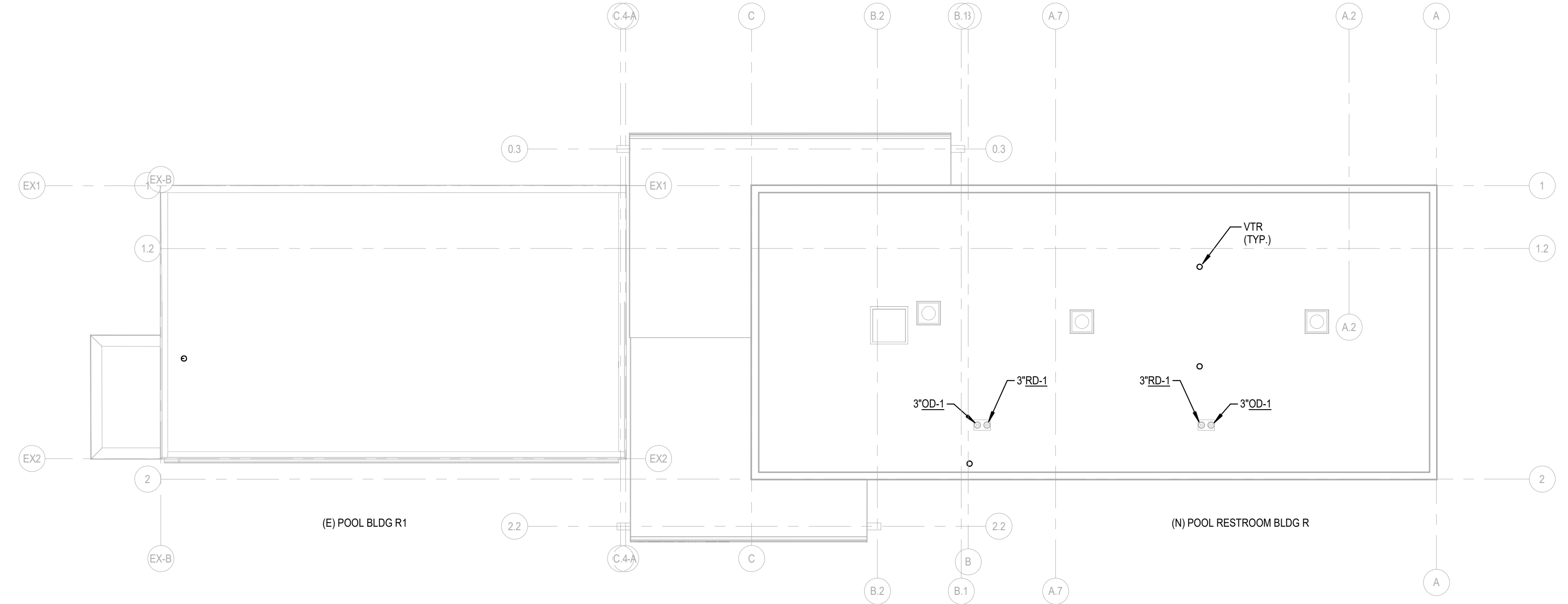
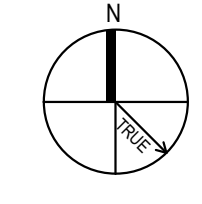
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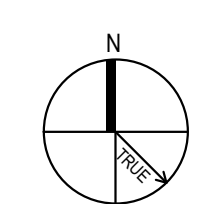
1 PLUMBING DEMOLITION PLAN - (E) POOL BLDG R1
SCALE: 1/8" = 1'-0"



2 PLUMBING PLAN - (E) POOL BLDG R1 AND (N) POOL RESTROOM BLDG R
SCALE: 1/8" = 1'-0"



3 PLUMBING ROOF PLAN - (E) POOL BLDG R1 AND (N) POOL RESTROOM BLDG R
SCALE: 1/8" = 1'-0"



SHEET NOTES

- 1 4"W DOWN AND 2"V UP.
- 2 3"W DOWN AND 2"V UP.
- 3 2"W DOWN AND 1 1/2"V UP.
- 4 2"CW DOWN IN WALL WITH SHUT-OFF VALVE BEHIND ACCESS PANEL TO 2"CW HEAD IN WALL.
- 5 3/4"CW DOWN IN WALL WITH SHUT-OFF VALVE BEHIND ACCESS PANEL.
- 6 3/4"TW IN WALL TO SH.
- 7 TP-1 AND WHA-1 IN WALL BEHIND ACCESS PANEL. CONTINUE 1/2"CW DOWN TO BELOW GRADE FLOOR AND CONNECT TO ED OR ES TRAP PRIMER CONNECTION.
- 8 1 1/4"CW DOWN TO EMERGENCY FIXTURE. CONNECT PER MANUFACTURERS RECOMMENDATION.
- 9 2 1/2"GW DOWN TO POOL HEATER. CONNECT PER MANUFACTURERS RECOMMENDATIONS.



COVINA VALLEY HS POOL REPLACEMENT
COVINA VALLEY UNIFIED SCHOOL DISTRICT
483 SOUTH HOLLENBECK AVENUE COVINA, CA 91723

DSA SUBMITTAL SET_V2
04/28/2023
REVISIONS

75-22616-00
DSA # 03-122700
DSA FILE # 19-HB
PLUMBING DEMOLITION, REMODEL & PLUMBING ROOF PLANS



CCGA ENGINEERS
Consulting Mechanical and Electrical Engineers
4750 E. Chiquita Mills Pkwy
Chino Hills, CA 91709
PH 909 587 0017
FX 909 587 0023

P2.1

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DSA 103-19- LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (SOILS), 2019 CBC
 Application Number: School Name: School District:
 04-119455 TBD USA Shade & Fabric Structures
 DSA File Number: Increment Number: Date Created: 2021-03-25 21:00:56

2019 CBC
IMPORTANT: This form is only a summary list of structural tests and some of the special inspections required for the project. Generally, the structural tests and special inspections noted on this form are those that will be performed by the Geotechnical Engineer of Record, Laboratory of Record, or Special Inspector. The complete test and inspection program must be performed as detailed on the DSA approved documents. The appendix at the bottom of the form identifies work NOT subject to DSA requirements for special inspection or structural testing. The project inspector is responsible for providing information on all facets of construction, including but not limited to, special inspections not listed on this form such as structural wood framing, high load wood diaphragms, cold-formed steel framing, anchorage of non-structural components, etc., per Title 24, Part 1, Chapter 17A (2019 CBC).

****NOTE:** Undefined section and table references found in this document are from the CBC or California Building Code.

KEY TO COLUMNS

1. TYPE	2. PERFORMED BY
Continuous - Indicates that a continuous special inspection is required.	GE - Indicates that the special inspection shall be performed by a registered geotechnical engineer or his or her authorized representative.
Periodic - Indicates that a periodic special inspection is required.	LOB - Indicates that the test or special inspection shall be performed by a testing laboratory accepted in the DSA Laboratory Evaluation and Acceptance Program. See CA Section 4335.
Test - Indicates that a test is required.	SI - Indicates that the special inspection may be performed by a project inspector when specifically approved by DSA.
	SA - Indicates that the special inspection shall be performed by an appropriately qualified approved special inspector.

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Geotechnical Reports: Project does NOT have and does NOT require a geotechnical report

1. GENERAL:	Table 1705A.6
Test or Special Inspection	Type Performed By Code References and Notes
1. Verify test: <input type="checkbox"/> a. One has been prepared properly prior to placement of controlled fill and/or excavations for foundations. <input type="checkbox"/> b. Foundation excavations are extended to proper depth and have reached proper materials. <input type="checkbox"/> c. Material below footing is adequate to achieve the design bearing capacity.	See Notes SI Refer to specific items identified in the Appendix listing exemptions for limitations. Placement of controlled fill exceeding 12" depth under foundations is not permitted without a geotechnical report.

2. SOIL COMPACTION AND FILL:	Table 1705A.6
Test or Special Inspection	Type Performed By Code References and Notes
1. Verify use of proper materials, densities and inspect fill thickness, placement and compaction during placement of fill. <input type="checkbox"/> a. Compaction testing.	Continuous LOB Under the supervision of a geotechnical engineer or LOB's engineering manager. Refer to specific items identified in the Appendix listing exemptions for limitations. Test LOB Under the supervision of a geotechnical engineer or LOB's engineering manager. Refer to specific items identified in the Appendix listing exemptions for limitations.

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Test or Special Inspection	Type	Performed By	Code References and Notes
1. Verify pile materials, sizes and lengths comply with the requirements. <input type="checkbox"/> a. Determine capacities of test piles and conduct additional load tests as required. <input type="checkbox"/> b. Inspect driving operations and maintain complete and accurate records for each pile. <input type="checkbox"/> c. Verify locations of piles and their alignments, confirm type and size of hammer, record number of blows per foot of penetration, determine required penetrations to achieve design capacity, record tip and shaft elevations and record any pile damage. <input type="checkbox"/> d. Steel piles: Provide tests and inspections per STEEL section below. <input type="checkbox"/> e. Concrete piles and concrete filled piles: Provide tests and inspections per CONCRETE section below. <input type="checkbox"/> f. For specialty piles, perform additional inspections as determined by the registered design professional in responsible charge.	Continuous	GE	By geotechnical engineer or his or her qualified representative.

4. CAST-IN-PLACE DEEP FOUNDATIONS (PILES):	Table 1705A.8	
Test or Special Inspection	Type Performed By Code References and Notes	
1. Each batch inspection: <input type="checkbox"/> a. For specialty piles, perform additional inspections as determined by the registered design professional in responsible charge.	See Notes SI	Default of 'Continuous' per 1705A.3.3. If approved by DSA, batch plant inspector may be reduced to 'Periodic' subject to requirements in Section 1705A.3.3.1, or eliminated per 1705A.3.3.2. (See Appendix for exemptions).

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1. Inspect driving operations and maintain complete and accurate records for each pile. <input type="checkbox"/> a. Verify pile locations, diameters, alignments and lengths (record concrete or steel values). <input type="checkbox"/> b. Concrete piles: Provide tests and inspections per CONCRETE section below.	Continuous	SI	Continuous inspection to be provided by project inspector. Refer to specific items identified in the Appendix listing exemptions for limitations.
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5. RETAINING WALLS:	Type	Performed By	Code References and Notes
1. Placement, compaction and inspection of backfill: <input type="checkbox"/> a. Placement of wall reinforcement and/or drainage devices. <input type="checkbox"/> b. Placement of wall reinforcement and/or drainage devices. <input type="checkbox"/> c. Segmental retaining walls: Inspect placement of ties, dowels, connectors, etc. <input type="checkbox"/> d. Concrete retaining walls: Provide tests and inspections per CONCRETE section below. <input type="checkbox"/> e. Masonry retaining walls: Provide tests and inspections per CONCRETE section below.	Continuous	GE	1705A.6.1. By geotechnical engineer or his or her qualified representative. (See Section 2. Above). By geotechnical engineer or his or her qualified representative. (See DSA File #). By geotechnical engineer or his or her qualified representative. (See DSA File #). Provide tests and inspections per CONCRETE section below.

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DSA 103-19- LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (SOILS), 2019 CBC
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1. Soil Improvements: <input type="checkbox"/> a. Inspect shoring placement for proper application techniques. <input type="checkbox"/> b. Sample and test shotcrete (if). <input type="checkbox"/> c.	Continuous	SI	1705A.18, Table 1705A.3 Item 7, 1903A.6, 1903A.7, 1903A.8, 1903A.9, 1903A.11, 1903A.12. See ACI 308.3-13 Section 3.4, ACI 308-16.
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11. POST-INSTALLED ANCHORS:	Type	Performed By	Code References and Notes
1. Inspect installation of post-installed anchors: <input type="checkbox"/> a. Test post-installed anchors.	See Notes SI	1613A.1.10, Table 1705A.3 Item 4a (Continuous) & 4b (Periodic), 1705A.3.8 (See Appendix for exemptions), ACI 318-14 Sections 17.8 & 20.12. May be performed by the project inspector when specifically approved by DSA.	

12. OTHER CONCRETE:	Type	Performed By	Code References and Notes
1. Test or Special Inspection: <input type="checkbox"/> a.			

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DSA 103-19- LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (Concrete), 2019 CBC
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1. CAST-IN-PLACE CONCRETE	Type	Performed By	Code References and Notes
Material Verification and Testing: <input type="checkbox"/> a. Verify use of required design mix. <input type="checkbox"/> b. Identify, sample, and test reinforcing steel. <input type="checkbox"/> c. During concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete. <input type="checkbox"/> d. Test concrete J-ET. <input type="checkbox"/> e. Test concrete J-F. <input type="checkbox"/> f. Welding of reinforcing steel: Provide special inspection per STEEL, Category 19.10(a) & (c) and/or 19.20(a) & (b) below.	Periodic	SI	Table 1705A.3 Item 5, 1910A.1, 1910A.2, ACI 318-14 Section 30.6.1.2, DSA IR 17-10. (See Appendix for exemptions). Table 1705A.3 Item 6, ACI 318-14 Sections 26.5 & 26.12. 1905A.1.16, ACI 318-14 Section 26.12.

8. PRESTRESSED / POST-TENSIONED CONCRETE (in addition to Cast-in-Place Concrete tests and inspections):	Type	Performed By	Code References and Notes
1. Each batch inspection: <input type="checkbox"/> a. Verify and document steel fabrication per DSA-approved construction documents. <input type="checkbox"/> b. Inspect placement of prestressing tendons and anchorage. <input type="checkbox"/> c. Inspect placement of prestressing tendons. <input type="checkbox"/> d. Inspect application of post-tensioning or prestressing forces and grouting of bonded prestressing tendons.	Continuous	SI	Not applicable to cold-formed steel light-frame construction, except for joists (1705A.2.4).

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Test or Special Inspection	Type	Performed By	Code References and Notes
1. Sample and test prestressing tendons and anchorage. <input type="checkbox"/> a. Inspect placement of prestressing tendons. <input type="checkbox"/> b. Inspect application of post-tensioning or prestressing forces and grouting of bonded prestressing tendons.	Test	LOB	1705A.3.4, 1910A.3 1705A.3.4, Table 1705A.3 Items 1 & 8 Table 1705A.3 Item 11. Special inspector to verify specified concrete strength test prior to stressing.

9. PRECAST CONCRETE (in addition to Cast-in-Place Concrete tests and inspections):	Type	Performed By	Code References and Notes
1. Fabrication of precast concrete members: <input type="checkbox"/> a. Inspect fabrication of precast concrete members. <input type="checkbox"/> b. Inspect erection of precast concrete members.	Continuous	SI	ACI 318-14 Section 26.13. Table 1705A.3 Item 10. May be performed by SI when specifically approved by DSA.

10. SHOTCRETE (in addition to Cast-in-Place Concrete tests and inspections):	Type	Performed By	Code References and Notes
1. Test or Special Inspection: <input type="checkbox"/> a.			

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1. Inspect shoring placement for proper application techniques. <input type="checkbox"/> a. Sample and test shotcrete (if). <input type="checkbox"/> b.	Continuous	SI	1705A.18, Table 1705A.3 Item 7, 1903A.6, 1903A.7, 1903A.8, 1903A.9, 1903A.11, 1903A.12. See ACI 308.3-13 Section 3.4, ACI 308-16.
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11. POST-INSTALLED ANCHORS:	Type	Performed By	Code References and Notes
1. Inspect installation of post-installed anchors: <input type="checkbox"/> a. Test post-installed anchors.	See Notes SI	1613A.1.10, Table 1705A.3 Item 4a (Continuous) & 4b (Periodic), 1705A.3.8 (See Appendix for exemptions), ACI 318-14 Sections 17.8 & 20.12. May be performed by the project inspector when specifically approved by DSA.	

12. OTHER CONCRETE:	Type	Performed By	Code References and Notes
1. Test or Special Inspection: <input type="checkbox"/> a.			

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DSA 103-19- LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (Steel and Aluminum), 2019 CBC
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17. STRUCTURAL STEEL, COLD-FORMED STEEL AND ALUMINUM USED FOR STRUCTURAL PURPOSES	Type	Performed By	Code References and Notes
Material Verification and Testing: <input type="checkbox"/> a. Verify identification of all material and mill certificates indicate material properties that comply with requirements. <input type="checkbox"/> b. Test undrilled materials. <input type="checkbox"/> c. Examine seam widths of HSS shapes. <input type="checkbox"/> d. Test undrilled materials. <input type="checkbox"/> e. Verify and document steel fabrication per DSA-approved construction documents.	Periodic	SI	Table 1705A.2.1 Item 3a-c, 2202A.1, AISI S100-10 Section A1.1 & A3.2, AISI S100-15 Section A3 & A5, AISI S100-15 Section A4 & A6. May be performed by the project inspector or qualified technician when performed off-site. 2202A.1. DSA IR 17-3. Not applicable to cold-formed steel light-frame construction, except for joists (1705A.2.4).

18. HIGH-STRENGTH BOLTS, NUTS AND WASHERS:	Type	Performed By	Code References and Notes
1. Verify identification markings and manufacturer's certificate of compliance conform to ASTM standards specified in the DSA-approved documents. <input type="checkbox"/> a. Ultrasonic: <input type="checkbox"/> b. Test or Special Inspection: <input type="checkbox"/> a. Ultrasonic: <input type="checkbox"/> b. Test or Special Inspection: <input type="checkbox"/> c. Test or Special Inspection: <input type="checkbox"/> d. Test or Special Inspection: <input type="checkbox"/> e. Test or Special Inspection: <input type="checkbox"/> f. Test or Special Inspection: <input type="checkbox"/> g. Test or Special Inspection: <input type="checkbox"/> h. Test or Special Inspection: <input type="checkbox"/> i. Test or Special Inspection: <input type="checkbox"/> j. Test or Special Inspection: <input type="checkbox"/> k. Test or Special Inspection: <input type="checkbox"/> l. Test or Special Inspection: <input type="checkbox"/> m. Test or Special Inspection: <input type="checkbox"/> n. 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Test or Special Inspection: <input type="checkbox"/> ky. Test or Special Inspection: <input type="checkbox"/> kz. Test or Special Inspection: <input type="checkbox"/> la. Test or Special Inspection: <input type="checkbox"/> lb. Test or Special Inspection: <input type="checkbox"/> lc. Test or Special Inspection: <input type="checkbox"/> ld. Test or Special Inspection: <input type="checkbox"/> le. Test or Special Inspection			

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (Steel and Aluminum), 2019 CBC
 1705A.2.1, Table 1705A.2.1, ASC 303-16, ASC 341-16, ASC 358-16, ASC 360-16, AISI S100-16
 Application Number: School Name: School District:
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 2021-03-25 21:00:56

Test or Special Inspection	Type	Performed By	Code References and Notes
<input type="checkbox"/> b. Magnetic Particle	Test	LOR	1705A.2.1, 1705A.2.5, ASC 341-16 (6.2), ASC 360-16 NS.5, ANS/ASNT CP-109, SNT-TC-1A, AWS D1.1, AWS D1.8, DSA IR 17-2.
<input type="checkbox"/> c.	Test	LOR	
21. STEEL JOISTS AND TRUSSES: 1705A.2.1, Table 1705A.2.1, ASC 303-16, AISI S100-16, ASC 358-16, ASC 360-16, AISI S100-16			
<input type="checkbox"/> a. Verify size, type and grade for all chord and web members as well as connectors and weld filler material. Verify joint profiles, dimensions and camber. If applicable, verify all weld locations, lengths and profiles; mark or tag each joint.	Continuous	SI	1705A.2.3, Table 1705A.2.3, AWS D1.1, DSA IR 22-3 for steel joists only. 1705A.2.4, AWS D1.1 for cold-formed steel trusses.
<input type="checkbox"/> b. Test bond strength.	Test	LOR	1705A.14.6.

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DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (Steel and Aluminum), 2019 CBC
 1705A.2.1, Table 1705A.2.1, ASC 303-16, ASC 341-16, ASC 358-16, ASC 360-16, AISI S100-16
 Application Number: School Name: School District:
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Test or Special Inspection	Type	Performed By	Code References and Notes
<input type="checkbox"/> c. Test density.	Test	LOR	1705A.14.5.
23. ANCHOR BOLTS AND ANCHOR RODS:			
<input type="checkbox"/> a. Anchor Bolts and Anchor Rods	Test	LOR	Sample and test anchor bolts and anchor rods not readily identifiable per procedures noted in DSA IR 17-11.
<input type="checkbox"/> b. Threaded rod not used for foundation anchorage.	Test	LOR	Sample and test threaded rods not readily identifiable per procedures noted in DSA IR 17-11.

Test or Special Inspection	Type	Performed By	Code References and Notes
<input type="checkbox"/> a.			

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DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (Other), 2019 CBC

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 2021-03-25 21:00:56

Test or Special Inspection	Type	Performed By	Code References and Notes
<input type="checkbox"/> a. Load test for identified product(s).	Test	LOR	1705A.2, 1705A.3. Testing is not required for: 1) a product with a valid evaluation service report per DSA IR A-5, or 2) a product that can be justified by structural justification.
<input type="checkbox"/> b. Installation torque for non-HS bolts	Continuous	SI	Applicable to communication towers identified as Essential Service Facility Projects (ESFP). Calibrated wrench use required, verified by SI during installation. DSA Policy R. 18(1): Communication Towers, Poles and Bungalows Utilized by State Agencies for Essential Services Configurations. EXCEPTION: Non-ESFP may use PI without need for justification to DSA.
<input type="checkbox"/> c.			

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Appendix: Work Exempt from DSA Requirements for Structural Tests / Special Inspections

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Exempt items given in DSA IR A-22 or the 2019 CBC (including DSA amendments) and those items identified below with a check mark by the design professional are NOT subject to DSA requirements for the structural tests / special inspections noted. **Items marked as exempt shall be identified on the approved construction documents.** The project inspector shall verify all construction complies with the approved construction documents.

- SOILS:**
- 1. Deep foundations acting as a cantilever footing designed based on minimum allowable pressures per CBC Table 1806A.2 and having no geotechnical report for the following cases: A) free standing sign or scoreboard, B) cell or antenna towers and poles less than 30'-0" tall (e.g., lighting poles, flag poles, poles supporting open mesh fences, etc.), C) single-story structure with dead load less than 5 psf (e.g., open fabric shade structure), or D) covered walkway structure with an apex height less than 10'-0" above adjacent grade.
 - 2. Shallow foundations, etc. are exempt from special inspections and testing by a Geotechnical Engineer for the following cases: A) buildings without a geotechnical report and meeting the exception item #1 criteria in CBC Section 1803A.2 supported by native soil (any excavation depth) or fill soil (not exceeding 12' depth per CBC Section 1804A.6), B) soil scarification/compaction not exceeding 12' depth, C) native or fill soil supporting exterior non-structural framework (e.g., sidewalks, site concrete ramps, site stairs, parking lots, driveways, etc.), D) unpaved landscaping and playground areas, or E) utility trench backfill.

- CONCRETE/MASONRY:**
- 1. Pre-installed anchors for the following: A) exempt non-structural components (e.g., mechanical, electrical, plumbing equipment - see item 7 for "Welding") given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) or B) interior nonstructural wall partitions meeting criteria listed in exempt item 3 for "Welding."
 - 2. Concrete batch plant inspection is not required for items given in CBC Section 1705A.3.3.2 subject to the requirements and limitations in that section.

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Appendix: Work Exempt from DSA Requirements for Structural Tests / Special Inspections

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- 3. Non-bearing non-shear masonry walls may be exempt from certain DSA masonry testing and special inspection items as allowed per DSA IR 21-1.16. Refer to construction documents for specific exemptions according to each applicable wall condition.
- 4. Epoxy shear dowels in site flatwork and/or other non-structural concrete.
- 5. Testing of reinforcing bars is not required for items given in CBC Section 1910A.2 subject to the requirements and limitations in that section.

- Welding:**
- 1. Solid-clad and open-mesh gates with maximum leaf span or rolling section for rolling gates of 10' and apex height less than 8'-0" above lowest adjacent grade. When located above circulation or occupied space below, these gates are not located within 1.5x gate-fence height (max 8'-0") to the edge of floor or roof.
 - 2. Handrails, guardrails, and modular or relocatable ramps associated with walking surfaces less than 30' above adjacent grade (excluding base connections per the "Exception" language in Section 1705A.2.1). Fillet welds shall not be ground flush.
 - 3. Non-structural interior cold-formed steel framing spanning less than 15'-0", such as in interior partitions, interior soffits, etc. supporting only self weight and light-weight finishes or adhered tile, masonry, stone, or terra cotta veneer no more than 5/8" thickness and apex less than 20'-0" in height and not over an eave. Maximum tributary load to a member shall not exceed the equivalent weight of that occurring from a 10x10' opening in a 15' tall wall for a header or king stud.
 - 4. Manufactured support frames and curbs using hot rolled or cold-formed steel (i.e., light gauge) for mechanical, electrical, or plumbing equipment weighing less than 2000# (equipment only). Connections of such frames to superstructure elements using welding will require special inspection as noted in selected items for Sections 19, 19.1 and/or 19.2 of listing above.
 - 5. Manufactured components (e.g., T-locks, B-Line, Alcon, etc.) for mechanical, electrical, or plumbing hanger support and bracing (connections of such components to superstructure elements using welding will require special inspection as noted in selected items) for Sections 19, 19.1 and/or 19.2 of listing above.

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Appendix: Work Exempt from DSA Requirements for Structural Tests / Special Inspections

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- 6. TV Brackets, projector mounts with a valid listing (see DSA IR A-5) and recreational equipment (e.g., playground structures, basketball backstops, etc.) connections of such elements to superstructure elements using welding will require special inspection as noted in selected items for section 19, 19.1 and/or 19.2 located in the Steel/Aluminum category.
- 7. Any support for exempt non-structural components given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) meeting the following: A) when supported on a floor/roof, <400# and resulting composite center of mass (including component's center of mass) <4' above supporting floor/roof, B) when hung from a wall or roof/floor, <20# for discrete units or <5 psf for distributed systems.

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THE SAMPLE DSA-103 FORM SHOWN ON THIS SHEET IS FOR ILLUSTRATION PURPOSES ONLY TO ASSIST IN THE COMPLETION OF FUTURE PROJECTS SPECIFIC FORM DSA-103. A CURRENT DSA-103 FORM IS TO BE COMPLETED FOR EACH APPLICATION THAT THIS PC IS BEING INCORPORATED INTO AND ALL SAMPLE DSA-103 SHEETS ARE TO BE CROSSED OUT ON THIS DRAWING.

ADDITIONAL TESTING AND INSPECTION NOTES:

- THE PROJECT INSPECTOR AND TESTING AGENCY SHALL BE SELECTED BY THE SCHOOL DISTRICT AND APPROVED BY DSA AND THE ARCHITECT OF RECORD.
- THE SITE PROJECT INSPECTOR SHALL BE CLASS 2.
- THE COSTS OF THE PROJECT INSPECTOR AND TESTING AGENCY SHALL BE BORNE BY THE SCHOOL DISTRICT.
- COPIES OF VERIFIED REPORTS SHALL BE SENT TO DSA, THE ARCHITECT, THE SCHOOL DISTRICT, THE CONTRACTOR, AND THE PROJECT INSPECTOR.
- THE IN-PLANT INSPECTOR SHALL BE WELDING SPECIAL INSPECTOR FOR MATERIAL VERIFICATION AND WELDING.
- PER 2019 CBC SECTION 1705A.3.3, BATCH PLANT INSPECTION MAY BE WAIVED WHEN THE FOLLOWING REQUIREMENTS ARE MET:
 - A LICENSED WORKMAN SHALL POSITIVELY IDENTIFY QUANTITY OF MATERIALS AND CERTIFY EACH LOAD BY A BATCH TICKET.
 - BATCH TICKETS, INCLUDING MATERIAL QUANTITIES AND WEIGHTS SHALL ACCOMPANY THE LOAD, SHALL BE TRANSMITTED TO THE INSPECTOR OF RECORD BY THE TRUCK DRIVER WITH LOAD IDENTIFIED THEREON.
 - THE LOAD SHALL NOT BE PLACED WITHOUT A BATCH TICKET IDENTIFYING THE MIX. THE INSPECTOR OF RECORD SHALL KEEP A DAILY RECORD OF PLACEMENTS, IDENTIFYING EACH TRUCK ITS LOAD, AND TIME OF RECEIPT AT THE JOBSITE. AND APPROXIMATE LOCATION OF DEPOSIT IN THE STRUCTURE AND SHALL MAINTAIN A COPY OF THE DAILY RECORDS AS REQUIRED BY THE EMPLOYMENT AGENCY.

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS(SIGNATURE), 2019 CBC

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 2021-03-25 21:00:56

Name of Architect or Engineer in general responsible charge:
 Name of Structural Engineer (When structural design has been delegated):
 Signature of Architect or Structural Engineer: Date:

Note: To facilitate DSA electronic mark-ups and identification stamp application, DSA recommends against using secured electronic or digital signatures.

DSA STAMP

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DSA 103-19: LIST OF REQUIRED VERIFIED REPORTS, CBC 2019

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- 1. Soil Testing and Inspection: Geotechnical Verified Report Form DSA 209
- 2. Structural Testing and Inspection: Laboratory Verified Report Form DSA 291
- 3. Pre-Installed Anchors: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292
- 4. Shop Welding Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292

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THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF USA SHADE AND FABRIC STRUCTURES AND SHALL NOT BE REPRODUCED WITHOUT THEIR WRITTEN



CORPORATE HEADQUARTERS
 2580 ESTERS BLVD, SUITE 100
 DFW AIRPORT, TX, 75261
 800-966-5005

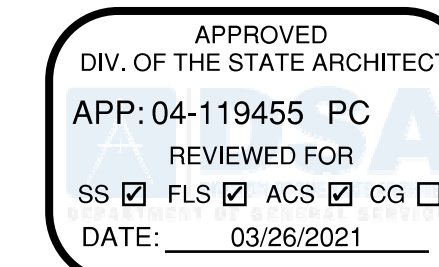
CERTIFICATIONS:
 IAS CERTIFICATION No: FA-428
 CLARK COUNTY MANUFACTURER
 CERTIFICATION NUMBER (NEVADA): 355

CUSTOMER:

PROJECT NAME:

LOCATION:

MODEL NUMBER:



STRUCTURE TYPE:

SCALE : VARIES

DRAWING SIZE: D

PRE-CHECK (PC) DOCUMENT
 Code : 2019 CBC
 A separate project application for construction is required.

Eng. By : DWH 09/14/20

Design By : DWH 09/14/20

Approved By : DWH 09/14/20

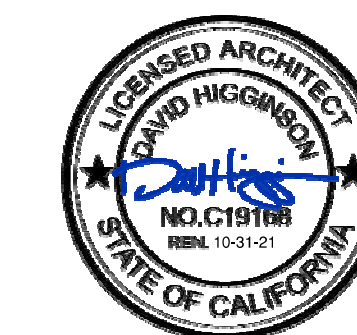
DRAWING DESCRIPTION:

DSA 103 SAMPLE FORMS

DWG.

SHEET P.C. T-3.1

REV.



SAMPLE DSA 103 - STATEMENT OF STRUCTURAL TESTS AND INSPECTIONS FORM - FOR CANTILEVER AND SINGLE POST UNITS

GENERAL NOTES
DESIGN LOADS
 BUILDING CODE: CBC 2019 (BASED ON IBC 2018)
 LIVE LOADS: 5 PSF
 SNOW LOAD: 5 PSF
 WIND LOADS: 115 MPH (3-SEC. Gust), EXPOSURE C, TOPOGRAPHIC FACTOR, $K_{zt} = 1.0$

1. SPECIAL INSPECTION REQUIREMENTS SHALL FOLLOW THE ATTACHED SAMPLE TEST AND INSPECTION LIST (IT & I LIST) APPROVED BY DSA. THE SHOP WELDING INSPECTION SHALL INCLUDE WELDING OF ALL STEEL MEMBERS AND IDENTIFICATION OF LABEL THROUGH MILL CERTIFICATE OR MATERIAL TESTING. UNCERTIFIED STEEL SHALL BE TESTED TO THE REQUIREMENTS OF CBC 2019 CHAPTER 17A. THE FIELD SPECIAL INSPECTION SHALL INCLUDE COMPRESSION CYLINDER TESTS FOR THE CONCRETE FOUNDATION.
 2. STRUCTURE SHALL BE IN THE LOCATION SHOWN ON THE SITE SPECIFIC DSA APPLICATION DRAWING.
 3. FOUNDATION DESIGN BASED ON CBC 2019, TABLE 1806A.2, SOIL CLASS 5 (ALLOWABLE FOUNDATION PRESSURE 1500 PSF)
 4. DESIGN PER FOLLOWING CODES: CBC 2019, ASCE 7-16, AISC 360-16, AISC 341-16, ACI 318-14, ASCE 55-16 & ASCE 19-16

STRUCTURAL STEEL
 1. FABRICATION OF THE STEEL STRUCTURES SHALL BE PERFORMED BY SHADE STRUCTURES OR AN AUTHORIZED LICENSEE. MATERIAL TESTING (OR MILL CERTIFICATES) AND INSPECTION OF WELDING SHALL BE CONDUCTED PER CBC 2019 SECTIONS 1704A, 1705A, 1705A.2, AND TABLE 1705A.2.1.
 2. ONLY CALIFORNIA LICENSED CONTRACTORS AUTHORIZED BY SHADE STRUCTURES SHALL INSTALL THE SHADE STRUCTURES.
 3. ALL WORK SHALL CONFORM TO CBC 2019 EDITION, TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)
 4. ALL GALVANIZED STEEL TUBE PRODUCTS MANUFACTURED BY ALLIED TUBE & CONDUIT FOR THIS STRUCTURE SHALL BE, AND CONFORM TO ASTM A500-16, IN ITS ENTIRETY. TYPICAL MECHANICAL PROPERTIES ARE:
 ROUND TUBE: 42,000 PSI YIELD STRESS MINIMUM / 48,000 PSI TENSILE STRESS MINIMUM
 SQUARE AND RECTANGULAR: 46,000 PSI YIELD STRESS / 58,000 PSI TENSILE STRESS
 ROUND PIPE: 42,000 PSI YIELD STRESS / 58,000 PSI TENSILE STRESS

6. ALL PLATES PRODUCTS SHALL COMPLY WITH ASTM A572 GRADE 50.
 7. STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH A.I.S.C. SPECIFICATIONS.
 8. ALL WELDING TO CONFORM WITH AMERICAN WELDING SOCIETY STANDARDS AND SHALL BE INSPECTED BY AN AWS/CWI INSPECTOR. AWS D1.1 FOR HOT ROLLED, AWS D1.3 FOR SHEET/COIL FORMED, AWS D1.9 SEISMIC SUPPLEMENT.
 9. ALL FULL PENETRATION WELD SHALL BE CONTINUOUSLY INSPECTED PER AWS D1.1 & D1.8.
 10. SHOP CONNECTIONS SHALL BE WELDED UNLESS NOTED OTHERWISE. FIELD CONNECTIONS SHALL BE AS INDICATED ON THE DRAWING. ALL WELDS SHALL BE A MINIMUM OF 3/16" ERT70X ELECTRODES UNLESS OTHERWISE NOTED. EITHER SMAW OR GMAW IS ACCEPTABLE.
 11. ALL STAINLESS STEEL BOLTS SHALL COMPLY WITH ASTM F-593, YIELD STRENGTH= 65 KSI, TENSILE STRENGTH=100 KSI MINIMUM, ALLOY GROUP 1, CONDITION CW1. ALL NUTS SHALL COMPLY WITH ASTM F-594 ALLOY GROUP 1, CONDITION CW1. REFERRING TO RCSC, ASTM F-593 IS NOT CONSIDERED AS HIGH STRENGTH BOLTS.

12. ALL HIGH STRENGTH BOLTS SHALL COMPLY WITH ASTM F3125 GRADE A325 N (GALVANIZED), ALL NUTS SHALL COMPLY WITH ASTM A563DH, AND WASHERS SHALL COMPLY WITH ASTM F436. ALL HIGH STRENGTH BOLTS SHALL BE TIGHTENED TO A SNUG TIGHT CONDITION.
 13. ALL STRUCTURAL STEEL ITEMS FROM NOTE 6) SHALL BE POWDER COATED WITH ONE SHOP COAT (2.5 MILS MIN.) OF ZINC-RICH PRIMER, UNDERCOAT, AND FINISH COAT, OR EQUIVALENT PAINT SYSTEM. THIS COAT IS A WEATHER RESISTANT POWDER COATING BASED ON POLYESTER TGIC (MANUFACTURED BY SHERWIN WILLIAMS, ASKO NOBEL, PPG OR TIGER DRYLAC). TO ACHIEVE OPTIMUM ADHESION, IT IS RECOMMENDED THAT THE PROPER TREATMENT AND DRYING TAKE PLACE BEFORE COATING. POLYESTER POWDER (TGIC) SPECIFICATIONS SHALL BE AS FOLLOWS:
 - PENCIL HARDNESS (ASTM D-3363), - HUMIDITY (ASTM D-2247).
 - SOLVENT RESISTANCE (PCI METHOD) - 50 DBL RUBS SL, SOFTNESS.

14. ALL STEEL ROUND TUBING ITEMS FROM NOTE 4) SHALL BE TRIPLE COATED FOR RUST PROTECTION USING THE IN-LINE ELECTROPLATING COAT PROCESS. TUBING SHALL BE INTERNALLY COATED WITH ZINC AND ORGANIC COATINGS TO PREVENT CORROSION AS MANUFACTURED BY ALLIED TUBE & CONDUIT.
 15. COLD-FORMED STEEL MEMBERS SHALL BE 55% ALUMINUM ZINC ALLOY COATED PER ASTM A792/A792M STANDARD IN ACCORDANCE TO TABLE A4.1, OF 90 COATING DESIGNATION. ALL EXPOSED STEEL FASTENERS SHALL BE STAINLESS STEEL (TYPE 304 MINIMUM), HOT DIP GALVANIZED (ASTM A153, CLASS D MINIMUM OR ASTM F2329), OR PROTECTED WITH CORROSION PREVENTIVE COATING THAT DEMONSTRATED NO MORE THAN 2% OF RED RUST IN MINIMUM 1000 HOURS OF EXPOSURE IN SALT SPRAY TEST PER ASTM B117. ZINC-PLATED FASTENERS DO NOT COMPLY WITH THIS REQUIREMENT.

CONCRETE SPECIFICATION
 1. CONCRETE SHALL BE SAMPLED AND TESTED PER CBC 2019 SECTION 1903A & SHALL BE INSPECTED PER SECTION 1903A.
 2. CONCRETE TO BE $F'_c = 4500$ PSI, TYPE V CEMENT, WATER/CEMENT RATIO OF 0.45, PER ACI 318-14 CHAPTER 5, REINFORCING STEEL TO BE $F_y = 60000$ PSI, MIN. GR. 60
 3. ALL ANCHOR BOLTS SET IN NEW CONCRETE (WHEN APPLICABLE) SHALL COMPLY WITH ASTM F-1554 GRADE 55 (GALVANIZED PER ASTM A153, CLASS D MINIMUM OR ASTM F2329). ANCHOR BOLTS EMBEDMENT NEEDS TO BE AS FOLLOWS:
 A) ANCHOR BOLT Ø1 1/4" 30 IN (MINIMUM EMBEDMENT)
 4. CERTIFIED MILL TEST REPORTS ARE TO BE PROVIDED FOR EACH SHIPMENT OF REINFORCEMENT.
 5. ALL NON-SHRINK GROUT SHALL HAVE A MINIMUM 28 DAYS COMPRESSIVE STRENGTH OF 5000 PSI, AND SHALL COMPLY THE REQUIREMENTS OF ASTM C109, ASTM C939, ASTM C1080, ASTM C1107, WHEN APPLICABLE.

FABRIC SPECIFICATION
 1. FABRIC SHALL BE MANUFACTURED BY MULTIKNIT LTD. OR OTHER COMPANY WHO CAN MANUFACTURE FABRIC WHICH MEETS THE SPECIFICATIONS LISTED ON PAGE 2000, AND SHALL BE FABRICATED FROM POLYETHYLENE MATERIALS.
 2. THE FABRIC SHALL RETAIN 80% OF ITS TENSILE AND TEARING STRENGTH AFTER ULTRAVIOLET EXPOSURE PER ASTM G53 USING A 313 NM LIGHT SOURCE FOR 500 HOURS WHILE MOISTENED FOR 1 HOUR EVERY 12 HOURS.
 3. PROVIDE CERTIFICATION BY MANUFACTURER AND STATE FIRE MARSHAL TO SCHOOLS' DISTRICT INSPECTOR OF RECORD AT SITE SPECIFIC INSTALLATION. COPY OF FIRE CERTIFICATION SHALL BE SENT TO DSA.
 4. FABRIC SHALL REQUIRE ANNUAL INSPECTION AND MAINTENANCE BY THE DISTRICT. FABRICS SAMPLES OF THE SAME MATERIAL WHICH ARE MAINTAINED AT THE PROJECTS SITE SHALL BE TESTED TO BE IN COMPLIANCE WITH ASTM D5034 AND D2261. THE ANNUAL TESTING ON THE APPROVED PLANS SHALL BE COMPARED TO THE FABRIC SPECIFICATIONS INDICATED IN NOTE 1 OF "FABRIC SPECIFICATION" ON THE APPROVED PLANS. THE FABRIC SHALL BE REPLACED WHEN THE TEST RESULTS RETURN LESS THAN 50% OF THE ULTIMATE VALUES IN NOTE 1 OF "FABRIC SPECIFICATION". FIRE TEST ON FABRIC: NFPA 701 TEST 2 AND ASTM E 84 EXTENDED 30 MINUTES TEST. FLAME SPREAD INDEX (FSI): 10, SMOKE DEVELOPED INDEX (SDI): 50. FABRIC IS ACCEPTABLE FOR USE IN WILDLIFE URBAN INTERFACE AREA.
 5. FABRIC TOP NEEDS TO BE REMOVED IF SNOW EXCEEDING 5 PSF ARE ANTICIPATED, FABRIC TOP NEEDS TO BE REMOVED IF WINDS EXCEEDING 115 MPH ARE ANTICIPATED.
 6. A VISUAL INSPECTION LOOKING FOR TEAR AND ABNORMAL WEAR IN FABRIC MATERIAL AND THREAD IS REQUIRED PRIOR TO RE-INSTALLATION. USA SHADE & FABRIC STRUCTURES SHALL BE NOTIFIED IF SIGNIFICANT DAMAGE IS PRESENT BEFORE RE-INSTALLATION.

AIRCRAFT CABLE
 1. FOR FABRIC ATTACHMENT USE 3/8" 7x19 GALV. CABLE PER ASTM A1023A, ASTM 1023M-02, WITH A BREAKING STRENGTH OF 14,400 LBS. CABLE SHALL BE TENSIONED TO 250 LBS MINIMUM. THE MAXIMUM CALCULATED CABLE ALLOWABLE CAPACITY IS 9a=4909 LB.
 2. CABLES SHALL BE FED THROUGH THE FABRIC SLEEVES AROUND THE PERIMETER OF THE CANOPY AND TENSIONED UNTIL THE FABRIC PANELS (DESIGNED PURPOSELY UNDERSIZED) REACH A TAUT APPEARANCE. ANY LONG TERM CABLE SAG SHALL BE MINIMIZED DURING THE MAINTENANCE RE-TIGHTENING VISITS AS REQUIRED.

2019 CBC PC DESIGN NOTES
 FLOOR LIVE LOAD: N/A
 ROOF LIVE LOAD: RLL 5 PSF

ALLOWABLE SOIL PRESSURE:
 DL + LL (CONC FTG) 1500 PSF
 DL + LL + SEISMIC (CONC FTG) 1500 PSF
 LATERAL BEARING DESIGN VALUE 100 PSF/FT BELOW NATURAL GRADE, PER TABLE 1806A.2
 TWO TIMES THE TABULAR VALUE IS USED (200 PSF/FT)
 PER CBC SECTION 1806A.3.4
 ALLOWABLE PIER FRICTIONAL RESISTANCE 250 PSF MAXIMUM BASED ON SECTION 1810A.3.3.1.4 (ONE-SIXTH OF THE BEARING VALUE). UPLIFT FRICTIONAL RESISTANCE HAVE A SAFETY FACTOR OF 3.

ROOF SNOW LOAD: 5 PSF
 ICE LOAD: ZERO PSF
 FLOOD HAZARD AREA: NO
 WHEN A SITE SPECIFIC PROJECT IS LOCATED IN A FLOOD ZONE OTHER THAN ZONE X, A LETTER STAMPED AND SIGNED FROM A SOILS ENGINEER IS NEEDED TO VALIDATE THE ALLOWABLE SOIL VALUES SPECIFIED IN THE PC ARE STILL APPLICABLE.

WIND DESIGN DIRECTIONAL PROCEDURE: ASCE 7-16, SECTION 27.3.2
 -BASIC DESIGN WIND SPEED (3 SEC GUST) V 115 MPH
 -WIND EXPOSURE FACTOR C Kzt 1
 -TOPOGRAPHIC FACTOR Kzt 1
 -RISK CATEGORY II
 -WIND VELOCITY PRESSURE EXPOSURE COEFFICIENT Kz 0.88
 -VELOCITY PRESSURE qz 25.32 PSF

SEISMIC DESIGN:
 -SITE CLASS D
 -DESIGN BASE SHEAR V 23358 LB
 -SEISMIC RESPONSE COEFFICIENTS Cs 1.6
 -RESPONSE MODIFICATION FACTOR R 1.25
 -ANALYSIS PROCEDURE EQUIVALENT LATERAL FORCE
 -RISK CATEGORY II
 -SEISMIC DESIGN CATEGORY E
 -SITE COEFFICIENT CATEGORY Fv 1.5

-SPECTRAL RESPONSE COEFFICIENTS SDS 2.00
 -LATERAL FORCE RESISTING SYSTEM G.2 ORDINARY CANTILEVERED COLUMN SYSTEM.
 -SEISMIC IMPORTANCE FACTOR I 1.0
 -DESIGN BASE SHEAR V 23358 LB
 -SEISMIC RESPONSE COEFFICIENTS Cs 1.6
 -RESPONSE MODIFICATION FACTOR R 1.25
 -ANALYSIS PROCEDURE EQUIVALENT LATERAL FORCE
 -RISK CATEGORY II
 -SEISMIC DESIGN CATEGORY E
 -SITE COEFFICIENT CATEGORY Fv 1.5

GEOHAZARD REPORT IS NOT REQUIRED FOR OPEN FABRIC STRUCTURES 1,600 SQ FT OR LESS COMPLYING WITH THE REQUIREMENTS OF IR A-4 SECTION 3.1.1. OPEN FABRIC SHADE STRUCTURES GREATER THAN 1,600 SQUARE FEET UP TO A MAXIMUM OF 4,000 SQUARE FEET AND COMPLYING WITH THE REQUIREMENTS NOTED IN IR A-4 SECTION 3.1.1 DO NOT REQUIRE A GEOHAZARD REPORT PROVIDED A GEOTECHNICAL REPORT INDICATES THAT NO LIQUEFACTION POTENTIAL EXISTS.
 ARCHITECT OF RECORD TO DETERMINE IF SPECIFIC SITE IS IN GEOLOGIC HAZARD ZONE. GEOHAZARD REPORT REQUIREMENTS PER DSA IR A-4.

PC OPTIONS SHALL NOT INCLUDE LIQUEFIABLE SOIL (EXCEPTION: OPEN FABRIC SHADE STRUCTURES 1,600 SQUARE FEET OR LESS COMPLYING WITH REQUIREMENTS OF IR A-4 SECTION 3.1.1). IF STRUCTURE IS LOCATED IN AN AREA WITH LIQUEFIABLE SOIL OR SITE CLASS F, OVER-THE-COUNTER SUBMITTAL IS NOT ALLOWED AND REGULAR PROJECT SUBMITTAL IS REQUIRED. IF SITE IS NOT IN A MAPPED LIQUEFACTION HAZARD ZONE, IT MAY BE PRESUMED THAT NO LIQUEFACTION HAZARD EXISTS ON THAT SITE UNLESS A SITE-SPECIFIC GEOTECHNICAL REPORT IDENTIFIES SUCH HAZARD.

MINIMUM FOUNDATION SETBACK LIMIT IN ADJACENT SOIL: THE DEPTH OF REQUIRED PIER EMBEDMENT SHALL START FROM AN ELEVATION THAT CORRESPONDS WITH A HORIZONTAL CLEAR DISTANCE OF 17'-6" THAT IS INTERSECT WITH THE SLOPE (DAYLIGHTING). IF SETBACK LIMITS ARE SMALLER THAN CBC REQUIREMENTS, A SITE-SPECIFIC SOILS REPORT IS REQUIRED.
 MINIMUM CLASS 2 PROJECT INSPECTOR REQUIRED.

FOOTPRINT CONFIGURATION
 1. THE STRUCTURE CAN BE PLACED FOLLOWING A CURVED CONFIGURATION AS LONG AS THE MAXIMUM DIMENSIONS ARE NOT EXCEEDED.

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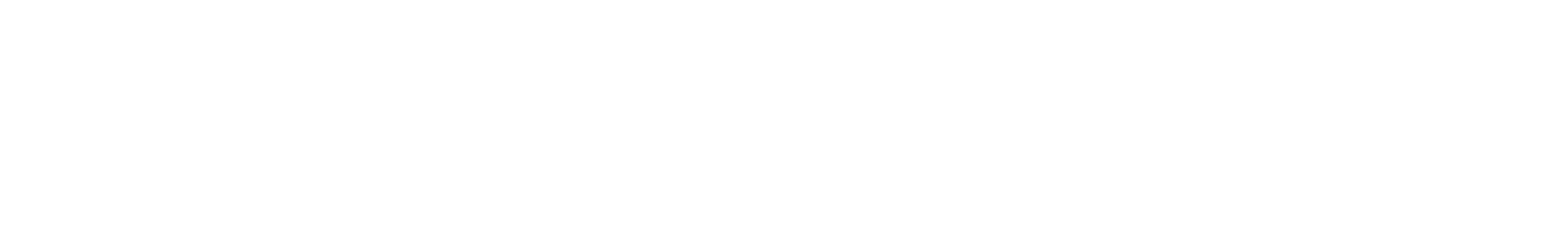
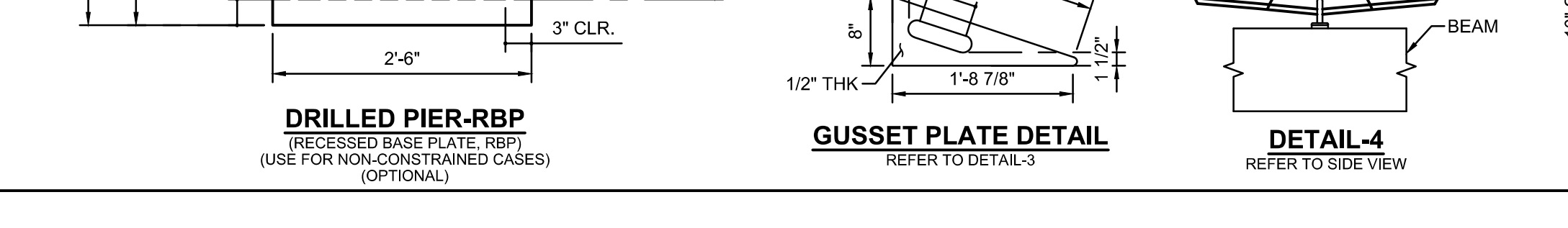
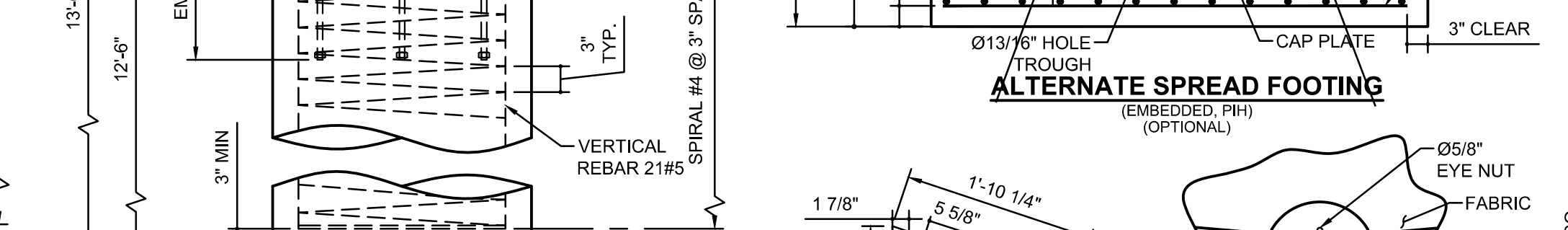
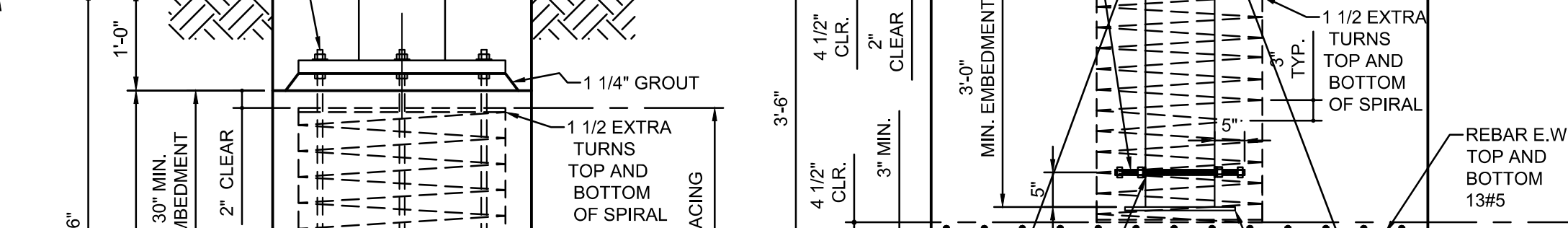
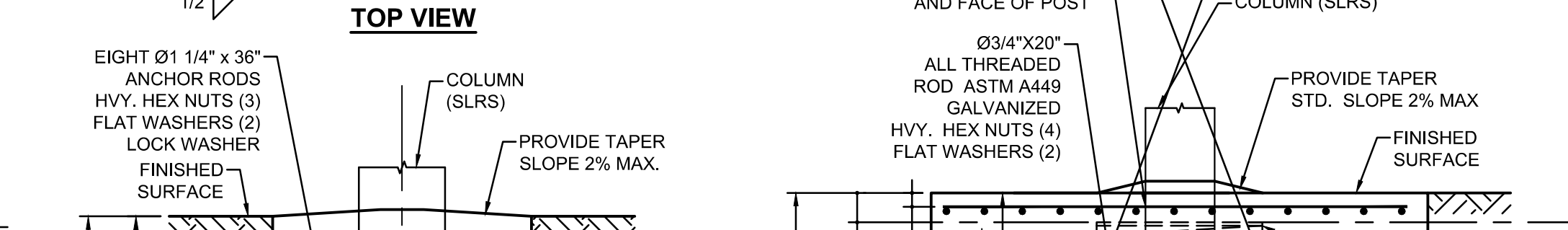
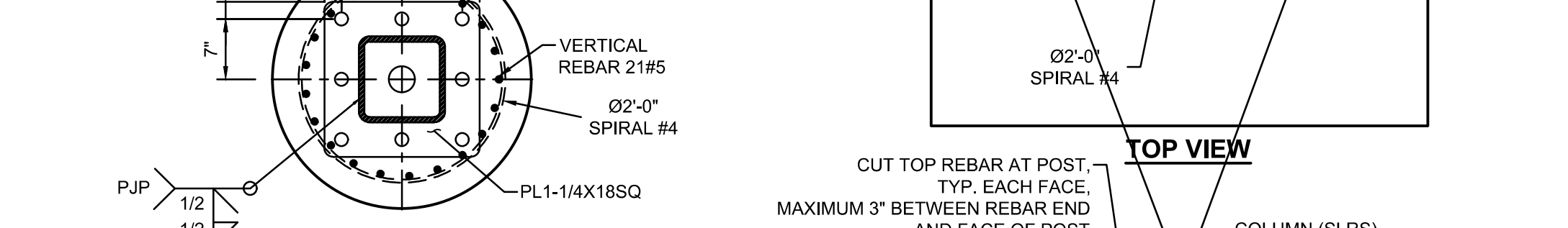
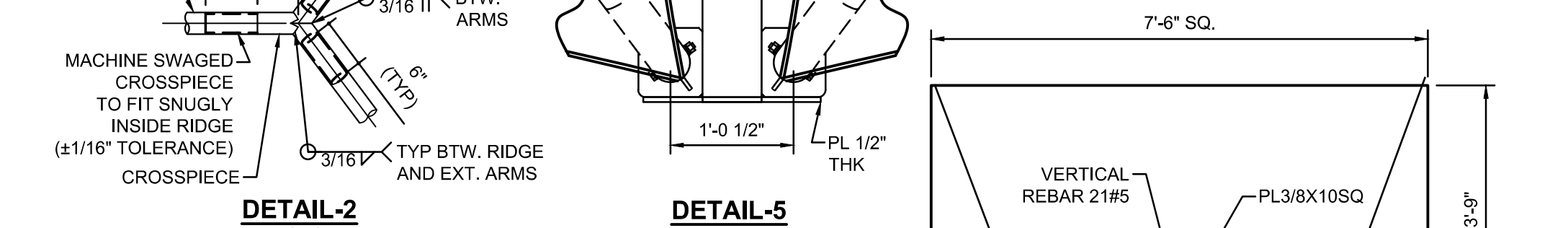
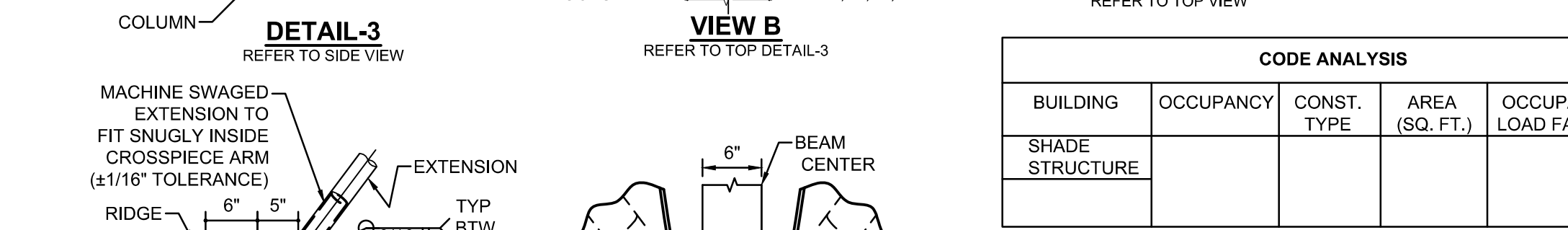
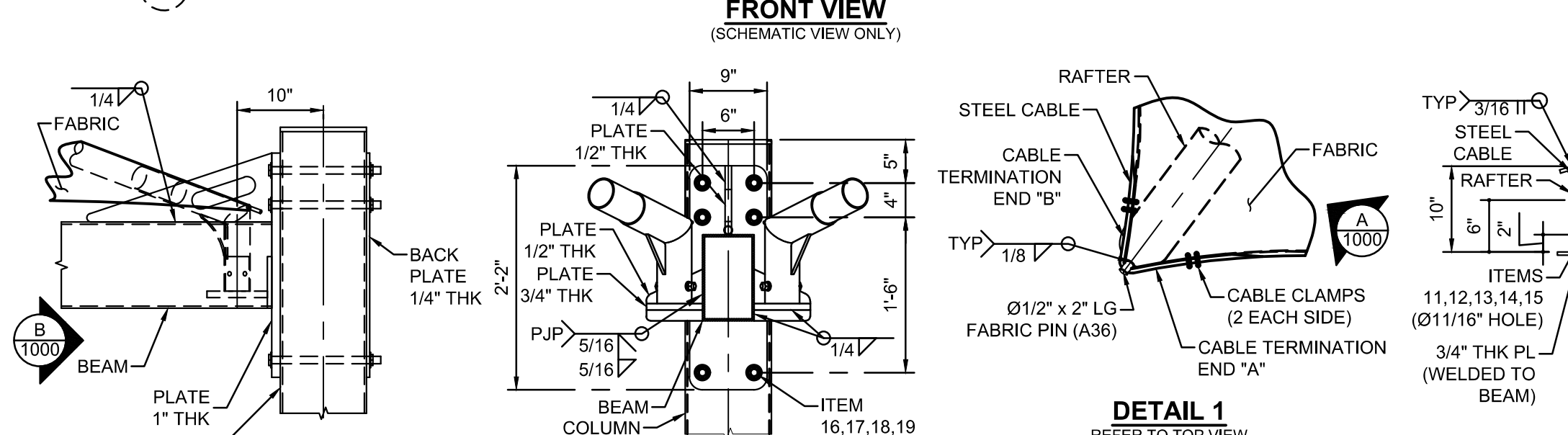
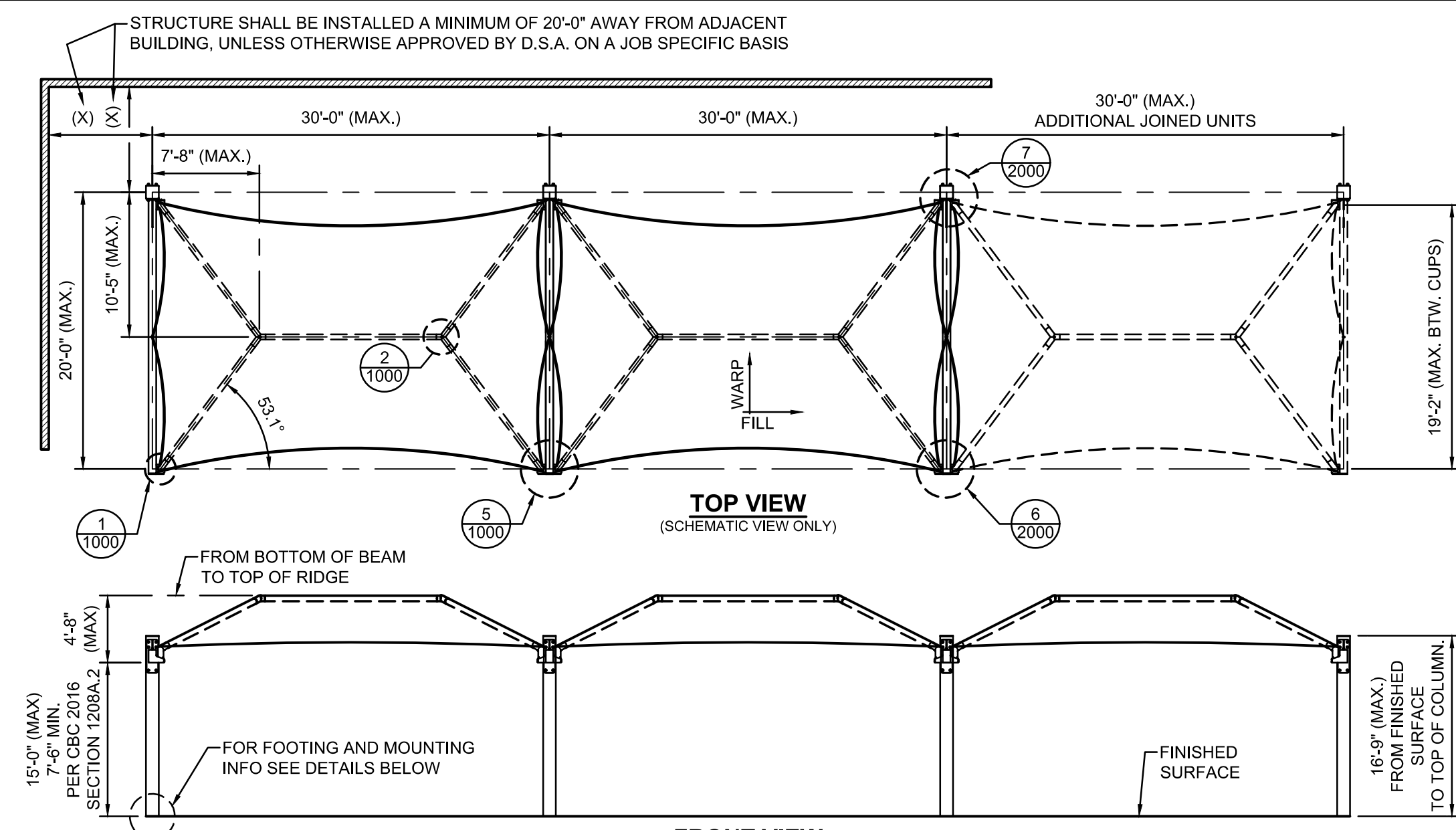
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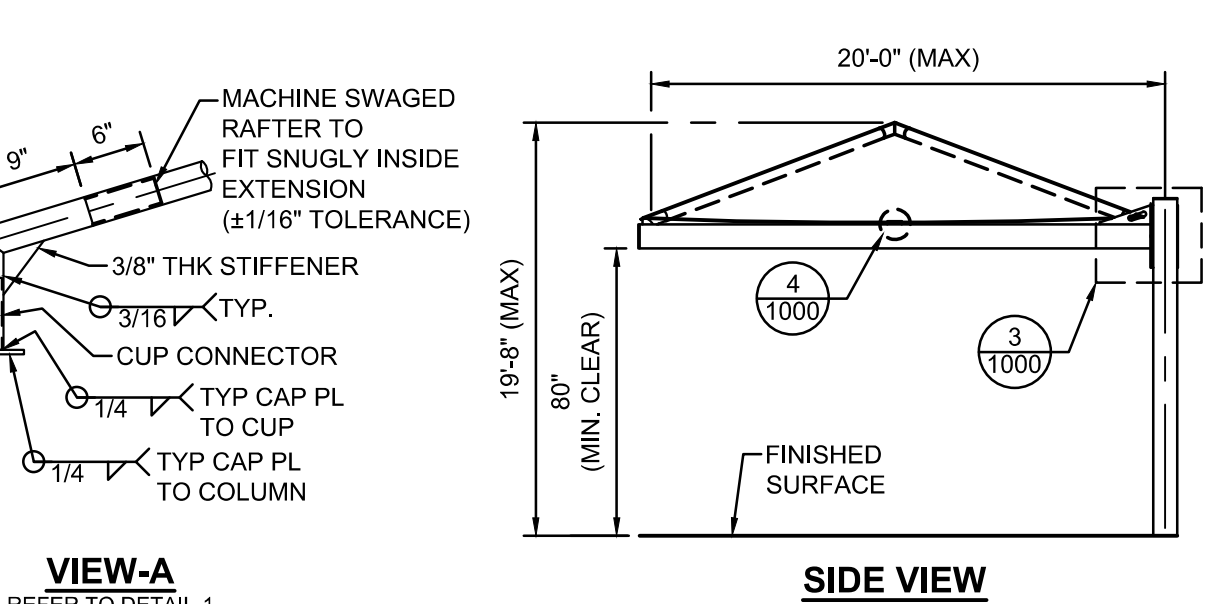
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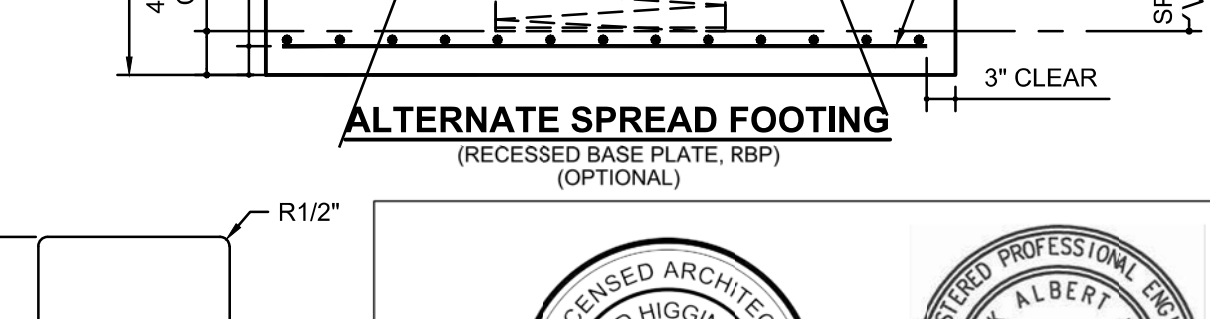
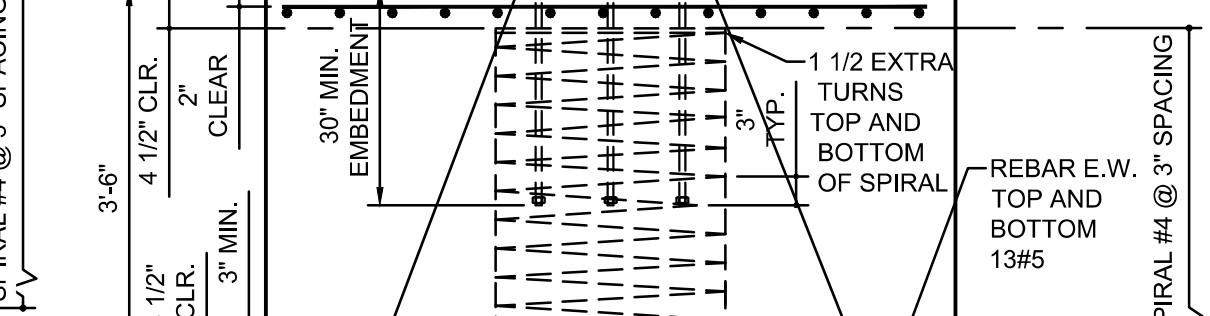
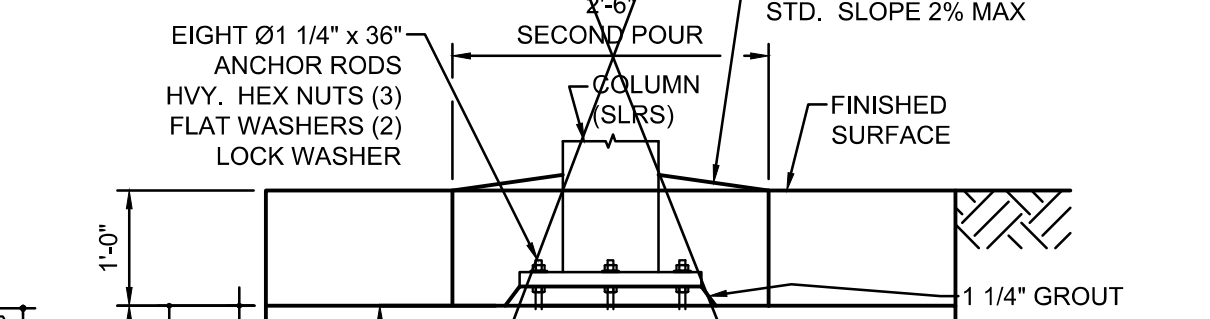
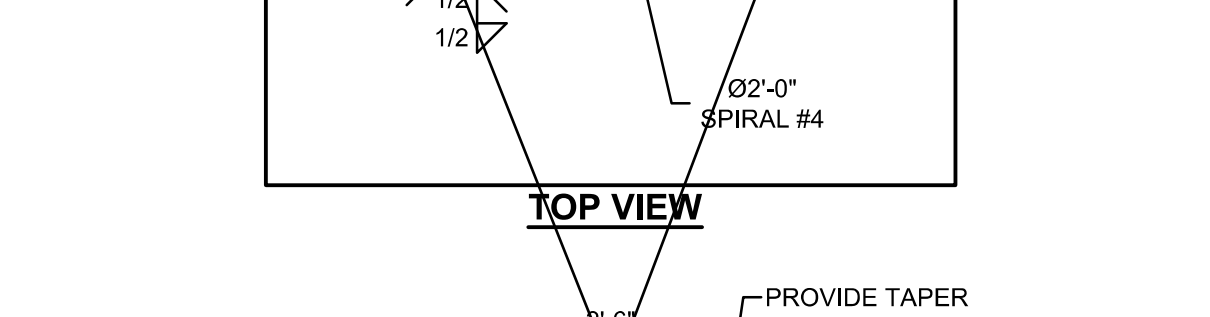
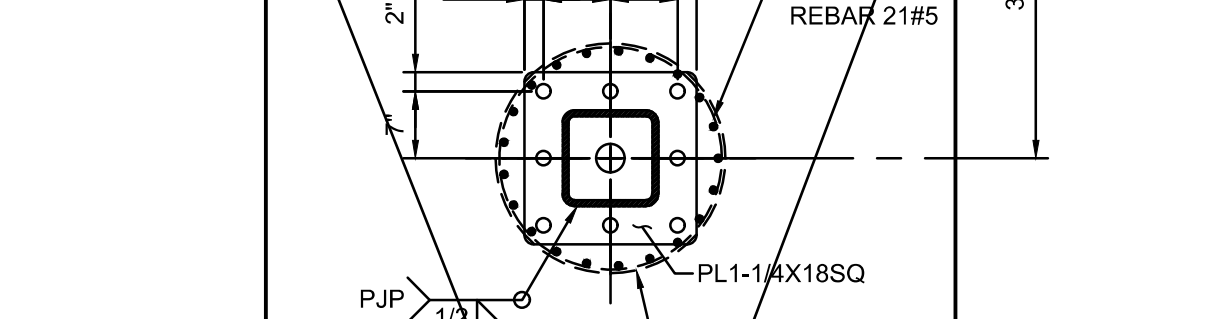


LIST OF MATERIALS			
ITEM	QTY	DESCRIPTION	MATERIAL
1	TBD	COLUMN	HSS 10 x 10 x 0.625
2A	TBD	BEAM LEFT	HSS 10 x 6 x 0.375
2B	TBD	BEAM RIGHT	HSS 10 x 6 x 0.375
2C	TBD	BEAM CENTER	HSS 10 x 6 x 0.375
3	TBD	CUP CONNECTOR (6" LG)	HSS 4.0 x 0.25
4	TBD	RAFTER (GALVANIZED STEEL TUBE)	4.50 GA 7 RD. TUBE (4.5 x 0.188)
5	TBD	EXTENSION (GALVANIZED STEEL TUBE)	4.50 GA 7 RD. TUBE (4.5 x 0.188)
6	TBD	CROSSPIECE (GALVANIZED STEEL TUBE)	4.50 GA 7 RD. TUBE (4.5 x 0.188)
7	TBD	RIDGE (GALVANIZED STEEL TUBE)	4.50 GA 7 RD. TUBE (4.5 x 0.188)
8	TBD	FABRIC TOP	FR COLOURSHADE Z25
9	TBD	Ø3/8" CABLE	GALVANIZED STEEL
10	TBD	Ø3/8" CABLE CLAMP	GALVANIZED STEEL
11	TBD	Ø5/8"-11NC x 6" HEX BOLT	18-8 SS
12	TBD	Ø5/8"-11NC HEX NUT	18-8 SS
13	TBD	Ø5/8" FLAT WASHER	18-8 SS
14	TBD	Ø5/8" FLAT WASHER	DELRIN (ACETAL)
15	TBD	Ø5/8" SPLIT LOCK WASHER	18-8 SS
16	TBD	Ø1"-8NC x 13" HEX BOLT	ASTM F3125 GRADE A325, GALVANIZED
17	TBD	Ø1"-8NC HEX NUT	ASTM A563 GALVANIZED
18	TBD	Ø1" SPLIT LOCK WASHER	ASTM F436 GALVANIZED
19	TBD	Ø1" FLAT WASHER	ASTM F436 GALVANIZED



CODE ANALYSIS					
BUILDING	OCCUPANCY	CONST. TYPE	AREA (SQ. FT.)	OCCUPANT LOAD FACTOR	OCCUPANT LOAD
SHADE STRUCTURE					

MAXIMUM OCCUPANT LOAD (PER CBC 2019 TABLE 1604A.5)
 -PUBLIC ASSEMBLY: 250 PERSONS
 -EDUCATIONAL OCCUPANCIES ABOVE 12TH GRADE: 500 PERSONS



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USASHADE & Fabric Structures®
 CORPORATE HEADQUARTERS
 2580 ESTERS BLVD, SUITE 100
 DFW AIRPORT, TX, 75261
 800-966-5005

CERTIFICATIONS:
 IAS CERTIFICATION No: FA-428
 CLARK COUNTY MANUFACTURER CERTIFICATION NUMBER (NEVADA): 355

CUSTOMER:

PROJECT NAME:

LOCATION:

MODEL NUMBER:
 DSA3022060-19

APPROVED
 DIV. OF THE STATE ARCHITECT
 APP: 04-119455 PC
 REVIEWED FOR
 SS FLS ACS CG
 DATE: 03/26/2021

STRUCTURE TYPE:
 FULL CANTILEVER HIP JOINED - DSA

SIZE: MAXIMUM
 20' x 200' x 15'e MAX.

SCALE: NONE
D

PRE-CHECK (PC) DOCUMENT
 Code : 2019 CBC
 A separate project application for construction is required.

Eng. By : JO 06/26/20
 Design By : JO 06/26/20
 Approved By : JO 06/26/20

DRAWING DESCRIPTION:
 PRODUCT INFORMATION

DWG. DSA3022060-19
 SHEET 10.1-1000
 REV. NC



ENVELOPE JOINT REACTIONS

Shear resultant = $\sqrt{F_x^2 + F_y^2 + P_z^2}$ Moment resultant = $\sqrt{M_x^2 + M_y^2 + M_z^2}$

ADD REACTIONS

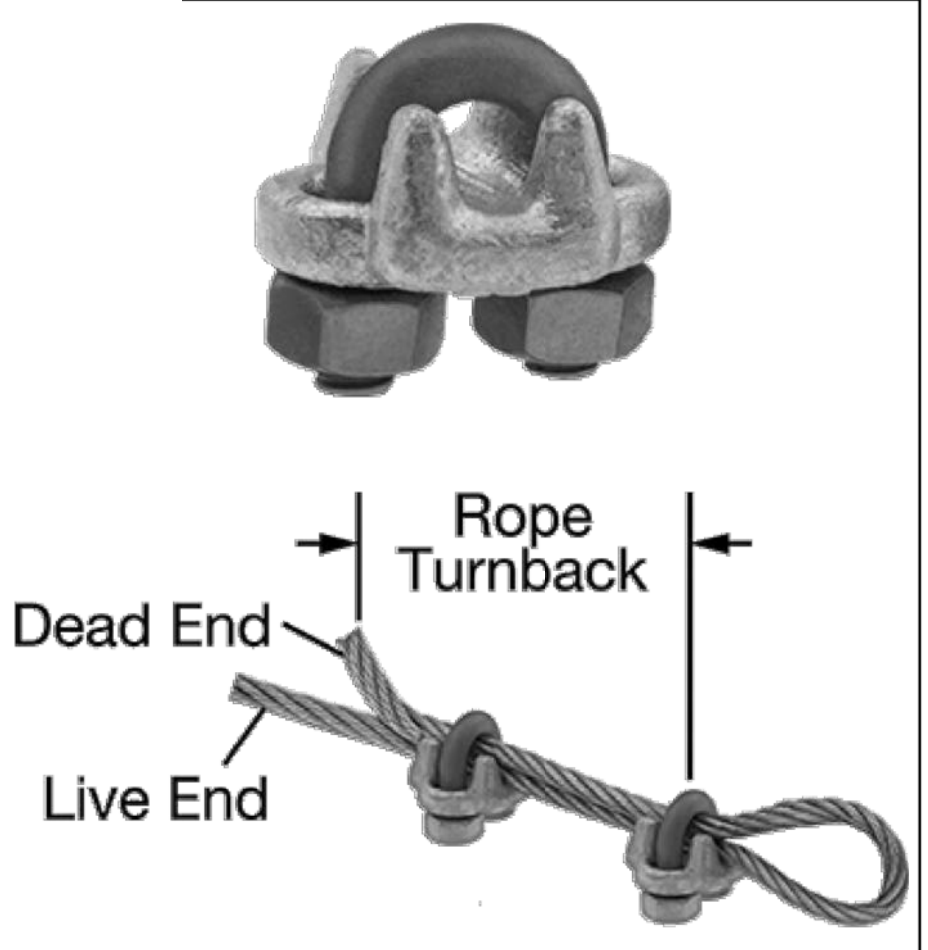
Wind Dir.	F _x	F _y	P _z	M _x	M _y	M _z	Support Reaction (kips)	Support Reaction (kips)	Support Reaction (kips)	Support Reaction (kips)	Support Reaction (kips)
MAXIMUM REACTIONS											
Wind	0.00	0.00	0.00	0.00	0.00	0.00	3.718	71.735	1.238	-6.828	
Min	0.00	0.00	0.00	0.00	0.00	0.00					
Max	0.00	0.00	0.00	0.00	0.00	0.00					
Wind	0.00	0.00	0.00	0.00	0.00	0.00					
Min	0.00	0.00	0.00	0.00	0.00	0.00					
Max	0.00	0.00	0.00	0.00	0.00	0.00					

BASIC LOAD CASES

DEAD LOAD: 0.0378 PSF (FABRIC)
 FLOOR LIVE LOAD: N/A
 ROOF LIVE LOAD: 5 PSF
 ROOF SNOW LOAD: 5 PSF
 SUPERIMPOSED LOADS: N/A

WIND LOAD: 0.0378 PSF (FABRIC)
 ULTIMATE DESIGN WIND SPEED (3 SEC GUST) 115 MPH
 VELOCITY PRESSURE qz: 25.32 PSF
 COMPONENT AND CLADDING qz: 25.32 PSF
 (CABLE AND CABLE HARDWARE ONLY)

SEISMIC LOAD: 1.8
 SEISMIC RESPONSE COEFFICIENTS Cs: 0.05
 DESIGN BASE SHEAR: 26358 LB



FORGED WIRE ROPE CLAMP

FITTING TYPE ROPE CLAMP
 FABRICATION: FORGED
 MATERIAL: GALVANIZED STEEL
 FOR WIRE ROPE DIAMETER 3/8"
 NUMBER OF CLAMPS REQUIRED: 2
 ROPE TURNBACK: 6 1/2"
 FOR WIRE ROPE CONSTRUCTION 7 x 19

ATTACHMENT TYPE: LOOP
 CLAMP WIDTH 2", HEIGHT 1 1/16", THICKNESS 1 11/16"
 REQUIRED INSTALLATION TOOL: TORQUE WRENCH
 REQUIRED TORQUE: 45 FT.-LBS.
 CAPACITY: 80% OF THE ROPE'S CAPACITY
 SPECIFICATIONS: MET ASME B30.26, FED. SPEC. FF-C-450

Aircraft Cable

Preformed, made in accordance with commercial specifications military and federal specification rope available.

Carbon Steel (Aircraft Cable) - Galvanized
 cable has the highest strength and greatest fatigue life of the materials offered. It has good to fair corrosion resistance in rural to industrial atmosphere environments. This material is most widely used for small diameter cables. Tin over galvanized cable offers greater corrosion resistance and reduced friction over pulleys.

7 x 19			Galvanized Min. Breaking Strengths (lbs)
Dia. (in)	Approx. Wt 1000 Ft/lbs		
3/32	17.	1,000	
1/8	29.	2,000	
5/32	45.	2,800	
3/16	65.	4,200	
7/32	86.	5,600	
1/4	110.	7,000	
9/32	139.	8,000	
5/16	173.	9,800	
3/8	243.	14,400	

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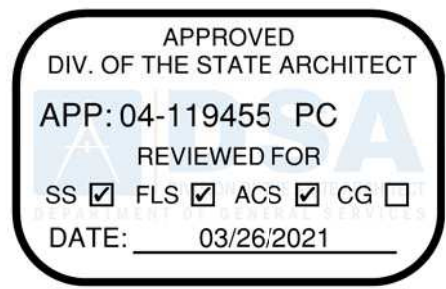
CERTIFICATIONS:
 IAS CERTIFICATION No: FA-438
 CLARK COUNTY MANUFACTURER CERTIFICATION NUMBER (NEVADA): 355

CUSTOMER:

PROJECT NAME:

LOCATION:

MODEL NUMBER:
 DSA3022060-19



STRUCTURE TYPE:
 FULL CANTILEVER HIP JOINED - DSA

SIZE: MAXIMUM
 20' x 200' x 15'e MAX.

SCALE: NONE

DRAWING SIZE:
 D

PRE-CHECK (PC) DOCUMENT
 Code: 2019 CBC
 A separate project application for construction is required.

Eng. By: JO 06/26/20
 Design By: JO 06/26/20
 Approved By: JO 06/26/20

DRAWING DESCRIPTION:
 REACTIONS

DWG. DSA3022060-19
 SHEET 10.2-2000
 REV. NC

Multiknit INTERNATIONAL 190/F5 Fire rated specifications

Standard range Revision 0 28-Oct-12

Colour	Shade %	UV Block %	Average GSM	Average Warp break strength lga	Average Elongation %	Average Weft break strength lga	Average Elongation %	Burst lga	Average Burst to Mass ratio
Desert Sand	80	92	185	50	40	185	50	73	156
Blue	80	85	185	50	40	72	73	156	0.84
Brown	85	185	50	40	72	73	156	0.84	
Green	80	85	185	50	40	72	73	156	0.84
Red	80	85	185	50	40	72	73	156	0.84
Silver	80	81	185	50	40	72	73	156	0.84
Terracotta	75	82	185	50	40	72	73	156	0.84
Yellow	80	89	185	50	40	72	73	156	0.84

CONVERSION TO IMPERIAL UNITS:
 185 GSM = 0.378 psf
 50 KGS = 110 Lb
 72 KGS = 159 Lb

Notes:
 - 190/F5 conforms to The California State Fire Marshal Title 19 Test for Small scale Fabrics
 - Tear tests are done using a 50mm wide strip and a cross head speed of 500mm/min
 - This report has been compiled using the mean results from all tests conducted on the given sample by our Quality Control Laboratory, the information provided is considered to be a good reflection of the inherent properties of the fabric tested. These results shall only be used as an indication of the quality and characteristics of the fabric tested.
 - Company cannot be held responsible or liable in any way whatsoever should the information differ to that of a registered testing institution.

Dean Joubert
 General Manager - Multiknit (Pty) Ltd

Tommy Rogers
 Managing Director - Multiknit (Pty) Ltd

