

GENERAL NOTES - STRUCTURAL

- 1. THE GENERAL STRUCTURAL NOTES ARE INTENDED TO AUGMENT THE DRAWINGS AND SPECIFICATIONS. SHOULD CONFLICTS OCCUR BETWEEN DOCUMENTS, THE STRICTEST PROVISION SHALL GOVERN.
2. THE CONTRACTOR SHALL LIMIT THE AMOUNT OF LOAD IMPOSED UPON THE STRUCTURAL FRAMING SYSTEM DURING CONSTRUCTION. LOADS, INCLUDING CONSTRUCTION LOADS, MUST NOT EXCEED THE DESIGN CAPACITY OF THE FRAMING AT THE TIME THE LOADS ARE IMPOSED.
3. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED SELF SUPPORTING, STABLE STRUCTURE UNLESS OTHERWISE INDICATED.
4. ALL MATERIALS AND WORKMANSHIP SHALL MEET OR EXCEED THE MINIMUM REQUIREMENTS OF THE GOVERNING BUILDING CODE: MICHIGAN BUILDING CODE, CURRENT EDITION.
5. ALL SHOP DRAWINGS PREPARED BY SUPPLIERS, SUBCONTRACTORS, ETC. SHALL BE REVIEWED BY THE ARCHITECT/ENGINEER FOR CONFORMANCE WITH DESIGN INTENT ONLY.
6. STRUCTURAL DRAWINGS ARE INTENDED TO BE USED WITH ARCHITECTURAL, ELECTRICAL AND MECHANICAL DRAWINGS.
7. MECHANICAL FRAMING LOADS, OPENINGS AND SUPPORT STRUCTURE ARE SHOWN FOR BIDDING PURPOSES ONLY.
8. THE CONTRACTOR SHALL INFORM THE ENGINEER/ARCHITECT OF ANY DEVIATIONS FROM THE DRAWINGS.
9. DRAWINGS ARE INTENDED TO BE PRINTED PER THE SCALE PROVIDED.
10. CONTRACTOR SHALL NOT MIX GALVANIZED AND STAINLESS STEEL AT ANY TIME.
11. CONTRACTOR SHALL RECOGNIZE EFFECTS OF THERMAL MOVEMENTS AND MOISTURE CONTENT CHANGES OF STRUCTURAL ELEMENTS DURING THE CONSTRUCTION PERIOD.
12. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING COMPLETE AND FUNCTIONING SYSTEMS, INCLUDING BUT NOT LIMITED TO, PROVIDING (AT NO ADDITIONAL COST) ITEMS NOT SPECIFICALLY SHOWN IN THESE DRAWINGS WHICH ARE NORMALLY CONSIDERED NECESSARY.

SOILS AND EARTHWORK

- 1. SOIL INVESTIGATIONS HAVE BEEN PERFORMED FOR THIS PROJECT BY G2 CONSULTING, BORINGS DERIVED 07/12/24.
2. OHM UTILIZED DATA CONTAINED IN BORING LOGS TO DETERMINE DESIGN LOAD BEARING CAPACITY AND OTHER DESIGN PARAMETERS.
3. CONTRACTOR SHALL VERIFY SOIL BEARING CAPACITY PRIOR TO CONSTRUCTION.
4. SPECIAL DESIGN AND CONSTRUCTION PROVISIONS FOR THIS PROJECT'S FOUNDATIONS:
A. NONE
5. INCLUDE IN THE WORK PROVIDING ALL EQUIPMENT, MATERIAL, AND QUALIFIED LABOR NECESSARY FOR EXCAVATION, SHORING, DEWATERING SYSTEMS, BACKFILL AND COMPACTION OF SOILS.
6. FOR PROTECTION OF UNDERGROUND UTILITIES, THE CONTRACTOR SHALL TELEPHONE (800) 482-7171 NOT LATER THAN THREE BUSINESS DAYS PRIOR TO EXCAVATING IN THE VICINITY OF UTILITY LINES.
7. EXCAVATE TO ELEVATIONS AND DIMENSIONS SHOWN ON THE PLANS WITHIN A TOLERANCE OF +/- 0.10 FEET.
8. NOTIFY THE ENGINEER FOR AN INSPECTION WHEN THE EXCAVATION HAS REACHED SUB-GRADE ELEVATION.
9. SATISFACTORY SOIL MATERIALS ARE DEFINED AS GRANULAR MATERIALS CLASSIFIED AS GW, GP, GM, SW, SP, SW-SM, SP-SM OR SM BY THE UNIFIED SOILS CLASSIFICATION SYSTEM.
10. UNSATISFACTORY SOIL MATERIALS ARE DEFINED AS SOILS CLASSIFIED AS GC, SW-SC, SP-SC, SC, ML, MH, CL, CH, OH, OH, AND PT BY THE UNIFIED SOILS CLASSIFICATION SYSTEM.
11. BACKFILL ALL STRUCTURAL WORK WITH SATISFACTORY SOIL MATERIALS AND ENGINEERED FILL AS SHOWN ON PLANS.
12. COMPACT SOILS BELOW FOOTINGS TO A MINIMUM OF 95% OF THE MAXIMUM DENSITY AS DETERMINED BY MODIFIED PROCTOR, ASTM D1557.
13. COMPACT BACKFILL IN LAYERS TO MINIMUM 95% MAXIMUM DENSITY AS DETERMINED BY MODIFIED PROCTOR, OR MICHIGAN CONE TEST.

CONCRETE NOTES

- 1. PROVIDE MINIMUM 28-DAY CONCRETE COMPRESSIVE STRENGTH OF 4,000 PSI (fc = 4,000 PSI). PROVIDE NORMAL WEIGHT CONCRETE WITH 8% +/- 1.5% ENTRAINED AIR FOR EXTERIOR APPLICATIONS.
2. PROVIDE READY-MIX CONCRETE CONFORMING TO ASTM C-94.
3. CONCRETE SHALL BE PLACED IN ACCORDANCE WITH ACI 117 301, 305R, 306.1, AND 308.1, LATEST APPLICABLE EDITION.
4. PLACE ANCHOR RODS SET IN CONCRETE TO RECEIVE STRUCTURAL STEEL WITHIN TOLERANCES SPECIFIED IN THE LATEST APPLICABLE AISC CODE OF STANDARD PRACTICES FOR STEEL BUILDINGS AND BRIDGES.
5. REINFORCING STEEL CONFORMING TO ASTM A-615, GRADE 60 IS REQUIRED.
6. REINFORCING STEEL SHALL NOT BE WELDED.
7. POST INSTALLED ANCHORS OR REBAR SHALL BE ANCHORED INTO CONCRETE WITH POWERS PE1000+ EPOXY INJECTION ADHESIVE.
REINFORCEMENT LAP SPLICE LENGTHS

Table with 3 columns: BAR SIZE, TOP BARS, ALL OTHER BARS. Rows for #3, #4, #5, #6, #7, #8 bars with splice lengths for fc = 3,000, 4,000, and 5,000 psi.

- \* TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12" OF FRESH CONCRETE BELOW BAR.
\* LAP SPLICE LENGTHS SHOWN ARE CLASS B SPLICE LENGTHS FOR UNCOATED OR GALVANIZED BARS WITH CLEAR COVER OF 4B OR MORE AND WITH CLEAR SPACING OF 24B OR MORE.
1. NO. 5 OR SMALLER 11/2"
2. GREATER THAN NO. 5 2"
C. SLAB ON GRADE: 2" FROM T/S/L/B

MASONRY NOTES

- 1. CONSTRUCT MASONRY IN ACCORDANCE WITH ACI 530.1/ASCE 6-CURRENT EDITION.
2. PROVIDE NORMAL WEIGHT CONCRETE UNIT MASONRY UNITS MANUFACTURED IN ACCORDANCE WITH ASTM C90, Fm = 1,900 PSI.
3. GROUT VOIDS AS INDICATED ON THE DRAWINGS, WITH GROUT CONFORMING TO ASTM C476.
4. LAY UNIT MASONRY IN A RUNNING BOND PATTERN UNLESS SPECIFICALLY SHOWN OTHERWISE ON THE PLANS.
5. MORTAR SHALL BE TYPE S COMPLYING WITH ASTM C270 IS REQUIRED.
6. PROTECT MASONRY BY COVERING TOP OF WALLS WITH WATERPROOF SHEETING AT THE END OF EACH DAY.
7. GROUT ALL CORES CONTAINING REBAR AND VOIDS WHERE INDICATED.
8. ALL CORES BELOW GRADE SHALL BE GROUTED SOLID UP TO FINISHED FLOOR ELEVATION.
9. CORES CONTAINING EXPANSION OR ADHESIVE ANCHORS SHALL BE GROUTED SOLID.
10. ALL VERTICAL REINFORCEMENT SHALL BE CONTINUOUS THROUGH BOND BEAMS.
11. COORDINATE WALL OPENINGS AND OTHER WALL CONFIGURATIONS WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, CIVIL, AND OTHER DISCIPLINES.
12. POST INSTALLED ANCHORS OR REBAR SHALL BE ANCHORED INTO MASONRY WITH POWERS PE1000 + EPOXY INJECTION ADHESIVE.
13. PROVIDE HORIZONTAL JOINT REINFORCEMENT IN ALTERNATE COURSES (16" OC) USING 9 GAUGE DURATRUS OR EQUAL.

Table with 4 columns: BAR SIZE, MINIMUM LAP SPLICE Fm = 1,500 psi, MINIMUM LAP SPLICE Fm = 1,900 psi, COMMENTS. Rows for #3, #4, #5, #6, #7, #8 bars.

WOOD FRAMING NOTES

- 1. ALL FRAMING SHALL BE SPRUCE-PINE-FIR (S.P.F.) NO. 2 OR BETTER: Fb=875 PSI; E=1.4X10^6 PSI; Fv=135 PSI; Fcperp =425 PSI.
2. FLOOR TRUSS JOISTS SHALL BE TRUSS-JOIST MILLILLIAN TJI SERIES OR EQUAL.
3. HANGERS/CONNECTORS SHALL BE 18 GA GALVANIZED, SIMPSON STRONG-TIE OR EQUAL.
4. SHEATHING/FLOORING SHALL BE APA GRADED AS FOLLOWS:
A. ROOF SHEATHING: 5/8" MIN, 40/20 EXPOSURE 1
B. WALL SHEATHING: 1/2" MIN, 32/16 EXPOSURE 1
C. FLOOR SHEATHING: 3/4" MIN, STURD-I-FLOOR EXPOSURE 1, T&G, GLUED AND NAILED
5. MINIMUM REQUIREMENTS FOR ENGINEERED WOOD PRODUCTS ARE INDICATED AS FOLLOWS.
6. 2.0E LAMINATED VENEER LUMBER: Fb=2,600 PSI; E=2.0X10^6 PSI; Fv=285 PSI; Fcperp =750 PSI.
7. 2.0E PARALLAM PARALLEL STRAND LUMBER: Fb=2,900 PSI; E=2.0X10^6 PSI; Fv=290 PSI; Fc = 650 PSI.
8. 24F-V4 WESTERN SPECIES GLUE LAMINATED TIMBER MANUFACTURED IN ACCORDANCE WITH ANSI/APA T190.1-1992, APPEARANCE GRADE.
9. TJI/PRO: WOOD T1 FLOOR JOISTS AS MANUFACTURED BY WEYERHAEUSER, OR APPROVED EQUIVALENT.
10. WHERE HEADERS ARE NOT SPECIFIED OVER DOORS, WINDOWS OR OTHER OPENINGS WITHIN BEARING OR EXTERIOR WALLS PROVIDE A MINIMUM (3) 2X12 HEADER, U.N.O. ALL WINDOW PENETRATIONS SHALL HAVE MINIMUM (2) SILL PLATES.
11. STEEL PLATES OR FASTENERS IN CONTACT WITH PRESSURE TREATED LUMBER AND PROTECTED WITHIN THE BUILDING ENVELOPE.
12. FASTEN MEMBERS IN ACCORDANCE WITH MICHIGAN BUILDING CODE TABLE 2304.10.1, UNLESS OTHERWISE NOTED.
13. WHERE NOTED, NAIL SIZES ARE BASED ON THE FOLLOWING MINIMUM SIZES

Table with 3 columns: SIZE, DESIGNATION, MIN SIZE. Rows for 6d, 8d, 10d, 12d, 16d nails in BOX and COMMON designations.

PRE-ENGINEERED WOOD TRUSS NOTES

- 1. CONTRACTOR SHALL PROVIDE AND INSTALL METAL-PLATE CONNECTED WOOD TRUSSES DESIGNED TO SUPPORT THE LOADS INDICATED ON THE PLANS.
2. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS SEALED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF MICHIGAN.
3. TRUSS MANUFACTURER SHALL DESIGN TRUSSES FOR WIND LOADS PER SEI/ASCE 7-02.
4. CONTRACTOR SHALL SUPPLY, INSTALL, AND REMOVE ALL NECESSARY TEMPORARY BRACING REQUIRED FOR INSTALLATION OF WOOD TRUSSES AND MEMBERS IN ACCORDANCE WITH DSB-89.
5. METAL PLATE CONNECTORS SHALL COMPLY WITH TPI 1, HOT-DIP GALVANIZED STEEL SHEET.
6. PROVIDE DIMENSIONAL LUMBER OF ANY SPECIES FOR TRUSS CHORD AND WEB MEMBERS.
7. CONTRACTOR SHALL INSTALL SIMPSON STRONG-TIE MODEL H3 TIE-DOWNS UNLESS NOTED OTHERWISE.
8. INSTALL AND FASTEN PERMANENT BRACING DURING TRUSS ERECTION AND BEFORE CONSTRUCTION LOADS ARE APPLIED.
9. IN ADDITION TO THE ANY LATERAL BRACING WHICH IS REQUIRED BY THE TRUSS MANUFACTURER/SUPPLIER, THE CONTRACTOR SHALL PROVIDE AND INSTALL PERMANENT DIAGONAL STABILITY BRACING FOR ALL COMPRESSION WEBS AND PRIMARY TOP CHORDS OF PIGGY BACK TRUSSES.

BUILDING LOADS

BUILDING CLASSIFICATION II

Table for LIVE LOADS: UNIFORM FLOOR LIVE LOAD (NA), ROOF LOAD - SEE SNOW LOAD (20 psf), INTERIOR WALL LATERAL LIVE LOAD (5 psf).

Table for DEAD LOADS: MATERIAL DEAD LOAD (15 psf), MECHANICAL DEAD LOAD (5 psf).

Table for SNOW LOADS: BALANCED SNOW (16 psf), UNBALANCED SNOW (5 psf, 16 psf).

Table for WIND LOADS: LOAD OR VARIABLE, ULTIMATE DESIGN WIND SPEED (115 mph), RISK CATEGORY (II), SEISMIC IMPORTANCE FACTOR (1.0), etc.

Table for EARTHQUAKE DESIGN DATA: LOAD VARIABLE, RISK CATEGORY (II), SEISMIC IMPORTANCE FACTOR (1.0), etc.

Table for MISCELLANEOUS DESIGN DATA: ASSUMED SOIL BEARING STRENGTH (2000 psf).

- 1. APPLICABLE CODE IS 2015 MICHIGAN BUILDING CODE.
2. APPLICABLE TECHNICAL CODE IS ASCE/SEI 7-10.
3. WIND LOAD BASED ON ASCE 7-10
A. MWFS: CHAPTER 26, PART 1
B. C&C: CHAPTER 30, PART 1
4. LOADS ARE BASED ON SECTION 16 OF MBC 2015 UNLESS OTHERWISE NOTED.

LOOSE LINTEL & FRAMING NOTES

FOR ALL FRAMING & OPENINGS IN WALLS, INCLUDING THOSE FOR DOORWAYS, DUCTS & EQUIPMENT, PROVIDE (1) ANGLE FOR EACH 4" OF WALL THICKNESS AS FOLLOWS:

- 1. SPANS TO 4'-0": L3 1/2x3 1/2x5/16
2. SPANS 4'-1" TO 7'-0": L5x3 1/2x5/16
3. SPANS LARGER THAN 7'-0": REFER TO LINTEL SCHEDULE
LINTEL BEARING (MIN)
1. SPANS TO 4'-0": 6" EACH END
2. SPANS 4'-1" TO 7'-0": 8" EACH END
3. SPANS LARGER THAN 7'-0": PROVIDE BEAMS WITH PLATES AS SHOWN ON PLANS

- NOTES:
1. ALL OPENINGS ARE NOT SHOWN IN THE FRAMING PLANS. REFER TO ARCHITECTURAL, MECHANICAL & ELECTRICAL DRAWINGS AND DETAILS FOR OPENINGS AND RECESSES.
2. WHERE ARE NOT DETAILED OR NOTED, PROVIDE LINTELS FOR ALL OPENINGS PER ABOVE LOOSE LINTEL SCHEDULE.
3. EQUIPMENT SUSPENDED FROM CEILING JOISTS: USE ANGLE LINTEL, SPAN (3) JOIST MIN, TOP CHORD, WELD OR CLAMP TO JOIST.
4. FOR OPENINGS ON FLOOR AND ROOF DECKS, PROVIDE DAL1 ANGLES EACH SIDE, FASTEN TO JOISTS AND DECK WITH CLIPS AND SCREWS.
5. ALL EXTERIOR, EXPOSED STL LINTELS SHALL BE HOT DIPPED GALVANIZED.

STRUCTURAL SYMBOLS LEGEND

Table with 3 columns: VIEW REFERENCES, NOTES & ANNOTATIONS, INDICATOR LINES & POINTS. Includes symbols for SIM, DETAIL, SECTION, EXTERIOR, SHEET KEYNOTE, REVISION, NORTH INDICATOR, CENTER LINE, ELEVATION MARK, MATCHLINE, EXISTING GRID LINE, NEW GRID LINE, NEW BUILDING LINE.

STRUC. ABBR.

STRUC. ABBR.

Table mapping structural abbreviations to full names: A AND, @ ALUM, ANSI AMERICAN NATIONAL STANDARDS INSTITUTE, APPROX APPROXIMATE, ARCH ARCHITECTURAL (ARCHITECT), ASTM AMERICAN SOCIETY FOR TESTING AND MATERIALS, B BOT, BLDG BUILDING, BLK BLOCK, BLKG BLOCKING, BOF BOTTOM OF FOOTING, BOT BOTTOM, BRG BEARING, BRKT BRACKET, BTWN BETWEEN, C CIP, CJ CONTROL JOINT, CL CENTER LINE, CLR CLEAR, CMU CONCRETE MASONRY UNIT, COL COLUMN, CONC CONCRETE, D DEG, DEMO DEMOLITION, DET DETAIL, DIA DIAMETER, DIST DISTANCE, DL DEAD LOAD, E EA, EF EACH FACE, EJ EXPANSION JOINT, EL ELEVATION, ENG ENGINEER, ENTR ENTRANCE, EQ EQUAL, EQUIP EQUIPMENT, ES EACH SIDE, EW EACH WAY, EXP EXPANSION (EXPOSED), EXST EXISTING, F FD, FF FINISHED FLOOR, FN FINISH / FINISHED, FT FOOT / FEET, FTG FOOTING, G GA, GALV GALVANIZED, GB GYPSUM BOARD, GYP GYPSUM, H HDR, HORIZ HORIZONTAL, HR HOUR, HT HEIGHT, I I, IN INCH / INCHES, INSUL INSULATION, J JUST, JT JOINT, L LLH, LLV, LONG LONGITUDINAL, LP LOW POINT, LT LEFT, M MAXIMUM, MBC MICHIGAN BUILDING CODE, MECH MECHANICAL, MFR MANUFACTURER, MIN MINIMUM, MISCELLANEOUS, MO MASONRY OPENING, N NORTH, NA NOT APPLICABLE, NIC NOT IN CONTRACT, No NUMBER, NOM NOMINAL, NTS NOT TO SCALE, O OHIO BUILDING CODE, OC ON CENTER, OH OVERHEAD, P PC, POUNDS PER CUBIC FOOT, PL PLATE, PLMB PLUMBING, PLYWOOD PLYWOOD, PREFAB PREFABRICATED, PSF POUNDS PER SQUARE FOOT, PSI POUNDS PER SQUARE INCH, PT PRESSURE TREATED, PVC POLYVINYL CHLORIDE, Q QTY QUANTITY, R REINFORCED, REINFORCE, REV REVISE / REVISION, RO ROUGH OPENING, RS ROUGH SAWN, RT RIGHT, S SIMILAR, SOG SOG SLAB ON GRADE, SO FT SQUARE FOOT / FEET, SQ IN SQUARE INCH / INCHES, STL STEEL, T TAB, TOP & BOTTOM, T&G TONGUE & GROOVE, TEMP TEMPERATURE / TEMPERED, TOB TOP OF BEAM, TOC TOP OF CONCRETE, TOM TOP OF MASONRY, TOS TOP OF STEEL, TOW TOP OF WALL, TYP TYPICAL, U UNO, UNLESS NOTED OTHERWISE, V VERT, VERTICAL, VIF VERIFY IN FIELD, W WITH, WO WITHOUT, WD WOOD, WF WIDE FLANGE, WT WEIGHT, WWF WELDED WIRE FABRIC, Y YARD, YD YARD



OHM-ADVISORS.COM

ISSUED FOR BID SET 2024/11/22

CANTON CHARTER TOWNSHIP CHERRY HILL VILLAGE Cherry Hill Rd, Canton, MI 48187 STRUCTURAL NOTES PROJECT NUMBER 0123-24-0220

S-001



WALL SCHEDULE			
MARK	WIDTH	REINFORCING	NOTES
WC1	8"	#5 AT 12" OC EW	
WM1	6"	#5 AT 48" OC WITH W1.7 WIRE LADDER TIES AT 16" OC	

MASONRY COLUMN SCHEDULE			
MARK	COLUMN SIZE	REINFORCING	NOTES
CM1	Masonry 8 x 8	(1) #5 BAR CENTERED IN CORE	
CM2	Masonry 16 x 16	(4) #5 BARS CENTERED IN CORES	

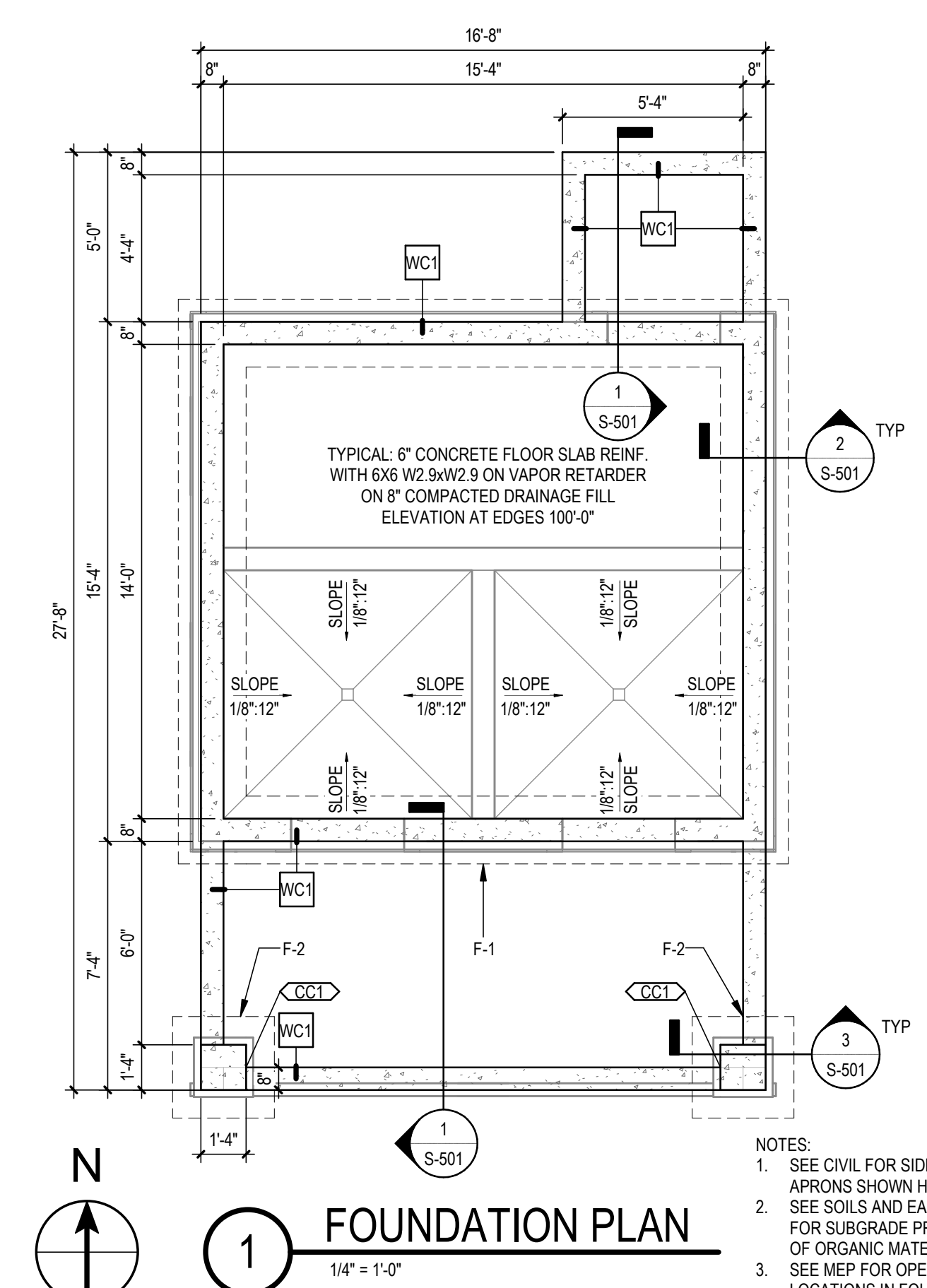
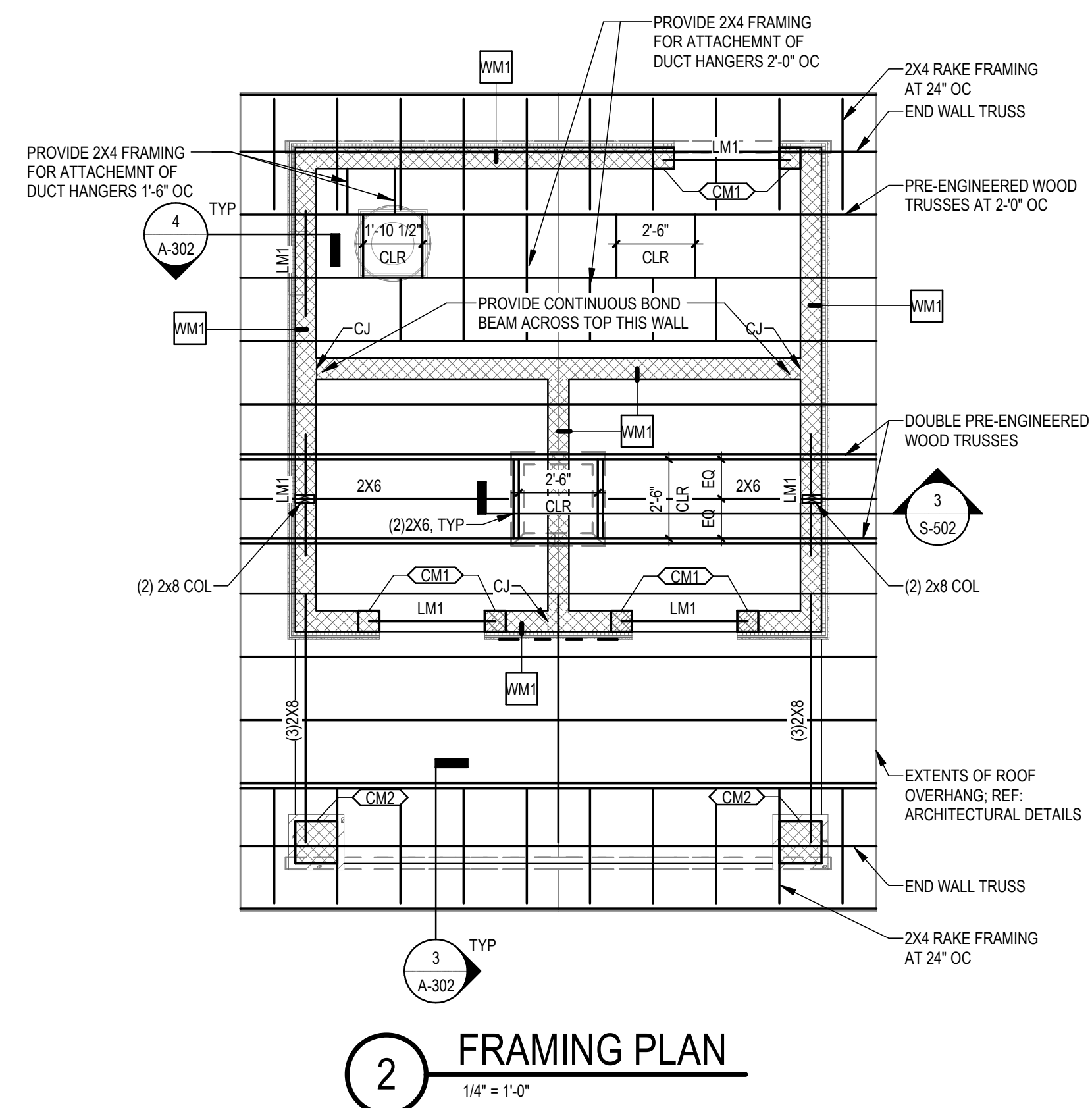
CONCRETE COLUMN SCHEDULE			
MARK	COLUMN SIZE	REINFORCING	NOTES
CC1	Conc. 16 x 16	(4) #8 VERTICAL BARS WITH #3 TIES AT 12" OC	

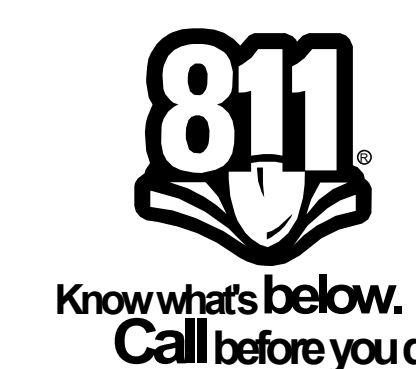
FOOTING SCHEDULE					
MARK	FOOTING SIZE			REINFORCING	NOTES
	L	W	D		
F-1	varies	24"	12"	(3) #5 BARS	
F-2	36"	36"	12"	(4) #5 BARS EW	

SCHEDULE NOTES:

- PROVIDE HORIZ HOOKS ON ALL VERTICAL BARS, TURNED OUT AWAY FROM CENTERLINE. (#4 = 12", #8 = 24")
- PROVIDE "L" 30"x30" FOR #4 HORIZONTAL LAP BARS AT ALL CORNERS.
- PROVIDE #4 BARS AT 36" OC PERPENDICULAR TO BOTTOM FOOTING BARS FOR WALL FOOTINGS.
- REFER TO PLANS FOR STRIP FOOTING LENGTHS.



- NOTES:
- SEE CIVIL FOR SIDEWALK OUTSIDE OF APRONS SHOWN HERE.
  - SEE SOILS AND EARTHWORK NOTES ON S-001 FOR SUBGRADE PREPARATION AND REMOVAL OF ORGANIC MATERIALS.
  - SEE MEP FOR OPENING SIZES AND LOCATIONS IN FOUNDATION WALLS.

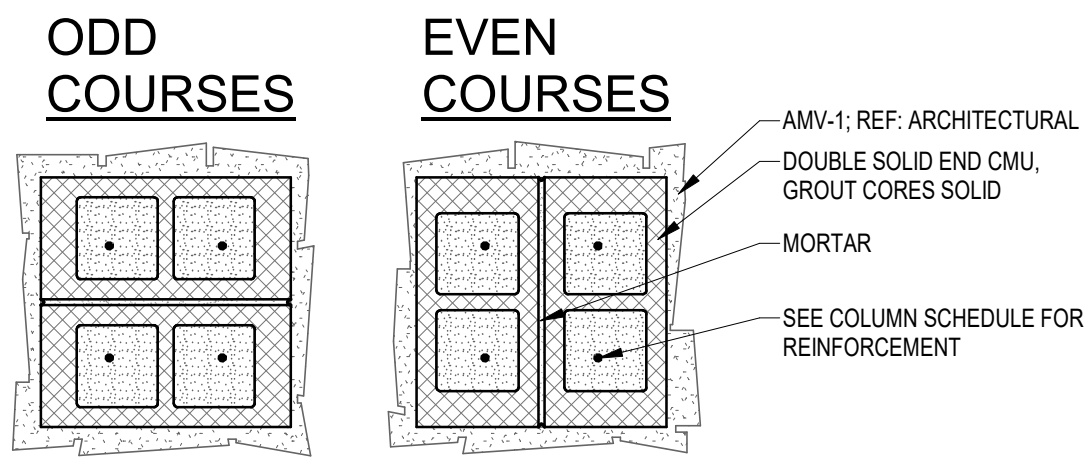


ISSUED FOR: BID SET

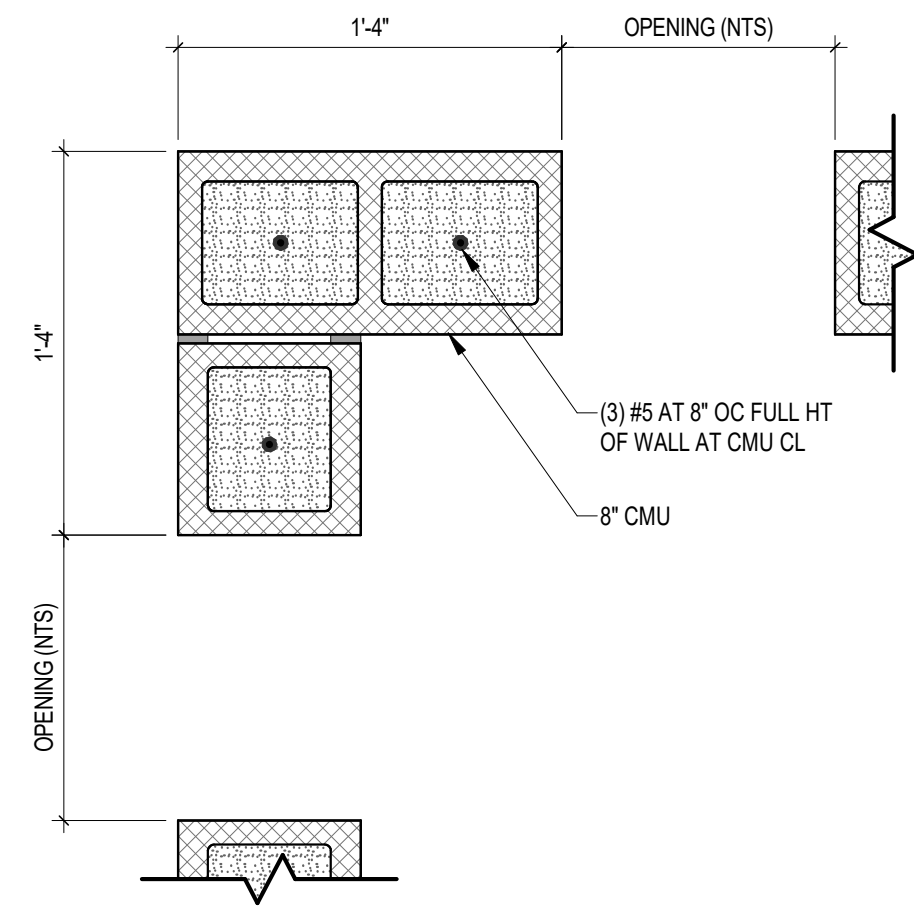
PROJECT NUMBER: 0133-24-0200  
 PM: CM  
 CANTON CHARTER TOWNSHIP  
 CHERRY HILL VILLAGE  
 Cherry Hill Rd, Canton, MI 48187

FOUNDATION AND ROOF FRAMING PLAN AND DETAILS

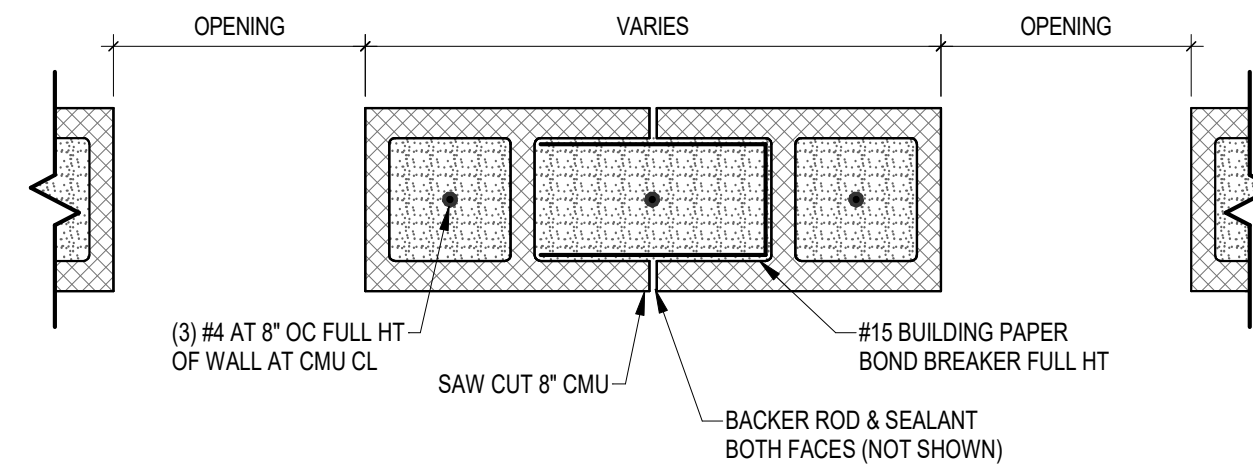
COPYRIGHT 2024 OHM ALL DRAWINGS AND WRITTEN MATERIALS APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF OHM AND THE SAME MAY NOT BE DUPLICATED, DISTRIBUTED, OR DISCLOSED WITHOUT PRIOR WRITTEN CONSENT OF OHM



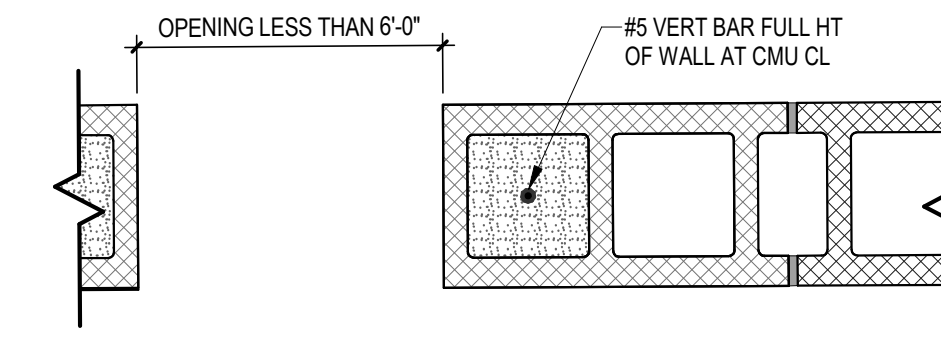
**13 CM2 DETAIL**  
1" = 1'-0"



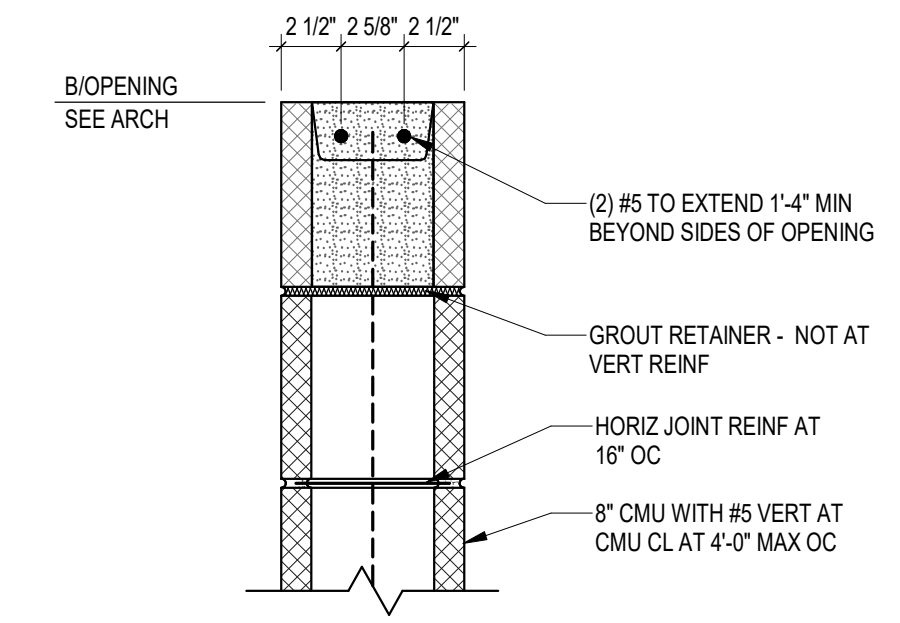
**12 CORNER REINFORCEMENT**  
1 1/2" = 1'-0"



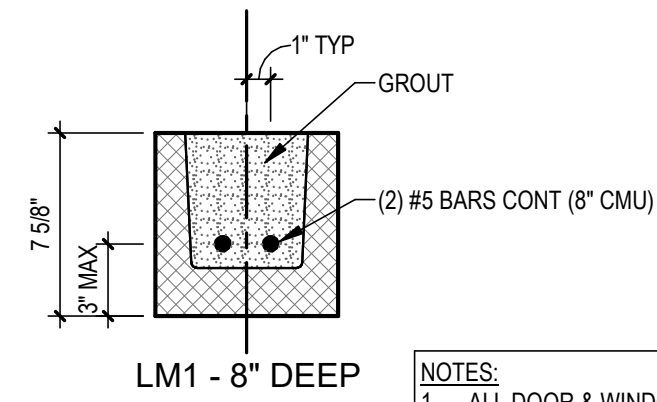
**11 JAMB REINFORCEMENT BETWEEN DOORS**  
1 1/2" = 1'-0"



**10 JAMB REINFORCEMENT AT SINGLE DOORS**  
1 1/2" = 1'-0"

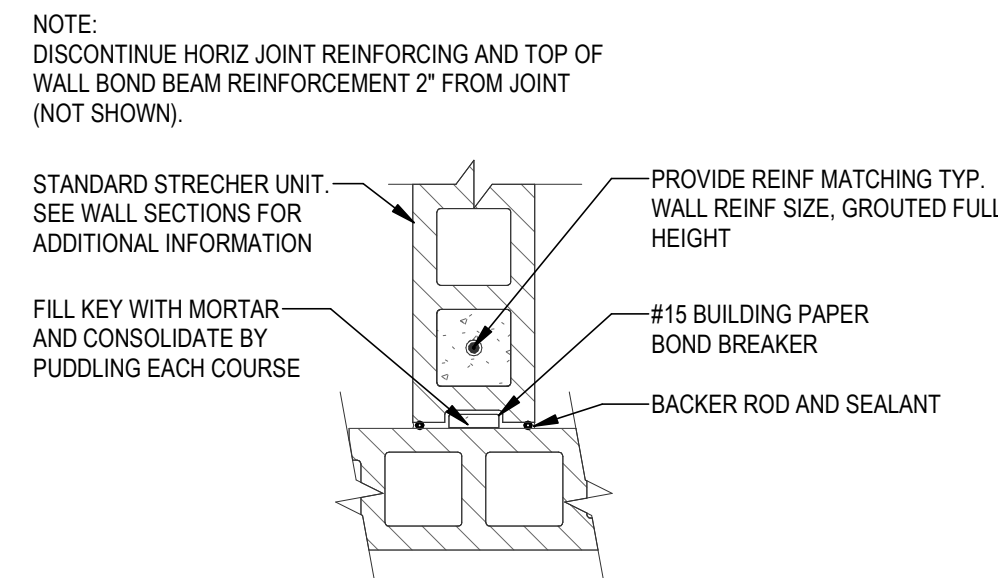


**9 CMU BOND BEAM DETAIL**  
1 1/2" = 1'-0"

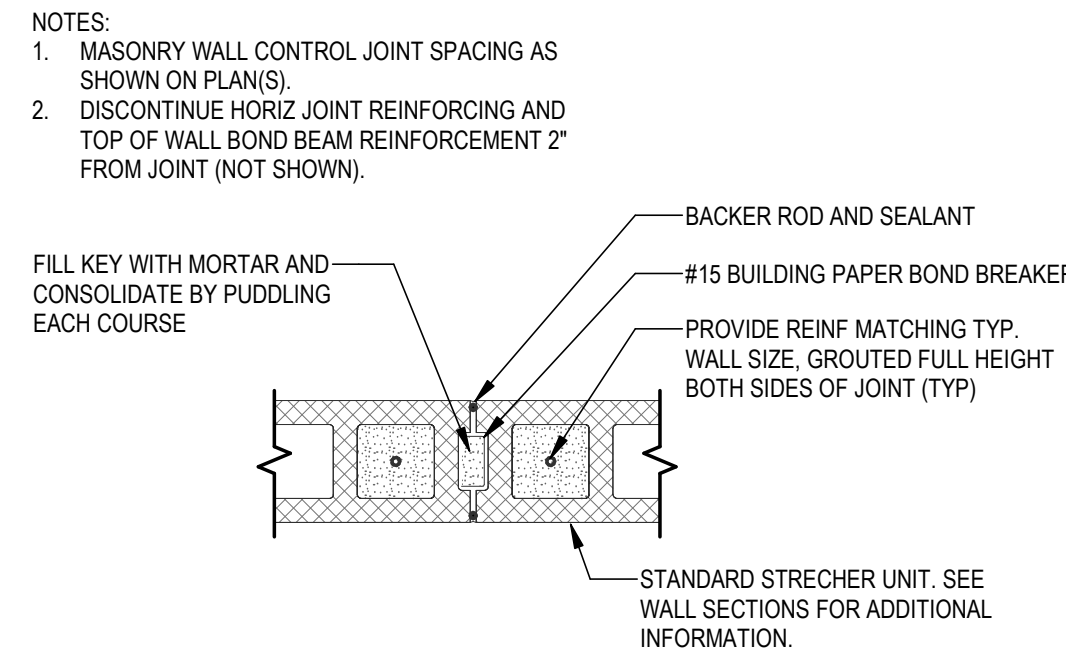


- NOTES:**
- ALL DOOR & WINDOW OPENINGS IN CMU WALLS TO HAVE LM1 LINTELS.
  - EXTEND VERTICAL REINFORCING THROUGH LINTELS & BOND BEAMS.

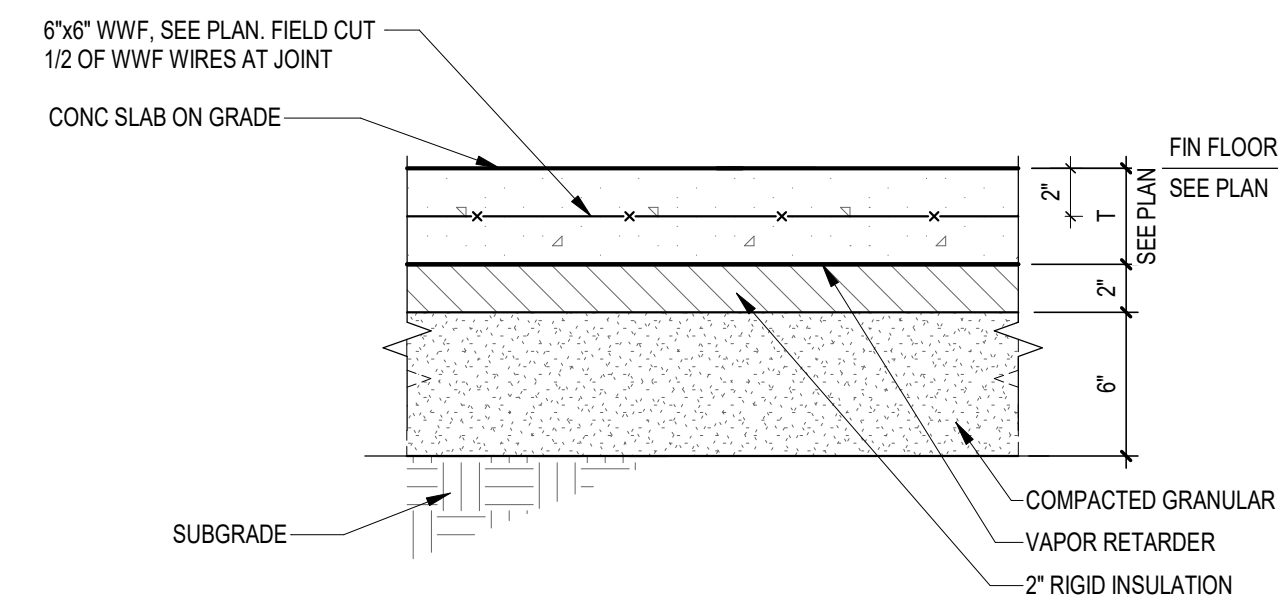
**8 TYP CMU MASONRY LINTEL**  
1 1/2" = 1'-0"



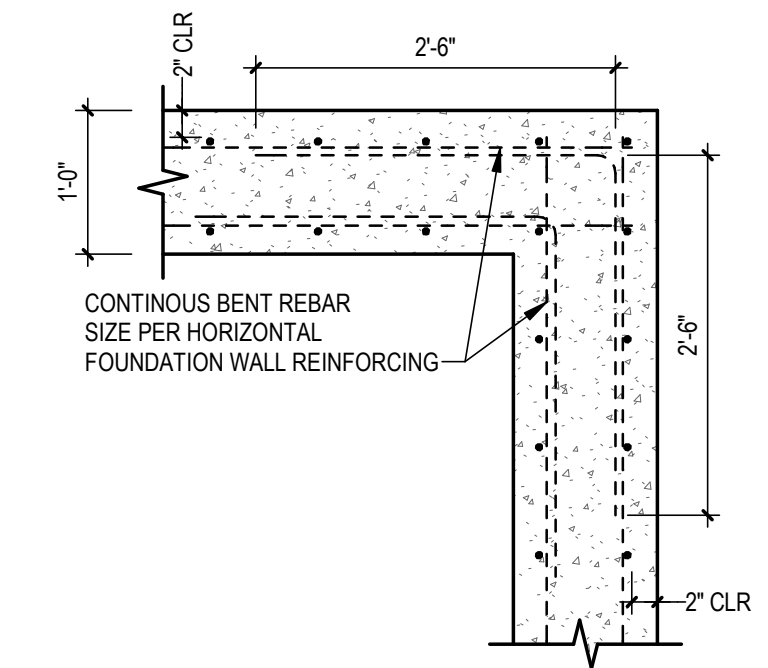
**7 TYPICAL INTERSECTING MASONRY WALL CONTROL JOINT**  
1" = 1'-0"



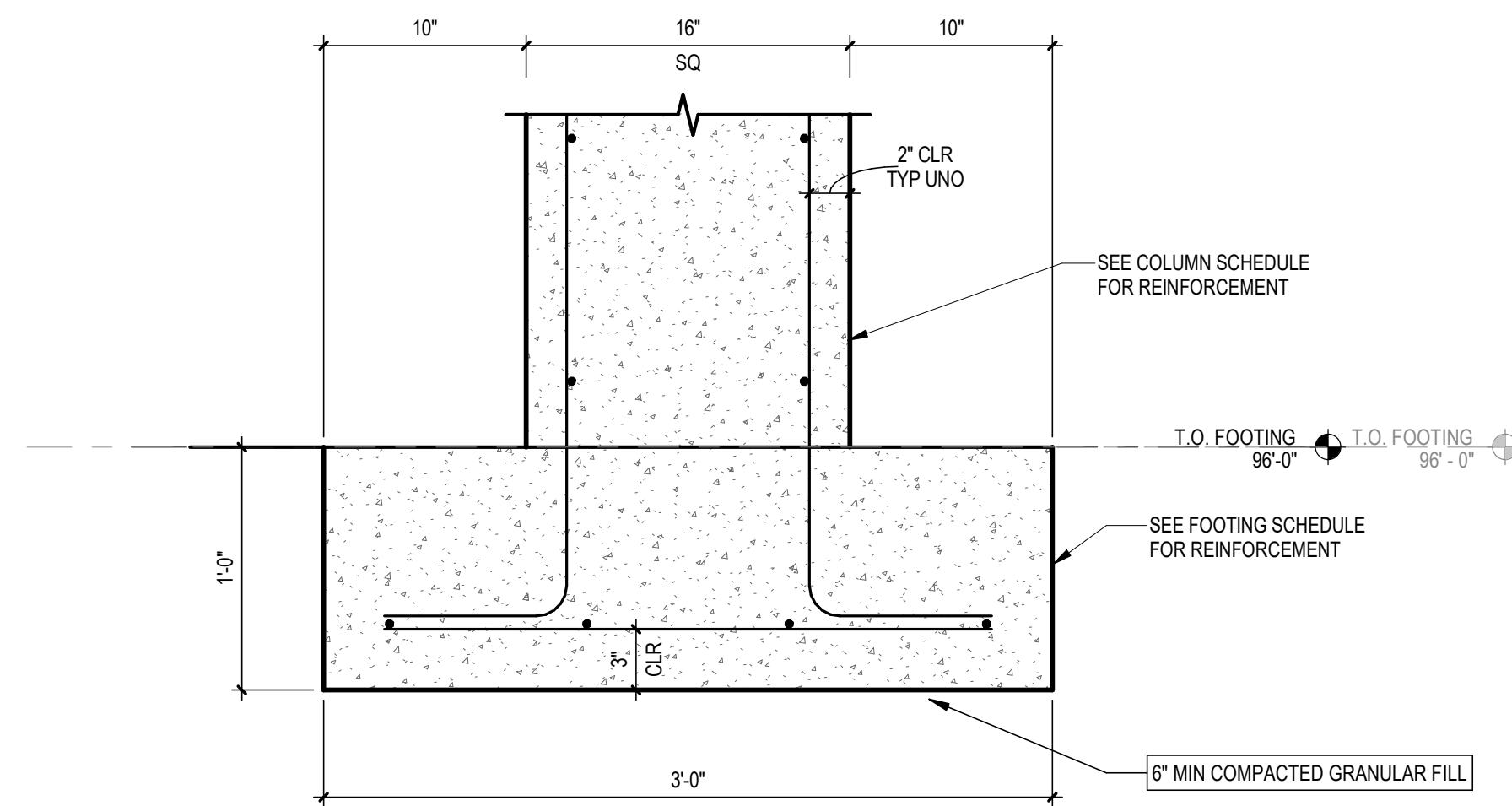
**6 TYPICAL MASONRY WALL CONTROL JOINT**  
1" = 1'-0"



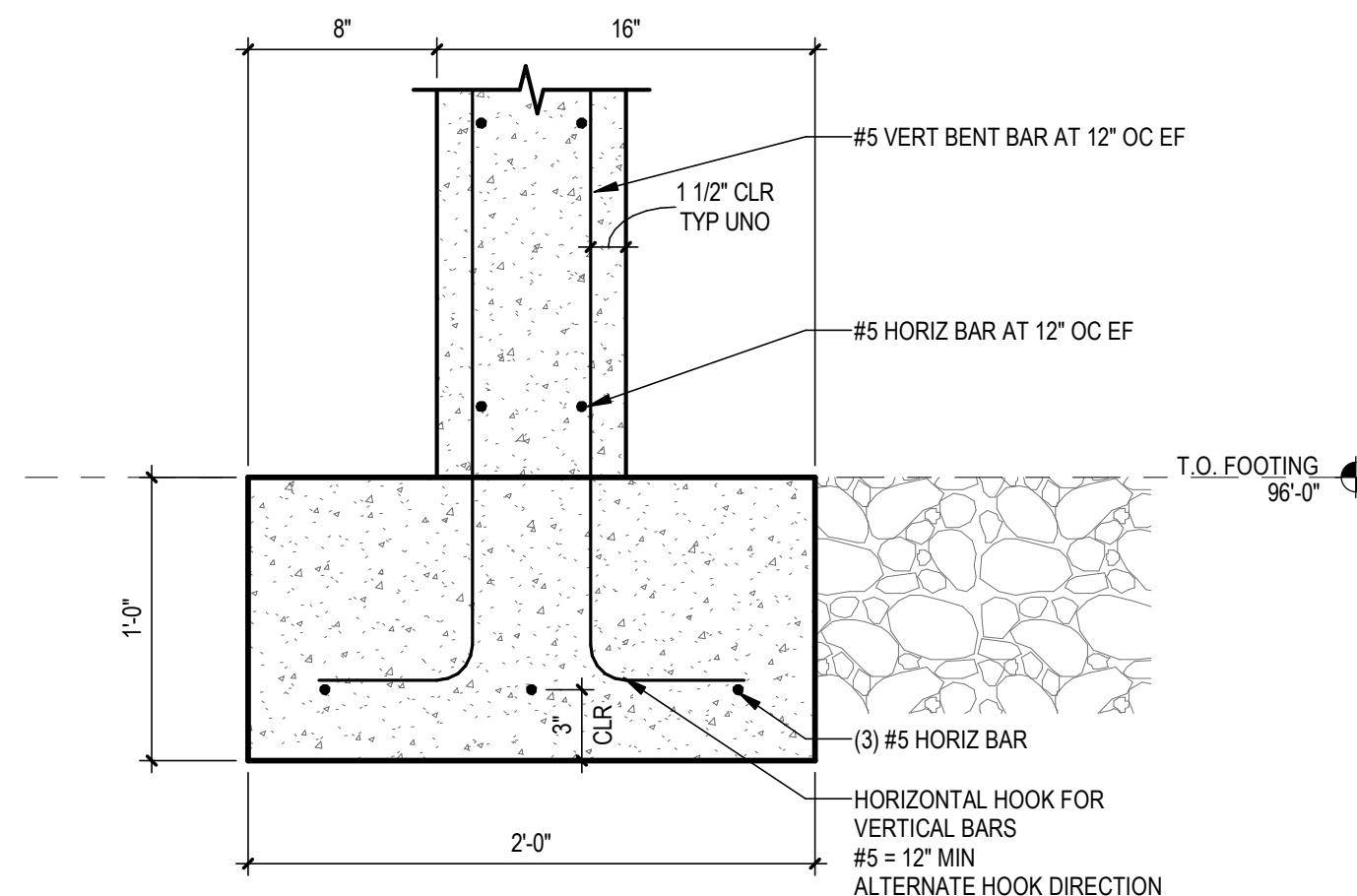
**5 TYPICAL SLAB ON GRADE**  
1 1/2" = 1'-0"



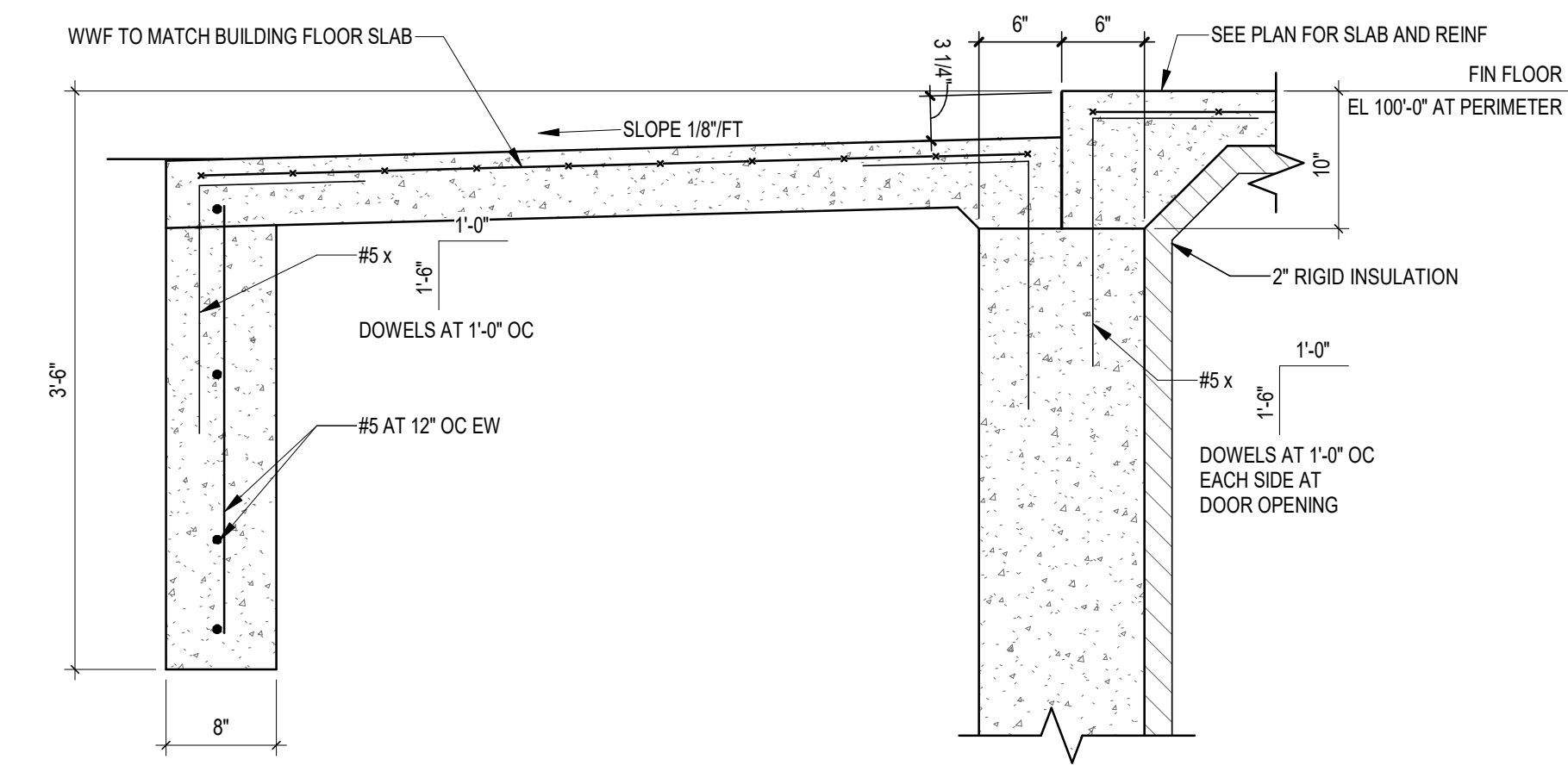
**4 TYP WALL CORNER REINFORCING**  
3/4" = 1'-0"



**3 F-2 FOOTING**  
1 1/2" = 1'-0"



**2 F-1 STRIP FOOTING**  
1 1/2" = 1'-0"



**1 TYPICAL SUPPORTED SLAB DETAIL**  
1" = 1'-0"



Know what's below. Call before you dig.

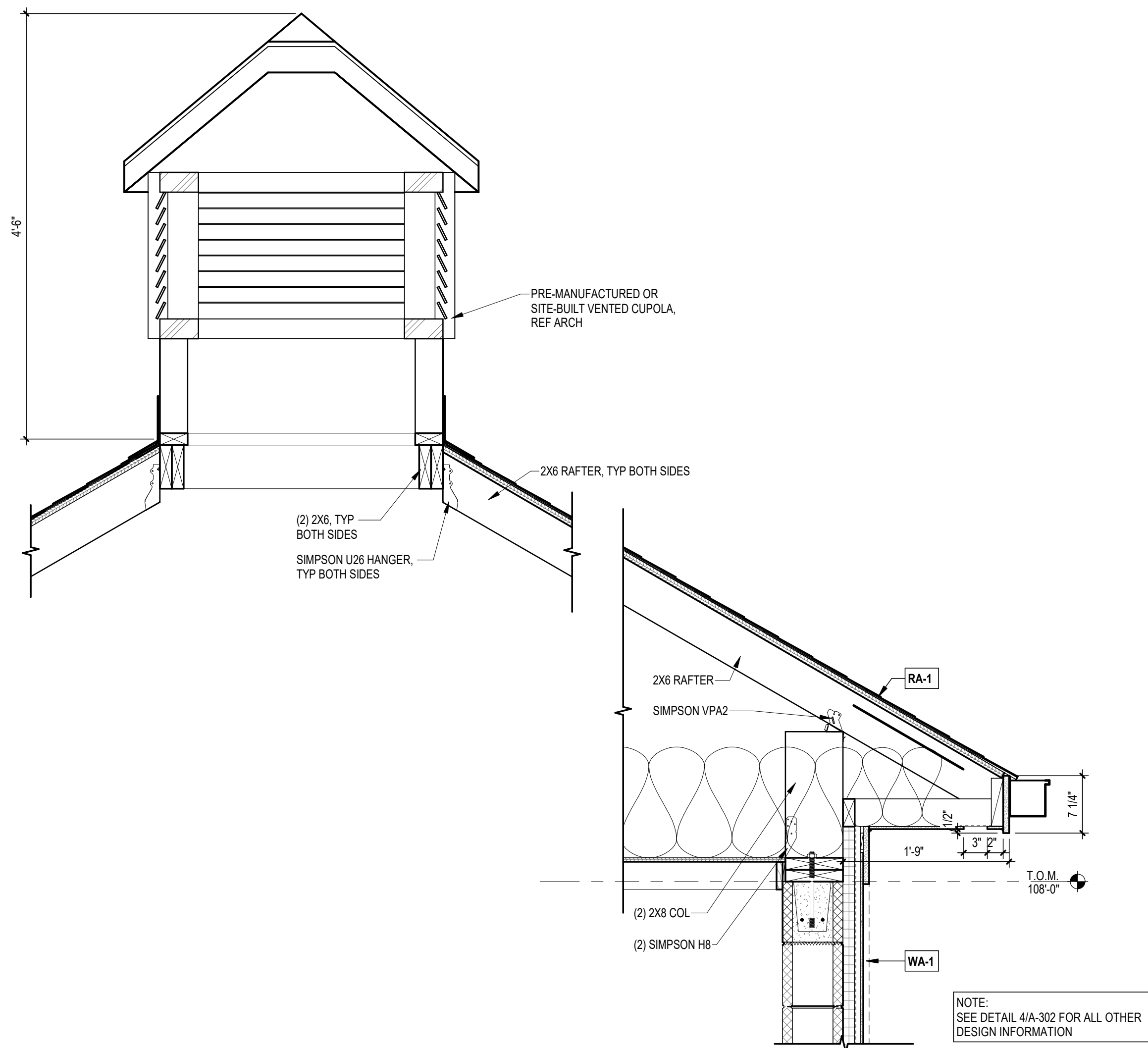
20241122 ISSUED FOR BID SET

PROJECT NUMBER 0133-24-0220 PM CM

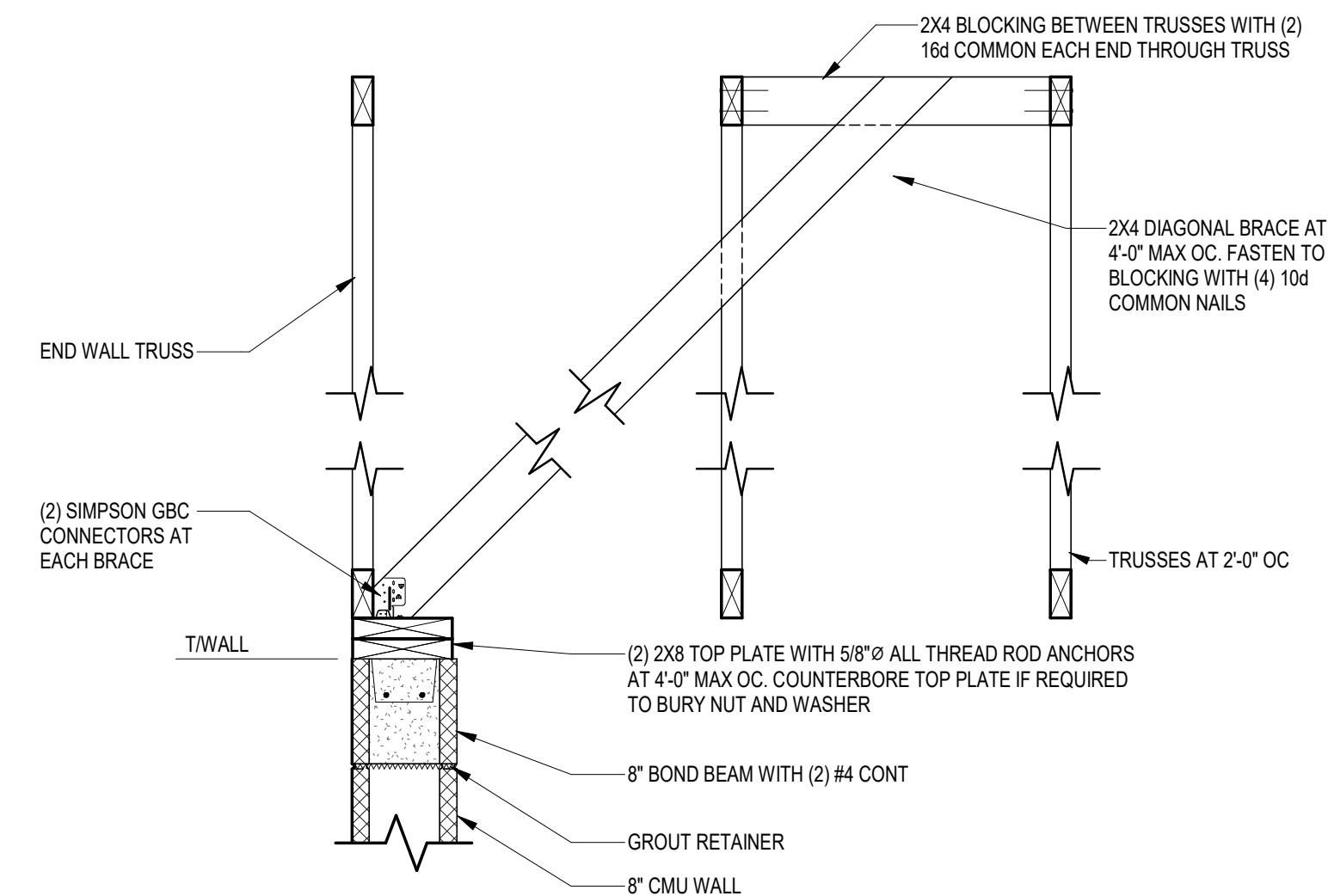
CANTON CHARTER TOWNSHIP  
CHERRY HILL VILLAGE  
Cherry Hill Rd, Canton, MI 48187

STRUCTURAL DETAILS

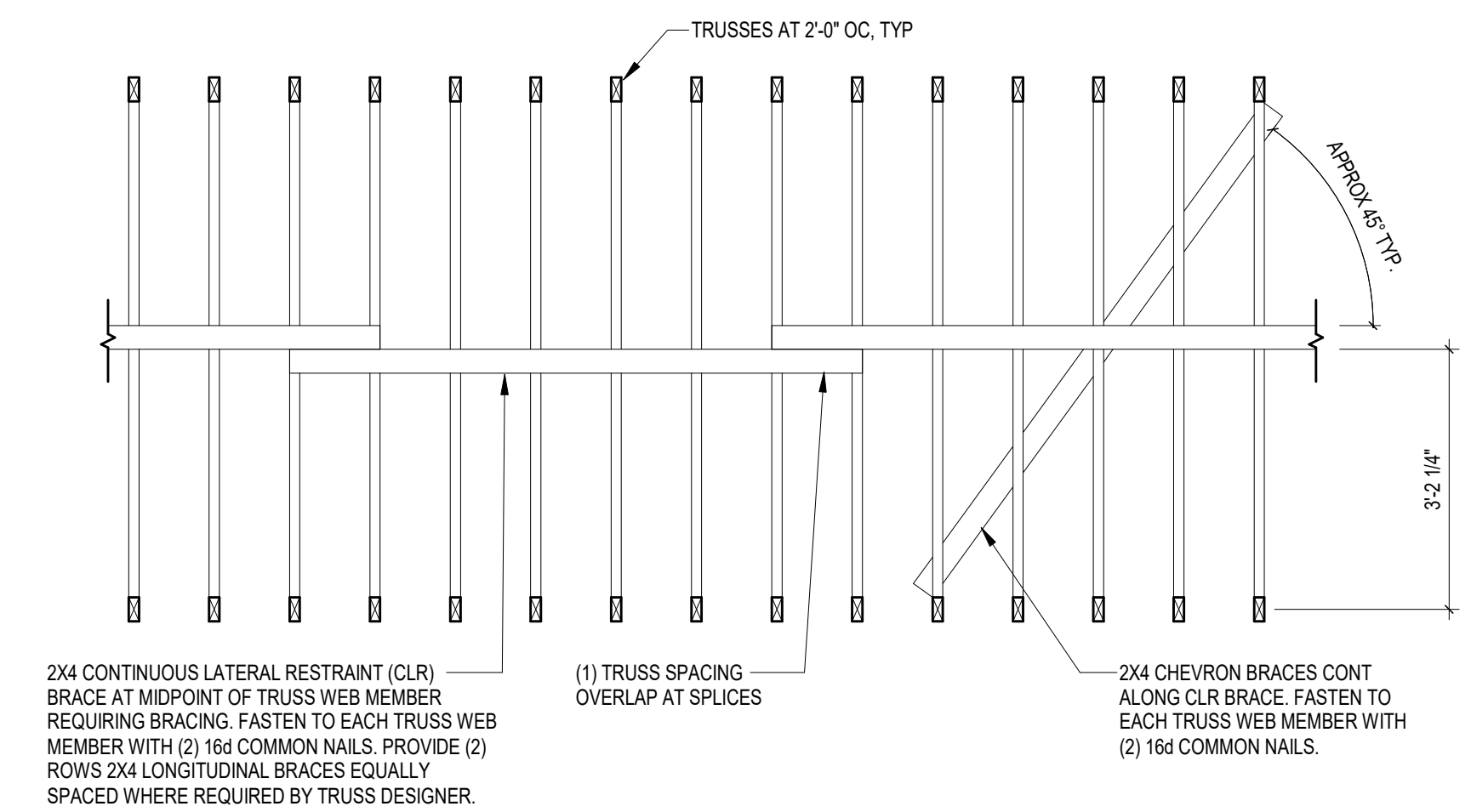
COPYRIGHT 2024 OHM ALL DRAWINGS AND WRITTEN MATERIALS APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF OHM AND THE SAME MAY NOT BE REPRODUCED, DISTRIBUTED, OR DISCLOSED WITHOUT PRIOR WRITTEN CONSENT OF OHM



**3** FRAMING AT CUPOLA  
1" = 1'-0"



**2** VERTICAL TRUSS BRACING DETAIL  
1" = 1'-0"



**1** TYPICAL TRUSS WEB MEMBER LATERAL BRACING  
1/2" = 1'-0"

20241122  
ISSUED FOR BID SET

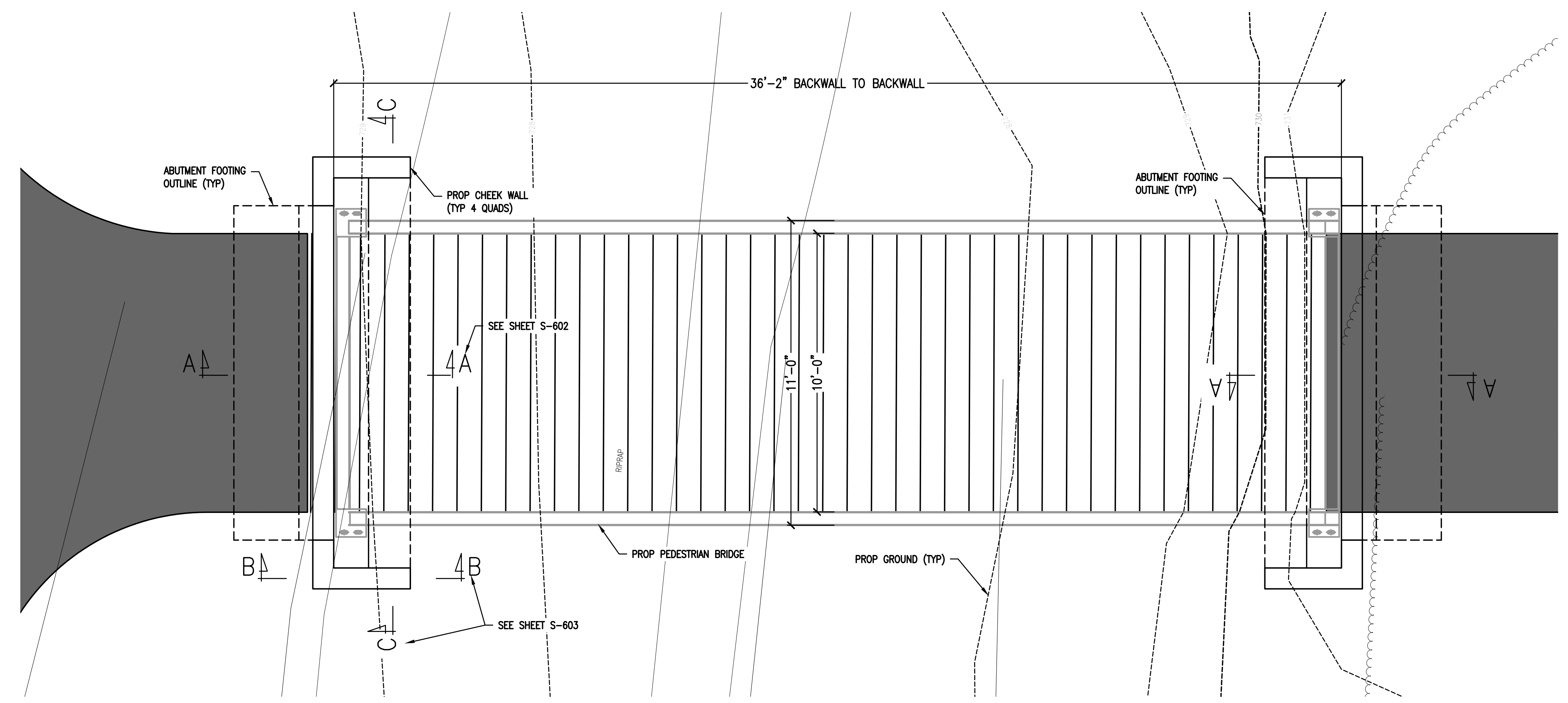
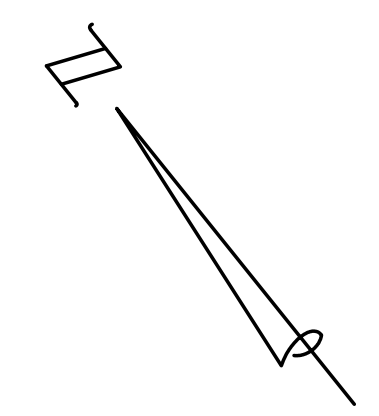
PROJECT NUMBER  
013324-020  
PM  
CM

CANTON CHARTER TOWNSHIP  
CHERRY HILL VILLAGE  
Cherry Hill Rd, Canton, MI 48187

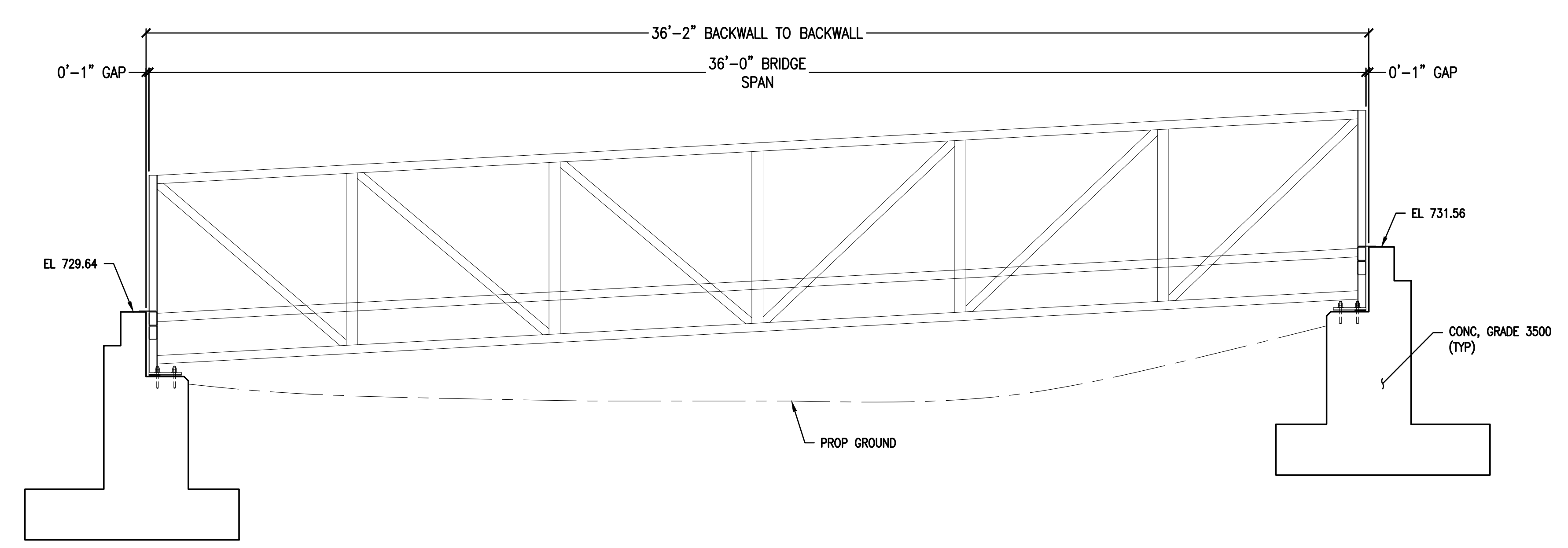
STRUCTURAL DETAILS

S-502

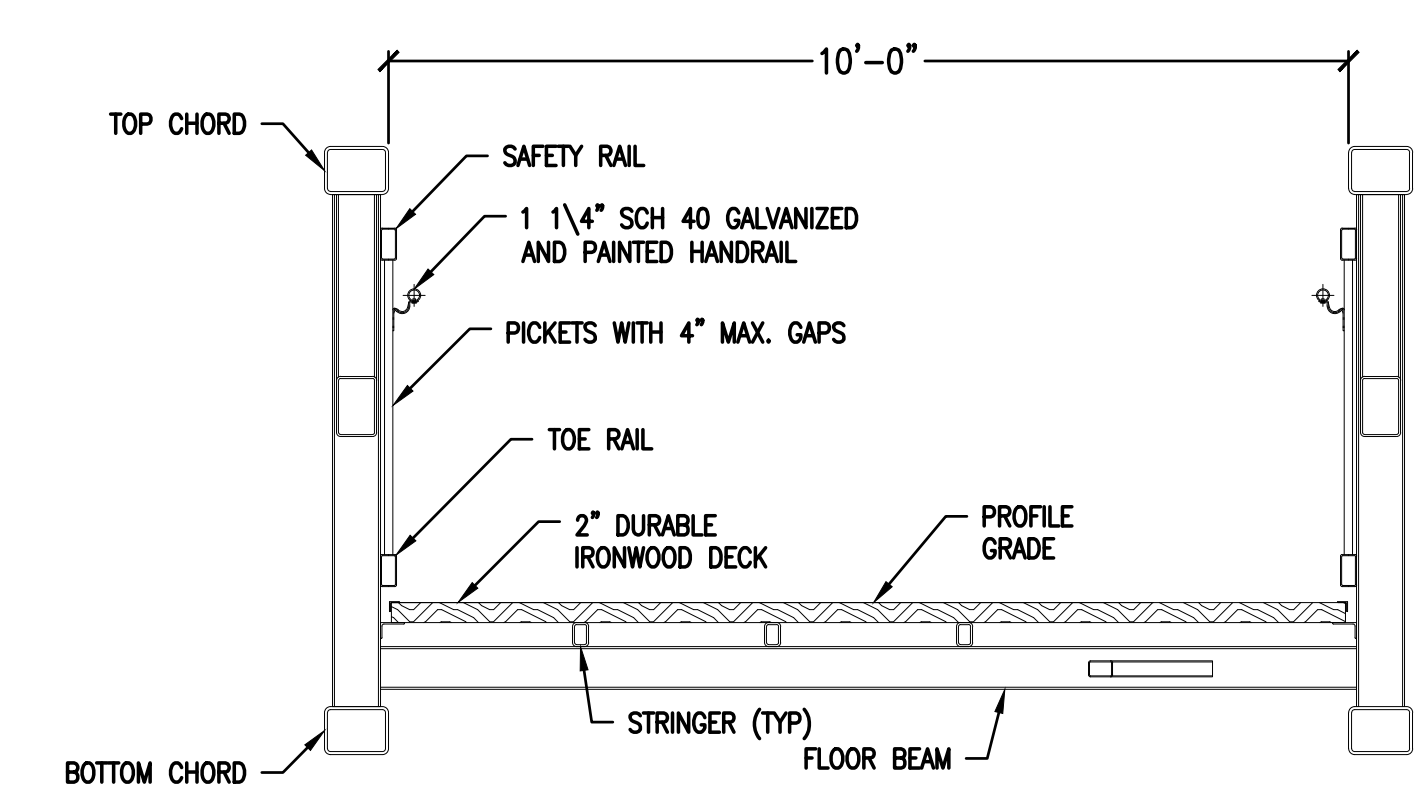
COPYRIGHT 2024 OHM ALL DRAWINGS AND WRITTEN MATERIALS APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF OHM AND THE SAME MAY NOT BE DUPLICATED, DISTRIBUTED, OR DISCLOSED WITHOUT PRIOR WRITTEN CONSENT OF OHM



**PLAN**  
SCALE: 1"=2.5'



**ELEVATION**  
SCALE: 1"=2.5'



**BRIDGE SECTION**  
SCALE: 1"=2'

**NOTES:**

THE CONTRACTOR SHALL LOCATE ALL ACTIVE UNDERGROUND UTILITIES PRIOR TO STARTING WORK AND SHALL CONDUCT OPERATIONS IN SUCH A MANNER AS TO ENSURE THAT THOSE UTILITIES NOT REQUIRING RELOCATION WILL NOT BE DISTURBED.

PLAN ELEVATIONS REFER TO NAVD 88 DATUM.

WATER LEVEL IS SUBJECT TO CHANGE THE CONTRACTOR IS RESPONSIBLE FOR MAKING A DETERMINATION OF WATER LEVELS THAT MAY EXIST DURING CONSTRUCTION.

IMMEDIATELY AFTER THE CONSTRUCTION OF AN ABUTMENT IS COMPLETED, SLOPE PROTECTION AND SEEDING OR SODDING SHALL BE PLACED ON THE ADJACENT EMBANKMENT SLOPES.

CONSTRUCTION EQUIPMENT SHALL NOT BE PERMITTED ON OR ALLOWED TO CROSS THE PROPOSED BRIDGE.

THE DESIGN OF THIS STRUCTURE IS BASED ON CURRENT AASHTO LRFD BRIDGE DESIGN SPECIFICATION PEDESTRIAN LOADING OF 90 PSF AND A MAINTENANCE VEHICLE H5 LOADING NOT ACTING CONCURRENTLY.

ALL EXPOSED CONCRETE EDGES SHALL BE CHAMFERED 3/4".

BRIDGE SEAT ELEVATION MAY VARY DEPENDING ON THE SUPERSTRUCTURE FABRICATOR. MODIFICATION TO THE ABUTMENT SEAT, REINFORCING STEEL LENGTH AND ANCHOR BOLT SPACING SHALL BE CONSIDERED INCIDENTAL TO ITEM "PREFABRICATED BRIDGE, 36'-FT".

BEARING BASE PLATE AND SETTING PLATE SHALL BE DETERMINED BY BRIDGE FABRICATOR. THE EXPANSION BEARING SHALL HAVE THE SLIDING DEVICE WITH BONDED TEFLON AND STAINLESS PLATES. ALL PLATES AND BEARING DEVICES SHALL BE INCLUDED WITH ITEM "PREFABRICATED BRIDGE, 36'-FT".

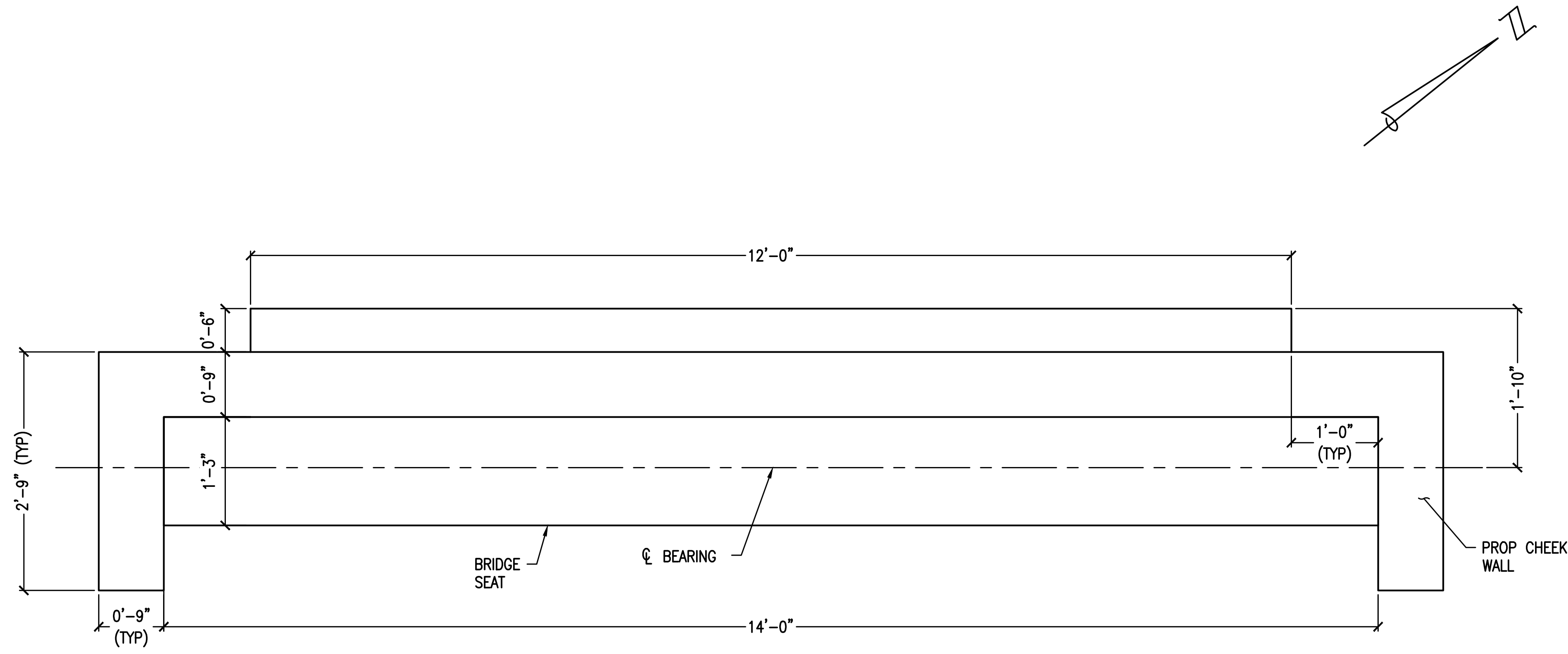
ANCHOR BOLTS SHALL BE 1" DIA. STAINLESS STEEL ANCHOR BOLTS WITH (2) NUTS AND (1) O.D. WASHER EACH. BOTH NUTS TIGHT AT FIXED END ONLY. TOP NUT TIGHT, BOTTOM NUT FINGER TIGHT AT EXPANSION END. ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE INCLUDED WITH ITEM "PREFABRICATED BRIDGE, 36'-FT".

CONCRETE ABOVE THE ABUTMENT SEAT AND WINGWALL CONSTRUCTION JOINTS SHALL NOT BE POURED UNTIL AFTER THE TRUSS BRIDGE IS ERECTED IN PLACE.

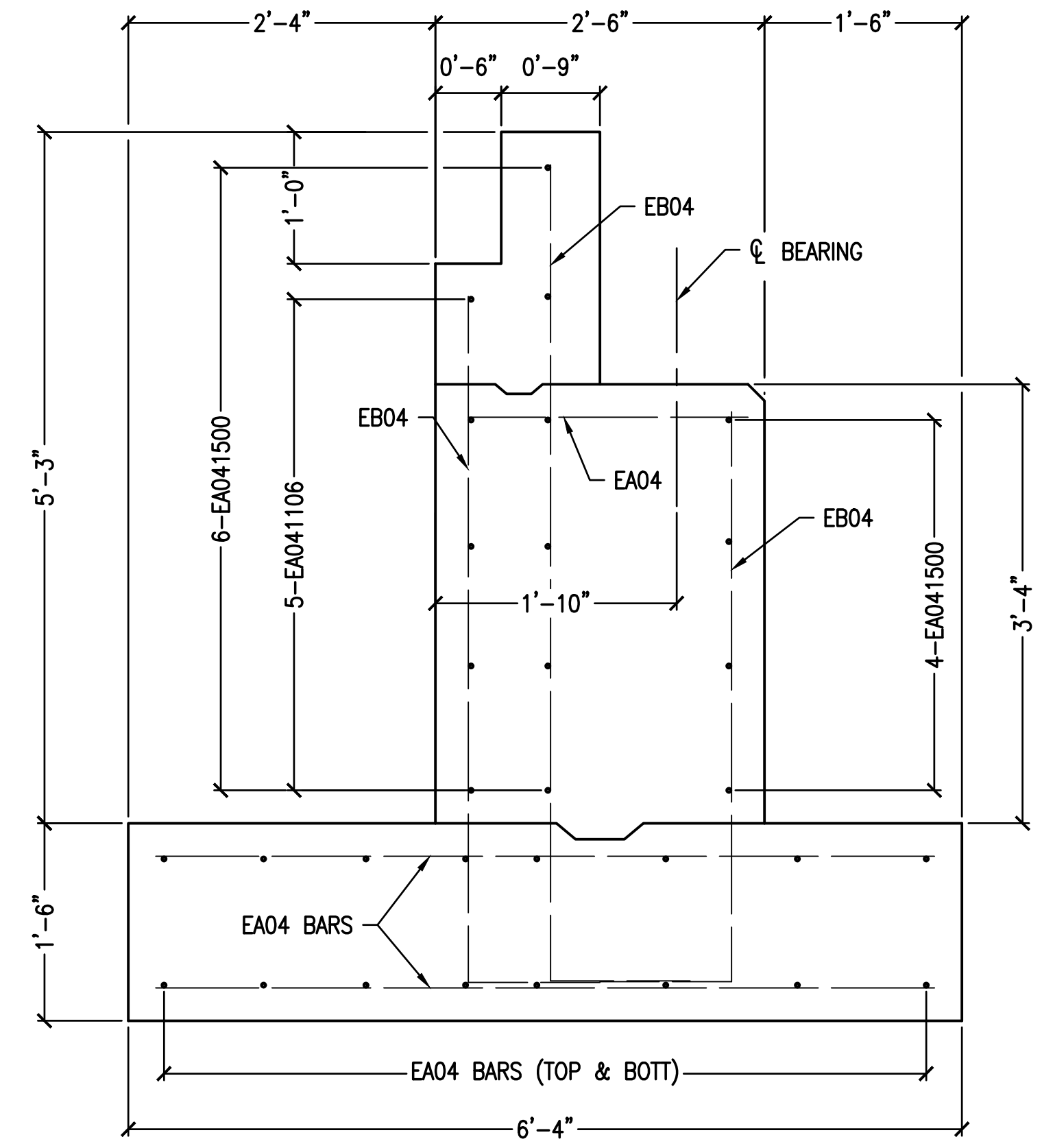
A GEOTECHNICAL ENGINEER SHALL VERIFY THE BEARING SOILS ARE CAPABLE OF HANDLING 3000 PSF PRIOR TO CONSTRUCTION OF ABUTMENTS. PROVIDE WRITTEN CONFIRMATION TO THE ENGINEER.

ISSUED FOR:	DATE
BID SET	2024/1/22
REVISION	DESCRIPTION

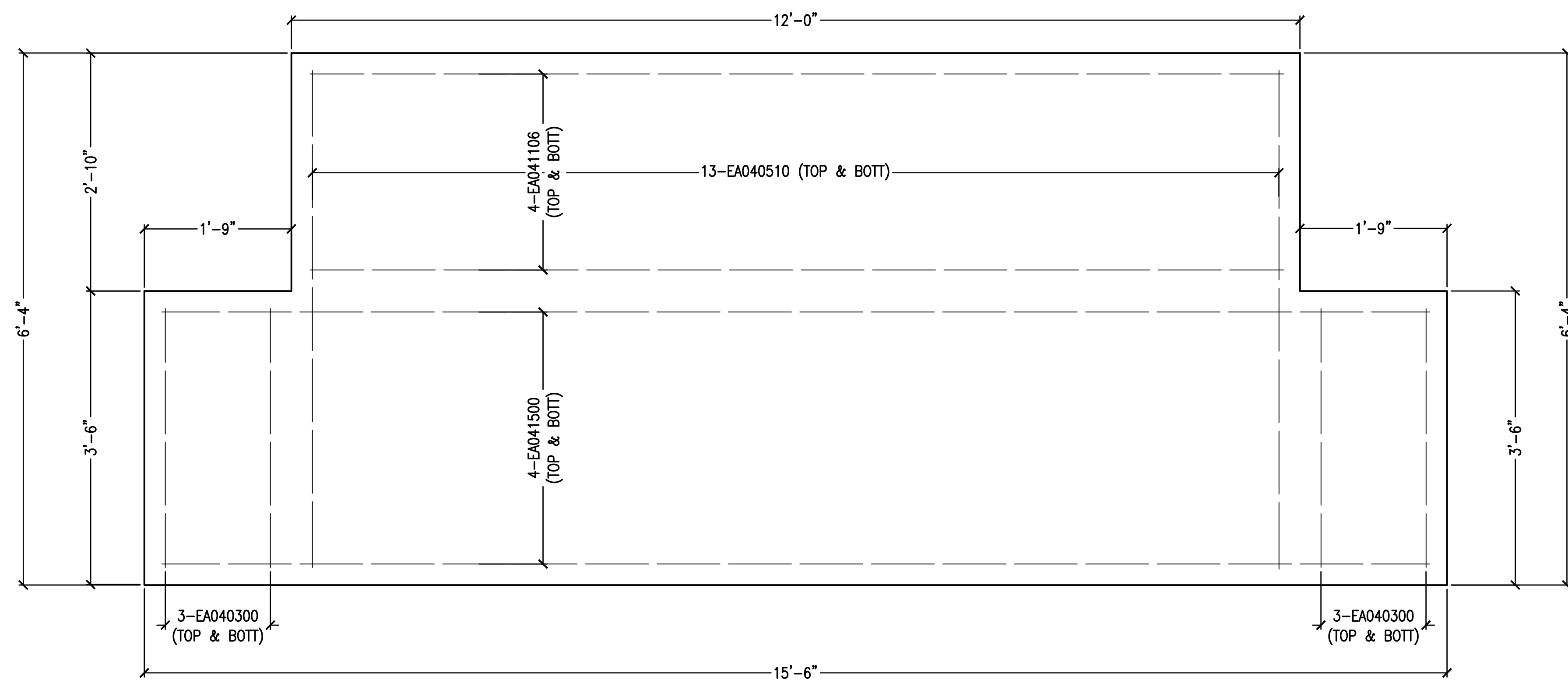
PROJECT NUMBER	PM	CANTON CHARTER TOWNSHIP
0133-24-0020	CM	CHERRY HILL VILLAGE PHASE 1
		CANTON TOWNSHIP, MICHIGAN
		GENERAL PLAN OF STRUCTURE



**TYPICAL PLAN OF ABUTMENT**  
(ABUTMENT A SHOWN, ABUTMENT B OPPOSITE HAND)



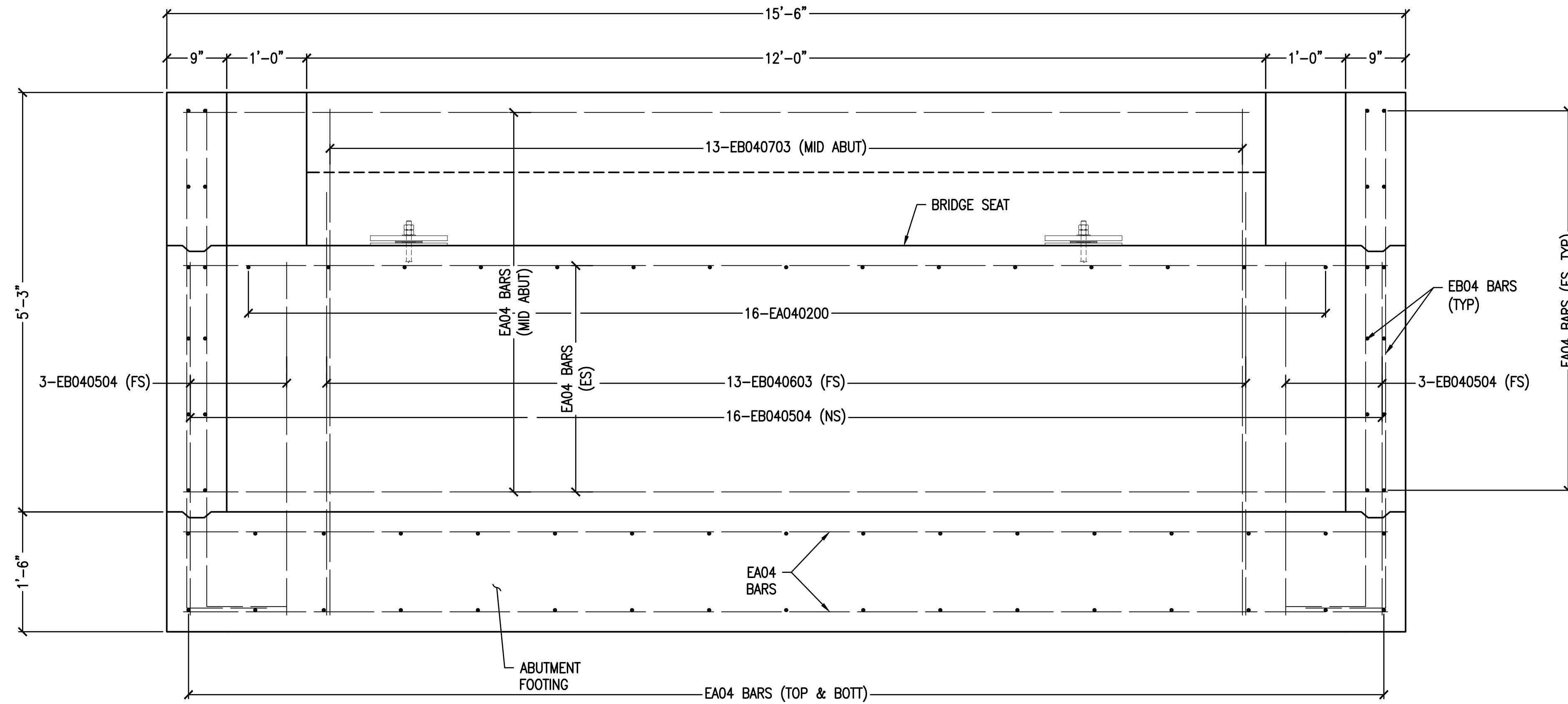
**TYPICAL SECTION THRU ABUTMENT, A-A**



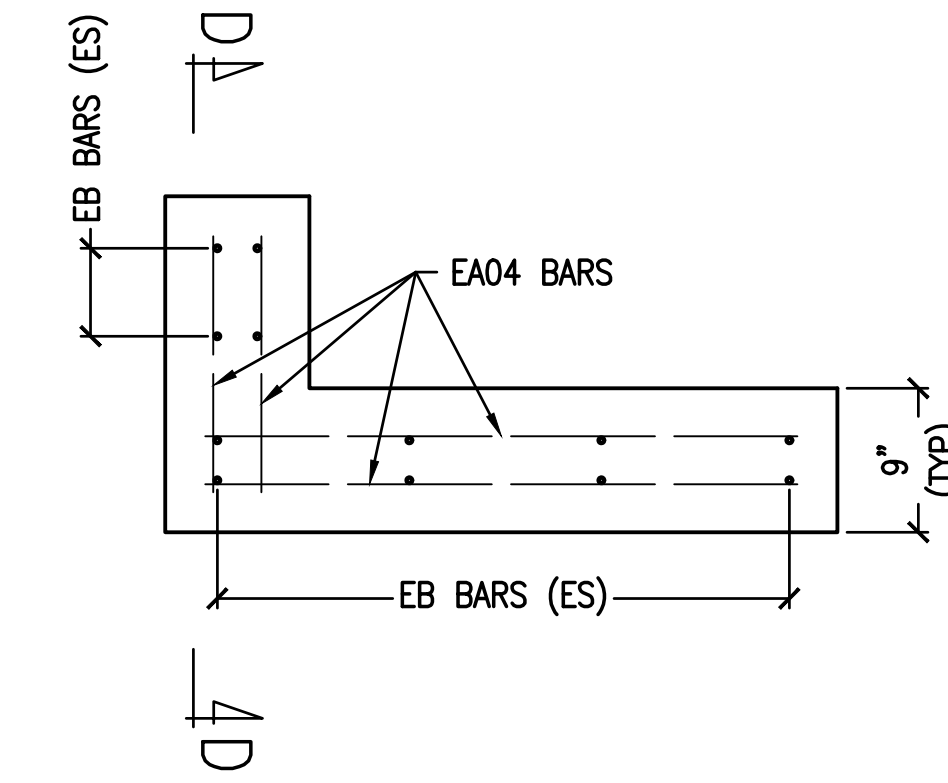
**ABUTMENT FOOTING PLAN**  
(ABUTMENT A SHOWN, ABUTMENT B OPPOSITE HAND)

ISSUED FOR:	BID SET	2024.122
REVISION	DESCRIPTION	DATE

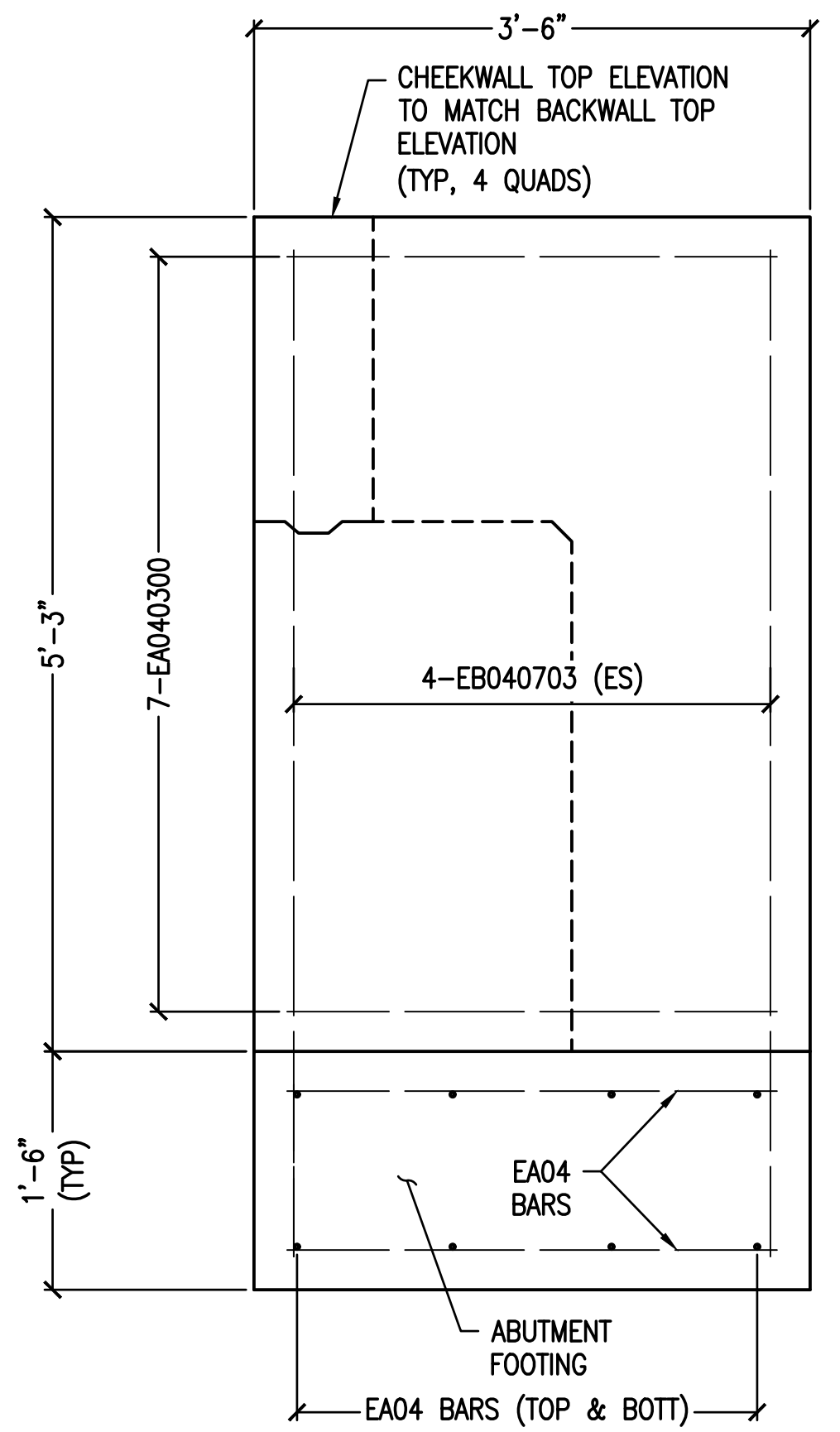
PROJECT NUMBER: 0133-24-020  
 PROJECT NAME: CANTON CHARTER TOWNSHIP  
 CHERRY HILL VILLAGE PHASE 1  
 CANTON TOWNSHIP, MICHIGAN  
 BRIDGE DETAILS



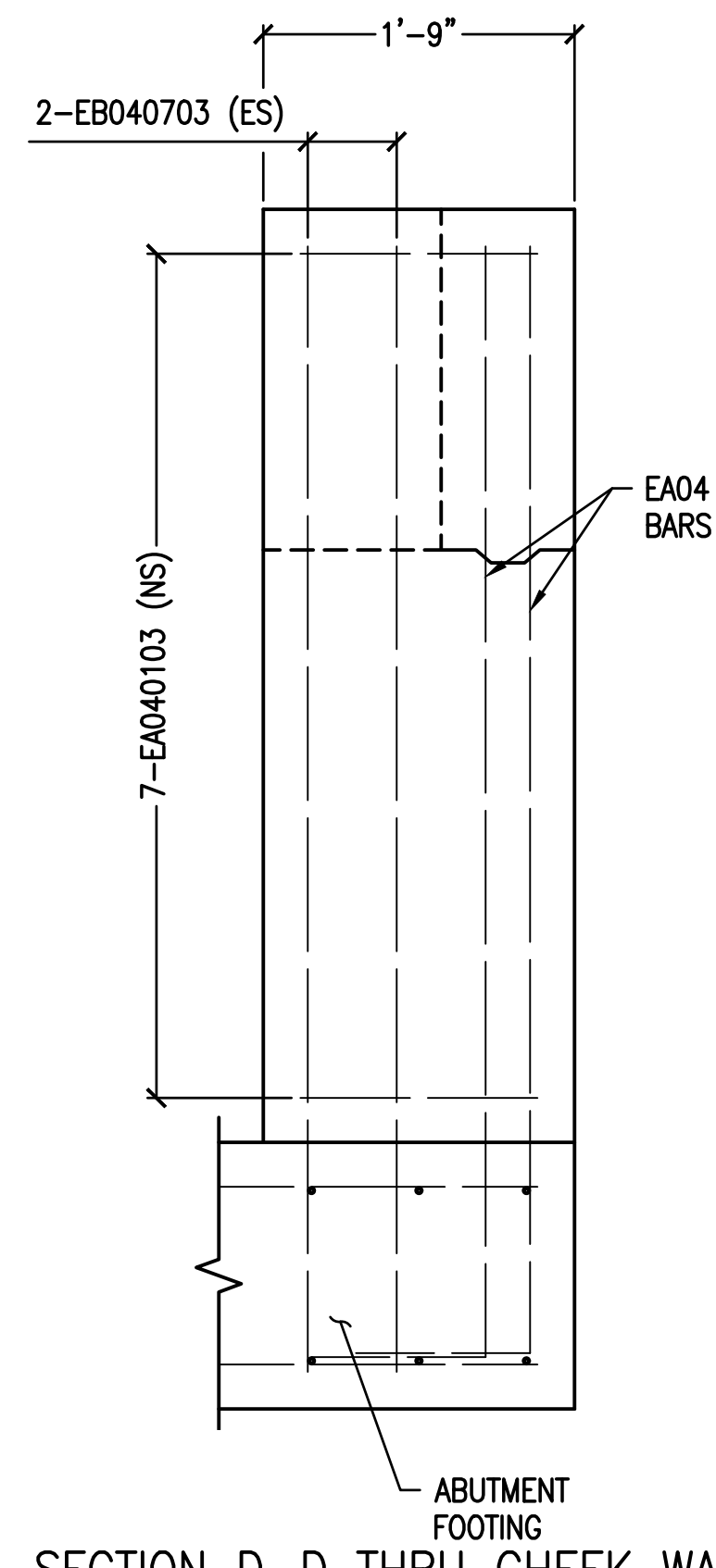
SECTION C-C THRU ABUTMENT



CHEEK WALL PLAN SECTION  
(ABUTMENT FOOTING NOT SHOWN, TYPICAL ALL 4 QUADS)



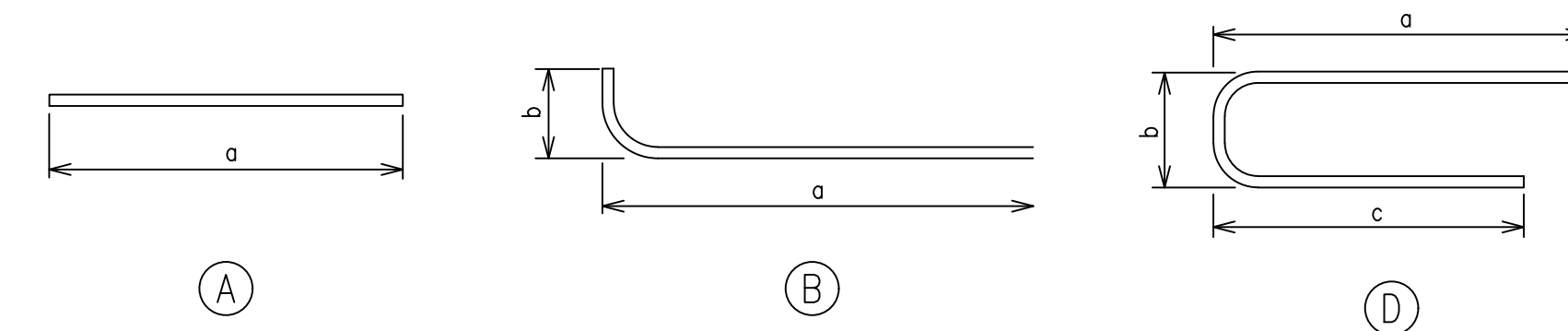
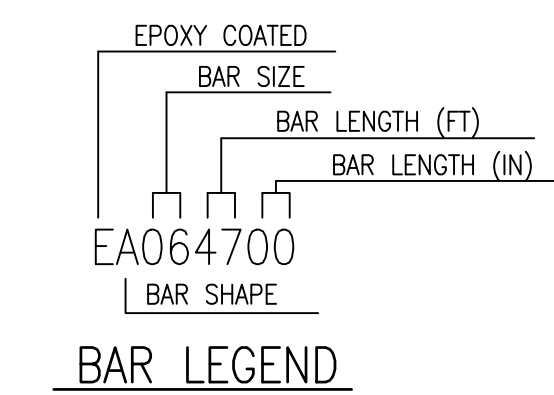
SECTION B-B THRU CHEEK WALL  
(TYPICAL ALL 4 QUADS)



SECTION D-D THRU CHEEK WALL  
(TYPICAL ALL 4 QUADS)

CHEEK WALLS  
ABUTMENT STEM  
FOOTING

MARK	NO	REQ'D	SIZE	DIMENSIONS							TOTAL WEIGHT		
				a	b	c	d	e	f	g		h	
EA040103	28		#4	1'-3"									24
EA040300	56		#4	3'-0"									113
EB040703	48		#4	6'-3"	1'-0"								233
EA040200	30		#4	2'-0"									41
EA041106	10		#4	11'-6"									77
EA041500	20		#4	15'-0"									201
EB040504	44		#4	4'-4"	1'-0"								157
EB040603	26		#4	5'-3"	1'-0"								109
EB040703	26		#4	6'-3"	1'-0"								126
EA040300	24		#4	3'-0"									49
EA040510	52		#4	5'-10"									203
EA041106	16		#4	11'-6"									123
EA041500	16		#4	15'-0"									161
											TOTAL	1617	



ISSUED FOR: BID SET  
REVISION  
2024/1/22  
DATE

PROJECT NUMBER: 0133-24-0020  
PM: CM  
CANTON CHARTER TOWNSHIP  
CHERRY HILL VILLAGE PHASE 1  
CANTON TOWNSHIP, MICHIGAN  
BRIDGE DETAILS



ABBREVIATIONS

SEE LEGENDS ON A-002 FOR ACCESSORY ABBREVIATIONS

Table of abbreviations for building materials and components, including A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.

ABBREVIATIONS

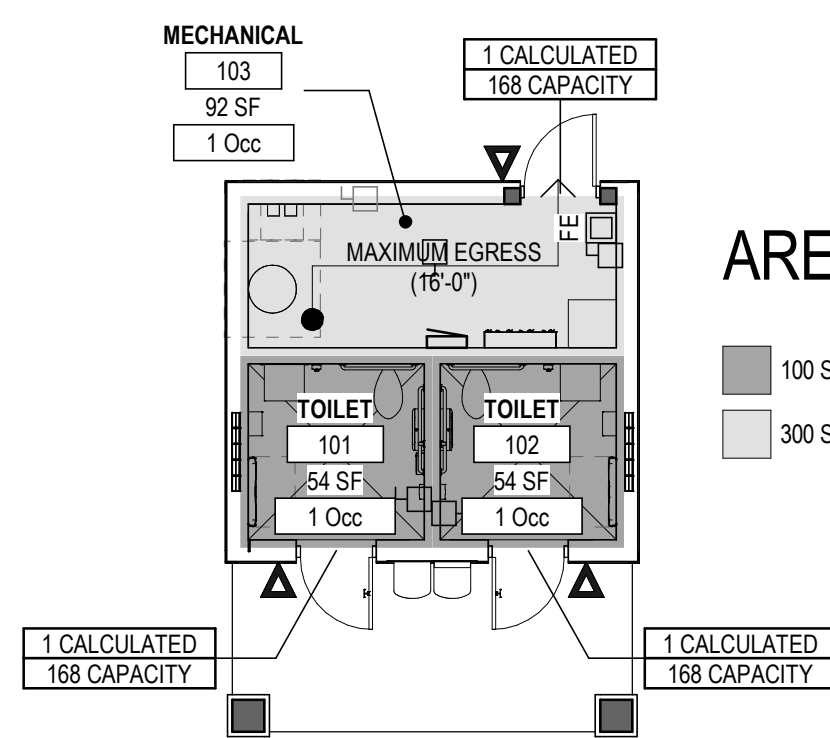
SEE LEGENDS ON A-002 FOR ACCESSORY ABBREVIATIONS

Table of abbreviations for building materials and components, including G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.

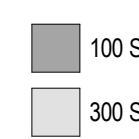
ABBREVIATIONS

SEE LEGENDS ON A-002 FOR ACCESSORY ABBREVIATIONS

Table of abbreviations for building materials and components, including S, T, U, V, W, X, Y, Z.



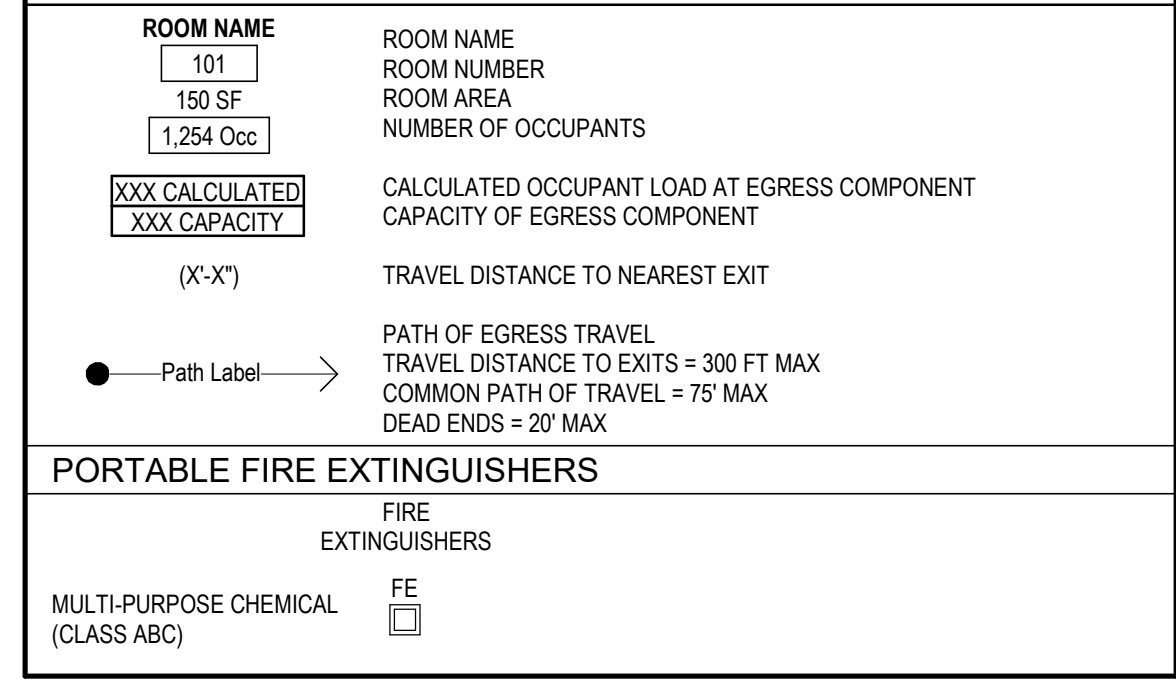
AREA PER OCCUPANT



CODE PLAN

1/8" = 1'-0"

CODE PLAN LEGEND



PROJECT DESCRIPTION, BUILDING CODE INFORMATION, PROJECT INFORMATION, GENERAL BUILDING HEIGHTS AND AREAS, MIXED USE & OCCUPANCY, FIRE RESISTANT CONSTRUCTION, ENERGY EFFICIENCY, PLUMBING FIXTURE CALCULATIONS, BUILDING "A" - RESTROOM BUILDING.

GENERAL NOTES - ARCHITECTURAL

- 1. DO NOT SCALE DRAWINGS. IF DIMENSIONS CANNOT BE DETERMINED OR DOCUMENTS ARE IN CONFLICT, THE CONTRACTOR SHALL OBTAIN CLARIFICATION FROM THE ARCHITECT PRIOR TO CONTINUATION OF WORK.

SCHEDULE OF DEFERRED SUBMITTALS

Table with columns: DESCRIPTION, PROFESSIONAL SEAL. Item 1: PRE-ENGINEERED WOOD TRUSSES.

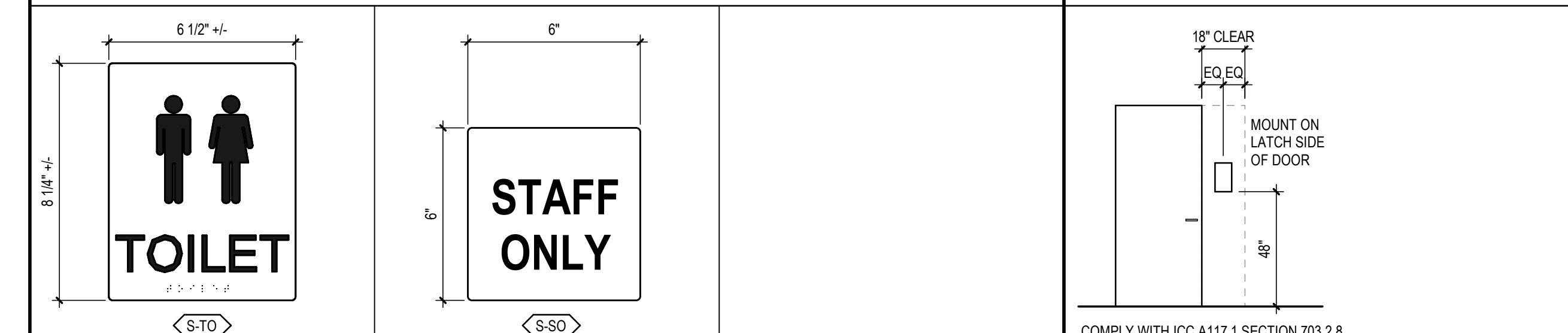
ARCHITECTURAL SYMBOLS LEGEND

VIEW REFERENCES, NOTES & ANNOTATIONS, INDICATOR LINES, FINISHES, BUILDING ELEMENTS, ACCESSIBILITY, MATERIAL SYMBOL LEGEND.

SIGNAGE LEGEND

SIGNS TO COMPLY WITH ICC A117.1-2009, SECTION 703, SIGNAGE

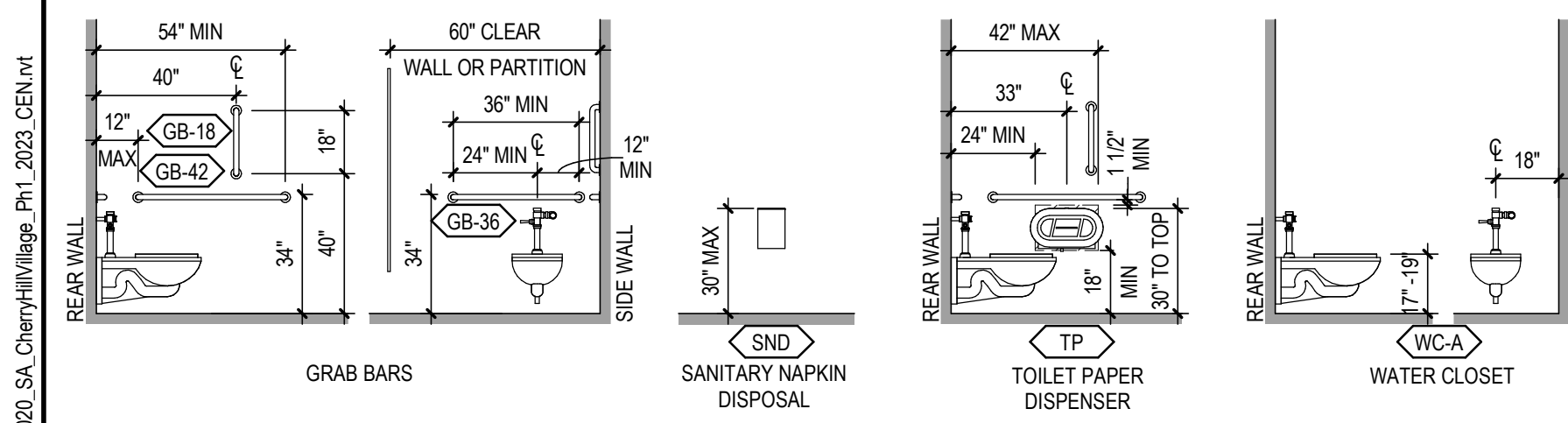
SIGNAGE MOUNTING LEGEND



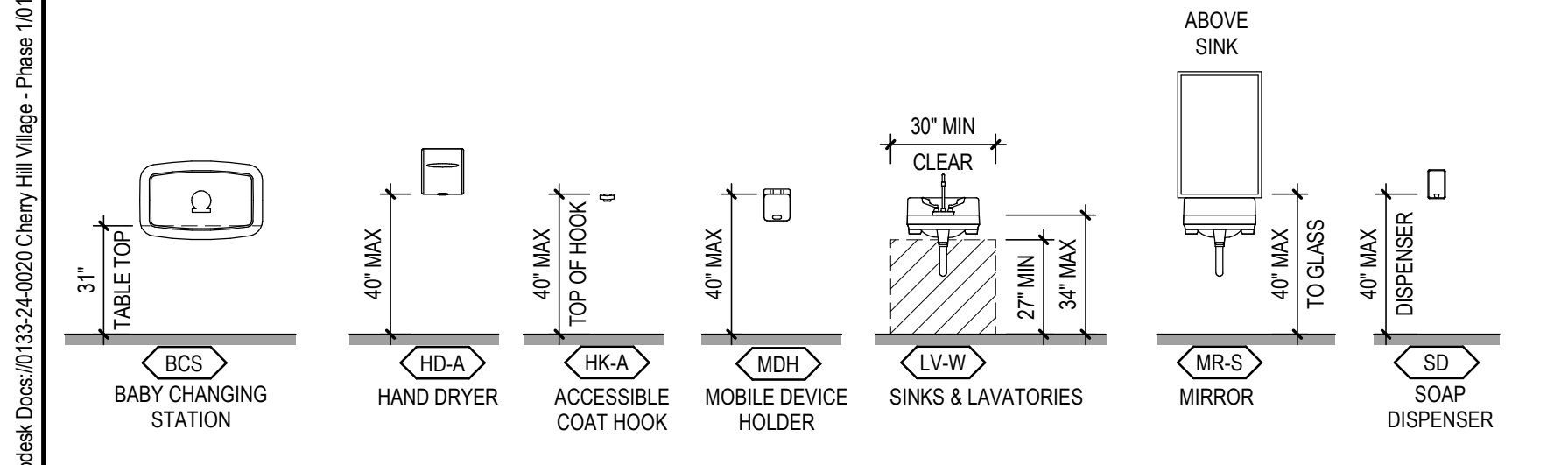
MOUNTING LOCATIONS LEGEND

- GENERAL NOTES: 1. COMPLY WITH THE STATE BUILDING CODE, ICC A117.1, AND THE AMERICANS WITH DISABILITIES ACT.

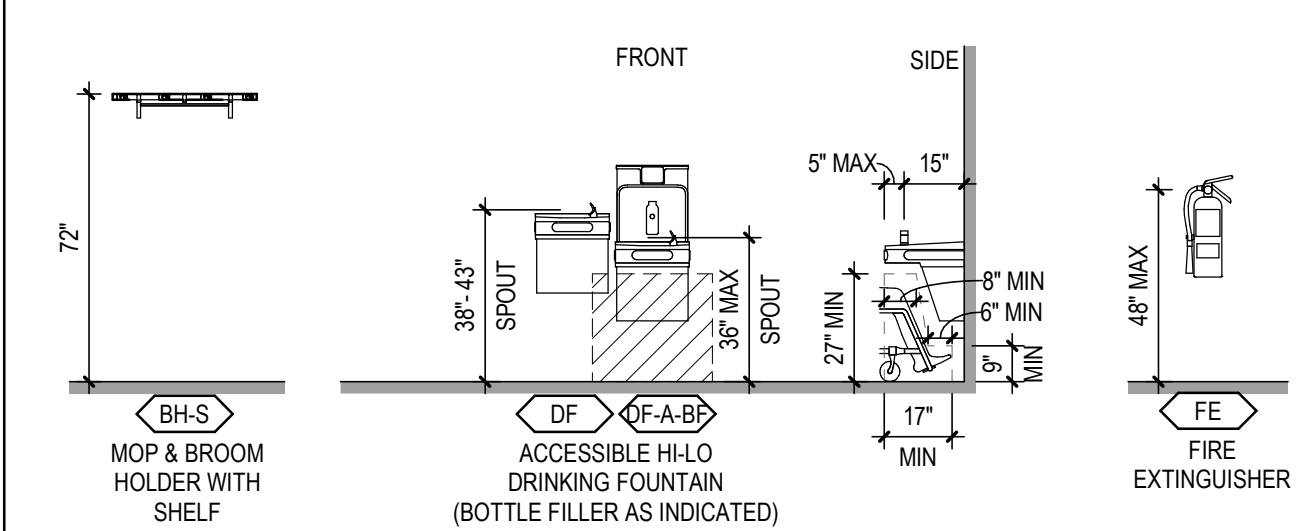
TOILET COMPARTMENT ACCESSORIES



RESTROOM ACCESSORIES



CUSTODIAL AND OTHER ACCESSORIES



OHM-ADVISORS.COM

2024-1-25  
ISSUED FOR BID SET

CANTON CHARTER TOWNSHIP  
CHERRY HILL VILLAGE  
Cherry Hill Rd, Canton, MI 48187

A-001

COPYRIGHT 2024 OHM ALL DRAWINGS AND WRITTEN MATERIALS APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF OHM AND THE SAME MAY NOT BE REPRODUCED, DISTRIBUTED, OR DISCLOSED WITHOUT PRIOR WRITTEN CONSENT OF OHM



2024-1-25 17:15:18  
 AutoCAD Doc: 0133-24-020 Cherry Hill Village - Phase 1013324020\_S.A. Cherry Hill Village\_P11\_2023\_CEN.rvt  
 PROJECT NUMBER: 0133-24-020  
 PLAN: CH  
 ISSUED FOR: BID SET  
 2024/1/22  
 CANTON CHARTER TOWNSHIP  
 CHERRY HILL VILLAGE  
 Cherry Hill Rd, Canton, MI 48187  
 PLANS, SCHEDULES, DETAILS  
 A-101  
 OHM ARCHITECTS ENGINEERS PLANNERS  
 OHM-ADVISORS.COM

### DOOR SCHEDULE

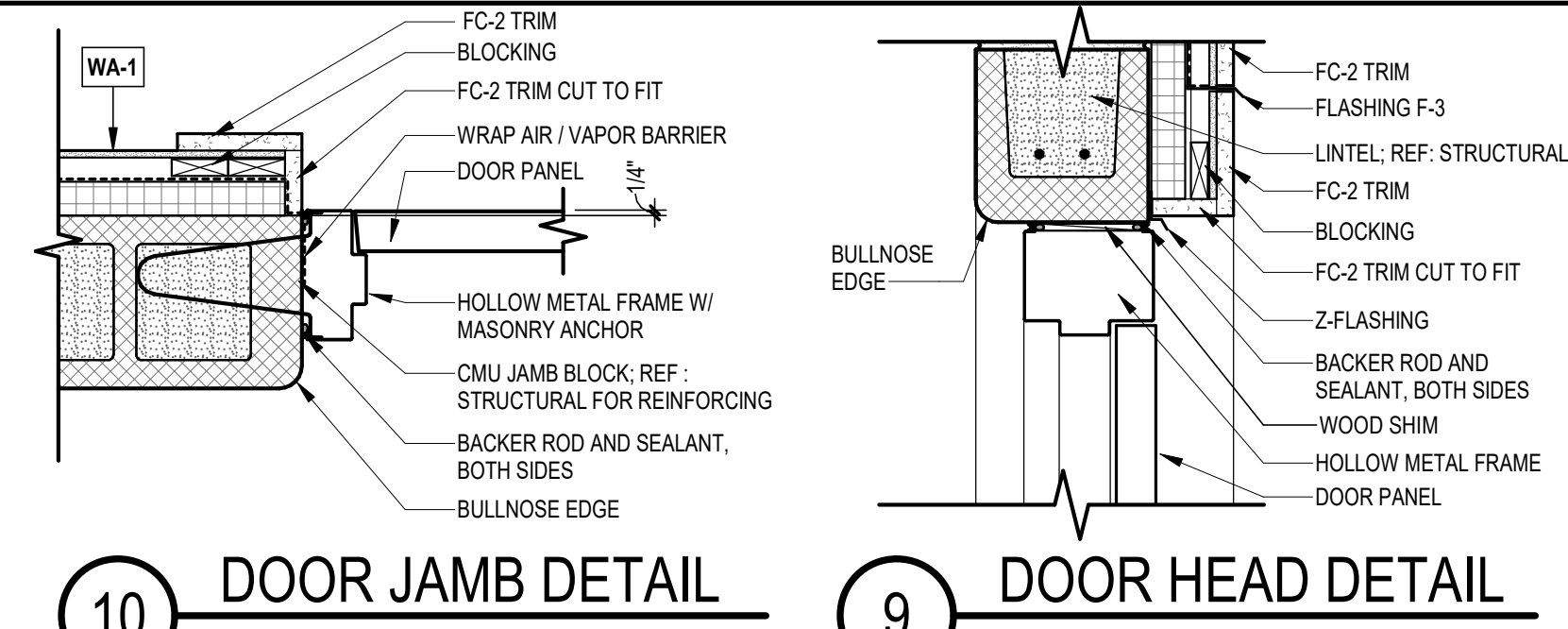
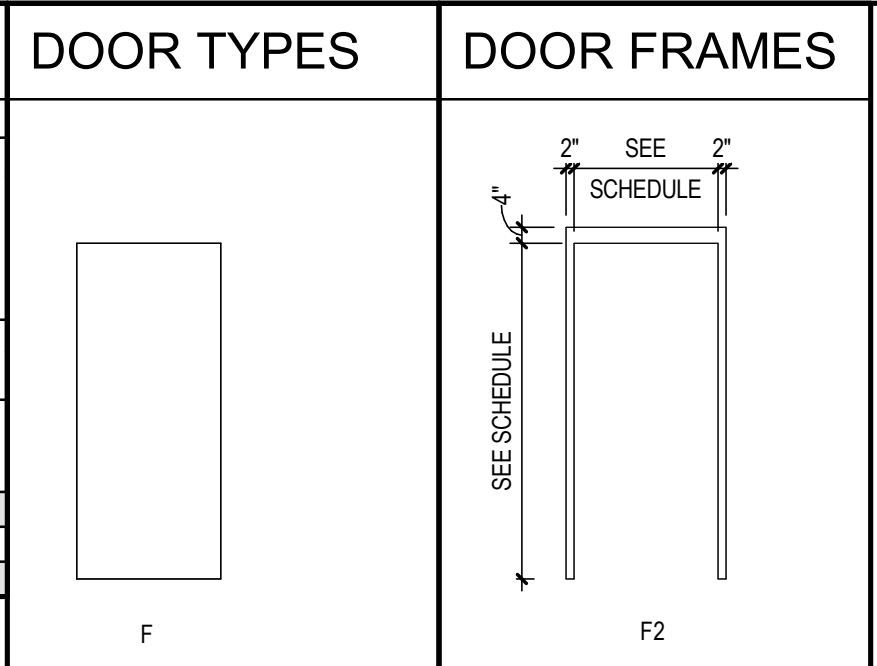
**SCHEDULE KEY:**

MARK AS SPECIFIED ON FLOOR PLANS	TYPE: REFER TO LEGENDS ON THIS SHEET	DOOR MATERIAL: HM HOLLOW METAL	FRAME MATERIAL: HM HOLLOW METAL	DOOR / FRAME FINISH: PTD PAINTED	DETAIL: REFER TO DETAILS AS INDICATED	HARDWARE SET: REFER TO PROJECT MANUAL DIVISION 08 FOR HARDWARE SCHEDULE
----------------------------------	--------------------------------------	--------------------------------	---------------------------------	----------------------------------	---------------------------------------	---

**SCHEDULE NOTES:**

- 1.

REV.	MARK	SIZE	NO. OF LEAFS	DOOR TYPE	DOOR MAT'L	DOOR FINISH	FRAME TYPE	FRAME MAT'L	FRAME FINISH	DEPTH	HEAD	JAMB	THRSH	HDW	NOTES
	101	3'-0" x 7'-0"	1	F	HM	EPT-3	F2	HM	EPT-3	5.34"	9	10		1	
	102	3'-0" x 7'-0"	1	F	HM	EPT-3	F2	HM	EPT-3	5.34"	9	10		1	
	103	3'-0" x 7'-0"	1	F	HM	EPT-3	F2	HM	EPT-3	5.34"	9	10		2	



### GENERAL NOTES - REF. CEILING PLANS

1. REFER TO PROJECT INFORMATION SHEET FOR MATERIAL / REFERENCE SYMBOLS AND ABBREVIATIONS
2. REFER TO MECHANICAL, ELECTRICAL, FOR QUANTITY AND TYPE OF CEILING MOUNTED FIXTURES / DEVICES.
3. REFERENCE MECHANICAL AND ELECTRICAL DRAWINGS FOR MOUNTING LOCATIONS OF ITEMS WHERE NO CEILINGS ARE REQUIRED OR INDICATED
4. REFER TO ELECTRICAL DRAWINGS FOR LIGHTING FIXTURE SCHEDULE
5. REFER TO MECHANICAL DRAWINGS FOR DIFFUSER FIXTURE SCHEDULE

### WINDOW SCHEDULE

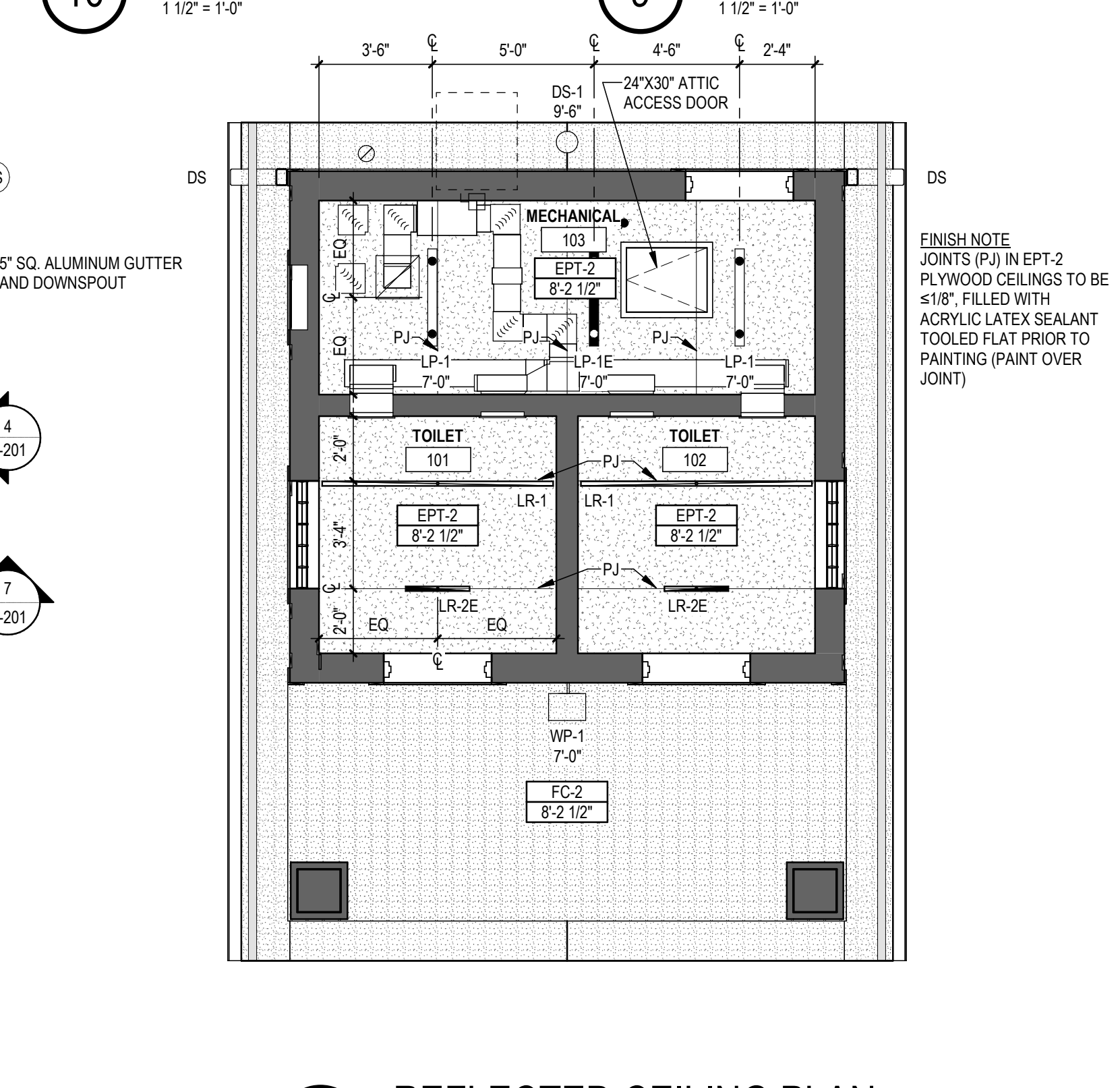
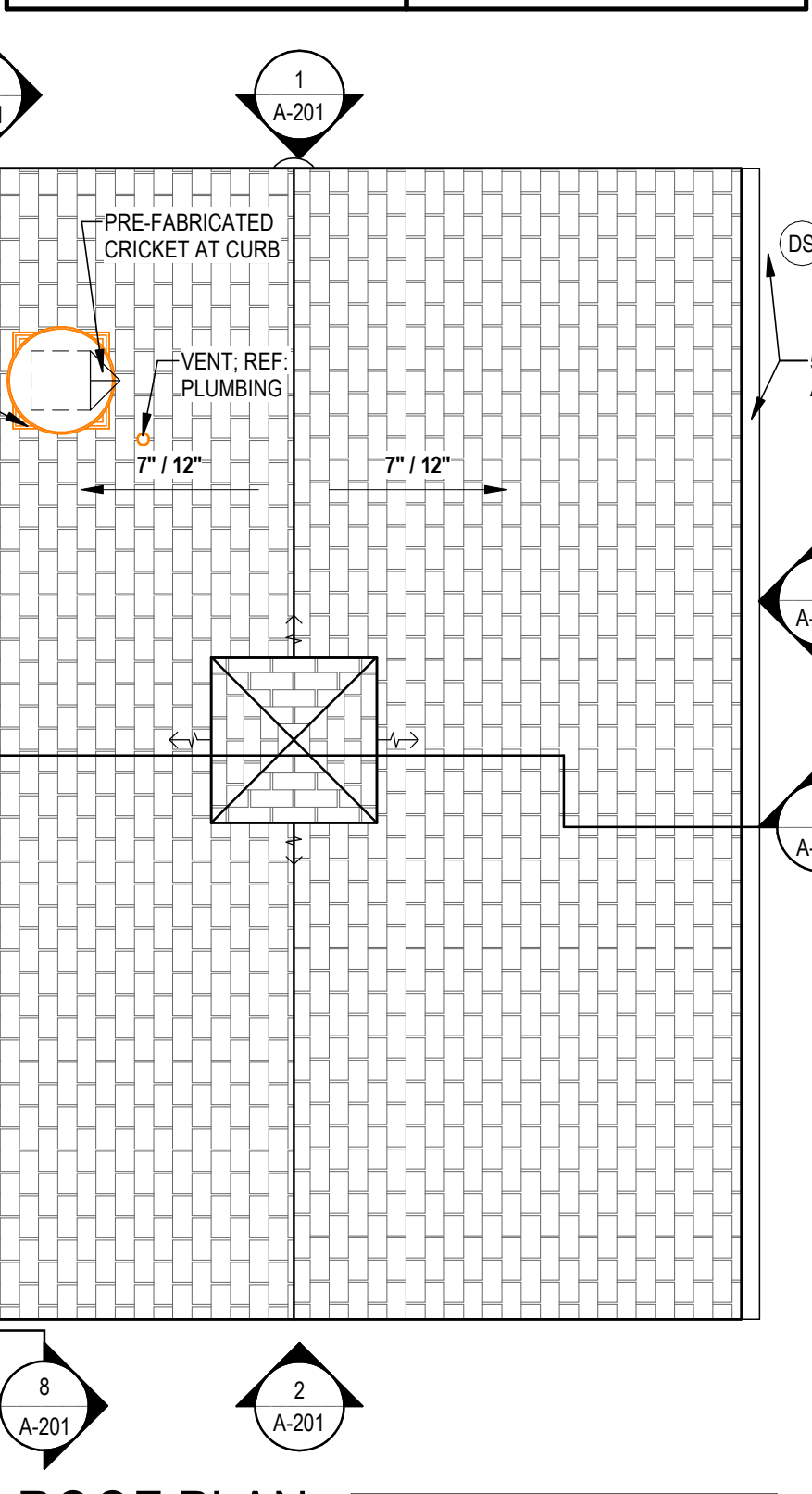
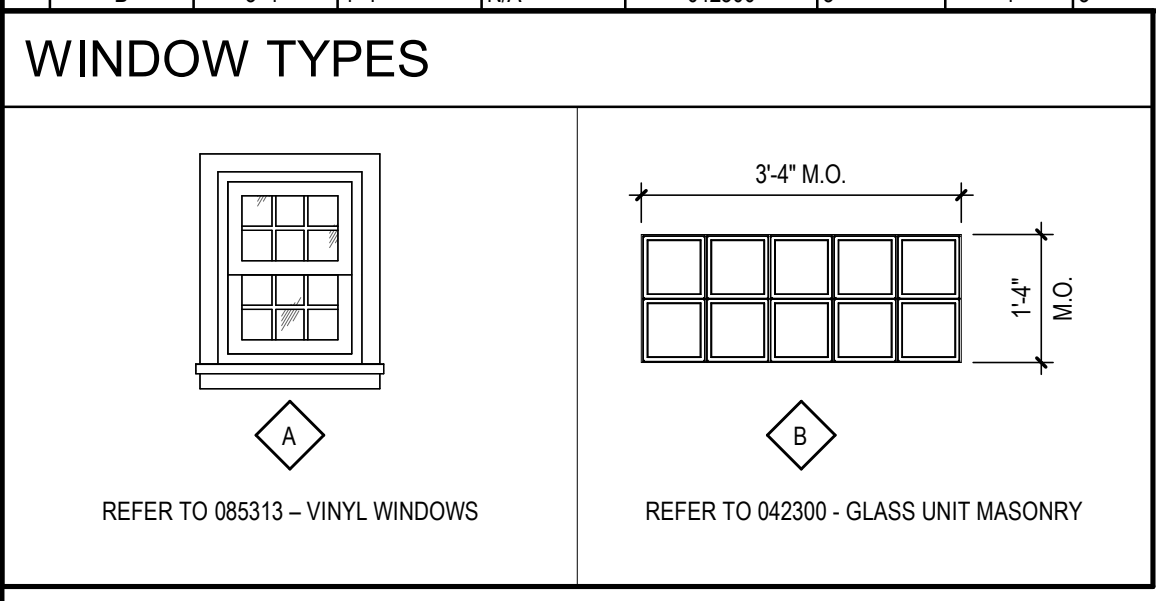
**SCHEDULE KEY:**

TYPE	FRAME MATERIAL: VL VINYL	FRAME FINISH: PF PRE-FINISHED	GLAZING TYPE: REFER TO PROJECT MANUAL DIVISION 04 AND 08 FOR GLAZING TYPES	DETAIL: REFER TO DETAILS AS INDICATED	FIRE RATING: IN MINUTES
------	--------------------------	-------------------------------	--	---------------------------------------	-------------------------

**SCHEDULE NOTES:**

- 1.

REV.	TYPE	SIZE	FRAME MAT. FINISH	GLAZING TYPE	DETAIL	FIRE RATING	NOTES
	A	1'-6" x 2'-6"	VL_PF	085313	7		
	B	3'-4" x 1'-4"	N/A	042300	3		



### REFLECTED CEILING PLAN LEGEND

**CEILING TYPES**

- CA-1 - CEILING TYPE
- X'-X" - CEILING ELEVATION

**FINISH LEGEND**

- EPT-2 1/2" ACX GRADE PLYWOOD SHEATHING w/ EPOXY PAINT
- FC-2 FIBER CEMENT SOFFIT PANEL
- SOFFIT VENT REF: 07 46 46 FIBER-CEMENT SIDING

**LIGHT FIXTURES**

(REFER TO ELECTRICAL DRAWINGS)

- - PENDANT MOUNT
- - EMERGENCY PENDANT MOUNT
- ◐ - RECESSED MOUNT
- ◑ - EMERGENCY RECESSED MOUNT
- (INT.) □ (EXT.) - WALL MOUNT

**HVAC DEVICES**

(REFER TO MECHANICAL DRAWINGS)

- ☒ - RECTANGULAR CEILING DIFFUSER / GRILLE
- ◻ - ACCESS DOOR

### GENERAL NOTES - ROOF PLAN

1. COORDINATE PENETRATIONS AND ROOF MOUNTED EQUIPMENT WITH MECHANICAL, PLUMBING, ELECTRICAL AND STRUCTURAL DRAWINGS
2. ALL ROOF PENETRATIONS SHALL BE SEALED WITH APPROPRIATE MATERIAL
3. ALL EXPOSED METAL ELEMENTS TO BE PRE-FINISHED. COLOR AS SELECTED BY ARCHITECT
4. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION ON FINISHES & INSTALLATION REQUIREMENTS

### ROOF LEGEND

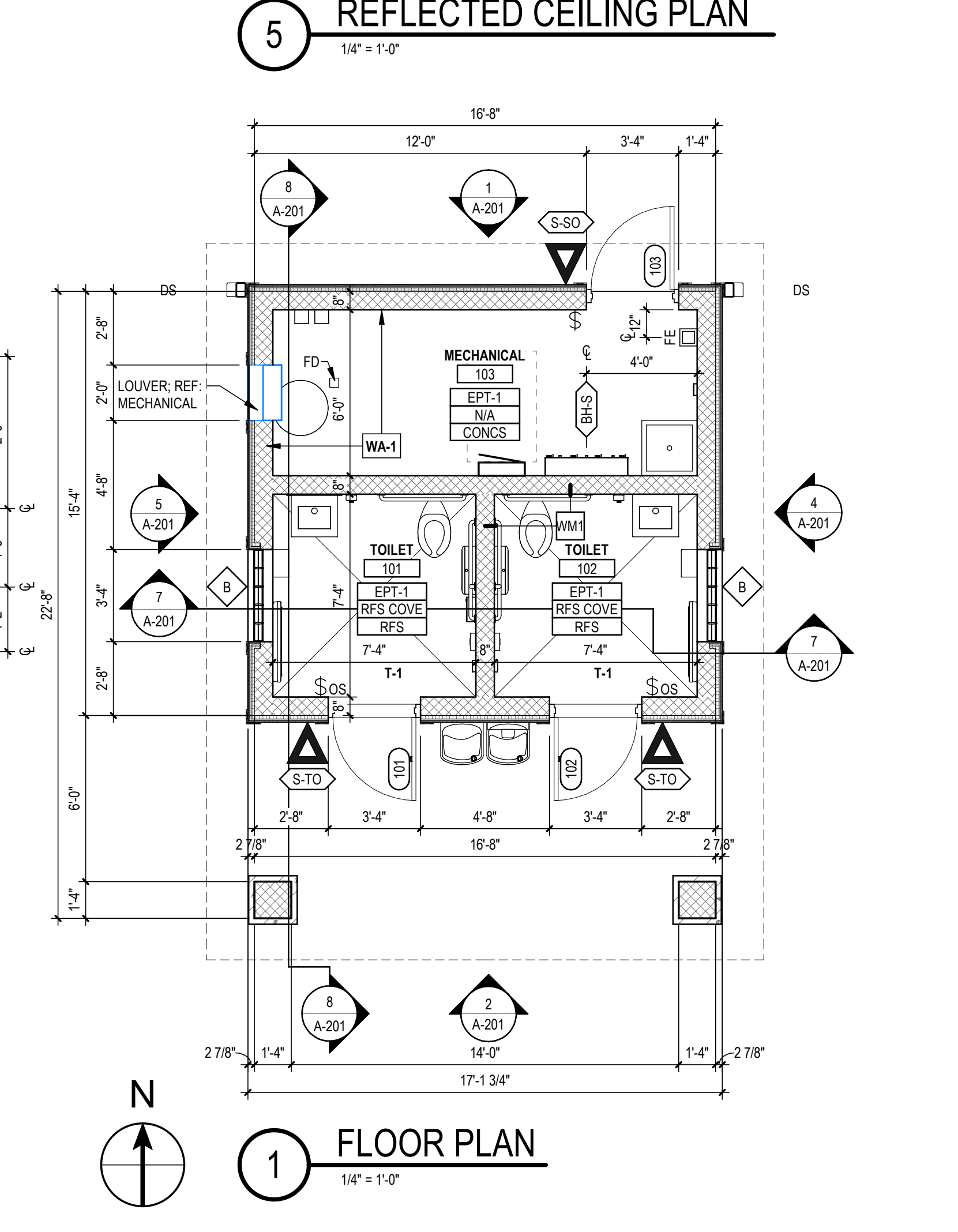
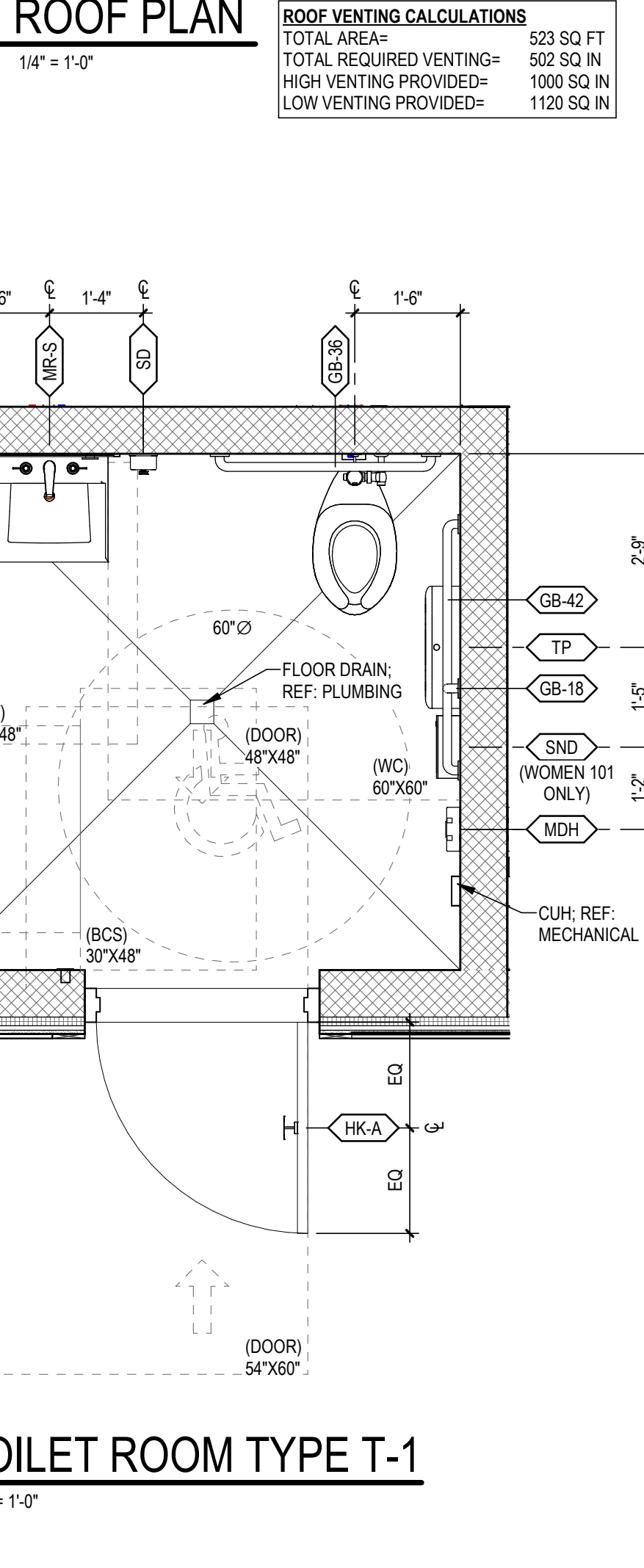
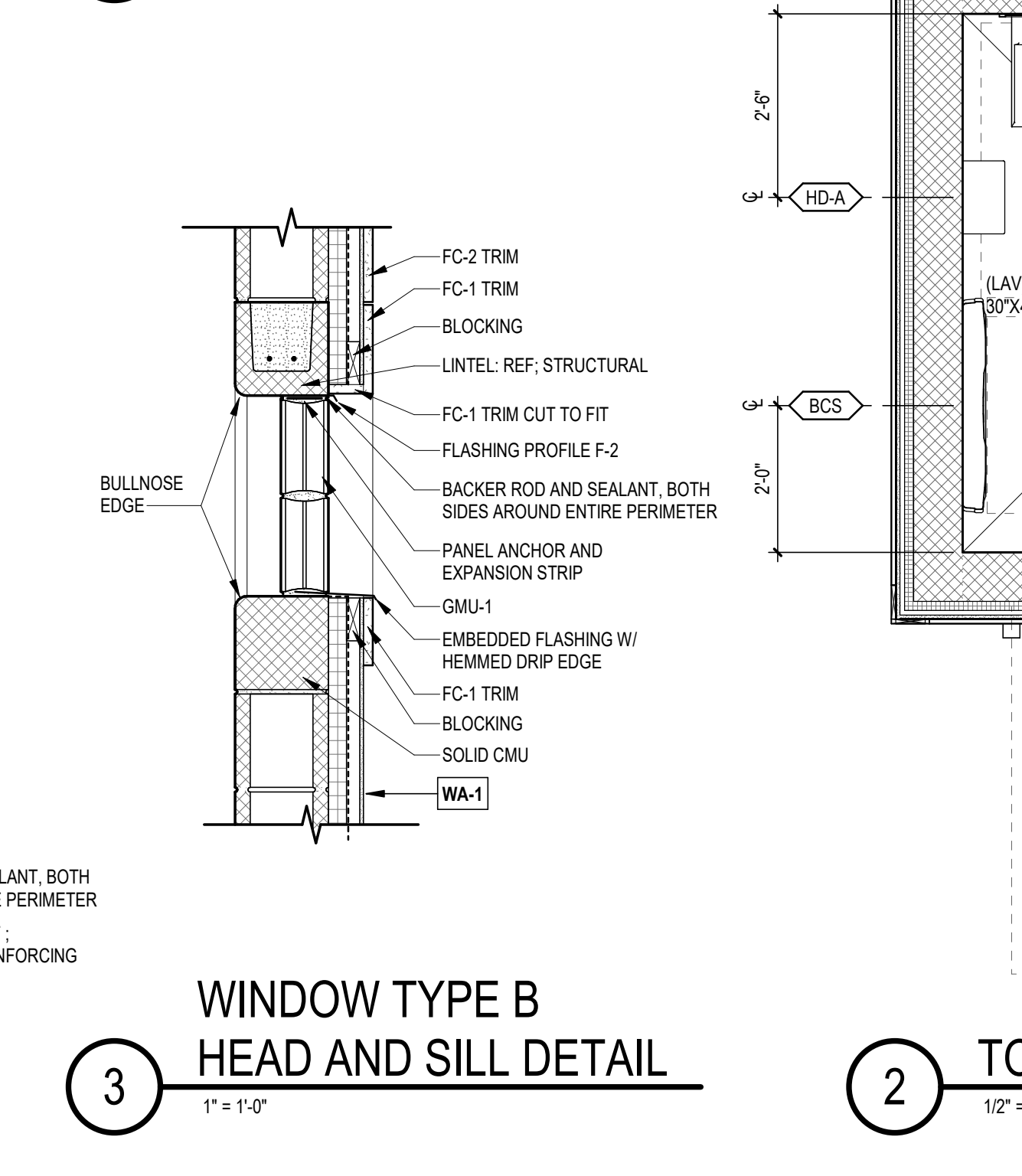
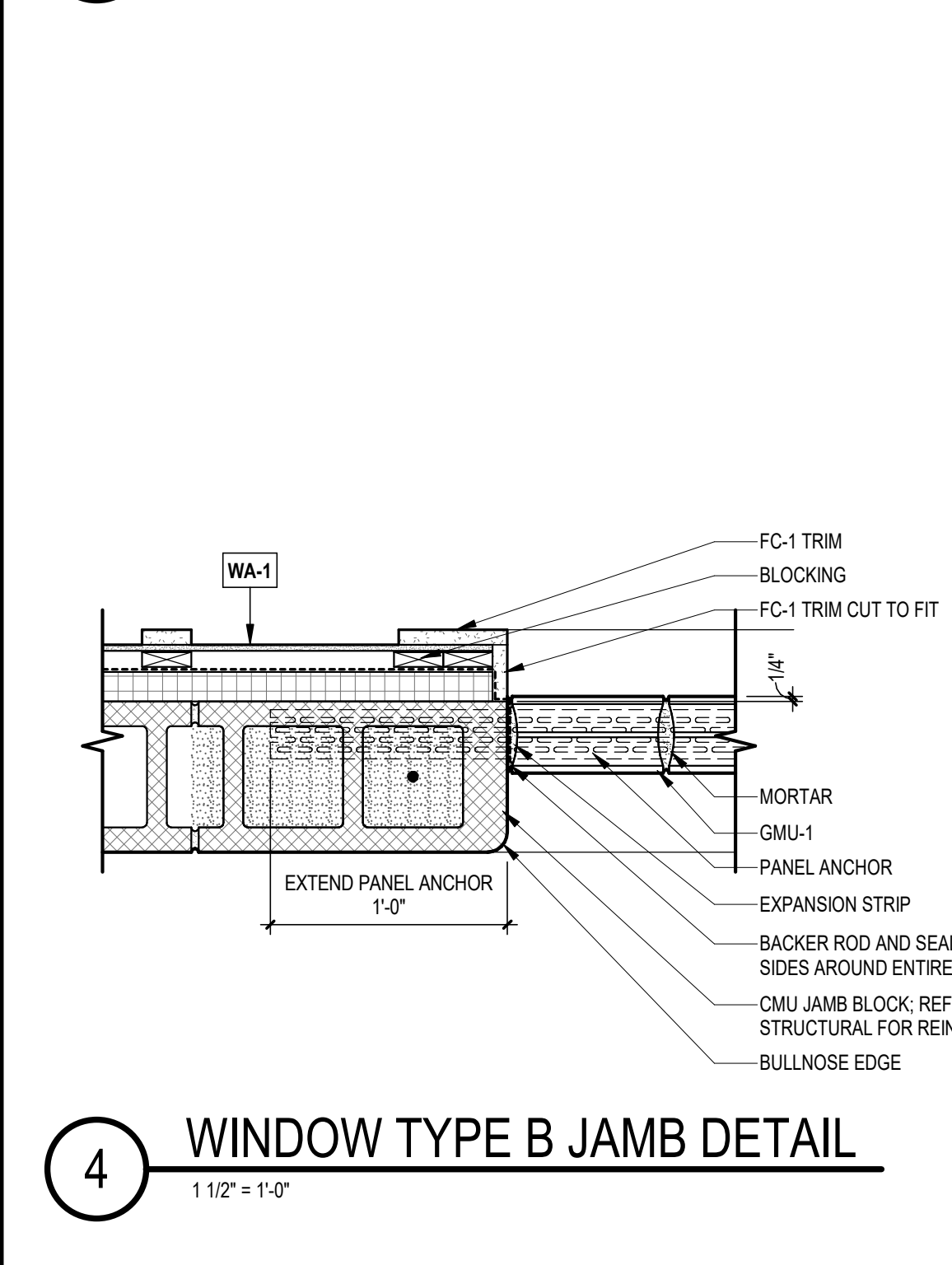
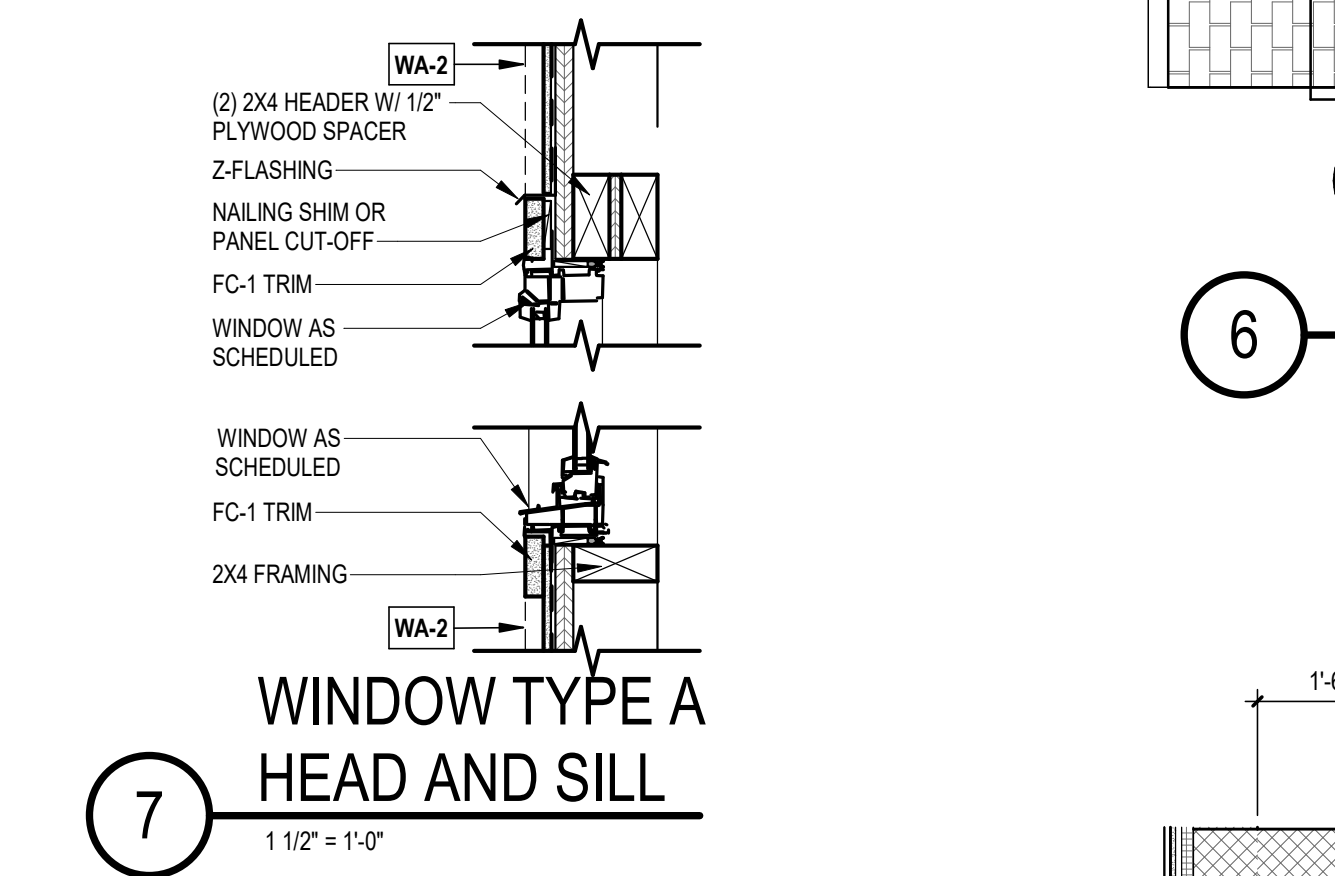
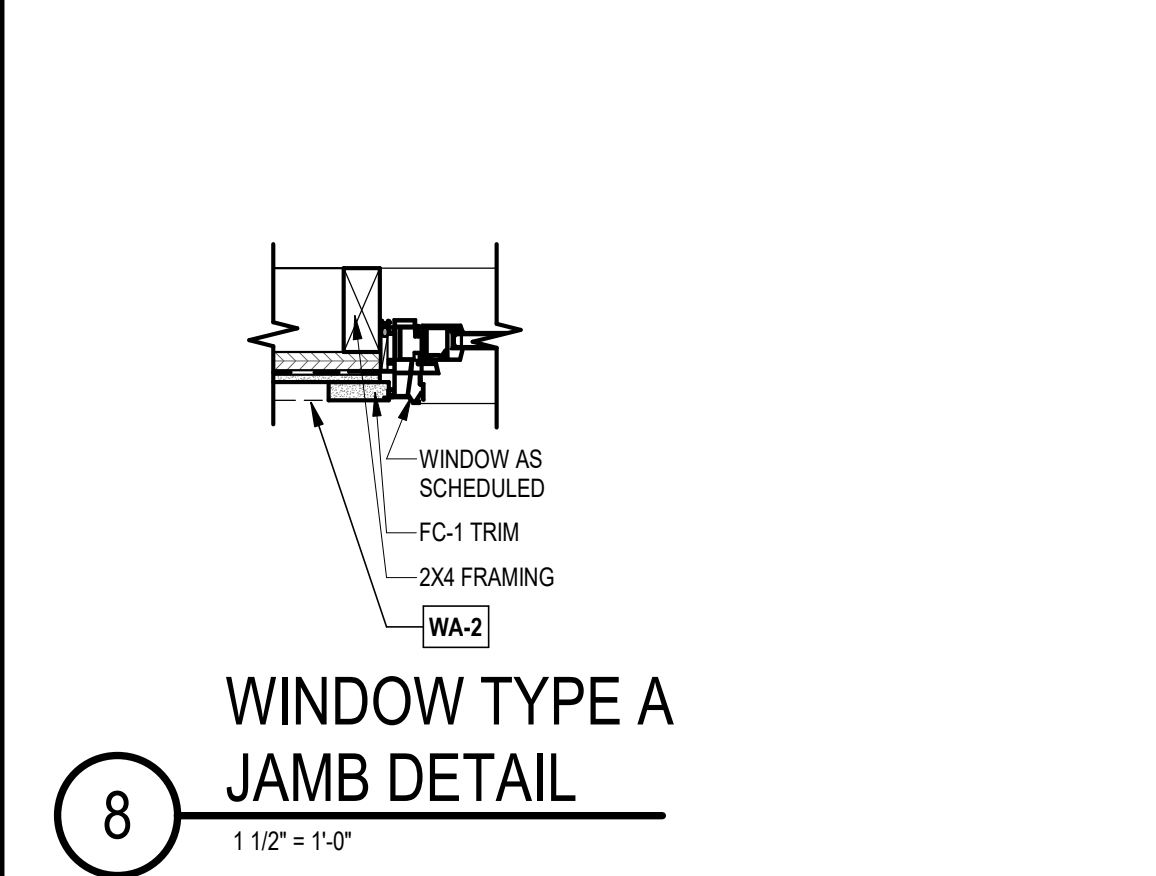
- DS - DOWN SPOUT
- X:12 - ROOF SLOPE

### GENERAL NOTES - PLANS

1. FIRST FLOOR REFERENCE ELEVATION 100'-0" = 733.80' (REFER TO CIVIL)
2. DO NOT SCALE DRAWINGS. IF DIMENSIONS CANNOT BE DETERMINED OR DOCUMENTS ARE IN CONFLICT, THE CONTRACTOR SHALL OBTAIN CLARIFICATION FROM THE ARCHITECT PRIOR TO CONTINUATION OF WORK
3. REFER TO A-001 FOR ACCESSORY MOUNTING DIAGRAMS
4. REFER TO A-301 FOR WALL AND ROOF ASSEMBLY TYPES, PARTITION TYPES, FLASHING PROFILES.
5. ALL MASONRY DIMENSIONS ARE NOMINAL - UNO
6. REFER TO SPECIFICATION SECTION 010500 - DESIGN SELECTIONS FOR INTERIOR AND EXTERIOR MATERIAL ABBREVIATIONS AND INFORMATION.

### GENERAL NOTES - FINISH PLANS

1. REFER TO REFLECTED CEILING PLANS FOR CEILING TYPES, HEIGHTS, AND FINISH INFORMATION.
2. ALL WALL MOUNTED MECHANICAL EQUIPMENT (DIFFUSERS, GRILLES, ETC.) AND ELECTRICAL EQUIPMENT (PANELS, ETC.) SHALL BE PAINTED TO MATCH THE ADJACENT WALL COLOR. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR QUANTITIES AND LOCATIONS.
3. PROVIDE APPROPRIATE TRANSITION STRIPS BETWEEN DISSIMILAR FLOORING MATERIALS AT VERTICAL AND HORIZONTAL APPLICATIONS.



### FLOOR AND FINISH PLAN LEGEND

**ROOM FINISH INDICATOR**

ROOM NAME AND NUMBER PLUS GENERAL ROOM FINISH INFORMATION. FINISH TAGS SHALL APPLY TO ALL LIKE MATERIALS WITHIN A ROOM (UNO).

ROOM NUMBER	ROOM NAME
101	101
PT-2	PT-2
VB-1	VB-1
CPT-F	CPT-F

**FINISH LEGEND**

FINISH LEGEND IS GENERAL. REFER TO SPECIFICATIONS FOR SPECIFIC FINISH INFORMATION. MULTIPLE FINISH TYPES ARE DENOTED BY NUMBER FOLLOWING ABBREVIATION.

PROJECT NUMBER: 0133-24-020  
 PLAN: CH  
 ISSUED FOR: BID SET  
 2024/1/22  
 CANTON CHARTER TOWNSHIP  
 CHERRY HILL VILLAGE  
 Cherry Hill Rd, Canton, MI 48187  
 PLANS, SCHEDULES, DETAILS  
 A-101  
 OHM ARCHITECTS ENGINEERS PLANNERS  
 OHM-ADVISORS.COM



### DRINKING FOUNTAIN DETAIL SECTION

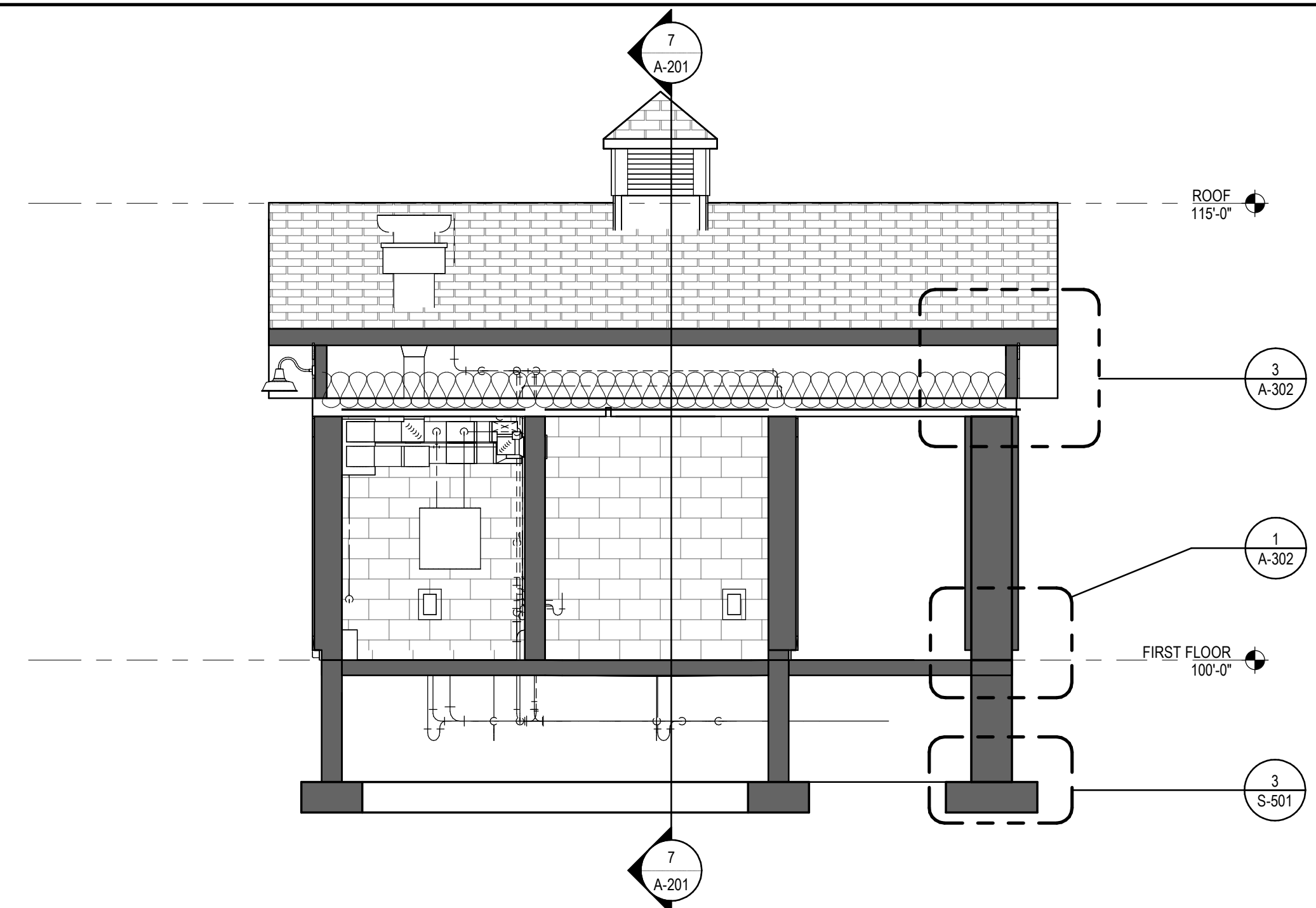
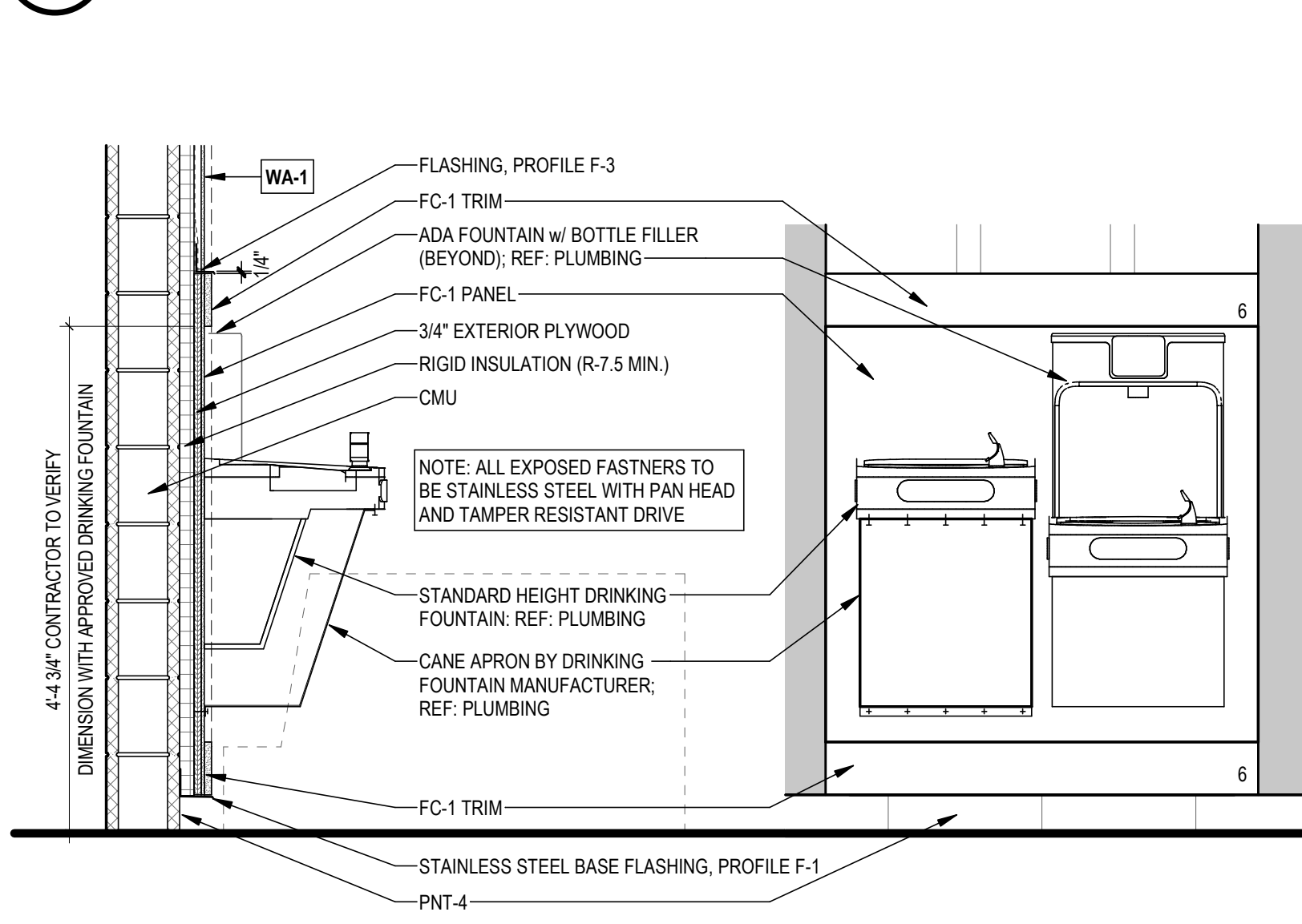
3/4" = 1'-0"

### 6 DETAIL AT PANEL BUTT CONDITION

1" = 1'-0"

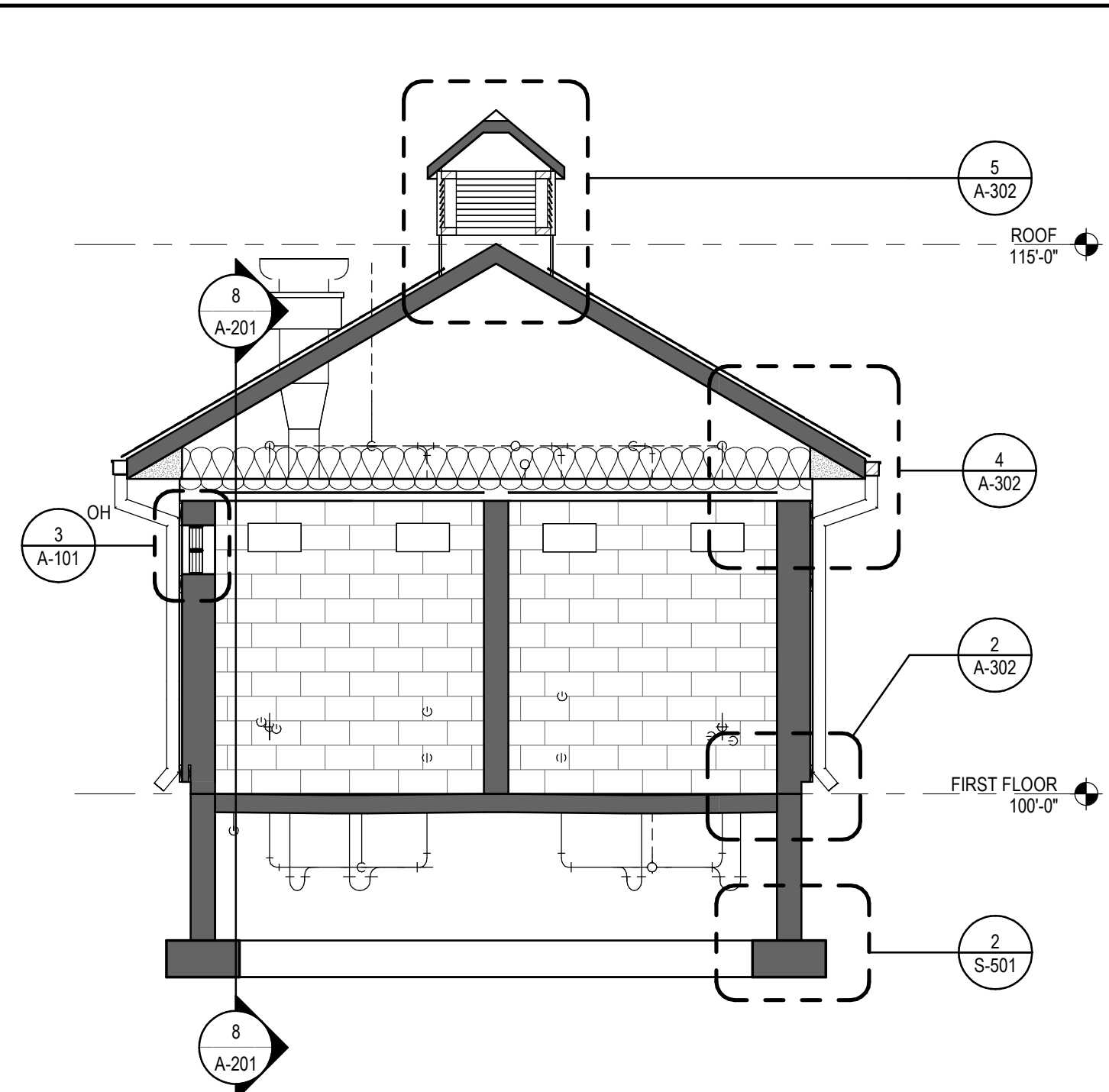
### DRINKING FOUNTAIN ENLARGED ELEVATION

3/4" = 1'-0"



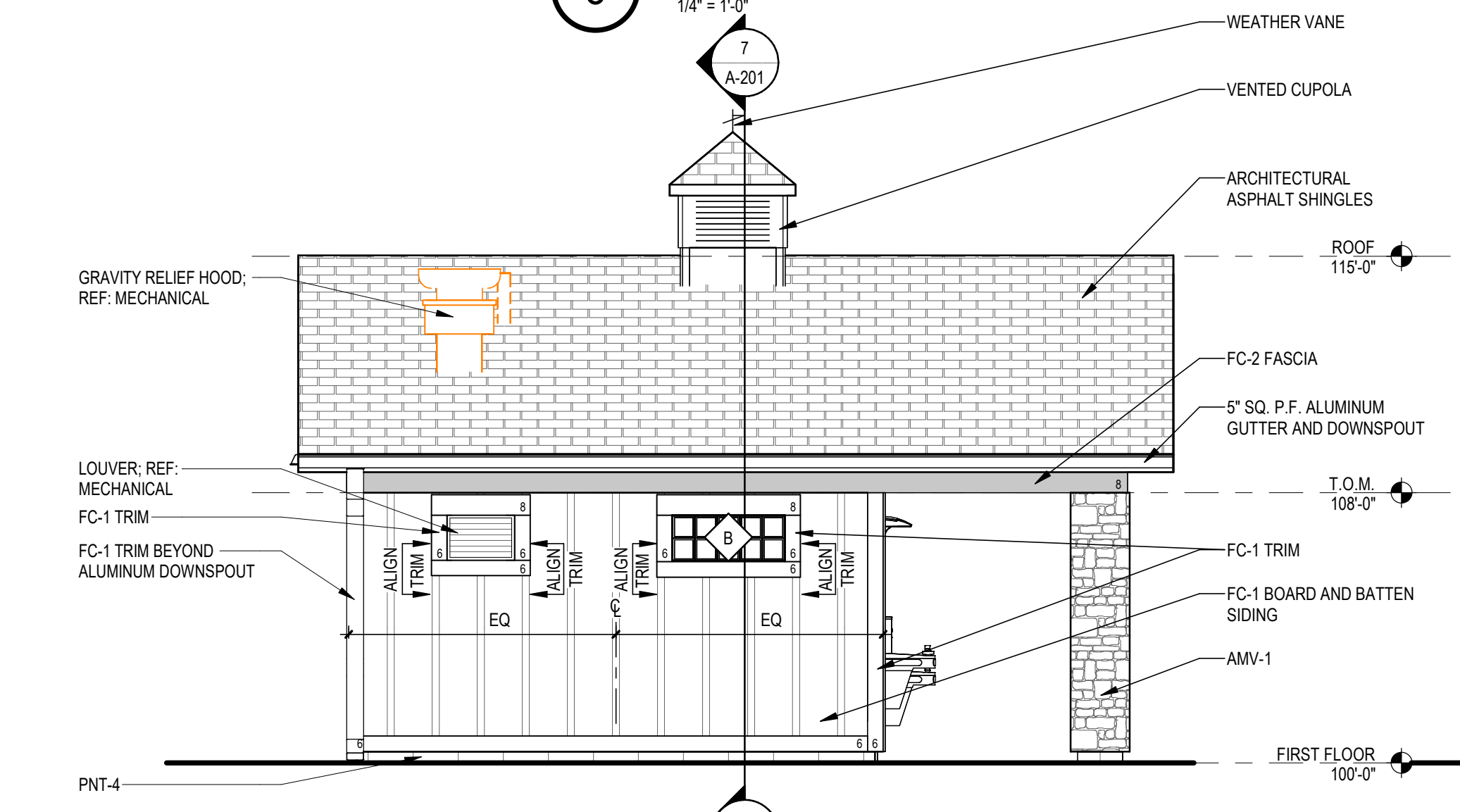
### 8 LONGITUDINAL BUILDING SECTION

1/4" = 1'-0"



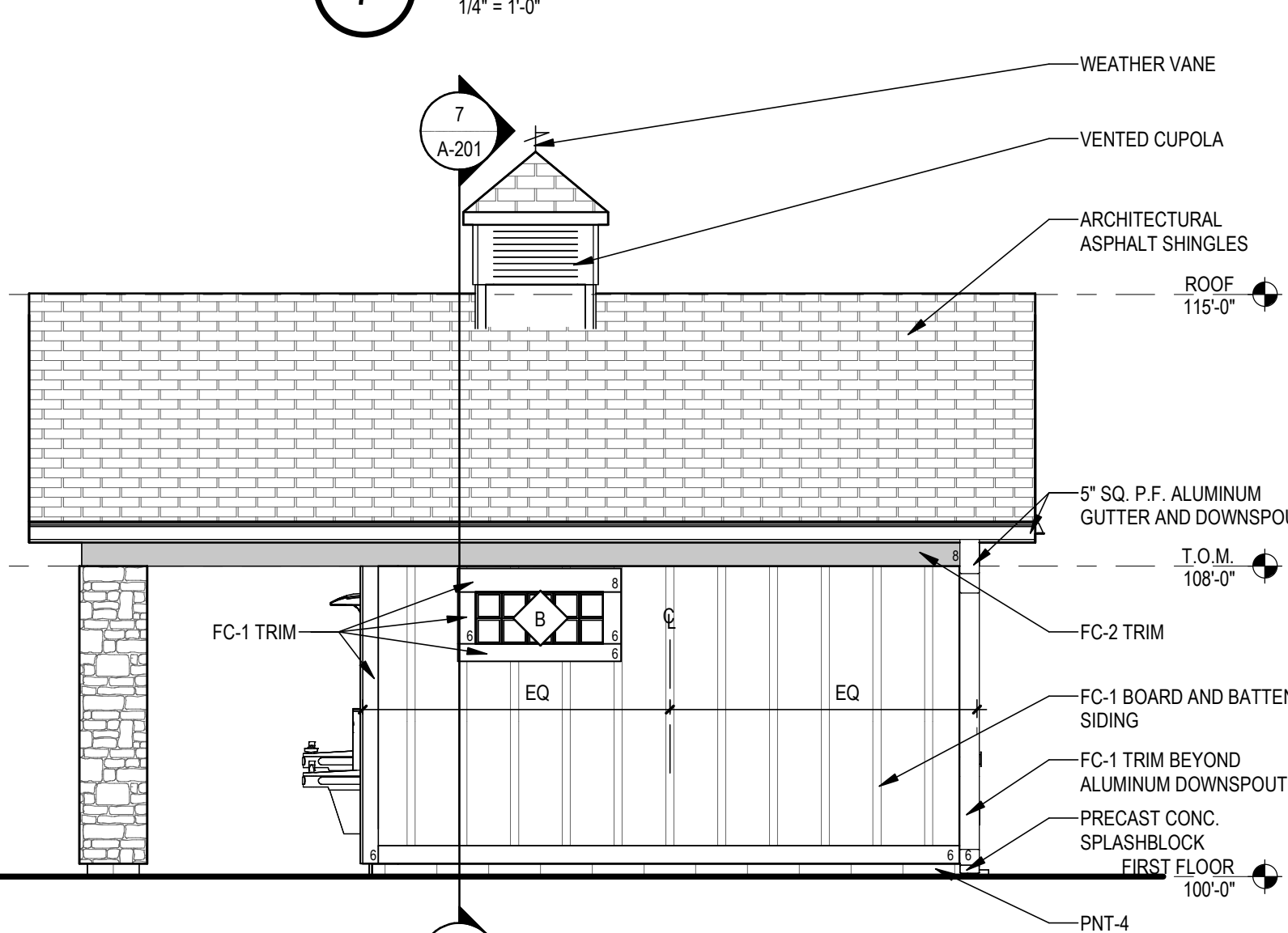
### 7 LATITUDINAL BUILDING SECTION

1/4" = 1'-0"



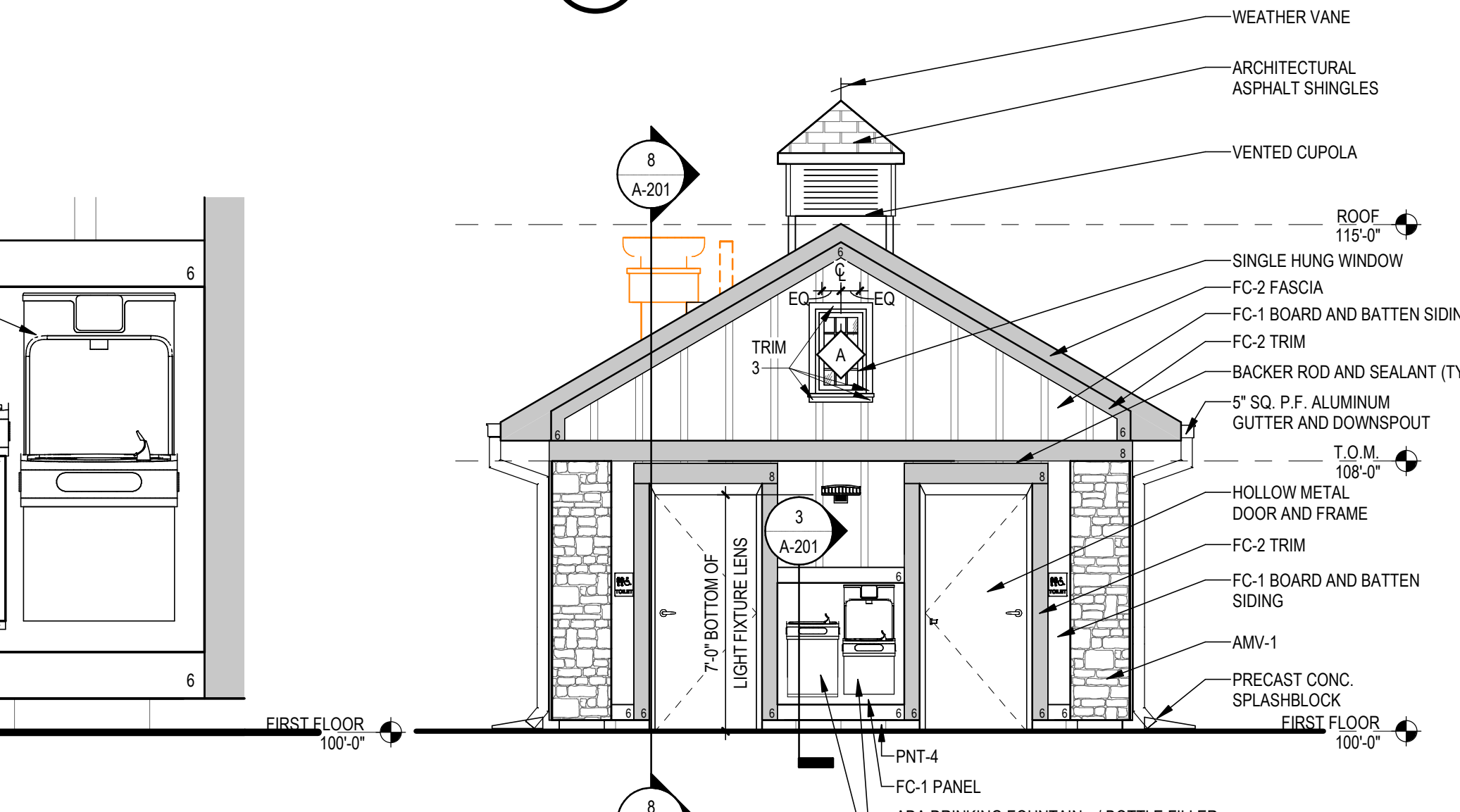
### 5 WEST ELEVATION

1/4" = 1'-0"



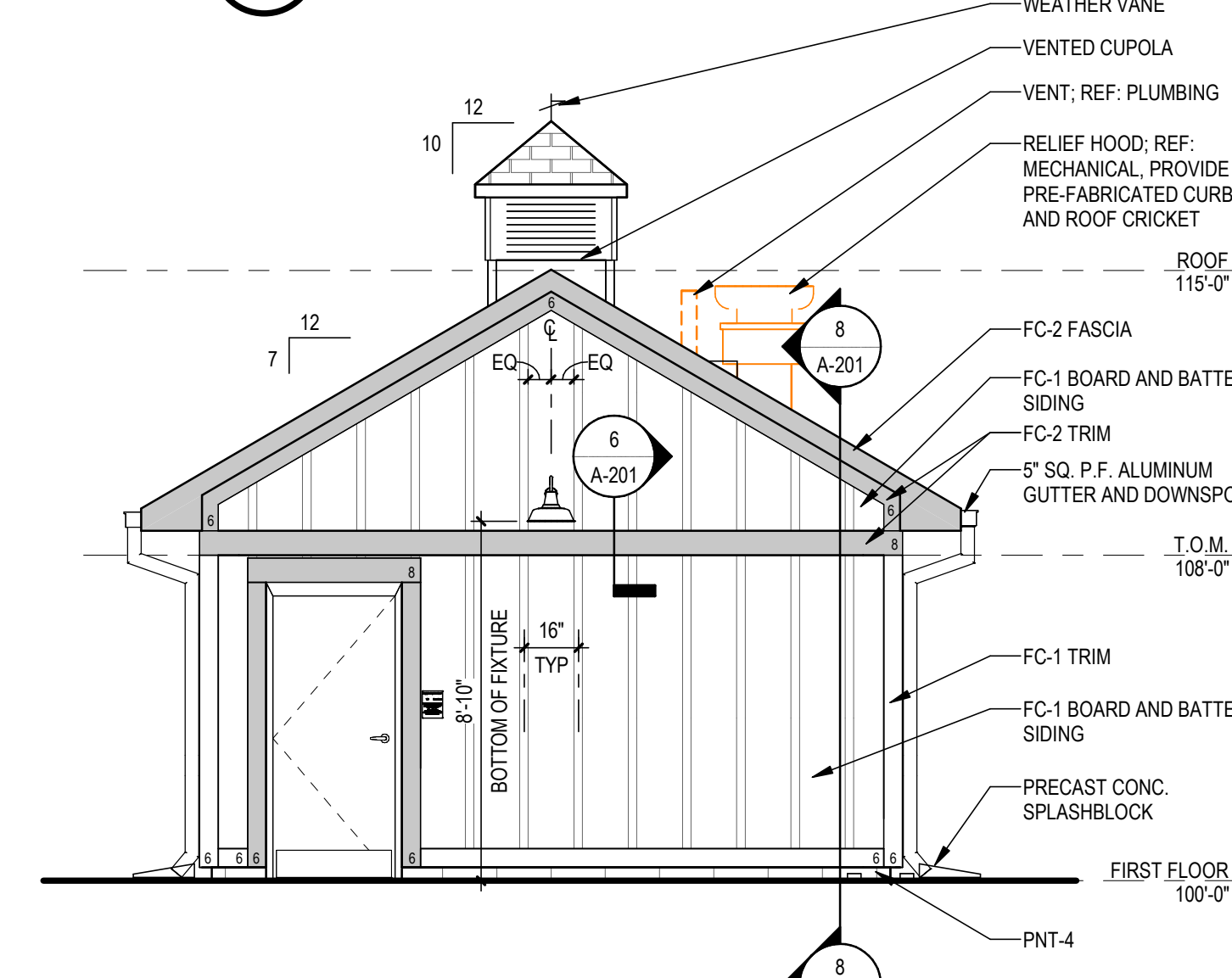
### 4 EAST ELEVATION

1/4" = 1'-0"



### 2 SOUTH ELEVATION

1/4" = 1'-0"



### 1 NORTH ELEVATION

1/4" = 1'-0"

### GENERAL NOTES - ELEVATIONS

1. ALL PENETRATIONS SHALL BE SEALED WITH APPROPRIATE MATERIAL
2. ALL EXPOSED METAL ELEMENTS TO BE PRE-FINISHED, COLOR AS SELECTED BY ARCHITECT
3. REFER TO PROJECT MANUAL FOR ADDITIONAL INFORMATION ON FINISHES & INSTALLATION REQUIREMENTS

### (FC) FIBER CEMENT TRIM SIZE LEGEND

TRIM TAGS LOCATED AT BOTTOM RIGHT CORNER OF TRIM BOARDS ON ELEVATIONS

TAG	(NOMINAL WIDTH)	ACTUAL WIDTH
3	3"	2.5"
6	6"	5.5"
8	8"	7.25"

ALL TRIM TO BE 4/4 (0.75") THICK UNLESS NOTED OTHERWISE



OHM-ADVISORS.COM

ISSUED FOR: BID SET

2024/11/22

PROJECT NUMBER: 0133-24-0220  
 PM: CM  
**CANTON CHARTER TOWNSHIP**  
**CHERRY HILL VILLAGE**  
 Cherry Hill Rd, Canton, MI 48187

**A-201**

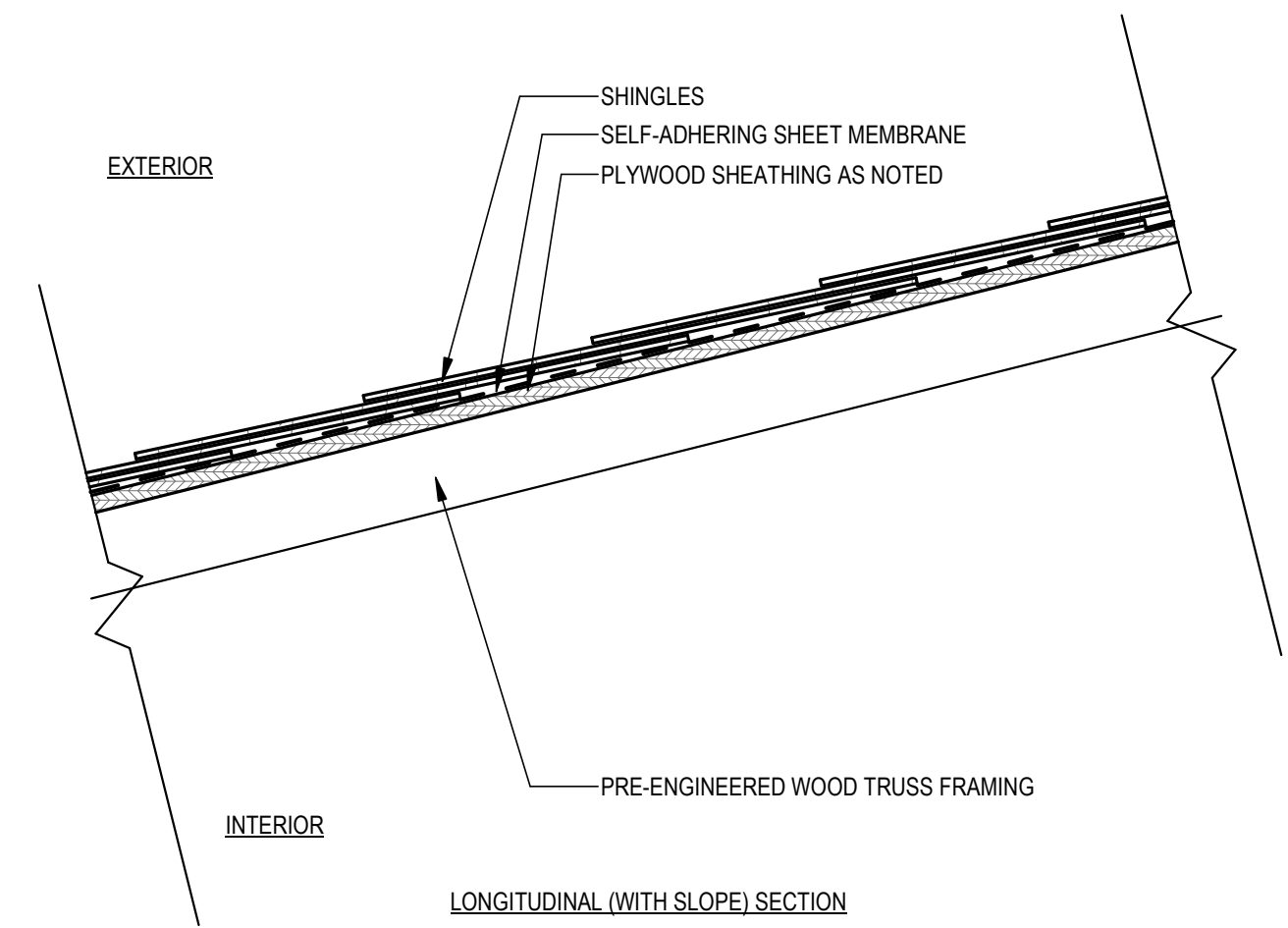
COPYRIGHT 2024 OHM. ALL DRAWINGS AND WRITTEN MATERIALS APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF OHM AND THE SAME MAY NOT BE DUPLICATED, DISTRIBUTED, OR DISCLOSED WITHOUT PRIOR WRITTEN CONSENT OF OHM.

EXTERIOR ELEVATIONS AND BUILDING SECTIONS



**GENERAL NOTES - PARTITIONS**

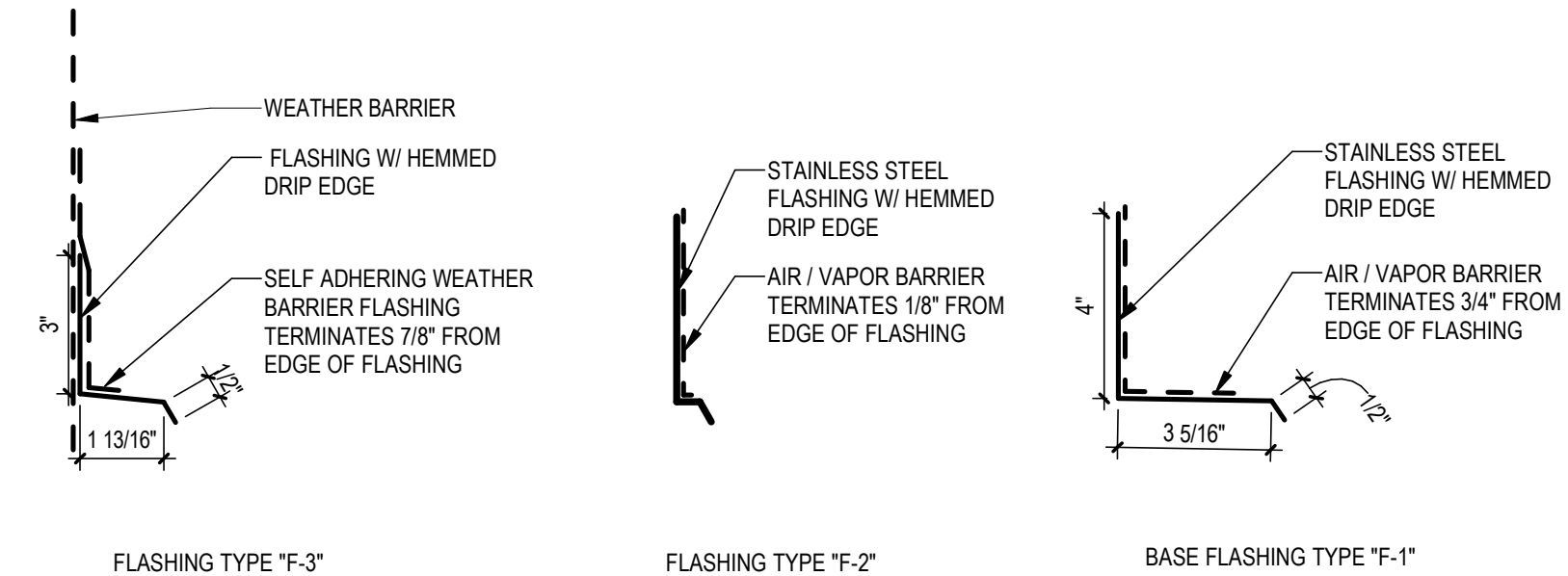
1. USE PARTITION TYPE 'M8' UNO
2. FOR CLARITY, PARTITION TYPES DO NOT INDICATE BASE AND FLOOR FINISHES. REFER TO ROOM FINISH SCHEDULE.
3. APPLY A CONTINUOUS BEAD OF ACOUSTICAL SEALANT AROUND ALL ELECTRICAL WALL BOXES
4. FOR NON-FIRE-RATED PARTITIONS, APPLY ACOUSTICAL SEALANT AROUND PENETRATIONS ABOVE THE CEILING IN FULL-HEIGHT PARTITIONS, UNO



**SHINGLED ROOF ON WOOD TRUSSES**

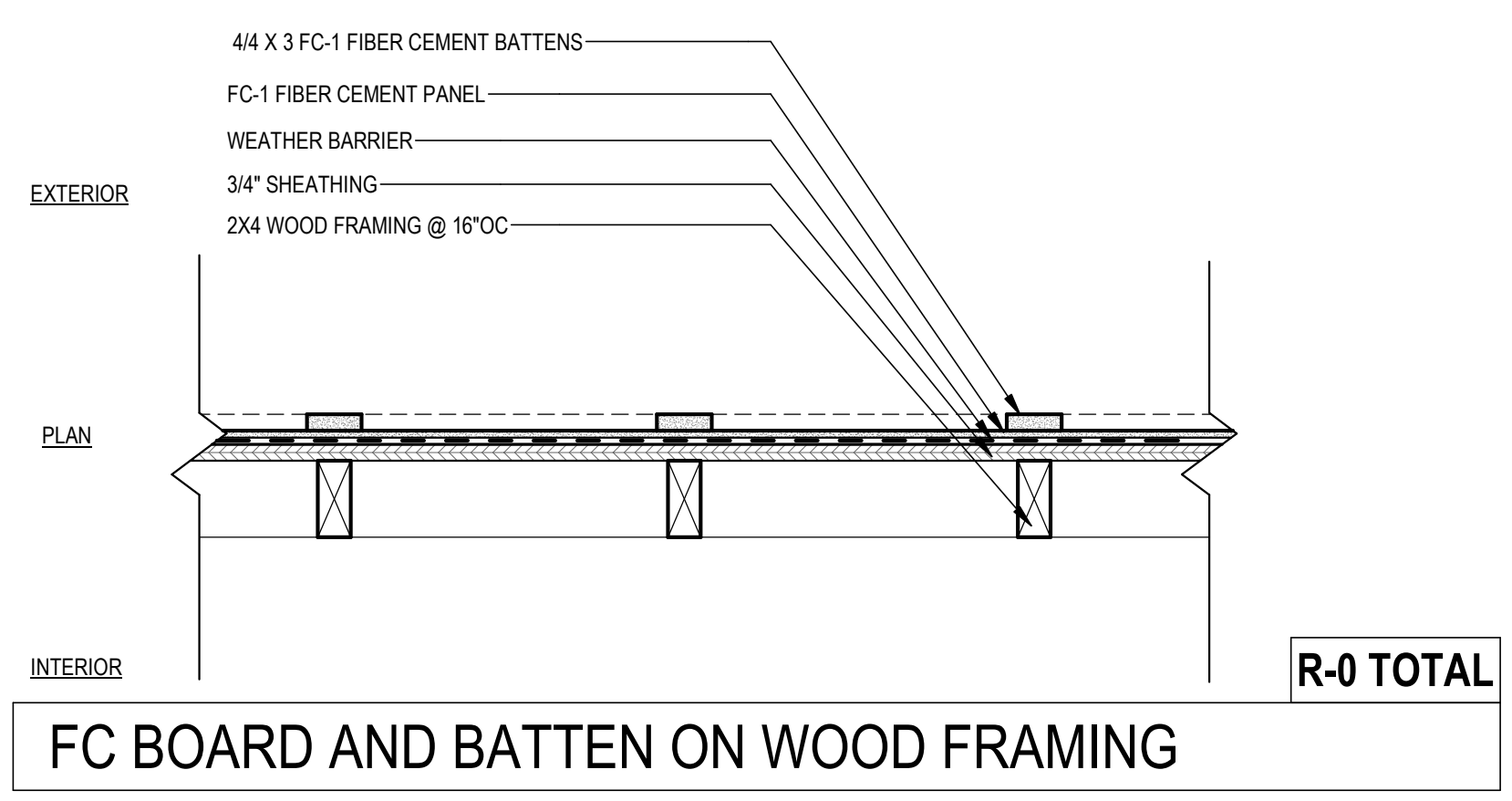
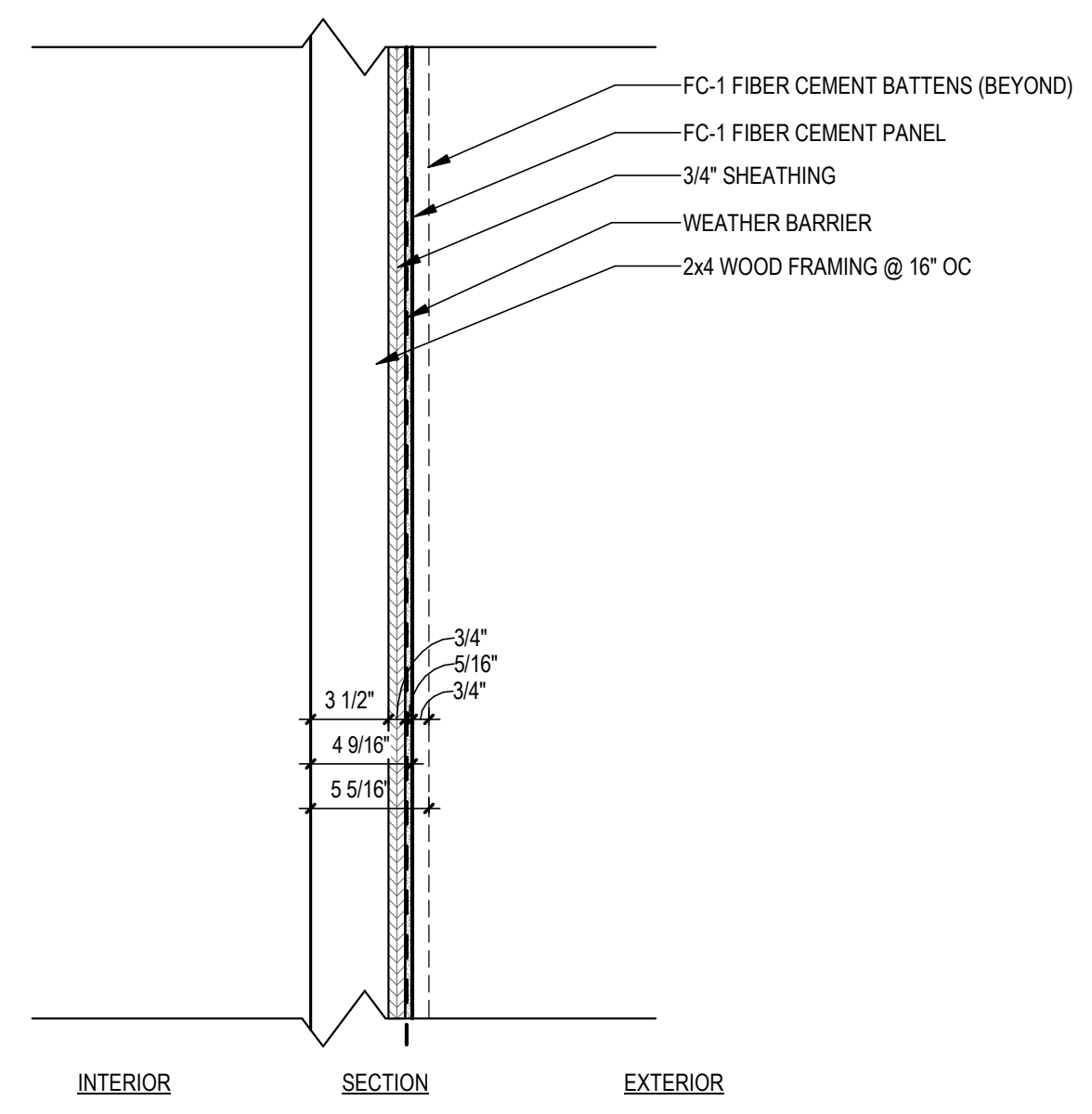
ROOF ASSEMBLY  
TILED ROOF SYSTEM  
ASPHALT SHINGLES  
PRE-ENGINEERED WOOD TRUSS FRAMING

**ROOF ASSEMBLY RA-1**



**FLASHING PROFILE TYPES**

ALL VISIBLE EDGES OF FLASHING TO BE FINISHED

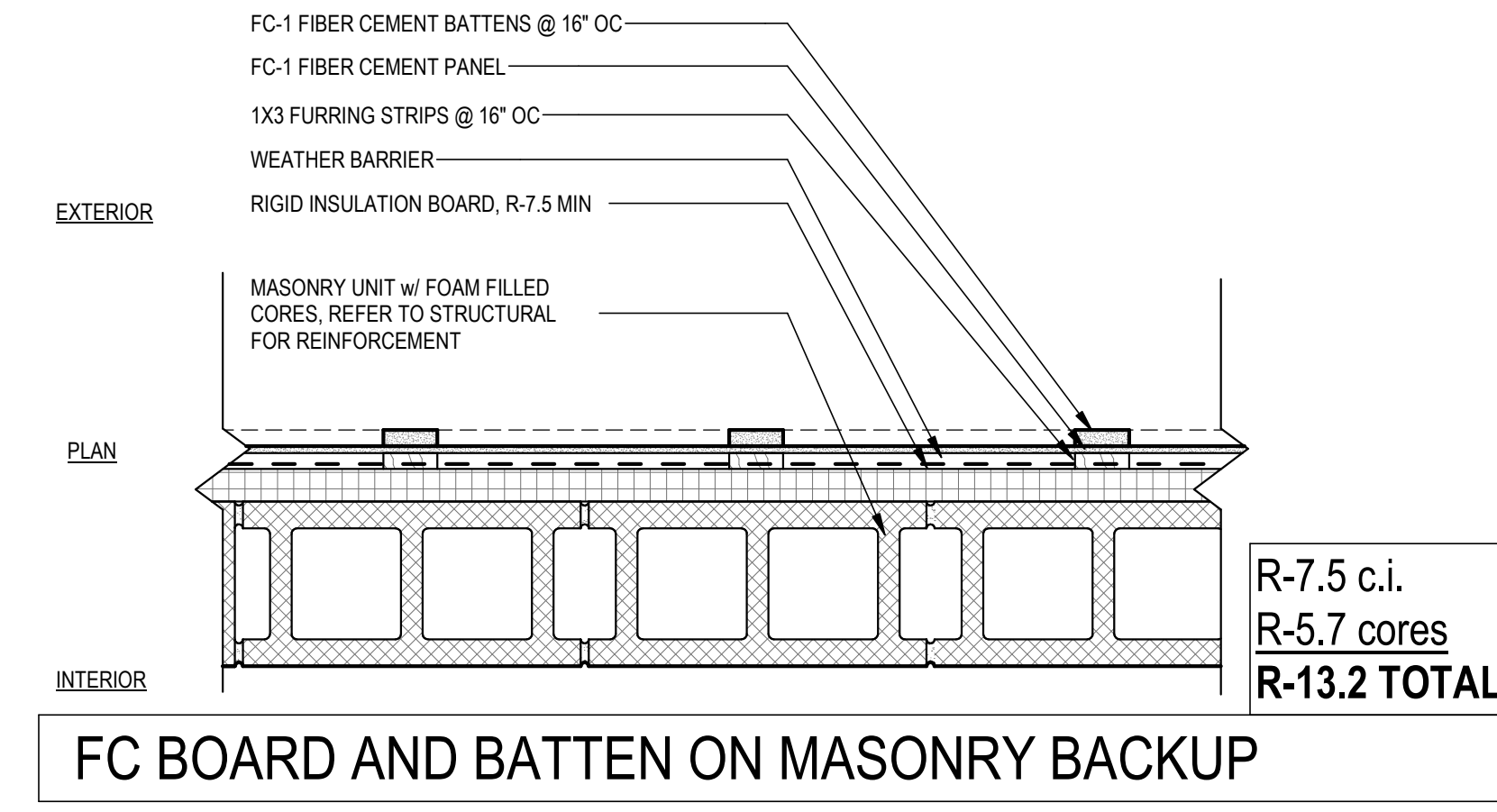
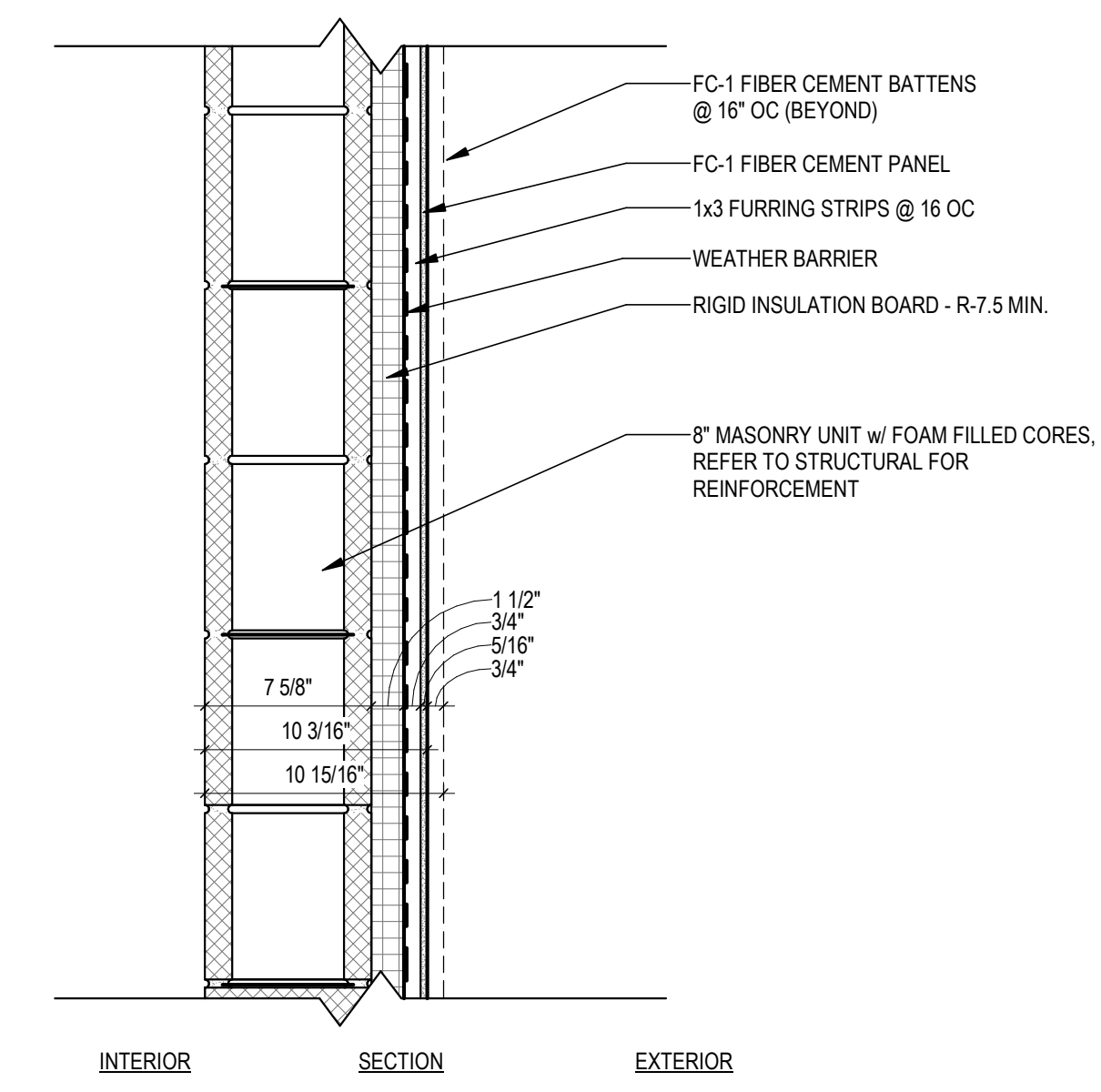


**FC BOARD AND BATTEN ON WOOD FRAMING**

WALL ASSEMBLY  
FIBER CEMENT BOARD AND BATTEN  
WOOD FRAMING

**WALL ASSEMBLY WA-2**

R-0 TOTAL

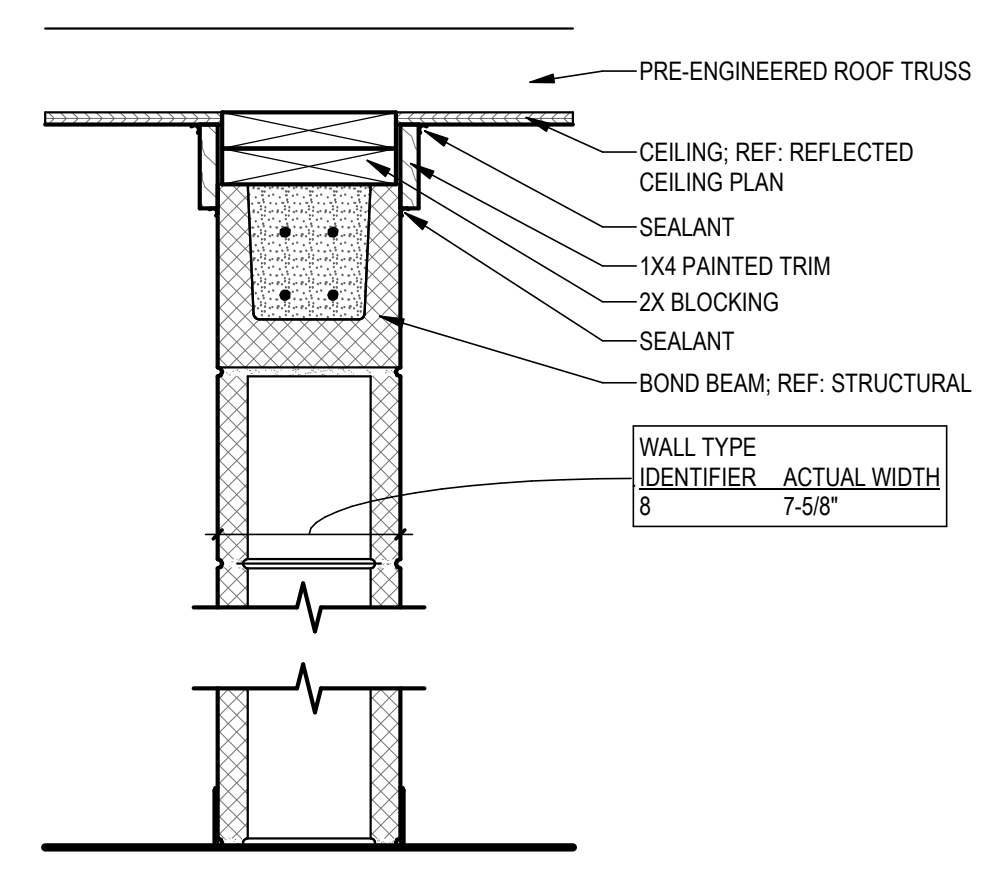


**FC BOARD AND BATTEN ON MASONRY BACKUP**

WALL ASSEMBLY  
FIBER CEMENT BOARD AND BATTEN  
RIGID INSULATION  
REINFORCED CONCRETE MASONRY UNIT

**WALL ASSEMBLY WA-1**

R-7.5 c.i.  
R-5.7 cores  
R-13.2 TOTAL



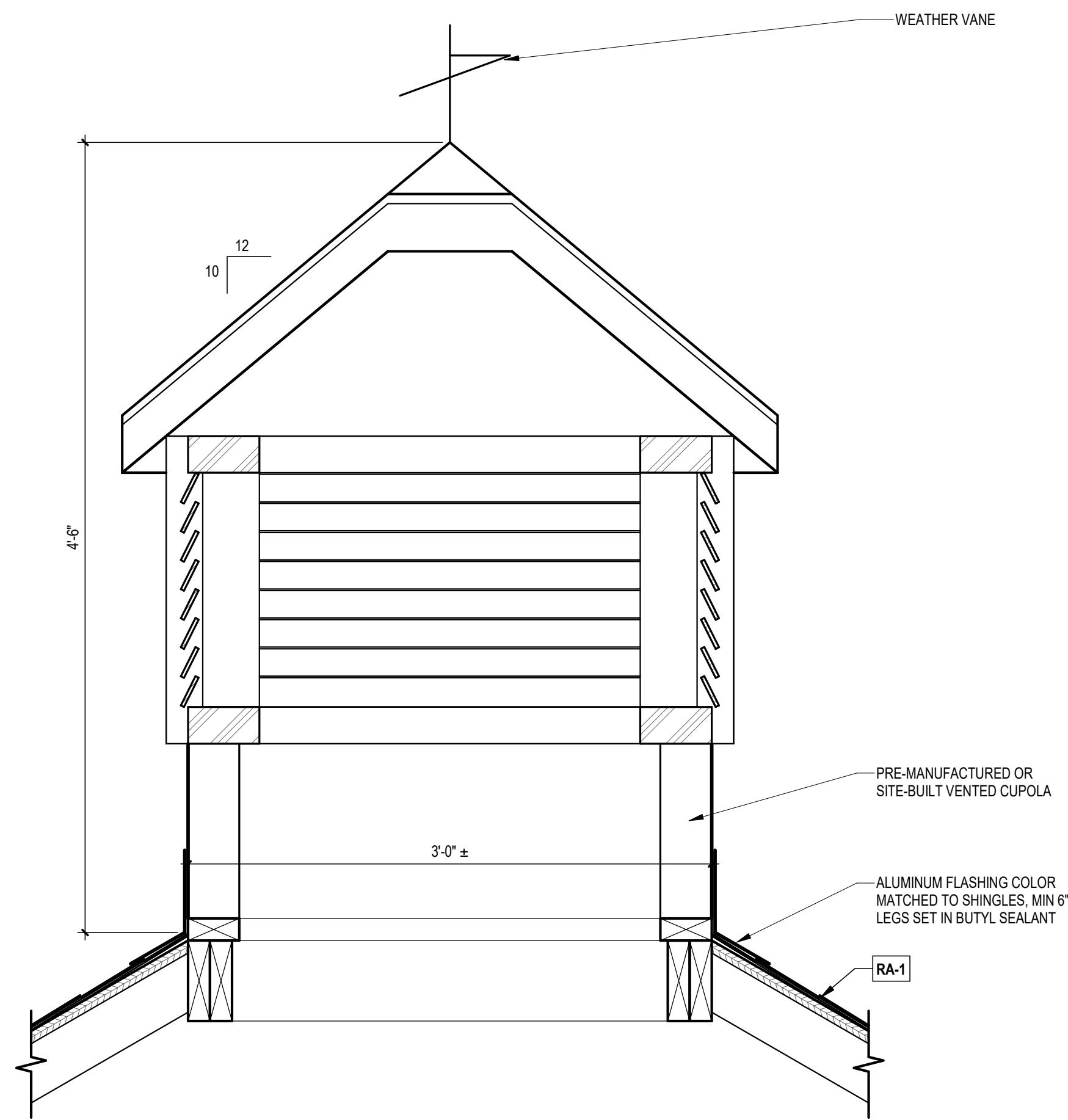
**TYPE 'M'  
FULL HEIGHT MASONRY WALL**

WALL TYPE IDENTIFIER ACTUAL WIDTH  
8 7'-5/8"

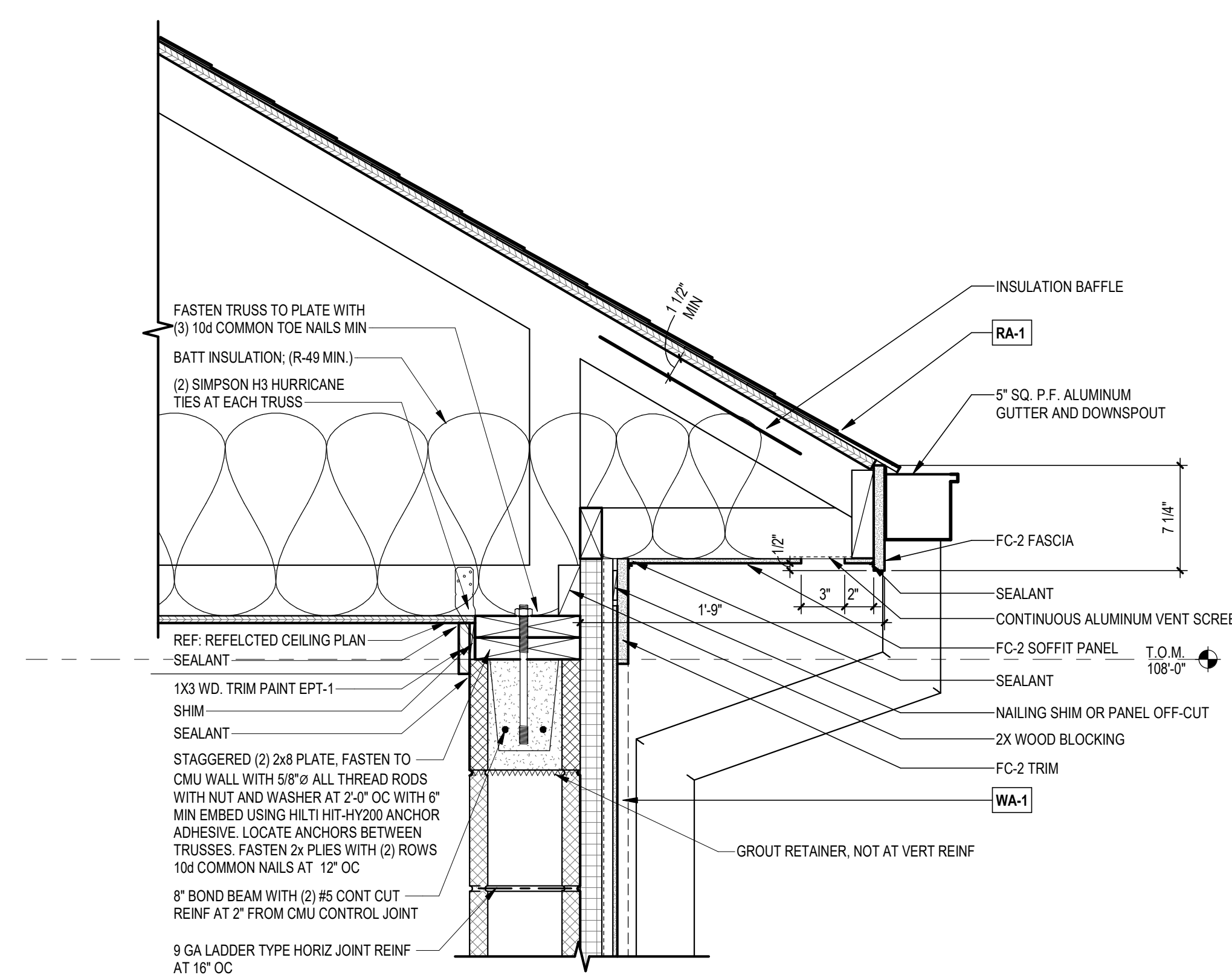
20241122  
ISSUED FOR BID SET

PROJECT NUMBER: 0133-24-0200  
PM: CM  
CANTON CHARTER TOWNSHIP  
CHERRY HILL VILLAGE  
Cherry Hill Rd, Canton, MI 48187  
ASSEMBLIES AND PARTITIONS

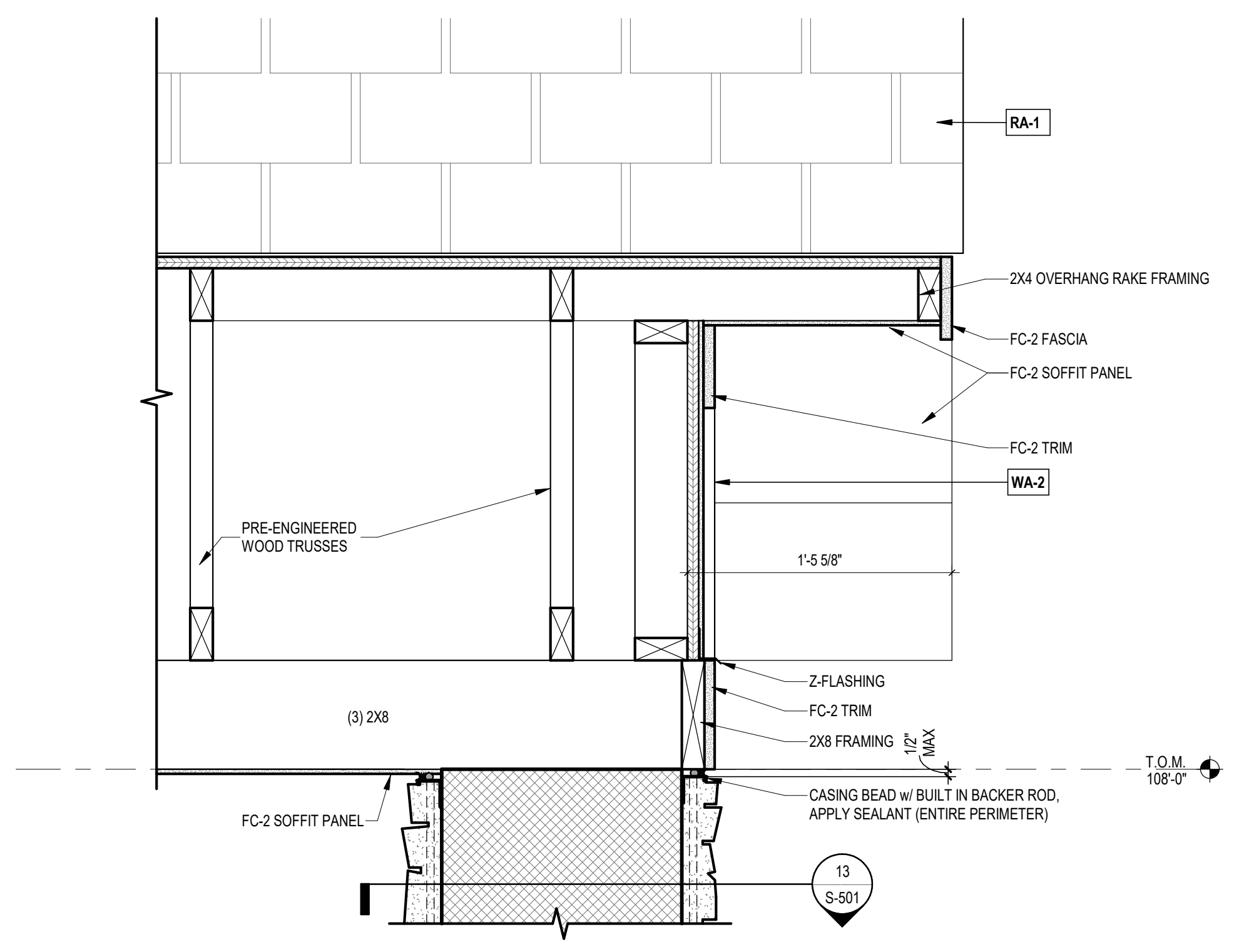
COPYRIGHT 2024 OHM. ALL DRAWINGS AND WRITTEN MATERIALS APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF OHM AND THE SAME MAY NOT BE DUPLICATED, DISTRIBUTED, OR DISCLOSED WITHOUT PRIOR WRITTEN CONSENT OF OHM.



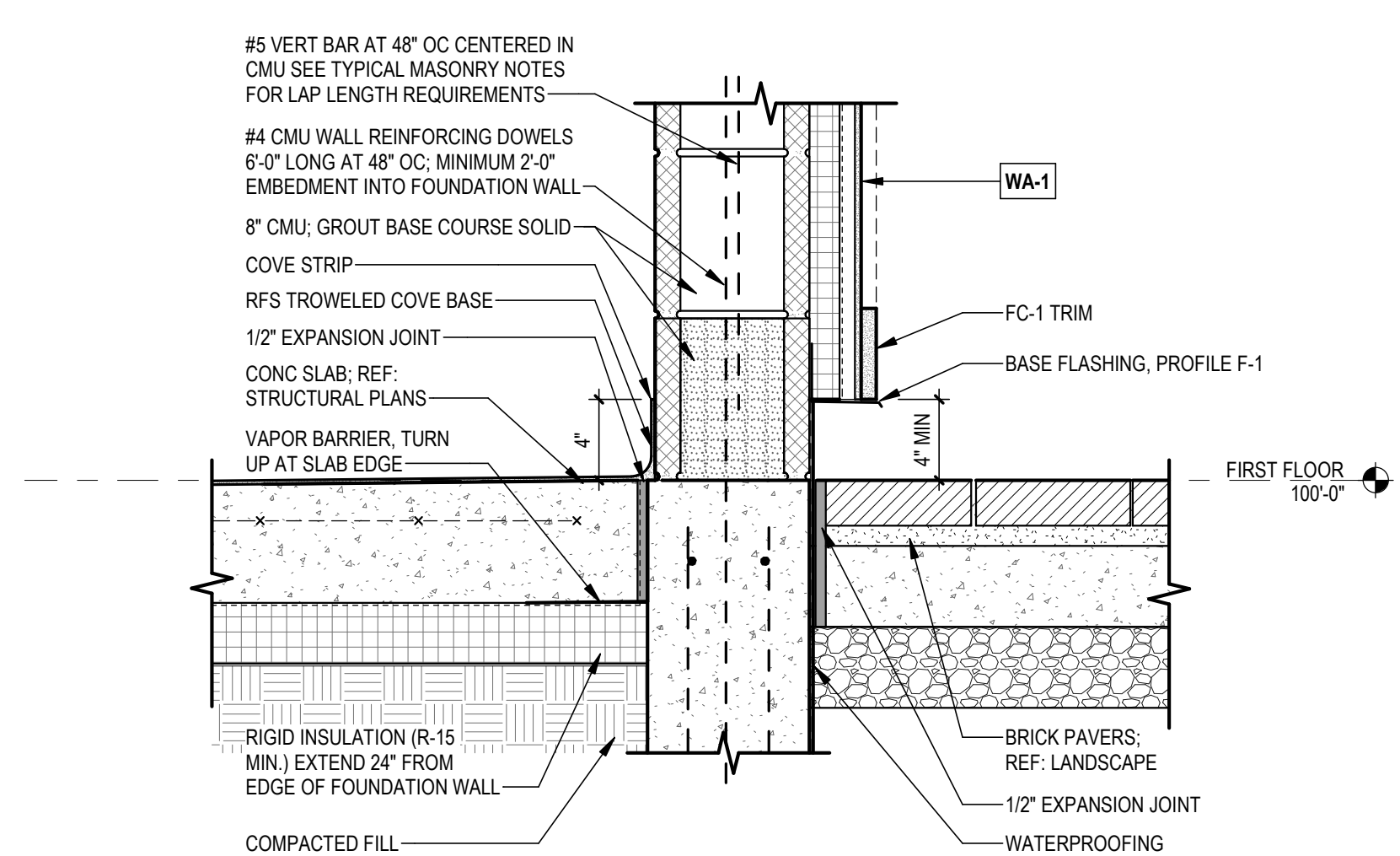
**5 FRAMING AT CUPOLA**  
1 1/2" = 1'-0"



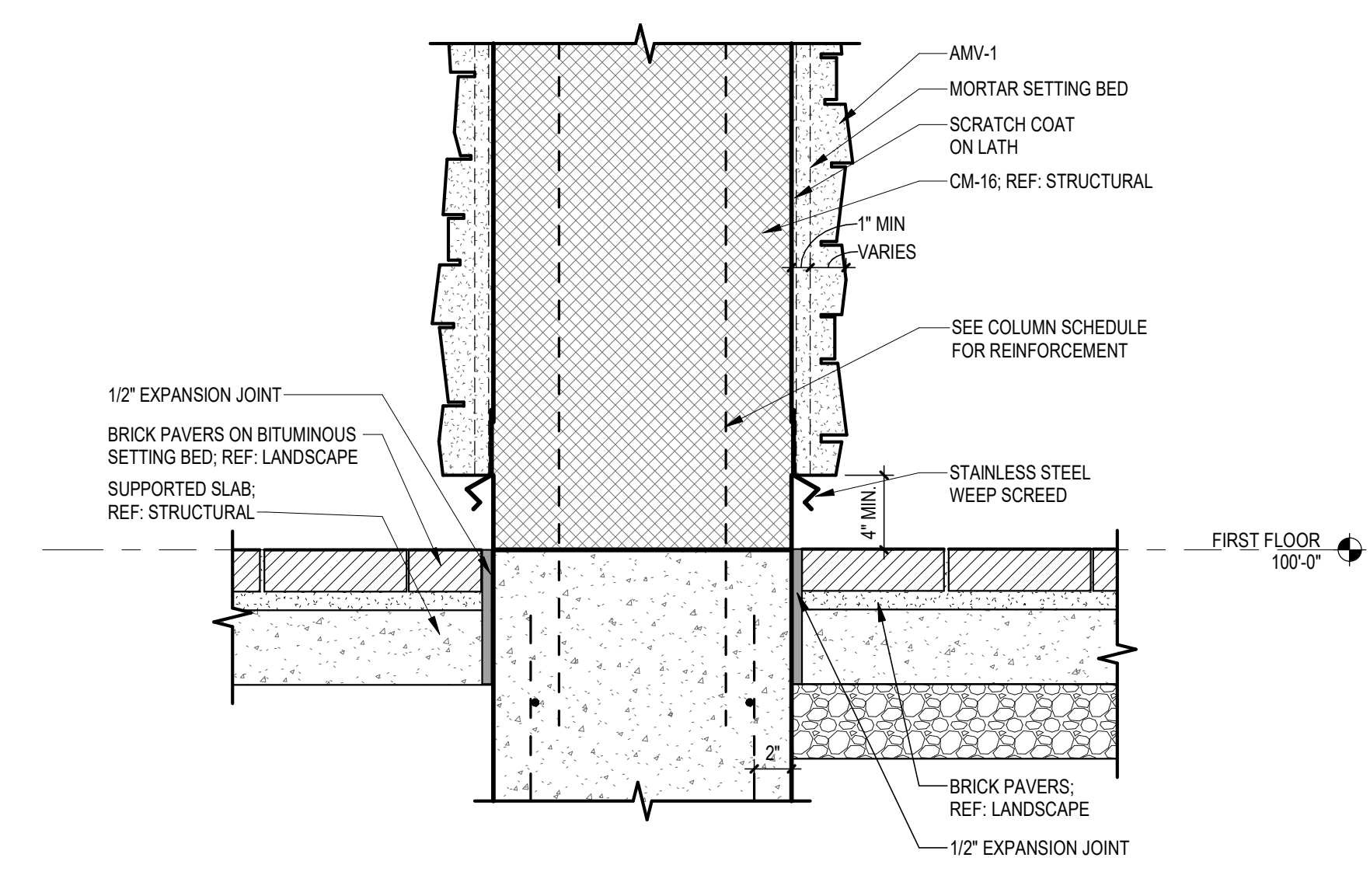
**4 TOP OF WALL**  
1 1/2" = 1'-0"



**3 OVERHANG AT MASONRY COLUMN**  
1 1/2" = 1'-0"

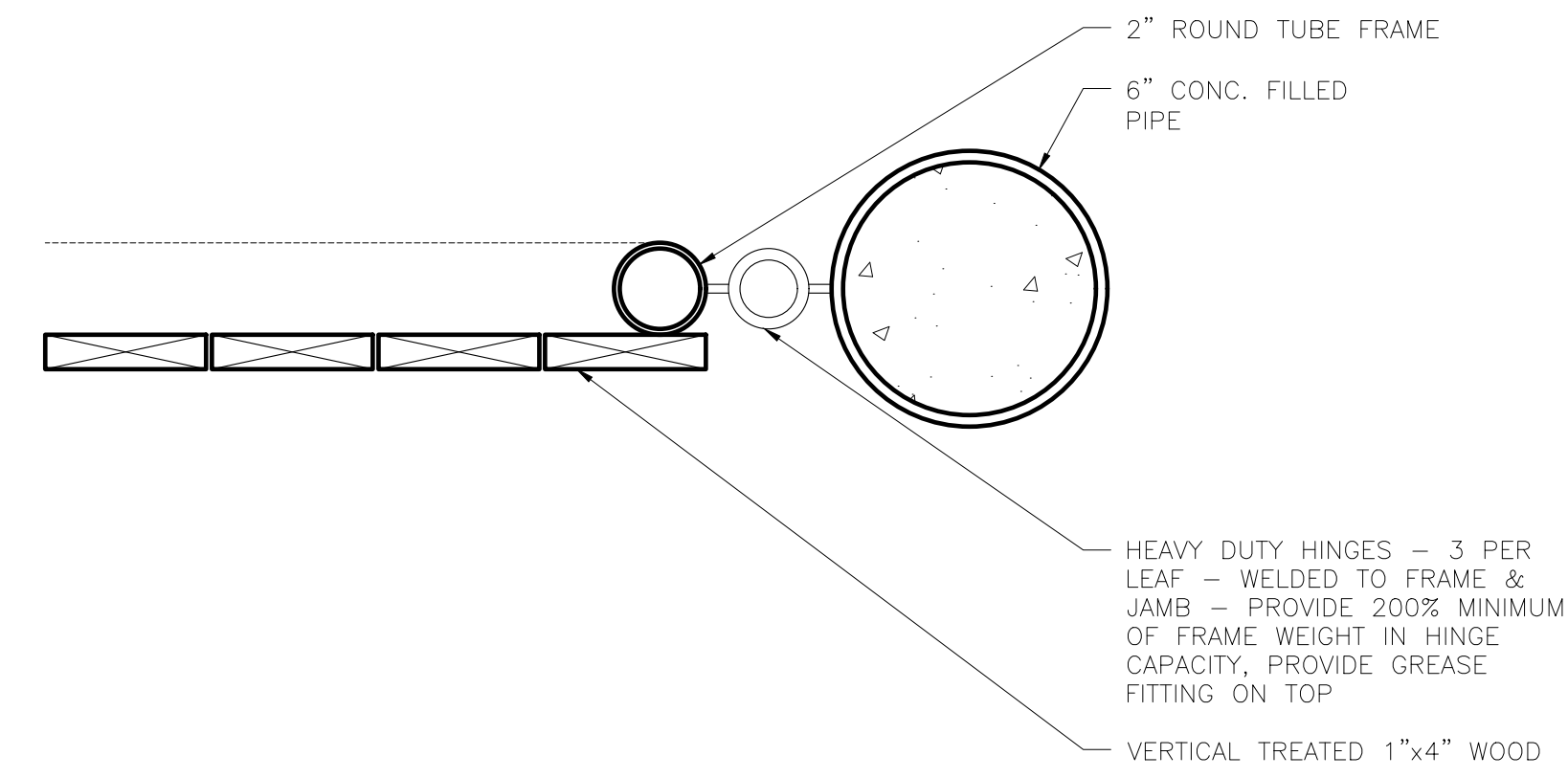


**2 TYPICAL BASE OF WALL**  
1 1/2" = 1'-0"

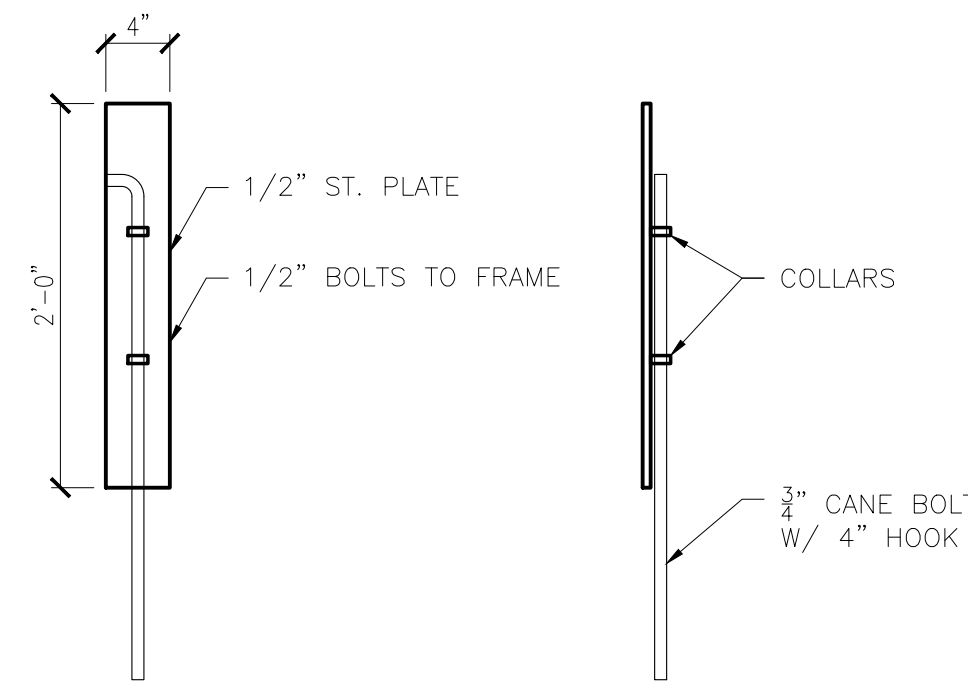


**1 BASE OF MASONRY COLUMN**  
1 1/2" = 1'-0"

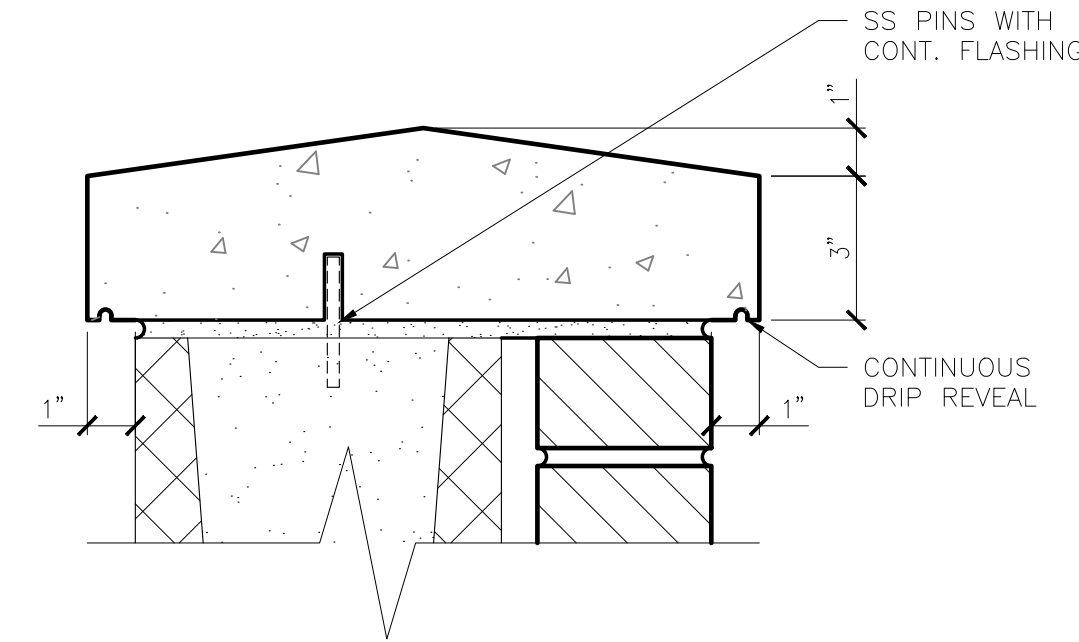




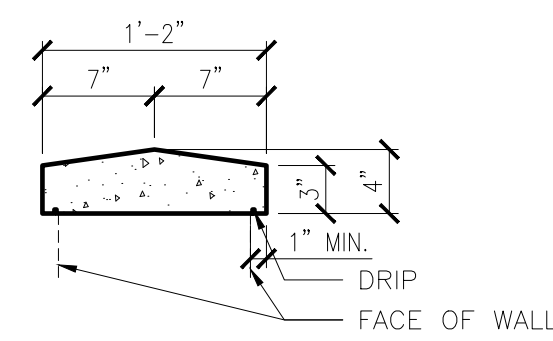
**4** DETAIL AT DOOR HINGES  
1" = 1'-0"



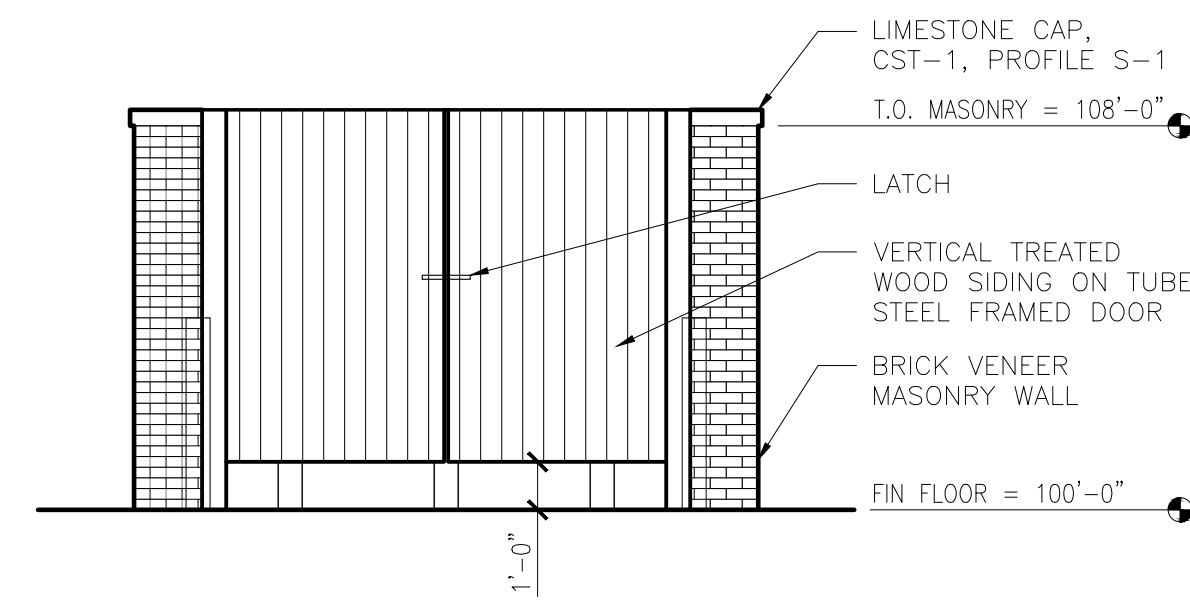
**3** DETAIL AT DOOR CANE BOLTS  
3" = 1'-0"



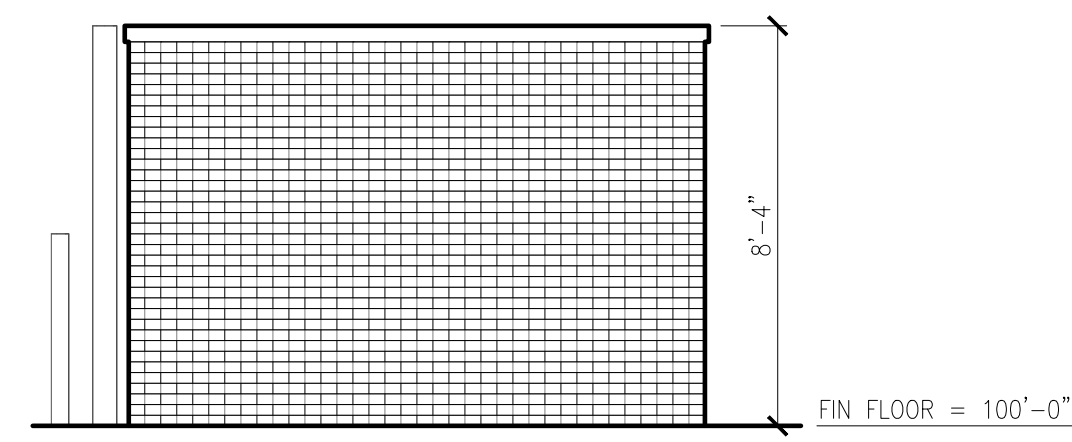
**2** ENLARGED SECTION DETAIL AT WALL CAP  
3" = 1'-0"



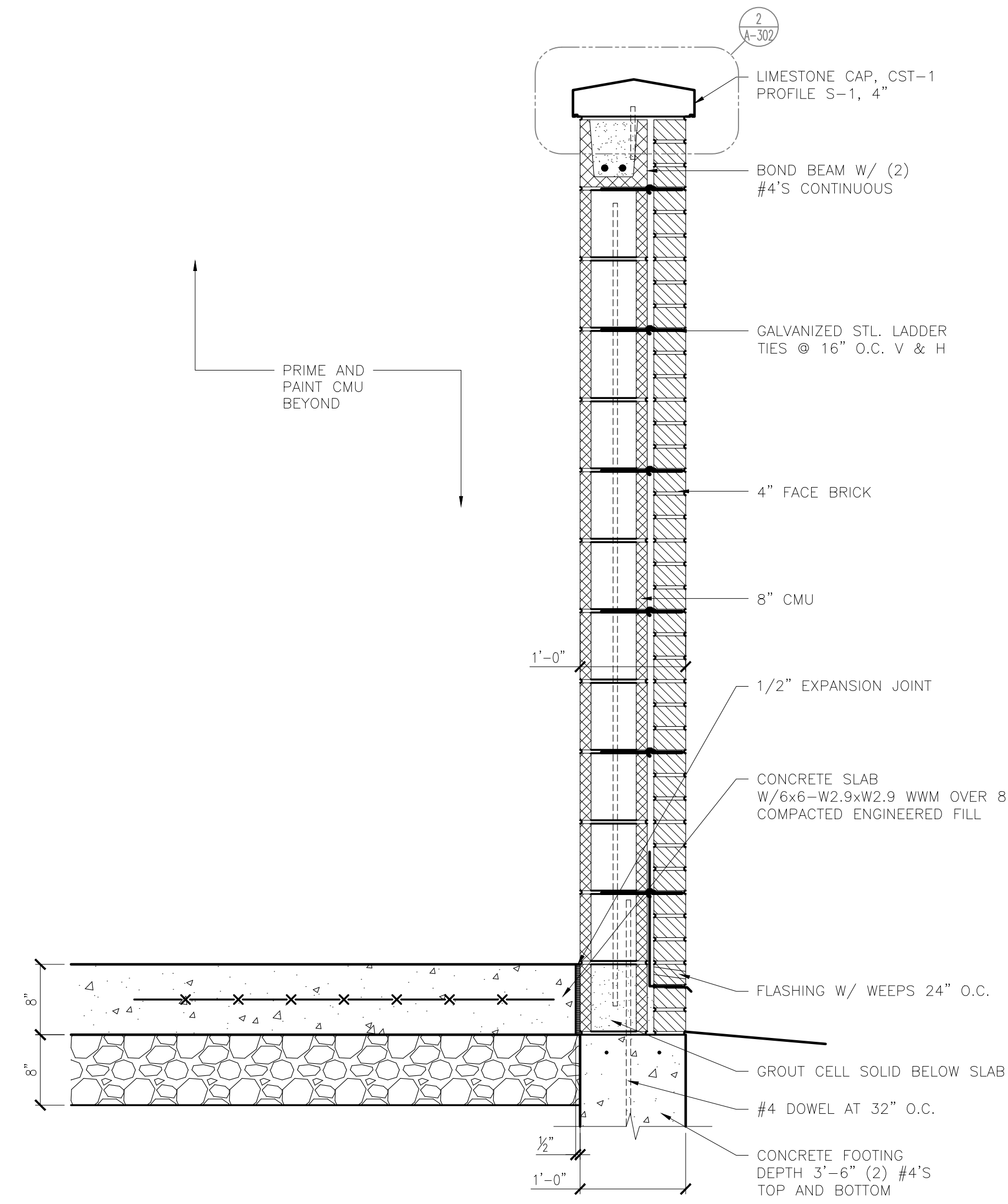
STONE PROFILE TYPE "S-1"



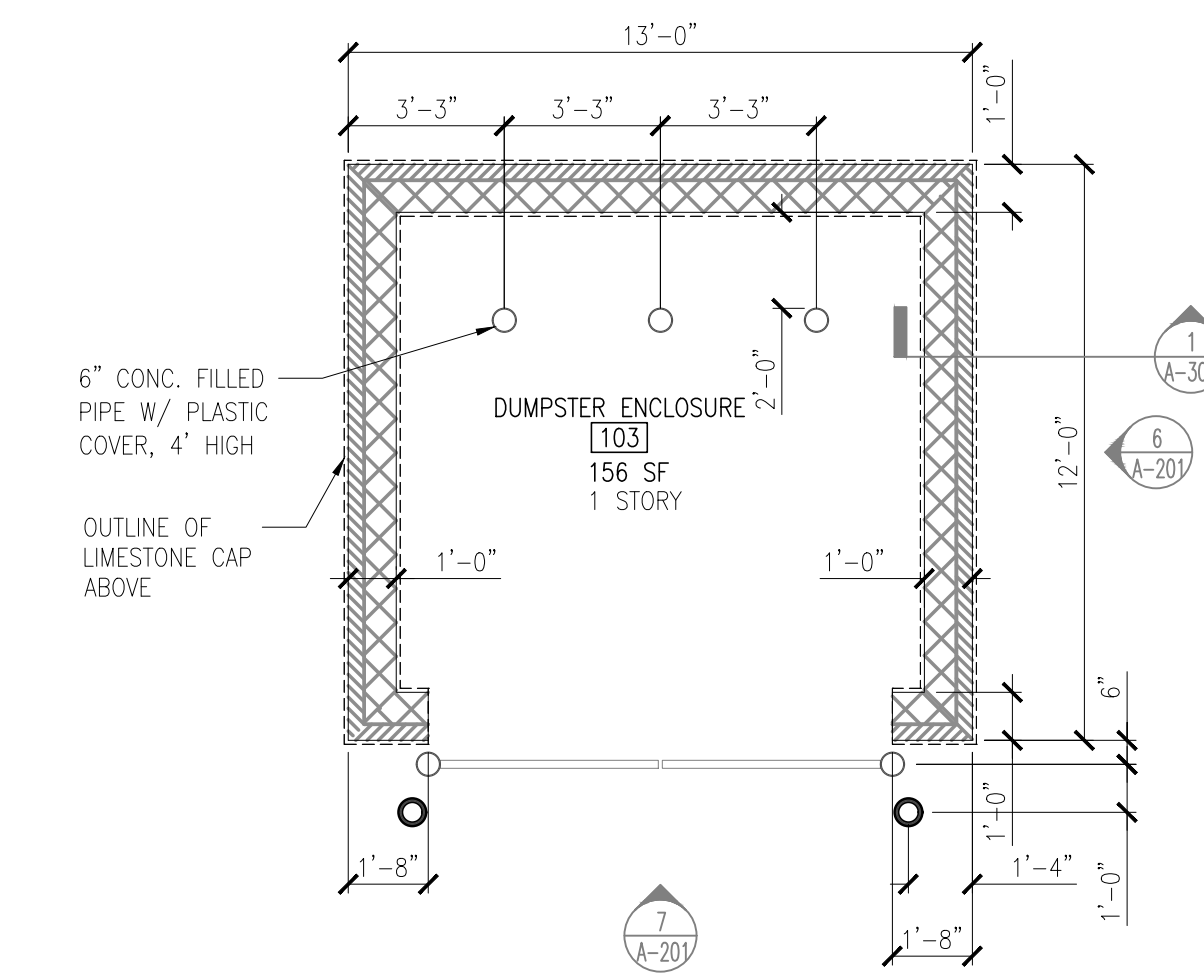
**7** DUMPSTER ENCLOSURE - SOUTH ELEVATION  
1/4" = 1'-0"



**6** DUMPSTER ENCLOSURE - EAST ELEVATION  
1/4" = 1'-0"



**1** DUMPSTER ENCLOSURE - WALL SECTION  
1" = 1'-0"



**3** DUMPSTER ENCLOSURE FLOOR PLAN  
1/4" = 1'-0"

ISSUED FOR:	2024/1/22
BD SET	DATE
REVISION	DESCRIPTION

PROJECT NUMBER	PM
0133-24-0020	CM
CANTON CHARTER TOWNSHIP	
CHERRY HILL VILLAGE PHASE 1	
CANTON TOWNSHIP, MICHIGAN	
DUMPSTER ENCLOSURE	

PLUMBING FIXTURE SCHEDULE

TYPE	DESCRIPTION	MANUFACTURER	CATALOG NO.	TRIM	REMARKS	CW	HW	WASTE	VENT	ADA
WC-1	WALL MOUNTED WATER CLOSET	KOHLER	KINGSTON K-84325	LUSTRA K-4670-SC SEAT, SLOAN ROYAL 110 ESS FLUSH VALVE ZURN Z1202-N4 VERTICAL DISCHARGE CARRIER	HARD WIRED FLUSH VALVE	1"	---	3"	2"	Y
L-1	WALL HUNG VITREOUS CHINA LAVATORY	KOHLER	KINGSTON K-2007	FAUCET- KOHLER KUMIN K-103K37-SANA SENSORED, HARD WIRED - K13480	MIXING VALVE WATTS MMV-M1, P-TRAP PROTECTION TRUBRO LAV GUARD 2, SELECT CARRIER FOR APPLICATION	1/2"	1/2"	1-1/2"	1-1/2"	Y
S-1	24X24 FLOOR MOUNTED MOP SINK	MUSTEE	63M	FAUCET - CHICAGO FAUCETS 835-369CP WALL GUARDS - 67.24C BUMPER GUARDS - 36.403 HOSE AND HANGER - 65.700 MOP HANGER - 65.600	REMOVABLE STAINLESS STEEL STRAINER, MOUNT FAUCET 36" AFF	1/2"	1/2"	1-1/2"	1-1/2"	
DF-1	B-LEVEL EXTERIOR DRINKING FOUNTAIN WITH BOTTLE FILLER	ELKAY	VRCTLDDMWSK	STAINLESS STEEL, SURFACE WALL MOUNTED, EWF3000 FILTER, 98324C CANE APRON	SELECT CARRIER FOR APPLICATION.	1/2"	---	1-1/2"	1-1/2"	Y
FD-1	FLOOR DRAIN, CAST IRON BODY WINICKEL BRONZE FINISH, ADJUSTABLE COLLAR	ZURN	Z415-BZ1		VERIFY SETTING BEFORE CONCRETE SETS. PROVIDE WITH SURE SEAL TRAP SEAL.	---	---	3"	---	
FCO-1	FLOOR CLEANOUT, CAST IRON BODY, EPOXY COATED, REMOVABLE, ADJUSTABLE	ZURN	Z1400	BRASS PLUG, 8" ROUND NEOPRENE GASKET		---	---	3"	---	
WHA-1	WATER HAMMER ARRESTOR	SOUIX CHIEF	653-B			---	---	---	---	
WHA-2	WATER HAMMER ARRESTOR	SOUIX CHIEF	652-A			---	---	---	---	
WH-1	ELECTRIC WATER HEATER, 20 GAL, 3kW	LOCHINVAR	JUNIOR JET-20 SCF	120V, 1φ, 60 Hz		3/4"	3/4"	3/4"	---	

GENERAL NOTES - PLUMBING

- ALL PLUMBING EQUIPMENT AND INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE 2021 STATE OF MICHIGAN PLUMBING CODE AND THE 2021 INTERNATIONAL PLUMBING CODE.
- THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING A PLUMBING PERMIT AND INSPECTIONS. A FINAL INSPECTION CERTIFICATE SHALL BE SUBMITTED BEFORE FINAL PAYMENT WILL BE ISSUED.
- DRAWINGS INDICATE REQUIRED SIZES AND POINTS OF TERMINATION OF PIPES AND SUGGESTED ROUTES. IT IS NOT THE INTENTION OF THE DRAWINGS TO INDICATE ALL NECESSARY OFFSETS. INSTALL WORK IN MANNER TO CONFORM TO STRUCTURE, AVOID OBSTRUCTIONS, PRESERVE HEADROOM AND KEEP OPENINGS AND PASSAGEWAYS CLEAR. DO NOT SCALE FROM DRAWINGS.
- THE PLUMBING CONTRACTOR SHALL FURNISH SHOP DRAWINGS ON FIXTURES, APPURTENANCES AND MATERIALS THAT THEY INTEND TO FURNISH, FOR APPROVAL TO OWNER.
- PROTECT ALL EQUIPMENT AND FIXTURES STORED OR SET IN PLACE ON JOB.
- ALL VENT LINES SHALL BE INSTALLED VERTICAL OR SLOPED UP TO VTR.
- ALL PIPING TO BE CONCEALED UNLESS OTHERWISE NOTED ON PLANS.
- EACH RISER SHALL BE VALVED IN AN ACCESSIBLE LOCATION.
- EACH PLUMBING FIXTURE SHALL BE PROVIDED WITH AN ACCESSIBLE SHUT OFF VALVE ON SUPPLY LINES.
- PROVIDE FIRESTOPPING AT ALL NEW PENETRATIONS OF FIRE RATED FLOOR AND WALL ASSEMBLIES.
- A BOUND MANUAL SHALL BE SUBMITTED UPON COMPLETION WITH MAINTENANCE INSTRUCTIONS, PARTS LISTS, AND MANUFACTURER'S WARRANTIES. ALSO A WARRANTY FROM THE PLUMBING CONTRACTOR, ALONG WITH RECORD DRAWINGS SHALL BE SUBMITTED AT THIS TIME.

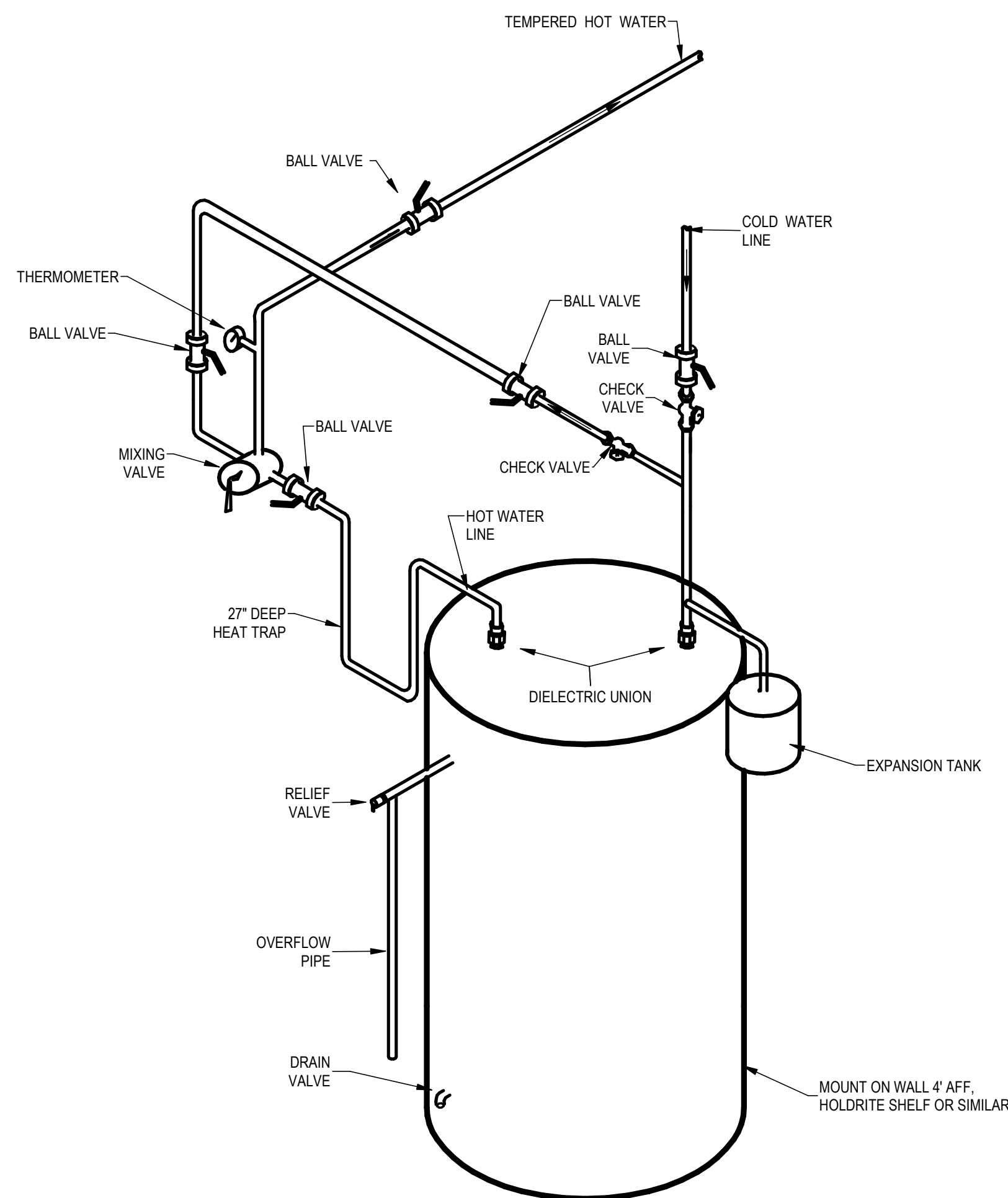


PLUMBING ABBREVIATIONS

AAV	AIR ADMITTANCE VALVE
AFF	ABOVE FINISHED FLOOR
B	
BFP	BACK FLOW PREVENTER
C	
CA	COMPRESSED AIR
CW	DOMESTIC COLD WATER
D	
DF	DRINKING FOUNTAIN
DN	DOWN
DW	DISHWASHER
DWV	DRAIN WASTE & VENT
E	
EWC	ELECTRIC WATER COOLER
F	
FCO	FLOOR CLEAN OUT
FD	FLOOR DRAIN
G	
G	NATURAL GAS
H	
HB	HOSE BIB
HVAC	HEATING VENTILATING & AIR CONDITIONING
HW	DOMESTIC HOT WATER
HWC	HOT WATER CIRCULATION
HWCP	HOT WATER CIRCULATION PUMP
L	

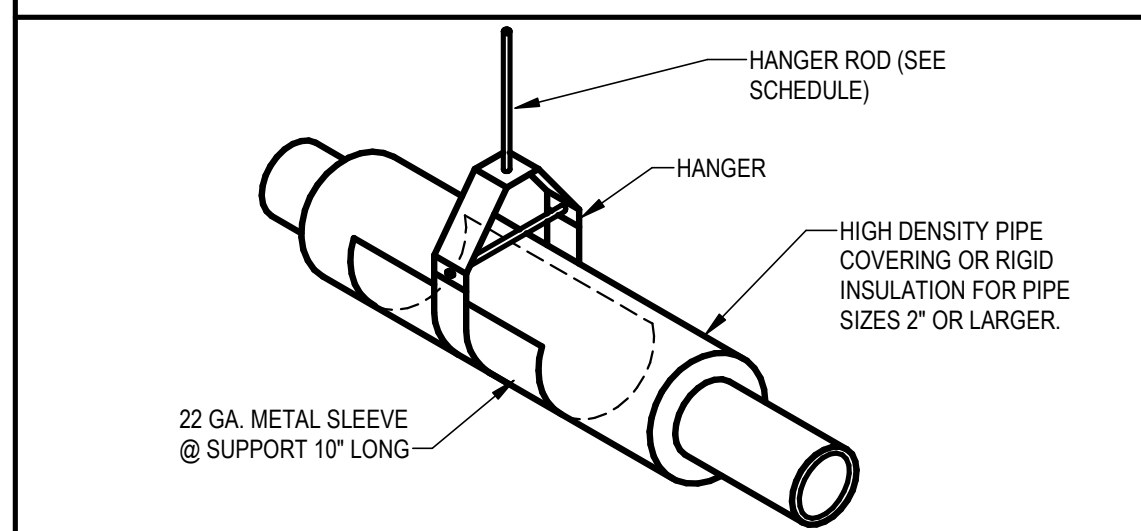
PLUMBING ABBREVIATIONS

L	LAVATORY
M	
MH	MANHOLE
MISC	MISCELLANEOUS
MTD	MOUNTED
O	
OD	OVERFLOW DRAIN
P	
PRV	PRESSURE REDUCING VALVE
R	
RD	ROOF DRAIN
S	
S	SINK
SH	SHOWER
T	
TYP	TYPICAL
U	
U	URINAL
V	
V	SANITARY VENT
VRT	VENT THROUGH ROOF
W	
W	SANITARY WASTE
WC	WATER CLOSET
WCO	WALL CLEAN OUT
WH	WATER HEATER
WHA	WATER HAMMER ARRESTOR



1 ELECTRIC WATER HEATER DETAIL  
N.T.S.

PIPE HANGER SCHEDULE



PIPE SIZE (NOMINAL)	HANGER SPACING (FT)				HANGER ROD SIZE
	STEEL	CAST IRON	COPPER	PVC/ABS	
1 1/2"	5	-	6	3	3/8"
3/4"	6	-	6	4	3/8"
1"	7	-	6	4	3/8"
1 1/4"	8	-	6	4	3/8"
1 1/2"	9	5	10	4	3/8"
2"	10	5	10	4	3/8"
2 1/2"	10	-	10	4	1/2"
3"	10	5	10	4	1/2"
4"	10	5	10	4	1/2"
5"	10	5	10	-	1/2"
6"	10	5	10	-	1/2"

PIPE INSULATION SCHEDULE

PIPE SYSTEM	THICKNESS	TYPE	REMARKS
DOMESTIC HOT WATER	1" TO 1 1/2" SEE NOTE 1	FIBERGLASS	SELF SEALING W/PVC FITTING COVERS
DOMESTIC COLD WATER	1"	FIBERGLASS	SELF SEALING W/PVC FITTING COVERS
HOT WATER RECIRCULATING	1" TO 1 1/2" SEE NOTE 1	FIBERGLASS	SELF SEALING W/PVC FITTING COVERS
ROOF & OVERFLOW DRAINS	1"	FIBERGLASS	SELF SEALING W/PVC FITTING COVERS

1. FOR PIPING NO LARGER THAN 1 1/2", INSULATION THICKNESS SHALL BE 1". FOR PIPING 1 1/2" AND LARGER, INSULATION THICKNESS SHALL BE 1 1/2"

PLUMBING SYMBOLS LEGEND

PIPING	NEW	EXISTING	DEMOLISH
NATURAL GAS	⊖-6" G	⊖-6" G	⊖-6" G
COMPRESSED AIR	⊖-6" CA	⊖-6" CA	⊖-6" CA
DOMESTIC COLD WATER	⊖-6" CW	⊖-6" CW	⊖-6" CW
DOMESTIC HOT WATER	⊖-6" HW	⊖-6" HW	⊖-6" HW
HOT WATER CIRCULATION	⊖-6" HWC	⊖-6" HWC	⊖-6" HWC
ROOF OVERFLOW DRAIN	⊖-6" OD	⊖-6" OD	⊖-6" OD
ROOF DRAIN	⊖-6" RD	⊖-6" RD	⊖-6" RD
SANITARY VENT	⊖-6" V	⊖-6" V	⊖-6" V
SANITARY WASTE	⊖-6" W	⊖-6" W	⊖-6" W

VALVES	PIPE FITTINGS	PIPE FITTINGS
	HOSE BIB	AIR CHAMBER
	CONNECT TO EXISTING	AIR ELIMINATOR
	ELBOW DOWN	AIR SEPARATOR
	ELBOW UP	AUTOMATIC AIR VENT
	TEE UP	COMPOUND GAUGE
	TEE DOWN	PRESSURE GAUGE
	CLEAN OUT	SHOCK ABSORBER
	CONCENTRIC REDUCER	
	ECCENTRIC REDUCER	
	END CAP	
	UNION	
	STRAINER	
	FLANGED CONNECTION	
	EXPANSION JOINT	

OTHER SYMBOLS	
	PLUMBING FIXTURE / EQUIPMENT INDICATOR
	FLOOR DRAIN
	PIPE BREAK LINE
	PIPE END

ISSUED FOR BID SET 2024/1/22

PROJECT NUMBER 0133-24-0020

CANTON CHARTER TOWNSHIP  
CHERRY HILL VILLAGE  
Cherry Hill Rd, Canton, MI 48187

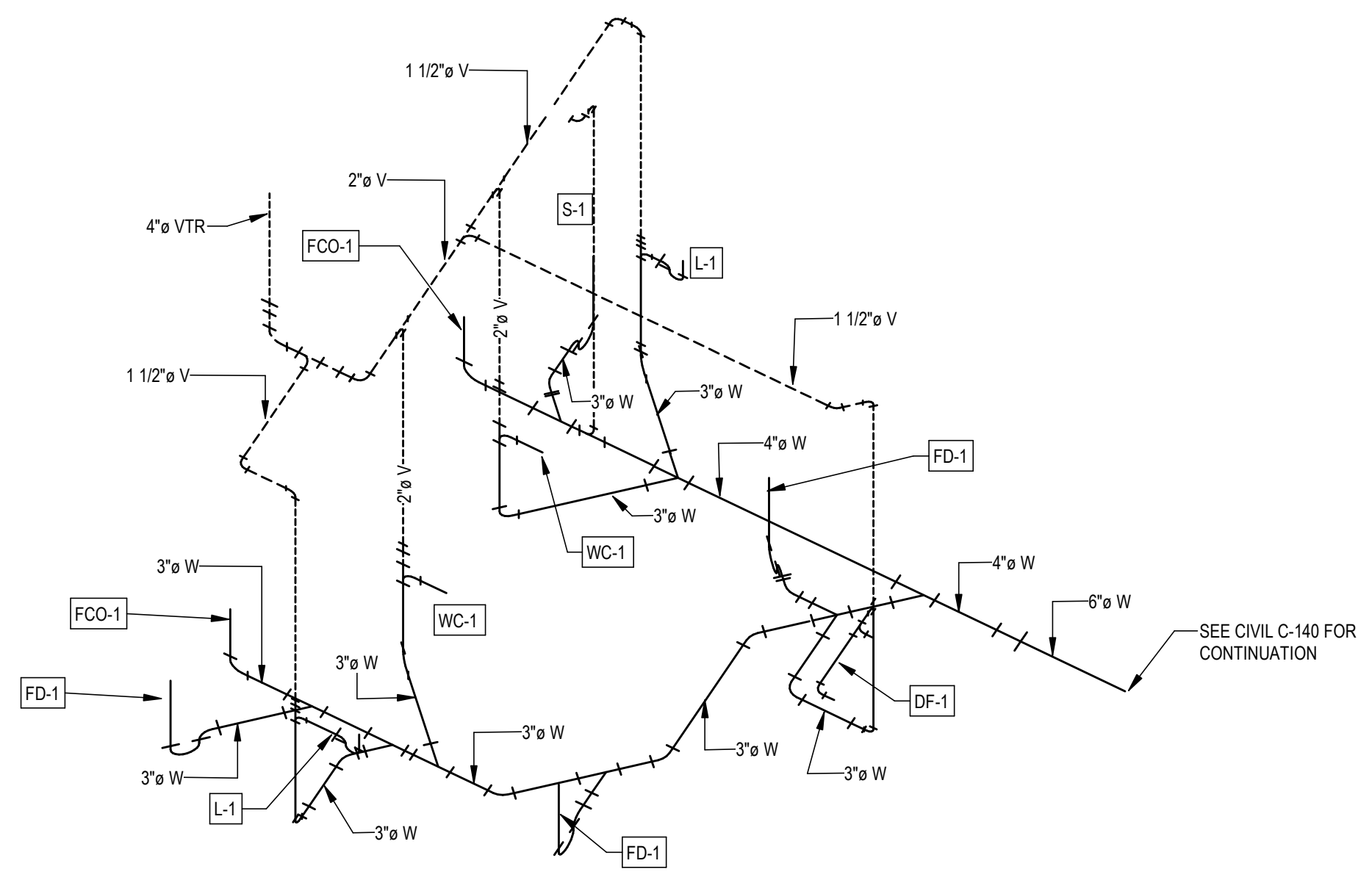
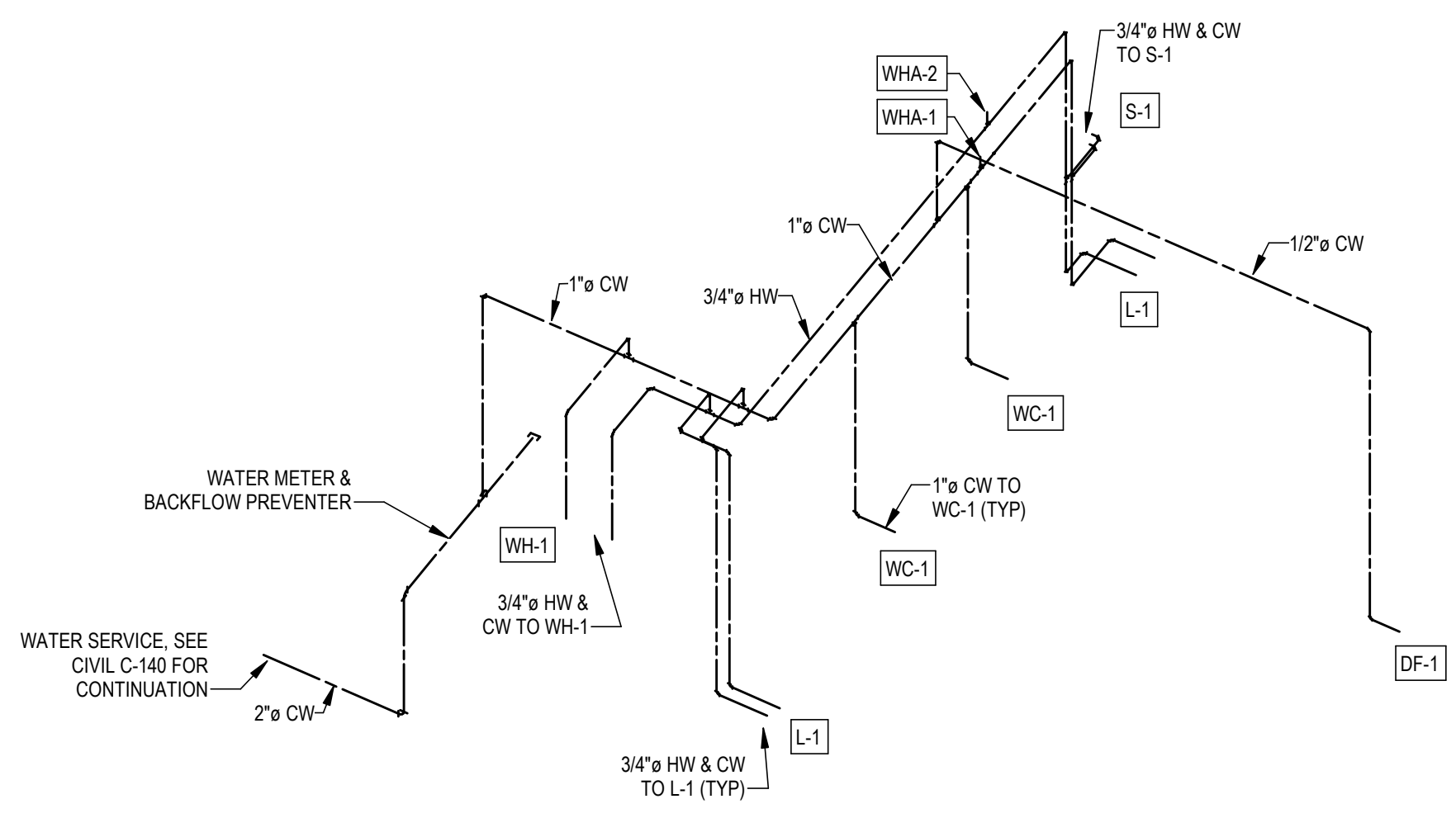
PLUMBING NOTES AND SYMBOLS

P-001



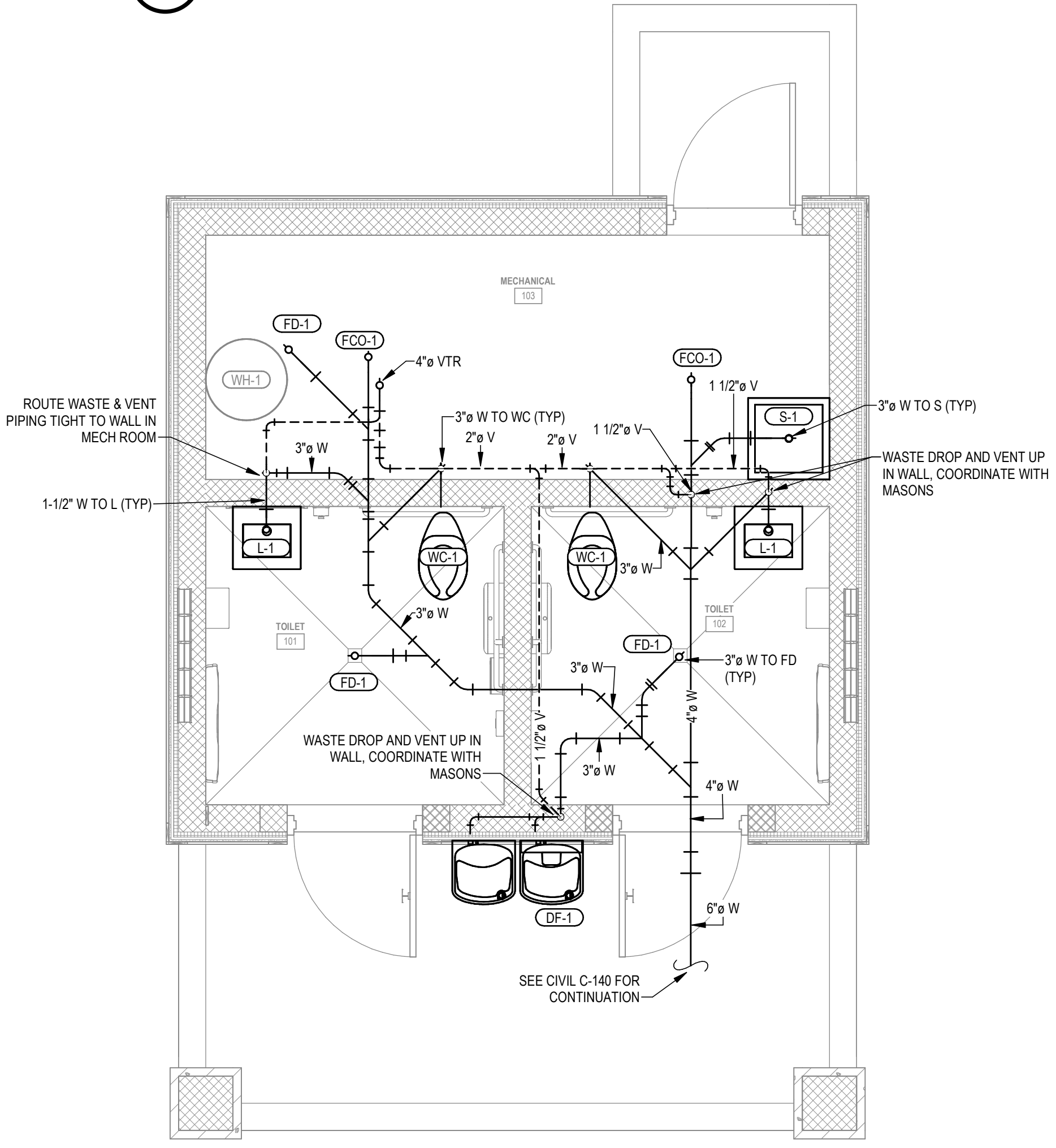
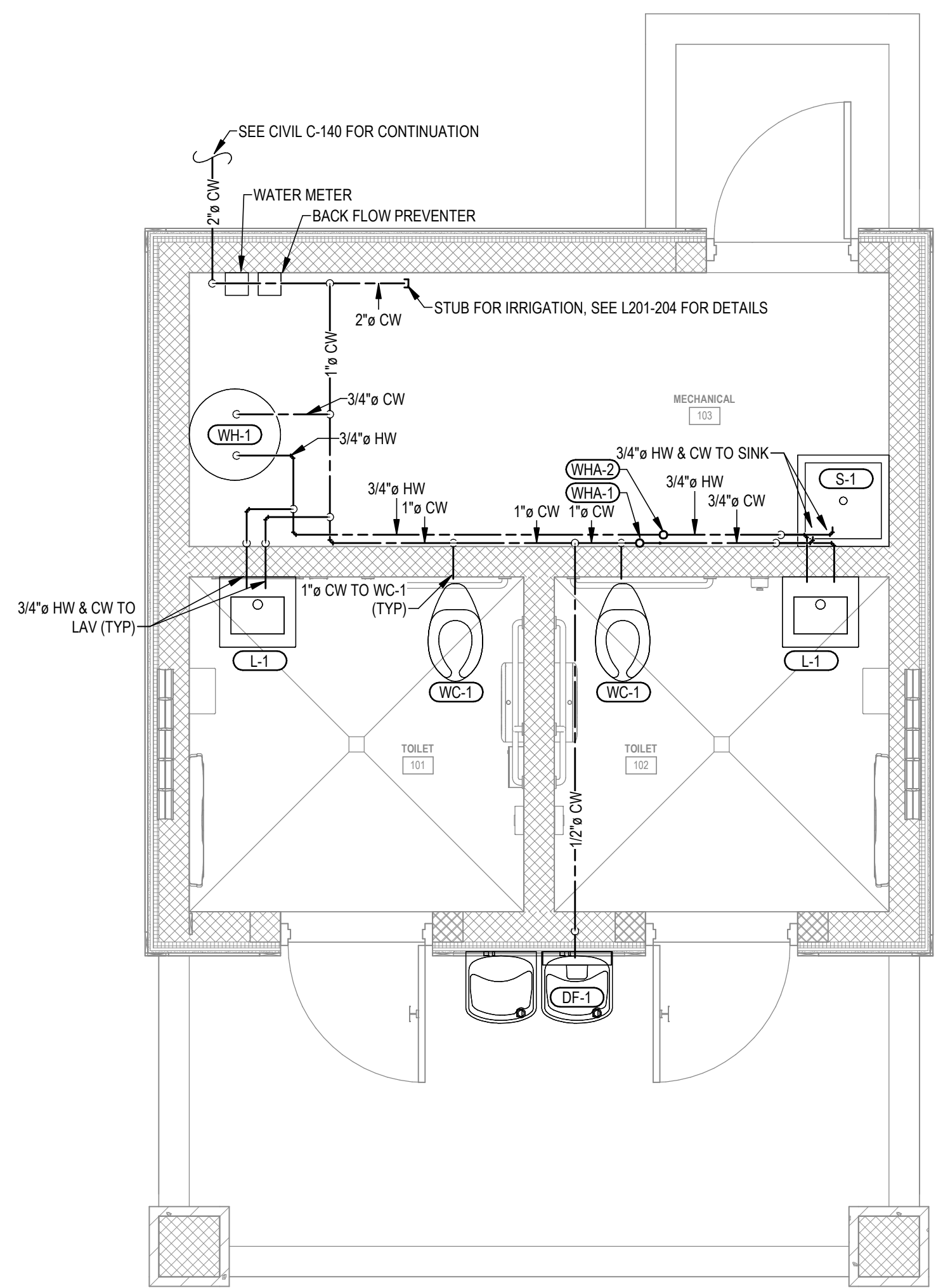
**GENERAL NOTES - DOMESTIC PLUMBING**

1. THE DRAWINGS INDICATE REQUIRED SIZE AND POINTS OF CONNECTION TO EXISTING SYSTEMS AND SUGGEST PROPER ROUTES TO CONFORM TO STRUCTURE, AVOID OBSTRUCTIONS, AND PRESERVE CLEARANCES. IT SHALL BE THE WORK OF THE CONTRACTOR TO MAKE THE INSTALLATION CONFORM TO STRUCTURE, AVOID OBSTRUCTIONS, PRESERVE HEADROOM, AND KEEP OPENINGS AND PASSAGEWAYS CLEAR WITHOUT FURTHER OBSTRUCTION OR COST TO THE OWNER.
2. COORDINATE AND SCHEDULE ALL CONNECTIONS TO EXISTING SYSTEMS AND SYSTEM SHUT-DOWNS WITH OWNER'S REPRESENTATIVES.
3. EACH PLUMBING FIXTURE SHALL BE PROVIDED WITH AN ACCESSIBLE SHUT OFF VALVE ON SUPPLY LINES.



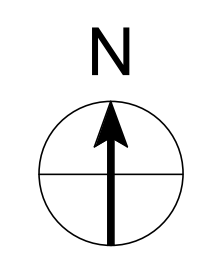
**4 DOMESTIC WATER ISOMETRIC**  
N.T.S

**2 DRAIN, WASTE & VENT ISOMETRIC**  
N.T.S



**3 FIRST FLOOR DOMESTIC WATER PLAN**  
3/8" = 1'-0"

**1 FIRST FLOOR DRAIN, WASTE & VENT PLAN**  
3/8" = 1'-0"



ISSUED FOR BID SET  
20241122

PROJECT NUMBER  
013324020  
CANTON CHARTER TOWNSHIP  
CHERRY HILL VILLAGE  
Cherry Hill Rd, Canton, MI 48187

FIRST FLOOR PLUMBING PLAN

COPYRIGHT 2024 OHM ALL DRAWINGS AND WRITTEN MATERIALS APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF OHM AND THE SAME MAY NOT BE REPRODUCED, DISTRIBUTED, OR DISCLOSED WITHOUT PRIOR WRITTEN CONSENT OF OHM

### MECHANICAL ABBREVIATIONS

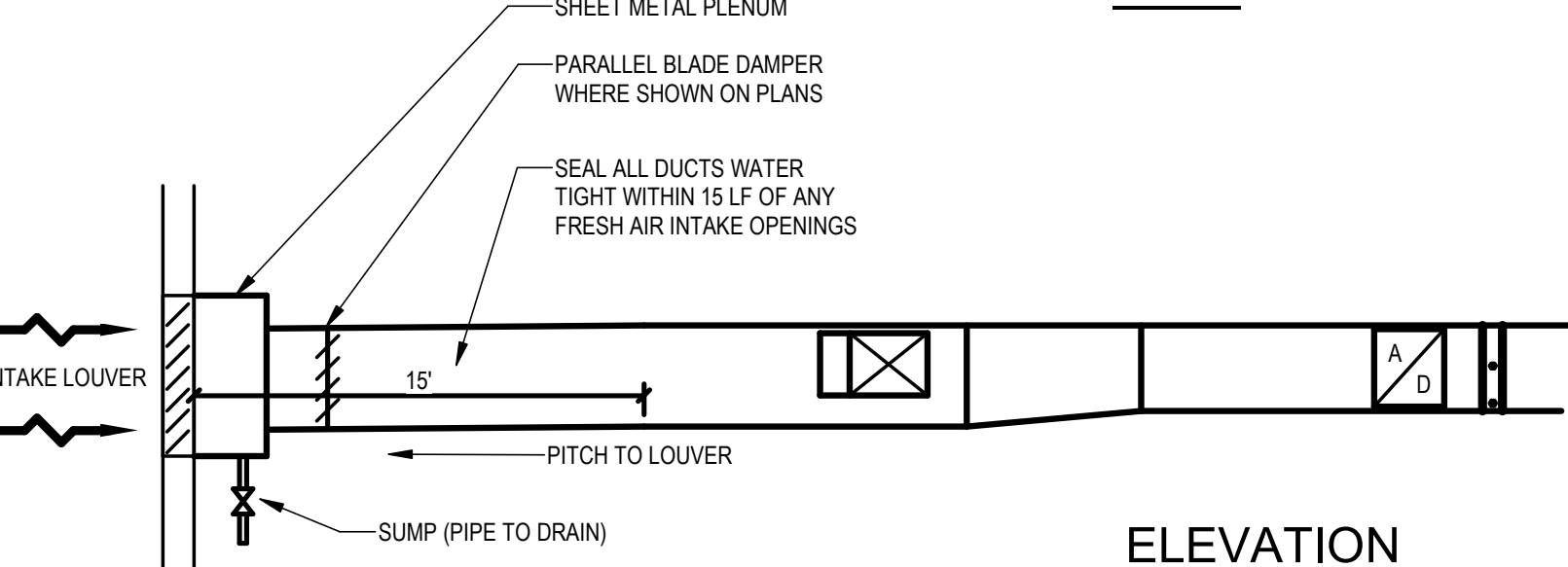
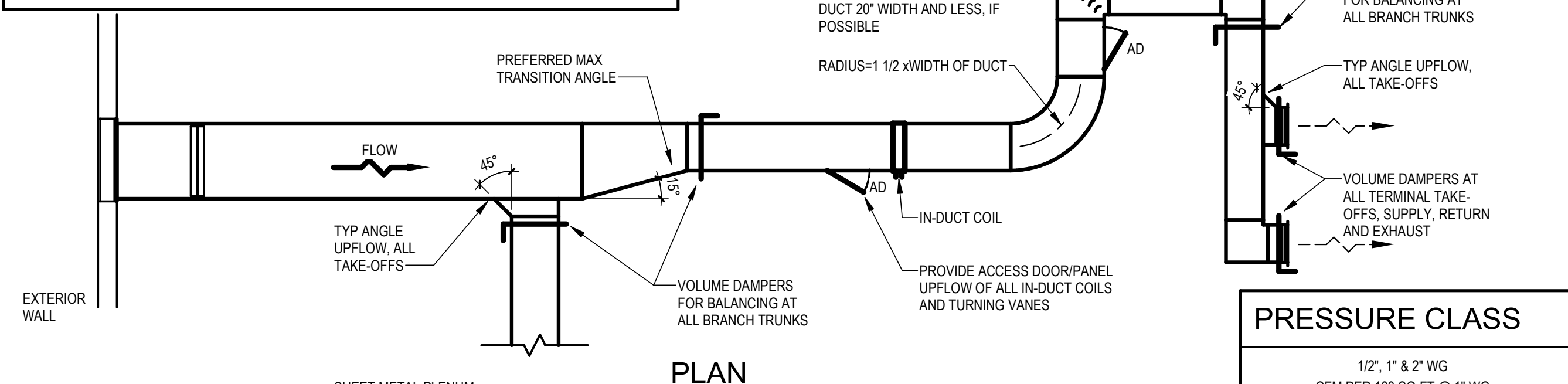
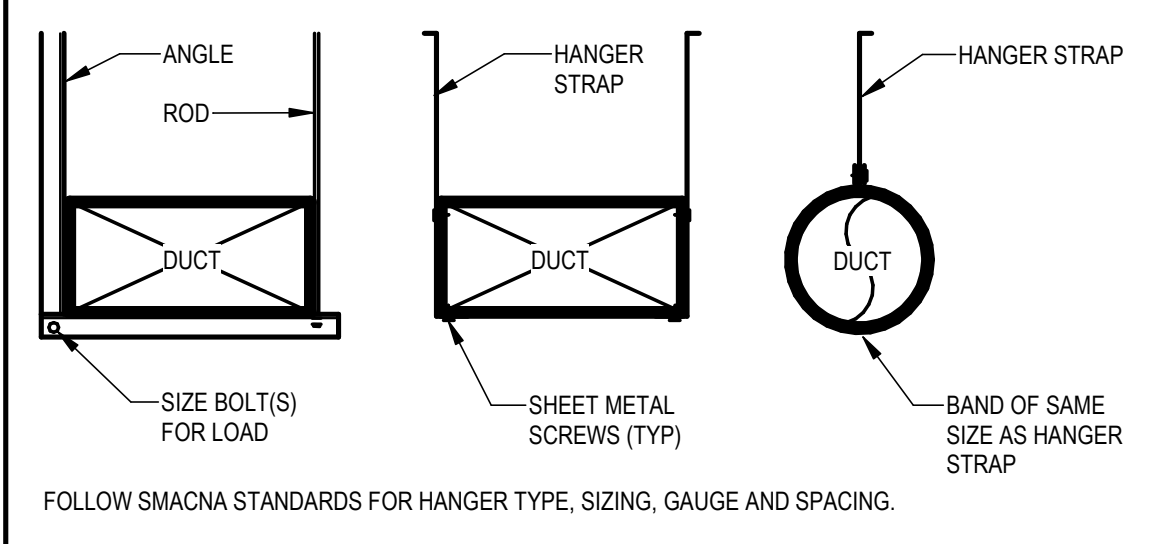
A	AIR
AAV	AUTOMATIC AIR VENT
AD	ACCESS DOOR/PANEL
AF	ABOVE FINISH FLOOR
AHU	AIR HANDLING UNIT
APD	AIR PRESSURE DROP
AS	AIR SEPARATOR
B	BOILER
BDD	BACK DRAFT DAMPER
BFP	BACK FLOW PREVENTER
C	CUBIC FEET PER MINUTE
CG	CEILING GRID
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
CND	STEAM CONDENSATE
COND	CONDENSING UNIT
CONV	CONVECTOR
CR	CONDENSATE RETURN
CUH	CABINET UNIT HEATER
D	DRY BULB
DIA Ø	DIAMETER
DN	DOWN
E	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EDB	ENTERING DRY BULB
EDH	ELECTRIC DUCT HEATER
EF	EXHAUST FAN
ESP	EXTERNAL STATIC PRESSURE
ET	EXPANSION TANK
EWB	ENTERING WET BULB
EWT	ENTERING WATER TEMPERATURE
EXST	EXISTING
F	FAN COIL UNIT
FCU	FAN COIL UNIT
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FT	FOOT / FEET
FTR	FIN TUBE RADIATION
*F	FAHRENHEIT DEGREE
G	NATURAL / LP GAS
GA	GAUGE
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
H	HOT WATER COIL
HP	HORSEPOWER
HPS	HIGH PRESSURE STEAM
HRU	HEAT RECOVERY UNIT
HTWR	HEATING WATER RETURN
HTWS	HEATING WATER SUPPLY
HVAC	HEATING VENTILATING & AIR CONDITIONING
HX	HEAT EXCHANGER

### MECHANICAL ABBREVIATIONS

I	INCH / INCHES
K	KITCHEN HOOD
L	LOUVER
LAT	LEAVING AIR TEMPERATURE
LDB	LEAVING DRY BULB
LF	LINEAL FEET
LPS	LOW PRESSURE STEAM
LWB	LEAVING WET BULB
LWT	LEAVING WATER TEMPERATURE
M	MAXIMUM
MBH	THOUSAND BTU PER HOUR
MCA	MINIMUM CIRCUIT AMPS
MIN	MINIMUM
MISC	MISCELLANEOUS
MTD	MOUNTED
MJA	MAKE-UP AIR UNIT
O	OUTSIDE AIR
OA	OUTSIDE AIR
P	PUMP
PH	PHASE
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
PSIG	POUNDS PER SQUARE INCH GAUGE
R	SUPPLY REGISTER
RA	RETURN AIR
RAD	RADIANT HEATER
RD	ROUND DIFFUSER
RF	RETURN FAN
RH	GRAVITY RELIEF HOOD
RPM	REVOLUTIONS PER MINUTE
S	SUPPLY AIR
SA	SUPPLY AIR
SC	STEAM COIL
SD	SMOKE DAMPER
SF	SUPPLY FAN
SP	STATIC PRESSURE
STD	STANDARD
STM	STEAM
SWG	SIDE WALL GRILLE
SWR	SIDE WALL REGISTER
T	TYPICAL
TYP	TYPICAL
U	UNIT HEATER
V	VENT
V	VENT
VAV	VARIABLE AIR VOLUME
VD	VANED DIFFUSER
W	WATER HEATER
WH	WATER HEATER
WPD	WATER PRESSURE DROP

### DUCTWORK REQUIREMENTS

#### DUCT SUPPORT DETAILS



PRESSURE CLASS	
1/2", 1" & 2" WG	
CFM PER 100 SQ FT @ 1" WG	
SEAL CLASS	C
RECTANGULAR DUCT	24
ROUND DUCT	12

#### NOTES

- ITEMS AS SHOWN ARE THE MINIMUM REQUIRED AND SHALL BE PROVIDED BY THE CONTRACTOR WHETHER SHOWN ON THE FOLLOWING PLANS OR NOT.
- LISTED DUCT SIZES INDICATE THE INSIDE CLEAR DIMENSIONS, NOT INCLUDING DUCT LINER.
- ALL FLAT SURFACES ON DUCTS AND FITTINGS SHALL BE EITHER CROSS BROKE OR BEADED.
- DUCT SEAMS SHALL BE EITHER PITTSBURG OR BUTTON LOCK.
- STANDING RIB CLEATS ARE REQUIRED ON DUCTS HAVING WIDTHS OF 24" OR MORE.
- ALL JOINTS IN SHEET METAL SHALL BE SEALED WITH AN APPROVED DUCT SEALANT.
- ALL DAMPERS MUST HAVE A POSITION INDICATOR ON THE SHAFT.
- DAMPERS GREATER THAN 8" IN WIDTH MUST BE OPPOSED BLADE.

### GENERAL NOTES - MECHANICAL

- DRAWINGS INDICATE REQUIRED SIZES AND POINTS OF TERMINATION OF PIPES AND DUCTS AND SUGGESTED ROUTES. IT IS NOT THE INTENTION OF DRAWINGS TO INDICATE ALL NECESSARY OFFSETS. INSTALL WORK IN MANNER TO CONFORM TO STRUCTURE, AVOID OBSTRUCTIONS, PRESERVE HEADROOM AND KEEP OPENINGS AND PASSAGEWAYS CLEAR. DO NOT SCALE FROM DRAWINGS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF ALL EQUIPMENT AND MATERIALS IN A "NEW" CONDITION DURING CONSTRUCTION.
- PROVIDE BALANCE DAMPERS FOR EACH DIFFUSER/GRILLE AND BRANCH DUCT.
- ALL EXTERNALLY ISOLATED HVAC EQUIPMENT SHALL HAVE FLEXIBLE DUCT CONNECTORS.
- ALL CONDENSATE DRAIN PIPING TO TERMINATE TO DRAIN VIA AIR GAP.
- COORDINATE ROOF MOUNTED EQUIPMENT SIZES WITH ARCHITECTURAL TRADES PRIOR TO CONSTRUCTION.
- ROOF OPENINGS SHALL BE SEALED WEATHER-TIGHT AND WITH ROOFING MATERIALS COMPATIBLE WITH SPECIFIED ROOFING. CONTRACTOR SHALL NOT VOID ROOF WARRANTY.
- DUCT ACCESS PANELS SHALL BE PROVIDED AT ALL FIRE DAMPERS, FIRE/SMOKE DAMPERS, MOTORIZED DAMPERS, AND DUCT SMOKE DETECTORS. WHERE NECESSARY, CEILING ACCESS PANELS SHALL BE PROVIDED AS WELL.
- INSTALL ALL NEW EQUIPMENT IN COMPLIANCE WITH THE MANUFACTURER'S REQUIRED CLEARANCES. ALL DISCONNECTS AND HIGH VOLTAGE ELECTRICAL PANELS SHALL HAVE THE CLEARANCE REQUIRED BY NEC ARTICLE 110 (36" FOR 120/208V, 42" FOR 277/480V, AND 48" WHEN FACING ONE ANOTHER).
- ROUTE ALL CONTROL WIRING TO THE THERMOSTATS AND VAV BOXES WITHIN THE SOFFITS AND WALLS WHEREVER POSSIBLE. WIRING IN ANY WALLS OR EXPOSED SHALL BE IN CONDUIT, WHERE CONNECTING TO VAV BOXES IN EXPOSED AREAS, CONTROL WIRING SHALL BE RUN IN EXPOSED PAINTED CONDUIT. CONDUIT COLOR SHALL BE COORDINATED WITH ARCHITECT.

#### INSULATION SCHEDULE

ITEM	THICKNESS	TYPE	REMARKS
OUTSIDE AIR DUCT	2"	FIBERGLASS	TYPE ASJ
SUPPLY DUCT	1 1/2"	FIBERGLASS	TYPE ASJ
EXHAUST DUCT	2"	FIBERGLASS	TYPE ASJ

- ALL DUCTS WITHIN 25' OF MOTORS, INSTALL 1" MANVILLE LINO-COUSTIC DUCT LINER OR EQUAL, EXCLUDING OA & EA DUCT.
- EXPOSED DUCTWORK SHALL BE INSULATED WITH RIGID FIBERGLASS DUCT INSULATION AND JACKET.
- INSULATE EXHAUST DUCTS WITHIN 10' OF EXTERIOR OPENINGS AND EXHAUST DUCTS EXPOSED TO OUTSIDE AIR.
- DUCT LINER IS FOR COUSTICAL PURPOSES ONLY. EXTERNAL INSULATION IS REQUIRED AS NOTED.

### HVAC SYMBOLS LEGEND

DUCTS			
PROPOSED		EXISTING	DEMOLISH
RECTANGLE	ROUND	RECTANGLE	ROUND
DROP	RISE	DROP	RISE
EXHAUST AIR	12x12 EA	12ø EA	12x12 EA
OUTSIDE AIR	12x12 OA	12ø OA	12x12 OA
RETURN AIR	12x12 RA	12ø RA	12x12 RA
SUPPLY AIR	12x12 SA	12ø SA	12x12 SA

DIFFUSERS & GRILLES		HVAC SYMBOLS		OTHER SYMBOLS	
	CEILING DIFFUSER / GRILLE		THERMOSTAT		TURNING VANES
	CIRCULAR CEILING DIFFUSER / GRILLE		HUMIDISTAT	12x12	DUCT WIDTH x HEIGHT
	LINEAR SLOT DIFFUSER		CONNECT TO EXISTING	12ø	ROUND DUCT DIAMETER
	WALL DIFFUSER / GRILLE		RETURN AIRFLOW		EQUIPMENT INDICATOR
	FLOOR REGISTER		SUPPLY AIRFLOW OUT		
	TRANSFER GRILLE		SUPPLY AIRFLOW DOWN		

DAMPERS	
	MANUAL VOLUME
	MOTORIZED
	PNEUMATIC
	FIRE - HORIZONTAL
	FIRE - VERTICAL
	SMOKE - HORIZONTAL
	SMOKE - VERTICAL
	SMOKE AND FIRE - HORIZONTAL
	SMOKE AND FIRE - VERTICAL

PIPING	
	NATURAL GAS
	FIN TUBE RADIATION



2024.11.22

ISSUED FOR BID SET

PROJECT NUMBER  
0133-24-020

DATE  
11/22/2024

CANTON CHARTER TOWNSHIP  
CHERRY HILL VILLAGE  
Cherry Hill Rd, Canton, MI 48187

MECHANICAL NOTES AND SYMBOLS

COPYRIGHT 2024 OHM. ALL DRAWINGS AND WRITTEN MATERIALS APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF OHM AND THE SAME MAY NOT BE DUPLICATED, DISTRIBUTED, OR DISCLOSED WITHOUT PRIOR WRITTEN CONSENT OF OHM.

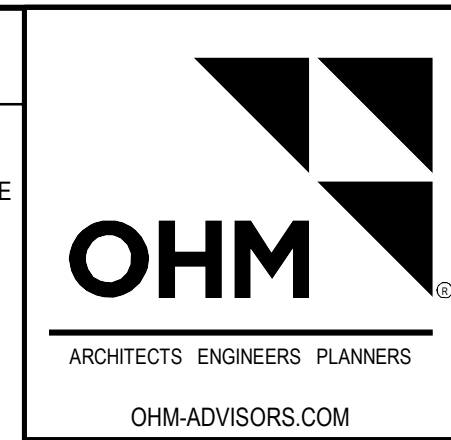
**ENERGY RECOVERY VENTILATOR SCHEDULE**

MARK	SERVICE	LOCATION	SUPPLY AIR				EXHAUST AIR		SUPPLY FAN			EXHAUST FAN			FILTERS	MANUFACTURER	MODEL	NOTES		
			CFM	SUMMER EAT (°F) (DB/WB)	SUMMER LAT (°F) (DB/WB)	WINTER EAT (°F)	WINTER LAT (°F)	ESP (IN-WG)	CFM	ESP (IN-WG)	WATTAGE	VOLTAGE	PHASE	WATTAGE					VOLTAGE	PHASE
ERV-1	RESTROOM	103 MECHANICAL	150	90/74	78/67	2.9	56	0.5	150	0.05	70	120	1	70	120	1	MERV 8	RENEWAIRE	EV PREMIUM LH	1,2

NOTES:  
 1. PROVIDE WITH TWO CEILING OCCUPANCY SENSORS, PART: 131302.  
 2. INTERLOCK TO OUTSIDE AIR LOUVER/DAMPER FROM FACTORY CONTROLS.

**GENERAL NOTES - MECHANICAL HVAC**

- DRAWINGS INDICATE REQUIRED SIZES AND POINTS OF TERMINATION OF PIPES AND DUCTS AND SUGGESTED ROUTES. IT IS NOT THE INTENTION OF DRAWINGS TO INDICATE ALL NECESSARY OFFSETS. INSTALL WORK IN MANNER TO CONFORM TO STRUCTURE. AVOID OBSTRUCTIONS. PRESERVE HEADROOM AND KEEP OPENINGS AND PASSAGEWAYS CLEAR. DO NOT SCALE FROM DRAWINGS.
- MECHANICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE PATCHING, CAPPING, OR REPAIRING OF WALLS AND ROOF WHERE OPENINGS OCCUR AS A RESULT OF REMOVAL OF MECHANICAL AND ELECTRICAL COMPONENTS AS PART OF THIS CONTRACT, UNLESS THE OPENING IS BEING RE-USED OR ENLARGED IN THE RENOVATION WORK.
- PROVIDE BALANCE DAMPERS FOR EACH DIFFUSER/GRILLE AND BRANCH DUCT.
- SIZES INDICATED FOR EXISTING DUCTWORK AND PIPING ARE PER THE ORIGINAL DOCUMENTS. FIELD VERIFY EXACT SIZES AND PROVIDE TRANSITIONS ACCORDINGLY.
- COORDINATE LOCATIONS OF THE THERMOSTATS WITH OTHER TRADES.



**GRAVITY RELIEF HOOD SCHEDULE**

MARK	SERVICE	CFM	THROAT VELOCITY (FPM)	SIZE (INxIN)		ESP (IN-WG)	MANUFACTURER	MODEL	NOTES
				THROAT	HOOD				
GRH-1	ERV-1	150	103	16x16	29	0.001	GREENHECK	GRSR-16	1,2

NOTES:  
 1. PROVIDE WITH SLOPED ROOF CURB 12" MINIMUM HEIGHT AND GRAVITY BACKDRAFT DAMPER.  
 2. CONNECTED TO ERV-1.

**ELECTRIC COIL SCHEDULE**

MARK	SERVICE	LOCATION	CAPACITY (KW)	CFM	ELECTRICAL		MANUFACTURER	MODEL	NOTES
					V/PH/Hz	MCA			
EDH-1	ERV-1	RESTROOM	2	150	208/3/60		RENEWAIRE	EK-1008002	1,2

NOTES:  
 1. SCR CONTROLLABLE, PROVIDE CONTROLS TO MAINTAIN DISCHARGE TEMPERATURE SETPOINT (ADJ).  
 2. CONNECT TO ERV DISCHARGE AIR TEMPERATURE SENSOR.

**LOUVER SCHEDULE**

MARK	SERVICE	CFM	SIZE (IN.)	MAX PRESS. DROP (IN-WG)	MINIMUM FREE AREA	MANUFACTURER	MODEL	NOTES

NOTES:  
 1. CONNECTED TO ERV-1.  
 2. PROVIDE WITH 120V ACTUATOR.

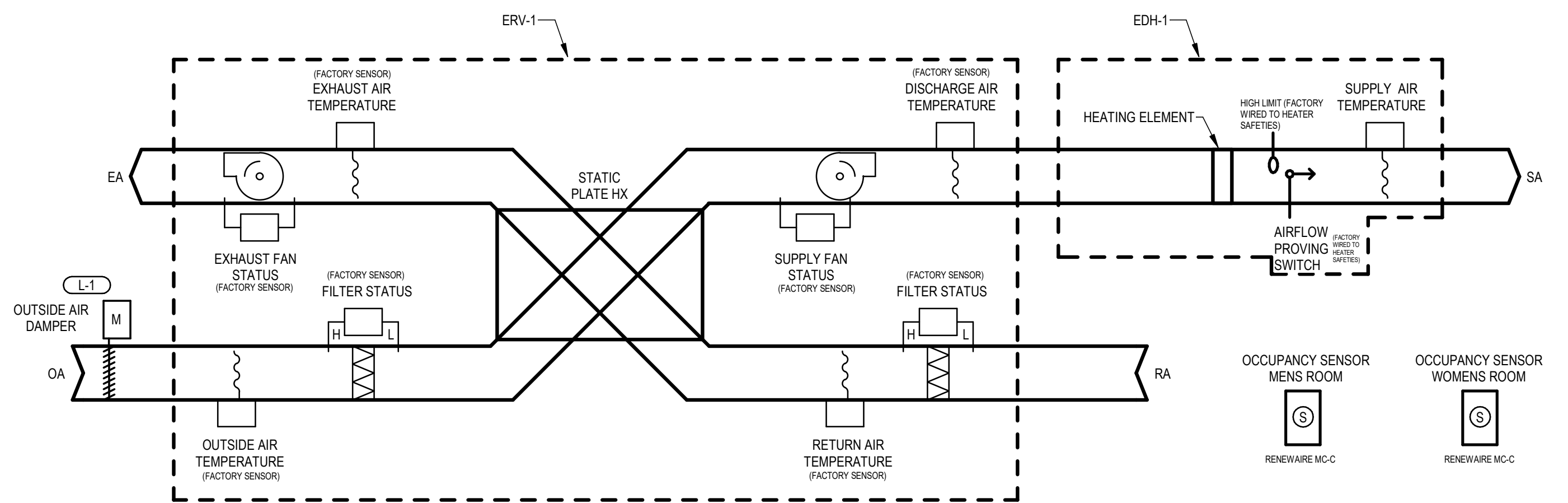
**ELECTRIC CABINET UNIT HEATER SCHEDULE**

MARK	LOCATION	CFM	KW	ELECTRICAL			MANUFACTURER	MODEL	NOTES
				V/PH/Hz	MCA	MOCP			
CUH-1	101 WOMEN	70	1.5	208/1/60	6.3	20	TPICORP	HF3215T2RPW	1,2
CUH-2	102 MEN	70	1.5	208/1/60	6.3	20	TPICORP	HF3215T2RPW	1,2
CUH-3	103 MECHANICAL	70	1.5	208/1/60	6.3	20	TPICORP	HF3215T2RPW	1,2

NOTES:  
 1. PROVIDE WITH INTEGRAL T-STAT.  
 2. MOUNT 16" AFF.

**AIR TERMINAL SCHEDULE**

Mark	FLOW (CFM)	MANUFACTURER	MODEL	DIMENSIONS	SUPPLY	RETURN	EXHAUST	Comments
101.1	75	PRICE	620	16x8	X			
101.2	75	PRICE	80	16x8		X		
102.1	75	PRICE	620	16x8	X		X	
102.2	75	PRICE	80	16x8		X		



**ENERGY RECOVERY VENTILATOR & ELECTRIC DUCT HEATER SEQUENCE OF OPERATION:**

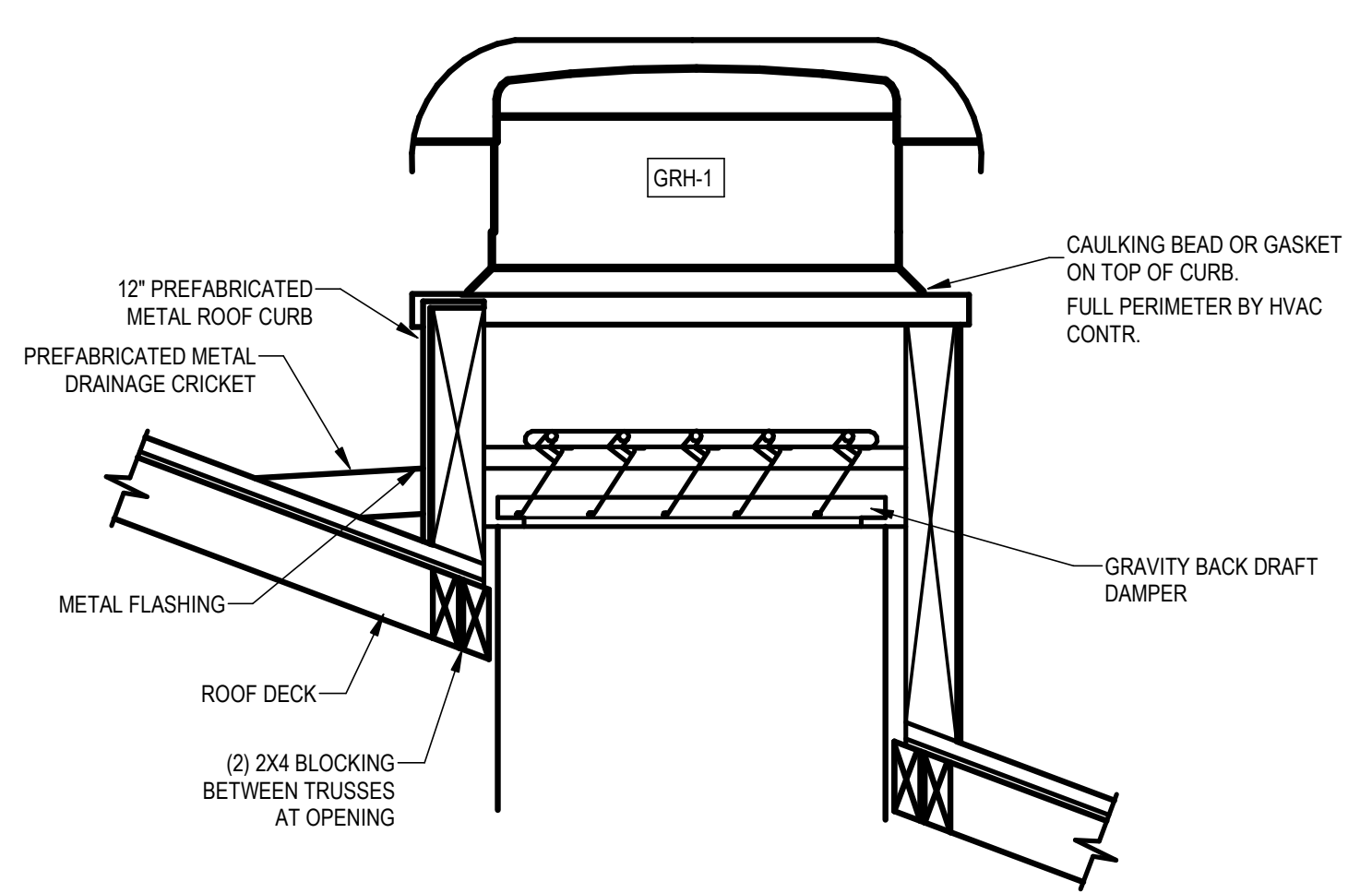
THE ERV SHALL RUN DURING SENSED OCCUPANCY, UNLESS SHUTDOWN ON FACTORY INTEGRAL SAFETIES. STARTED FROM MOTION DETECTED AT EITHER THE MENS OR THE WOMENS ROOMS OCCUPANCY SENSOR.

WHEN THE ERV IS COMMANDED TO RUN:  
 THE LOUVER/DAMPER L-1 SHALL BE OPENED FROM A SIGNAL FROM THE ERV CONTROLLER.  
 THE SUPPLY FAN AND EXHAUST FAN SHALL RUN.

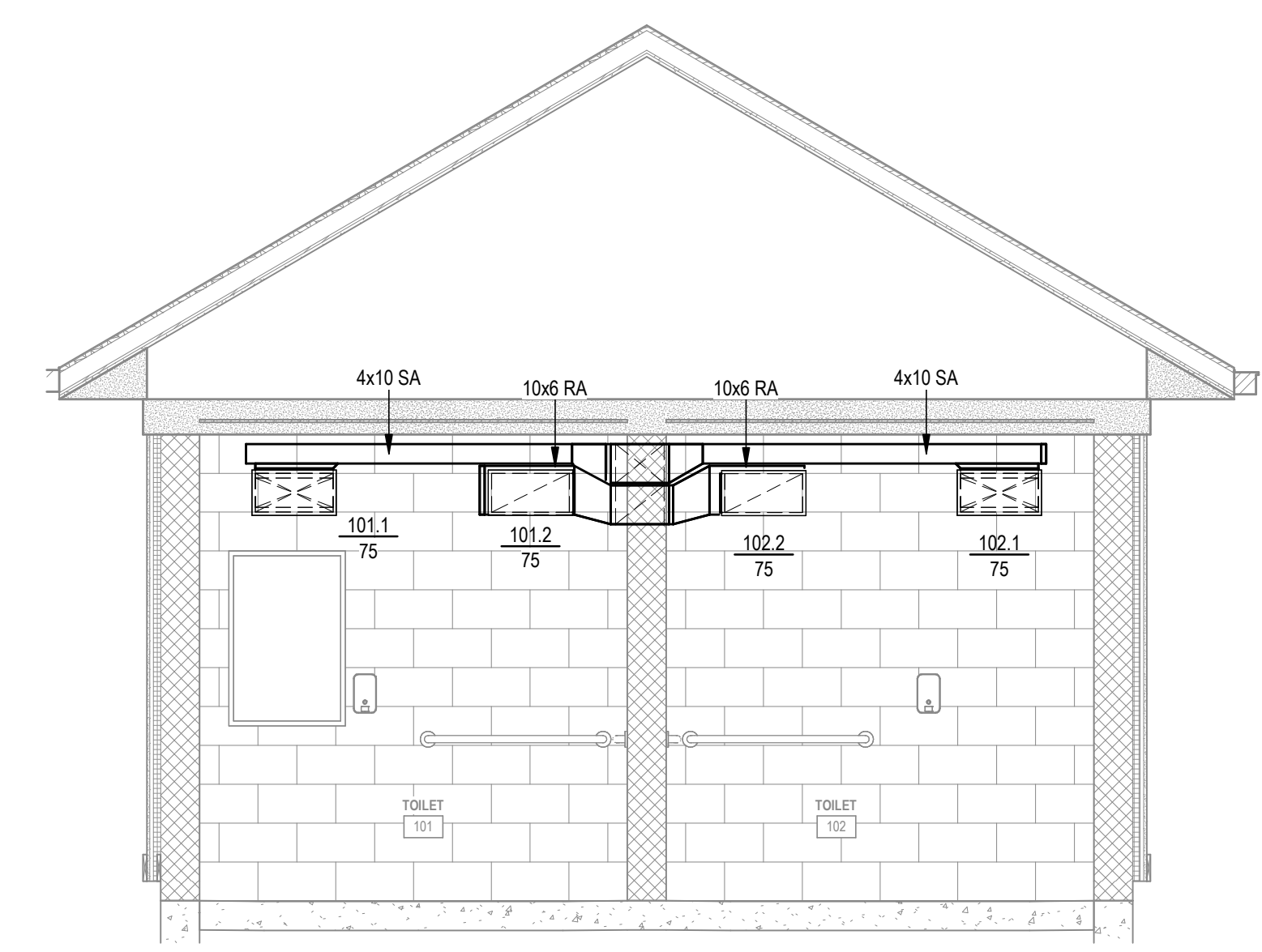
THE ELECTRIC DUCT HEATER SHALL BE ENABLED IF THE DISCHARGE AIR TEMPERATURE IS BELOW 60 DEGREES (ADJ) AND ERV-1 IS RUNNING AS SENSED BY THE HEATERS INTEGRAL CONTROLS FOR BOTH AIRFLOW AND TEMPERATURE. UNLESS SHUTDOWN ON FACTORY INTEGRAL SAFETIES.  
 THE ELECTRIC DUCT HEATER SHALL MODULATE TO MAINTAIN A DISCHARGE AIR TEMPERATURE OF 90 DEGREES (ADJ).

WHEN OCCUPANCY IS NO LONGER SENSED BY EITHER MOTION SENSOR FOR 15 MINUTES, (ADJ) ERV-1 SUPPLY AND EXHAUST FANS SHALL SHUT DOWN.  
 LOUVER/DAMPER L-1 SHALL CLOSE  
 ELECTRIC DUCT HEATER SHALL BE DISABLED FROM INTEGRAL AIRFLOW PROVING SWITCH.

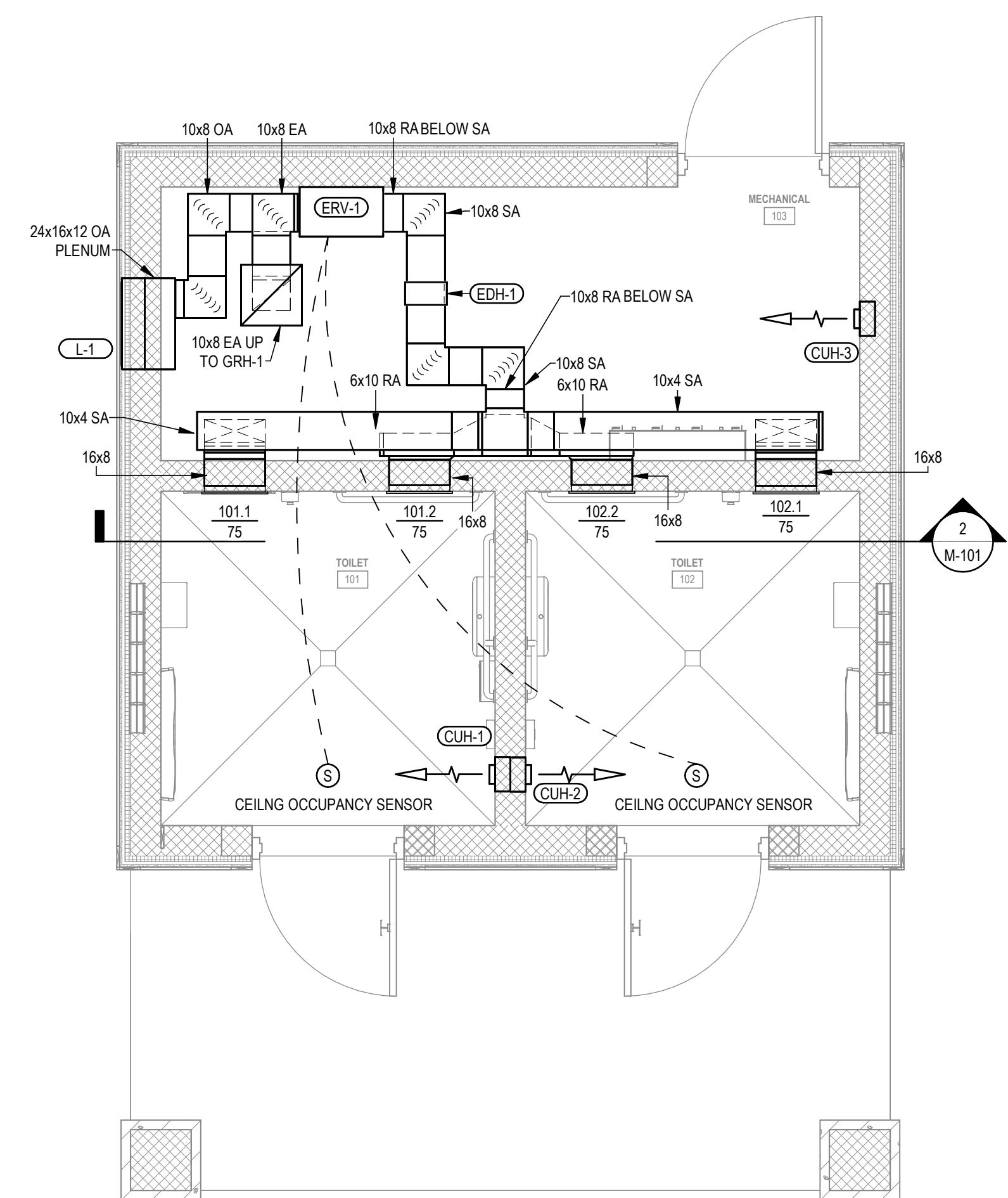
**3 ERV CONTROL SCHEMATIC**  
N.T.S



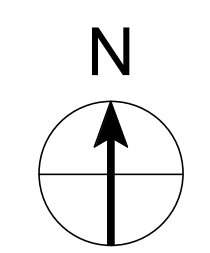
**4 GRAVITY RELIEF HOOD DETAIL**  
N.T.S



**2 SECTION VIEW**  
3/8" = 1'-0"



**1 FIRST FLOOR MECHANICAL PLAN**  
3/8" = 1'-0"



ISSUED FOR BID SET 20241122

PROJECT NUMBER: 013324-020  
 PM: CM  
**CANTON CHARTER TOWNSHIP**  
**CHERRY HILL VILLAGE**  
 Cherry Hill Rd, Canton, MI 48187  
**FIRST FLOOR MECHANICAL PLAN**  
 COPYRIGHT 2024 OHM. ALL DRAWINGS AND WRITTEN MATERIALS APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF OHM AND THE SAME MAY NOT BE DUPLICATED, DISTRIBUTED, OR DISCLOSED WITHOUT PRIOR WRITTEN CONSENT OF OHM.



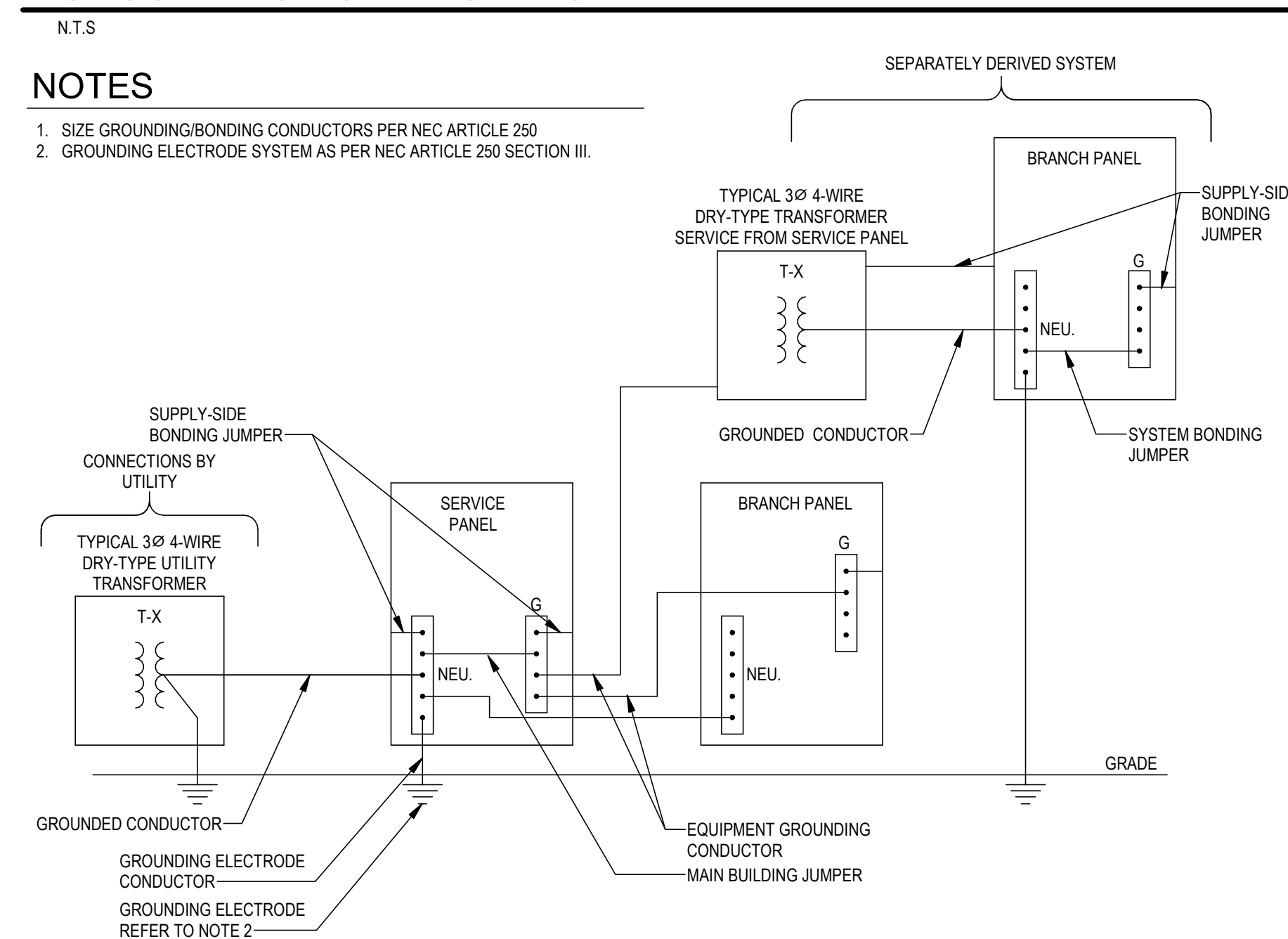
### ELEC. ABBREVIATION.

Φ	SPECIAL PHASE
A	AMPERE
AFF	ABOVE FINISHED FLOOR
C	CONDUIT
CAT	CATALOGUE
CB	CIRCUIT BREAKER
CMU	CONCRETE MASONRY UNIT
CO.	COMPANY
CUH	CABINET UNIT HEATER
E	ELECTRICAL CONTRACTOR
EC	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN
EWC	ELECTRIC WATER COOLER
F	FIRE ALARM
G	GROUND FAULT CIRCUIT INTERRUPTER
GND	EQUIPMENT GROUND
H	HIGH INTENSITY DISCHARGE
HPS	HIGH PRESSURE SODIUM
HVAC	HEATING VENTILATING & AIR CONDITIONING
K	KEY OPERATED DEVICE
KVA	KILOVOLT-AMPERES
KW	KILOWATTS
L	LIGHT EMITTING DIODE
M	MAIN CIRCUIT BREAKER
MDP	MAIN DISTRIBUTION PANEL
MH	METAL HALIDE
MISC	MISCELLANEOUS
MLO	MAIN LUG ONLY
MTD	MOUNTED
N	NEUTRAL
No.	NUMBER
P	PILOT
PL	PILOT
R	RECEPT
RECEPT	RECEPTACLE
T	TELEPHONE
TEL	TELEPHONE
TV	TELEVISION
TYP	TYPICAL
U	UNDERGROUND ELECTRIC
UH	UNIT HEATER
UNO	UNLESS NOTED OTHERWISE
V	VOLT
VA	VOLT-AMPERES
W	WIRE
WNC	WIRELESS NETWORK CONTROLLER
WP	WEATHERPROOF
X	XFMR
XFMR	TRANSFORMER

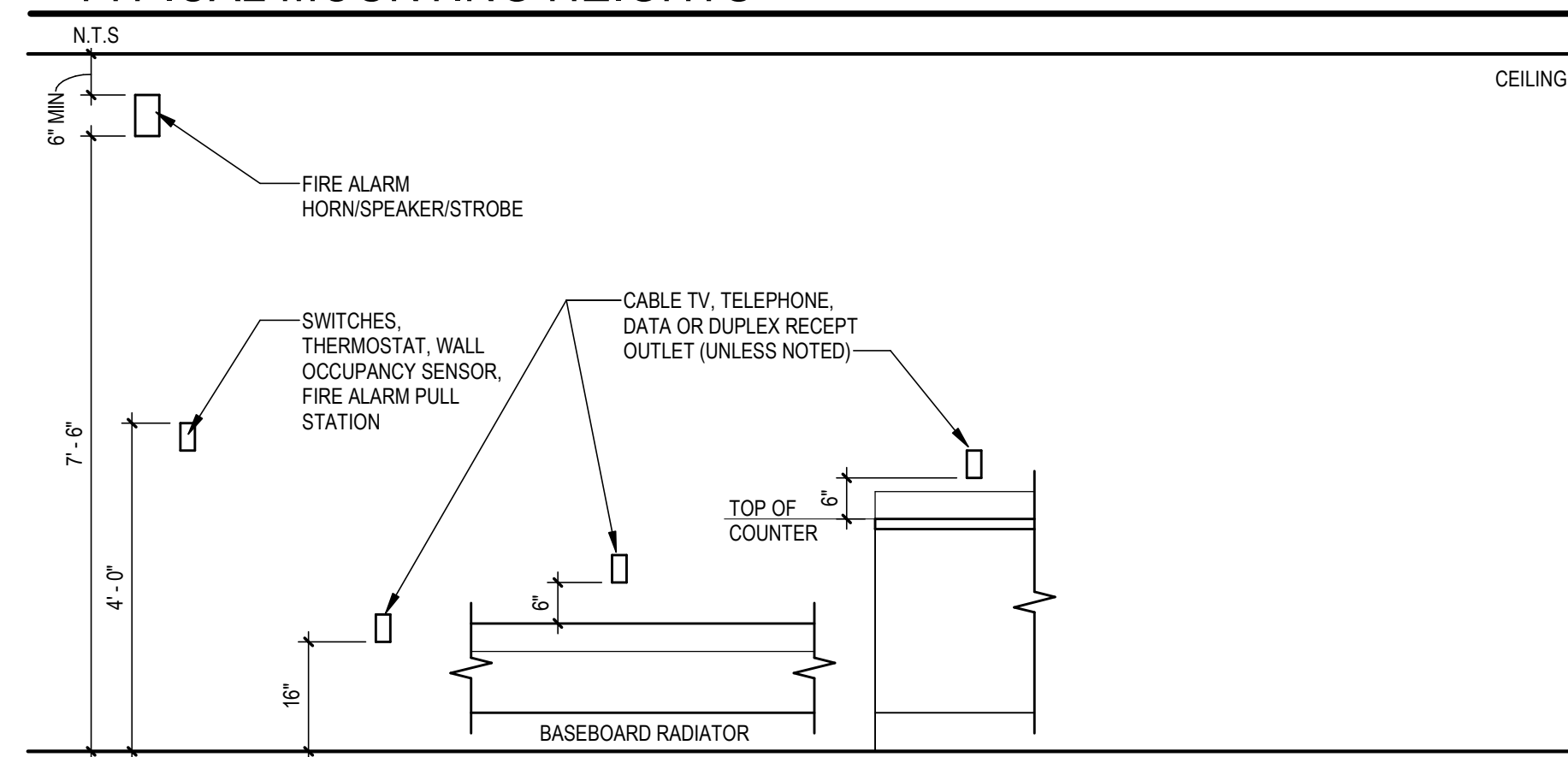
### GENERAL NOTES - ELECTRICAL

1. ALL ELECTRICAL INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE CURRENT NATIONAL ELECTRICAL CODE AND ANY STATE/LOCAL AMENDMENTS.
2. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACQUISITION OF AN ELECTRICAL PERMIT AND SCHEDULING OF THE NECESSARY INSPECTIONS. UPON COMPLETION OF THE WORK THE ELECTRICAL CONTRACTOR SHALL PROVIDE THE OWNER EVIDENCE OF INSPECTION APPROVAL.
3. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION REQUIRED WITH THE ELECTRIC UTILITY SERVING THE FACILITY. UTILITY COSTS SHALL BE PAID SEPARATELY BY THE OWNER.

### GROUNDING BONDING DIAGRAM



### TYPICAL MOUNTING HEIGHTS



### ELECTRICAL SYMBOLS LEGEND

<b>LIGHT FIXTURES</b> (LF-1) LIGHT FIXTURE INDICATOR H HUB CONTROLLER Z LIGHTING ZONE SURFACE / CEILING MOUNT EMERGENCY SURFACE / CEILING MOUNT PENDANT / CHAIN MOUNT EMERGENCY PENDANT / CHAIN MOUNT RECESSED MOUNT EMERGENCY RECESSED MOUNT COMBINATION FAN / LIGHT TRACK STRIP WALL MOUNT EMERGENCY WALL MOUNT EXTERIOR POLE MOUNT EXTERIOR POST MOUNT EMERGENCY WALL PACK (WALL) (W/LIGHTS) EXIT SIGN (LIGHT) (NO LIGHT) CEILING FAN	<b>RECEPTACLE OUTLETS</b> SIMPLEX RECEPTACLE DUPLEX GROUNDED RECEPTACLE CTR MOUNTED ABOVE COUNTER G GROUND FAULT CIRCUIT INTERRUPTER GC GFCI - MOUNTED ABOVE COUNTER U DUAL USB PORTS UC DUAL USB PORTS ABOVE COUNTER WP WEATHERPROOF RECEPT & COVER, GFI 208/240/480V, 1φ STRAIGHT BLADE RECEPTACLE QUADRUPEX RECEPTACLE DUPLEX RECEPTACLE ON EMERGENCY POWER FLOOR BOX CEILING BOX SPECIALTY RECEPTACLE	<b>FIRE ALARM SYSTEM</b> OUTDOOR BELL / CHIME SMOKE DETECTOR SMOKE DETECTOR WITH AUDIBLE BASE SMOKE/CARBON MONOXIDE DETECTOR DUCT SMOKE DETECTOR HEAT DETECTOR (CLG) (WALL) FIRE ALARM HORN/STROBE FIRE ALARM STROBE FIRE ALARM SPEAKER FIRE ALARM SPEAKER/STROBE FIRE ALARM PULL STATION ELECTROMAGNETIC DOOR HOLD OPEN END OF LINE RESISTOR FIRE ALARM FLOW SWITCH FIRE ALARM PRESSURE SWITCH FIRE ALARM TAMPER SWITCH FIRE ALARM ANNUNCIATOR PANEL FIRE ALARM CONTROL PANEL HOOD SUPPRESSION SYSTEM FIRE ALARM CONTACT
<b>POWER DISTRIBUTION</b> DISCONNECT SWITCH FUSED DISCONNECT SWITCH COMBINATION MOTOR STARTER WITH DISCONNECT SWITCH MOTOR STARTER ELECTRICAL METER DISTRIBUTION PANEL ELECTRICAL POWER PANEL SURFACE MOUNT ELECTRICAL POWER PANEL FLUSH MOUNT LIGHTING CONTROL PANEL RELAY ELECTRICAL TRANSFORMER ELECTRICAL PULL BOX JUNCTION BOX (CLG) (WALL) (FLR) SINGLE PHASE MOTOR THREE PHASE MOTOR VARIABLE FREQUENCY DRIVE	<b>SWITCHES</b> SWITCHES: X = DESIGNATION BELOW H = HUB CONTROLLER Z = LIGHTING ZONE SINGLE POLE TWO POLE THREE WAY FOUR WAY DIMMER FAN KEY OPERATED LOW VOLTAGE MOTION DETECTION OCCUPANCY SENSOR PILOT LIGHT TIMER	<b>TELEPHONE/COMMUNICATIONS</b> (CLG) (WALL) (FLR) (FURN) NUMBER AND TYPE OF PORTS COAXIAL PORT DATA PORT HDMI PORT PHONE PORT WIRELESS ACCESS POINT (CEILING) (WALL) SPEAKER INTERCOM CALL BOX BELL MICROPHONE JACK POWER SUPPLY REQUIRES WIRE GUARD NURSE CALL MAIN PANEL NURSE CALL PULL STATION NURSE CALL LIGHT CLOCK
<b>RACEWAY NOTES</b> 1. MINIMUM SIZE OF RIGID CONDUIT SHALL BE 3/4". 2. MINIMUM SIZE OF FLEX CONDUIT SHALL BE 1/2". 3. MINIMUM SIZE WALL BOX IN CMU SHALL BE 4"x4". 4. MINIMUM SIZE OF UNDERGROUND CONDUIT SHALL BE 1 1/4".	<b>WIRES</b> POWER CIRCUIT WIRING UNDERGROUND WIRING SWITCH LOOP WIRING UN-SWITCHED HOT WIRING LOW VOLTAGE WIRING DATA WIRING	PROPOSED EXISTING DEMOLISH

PROJECT NUMBER: 0133-24-020

ISSUED FOR: BID SET

20241122

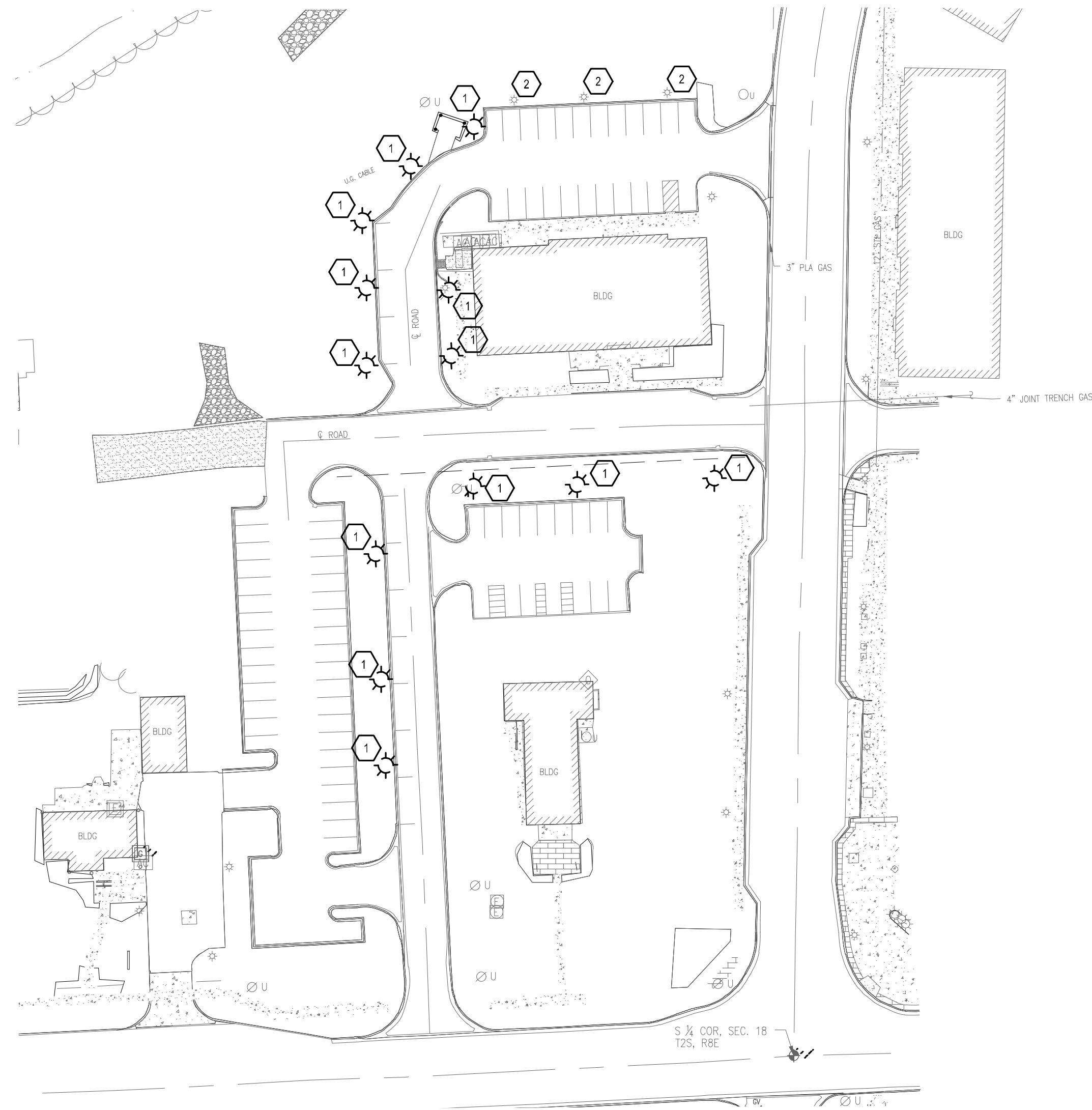
PN CH

CANTON CHARTER TOWNSHIP  
 CHERRY HILL VILLAGE  
 Cherry Hill Rd, Canton, MI 48187

E-001

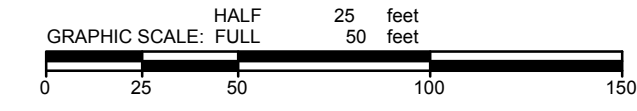
COPYRIGHT 2024 OHM ALL DRAWINGS AND WRITTEN MATERIALS APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF OHM AND THE SAME MAY NOT BE REPRODUCED, DISTRIBUTED, OR DISCLOSED WITHOUT PRIOR WRITTEN CONSENT OF OHM

DRAWING PATH: P:\0126\_0166\01324\0200\_Cherry Hill Village Phase 1\Drawings\Site\Sheet\ED-101.dwg November 21, 2024 4:50 PM



**ELECTRICAL DEMOLITION KEYNOTES**

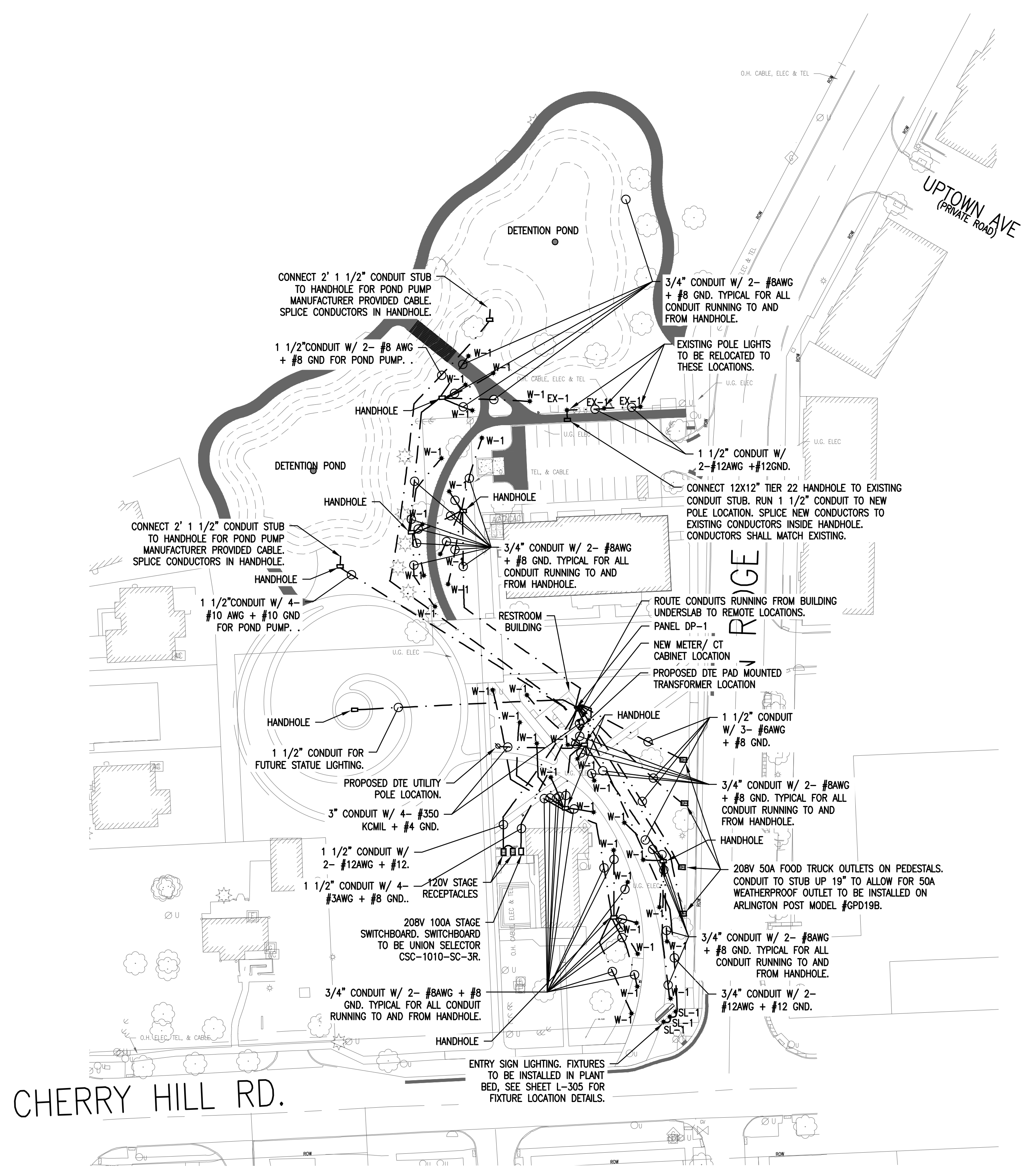
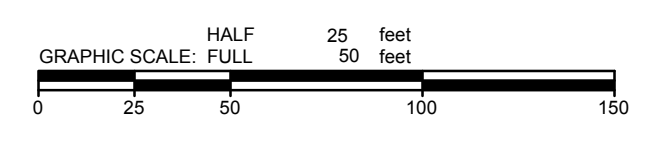
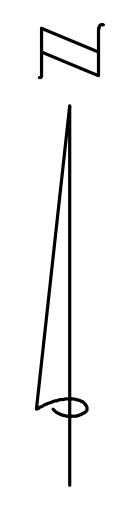
- ⬢ DENOTES PLAN KEY NOTE ITEM USING NUMBERS BELOW.
- 1 REMOVE LIGHT POLE, FIXTURE, AND FOUNDATION. REMOVE CONDUCTORS, CAP AND ABANDON CONDUIT. SALVAGE FIXTURE AND POLE. RETURN TO THE OWNER.
- 2 REMOVE AND SALVAGE EXISTING LIGHT POLES AND FIXTURES FOR RELOCATION. CONDUIT AND CONDUCTORS TO REMAIN FOR RE-USE.



ISSUED FOR:	BID SET	2024/11/22
REVISION	DESCRIPTION	DATE

PROJECT NUMBER: 01324-020 PM CM  
CANTON CHARTER TOWNSHIP  
CHERRY HILL VILLAGE PHASE 1  
CANTON TOWNSHIP, MICHIGAN  
ELECTRICAL DEMOLITION PLAN

COPYRIGHT 2024 OHM ADVISORS. ALL DRAWINGS AND WRITTEN MATERIALS APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF OHM ADVISORS AND THE SAME MAY NOT BE DUPLICATED, DISTRIBUTED, OR DISCLOSED WITHOUT PRIOR WRITTEN CONSENT OF OHM ADVISORS



CHERRY HILL RD.

UPTOWN AVE  
(PRIVATE ROAD)



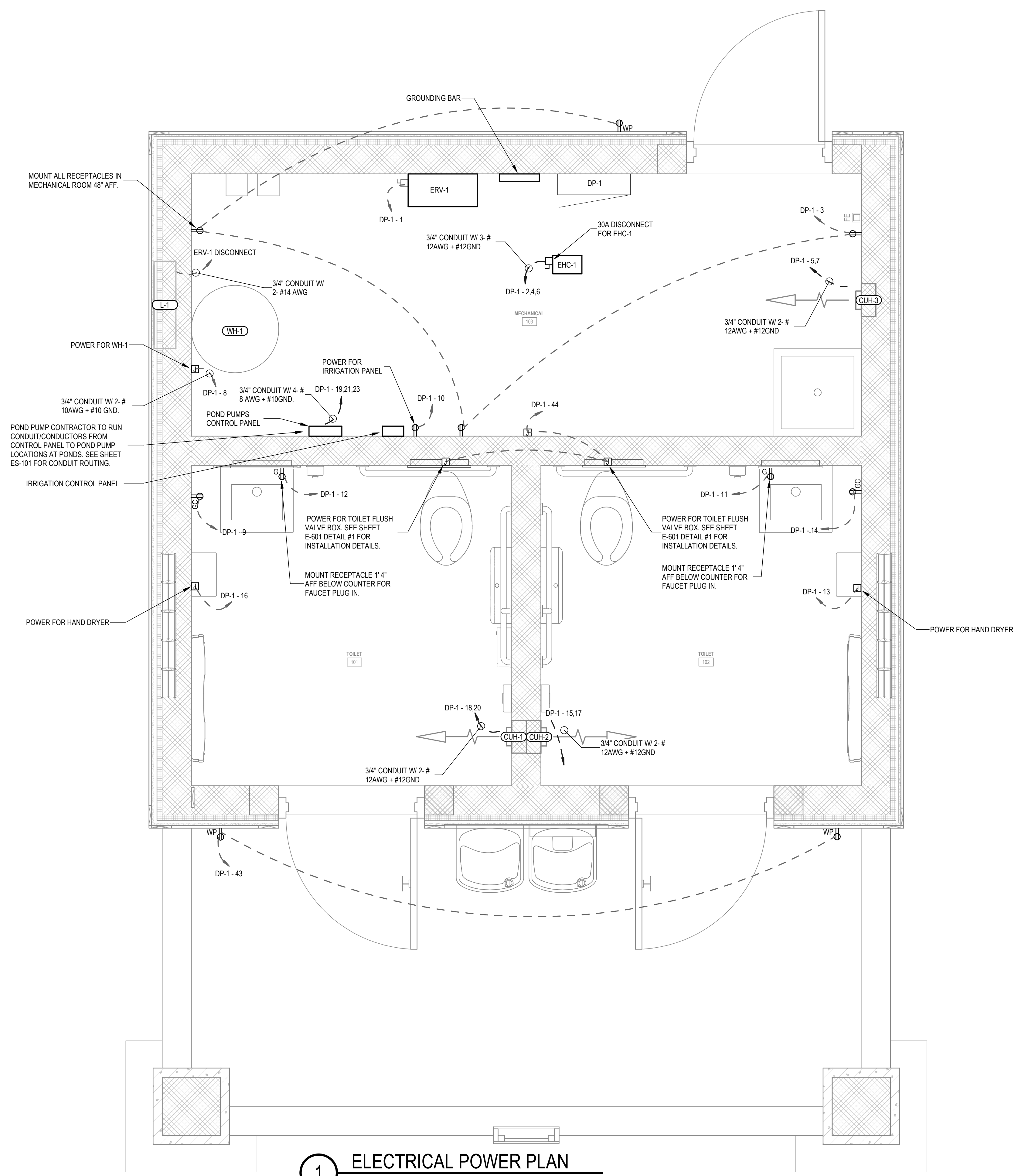
Know what's below.  
Call before you dig.

ISSUED FOR:	BID SET	DESCRIPTION	DATE

PROJECT NUMBER	PM	CM
0133-24-0020		

CANTON CHARTER TOWNSHIP  
CHERRY HILL VILLAGE PHASE 1  
CANTON TOWNSHIP, MICHIGAN  
ELECTRICAL SITE PLAN





MOUNT ALL RECEPTACLES IN MECHANICAL ROOM 48" AFF.

POWER FOR WH-1

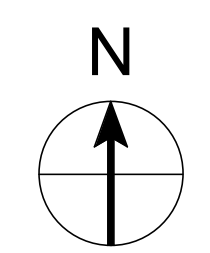
3/4" CONDUIT W/ 2-# 10AWG + #10 GND.

POND PUMP CONTRACTOR TO RUN CONDUIT/CONDUCTORS FROM CONTROL PANEL TO POND PUMP LOCATIONS AT PONDS. SEE SHEET ES-101 FOR CONDUIT ROUTING.

IRRIGATION CONTROL PANEL

POWER FOR HAND DRYER

**1 ELECTRICAL POWER PLAN**  
3/4" = 1'-0"



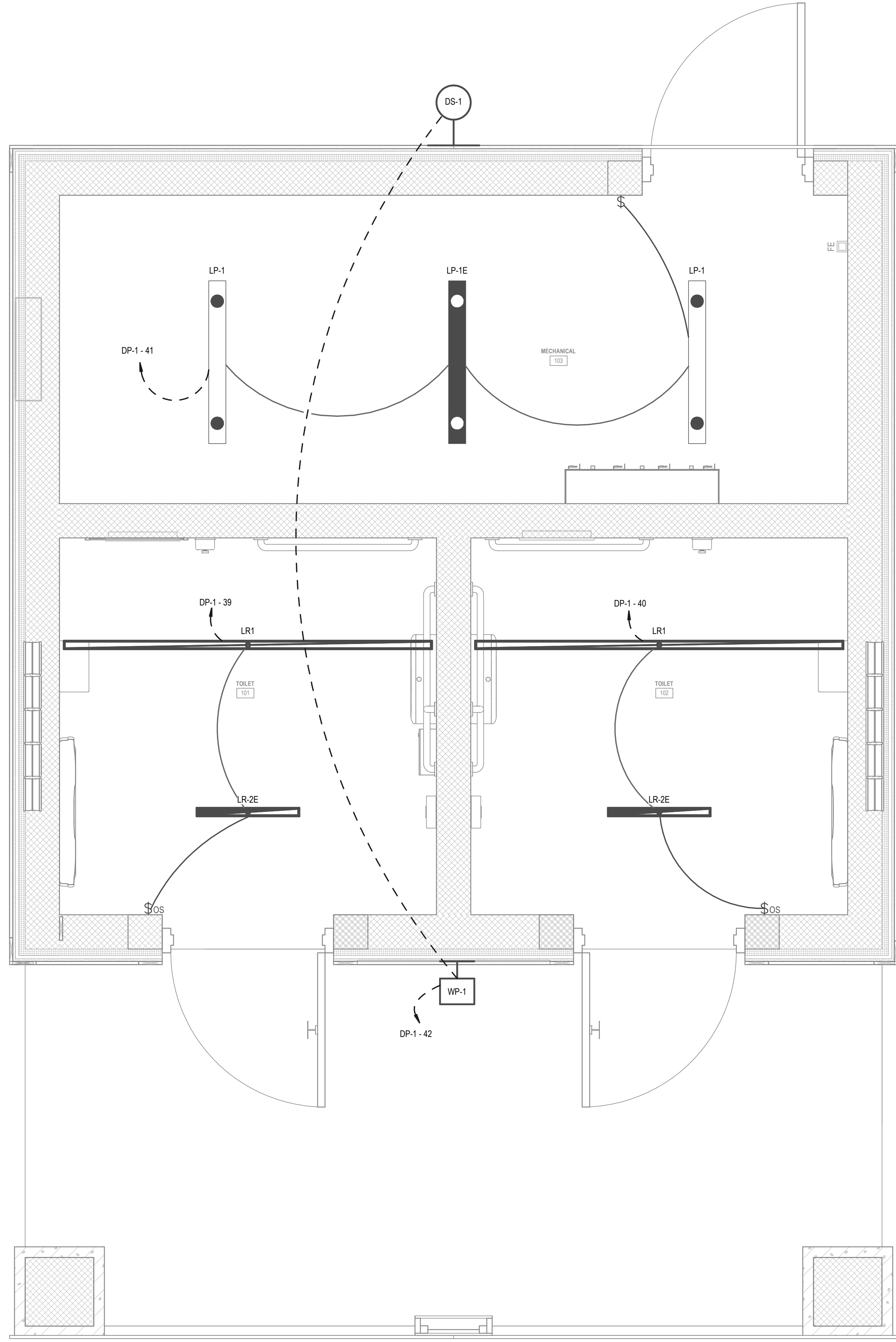
ISSUED FOR: BID SET 20241122

PROJECT NUMBER: 013324-020  
 PM: CMI  
 CANTON CHARTER TOWNSHIP  
 CHERRY HILL VILLAGE  
 Cherry Hill Rd, Canton, MI 48187

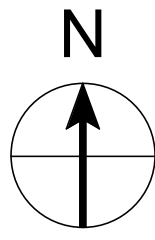
ELECTRICAL POWER PLAN

EP101

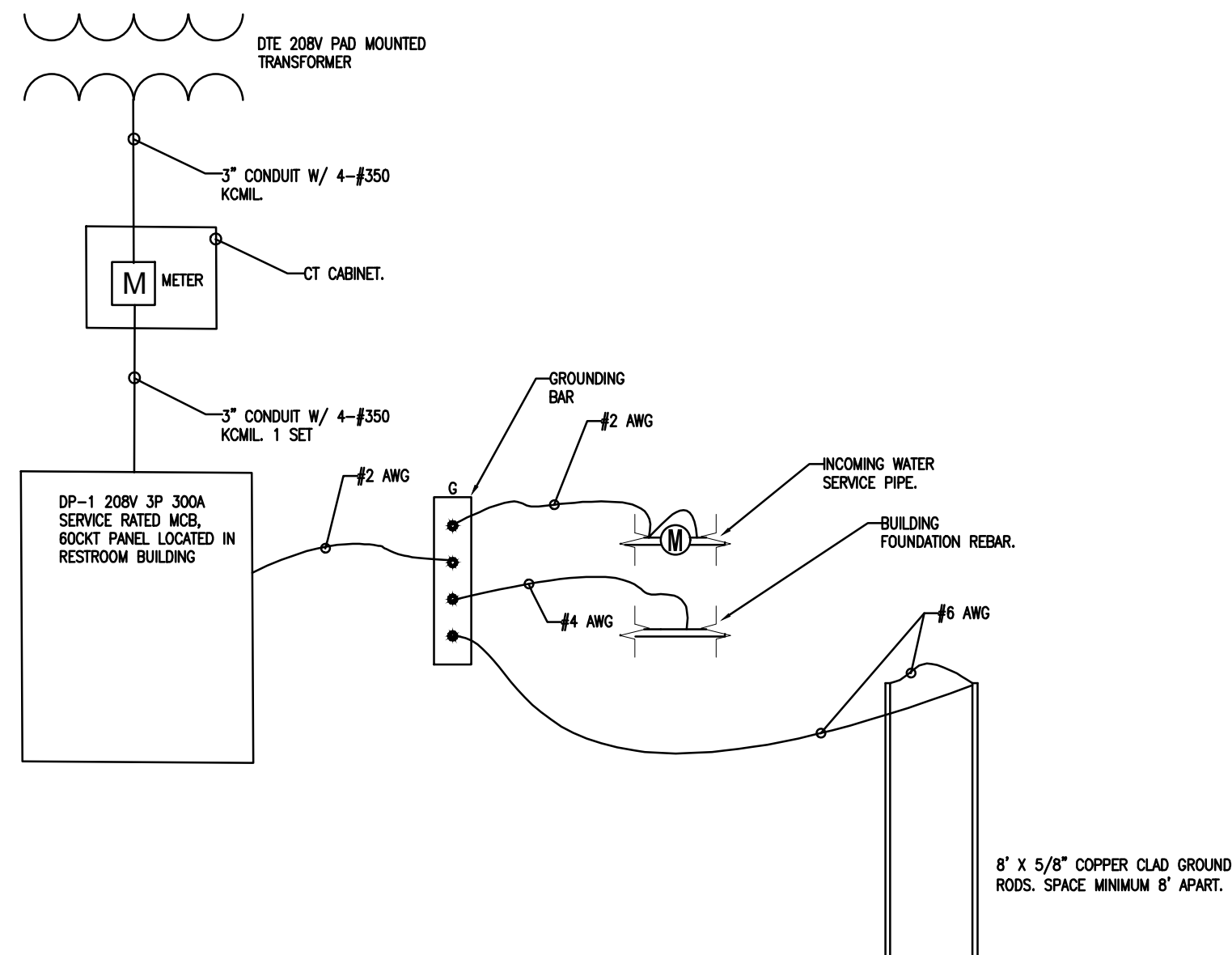
COPYRIGHT 2024 OHM. ALL DRAWINGS AND WRITTEN MATERIALS APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF OHM AND THE SAME MAY NOT BE REPRODUCED, DISTRIBUTED, OR DISCLOSED WITHOUT PRIOR WRITTEN CONSENT OF OHM.



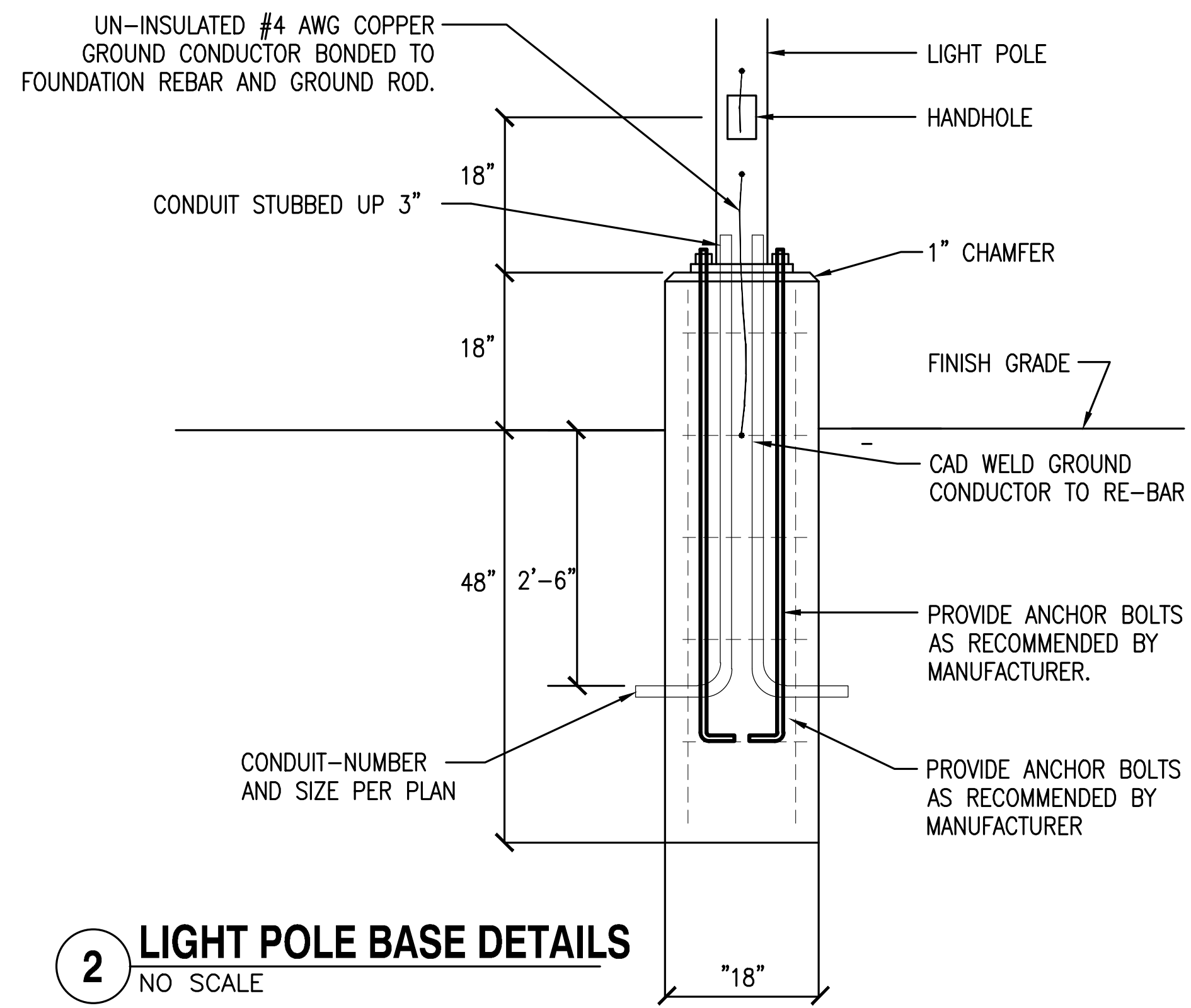
**1** ELECTRICAL LIGHTING PLAN  
 3/4" = 1'-0"





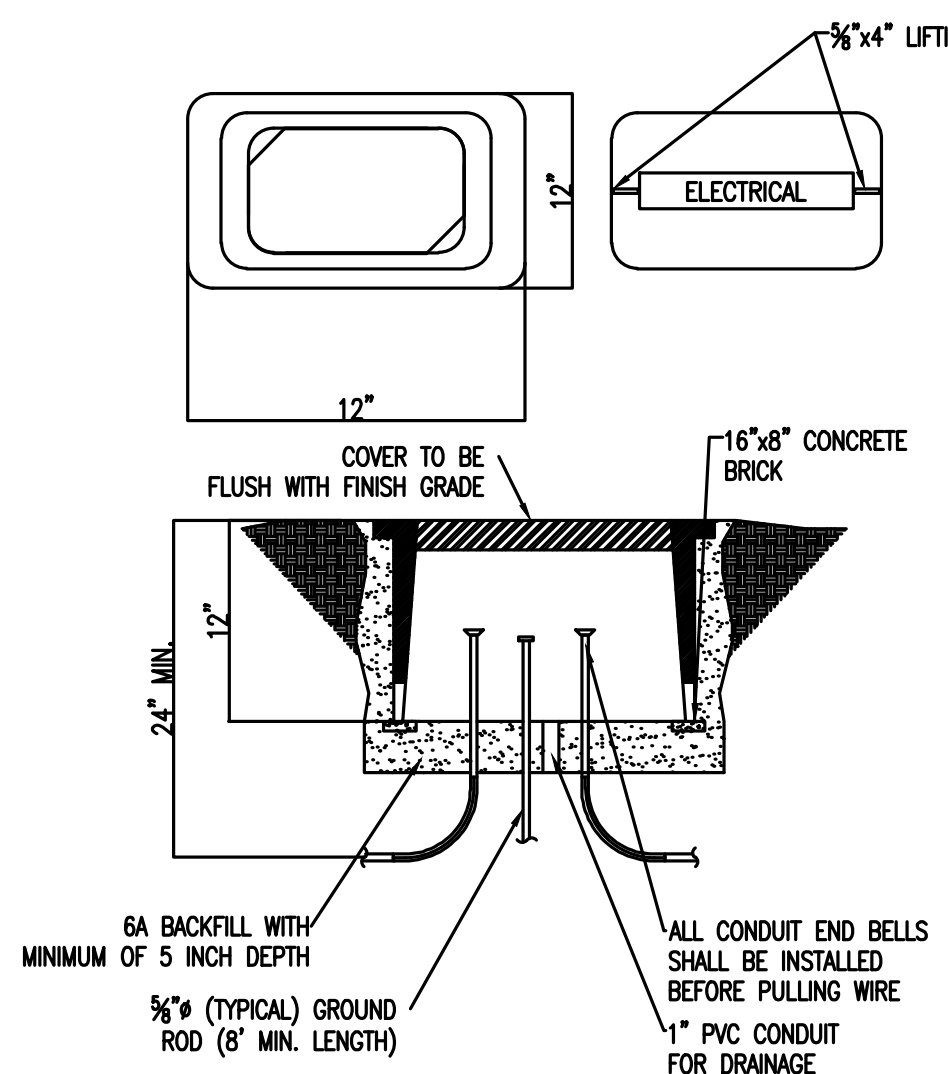


**1 ELECTRICAL ONE LINE DIAGRAM**  
NTS

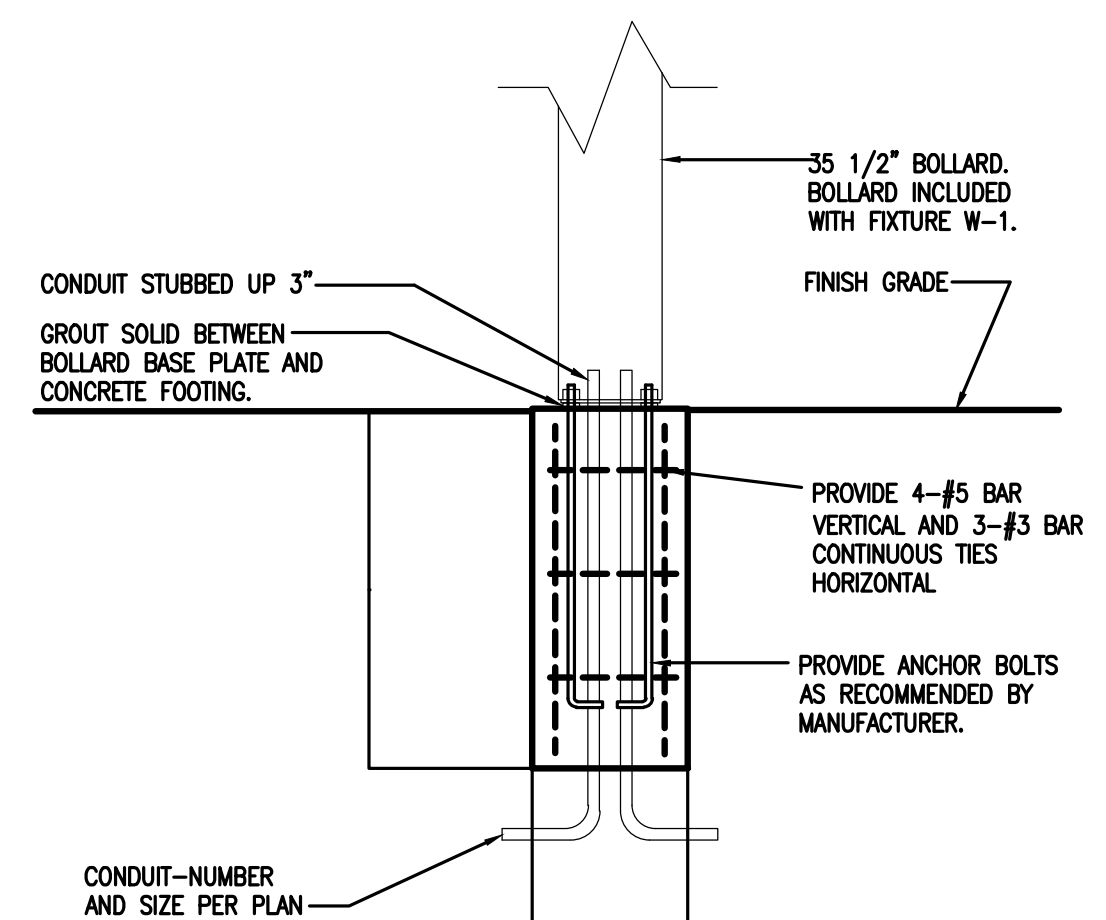


**2 LIGHT POLE BASE DETAILS**  
NO SCALE

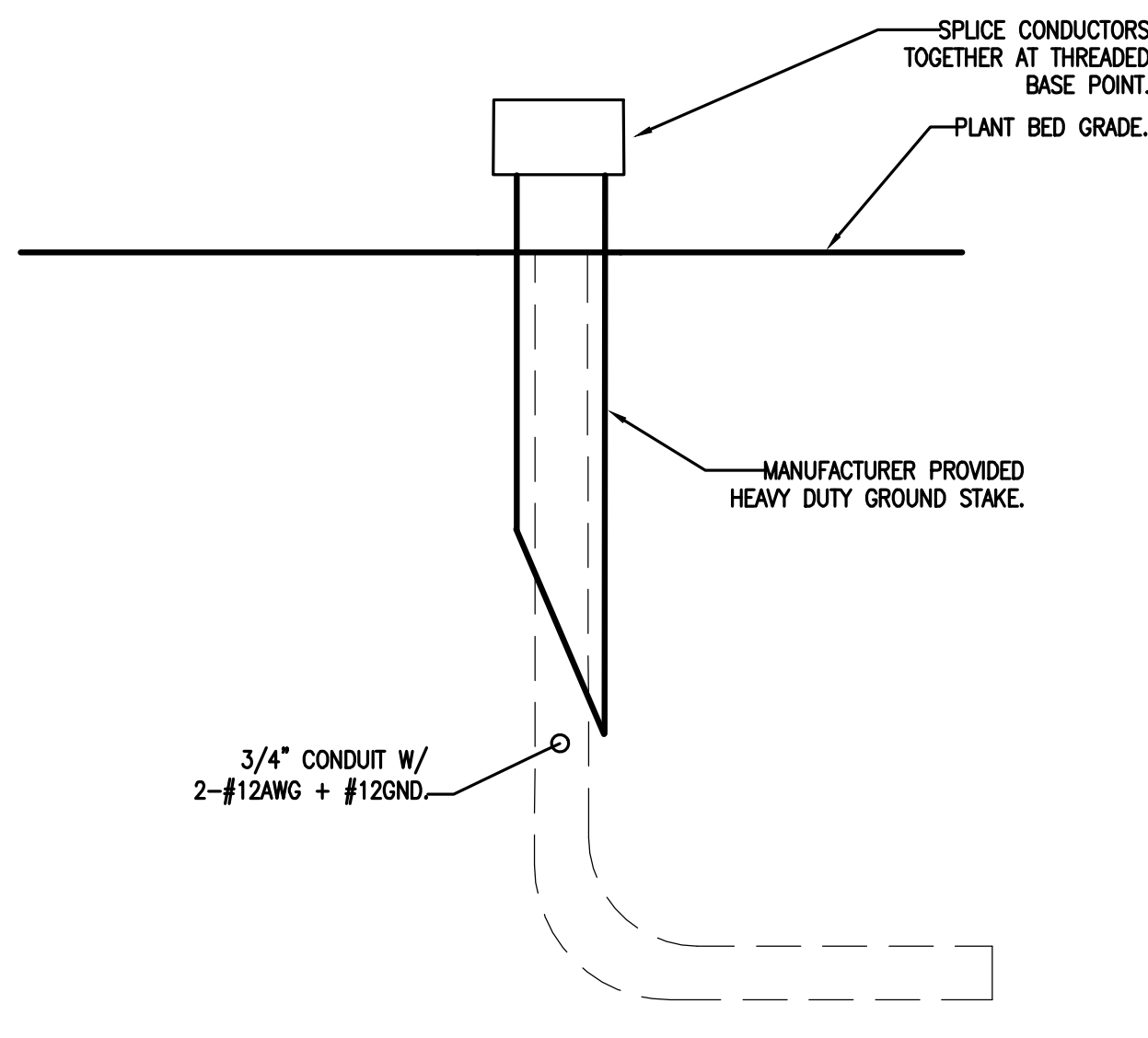
- BOX AND COVER SHALL BE CONCRETE OR COMPOSITE. METAL COVER IS ACCEPTABLE.
- COVERS SHALL BE SECURED WITH 3/8" BOLTS, NUTS, AND WASHERS. WHICH SHALL BE BRASS, STAINLESS STEEL OR OTHER CORROSION RESISTANT MATERIAL. STAINLESS STEEL SHALL HAVE A CHROMIUM CONTENT OF NOT LESS THAN 18% AND A NICKEL CONTENT OF NOT LESS THAN 8%, NUTS SHALL BE RECESSED BELOW TOP SURFACE OF COVER.
- COVER LETTERING SHALL BE 1/2" MINIMUM LETTERS CAST IN STANDARD MARKINGS: (ELECTRICAL).
- CONDUIT ENTERING THE BOX SHALL HAVE 90° LONG RADIUS BEND (INSIDE THE BOX). THE CONDUITS OPENING, INSIDE THE BOX, SHALL BE AT LEAST 4" BELOW THE LID. OPENING SHALL HAVE SMOOTH EDGE. IF THE CONDUIT IS P.V.C. A SLIP COUPLING MUST BE USED. IF THE CONDUIT IS RIGID PIPE, A PROTECTIVE BUSHING SHALL BE USED.
- CONDUCTORS SHALL HAVE A MINIMUM OF 24" SLACK FROM CONDUIT BELL END.
- BACKFILL WITH EXCAVATED MATERIAL AND THOROUGHLY COMPACT.
- WHERE PULLBOXES ARE INSTALLED IN CONCRETE AREAS, 1/2" PREMOLDED EXPANSION JOINT SHALL BE INSTALLED AROUND THE BOX.
- BOXES IN NON-VEHICLE TRAFFIC AREAS TO BE TIER 8 AND IN VEHICLE TRAFFIC AREAS TO BE TIER 22 UNLESS OTHERWISE NOTED.



**3 HANDHOLE DETAIL**  
NO SCALE



**4 FIXTURE W-1 BASE DETAIL**  
NO SCALE



**5 FIXTURE SL-1 BASE DETAIL**  
NO SCALE

ISSUED FOR:	BID SET	REVISION	DESCRIPTION	DATE
				2024/11/22

PROJECT NUMBER: 03324-020  
 CANTON CHARTER TOWNSHIP  
 CHERRY HILL VILLAGE PHASE 1  
 CANTON TOWNSHIP, MICHIGAN  
 ELECTRICAL DETAILS

DRAWING PATH: P:\0126\_0165\01324\020\_Chenry Hill Village Phase 1\Drawings\Site\Sheets\04\020\_DET - Electrical November 25, 2024 10:04 AM

COPYRIGHT 2024 OHM ADVISORS. ALL DRAWINGS AND WRITTEN MATERIALS APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF OHM ADVISORS AND THE SAME MAY NOT BE DUPLICATED, DISTRIBUTED, OR DISCLOSED WITHOUT PRIOR WRITTEN CONSENT OF OHM ADVISORS

### BRANCH PANEL: DP-1

**LOCATION:** MECHANICAL 103      **VOLTS:** 120/208 Wye      **SCCR RATING:** 35,000  
**SUPPLY FROM:**                      **PHASES:** 3                      **MAINS TYPE:** MCB  
**MOUNTING:** SURFACE              **WIRES:** 4                      **MAINS RATING:** 400 A  
**ENCLOSURE:** TYPE 1                      **MCB RATING:** 300 A

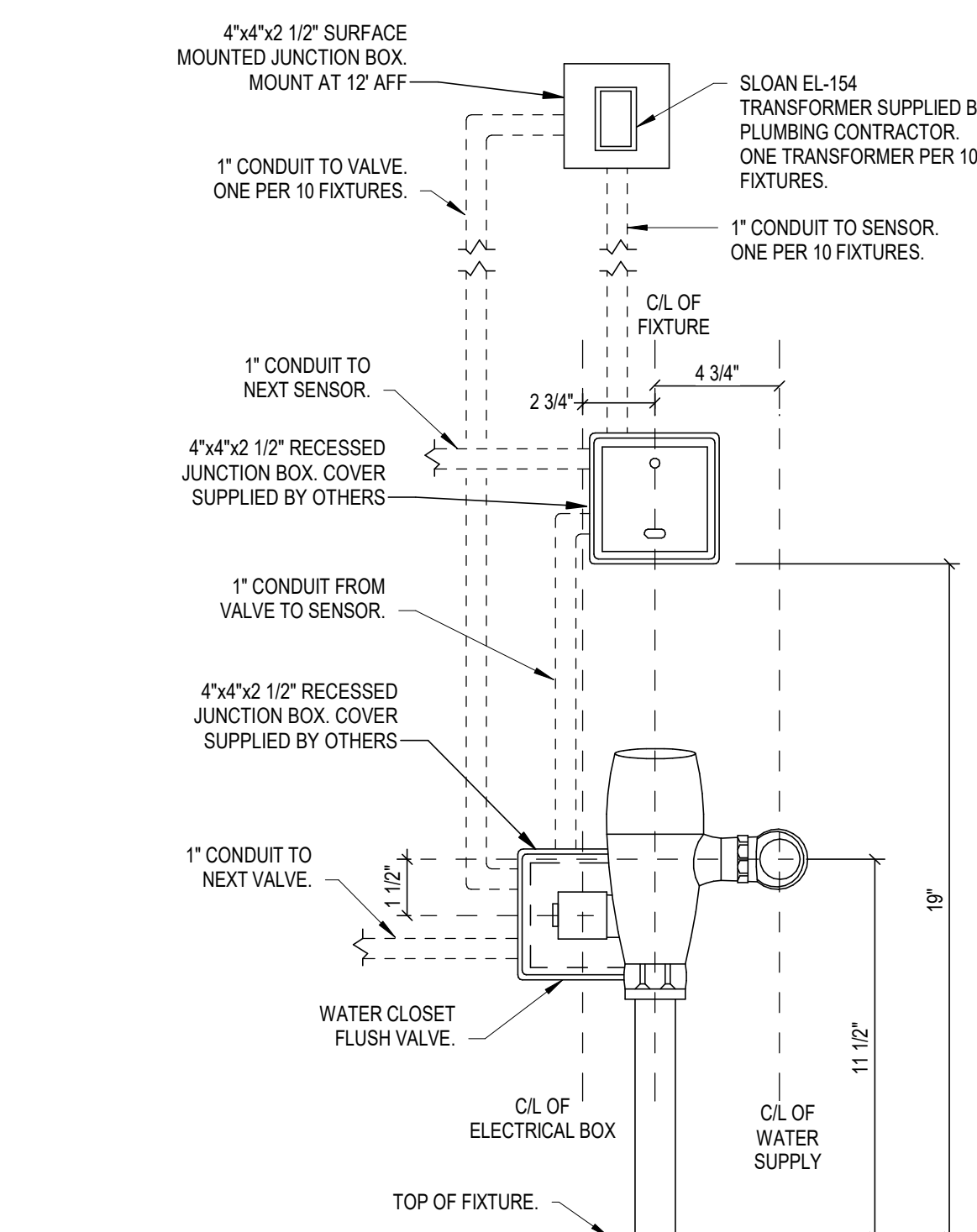
**NOTES:**

IDENTIFICATION	WIRES	POLE	AMP	CKT	A	B	C	A	B	C	CKT	AMP	POLE	WIRES	IDENTIFICATION
ERV-1	12	1	20	1	0.06			0.67			2				
ME 103 GENERAL RECEP	12	1	20	3		0.72		0.67			4	20	3	12	EHC-1
CUH-3	12	2	20	5			0.75			0.67	6				
				7	0.75			2.50			8	30	1	10	WH-1
WOMEN 101 RECEPTACLE	12	1	20	9		0.18		0.60			10	20	1	12	IRRIGATION CONTROL PANEL
MENS FAUCET	12	1	20	11			0.72				12	20	1	12	WOMENS FAUCET
MENS HAND DRYER	12	1	20	13	0.60			0.18			14	20	1	12	MEN 102 RECEPTACLE
CUH-2	12	2	20	15		0.75		0.60			16	20	1	12	WOMENS HAND DRYER
				17			0.75			0.75	18				
				19	3.60			0.75			20	20	2	12	CUH-1
				21		3.60		5.20			22				
50A FOOD TRUCK OUTLET 2	8	2	50	23			3.60		5.20		24	50	2	8	50A FOOD TRUCK OUTLET 1
				25	5.20			5.20			26				
				27		5.20			5.20		28				
50A FOOD TRUCK OUTLET 4	8	2	50	29			5.20			0.60	30	20	1	12	ENTRY SIGN LIGHTING
				31	5.20			0.60			32	20	1	12	GENERAL STAGE OUTLET 1
GENERAL STAGE OUTLET 2	12	1	20	33		0.60			6.33		34				
PATHWAY LIGHTING NORTH	12	1	20	35			0.50			6.33	36	100	3	3	STAGE CONCERT 100A SWITCHBOARD
PATHWAY LIGHTING SOUTH	12	1	20	37	0.50				6.33		38				
WOMEN 101 LIGHTING	12	1	20	39		0.00			0.00		40	20	1	12	MEN 102 LIGHTS
MECHANICAL 103 LIGHTS	12	1	20	41			0.19			0.00	42	20	1	12	EXTERIOR LIGHTS
FRONT OUTDOOR RECEPTACLES	12	1	20	43	0.36			1.20			44	20	1	12	TOILET FLUSH VALVES
SPARE	12	1	20	45		0.00			0.00		46	20	1	12	SPARE
SPARE	12	1	20	47			0.00			0.00	48	20	1	12	SPARE
SPARE	12	1	20	49	0.00			0.00			50	20	1	12	SPARE
				51							52				
				53							54				
				55							56				
				57							58				
				59							60				
<b>CONNECTED LOAD: (KVA)</b>					33.70		29.65		25.98						

### LIGHTING FIXTURE SCHEDULE

SCHEDULE NOTES:

TYPE	DESCRIPTION	MFR.	CATALOG #	LAMPS	WATTS	NOTES
DS-1	SCENCE LIGHT FIXTURE	SPECTRUM LIGHTING	WS1611-TD10L-30K-DX-TF2-PA22-MW-EG	LED	15	PROVIDE INTEGRATED PHOTOCELL TO CONTROL FIXTURE.
EX-1	EXISTING POLE LIGHT				30	SEE SITE PLANS FOR RE-USE PLANS
LP-1	LINEAR PENDANT LIGHTING FIXTURE	LITHONIA LIGHTING	CLX L36 3750LM SEF RDL MVOLT GZ10 40K 80CRI	LED	26.47	
LP-1E	LINEAR PENDANT LIGHTING EMERGENCY FIXTURE	LITHONIA LIGHTING	CLX L36 3750LM SEF RDL MVOLT GZ10 40K 80CRI-LGD18W	LED	26.47	PROVIDE UN-SWITCHED HOT FOR "E" LIGHTING
LR1	ASYMETRICAL DOWNLIGHT LIGHTING FIXTURE	LITHONIA LIGHTING	HP-2-R-D-7-2"-V-840-DAO-L-96LG-120-SC-FC-10-VF-FE-SW	LED	73.8	
LR-2E	STANDARD DOWNLIGHT EMERGENCY FIXTURE	LITHONIA LIGHTING	HP-2-R-D-2-V-840-F-96LG-120-SC-FC-10-V-F-FE-SW-LGD18W	LED	73.8	PROVIDE UN-SWITCHED HOT FOR "E" LIGHTING
SL-1	ENTRY SIGN UPLIGHT	FC OUTDOOR LIGHTING	FC1106-UNV-3K-CR190-36L-BKE-40-PE-CV 6-HGS	LED	26	
W-1	WALKWAY LIGHT	LANDSCAPE FORMS	AJ100-T4-30K-UV1-BLK	LED	10	
WP-1	WALLPACK FIXTURE	BEGA	B22261-WHT	LED	6	PROVIDE INTEGRATED PHOTOCELL TO CONTROL FIXTURE.



**1 FLUSH VALVE ELECTRICAL DETAILS**  
1/8" = 1'-0"

20241122  
ISSUED FOR BID SET

PROJECT NUMBER: PM CH  
0133-24-020

**CANTON CHARTER TOWNSHIP**  
**CHERRY HILL VILLAGE**  
 Cherry Hill Rd, Canton, MI 48187  
**ELECTRICAL SCHEDULES**