

COMcheck Software Version COMcheckWeb
Envelope Compliance Certificate

Project Information

Energy Code: 2018 IECC
Project Title: Horizon Farm Credit
Location: Bridgeville, Delaware
Climate Zone: 4a
Project Type: New Construction
Vertical Glazing / Wall Area: 19%

Construction Site: 101 Passwaters Farm Rd, Bridgeville, Delaware 19933
Owner/Agent: Horizon Farm Credit, 45 Allerton Ct, Westminster, Maryland 21157, 4102596827
Designer/Contractor: Morgan Helfrich, George, Miles & Buhr, LLC, 206 W Main Street, Salisbury, Maryland 21801, 4107423115, mhelfrich@gmbnet.com

Additional Efficiency Package(s)

Credits: 1.0 Required 1.0 Proposed
Reduced Air Infiltration, 1.0 credit

Building Area	Floor Area
1-Office - Nonresidential	19683

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor _(a)
Floor: Unheated Slab-On-Grade, Horizontal with vertical 2 ft., [Bldg. Use 1 - Office] (d)	766	---	10.0	0.700	0.540
Roof: Attic Roof, Wood Joists, [Bldg. Use 1 - Office]	18673	38.0	0.0	0.027	0.027
Roof - Mechanical Well: Other, [Bldg. Use 1 - Office] (b)	4435	---	---	0.022	0.027
NORTH					
Wing 3 Wall - North (K): Wood-Framed, 16in. o.c., [Bldg. Use 1 - Office]	792	21.0	0.0	0.062	0.064
Door: Glass (over 50% glazing): Metal Frame, Entrance Door, Perf. Specs.: Product ID NA, SHGC 0.16, PF 0.18, [Bldg. Use 1 - Office] (c)	20	---	---	0.600	0.770
Window Type A (30 sqft ea): Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID NA, SHGC 0.18, PF 0.12, [Bldg. Use 1 - Office] (c)	90	---	---	0.360	0.380
Window Type A (30 sqft ea): Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID NA, SHGC 0.18, PF 0.32, [Bldg. Use 1 - Office] (c)	60	---	---	0.360	0.380
Window Type D (6 sqft ea): Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID NA, SHGC 0.18, PF 0.43, [Bldg. Use 1 - Office] (c)	36	---	---	0.360	0.380
Wing 1 Wall - North (F): Wood-Framed, 16in. o.c., [Bldg. Use 1 - Office]	859	21.0	0.0	0.062	0.064
Door: Glass (over 50% glazing): Metal Frame, Entrance Door, Perf. Specs.: Product ID NA, SHGC 0.16, PF 0.83, [Bldg. Use 1 - Office] (c)	20	---	---	0.600	0.770
Door: Insulated Metal, Garage door 14% glazing, [Bldg. Use 1 - Office] (c)	80	---	---	0.125	0.310

Project Title: Horizon Farm Credit Report date: 09/24/25
Data filename: Page 1 of 14

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor _(a)
Office					
Window Type C (6 sqft ea): Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID NA, SHGC 0.18, PF 0.20, [Bldg. Use 1 - Office] (c)	24	---	---	0.360	0.380
Window Type D (6 sqft ea): Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID NA, SHGC 0.18, PF 0.43, [Bldg. Use 1 - Office] (c)	36	---	---	0.360	0.380
Wing 2 Wall - North (H): Wood-Framed, 16in. o.c., [Bldg. Use 1 - Office]	1061	21.0	0.0	0.062	0.064
Window Type A (30 sqft ea): Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID NA, SHGC 0.18, PF 0.08, [Bldg. Use 1 - Office] (c)	120	---	---	0.360	0.380
Core Wall - North (B): Wood-Framed, 16in. o.c., [Bldg. Use 1 - Office]	104	21.0	0.0	0.062	0.064
Window Type A (30 sqft ea): Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID NA, SHGC 0.18, PF 1.20, [Bldg. Use 1 - Office] (c)	30	---	---	0.360	0.380
EAST					
Wing 4 Wall - East (E): Wood-Framed, 16in. o.c., [Bldg. Use 1 - Office]	915	21.0	0.0	0.062	0.064
Door: Glass (over 50% glazing): Metal Frame, Entrance Door, Perf. Specs.: Product ID NA, SHGC 0.16, PF 0.18, [Bldg. Use 1 - Office] (c)	20	---	---	0.600	0.770
Window Type A (30 sqft ea): Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID NA, SHGC 0.18, PF 0.12, [Bldg. Use 1 - Office] (c)	120	---	---	0.360	0.380
Window Type A (30 sqft ea): Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID NA, SHGC 0.18, PF 0.32, [Bldg. Use 1 - Office] (c)	60	---	---	0.360	0.380
Window Type D (6 sqft ea): Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID NA, SHGC 0.18, PF 0.43, [Bldg. Use 1 - Office] (c)	36	---	---	0.360	0.380
Wing 2 Wall - East (I): Wood-Framed, 16in. o.c., [Bldg. Use 1 - Office]	792	21.0	0.0	0.062	0.064
Door: Glass (over 50% glazing): Metal Frame, Entrance Door, Perf. Specs.: Product ID NA, SHGC 0.16, PF 0.18, [Bldg. Use 1 - Office] (c)	20	---	---	0.600	0.770
Window Type A (30 sqft ea): Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID NA, SHGC 0.18, PF 0.12, [Bldg. Use 1 - Office] (c)	120	---	---	0.360	0.380
Window Type A (30 sqft ea): Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID NA, SHGC 0.18, PF 0.32, [Bldg. Use 1 - Office] (c)	60	---	---	0.360	0.380
Window Type D (6 sqft ea): Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID NA, SHGC 0.18, PF 0.43, [Bldg. Use 1 - Office] (c)	36	---	---	0.360	0.380
Wing 3 Wall - East (L): Wood-Framed, 16in. o.c., [Bldg. Use 1 - Office]	1061	21.0	0.0	0.062	0.064
Window Type A (30 sqft ea): Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID NA, SHGC 0.18, PF 0.08, [Bldg. Use 1 - Office] (c)	120	---	---	0.360	0.380
Core Wall - East (J): Wood-Framed, 16in. o.c., [Bldg. Use 1 - Office]	174	21.0	0.0	0.062	0.064
Door: Glass (over 50% glazing): Metal Frame, Entrance Door, Perf. Specs.: Product ID NA, SHGC 0.16, PF 1.70, [Bldg. Use 1 - Office] (c)	40	---	---	0.600	0.770
SOUTH					
Wing 4 Wall - South (O): Wood-Framed, 16in. o.c., [Bldg. Use 1 - Office]	1061	21.0	0.0	0.062	0.064
Window Type A (30 sqft ea): Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID NA, SHGC 0.18, PF 0.08, [Bldg. Use 1 - Office] (c)	120	---	---	0.360	0.380
Wing 3 Wall - South (M): Wood-Framed, 16in. o.c., [Bldg. Use 1 - Office]	792	21.0	0.0	0.062	0.064

Project Title: Horizon Farm Credit Report date: 09/24/25
Data filename: Page 2 of 14

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor _(a)
Door: Glass (over 50% glazing): Metal Frame, Entrance Door, Perf. Specs.: Product ID NA, SHGC 0.16, PF 0.18, [Bldg. Use 1 - Office] (c)	20	---	---	0.600	0.770
Window Type A (30 sqft ea): Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID NA, SHGC 0.18, PF 0.12, [Bldg. Use 1 - Office] (c)	90	---	---	0.360	0.380
Window Type A (30 sqft ea): Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID NA, SHGC 0.18, PF 0.32, [Bldg. Use 1 - Office] (c)	60	---	---	0.360	0.380
Window Type D (6 sqft ea): Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID NA, SHGC 0.18, PF 0.43, [Bldg. Use 1 - Office] (c)	36	---	---	0.360	0.380
Wing 4 Wall - South (Q): Wood-Framed, 16in. o.c., [Bldg. Use 1 - Office]	75	21.0	0.0	0.062	0.064
Door: Insulated Metal, Swinging, [Bldg. Use 1 - Office]	21	---	---	0.480	0.610
Wing 1 Wall - South (D): Wood-Framed, 16in. o.c., [Bldg. Use 1 - Office]	317	21.0	0.0	0.062	0.064
Door: Glass (over 50% glazing): Metal Frame, Entrance Door, Perf. Specs.: Product ID NA, SHGC 0.16, PF 0.08, [Bldg. Use 1 - Office] (c)	20	---	---	0.600	0.770
Window Type A (30 sqft ea): Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID NA, SHGC 0.18, PF 0.12, [Bldg. Use 1 - Office] (c)	30	---	---	0.360	0.380
Window Type D (6 sqft ea): Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID NA, SHGC 0.18, PF 0.43, [Bldg. Use 1 - Office] (c)	36	---	---	0.360	0.380
Core Wall - South (R): Wood-Framed, 16in. o.c., [Bldg. Use 1 - Office]	104	21.0	0.0	0.062	0.064
Window Type A (30 sqft ea): Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID NA, SHGC 0.18, PF 1.20, [Bldg. Use 1 - Office] (c)	30	---	---	0.360	0.380

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor _(a)
WEST					
Wing 2 Wall - West (G): Wood-Framed, 16in. o.c., [Bldg. Use 1 - Office]	792	21.0	0.0	0.062	0.064
Door: Glass (over 50% glazing): Metal Frame, Entrance Door, Perf. Specs.: Product ID NA, SHGC 0.16, PF 0.18, [Bldg. Use 1 - Office] (c)	20	---	---	0.600	0.770
Window Type A (30 sqft ea): Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID NA, SHGC 0.18, PF 0.12, [Bldg. Use 1 - Office] (c)	90	---	---	0.360	0.380
Window Type A (30 sqft ea): Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID NA, SHGC 0.18, PF 0.32, [Bldg. Use 1 - Office] (c)	60	---	---	0.360	0.380
Window Type D (6 sqft ea): Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID NA, SHGC 0.18, PF 0.43, [Bldg. Use 1 - Office] (c)	36	---	---	0.360	0.380
Wing 1 Wall - West (E): Wood-Framed, 16in. o.c., [Bldg. Use 1 - Office]	1061	21.0	0.0	0.062	0.064
Door: Glass (over 50% glazing): Metal Frame, Entrance Door, Perf. Specs.: Product ID NA, SHGC 0.16, PF 0.58, [Bldg. Use 1 - Office] (c)	20	---	---	0.600	0.770
Window Type A (30 sqft ea): Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID NA, SHGC 0.18, PF 0.08, [Bldg. Use 1 - Office] (c)	20	---	---	0.600	0.770
Window Type A (30 sqft ea): Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID NA, SHGC 0.18, PF 0.32, [Bldg. Use 1 - Office] (c)	120	---	---	0.360	0.380
Wing 4 Wall - West (P): Wood-Framed, 16in. o.c., [Bldg. Use 1 - Office]	75	21.0	0.0	0.062	0.064
Wing 4 Wall - West (P): Wood-Framed, 16in. o.c., [Bldg. Use 1 - Office]	317	21.0	0.0	0.062	0.064
Door: Glass (over 50% glazing): Metal Frame, Entrance Door, Perf. Specs.: Product ID NA, SHGC 0.16, PF 0.83, [Bldg. Use 1 - Office] (c)	20	---	---	0.600	0.770
Window Type A (30 sqft ea): Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID NA, SHGC 0.18, PF 0.12, [Bldg. Use 1 - Office] (c)	30	---	---	0.360	0.380

Project Title: Horizon Farm Credit Report date: 09/24/25
Data filename: Page 3 of 14

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor _(a)
Use 1 - Office] (c)					
Window Type D (6 sqft ea): Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID NA, SHGC 0.18, PF 0.43, [Bldg. Use 1 - Office] (c)	36	---	---	0.360	0.380
Core Wall - West (A): Wood-Framed, 16in. o.c., [Bldg. Use 1 - Office]	673	21.0	0.0	0.062	0.064
Door: Glass (over 50% glazing): Metal Frame, Entrance Door, Perf. Specs.: Product ID NA, SHGC 0.16, PF 0.90, [Bldg. Use 1 - Office] (c)	40	---	---	0.600	0.770
Door: Glass (over 50% glazing): Metal Frame, Entrance Door, Perf. Specs.: Product ID NA, SHGC 0.16, PF 0.90, [Bldg. Use 1 - Office] (c)	82	---	---	0.600	0.770
Window Type C (6 sqft ea): Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID NA, SHGC 0.18, PF 3.30, [Bldg. Use 1 - Office] (c)	6	---	---	0.360	0.380
Window Type B (15 sqft ea): Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID NA, SHGC 0.18, PF 1.20, [Bldg. Use 1 - Office] (c)	30	---	---	0.360	0.380

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.
(b) Other components require supporting documentation for proposed U-factors.
(c) Fenestration product performance must be certified in accordance with NFRC and requires supporting documentation.
(d) Slab-On-Grade proposed and budget U-factors shown in table are F-factors.

Envelope PASSES: Design 1% better than code

Envelope Compliance Statement

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 2018 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Morgan Helfrich, AIA, LEED AP
Name: Title Signature Date 01/12/2025

This report identifies proposed Construction Documentation Design only, GMB - Architects & Engineers is not liable for construction or any deviations from this design.



Project Title: Horizon Farm Credit Report date: 09/24/25
Data filename: Page 4 of 14

Horizon Farm Credit - Bridgeville - Code Review
International Building Code 2021
NFPA 101 - Life Safety Code 2021
Delaware Regulations: 702 Fire Protection in Building Construction
Additional Energy Conservation Code - 2018

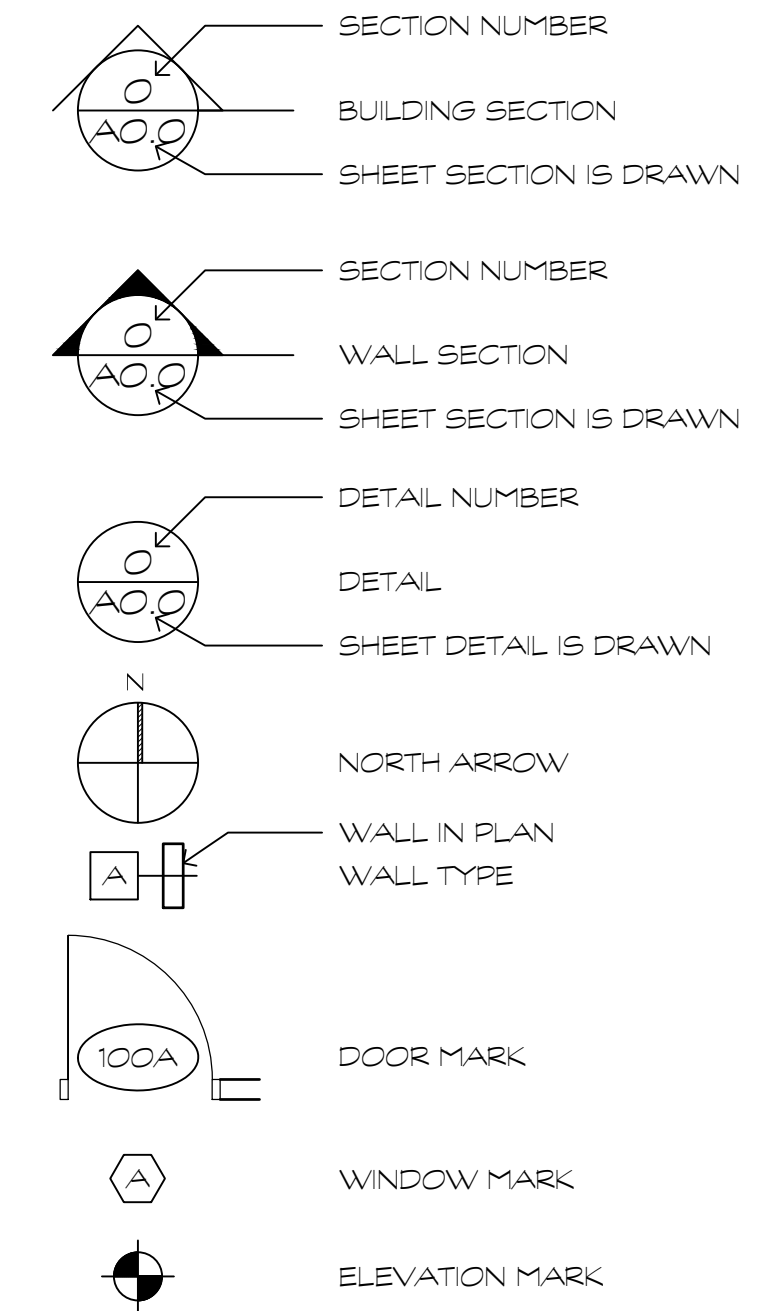


TOPIC	DESCRIPTION	CODE REFERENCE
OCCUPANCY GROUP	MIXED USE NEW CORPORATE OFFICE - BUSINESS (B) NEW KITCHEN + BREAK ROOM <2500 SF - BUSINESS (B) NEW TRAINING ROOM - ASSEMBLY (A-3)	IBC 304.1 NFPA 6.1.1.1
CONSTRUCTION CLASSIFICATION	TYPE V-B, SPRINKLERED. NFPA TYPE V000	IBC TABLE 602.5 NFPA TABLE A.8.2.1.2
ALLOWABLE AREAS	MAX. NUMBER OF STORIES, SPRINKLERED BUSINESS (B) 3 MAX. ALLOWABLE AREA, SPRINKLERED (S1) BUSINESS (B) 36,000	IBC TABLE 504.4 IBC TABLE 506.2
BUILDING AREAS	CORPORATE OFFICE (B) 16529 74% KITCHEN - BREAK ROOM (B) 746 3% TRAINING ROOM (A-3) 2408 11% AREA LESS THAN 10% OF AGGREGATE AREA AND CONSIDERED ANCILLARY TOTAL FINISHED AND ENCLOSED BUILDING AREA: 19,683 88% TOTAL UNENCLOSED BUILDING AREA: 2,740 12% TOTAL ENCLOSED AND UNENCLOSED BUILDING AREA: 22,423	IBC 508.2.3 NFPA 6.1.14.1.3
FIRE RESISTANCE BUILDING ELEMENTS	STRUCTURAL FRAME EXTERIOR BEARING WALLS INTERIOR BEARING WALLS NON-BEARING INTERIOR WALLS NON-BEARING INTERIOR WALLS FLOORS ROOFS	IBC TABLE 601 NFPA TABLE A.8.2.1.2
AUTOMATIC SPRINKLERS	AUTOMATIC SPRINKLERS REQUIRED FOR ALL BUILDINGS EXCEEDING AGGREGATE GROSS FLOOR AREA OF 10,000 SQUARE FEET	DE 702, CH 4, 1.2.1
FIRE RESIST. ON BLDG. SEP.	EXTERIOR WALLS X 30 FT. (ALL CONSTRUCTION TYPE) = NORTH, EAST, SOUTH, WEST	0 HRS IBC TABLE 705.5
MAX. ALLOWABLE AREA FOR UNPROT. OPENINGS	EXTERIOR WALLS; UNPROTECTED AND SPRINKLERED X > 30 FT. = NO LIMIT	IBC TABLE 705.8
OCC. SEPARATION	BUSINESS (B) TO BUSINESS (B), SPRINKLERED: 0 HR BUSINESS (B) TO ASSEMBLY (A-3), SPRINKLERED: 1 HR	IBC 508.4 NFPA TABLE 6.1.14.4.1 NFPA 6.1.14.4.3
MIN. OPENING FIRE PROTECTION IN RATED CONSTRUCTION	FIRE PARTITION AT 1HR CORRIDOR WALLS MIN. DOOR RATING = 1 HR MIN. SIDELITE OR GLAZING = 1 HR	IBC 716.1 (2) NFPA TABLE 6.3.3.2.2
WALL AND CEILING FINISH	BUILDING EXIT ENCLOSURE ROOMS CORRIDORS	CLASS B CLASS C CLASS B IBC TABLE 803.13 NFPA A.10.2.2
OCCUPANT LOAD	CORPORATE OFFICE (B): 16529 SF / 150 KITCHEN - BREAK ROOM (B): 746 SF / 50 (CON.) TRAINING ROOM (A-3): 2408 SF / 15 (UNCON.) TOTAL OCCUPANTS: 286 OCC.	110 OCC. 15 OCC. 161 OCC. 286 OCC. IBC TABLE 1004.5 IBC 1004.8 NFPA 7.3.1.2
EGRESS WIDTH	EXIT WIDTH: 0.2 x 286 = 57.2 INCHES PROVIDED: 864 INCHES STAIRWAY WIDTH: 0.3 x 9 = 0.9 INCHES PROVIDED: SERVICE STAIRS FOR ACCESS WITH ROOF CORRIDOR WIDTH: MIN = 44 INCHES THROUGHOUT AISLES AND AISLE ACCESSWAYS IN ASSEMBLY SPACES SHALL BE: MIN AISLE WIDTH FOR LEVEL AISLES WITH SEATING ON ONE SIDE = 36" MIN 18" FOR SEATING ADJACENT TO AISLE ACCESSWAY MIN AISLE ACCESSWAYS FOR ROWS FEWER THAN 14 SEATS SHALL BE A MIN OF 12" WIDE 1/2" FOR EACH ADDITIONAL FOOT BEYOND 12R OR 12" + 1/2" (35.5' - 12") = 23.75"	IBC 1005.3.1 IBC 1005.3.2 IBC TABLE 1021.2 NFPA TABLE 7.3.3.1 IBC 1020.3 IBC 1018.2 IBC 1030.9.1.5 IBC 1030.13.1 IBC 1030.13.1.1
EXIT ACCESS TRAVEL DISTANCE	BUSINESS (B) = 300 FT. SPRINKLERED COMMON PATH BUSINESS (B) = 100 FT. SPRINKLERED	IBC TABLE 1017.6 NFPA A7.6 IBC TABLE 1006.2.1
CORRIDOR REQUIREMENTS	CORRIDOR WALLS AND OPENINGS 9 OCCUPANCIES (30 OCCUPANTS, SPRINK.) MIN. CORR. WIDTH: 44 INCH DEAD END CORRIDOR LENGTH, SPRINKLERED: 20 FT MAX BUSINESS PERMITTED 50 FT. MAX.	IBC 1020.2 IBC 1020.3 IBC 1020.4 NFPA A7.6
PLUMBING FIXTURES	WATERCLOSETS: BUSINESS (B) 1 PER 25 FOR 1ST 50 OCC, AND 1 PER 50 THEREAFTER 253 OCC (127 M + 127 F); REQ.: 4 PER M / F TOTAL REQUIRED = 8 LAVATORY: BUSINESS (B) 1 PER 40 FOR 1ST 80 OCC, AND 1 PER 80 THEREAFTER 253 OCC (127 M + 127 F); REQ.: 3 PER M / F TOTAL REQUIRED = 6 DRINKING FOUNTAIN BUSINESS (B) 1 PER 100 OCC. 253 OCC; REQ.: 3 TOTAL REQUIRED = 3 SERVICE SINK BUSINESS (B) 1 REQUIRED TOTAL REQUIRED = 1	IBC TABLE 2902.1
THERMAL PERFORMANCE REQUIREMENTS	ZONE 4, EXCEPT MARINE ROOF: ATTIC AND OTHER ROOF: INSULATION ENTIRELY ABOVE DECK WOOD FRAMED: UNHEATED SLAB: FIXED FENESTRATION: OPERABLE FENESTRATION: ENTRANCE DOORS	R-38 R-30 CI R-20 OR R-13 + R-3.8 CI R-10, 24" U-0.38 U-0.45 U-0.77 IECC C402.1.3 IECC C402.4
SHGC	PROJECTION FACTOR <0.2	0.36 SSW 0.48 N IECC C402.4

ABBREVIATIONS:

ARCH.	ARCHITECT/ARCHITECTURAL
AC-L	ACOUSTICAL LAY-IN CEILING
ALUM.	ALUMINUM
ALUN.	CONCRETE
CONT.	CONTINUOUS
C.T.	CERAMIC TILE
FT.	FOOT
GWB	GYPSUM WALL BOARD
HM	HOLLOW METAL
HV	HARDWARE
MAX.	MAXIMUM
MIN.	MINIMUM
NOM.	NOMINAL
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
PAR.	PAPER
PVC	POLYVINYL CHLORIDE
S.F.	SQUARE FOOT
STRUCT.	STRUCTURAL
T.O.	TOP AND BOTTOM
T.O.	TOP OF
W/	WITH

SYMBOLS LEGEND:



DATE	REVISION	ISSUED FOR PERMIT
1/19/2026		
	1	

OUTLINE SPECIFICATIONS

GENERAL

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE CODES, AND RULES AND REGULATIONS OF THE REGULATORY AGENCIES HAVING JURISDICTION OVER THIS PROJECT AND ITS LOCATION.
- FURNISH REQUIRED CONSTRUCTION AIDS, BARRIERS, TEMPORARY ENCLOSURES AND SAFETY AIDS NECESSARY TO ACCOMPLISH THE WORK IN A SAFE AND EFFICIENT MANNER, IN ACCORDANCE WITH APPLICABLE CODES AND REGULATIONS. CLEANING UPON COMPLETION OF WORK.
- EXECUTE PROPER CLEANING DAILY DURING THE PROGRESS OF THE WORK AND AT COMPLETION OF THE JOB.
- ALL REQUIRED PERMITS SHALL BE PAID FOR AND OBTAINED BY CONTRACTOR.
- ALL CONTRACTORS SHALL BE LICENSED IN THE STATE OF DELAWARE.
- CONTRACTOR SHALL SELECT, EMPLOY AND PAY FOR SERVICES OF AN INDEPENDENT TESTING LABORATORY TO PERFORM SPECIFIED INSPECTION, SAMPLING AND TESTING WHERE SPECIFIED IN BID DOCUMENTS.
- COMPLY WITH FEDERAL, STATE AND LOCAL CODES AND REGULATIONS FOR FURNISHING REQUIRED CONSTRUCTION AIDS AND BARRIERS FOR PERFORMANCE OF THE WORK.

SUBSTITUTIONS

- WHERE SPECIFIC MANUFACTURERS AND MODEL NUMBERS ARE SHOWN, OWNER MAY CONSIDER SUBSTITUTION REQUESTS, PRIOR TO BID, OF EQUIVALENT OR SUPERIOR FUNCTION, APPEARANCE AND QUALITY, WHEN CERTIFIED IN WRITING BY PROPOSER AND ACCEPTED IN WRITING BY THE ARCHITECT/ENGINEER.

02 01 00 - SUBSURFACE EXPLORATION

- TEST BORING LOGS: THE TEST BORING LOGS INCLUDED HEREIN ARE FOR THE INFORMATION OF HORIZON CREDIT FARM, AND IN NO WAY IS THIS INFORMATION TO BE CONSIDERED PART OF THE CONTRACT. NEITHER THE OWNER NOR THE ARCHITECT WARRANTS OR GUARANTEES THAT THE MATERIALS AND CONDITIONS ACTUALLY ENCOUNTERED IN THE PROSECUTION OF THE WORK WILL BE THE SAME AS SHOWN IN THE TEST BORINGS. IF THE CONTRACTOR RELIES FOR ANY PURPOSE UPON SAID INFORMATION, HE DOES SO AT HIS OWN RISK. THE CONTRACTOR SHALL MAKE OWN INVESTIGATIONS OF THE ON-SITE CONDITIONS AND MATERIALS, AND BASE THEIR PRICE UPON THEIR OWN FINDINGS.
- ALL KNOWN SUBSURFACE LINES, PIPES, CONDUITS, AND STRUCTURES ARE SHOWN ON THE DRAWINGS. THE LINES SHOWN ARE BASED UPON THE BEST AVAILABLE PLANS AND MAPS. THE LOCATIONS HAVE NOT BEEN VERIFIED BY TEST PITS AND THE ARCHITECT AND THE OWNER ASSUME NO RESPONSIBILITY FOR THE ACCURACY OF THE DRAWINGS. IN ANY AREA WHERE THE CONTRACTOR MUST MAKE CONNECTIONS TO OR CROSS EXISTING LINES, IT SHALL BE HIS RESPONSIBILITY TO TEST PIT THE LINES AND VERIFY THE LOCATIONS TO HIS SATISFACTION. IN THE EVENT THAT LINES ARE NOT FOUND LOCATED AS SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT SO THAT AN EVALUATION CAN BE MADE AS TO THE MAGNITUDE AND METHOD OF ANY ADJUSTMENTS IN THE PLANS.
- THE CONTRACTOR SHALL BE REQUIRED TO VERIFY THE LOCATION AND DEPTH OF ALL CRITICAL LINES USING TEST PITS BEFORE BEGINNING WORK.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY DAMAGE TO ANY UNDERGROUND OR ABOVEGROUND LINES ENCOUNTERED IN ANY MANNER DURING CONSTRUCTION. WHEN CROSSING AND WORKING IN THE VICINITY OF EXISTING LINES IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO PROPERLY SUPPORT AND MAINTAIN THE OPERATION OF THE LINES. EXTREME CARE MUST BE EXERCISED IN EXCAVATION AND REFIL OPERATIONS. THE CONTRACTOR WILL CORRECT AT HIS OWN EXPENSE ANY DAMAGE CAUSED TO EXISTING LINES.

02 41 00 - DEMOLITION

- WORK INCLUDES DEMOLITION AND REMOVAL OF EXISTING ON-SITE STRUCTURES, SITEWORK, AND OTHER MISCELLANEOUS APERTURANCE AS REQUIRED TO ALLOW NEW CONSTRUCTION OPERATIONS, COMPLYING WITH APPLICABLE CODES AND ACCIDENT AND FIRE PREVENTION REGULATIONS. FIELD VERIFY.
- TAKE APPROPRIATE ACTION TO CHECK THE SPREAD OF DUST AND TO AVOID THE CREATION OF A NUISANCE IN THE SURROUNDING AREA.
- PROTECTION: PERFORM WORK IN A SAFE MANNER IN ORDER TO AVOID ACCIDENTS AND PROPERTY DAMAGE. WORKMEN MUST BE EXPERIENCED IN THIS TYPE OF WORK. EQUIPMENT SHOULD BE OF SUITABLE TYPE, IN GOOD WORKING CONDITION, AND OPERATED BY SKILLED OPERATORS. WHERE PEDESTRIAN AND DRIVER SAFETY IS ENDANGERED IN THE AREA OF REMOVAL WORK, USE TRAFFIC BARRICADES WITH FLASHING LIGHTS. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS. EXPLOSIVES: NOT PERMITTED. STRICTLY OBSERVE REGULATIONS WHEN REMOVING TANKS AND PIPING WHICH MAY HAVE CONTAINED FLAMMABLE LIQUIDS OR GASES. PREVENT ACCESS OF UNAUTHORIZED PERSONS.
- EXISTING FACILITIES (UTILITIES) TO BE REMOVED: CONTRACTOR SHALL REMOVE ANY ITEM DISCOVERED DURING THE COURSE OF DEMOLITION. CONTRACTOR IS RESPONSIBLE FOR PROPERLY DISCONNECTING AND CAPPING UTILITIES TO THE REQUIRED UTILITY STANDARD. ALL EXCAVATIONS OR HOLES TO BE FILLED AND PROPERLY COMPACTED WITH SUITABLE MATERIAL FROM THE SITE OR IMPORTED FILL. PREVENT DAMAGE TO ACTIVE OVERHEAD AND UNDERGROUND POWER CABLES, TELEPHONE, AND WATER AND SEWER LINES DURING DEMOLITION OPERATION. ARRANGE WITH UTILITY COMPANIES FOR DISCONNECTION OF SERVICES BEFORE STARTING WORK.
- TITLE TO MATERIALS: TITLE TO MATERIALS AND EQUIPMENT TO BE REMOVED, EXCEPT AS SPECIFIED OTHERWISE, IS VESTED IN THE CONTRACTOR UPON RECEIPT OF NOTICE TO PROCEED. THE OWNER WILL NOT BE RESPONSIBLE FOR THE CONDITION OR LOSS OF OR DAMAGE TO SUCH PROPERTY AFTER NOTICE TO PROCEED. MATERIALS AND EQUIPMENT SHALL NOT BE VIEWED BY PROSPECTIVE PURCHASERS OR SOLD ON THE SITE.
- DEBRIS AND RUBBISH: REMOVE AND TRANSPORT DEBRIS AND RUBBISH IN A MANNER THAT WILL PREVENT SPILLAGE ON STREETS OR ADJACENT AREAS. CLEAN UP SPILLAGE FROM STREETS AND ADJACENT AREAS. DISPOSE OF DEBRIS AND RUBBISH IN AN APPROVED OFF SITE DISPOSAL AREA. REGULATIONS: COMPLY WITH FEDERAL, STATE, AND LOCAL HAULING AND DISPOSAL REGULATIONS.

03 11 00 - CONCRETE FORMWORK

- CONTRACTOR'S RESPONSIBILITY FOR DESIGN, ENGINEERING AND CONSTRUCTION OF FORMWORK. DESIGN FORMWORK IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE'S RECOMMENDED PRACTICE FOR CONCRETE FORMWORK ACI 347. DESIGN FORMS TO REPEAT REGULARLY OR REGULARLY REPEATING STRUCTURAL UNITS OR BAYS. SUBMIT SHOP DRAWING COVERING SUCH FORMING CONDITION.
- ALLOWABLE TOLERANCES: SET AND MAINTAIN CONCRETE FORMS WITHIN TOLERANCE LIMITS STATED IN AMERICAN CONCRETE INSTITUTE'S RECOMMENDED PRACTICE FOR CONCRETE FORMWORK ACI 347.
- REFER TO ACI 350, CODE REQUIREMENTS FOR ENVIRONMENTAL ENGINEERING CONCRETE STRUCTURES AND COMMENTARY. AMERICAN PLYWOOD ASSOCIATION: APA GRADE TRADEMARKS. U.S. DEPARTMENT OF COMMERCE PRODUCT STANDARDS: PS-1-09 FOR CONSTRUCTION AND INDUSTRIAL PLYWOOD.
- PROTECT FORMWORK MATERIALS BEFORE, DURING AND AFTER ERECTION TO INSURE ACCEPTABLE FINISHED CONCRETE WORK. ALSO PROTECT IN-PLACE MATERIALS AND OTHER OPERATIONS OF WORK IN CONNECTION WITH CONCRETE POURS. IN EVENT OF DAMAGE TO ERECTED FORMS, MAKE NECESSARY REPAIRS OR REPLACEMENTS PRIOR TO CONCRETE POURS AT NO EXPENSE TO THE OWNER
- FORMS: LUMBER: FORM FRAMING, SHEATHING AND SHORING CONFORMING TO ACI 347. USE LUMBER FREE OF MATERIAL DEFECTS THAT WOULD DEFORM FINISHED CONCRETE PRODUCT.
- PLYWOOD, FORM SHEATHING AND PANELS: NOT LESS THAN 5/8-INCH THICK EXTERIOR TYPE B, B PLYWOOD CLASS I AND II EXT. APA CONFORMING TO U.S. PRODUCT STANDARD PS-1. PLYWOOD FORMS WITH METAL EDGES WILL BE ACCEPTABLE. USE TYPE II ONLY ON SURFACES NOT EXPOSED TO VIEW. PROVIDE MOLDINGS FOR CHAMFERS (IF ANY) BOTH MILLED AND PLANED SMOOTH.
- STEEL: METAL FORMS OF PRE-ENGINEERED DESIGN MAY BE USED IN LIEU OF WOOD FORMS.
- FORM TIES: FACTORY FABRICATED, ADJUSTABLE-LENGTH, REMOVABLE OR SNAP-OFF METAL FORM TIES CONFORMING TO ACI 347 AND ACI 350; USE TIES IN CONSTRUCTION OF LIQUID RETAINING STRUCTURES THAT ARE DESIGNED TO PREVENT SEEPAGE OR FLOW OF WATER ALONG THE EMBEDDED ITEM. USE SNAP-OFF METAL TIES WITH ENDS THAT BREAK AT LEAST 1½ INCH FROM THE FACE OF THE WALL. ASSEMBLY SHOULD PROVIDE CONE SHAPED DEPRESSIONS IN THE FORMS AT THE SURFACE AT LEAST 1 INCH IN DIAMETER AND 1½ INCH DEEP TO ALLOW FILLING AND PATCHING. REMOVABLE TIES THAT LEAVE HOLES LARGER THAN 1 INCH ARE NOT PERMITTED.FORM TIES FABRICATED ON THE PROJECT SITE AND WIRE TIES OR FLAT BANDS ARE NOT ACCEPTABLE. WOOD SPACERS ARE NOT PERMITTED WITHIN THE POUR.
- METAL SPACERS: INCLUDE SPACERS, CHAIRS, TIES OR OTHER DEVICES FOR PROPERLY ASSEMBLING, PLACING, SPACING, AND SUPPORTING THE REINFORCEMENT IN PLACE. PROVIDE METAL ACCESSORIES WITH SOLID PLASTIC FEET FOR EXPOSED SLABS AND SIMILARLY EXPOSED CONCRETE SURFACES, BOTH INTERIOR AND EXTERIOR, WHERE ACCESSORIES COME IN CONTACT WITH FORMS. ALUMINUM METAL ACCESSORIES THAT COME IN CONTACT OR ARE EMBEDDED IN CONCRETE SHALL BE PROHIBITED.
- PREPARATION: APPLY FORM COATINGS IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. DO NOT ALLOW EXCESS FORM COATING MATERIAL TO ACCUMULATE IN THE FORMS. DO NOT ALLOW FORM COATINGS TO COME IN CONTACT WITH CONSTRUCTION JOINTS OR REINFORCING CABLE. CAULK AND TAPE BUTT JOINTS IN FORMWORK.
- ERECTION : CONSTRUCT FORMS IN ACCORDANCE WITH ACI 347 TO REQUIRED DIMENSIONS, PLUMB, STRAIGHT AND MORTAR TIGHT, AND PASTE TIGHT WHERE APPEARANCE IS IMPORTANT. SECURELY BRACE AND SHORE FORMS TO PREVENT DISPLACEMENT AND TO SAFELY SUPPORT IMPOSED CONCRETE LOAD. PROVIDE TEMPORARY OPENINGS WHERE INTERIOR AREA OF FORMWORK IS INACCESSIBLE FOR CLEANOUT, FOR INSPECTION BEFORE CONCRETE PLACEMENT, AND FOR PLACEMENT OF CONCRETE. SECURELY BRACE TEMPORARY OPENINGS AND SET TIGHTLY TO FORMS TO PREVENT THE LOSS OF CONCRETE MORTAR. LOCATE TEMPORARY OPENINGS ON FORMS IN AS INCONSPICUOUS A LOCATION AS POSSIBLE. PROVIDE OPENINGS IN CONCRETE FORMWORK OF THE CORRECT SIZE AND IN THE PROPER LOCATION TO ACCOMMODATE OTHER OPERATIONS OF CONSTRUCTION WORK IN THE PROJECT. ACCURATELY PLACE AND SECURELY SUPPORT ITEMS TO BE BUILT INTO FORMS. WET FORMS SUFFICIENTLY TO PREVENT JOINTS IN WOOD FORMS FROM OPENING PRIOR TO CONCRETE POUR.

- FORM REMOVAL (ACI 347) : AFTER CONCRETE HAS BEEN PLACED, FORMS, BRACING AND SUPPORTS SHALL REMAIN UNDISTURBED LONG ENOUGH TO ALLOW THE CONCRETE TO REACH THE STRENGTH NECESSARY TO SUPPORT WITH SAFETY ITS OWN WEIGHT PLUS ANY LIVE LOAD AND EARTH PRESSURE THAT MIGHT BE PLACED UPON IT WITHOUT CAUSING EXCESSIVE SETTLEMENT OR DEFLECTION OR ANY TEMPORARY OR PERMANENT DAMAGE TO THE STRUCTURE. WHERE IN THEIR OPINION, THE LEAVING IN PLACE OF FORMS CONTRIBUTES TO THE PERMANENT BENEFIT OF THE STRUCTURE, THE ENGINEER MAY ORDER THE FORMS TO REMAIN FOR A LONGER PERIOD THAN THAT CONSIDERED TO BE SUFFICIENT TIME IN THE JUDGMENT OF THE CONTRACTOR. HOWEVER, SHOULD THE ENGINEER ACQUIESCE IN THE REMOVAL OF FORMS BY THE CONTRACTOR, THE ENGINEER ASSUMES NO RESPONSIBILITY AS A RESULT OF THEIR REMOVAL. THE CONTRACTOR IS FULLY AND PERSONALLY RESPONSIBLE AND IS IN NO MANNER RELIEVED OF THIS RESPONSIBILITY FOR SUCH REMOVAL. TAKE SPECIAL CARE TO PREVENT THE BREAKING OF EDGES AND CORNERS OF CONCRETE IN THE STRIPPING OF FORMS. HAMMER_PACK HOLES LEFT BY THE RODS WITH STIFF MORTAR OF THE SAME MATERIALS AS, BUT SOMEWHAT LEANER THAN, THAT IN THE CONCRETE. RENDER THE PATCH INCONSPICUOUS.

03 20 00 - CONCRETE REINFORCEMENT

- REFERENCE: ASTM A82: SPECIFICATION FOR STEEL WIRE, PLAIN FOR CONCRETE REINFORCEMENT. ASTM A185: SPECIFICATION FOR STEEL WELDED WIRE FABRIC, PLAIN, FOR CONCRETE REINFORCEMENT. ASTM A615: SPECIFICATION FOR DEFORMED AND PLAIN BILLET - STEEL BARS FOR CONCRETE REINFORCEMENT. CRSI: MANUAL OF STANDARD PRACTICE.
- SUBMIT SCALED SHOP DRAWINGS WITH LAYOUT + REINFORCEMENT. FURNISH ADDITAVIT FROM STEEL MANUFACTURER THAT STEEL MANUFACTURED FOR THIS PROJECT MEETS THE REQUIREMENTS SPECIFIED.
- DEFORMED REINFORCING BARS: NEW BILLET STEEL, ASTM A615, GRADE 60. STIRRUPS AND TIES SHALL BE GRADE 40.
- WELDED WIRE FABRIC REINFORCING: ASTM A185.
- METAL ACCESSORIES: INCLUDE SPACERS, CHAIRS, TIES, OR OTHER DEVICES FOR PROPERLY ASSEMBLING, PLACING, SPACING AND SUPPORTING REINFORCEMENT IN PLACE. PROVIDE METAL ACCESSORIES FOR EXPOSED SLABS AND SIMILARLY EXPOSED CONCRETE SURFACES, BOTH INTERIOR AND EXTERIOR, WITH SOLID PLASTIC FEET WHERE ACCESSORIES COME IN CONTACT WITH FORMS. PROVIDE CHAIRS FOR REINFORCING FOR SLABS AND BEAMS ON EARTH WITH METAL PADS ATTACHED TO THE FEET TO PREVENT PENETRATION OF THE EARTH FORM
- TIE WIRE: STEEL ASTM A82.
- FABRICATE FOLLOWING CRSI "MANUAL OF STANDARD PRACTICE." PLACE REINFORCEMENT IN ACCORDANCE WITH CRSI MANUAL FOR PLACING REINFORCING REBAR. SUPPORT AND TIE THAT WILL PREVENT DISPLACEMENT. NOTE REQUIREMENTS FOR EARTH FORMS AND EXPOSED CONCRETE PER GEOTECHNICAL REPORT. REMOVE LOOS RUST AND MILL SCALE, AND OTHER DEBRIS THAT IMPEDS BONDING. INSTALL WIRE FABRIC IN LONG LENGTHS AS PRACTICABLE, LAP PIECES AT LEAST ONE FULL MESH AND LACE SPLICES WITH 16 GAUGE WIRE.

03 30 00 - CAST-IN-PLACE CONCRETE

- REFERENCE: ASTM C31: METHOD OF MAKING AND CURING CONCRETE TEST SPECIMENS IN THE FIELD. ASTM C33: CONCRETE AGGREGATES. ASTM C39: TEST METHOD FOR COMPRESSIVE STRENGTH OF CYLINDRICAL CONCRETE SPECIMENS. ASTM C150: PORTLAND CEMENT. ASTM C260: AIR-ENTRAINING ADMIXTURES FOR CONCRETE. ASTM C494: CHEMICAL ADMIXTURES FOR CONCRETE. ACI 211.1-91: STANDARD PRACTICE FOR SELECTING PROPORTIONS FOR NORMAL, HEAVYWEIGHT, AND MASS CONCRETE. FS HH-F-341: FILLERS, EXPANSION JOINT; BITUMINOUS (ASPHALT AND TAR) AND NONBITUMINOUS.
- SUBMIT:
 - DESIGN MIXES: PROPORTIONING (ACI 211.1) WITH MIX OF MIN. 5½ BAGS OF CEMENT PER CUBIC YARD OF CONCRETE, AMOUNT OF COARSE AGGREGATE NECESSARY TO PRODUCE WORKABLE MIXTURE, MINIMUM AMOUNT OF WATER TO OBTAIN REQUIRED SLUMPS NOT TO EXCEED WATER/CEMENT RATIO OF 6½ GALLONS OF WATER PER BAG OF CEMENT; WATER REDUCING ADMIXTURE IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS WITHOUT IMPEDEING SLUMP.
 - AIR ENTRAINING ADMIXTURE: CONCRETE SHALL HAVE AIR ENTRAINING NOT LESS THAN 4 PERCENT OR MORE THAN 6 PERCENT, AS CERTIFIED BY SUPPLIER.
 - STRENGTH: MINIMUM COMPRESSIVE STRENGTH AT THE ENF OD 28 DAYS PER STRUCT. PERFORMANCE.
 - SLUMP: ACI 211.1
- CONCRETE TESTS BY AN APPROVED TESTING AGENCY EMPLOYED BY CONTRACTOR, AT LEAST ONE TEST FOR EACH 50 CUBIC YARDS OR PORTION THEREOF PLACED IN ONE DAY. MAKE FOUR TEST CYLINDERS: 2, 7-DAY AND 2, 28-DAY. MOLD AND CURE PER ASTM C 31, TEST IN ACCORDANCE WITH ASTM C 39.
- INSTALLED BY ACI-CERTIFIED FLATWORK TECHNICIAN AND FINISHER, MANUFACTURER COMPLYING WITH ASTM C 94/C 94M, AND CERTIFIED TO NRCMA'S "CERTIFICATION OF READY MIXED CONCRETE PRODUCTION FACILITIES": TESTING AGENCY QUALIFIED TO ASTM C 1077 AND ASTM E929, AS DOCUMENTED BY ASTM E 548; PERSONNEL CONDUCTING FIELD TESTS QUALIFIED AS ACI CONCRETE FIELD TESTING TECHNICIAN, GRADE 1, ACCORDING TO ACI CP-01; PERSONNEL PERFORMING LABORATORY TESTS SHALL BE ACI-CERTIFIED CONCRETE STRENGTH TESTING TECHNICIAN AND CONCRETE LABORATORY TESTING TECHNICIAN – GRADE I
- SINGLE SOURCE FOR CEMENTITIOUS MATERIAL, AGGREGATE, AND ADMIXTURES.
- COMPLY WITH ACI 301, "SPECIFICATIONS FOR STRUCTURAL CONCRETE," SECTIONS 1 THROUGH 5 AND ACI 117, "SPECIFICATIONS FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS.
- MATERIAL:
 - CEMENT: ASTM C 150, TYPE 1. USE ONLY ONE BRAND THROUGHOUT THE PROJECT.
 - AGGREGATE: COARSE AGGREGATE: ASTM C 33. FREE OF LOAM, CLAY, OR FOREIGN MATTER. CRUSHED STONE OR GRAVEL, HARD, DURABLE AND FREE OF ADHERENT COATINGS. MAXIMUM SIZE NUMBER 57 UNLESS NOTED OTHERWISE. MAXIMUM SIZE FOR TOPPING, SLABS, AND FILLS 3 INCHES AND LESS IN THICKNESS IS 3/8 INCH. FINE AGGREGATE: NATURAL SAND FREE OF LOAM, CLAY OR FOREIGN MATTER. ADMIXTURES: USE ONLY ONE BRAND THROUGHOUT THE PROJECT. ACCELERATOR MAY BE USED ONLY IF DESIGN MIXES UTILIZING THE ACCELERATOR ARE SUBMITTED AND ACCEPTED. DO NOT USE ADMIXTURES CONTAINING CALCIUM CHLORIDE.
 - WATER: ASTM C94 AND POTABLE.
 - GALVANIZED METAL SCREED JOINTS (HECKMAN BUILDING PRODUCTS, INC., CHICAGO, IL 60624), #95, 24 GAUGE WITH STAKE PINS
 - EXPANSION JOINT FILLER: FS HH-F-341, TYPE 1, PRE-MOLDED BITUMINOUS, IMPREGNATED FIBERBOARD STRIPS.
 - PLASTIC VAPOR RETARDER: POLYETHYLENE SHEET, ASTM D4397, NOT LESS THAN 10 MILS THICK. FORTIFIBER CORP. OR APPROVED SUBSTITUTIONS.
- PREPARATION: FOLLOW ACI STANDARDS ON FORMWORK, EMBEDDMENT, REINFORCING, RUNWATS, BONDING, EQUIPMENT, CONSTRUCTION JOINTS, CONSTRUCTION JOINTS, SLAB ON GRADE, AND PLASTIC VAPOR RETARDERS (ASTM E1643) WITH 6" LAPPED AND SEALED JOINTS. DO NOT ADD WATER TO CONCRETE DURING DELIVERY OR PLACEMENT.
- INSTALL SLABS ON GRADE OVER DRAINAGE FILLED COMPACTED SUBGRADE PER GEOTECHNICAL REPORT, VAPOR BARRIER AND EXPANSION WHERE INDICATED. PREPARE SUBGRADE WITH TERMIT CONTROL. PLACE CONSTRUCTION JOINTS UNER WALLS AND PARTITIONS WHERE FEASIBLE. USE SCREED JOINTS AT JOINTS IN FLOOR SLABS.
- STEEL TROWEL FINIS FOR FLOORS INTENDED AS WALKING SURFACES OR RECEIPT OF FLOOR COVERINGS, BROOM FINISH EXTERIOR WALKS, STEPS, AND PLATFORMS.
- COVER AND PROTECT FOR A MIN. OF 7 DAYS AFTER POURED WITH MIN. 4 MIL POLYETHYLENE OR PAPER LAPPED 6 INCHES. COLD WEATHER INSTALLATION FOLLOW ACI 306.1, HOT WEATHER INSTALLATION FOLLOW ACI 301.

03 60 00 - GROUT

- REFER TO ACI 308, ASTM C 33, ASTM C150, ASTM C1019, ASTM C 476, ASTM 404.
- MATERIALS:
 - GROUT (SAND/CEMENT): PORTLAND CEMENT: ASTM C 150 TYPE II. (I NORMAL, II SULFATE R., III HIGH EARLY.), SAND: ASTM C 33, FINE AGGREGATE. GROUT SHALL MEET THE REQUIREMENTS OF ASTM C476 COURSE GROUT AND SHALL REACH A MINIMUM COMPRESSIVE STRENGTH OF 3000 POUNDS PER SQUARE INCH AT 28 DAYS.
 - WATER: POTABLE QUALITY, FREE FROM DELETERIOUS AMOUNTS OF ACIDS, ALKALIS, AND ORGANIC SUBSTANCES.
 - NON-SHRINK, NON-METALLIC GROUT: FACTORY PREMIXED MATERIAL CONTAINING NO CORROSIVE IRONS, ALUMINUMS, CHEMICALS OR GYPSUMS. GROUTS CONTAINING WATER REDUCERS, ACCELERATORS, OR LUBRIFIERS SHALL HAVE NO DRYING SHRINKAGE GREATER THAN THE EQUIVALENT SAND CEMENT AND WATER MIX AS TESTED PER ASTM C 596. GROUT SHALL BE NON-SHRINK BEFORE INITIAL SET AND SHOW NO EXPANSION AFTER SET AS TESTED PER ASTM C 596. INITIAL SET OF GROUT NOT LESS THAN 60 MINUTES PER ASTM C 191 TEST. USE TYPE II CEMENT IN GROUT FORMULATION. ACCEPTABLE MANUFACTURERS: U.S. GROUT CORPORATION; FIVE STAR; OR EQUAL.
- FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION FOR FORMING, SURFACE PREP, AND MIXING. PLACE GROUT WHILE NEAT CEMENT IS WET, IN SINGLE POURS, FINISH WITH STEEL TROWEL. CURE IN ACCORDANCE WITH ACI 308.

04 05 13 – MORTARS

- REFER TO APPLICABLE PROVISIONS OF ASTM C 91, ASTM C 144. ASTM C 207.
- MASONRY CEMENT: ASTM C 91; TYPE S, N AND M, SUPPLIED BY ONE MANUFACTURER. SAND: CLEAN, WELL GRADED PER ASTM C 144, WHITE/COLORLESS SAND TO NOT IMPACT MORTAR COLOR. WATER: POTABLE. OXYDRATED LIME: ASTM C 207, TYPE S. ADMIXTURE: NOT PERMITTED WITHOUT WRITTEN APPROVAL. COLOR: FROM MANUFACTURER'S STANDARD RANGE OF COLORS. BASIS OF DESIGN IS YORK BUILDING PRODUCTS –

WORKRITE: PATAGONIA WR-2311.

- GROUT FOR SETTING BEARING PLATES AND STRUCTURAL STEEL: NON-SHRINK, CEMENT BASED, NON-METALLIC, MEETING REQUIREMENTS OF ASTM C-1107.
- SURE-GRIP UTILITY GROUT BY DAYTON SUPERIOR CORP., PHILADELPHIA, PA, OR APPROVED SUBSTITUTION
- MIXING MORTARS: FOLLOW MANUFACTURERS RATIO OF SAND TO MORTAR. FOR CONCRETE MASONRY UNITS: ONE PART NATURAL MASONRY CEMENT, 2-1/4 TO 3 PARTS SAND BY VOLUME, ASTM C270, TYPE S ABOVE GRADE, TYPE M BELOW GRADE. BRICK: ASTM C270, TYPE N. MIX MORTARS THOROUGHLY BY MACHINE IN ACCORD WITH THE MANUFACTURER'S DIRECTIONS TO MEET THE REQUIREMENTS OF ASTM C 270. DO NOT RE-TEMPER OR USE MORTAR AFTER INITIAL SET. OBTAIN MORTAR INGREDIENTS OF A UNIFORM QUALITY, INCLUDING COLOR FOR EXPOSED MASONRY, FROM A SINGLE MANUFACTURER FOR EACH CEMENTITIOUS COMPONENT AND FROM ONE SOURCE OR PRODUCER FOR EACH AGGREGATE.

04 05 19 – JOINT REINFORCEMENT

- JOINT REINFORCEMENT: WIRE CONFORMING TO ASTM A82 FOR "COLD DRAWN STEEL WIRE FOR CONCRETE REINFORCEMENT". TRUSS TYPE OF 3/16 INCH DEFORMED SIDE RODS WITH #9 GAUGE CROSS RODS, 2 INCHES NARROWER THAN WIDTH OF WALL, REGULAR MILL GALVANIZED FINISH. USE SINGLE WYTHE TYPE FOR SINGLE WYTHE WALLS. USE MULTI-WYTHE TYPE WITH DRIP FOR CAVITY TYPE WALLS. USE H&B 130 TRUSS-TRI-MESH OR APPROVED SUBSTITUTION.
- PROVIDE HORIZONTAL REINFORCING, CONTINUOUS IN MASONRY WALL, 16 INCHES MAXIMUM VERTICAL SPACING ABOVE GRADE, 8 INCHES MAXIMUM BELOW GRADE. THE FIRST LEVEL OF REINFORCING SHALL START AT 8 INCHES ABOVE FLOOR SLAB. PROVIDE PREFABRICATED "T" SECTION HORIZONTAL REINFORCING AT ABUTTING WALLS AND PARTITIONS. CORNER REINFORCING PREFABRICATED. JOB FORMING NOT PERMITTED. LAPPING OF REINFORCEMENT AT CORNERS IS NOT ACCEPTABLE. REINFORCE HORIZONTALLY ABOVE AND BELOW OPENINGS IN FIRST AND SECOND BED JOINTS, 8 INCHES APART A MINIMUM OF 2 FEET BEYOND EDGE OF OPENING. DO NOT BRIDGE OVER OPENINGS AND EXPANSION JOINTS WITH HORIZONTAL REINFORCING.
- CONTROL JOINTS: H&B NS - CLOSED CELL NEOPRENE SPONGE, 3" FLANGE, DESIGNED TO FIT STANDARD SASH BLOCK, MEETING REQUIREMENTS OF ASTM D 1056 GRADE 2A1. USE IN CONJUNCTION WITH H&B SLIP-SET STABILIZER SPACED AT 16" ON-CENTER VERTICALLY AT EACH JOINT.
- PLACE WHERE INDICATED IN CMU WALLS AND IN ACCORD WITH THE MANUFACTURER'S DIRECTIONS. INSTALL H&B SLIP-SET STABILIZERS SPACED AT 16" ON-CENTER VERTICALLY AT EACH JOINT. WHERE NOT INDICATED, SPACE JOINTS A MAXIMUM OF 25'-0" ON-CENTE
- EXPANSION JOINTS: NS-CLOSED CELL NEOPRENE SPONGE AS MANUFACTURED BY H&B OR APPROVED SUBSTITUTION. USE IN CONJUNCTION WITH H&B SLIP-SET STABILIZER SPACED AT 32" ON-CENTER VERTICALLY AT EACH JOINT.
- PLACE WHERE INDICATED IN BRICK VENEER AND IN ACCORD WITH THE MANUFACTURER'S DIRECTIONS. INSTALL H&B SLIP-SET STABILIZERS SPACED AT 32" ON-CENTER VERTICALLY AT EACH JOINT. WHERE NOT INDICATED, SPACE JOINTS A MAXIMUM OF 25'-0" ON-CENTER
 - HOHMANN & BARNARD (H&B), INC., HAUPPAUGE, NY, OR APPROVED SUBSTITUTION

04 20 00 – UNIT MASONRY

- CONCRETE MASONRY UNITS. HOLLOW LOAD BEARING UNITS: ASTM C 90. PROVIDE NORMAL WEIGHT UNITS WITH MINIMUM AVERAGE NET-AREA COMPRESSIVE STRENGTH OF 1900 PSI. SOLID LOAD BEARING UNITS: ASTM C 145. SIZE: 8 INCHES BY 16 INCHES INCLUDING ALLOWANCE FOR JOINT WIDTHS BY THICKNESS REQUIRED, WITH EXPOSED SQUARE EXTERNAL CORNERS. FINE GRAIN UNIFORM FACE TEXTURE, ACCURATE FACE DIMENSIONS AND SHARP CORNERS AND FREE FROM IMPURITIES THAT CAUSE STAINS OR POP OUTS.
- FACE BRICK: BRICK SHALL BE HARD BURNED, NEW, WHOLE, SOUND AND FREE FROM CRACKS, SPALLS AND OTHER DEFECTS. COMPLY WITH ASTM C216, GRADE SW. GENERAL SHALE IN MONUMENT TUDOR, OR APPROVED SUBSTITUTION.
- WEEP/VENT PRODUCTS. USE ONE OF THE FOLLOWING:
 - WICKING MATERIAL: ABSORBENT ROPE, MADE FROM COTTON OR UV-RESISTANT SYNTHETIC FIBER, 1/4 TO 3/8 INCH IN DIAMETER, IN LENGTH REQUIRED TO PRODUCE 2-INCH EXPOSURE ON EXTERIOR AND 18 INCHES IN CAVITY BETWEEN WYTHES. USE ONLY FOR WEEPS.
 - ROUND PLASTIC WEEP/VENT TUBING: MEDIUM-DENSITY POLYETHYLENE, 3/8-INCH OD BY 4 INCHES LONG.
 - RECTANGULAR PLASTIC WEEP/VENT TUBING: CLEAR BUTYRATE, 3/8 BY 1-1/2 BY 3-1/2 INCHES LONG.
 - CELLULAR PLASTIC WEEP/VENT: ONE-PIECE, FLEXIBLE EXTRUSION MADE FROM UV-RESISTANT POLYPROPYLENE COPOLYMER, FULL HEIGHT AND WIDTH OF HEAD JOINT AND DEPTH 1/8 INCH LESS THAN DEPTH OF OUTER WYTHE. IN COLOR SELECTED FROM MANUFACTURER'S STANDARD.
- ADVANCED BUILDING PRODUCTS, INC., MORTAR MAKE WEEP VENT, OR APPROVED SUBSTITUTIONS.
- CAVITY DRAINAGE MATERIAL: FREE-DRAINING MESH, MADE FROM POLYMER STRANDS THAT WILL NOT GET DEGRADE WITHIN THE WALL CAVITY. PROVIDE ONE OF THE FOLLOWING:
 - STRIPS, FULL-DEPTH OF CAVITY AND 10 INCHES WIDE, WITH DOVETAIL SHAPED NOTCHES 7 INCHES DEEP THAT PREVENT MESH FROM BEING CLOGGED WITH MORTAR DROPPINGS.
 - STRIPS, NOT LESS THAN 3/4 INCH THICK AND 10 INCHES WIDE, WITH DIMPLED SURFACE DESIGNED TO CATCH MORTAR DROPPINGS AND PREVENT WEEP HOLES FROM BEING CLOGGED WITH MORTAR.
 - SHEETS OR STRIPS FULL DEPTH OF CAVITY AND INSTALLED TO FULL HEIGHT OF CAVITY.
 - SHEETS OR STRIPS NOT LESS THAN 3/4 INCH THICK AND INSTALLED TO FULL HEIGHT OF CAVITY WITH ADDITIONAL STRIPS 4 INCHES HIGH AT WEEP HOLES AND THICK ENOUGH TO FILL ENTIRE DEPTH OF CAVITY AND PREVENT WEEP HOLES FROM BEING CLOGGED WITH MORTAR.
- ADVANCED BUILDING PRODUCTS, INC.; MORTAR MAKE WEEP VENT; OR APPROVED SUBSTITUTIONS.
- REINFORCING BAR POSITIONERS: WIRE UNITS DESIGNED TO FIT INTO MORTAR BED JOINTS SPANNING MASONRY UNIT CELLS WITH LOOPS FOR HOLDING REINFORCING BARS IN CENTER OF CELLS. UNITS ARE FORMED FROM .148 INCH STEEL WIRE, HOT-DIP GALVANIZED AFTER FABRICATION. PROVIDE UNITS WITH EITHER TWO LOOPS OR FOUR LOOPS AS NEEDED FOR NUMBER OF BARS INDICATED.
 - RB REBAR POSITIONER BY H&B, INC.; OR APPROVED SUBSTITUTIONS.
- MASONRY CLEANERS: PROPRIETARY ACIDIC CLEANER: MANUFACTURER'S STANDARD-STRENGTH CLEANER DESIGNED FOR REMOVING MORTAR/GROUT STAINS, EFFLORESCENCE, AND OTHER NEW CONSTRUCTION STAINS FROM NEW MASONRY WITHOUT DISCOLORING OR DAMAGING MASONRY SURFACES. USE PRODUCT EXPRESSLY APPROVED FOR INTENDED USE BY CLEANER MANUFACTURER AND MANUFACTURER OF MASONRY UNITS BEING CLEANED.
 - PROSOCO, INC.; LAWRENCE, KS 66046, OR APPROVED SUBSTITUTION.
- SOURCE LIMITATIONS: OBTAIN EXPOSED MASONRY UNITS OF UNIFORM TEXTURE AND COLOR, OR A UNIFORM BLEND WITHIN THE RANGES ACCEPTED FOR THESE CHARACTERISTICS THROUGH ONE SOURCE FROM A SINGLE MANUFACTURER FOR EACH CATEGORY.
- WHERE INDICATED, PROVIDE MATERIALS AND CONSTRUCTION IDENTICAL TO THOSE OF ASSEMBLIES WITH FIRE-RESISTANCE RATINGS DETERMINED PER ASTM E 119 BY A TESTING AND INSPECTING AGENCY, BY EQUIVALENT CONCRETE MASONRY THICKNESS, OR BY OTHER MEANS, AS ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.

04 72 00 – CAST STONE

- CAST STONE: PLANT CAST. COMPRESSIVE STRENGTH: 7000 PSI. EXPOSED FACE RUBBED FINISH. REINFORCE WITH REINFORCING BARS AND PROVIDE WITH DRIP GROOVES, TWO HOLES FOR DOWELS ON BOTTOM AND HOLE IN EACH END FOR DOWELS. PROVIDE PRE-CAST CORNER SECTIONS. CAST STONE SHALL BE FABRICATED IN ACCORDANCE WITH ASTM 1364, ARCHITECTURAL CAST STONE SPECIFICATIONS. CAST STONE MANUFACTURERS SHALL BE A CERTIFIED PRODUCER MEMBER OF THE CAST STONE INSTITUTE. COLOR FROM STANDARD RANGE OF FINISHES, MATCH MORTAR COLOR.
 - HOYLE STONE PRODUCTS, OR APPROVED SUBSTITUTIONS.

05 12 00 – STRUCTURAL STEEL

- REFERNECE THE FOLLOWING STANDARDS AISC: SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS; ASTM A27: SPECIFICATION FOR STEEL FASTENINGS; CARBON, FOR GENERAL APPLICATIONS; ASTM A36: SPECIFICATION FOR CARBON STRUCTURAL STEEL; ASTM A573: SPECIFICATION FOR PIPE, STEEL, BLACK AND HOT DIPPED, ZINC COATED WELDED AND SEAMLESS; ASTM A307: SPECIFICATION FOR CARBON STEEL BOLTS AND STUDS, 60,000 PSI TENSILE STRENGTH; ASTM A325: SPECIFICATION FOR STRUCTURAL BOLTS, HEAT TREATED, 120/105 PSI MINIMUM TENSILE STRENGTH; ASTM A992: SPECIFICATION FOR STEEL FOR STRUCTURAL STEEL SHAPES. AWS D1.1: STRUCTURAL WELDING CODE. AWS WELDERS QUALIFICATIONS: STANDARD QUALIFICATIONS PROCEDURES.
- SUBMIT STRUCTURAL CALCULATIONS SIGNED BY A STRUCTURAL ENGINEER LICENSED WHERE THE FABRICATOR IS LOCATED
- MATERIALS
 - W-SHAPES: ASTM A992, GRADE 50.
 - M, S, HP, C, MC, M AND L-SHAPES: ASTM A36.
 - PLATES AND BARS: ASTM A36.
 - STEEL PIPE: ASTM A53, TYPE E OR S, GRADE B.
 - STEEL TUBING: ASTM A500, GRADE B.
 - ANCHOR BOLTS: ASTM A307, NON-HEADED TYPE WITH HEAVY HEXAGONAL NUTS UNLESS OTHERWISE INDICATED.
 - HIGH STRENGTH THREADED FASTENERS: HEAVY HEXAGONAL STRUCTURAL BOLTS, HEAVY HEXAGON NUTS, AND HARDENED WASHERS, SHALL BE QUENCHED AND TEMPERED MEDIUM-CARBON STEEL BOLTS, NUTS AND WASHERS, COMPLYING WITH ASTM A325.

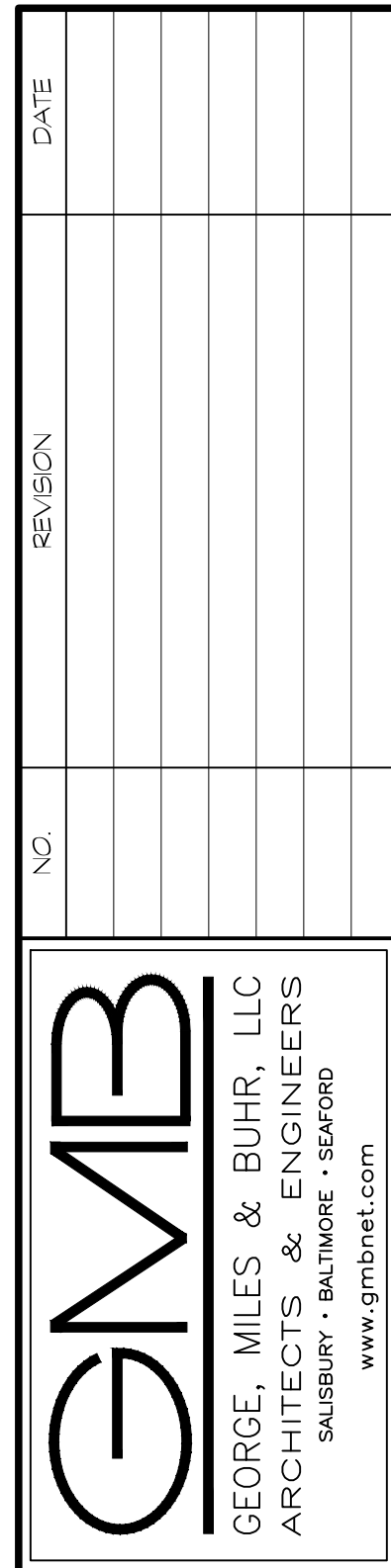
- ELECTRODES FOR WELDING: AWS CODE, USING ASTM A233 E-70 SERIES ELECTRODES.
- PAINT: REFER TO PAINT SECTION 09 91 00
- FABRICATE ITEMS OF STRUCTURAL STEEL IN ACCORD WITH AISC SPECIFICATIONS AND AS INDICATED ON THE APPROVED SHOP DRAWINGS. PROVIDE CAMBER IN STRUCTURAL MEMBERS AS REQUIRED. PROPERLY MARK AND MATCH-MARK MATERIALS FOR FIELD ASSEMBLY. FABRICATE FOR DELIVERY SEQUENCE, WHICH WILL EXPEDITE ERECTION AND MINIMIZE FIELD HANDLING. WHERE FINISHING IS REQUIRED, COMPLETE THE ASSEMBLY, INCLUDING WELDING OF UNITS, BEFORE START OF FINISHING OPERATIONS. PROVIDE FINISH SURFACES OF MEMBERS EXPOSED IN THE FINAL STRUCTURE FREE OF MARKINGS, BURRS, AND OTHER DEFECTS.
- PROVIDE BOLTS AND WASHERS OF TYPES AND SIZES REQUIRED FOR COMPLETION OF FIELD ERECTION. HIGH-STRENGTH BOLTED CONSTRUCTION: INSTALL HIGH-STRENGTH THREADED FASTENERS IN ACCORD WITH AISC "SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS". USING A325N BOLTS UNLESS NOTED OTHERWISE. WELDED CONSTRUCTION: COMPLY WITH AWS CODE FOR PROCEDURES, APPEARANCE AND QUALITY OF WELDS, AND METHODS USED IN CORRECTING WELDED WORK. ASSEMBLE AND BUILD BUILT-UP SECTIONS BY METHODS WHICH WILL PRODUCE TRUE ALIGNMENT OF AXIS WITHOUT WARP.
- SHOP PAINT STRUCTURAL STEEL WORK, EXCEPT THOSE MEMBERS OR PORTIONS OF MEMBERS TO BE EMBEDDED IN CONCRETE OR MORTAR. PAINT EMBEDDED STEEL, WHICH IS PARTIALLY EXPOSED ON THE EXPOSED PORTIONS AND THE INITIAL 2" OF EMBEDDED AREAS ONLY. DO NOT PAINT SURFACES, WHICH ARE TO BE WELDED OR HIGH-STRENGTH, BOLTED WITH FRICTION-TYPE CONNECTIONS. APPLY TWO COATS OF PAINT TO SURFACES, WHICH ARE INACCESSIBLE AFTER ASSEMBLY OR ERECTION. CHANGE COLOR OF SECOND COAT TO DISTINGUISH IT FROM THE FIRST.
- SURFACE PREPARATION: REMOVE LOOSE RUST, LOOSE MILL SCALE, AND SPLATTER, SLAG, AND FLOX DEPOSITS. CLEAN STEEL IN ACCORD WITH STEEL STRUCTURES PAINTING COUNCIL RECOMMENDATIONS AS FOLLOW. SP-2 "HAND TOOL CLEANED" FOR STEEL SCHEDULED OR SPECIFIED TO RECEIVE RUST INHIBITIVE PRIMER.
- GENERAL: COMPLY WITH AISC SPECIFICATIONS AND CODE OF STANDARD PRACTICE, AND AS SPECIFIED HEREIN.

05 50 00 – METAL FABRICATIONS

- REFERENCE ASTM A36: SPECIFICATION FOR STRUCTURAL STEEL. ASTM A307: SPECIFICATION FOR CARBON STEEL BOLTS AND STUDS, 60,000 PSI TENSILE STRENGTH. ASTM A386: SPECIFICATION FOR ZINC COATING (HOT DIP) ON ASSEMBLED STEEL PRODUCTS. ASTM A591: SPECIFICATION FOR SHEET STEEL, COLD ROLLED, ELECTROLYTIC ZINC-COATED. ALUMINUM ASSOCIATION: SPECIFICATIONS FOR ALUMINUM STRUCTURES. ASTM B221 ALUMINUM ALLOY EXTRUDED BARS, RODS, SHAPES AND TUBES.
- SUBMIT STRUCTURAL CALCULATIONS SIGNED BY A STRUCTURAL ENGINEER LICENSED WHERE THE FABRICATOR IS LOCATED
- STEEL PLATES AND BARS: ASTM A36, STEEL. STEEL ANCHOR BOLTS: ASTM A307 STEEL. STEEL SHOP PAINT: RUST INHIBITING PRIMER. REMOVE MILL SCALE AND APPLY TO CLEANED AND DREGREASED STEEL SURFACES AT RATE TO PROVIDE A 2.0-MIL DRY FILM THICKNESS. GALVANIZING: ASTM A386 ZINC COATING. ALUMINUM EXTRUSIONS: ASTM B221, ALLOY 6063-T6. ALUMINUM STRUCTURAL SHAPES AND PLATES: ASTM B209, ALLOY 6061-T6. ALUMINUM COATING/FINISHES PER ARCHITECT. STAINLESS STEEL BOLTS: GRADE 316 USE SEPARATION WASHERS TO PREVENT DIS-SIMILAR METAL ISSUES. STAINLESS STEEL ANGLES: GRADE 316
- USE MATERIALS OF SIZE AND THICKNESS SHOWN OR, IF NOT SHOWN, OF REQUIRED SIZE AND THICKNESS TO PRODUCE STRENGTH AND DURABILITY IN FINISHED PRODUCT. SMOOTH EXPOSED EDGES. PROVIDE HOT DIP GALVANIZED FASTENERS IN CONNECTION WITH STEEL ITEMS. WELD CORNERS AND SEAMS CONTINUOUSLY, COMPLYING WITH AWS RECOMMENDATIONS. AT EXPOSED CONNECTIONS, GRIND EXPOSED WELDS SMOOTH AND FLUSH TO MATCH AND BLEND WITH ADJOINING SURFACES. FORM EXPOSED CONNECTIONS WITH HAIRLINE JOINTS, FLUSH AND SMOOTH, USING CONCEALED FASTENERS WHERE POSSIBLE. PROVIDE FOR ANCHORAGE OF TYPE SHOWN, COORDINATED WITH SUPPORTING STRUCTURE. FABRICATE AND SPACE ANCHORING DEVICES TO PROVIDE ADEQUATE SUPPORT FOR INTENDED USE
- STEEL LINTELS: FABRICATE TO SIZES SHOWN OF 316 STAINLESS STEEL. PROVIDE OVER RECESSES OR OPENINGS INCLUDING OPENINGS FOR MECHANICAL TRADES. NOT LESS THAN 8" BEARING AT EACH END. ANCHOR BOLTS: FABRICATE OF ASTM A307 STEEL, THREADED ONE END WITH NUT AND WASHER, OTHER END AS DETAILED. SHOP PAINT PORTION NOT EMBEDDED IN MORTAR OR CONCRETE. BEARINGS PLATE, LADDERS, AND OTHER STEEL FABRICATIONS: FABRICATE OF A36 STEEL TO INDICATED SIZE. SHOP PAINT. AWNINGS, RAILINGS AND SIMILAR FABRICATIONS: FABRICATE WITH 6063-T6 ALLOY. ALUMINUM SHALL RECEIVE A COAL TAR EPOXY COATING APPLIED TO THE EXTERIOR OF THE FRAME WHERE IN CONTACT WITH CONCRETE

05 51 33 – LADDERS

- LADDERS OF ALUMINUM ALLOY PROFILES, ANODIZED 10 MICRON, NATURAL MAT FINISHING; NON-CORROSIVE FASTENERS (BOLTS, RIVETS AND WASHERS) CONFORMING TO MANUFACTURER'S STANDARDS; JOINT WASHERS, BUSHES, PLUGS, ETC. IN POLYAMIDE AND ELASTOMER. LADDER TO CORRESPOND TO EN 131 AND ISO 14122-4 STANDARDS. LADDERS PREASSEMBLED TO STANDARD LENGTH BY MANUFACTURER AND SHIPPED TO SITE. FINISH COLOR TO BE SELECTED BY OWNER FROM MANUFACTURER'S STANDARD RANGE OF COLORS, ANODIZED BLACK.
- LADDERS: FABRICATE OF ALUMINUM ALLOY WITH DIMENSIONS, SPACING, DETAILS AND ANCHORAGES AS INDICATED. COMPLY WITH THE REQUIREMENTS OF ANSI A14.3 AND APPLICABLE OSHA STANDARDS. THE UPRIGHTS ARE SPACED AT 2'. THE RUNG AXES AT 11". THE LADDER UPRIGHTS HAVE AN OBLONG SECTION (2-15/16" X 1" X 5/64") WITH ROUNDED CORNERS. THE RUNGS ARE ROUND (Ø 1-1/2") WITH A FLATTENED AND GROOVED ANTI-SLIP UPPER FACE. COUNTERBALANCED LOWER SLIDING LADDER TO PREVENT ACCESS BY UNAUTHORIZED PERSONS. RELEASE MECHANISM CONTROLLED FROM BELOW. SLIDING PART IS COUNTERBALANCED BY WEIGHTS THAT SHIFT IN HOLLOW PROFILES; AXES, SPRINGS AND CABLES ARE OF STAINLESS STEEL, PULLEY WHEELS OF POLYACETAL (POM-H). MANUFACTURER EQUIPPED SAFETY CAGE CONSISTING OF HOOPS AND VERTICAL BARS. THE HOOPS ARE BENT HOLLOW SQUARE PROFILES OF 1" X 1" X 1/16", AND THE VERTICAL BARS ARE HOLLOW ROUND PROFILES OF Ø 11/16" X 3/32". THE FREE PASSAGE IN THE SAFETY CAGE IS +/- 2'-3". THE VERTICAL HOOP SPACING HAS TO BE ADAPTABLE, BUT SHALL NOT EXCEED 1 m.
- JOHY, INC.; LOUISVILLE, CO 80027; OR APPROVED SUBSTITUTION.



NEW CONSTRUCTION FOR:
HORIZON FARM CREDIT DHQ
BRIDGEVILLE, DE

OUTLINE
SPECIFICATIONS



SCALE : N.T.S.
DESIGN BY : MHH
DRAWN BY : AUB
CHECKED BY : MHH

OUTLINE SPECIFICATIONS (CONTINUED)

06 10 00 – ROUGH CARPENTRY

- REFER TO ASTM A307: CARBON STEEL BOLTS AND STUDS, 60,000 PSI TENSILE STRENGTH. F5 FF-B-561: BOLTS, (SCREW) LAG, F5 FF-N-105: NAILS, BRADS, STAPLES AND SPIKES: WIRE, CUT AND WROUGHT.
- SUBMIT STRUCTURAL CALCULATIONS SIGNED BY A STRUCTURAL ENGINEER LICENSED WHERE THE FABRICATOR IS LOCATED
- FRAMING LUMBER: IDENTIFY FRAMING LUMBER BY GRADE STAMP OF THE APPROPRIATE LUMBER INSPECTION AGENCY. OTHER: IDENTIFY OTHER MATERIALS BY THE APPROPRIATE STAMP OF THE AGENCY OR ASSOCIATION, OR BY SUCH OTHER MEANS AS APPROVED. EACH PIECE OF PRESERVATIVE TREATED LUMBER MUST BEAR STAMP OR IMPRINT SHOWING TREATMENT AND PLANT IDENTIFICATION. PLYWOOD: IDENTIFY PLYWOOD AT TO SPECIES, GRADE, AND GLUE TYPE BY THE STAMP OF THE AMERICAN PLYWOOD ASSOCIATION. ALL PLYWOOD SHEATHING SHALL CONTAIN NON-URETHANE WATERPROOF GLUE. GENERAL: USE PRESERVATIVE TREATED LUMBER FOR PADS, BLOCKING, NAILERS AND GROUNDS IN CONTACT WITH CONCRETE, MASONRY OR STEEL, OR EXPOSED TO WEATHER. APPLY BRUSH COAT OF SAME CHEMICALS ON CUTS WHERE CUTTING IS NECESSARY.

ITEM	DESCRIPTION
LIGHT FRAMING, KD:	SOUTHERN PINE, HEM-FIR, SPRUCE STANDARD
4X4 MAXIMUM	
STRUCTURAL FRAMING, KD:	M-12 GRADE SOUTHERN PINE, WEYERHAUSER FRAMER SERIES
2X6 TO 2X12	
PRESERVATIVE TREATED WOOD:	1. AIR OR KILN DRY TO 19%
PRESSURE IMPREGNATED WITH:	CONTENT OR LESS AFTER TREATMENT.
ALKALINE COPPER QUATERNARY (ACQ)	
CONFORMING TO AWPA STANDARD C2	2. TREAT NAILERS, SILLS, FURRING, STRIPPING
FOR RESIDENTIAL/COMMERCIAL CONSTRUCTION.	AND SIMILAR ITEMS IN CONTACT WITH CONCRETE, MASONRY, STEEL.
MINIMUM RETENTION RATE:	0.40 LBS. PER CUBIC FOOT WITH MINIMUM PENETRATION 2.5" OR 85% OF THE SPACWOOD
TREATED FRAMING LUMBER:	SOUTHERN YELLOW PINE. SPIB GRADE #2
2X4 TO 3X12	
MACHINE BOLTS:	ASTM A307
LAG SCREWS:	FED. SPEC. FF-B-561
NAILS:	FED. SPEC. FF-N-105
	(NOTE: USE GALVANIZED OR STAINLESS STEEL 304 OR 316 FASTENERS AT EXTERIOR LOCATIONS AND WITH PRESERVATIVE TREATED LUMBER).
PLYWOOD SHEATHING,	APA RATED (C-D GRADE) WITH WATER-PROOF GLUE,
APA TRADEMARKED:	EXPOSURE1, SQUARE EDGE UNLESS NOTED OTHERWISE.
FELT:	NO. 15 OR NO. 30 ASPHALT SATURATED FELT AS INDICATED.
FRAMING ANCHORS:	FABRICATED OF GALVANIZED STEEL. PROVIDE FRAMING ANCHORS AND HANGERS OF THE SIZE AND TYPE RECOMMENDED BY THE MANUFACTURER FOR EACH USE, INCLUDING RECOMMENDED NAILS. "STRONG-TIE" MANUFACTURED BY SIMPSON, SAN LEANDRO, CA 94577 OR APPROVED SUBSTITUTION.

- ROUGH CARPENTRY SHALL PRODUCE JOINTS TRUE, TIGHT, AND WELL NAILED, WITH ALL MEMBERS ASSEMBLED IN ACCORD WITH DRAWINGS AND PERTINENT CODES AND REGULATIONS. SELECTION OF LUMBER PIECES: CAREFULLY SELECT MEMBERS, INDIVIDUAL PIECES FREE OF KNOTS AND OBVIOUS DEFECTS WILL NOT INTERFERE WITH PLACING BOLTS OR PROPER NAILING OR MAKING CONNECTIONS. CUT OUT AND DISCARD DEFECTS WHICH WILL RENDER A PIECE UNABLE TO SERVE ITS INTENDED FUNCTION. LUMBER MAY BE REJECTED BY THE ENGINEER, WHETHER OR NOT IT HAS BEEN INSTALLED, FOR EXCESSIVE WARP, TWIST, BOW, CROOK, MILDEW, FUNGUS, OR MOLD, AS WELL AS FOR IMPROPER CUTTING AND FITTING. SHIMMING: DO NOT SHIM SILLS, JOISTS, SHORT STUDS, TRIMMERS, HEADERS, LINTELS, OR OTHER FRAMING COMPONENTS.
- USE PRESERVATIVE TREATED LUMBER FOR PADS, BLOCKING, NAILERS AND GROUNDS IN CONTACT WITH CONCRETE, MASONRY OR STEEL, OR EXPOSED TO WEATHER. APPLY BRUSH COAT OF SAME CHEMICALS ON CUTS WHERE CUTTING IS NECESSARY.
- IN ADDITION TO FRAMING OPERATIONS NORMAL TO FABRICATION AND ERECTION INDICATED, INSTALL BACKING REQUIRED FOR WORK OF OTHER TRADES. SET HORIZONTAL OR SLOPED MEMBERS WITH CROWN UP. BEARINGS: MAKE BEARINGS FULL UNLESS OTHERWISE INDICATED ON THE DRAWINGS. FINISH BEARING SURFACES ON WHICH STRUCTURAL MEMBERS ARE TO REST SO AS TO GIVE SURE AND EVEN SUPPORT. WHERE FRAMING MEMBERS LOPE, CUT OR NOTCH ENDS AS REQUIRED TO GIVE UNIFORM BEARING SURFACE.
- PLYWOOD SHEATHING: PLACE PLYWOOD WITH FACE GRAIN PERPENDICULAR TO SUPPORTS AND CONTINUOUSLY OVER AT LEAST TWO SUPPORTS. PROVIDE EDGE SUPPORT BY MEANS OF PLY-CLIPS, TONGUE AND GROOVE PANELS OR LUMBER BLOCKING BETWEEN RAFTERS. ALLOW 1/8" SPACING AT PANEL ENDS AND EDGES. CENTER JOINTS ACCURATELY OVER SUPPORTS. STAGGER END JOINTS OF PLYWOOD PANELS TO ACHIEVE A MINIMUM OF CONTINUITY OF JOINTS. NAIL 4" O.C. AT EDGES OF PANELS AND 6" O.C. AT INTERMEDIATE SUPPORTS. USE NAIL TYPE RECOMMENDED BY THE APA. PROTECTION OF PLYWOOD: PROTECT PLYWOOD FROM MOISTURE BY USE OF WATERPROOF COVERINGS UNTIL PLYWOOD HAS IN TURN BEEN COVERED WITH THE NEXT SUCCEEDING COMPONENT. REFER TO ROOFING SPECIFICATION FOR FELT TYPE.
- NAILING: USE COMMON WIRE NAILS OR SPIKES. NAIL WITHOUT SPLITTING WOOD. PRE-BORE AS REQUIRED. REPLACE SPLIT MEMBERS.
- BOLTING: DRILL HOLES 1/16 INCH LARGER IN DIAMETER THAN THE BOLTS BEING USED. DRILL STRAIGHT AND TRUE FROM ON SIDE ONLY. BOLT THREADS SHALL NOT BEAR ON WOOD. USE WASHERS UNDER HEAD AND NUT WHERE BOTH BEAR ON WOOD; USE WASHERS UNDER ALL NUTS.
- SCREWS: PRE-BORE HOLES FOR LAG SCREWS AND WOOD SCREWS, SAME DIAMETER AS ROOT OF THREAD; ENLARGE HOLES TO SHANK DIAMETER FOR LENGTH OF SHANK. SCREW, WOOD NOT DRIVE, LAG SCREWS AND WOOD SCREWS.
- FRAMING ANCHORS: INSTALL IN ACCORD WITH THE MANUFACTURER'S INSTRUCTIONS. EVERY NAIL HOLE MUST BE USED.

06 17 13 – PLATE CONNECTED WOOD TRUSS

- REFERENCE: NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION (NFPA). DESIGN SPECIFICATIONS FOR METAL PLATE CONNECTED WOOD TRUSSES (TPI). ASTM A446: SPECIFICATION FOR STEEL SHEET, ZINC COATED (GALVANIZED) BY THE HOT-DIP PROCESS STRUCTURAL (PHYSICAL) QUALITY. ASTM A525: SPECIFICATION FOR GENERAL REQUIREMENTS FOR STEEL SHEET, ZINC COATED (GALVANIZED) BY HOT-DIP PROCESS.
- SHOP DRAWINGS FOR REVIEW. DRAWINGS MUST BEAR THE SEAL OF A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF DELAWARE.
- MATERIAL:
- LUMBER: STRESS-GRADED KILN DRIED DOUGLAS FIR OR SOUTHERN YELLOW PINE. SIZE AND GRADE AS DICTATED BY LOADING REQUIREMENTS.
- GUSSET PLATES: GALVANIZED SHEET STEEL MEETING REQUIREMENTS OF ASTM A 446 AND A 525. PLATES HAVE ALTERNATING PAIRS OF TWISTED BACK TO BACK NAIL TYPE PROJECTIONS ALONG THE LENGTH OF THE PLATE. PLATE SIZES AS DICTATED BY LUMBER SIZES AND LOADING REQUIREMENTS.
- FABRICATE WITH EXTENDED TOP CHORD WHERE REQUIRED FOR CORNICE ATTACHMENT. CONFORM TO TPI QUALITY CONTROL MANUAL QCM LATEST EDITION FOR TOLERANCES AND SPECIAL REQUIREMENTS. ACCURATELY CUT AND FABRICATE WOOD MEMBERS SO THAT MEMBERS HAVE GOOD BEARING. APPLY CONNECTOR PLATES TO BOTH FACES OF TRUSS AT EACH JOINT, WITH FIRM EVEN CONTACT BETWEEN THE PLATE AND THE WOOD.

06 20 00 - FINISH CARPENTRY

- FINISH CARPENTRY WORK AS SHOWN ON THE DRAWINGS AND IN SCHEDULES. THE TYPES OF WOODWORK INCLUDE, BUT ARE NOT NECESSARILY LIMITED, TO THE FOLLOWING: WOOD TRIM WHERE SCHEDULED AND WHERE INDICATED.
- MAINTAIN HEATING, COOLING, AND VENTILATION IN INSTALLATION AREAS AS REQUIRED TO REACH RELATIVE HUMIDITY NECESSARY TO MAINTAIN OPTIMUM MOISTURE CONTENT SPECIFIED FOR WOODWORK. INSTALL

MATERIALS PLUMB, LEVEL, TRUE AND STRAIGHT WITH NO DISTORTIONS. SHIM AS REQUIRED USING CONCEALED SHIMS. CUT TO FIT TO EXACT SIZE. WHERE WOODWORK ABUTS OTHER FINISHED WORK, SCRIBE AND CUT FOR ACCURATE FIT. BEFORE MAKING CUTOUTS, DRILL PILOT HOLES AT CORNERS. DISTRIBUTE DEFECTS ALLOWED IN THE QUALITY GRADE SPECIFIED TO THE BEST OVER-ALL ADVANTAGE, WHEN INSTALLING JOB ASSEMBLED WOODWORK ITEMS. TRIM AND MOLDINGS: INSTALL IN SINGLE, UN-JOINTED LENGTHS FOR OPENINGS AND FOR LESS THAN MAXIMUM LENGTH OF LUMBER AVAILABLE. FOR LONGER RUNS, USE ONLY ONE PIECE LESS THAN MAXIMUM LENGTH AVAILABLE IN ANY STRAIGHT RUN. STAGGED JOINTS IN ADJACENT MEMBERS. COPE MOLDINGS AT RETURNS AND MITER AT CORNERS. ATTACH WOODWORK SECURELY IN PLACE WITH UNIFORM JOINTS PROVIDING FOR THERMAL AND BUILDING MOVEMENTS. NAILING: BLIND NAIL WHERE POSSIBLE. USE FINE FINISHING NAILS WHERE EXPOSED. SET EXPOSED NAIL HEADS FOR FILLING. USE HOT DIPPED GALVANIZED FASTENERS FOR EXTERIOR WORK. PREPARING FOR FINISH: CLEAN WOODWORK AND FILL NAIL HOLES IN PREPARATION FOR FINISHES SPECIFIED FOR JOB-APPLICATION UNDER PAINTING SECTIONS OF THESE SPECIFICATIONS.

06 41 00 – WOOD CASEWORK

- PLASTIC LAMINATE CASEWORK: GRADE: AWI PREMIUM GRADE (SEC. 400). FACE CONSTRUCTION: "FLUSH OVERLAY" TYPE, EXCEPT AS OTHERWISE INDICATED (DRAWER FRONTS, DOORS AND FIXED PANELS PARTIALLY CONCEAL CASEWORK BEHIND). EXPOSED EDGES: PLASTIC LAMINATE MATCHING EXPOSED PANEL SURFACES, EXCEPT AS OTHERWISE INDICATED. EASE EXPOSED EDGE OF OVERLAP SHEET. SHELF STANDARDS LET INTO SIDE PANELS. COLOR, PATTERN AND TEXTURE AS SELECTED BY ARCHITECT FROM MANUFACTURERS' STANDARD SATIN-FINISHED SHEETS. PLASTIC-LAMINATE BY WILSONART IN COLOR: 17002 – FISHER OAK.
- COUNTERTOPS FOR CASEWORK WHERE USED AS COST ALTERNATE TO SPECIFIED SOLID SURFACE COUNTERTOPS: GRADE: SAME AWI GRADE AS REQUIRED FOR CASEWORK (SEC. 400), PLASTIC LAMINATE COVERED. COUNTER CONSTRUCTION: AS SHOWN, OR, IF DETAILS NOT SHOWN, COMPLY WITH STANDARDS AND PROVIDE, IF INDICATED, 4" HIGH BACK-SPLASH AND END-SPLASH, TOP MOUNTED SQUARE BUTT JOINT, FULLY COVERED WITH MATCHING PLASTIC LAMINATE, EASED EDGES. EXPOSED COUNTER EDGES: PLASTIC LAMINATE MATCHING OVERLAP SHEET AS OTHER EDGES. EASE EXPOSED EDGES. OVERLAP SHEET CUT-OUTS: PROVIDE CIRCULAR CUT-OUTS WHERE WIRING OR EQUIPMENT IS LOCATED BELOW WORKSURFACES WITH TWO-PIECE KNOCK-OUT STYLE GROMMETS AND PLUGS. COLOR SHALL BE SELECTED BY THE ARCHITECT.
- CABINET HARDWARE, SEMI-EXPOSED: ADJUSTABLE SHELF SUPPORTS AND BRACKETS: SHELF SUPPORTS NO. 255 KNAPE & VOGT MFG. CO., SHELF BRACKETS NO. 256 KNAPE & VOGT MFG. CO. SIDE PAIR DRAWER SLIDES: 50-18 RATED (PER PAIR), BALL BEARING NYLON WHEEL ROLLERS, 3/4" WIDE UNITS, EXTENSION TYPE NO. 1300; KNAPE & VOGT MFG. CO. MAGNETIC CABINET CATCHES: NO. DP41, ALUMINUM; STANLEY-NATIONAL. PULLS: NO. 8016; STANLEY-NATIONAL. CONCEALED HINGES: PLATED STEEL, SIZED PER MANUFACTURER'S RECOMMENDATIONS NO. 1591; STANLEY-NATIONAL. LOCKS: CASEWORK DRAWERS AND DOORS WHERE INDICATED SHALL BE PROVIDED WITH NO. C860 DOOR/DRAWER KEYED C346A UTILITY LOCKS; STANLEY-NATIONAL. CONFIRM KEYING PLAN WITH OWNER. COUNTER BRACKET: UNIVERSAL LOW PROFILE GUSSET STEEL BRACKET FOR SUPPORT OF VANITIES, FLOATING DESKS, WORK STATIONS, ETC. MATERIAL: 1/8" THICK STEEL. DIMENSIONS: 1.5" WIDE X 21" LONG X 15" HIGH. MOUNTING HOLES, SIZED FOR 1/4" LAG BOLTS. FINISH: PREMIUM POWDER COAT. FINISH: IRONBORNE. FINISH: IRONBORNE. FINISH: IRONBORNE.
- SHOP-FABRICATE CASEWORK TO THE GREATEST EXTENT POSSIBLE, DISASSEMBLE ONLY AS NECESSARY FOR DELIVERY AND INSTALLATION. INSTALL HARDWARE AT THE SHOP, PRIOR TO DELIVERY. REMOVE HARDWARE FOR FINISH APPLICATION, AND REINSTALL AFTER FINISHING.

06 61 16 – SOLID SURFACE FABRICATIONS

- REFER TO THE STANDARDS OF AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI), AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM), NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA), NSF INTERNATIONAL.
- SOLID SURFACE POLYMER COMPONENTS: CAST, NONPOROUS, FILLED POLYMER, NOT COATED, LAMINATED OR OF COMPOSITE CONSTRUCTION WITH THROUGH BODY COLORS MEETING ANSI Z124.3 OR ANSI Z124.6, HAVING MINIMUM PHYSICAL AND PERFORMANCE PROPERTIES SPECIFIED. SUPERFICIAL DAMAGE TO A DEPTH OF 0.010 INCH (.25 MM) SHALL BE REPAIRABLE BY SANDING AND/OR POLISHING. THICKNESS: 3/8 INCH UNLESS NOTED OTHERWISE. EDGE TREATMENT: V-MITER GROOVE. BACKSPLASH: APPLIED. SIDESPLASH: APPLIED SELECTED FROM THE MANUFACTURER'S STANDARD COLOR CHART. COUNTERTOPS AND WORK SURFACES: MONTE AMIATA 991155.
- WILSONART – ENGINEERED SURFACES DISTRIBUTED BY FESSENDEN HALL INC
- CUT-OUTS: PROVIDE CIRCULAR CUT-OUTS WHERE WIRING OR EQUIPMENT IS LOCATED BELOW WORKSURFACES WITH TWO-PIECE KNOCK-OUT STYLE GROMMETS AND PLUGS. JOINT ADHESIVE: MANUFACTURER'S STANDARD OR TWO-PART ADHESIVE KIT TO CREATE INCONSPICUOUS, NONPOROUS JOINTS. SEALANT: MANUFACTURER'S STANDARD MILDEW-RESISTANT, FDA-COMPLIANT, NSF 51-COMPLIANT (FOOD ZONE – ANY TYPE), UL-LISTED SILICONE SEALANT IN COLORS MATCHING COMPONENTS
- FIRE TEST RESPONSE CHARACTERISTICS: PROVIDE WITH THE FOLLOWING CLASS A (CLASS I) SURFACE BURNING CHARACTERISTICS AS DETERMINED BY TESTING IDENTICAL PRODUCTS PER UL 723 (ASTM E84) OR ANOTHER TESTING AND INSPECTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION: FLAME SPREAD INDEX: 25 OR LESS; SMOKE DEVELOPED INDEX: 450 OR LESS.
- PROVIDE MANUFACTURER'S WARRANTY AGAINST DEFECTS IN MATERIALS. WARRANTY SHALL PROVIDE MATERIAL AND LABOR TO REPAIR OR REPLACE DEFECTIVE MATERIALS. DAMAGE CAUSED BY PHYSICAL OR CHEMICAL ABUSE OR DAMAGE FROM EXCESSIVE HEAT WILL NOT BE WARRANTED. MANUFACTURER'S WARRANTY PERIOD: TEN YEARS FROM DATE OF SUBSTANTIAL COMPLETION
- INSTALL COMPONENTS PLUMB, LEVEL AND RIGID, SCRIBED TO ADJACENT FINISHES, IN ACCORDANCE WITH APPROVED SHOP DRAWINGS AND PRODUCT DATA. PROVIDE PRODUCT IN THE LARGEST PIECES AVAILABLE. FORM FIELD JOINTS USING MANUFACTURER'S RECOMMENDED ADHESIVE, WITH JOINTS INCONSPICUOUS IN FINISHED WORK. EXPOSED JOINTS/SEAMS SHALL NOT BE ALLOWED. REINFORCE FIELD JOINTS WITH SOLID SURFACE STRIPS EXTENDING A MINIMUM OF 1 INCH ON EITHER SIDE OF THE SEAM WITH THE STRIP BEING THE SAME THICKNESS AS THE TOP. CUT AND FINISH COMPONENT EDGES WITH CLEAN, SHARP RETURNS. ROUT RADI AND CONTOURS TO TEMPLATE. ANCHOR SECURELY TO BASE CABINETS OR OTHER SUPPORTS. ALIGN ADJACENT COUNTERTOPS AND FORM SEAMS TO COMPLY WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS USING ADHESIVE IN COLOR TO MATCH COUNTERTOP. CAREFULLY DRESS JOINTS SMOOTH, REMOVE SURFACE SCRATCHES AND CLEAN ENTIRE SURFACE. INSTALL COUNTERTOPS WITH NO MORE THAN 1/8-INCH (3 MM) SAG, BOW OR OTHER VARIATION FROM A STRAIGHT LINE.

07 11 20 AIR AND VAPOR BARRIER

- MEMBRANE: SELF-ADHESIVE, RUBBERIZED ASPHALT/POLYETHYLENE WATERPROOFING MEMBRANE WITH VAPOR TRANSMISSION OF 0.05 PERMS OR LESS; ROLLED WITH RELEASE PAPER TO PERMIT PRESSURE SENSITIVE APPLICATION AND SELF SEALING OF LAPPED JOINTS. PRIMER, MASTIC, ETC., AS RECOMMENDED BY MANUFACTURER.
- W.R. GRACE & CO., CAMBRIDGE, MA 02140. "PERM-A-BARRIER WALL MEMBRANE
- CONTRACTOR SHALL PROVIDE HIS WRITTEN GUARANTEE AS FOLLOWS: "WATERPROOFING IS GUARANTEED AGAINST DEFECTS OF WORKMANSHIP AND MATERIALS FOR A PERIOD OF TWO YEARS FROM DATE OF SUBSTANTIAL COMPLETION. SHOULD LEAKS OCCUR WITH THIS PERIOD, REPAIRS TO THE WATERPROOFING AND REPAIR OF DAMAGE TO OTHER PORTIONS OF THE BUILDING CAUSED BY SUCH LEAKS WILL BE MADE GOOD WITHOUT COST TO THE OWNER."
- CLEAN SUBSTRATE OF DIRT, OIL, LOOSE MATERIALS AND OTHER SUBSTANCES WHICH INTERFERE WITH PENETRATION, BOND, OR PERFORMANCE OF DAMP PROOFING MATERIALS. CANT STRIPS, FILLER: ON EXTERIOR SURFACES, WHERE LOWER EDGE OF DAMP PROOFING TERMINATES AT A HORIZONTAL PROJECTION (INCLUDING FOOTINGS UNDER WALLS), PROVIDE A CANT STRIP FORMED IN ACCORD WITH THE MANUFACTURER'S DETAILS. PROTECT WORK FROM SPILLAGE OF DAMP PROOFING MATERIALS. REPLACE OR RESTORE OTHER WORK WHICH IS SOILED OR OTHERWISE DAMAGED BY THE INSTALLATION OF THE DAMP PROOFING MATERIALS AND ASSOCIATED WORK. PRIME SUBSTRATE. APPLY BY BRUSH OR SPRAY AT THE RATE PRESCRIBED BY MEMBRANE MANUFACTURER. ALLOW PRIMER TO DRY ONE HOUR OR UNTIL TACK FREE. PRIME ONLY THE AREA TO BE COVERED WITH MEMBRANE IN A WORKING DAY. RE-PRIME IF NECESSARY. INSTALL MEMBRANE, ACCESSORY PRODUCTS AND PROTECTION BOARD IN ACCORD WITH THE MANUFACTURER'S INSTRUCTIONS.

07 21 13 – PERIMETER INSULATION

- REFER ASTM C578: SPECIFICATION FOR PRE-FORMED, CELLULAR, POLYSTYRENE THERMAL INSULATION. R VALUE: 50°F. FT²H/BTU PER INCH, MIN. AT 75°F. MEAN TEMPERATURE (ASTM C518) AND WARRANTED TO RETAIN AT LEAST 90% OF ITS ORIGINAL R VALUE FOR 15 YEARS. 15-YEAR PERIOD. INCLUDE PRINTED WARRANTY CERTIFICATE.
- INSULATION: CLOSED CELL EXTRUDED POLYSTYRENE BOARD. ASTM C578, TYPE IV. COMPRESSIVE STRENGTH 25 LB/IN. 2 MINIMUM (ASTM D1621). WATER ABSORPTION 0.1% BY VOLUME MAXIMUM (ASTM C272). B. MASTIC: TYPE AS RECOMMENDED BY INSULATION MANUFACTURER.
- DOW CHEMICAL, MIDLAND, MICH. 48674; OR APPROVED SUBSTITUTIONS

07 21 16 – BATT INSULATION

- REFERENCE ASTM C665: INSULATION BLANKETS, THERMAL (MINERAL FIBER).
- GLASS FIBER BUILDING INSULATION BLANKETS WITH KRAFT PAPER VAPOR RETARDER ONE FACE WITH STAPLING FLANGE. ASTM C665, TYPE II, CLASS C.
- UN-FACED GLASS FIBER BUILDING INSULATION BLANKETS FOR EXPOSED APPLICATION IN ATTIC AREAS. ASTM C665, TYPE I. CONSULT AND COMPLY WITH MANUFACTURER'S RECOMMENDATIONS FOR USING VAPOR BARRIER FACINGS FOR ATTIC APPLICATIONS BASED ON CLIMATE ZONE AND OTHER FACTORS.
- UN-FACED GLASS FIBER INSULATION BLANKETS FOR SOUND BATT INSULATION. ASTM C665, TYPE I.

- ATTIC STAIR INSULATOR TENT COMPRISED OF FIBERGLASS INSULATION R-10 INSULATION VALUE. SIZE SHALL BE SELECTED FROM MANUFACTURER'S STANDARD SIZES TO COVER ATTIC ACCESS OPENINGS.
- OWENS CORNING, TOLEDO, OH 43659. APPROVED SUBSTITUTION

07 22 00 INSULATION FOR THERMOPLASTIC ROOFING

- FIRE AND INSURANCE RATINGS: COMPLY WITH FIRE-RESISTANCE RATINGS AS REQUIRED BY GOVERNING AUTHORITIES AND CODES, AND COMPLY WITH THE FOLLOWING REQUIREMENTS: FM REQUIREMENTS FOR "ROOF DECK CONSTRUCTIONS" WHICH ARE RATED CLASS I, AND 1-90 WINDSTORM RESISTANCE CLASSIFICATION.
- THERMAL CONDUCTIVITY: THE THICKNESSES SHOWN ARE FOR THE THERMAL CONDUCTIVITY (K-VALUE AT 75 DEGREES F.) SPECIFIED FOR EACH MATERIAL. PROVIDE ADJUSTED THICKNESSES AS DIRECTED FOR THE USE OF MATERIAL HAVING A DIFFERENT THERMAL CONDUCTIVITY.
- MEET AT PROJECT WELL IN ADVANCE OF TIME SCHEDULED FOR ROOFING WORK, AND REVIEW REQUIREMENTS FOR THE WORK AND CONDITIONS WHICH COULD POSSIBLY INTERFERE WITH SUCCESSFUL PERFORMANCE OF THE WORK. REQUIRE EVERY PARTY WHO IS CONCERNED WITH THE WORK, OR REQUIRED TO COORDINATE WITH IT OR TO PROTECT IT THEREAFTER, TO ATTEND THE CONFERENCE.
- ROOF INSULATION: RIGID, ISOCYANURATE FOAM BOARD COMPLYING WITH FS HH-1-1972 WITH FACER ACCEPTABLE TO ROOFING MEMBRANE MANUFACTURER, K-FACTOR AT 75 DEGREES F. WHEN FULLY AGED OF 0.13. MATERIAL TO BEAR FM CLASS I LABEL. MANUFACTURER'S STANDARD SIZES. PROVIDE BOARD WITH TAPER WHERE REQUIRED. SLOPE AS INDICATED.
- GAF, PARSIPPANY, NJ 07054; OR APPROVED SUBSTITUTIONS
- NAILERS: TREATED WITH WATERBORNE PRESERVATIVES AND SPECIES AS SPECIFIED IN ROUGH CARPENTRY. ADHESIVES: THE TYPES RECOMMENDED BY THE INSULATION MANUFACTURER, AND COMPLYING WITH FIRE-RESISTANCE REQUIREMENTS. MASTIC SEALER: TYPE RECOMMENDED BY INSULATION MANUFACTURER FOR BONDING EDGE JOINTS BETWEEN UNITS AND FILLING VOIDS IN THE WORK. FASTENERS: TYPE AND SIZE AS RECOMMENDED ROOF MEMBRANE MANUFACTURER FOR THE TYPE OF DECK USED, AND COMPLYING WITH FIRE AND INSURANCE RATING REQUIREMENTS.

07 31 00 – FIBERGLASS REINFORCED ASPHALT SHINGLES

- REFERENCE UL 790 – TEST OF FIRE RESISTANCE OF ROOF COVERING MATERIALS. UL 997 – WIND RESISTANCE OF ROOF COVERING MATERIALS. ASTM D3018 – TYPE 1, ASPHALT SHINGLES SURFACED WITH MINERAL GRANULES.
- GENERAL CONTRACTOR SHALL PROVIDE HIS WRITTEN GUARANTEE AS FOLLOWS: "ASPHALT SHINGLE ROOFING AND RELATED FLASHING ARE GUARANTEED AGAINST LEAKS, DEFECTS OF WORKMANSHIP AND MATERIALS, AND DEFECTS DEVELOPING UNDER NATURAL WEAR AND TEAR FOR A PERIOD OF TWO YEARS FROM DATE OF SUBSTANTIAL COMPLETION. SHOULD LEAKS OCCUR WITHIN THIS PERIOD, REPAIRS TO THE ROOF AND DAMAGE TO OTHER PORTIONS OF BUILDING CAUSED BY SUCH LEAKS WILL BE MADE GOOD WITHOUT COST TO THE OWNER." PROVIDE OWNER WITH COPY OF SHINGLE MANUFACTURER'S 40-YEAR LIMITED WARRANTY AGAINST MANUFACTURING DEFECTS.
- SHINGLES: GAF TIMBERLINE HD HIGH DEFINITION SELF-SEALING, LAMINATED, FIBERGLASS MAT, ASPHALT ROOF SHINGLES, TO CARRY UL CLASS-A FIRE AND 130 MPH WIND RESISTANT LABEL. COLOR SELECTED FROM MANUFACTURER'S STANDARD LINE: TIMBERLINE - BARKWOOD. HIP AND RIDGE SHINGLES: SPECIAL BLENDED HIP AND RIDGE SHINGLES.
- GAF MATERIALS CORP., WAYNE, NJ 07470. OR APPROVED SUBSTITUTION
- UNDERLAYMENT: HIGH TEMPERATURE SELF-ADHESIVE 40 MIL THICK ROOFING UNDERLAYMENT COMPOSED OF RUBBERIZED ASPHALT ADHESIVE BACKED BY A LAYER OF HIGH PERFORMANCE POLYMERIC FILM. HIGH TEMPERATURE UNDERLAYMENT SHALL BE INSTALLED ON ALL ROOF SHEATHING.
- GRACE ICE & WATERSHIELD HT OR APPROVED SUBSTITUTION.
- NAILS: USE BARBED HOT DIPPED ZINC, OR ALUMINUM NAILS, HEADS 3/8" MINIMUM DIAMETER, 1-1/4" LONG. ROOF CEMENT: COMPLY WITH FS-S5-C-153, TYPE I. FIBRATED ASPHALT. STAPLES (ALTERNATE): 16 GAUGE ZINC COATED STAPLES WITH 1" NOMINAL CROWN.

07 46 00 – FIBER-CEMENT SIDING

- FURNISH CERTIFIED COPY OF MANUFACTURER'S LIMITED LIFETIME WARRANTY.
- PORTLAND CEMENT/GROUND SAND/CELLULOSE FIBER COMPOSITION EXTERIOR LAP SIDING COMPLYING WITH ASTM C1186, GRADE II, TYPE A, NON-ASBESTOS FIBER-CEMENT PLANK. FACTORY PRIMED FOR FIELD PAINTING. 6-1/4" X 5/16" X 12 FOOT LENGTHS. SURFACE BURNING CHARACTERISTICS IN ACCORDANCE WITH ASTM E-84: FLAME SPREAD 0, FUEL CONTRIBUTION, SMOKE DEVELOPED. LAP SIDING + VERTICAL SIDING IN MANUFACTURER'S STANDARD COLOR, COBBLESTONE + RICH ESPRESSO. EXTERIOR SIDING TO BE PAINTED, SEE SECTION 09 91 00 – PAINTS.
- JAMES HARDIE SIDING PRODUCTS, MISSION VIEJO, CA 92691.
- USE MANUFACTURER'S RECOMMENDED ACCESSORIES, MOLDINGS AND CORROSION RESISTANT FASTENERS FOR A COMPLETE APPLICATION

07 54 19 – POLYVINYL CHLORIDE ROOFING

- REFERENCE ASTM D4434 STANDARD SPECIFICATION FOR POLY(VINYL CHLORIDE) SHEET ROOFING. ASTM D6754 STANDARD SPECIFICATION FOR KETONE ETHYLENE ESTER BASED SHEET ROOFING. UL 580: UPLIFT RESISTANCE OF ROOF ASSEMBLIES.
- FURNISH TO THE OWNER, THE MANUFACTURER'S STANDARD 5-YEAR RENEWABLE WARRANTY OF WATER-TIGHTNESS. THIS WARRANTY SHALL BE FULLY PAID FOR BY THE ROOFING CONTRACTOR. THIS WARRANTY SHALL COVER BOTH LABOR AND MATERIALS NECESSARY TO ENSURE WATER-TIGHTNESS, INCLUDING THAT REQUIRED TO REPAIR ROOF LEAKS CAUSED BY STRUCTURAL MOVEMENT OR STANDING WATER ON THE ROOF MEMBRANE.
- ROOFING MEMBRANE: VERSIFLEX 60-MIL THICK POLYESTER REINFORCED PVC MEMBRANE ENHANCED BY A POLYESTER FABRIC THAT IS ENCAPSULATED BETWEEN THE PVC BASED TOP AND BOTTOM PLIES. COLOR: WHITE. THICKNESS OVER SCRIM: 0.028 INCHES. WEIGHT: 0.40 LBS/SQUARE FOOT. WATER VAPOR PERMEANCE: 0.10 PERMS MAXIMUM.
- ADHESIVES: SPICING CEMENTS, CAULKS, PRIMERS, SEALANTS AND BONDING ADHESIVES OR TYPES RECOMMENDED OR PROVIDED BY THE ROOFING MEMBRANE MANUFACTURER. NAILS AND FASTENERS: TYPES AND SIZES SUITED FOR THE PURPOSE AND COMPLYING WITH ROOFING MANUFACTURER'S INSTRUCTIONS. FLASHINGS: METAL FLASHINGS, GUTTERS AND DOWNSPOUTS FABRICATED OF MATERIAL EQUAL TO TORCAL METAL OF SUFFICIENT GAUGE AND FINISH TO ACCOMMODATE IT'S INTENDED USE AND COMPLYING WITH ROOFING MANUFACTURER'S INSTRUCTIONS. WATER CUT-OFF: CONTRACTOR MUST PROVIDE WATER CUT-OFF WHEN AND WHERE THE DANGER EXISTS THAT WATER MAY GET UNDER THE NEW ROOFING MEMBRANE. MAKE CUT-OFFS BY EXTENDING MEMBRANE BEYOND INSULATION AND SECURELY SETTING EDGE IN 6" OF PLASTIC ROOFING CEMENT. COMPLY WITH MANUFACTURER'S INSTRUCTIONS. ROOF WALKWAYS: NON-ASPHALTIC SLIP SHEET OF MATERIAL AND MANUFACTURER APPROVED BY ROOFING MEMBRANE MANUFACTURER. FASTENING: BAR OR DISC ANCHOR, FORMING A SYSTEM AS DEVELOPED BY MEMBRANE MANUFACTURER. FLASHINGS: VERSIFLEX NON-REINFORCED FLASHING, REINFORCED COVER STRIPS, PRE-MOLDED INSIDE/OUTSIDE CORNERS, PIPE FLASHINGS, LIQUIDSEAL FLUSH FLASHING AND SEALANT POCKETS FOR USE AS DIRECTED BY MANUFACTURER TO CREATE A WATERTIGHT ROOF ASSEMBLY. EXPANSION JOINTS: VERSIGARD EXPANSION JOINT SUPPORTS MADE OF HIGH-QUALITY EXTRUDED EPDM AND COMPATIBLE WITH VERSIFLEX PVC. JOINTS SHALL ALLOW FOR RUBBER-TO-MEMBRANE CONTACT AND FLEXIBILITY AT JOINTS.
- VERSICO ROOFING SYSTEM, CARLSLE, PA 17013. OR APPROVED SUBSTITUTION.

07 61 00 – SHEET METAL ROOFING

- SUBMIT SHOP DRAWINGS INDICATING THICKNESSES, DIMENSIONS, LAYOUTS, FASTENINGS AND ANCHORING METHODS, EXPANSION JOINTS, AND OTHER PROVISIONS NECESSARY TO PROVIDE FOR THERMAL EXPANSION AND CONTRACTION. SUBMIT ENGINEERING CALCULATIONS, PREPARED AND CERTIFIED BY A CIVIL OR STRUCTURAL ENGINEER, REGISTERED IN THE STATE OF DELAWARE. INCLUDE STRUCTURAL MEMBERS, FASTENERS AND ANCHORAGE COMPONENTS FOR A ROOF ANCHORAGE SYSTEM. UL 90 RATING REQUIRED. REVIEW OF CALCULATIONS AND SHOP DRAWINGS BY THE ARCHITECT WILL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR PROVIDING A SYSTEM TO MEET PERFORMANCE REQUIREMENTS. SUBMIT CALCULATIONS WITH FIRST SUBMITTAL OF SHOP DRAWINGS.
- WEATHERTIGHT WARRANTY: MANUFACTURER'S STANDARD FORM IN WHICH MANUFACTURER AGREES TO REPAIR OR REPLACE STANDING SEAM METAL ROOF PANEL ASSEMBLIES THAT FAIL TO REMAIN WEATHERTIGHT, INCLUDING LEAKS, WITHIN SPECIFIED WARRANTY PERIOD. WARRANTY PERIOD: 20 YEARS FROM DATE OF SUBSTANTIAL COMPLETION. THE INSTALLED SHALL EXTEND A TWO (2) YEAR WEATHER TIGHTNESS WARRANTY.
- FINISH WARRANTY: MANUFACTURER'S STANDARD FORM IN WHICH MANUFACTURER AGREES TO REPAIR FINISH OR REPLACE STANDING SEAM METAL ROOF PANELS THAT SHOW EVIDENCE OF DETERIORATION OF FACTORY-APPLIED FINISH WITHIN SPECIFIED WARRANTY PERIOD. EXPOSED PANELS FINISH - DETERIORATION INCLUDES THE FOLLOWING: COLOR FADING MORE THAN 5 HUNTER UNITS WHEN TESTED ACCORDING TO ASTM D 2244. CHALKING IN EXCESS OF A NO. 8 RATING WHEN TESTED ACCORDING TO ASTM D 4214. CRACKING, CHECKING, PEELING OR FAILURE OF A PAINT TO ADHERE TO A BARE METAL WARRANTY PERIOD: 20 YEARS FROM THE DATE OF SUBSTANTIAL COMPLETION
- APPLICATOR SHALL FURNISH WRITTEN WARRANTY FOR A TWO (2) YEAR PERIOD FROM DATE OF SUBSTANTIAL COMPLETION OF BUILDING COVERING REPAIRS REQUIRED TO MAINTAIN ROOF AND FLASHINGS IN WATERTIGHT CONDITION.
- STANDING SEAM ROOFING SYSTEM: PROVIDE ACCESSORIES SUCH AS CLIPS, BACK-UP PLATES, HIP PANS, VALLEY TRIM, RIDGE CAP, EAVE TRIM AND OTHER ITEMS FOR A COMPLETE INSTALLATION OF SAME MATERIALS AS ITEMS TO WHICH THEY ARE APPLIED. FACTORY APPLIED SEALANT BEAD IN SEAM. EXPOSED EXTERIOR SHEET

- METAL ITEMS SHALL BE SMOOTH SURFACE ALUMINUM, WITH A FACTORY-APPLIED FLUOROPOLYMER KYNAR 500 COATING AFTER METAL SUBSTRATE HAS BEEN PROPERLY CLEANED AND PRETREATED. ROOF PANEL: .032" ALUMINUM. SYSTEM CONSISTS OF CLIP ANCHORED METAL PAN 16" WIDE BY 1.75" HIGH WITH UPTURNED LEG ON ONE SIDE WHICH LOCKS OVER A HOLD-DOWN CLIP AND THE NEXT ADJOINING PANEL LEG. STRIPPABLE PROTECTIVE COATING. CLIPS: UL 90 INSTALLED SIMULTANEOUSLY WITH BEARING PLATE WITH TWO #14 DEKFAST FASTENERS. FASTENERS SHOULD EXTEND 1/2" BELOW DECK. SUBSTRATE: AS INDICATED. FINISH COLOR BASED ON MANUFACTURER'S STANDARD RANGE OF COLORS. FINAL COLOR TO BE DETERMINED BY OWNER, BASIS OF DESIGN PAC'CLAD'S STANDARD RANGE OF COLORS: FOREST GREEN.
- PETERSON ALUMINUM CORPORATION, ANNAPOLIS JUNCTION, MD 20701. OR APPROVED SUBSTITUTION. ROOF PANELS: SNAP-CLAD. UTILIZE TITE-LOK PLUS FOR LOCATIONS OF METAL PANEL ROOF WHERE SLOPE IS LESS THAN 2:12. CANOPY SOFFIT PANELS: SOFFIT REVEAL, UNVENTED. EAVE SOFFIT PANELS: PAC-750 SOFFIT VENTED
- RIDGE CAP: MANUFACTURER'S STANDARD TYPE. VENTED TYPE.
- PARAPET CAP: MANUFACTURER'S STANDARD SLOPED-TO-VERTICAL-WALL TYPE. VENTED TYPE WHERE INDICATED.
- GUTTERS: FURNISH AND INSTALL IN SIZE AND SHAPE INDICATED. PROVIDE WITH ROOF APRON. JOINTS SHOULD BE LAPPED, RIVETED AND SEALED. PROVIDE WITH EXPANSION JOINTS, OUTLET TUBES AND END CAPS. GUTTER STRAPS SPACED 32" O.C. HANG GUTTERS LEVEL. MANUFACTURER IS RESPONSIBLE FOR DESIGN OF GUTTER SIZE BASED ON PUBLISHED RAINFALL INTENSITY PROJECTIONS FOR 100 YEAR STORMS BY U.S. WEATHER BUREAU. FOLLOW SMCNA DESIGN GUIDELINES, LATEST EDITION. OUTLET TUBES: SIZE AS REQUIRED TO FIT DOWNSPOUTS.
- EXPANSION JOINTS: GUTTER ENDS ARE FLANGED AT THE TOP. RIVETED AND SEALED INTO EACH SECTION OF GUTTER. SECTIONS ARE JOINED AND A CAP IS USED TO COVER THE JOINT. LEAVE ONE INCH SPACE BETWEEN END CAPS. PROVIDE COVER PLATE TO COVER EXPANSION JOINT. MAXIMUM LENGTH OF GUTTER BETWEEN EXPANSION JOINTS 60 FEET.
- CONDUCTOR BOXES: SHEET METAL RECTANGULAR OPEN-TOP STYLE ATTACHED TO SUPPORTING WALL AND SEALED TO SCUPPER. CONDUCTOR BOX BASE SHALL BE FIT TO SAME SIZE AND STYLE OF DOWNSPOUT AS USED FOR GUTTERS.
- DOWNSPOUTS: RECTANGULAR STYLE. FORM IN 8 TO 10 FOOT LENGTHS WITH TELESCOPING END JOINTS AND LOCKED LONGITUDINAL JOINTS. HANGERS SPACED MAXIMUM 5'-0" ON CENTER. PROVIDE WITH OFFSET ELBOWS AT TOP AND ELBOW AT BOTTOM FOR DISCHARGE ONTO SPLASH BLOCKS OR CONNECT TO EXISTING STORM DRAINAGE SYSTEM AS SHOWN.
- FLASHINGS, INCLUDING VALLEY AND STEP FLASHINGS, TRIMS, GUTTERS, DOWNSPOUTS, AND ACCESSORIES, FACTORY FORMED COATED STEEL IN FINISH AND SELECTED COLOR TO MATCH PANELS WITH STRIPPABLE PROTECTIVE COATING.
- SEALANTS AND CLOSURES: TYPE FORMULATED FOR USE WITH SPECIFIED ROOFING SYSTEMS. SEALANTS: CLOSED CELL RUBBER AND BUTYL TAPE MASTIC. SEALANT: ACRYLIC GUM GRADE. CLOSURES: SAME MATERIAL AND FINISH AS ROOF PANELS.
- FASTENERS: NON-CORROSIVE SCREWS AND RIVETS, COLOR COATED WHERE EXPOSED, OF SIZE AND TYPE REQUIRED FOR THE PARTICULAR APPLICATION. PROVIDE SCREWS WITH SELF SEALING WASHERS WHERE REQUIRED.
- METAL CANOPY SOFFIT SYSTEM: 1-INCH HIGH BY 12-INCH WIDE SMOOTH .032 ALUMINUM PANEL WITH FACTORY APPLIED FLUOROPOLYMER KYNAR 500 COATING AFTER METAL SUBSTRATE HAS BEEN PROPERLY CLEANED AND PRETREATED. FRAMING MEMBERS: 24 GAUGE GALVANIZED G90 STEEL FURRING CHANNELS AS REQUIRED BY MANUFACTURER TO PROPERLY INSTALL THE SOFFIT SYSTEM, USING TEK TYPE FASTENERS FASTENED TO STRUCTURE. FASTENERS: SELF-TAPPING, SELF-DRILLING FASTENERS, CLOSED END POP RIVETS AND GROMMETED FASTENERS INSTALLED WITHIN MANUFACTURER'S RECOMMENDATIONS. USE STAINLESS STEEL FASTENERS FOR EXTERIOR APPLICATIONS. PROVIDE METAL BACKED EPDM WASHERS UNDER HEADS OF EXPOSED FASTENERS. CLOSED END PAINTED POP RIVETS FOR EXPOSED POP RIVETS. ALL EXPOSED FASTENERS SHALL BE SUPPLIED BY SYSTEM MANUFACTURER AND FACTORY PAINTED TO MATCH PANEL COLOR FINISH.
- UNDERLAYMENT: HIGH TEMPERATURE SELF-ADHESIVE 40 MIL THICK ROOFING UNDERLAYMENT COMPOSED OF RUBBERIZED ASPHALT ADHESIVE BACKED BY A LAYER OF HIGH PERFORMANCE POLYMERIC FILM. HIGH TEMPERATURE UNDERLAYMENT SHALL BE INSTALLED ON ALL ROOF SHEATHING.
- GRACE ICE & WATERSHIELD HT. OR APPROVED SUBSTITUTION.
- SNOW GUARD SYSTEM: PRE-MANUFACTURED SNOW RAIL SYSTEM COMPRISED OF MILL FINISHED ALUMINUM CLIPS AND CROSS MEMBERS ATTACHED TO METAL ROOF PANEL SEAMS, DESIGNED TO HOLD A SLIDE-IN CONTINUOUS COLOR STRIP FABRICATED OF METAL ROOF PANEL MATERIAL OF MATCHING COLOR AND FINISH.
- S-S COLSGUARD SYSTEM. OR APPROVED SUBSTITUTION.

07 62 00 – SHEET METAL FLASHING AND TRIM

- REFERENCE CURRENT EDITION OF SMCNA – ARCHITECTURAL SHEET METAL MANUAL
- GENERAL CONTRACTOR SHALL PROVIDE HIS WRITTEN GUARANTEE AS FOLLOWS: "FLASHING AND SHEET METAL ARE GUARANTEED AGAINST LEAKS, DEFECTS OF WORKMANSHIP AND MATERIALS, AND DEFECTS DEVELOPING UNDER NATURAL WEAR AND TEAR FOR A PERIOD OF TWO YEARS FROM DATE OF SUBSTANTIAL COMPLETION. SHOULD LEAKS OCCUR WITHIN THIS PERIOD, REPAIRS TO FLASHING AND SHEET METAL AND DAMAGE TO OTHER PORTIONS OF BUILDING CAUSED BY SUCH LEAKS WILL BE MADE GOOD WITHOUT COST TO THE OWNER."
- STAINLESS STEEL: AISI TYPE 302/304, DULL FINISH. FASTENINGS: OF SIZE AND TYPE REQUIRED FOR A SECURE INSTALLATION. SCREWS, RIVETS, BOLTS: ALUMINUM OR STAINLESS STEEL. NAILS: LARGE GAUGE, ALUMINUM. ELASTIC SEALANT: TYPE FORMULATED FOR USE WITH ALUMINUM OR STAINLESS STEEL.
- GENERAL: MAKE SURFACES TO RECEIVE SHEET METAL PLUMB AND TRUE, CLEAN, EVEN, SMOOTH, DRY AND FREE FROM DEFECTS WHICH MIGHT AFFECT THE APPLICATION. PROVIDE INSTALLATION IN ACCORD WITH THE APPLICABLE REQUIREMENTS OF SMCNA. SEPARATE DISSIMILAR METALS AND SEPARATE METALS FROM CONTACT WITH OTHER CORROSIVE MATERIALS WITH A 15-MIL COATING OF BITUMINOUS MASTIC. FORM SHEET METAL ACCURATELY WITH TRUE, SHARP, AND STRAIGHT LINES TO AN ACCURATE FIT.
- UNLESS OTHERWISE NOTED, TURN EXPOSED EDGES BACK 1/2 INCH. EXPANSION: FORM, FABRICATE, AND INSTALL SHEET METAL TO PROVIDE FOR EXPANSION AND CONTRACTION. JOINTS: JOIN PARTS WITH RIVETS WHERE NECESSARY FOR STRENGTH OR STIFFNESS. SEAL JOINTS. NAILING: WHENEVER POSSIBLE, SECURE METAL BY MEANS OF CLIPS OR CLEATS WITHOUT NAILING THROUGH METAL. SPACE NAILS, RIVETS, AND SCREWS AS RECOMMENDED BY SMCNA. USE BARBED ROOFING NAILS FOR ATTACHMENT TO WOOD. ALUMINUM 0.040 INCH OR LESS IN THICKNESS BUTTED WITH SPACE AND BACKED WITH FORMED FLASHING PLATE, OR LOCK JOINTED, MECHANICALLY FASTENED, AND JOINT FILLED WITH SEALANT

07 67 00 – FLEXIBLE WALL FLASHING

- FLASHING: 40 MIL TOTAL THICKNESS SELF-ADHESIVE, COLD APPLIED TAPE CONSISTING OF 32 MILS OF RUBBERIZED ASPHALT INTEGRALLY BONDED TO AN 8 MIL HIGH DENSITY, CROSS LAMINATED POLYETHYLENE FILM.
- PRIMER, ADHESIVES, ETC.: AS RECOMMENDED BY MEMBRANE MANUFACTURER
- W.R. GRACE & CO., CAMBRIDGE, MA 02140. PERM-A-BARRIER WALL FLASHING.

07 92 00 – SEALANTS AND CAULKING

- REFERENCE FS TT-5-230: SEALING COMPOUND, ELASTOMERIC TYPE, SINGLE COMPONENT.
- CONTRACTOR PROVIDE HIS WRITTEN GUARANTEE AS FOLLOWS: "CAULKING IS GUARANTEED AGAINST LEAKS, DEFECTS OF WORKMANSHIP AND MATERIALS FOR A PERIOD OF 5 YEARS FROM THE DATE OF SUBSTANTIAL COMPLETION, AND CAULKING AND DAMAGE TO BUILDING CAUSED BY SUCH LEAKS WILL BE REPAIRED WITHOUT COST TO THE OWNER."
- SEALANT: DYNALON 1. ONE PART NON-SAG URETHANE, TYPE II.
- PAVEMENT JOINT SEALANT: TT-S-230C, TYPE I, UREXPAN NR-201, ONE PART SELF LEVELING URETHANE SEALANT.
- BACKER ROD: POLYETHYLENE FOAM, CLOSED CELL, COMPATIBLE WITH SEALANT.
- JOINT CLEANER: METHYL ETHYL KETONE, TOLUENE, XYLENE.
- JOINT PRIMER: TYPE AS RECOMMENDED BY CAULKING MANUFACT

OUTLINE SPECIFICATIONS (CONTINUED)

07 92 19 --ACOUSTICAL JOINT SEALANT

- REFERENCE ASTM C734, STANDARD TEST METHOD FOR LOW-TEMPERATURE FLEXIBILITY OF LATEX SEALANTS AFTER ARTIFICIAL WEATHERING. ASTM C834, STANDARD SPECIFICATION FOR LATEX SEALANTS. ASTM C919, STANDARD PRACTICE FOR USE OF SEALANTS IN ACOUSTICAL APPLICATIONS. ASTM D217, STANDARD TEST METHODS FOR CONE PENETRATION OF LUBRICATING GREASE. ASTM E84, STANDARD TEST METHOD FOR SURFACE BURNING CHARACTERISTICS OF BUILDING MATERIALS. ASTM E90, STANDARD TEST METHOD FOR LABORATORY MEASUREMENT OF AIRBORNE SOUND TRANSMISSION LOSS OF BUILDING PARTITIONS AND ELEMENTS. ASTM G21, STANDARD PRACTICE FOR DETERMINING RESISTANCE OF SYNTHETIC POLYMERIC MATERIALS TO FUNGI. ISO 11600, BUILDING CONSTRUCTION -- JOINTING PRODUCTS -- CLASSIFICATION AND REQUIREMENTS FOR SEALANTS.
INSTALLING CONTRACTOR SHALL ARRANGE FOR THE ACOUSTIC JOINT SEALANT MANUFACTURER'S DIRECT REPRESENTATIVE (NOT DISTRIBUTOR OR AGENT) TO BE ON-SITE DURING INITIAL INSTALLATION OF ACOUSTIC SEALANT AND SPRAY SYSTEMS TO TRAIN APPROPRIATE CONTRACTOR PERSONNEL IN PROPER SELECTION AND INSTALLATION PROCEDURES. ENGAGE AN EXPERIENCED INSTALLER WHO IS CERTIFIED, LICENSED, OR OTHERWISE QUALIFIED BY THE ACOUSTIC SEALANT AND ACOUSTIC SPRAY MANUFACTURER AS HAVING BEEN PROVIDED THE NECESSARY TRAINING TO INSTALL MANUFACTURER'S PRODUCTS PER SPECIFIED REQUIREMENTS. A MANUFACTURER'S WILLINGNESS TO SELL ITS ACOUSTICAL SEALANT PRODUCTS TO THE CONTRACTOR OR TO AN INSTALLER ENGAGED BY THE CONTRACTOR DOES NOT IN ITSELF CONFER QUALIFICATION ON THE BUYER.
ACOUSTIC SEALANT FOR EXPOSED AND CONCEALED JOINTS AND ANNULAR SPACES AROUND THROUGH-PENETRATIONS: HILTI CP 506 SMOKE AND ACOUSTIC SEALANT. PROVIDE MANUFACTURER'S STANDARD NON-SAG, PAINTABLE, NON-STAINING LATEX SEALANT COMPLYING WITH ASTM C834, ASTM C919 AND THE FOLLOWING:
SEALANT EFFECTIVELY REDUCES AIRBORNE SOUND TRANSMISSION THROUGH HEAD-OF-WALL AND BOTTOM-OF-WALL JOINTS AND OPENINGS TO ACCOMMODATE THROUGH-PENETRATIONS IN BUILDING CONSTRUCTION AS DEMONSTRATED BY TESTING REPRESENTATIVE ASSEMBLIES IN ACCORDANCE WITH ASTM E90.
ACOUSTICAL SEALANT TO MAINTAIN STC RATINGS AT SOUND RATED PARTITIONS AS INDICATED ON THE DRAWINGS.
SEALANT HAS FLAME-SPREAD AND SMOKE-DEVELOPED RATINGS OF LESS THAN 25 AS TESTED IN ACCORDANCE WITH ASTM E84.
SEALANT IS MOLD AND MILDEW RESISTANT PER ASTM G21 WITH A RATING OF ZERO (0), "NO GROWTH".
SEALANT HAS MOVEMENT CAPABILITY OF MINIMUM 12.5% IN ACCORDANCE WITH ISO 11600.
LATEX SEALANT ACCORDING TO ASTM C 834 CLASS OP -18°C WITH SHRINKAGE ACCORDING TO ASTM C 1241 < 25 % C.
PROPOSED ACOUSTIC SEALANT MATERIALS AND METHODS SHALL CONFORM TO APPLICABLE GOVERNING CODES HAVING LOCAL JURISDICTION.
ACOUSTIC SEALANT FOR BOTTOM OF WALLS: HILTI CP605 BOTTOM OF WALL SEALANT. COMPLY WITH STANDARDS LISTED ABOVE.
ACOUSTIC SPRAY FOR EXPOSED AND CONCEALED JOINTS: HILTI CP 572 SMOKE AND ACOUSTIC SPRAY. PROVIDE MANUFACTURER'S STANDARD SPRAYABLE LATEX MATERIAL COMPLYING WITH ASTM C919 AND THE FOLLOWING:
SPRAY EFFECTIVELY REDUCES AIRBORNE SOUND TRANSMISSION THROUGH HEAD-OF-WALL JOINTS IN BUILDING CONSTRUCTION AS DEMONSTRATED BY TESTING REPRESENTATIVE ASSEMBLIES IN ACCORDANCE WITH ASTM E90.
ACOUSTICAL SPRAY TO MAINTAIN STC RATINGS AT SOUND RATED PARTITIONS AS INDICATED ON THE DRAWINGS.
SPRAY HAS FLAME-SPREAD AND SMOKE-DEVELOPED RATINGS OF LESS THAN 25 AS TESTED IN ACCORDANCE WITH ASTM E84.
SPRAY IS MOLD AND MILDEW RESISTANT PER ASTM G21 WITH A RATING OF ZERO (0), "NO GROWTH".
SPRAY HAS MOVEMENT CAPABILITY OF MINIMUM 12.5%.
PROPOSED ACOUSTIC SPRAY MATERIALS AND METHODS SHALL CONFORM TO APPLICABLE GOVERNING CODES HAVING LOCAL JURISDICTION.
PRE-FORMED MINERAL WOOL: CP 767 SPEED STRIPS. CP 777 SPEED PLUGS
HILTI, INC., PLANO, TEXAS. OR APPROVED SUBSTITUTION

08 11 00 -- STEEL DOOR AND FRAMES

- REFERENCES ANSI A250.6 - HARDWARE ON STANDARD STEEL DOORS (REINFORCEMENT--APPLICATION); 1998, ANSI A250.8 - SDI RECOMMENDED SPECIFICATIONS FOR STANDARD STEEL DOORS AND FRAMES; 1998 (REVISION OF SDI 100-91), ASTM A 366/A 366M - STANDARD SPECIFICATION FOR STEEL, SHEET, CARBON, COLD-ROLLED, COMMERCIAL QUALITY; 1996; ASTM A 569/A 569M - STANDARD SPECIFICATION FOR COMMERCIAL STEEL, SHEET AND STRIP, CARBON (0.15 MAXIMUM PERCENT), HOT-ROLLED; 1997; ASTM A 591/A 591M - STANDARD SPECIFICATION FOR STEEL SHEET, ELECTROLYTIC ZINC-COATED, FOR LIGHT COATING MASS APPLICATIONS; 1996; ASTM A 620/A 620M - STANDARD SPECIFICATION FOR DRAWING STEEL (DS), SHEET, CARBON, COLD-ROLLED; 1997; ASTM A 653/A 653M - STANDARD SPECIFICATION FOR STEEL SHEETS, ZINC-COATED (GALVANIZED) OR ZINC IRON ALLOY-COATED (GALVANNEALED) BY THE HOT-DIP PROCESS; 1997; DHI A115.16 - INSTALLATION GUIDE FOR DOORS AND HARDWARE; DOOR AND HARDWARE INSTITUTE; 1994. SDI 105 - RECOMMENDED ERECTION INSTRUCTIONS FOR STEEL FRAMES, STEEL DOOR INSTITUTE; 1992; SDI 113 - TEST PROCEDURE AND ACCEPTANCE CRITERIA FOR APPARENT THERMAL PERFORMANCE OF STEEL DOOR AND FRAME ASSEMBLIES; STEEL DOOR INSTITUTE; 1979.
STEEL SHEET FOR DOORS AND FRAMES: COLD ROLLED STEEL: ASTM A 366/A 366M OR ASTM A 620/A 620M. HOT ROLLED STEEL: PICKLED AND OILED, ASTM A 569/A 569M, TYPE B. GALVANIZED STEEL: ASTM A 653/A 653M; HOT-DIPPED ZINC-COATED STEEL; HOT-DIPPED ZINC-IRON ALLOY-COATED STEEL OF A40/ZF120 COATING, MINIMUM. STEEL SHEET FOR ANCHORS AND ACCESSORIES: ELECTROLYTICALLY DEPOSITED ZINC COATED STEEL; ASTM A 591/A 591M, COATING CLASS B, MINIMUM.
COMPLY WITH ANSI A250.8.
EXTERIOR DOORS: PROVIDE INSULATED CONSTRUCTION WITH U-VALUE OF AT LEAST 0.48 (2.72) WHEN TESTED IN ACCORDANCE WITH SDI 113. PROVIDE MANUFACTURER'S STANDARD FOAM INSULATED CORE. STEEL STIFFENED GRID CORE AND STILE AND RAIL UNITS ARE EXEMPT FROM THERMAL RATING REQUIREMENTS.
FULL FLUSH DOORS: USE ONLY HONEYCOMB CORES. EXCEPTION: EXTERIOR DOORS; CORES AS SPECIFIED.
ALL STEEL DOORS: LEVEL 2, MODEL 2 (HEAVY-DUTY, SEAMLESS DESIGN, 16 GAGE (1.52 MM) FRAMES).
FRAMES FOR WOOD AND PLASTIC DOORS SPECIFIED ELSEWHERE: LEVEL 2 STEEL FRAMES.
FRAMES: PROVIDE EITHER KNICKDOWN FINE ASSEMBLED OR WELDED UNIT TYPE FRAMES UNLESS OTHERWISE INDICATED. FOR DRYWALL PARTITIONS PROVIDE SLIP-ON TYPE FRAMES FOR INSTALLATION AFTER PARTITIONS ARE ERECTED.
DOORS AND FRAMES ARE CLEANED, PHOSPHATIZED AND PRIMED WITH A COAT OF FORCE CURED RUST INHIBITING PRIMER THAT MEETS OR EXCEEDS THE REQUIREMENTS OF ANSI A250.10 (120 HOUR CONTINUOUS SALT SPRAY TEST PER ASTM B117 AND 240 HOUR CONTINUOUS HUMIDITY TEST PER ASTM D4585).
GALVANIZING: PROVIDE UNITS OF GALVANIZED STEEL WHERE INDICATED BY DOOR SCHEDULE.
GLAZED LIGHTS: PROVIDE GLAZING STOPS AND BEADS.
CECO DOOR PRODUCTS, APPROVED SUBSTITUTION

08 14 16 -- FLUSH WOOD DOOR

- REFERENCE NWWDA: HARDWOOD VENEERED FLUSH DOORS I.S., 1-A SERIES
SUBMIT TWO COPIES OF WRITTEN AGREEMENT IN DOOR MANUFACTURER'S STANDARD FORM SIGNED BY THE MANUFACTURER AND CONTRACTOR, AGREEING TO REPAIR OR REPLACE DEFECTIVE DOORS WHICH HAVE WARPED (BOW, CUP OR TWIST) OR WHICH SHOW PHOTOGRAPHING OF CONSTRUCTION BELOW IN FACE VENEERS, AS DEFINED IN NWWA STANDARD DOOR GUARANTEE. THE GUARANTEE SHALL ALSO INCLUDE REFINISHING AND REINSTALLATION WHICH MAY BE REQUIRED DUE TO REPAIR OR REPLACEMENT OF DEFECTIVE DOORS. WARRANTY SHALL BE IN EFFECT FOR TIME SHOWN FOR THE VARIOUS TYPES OF DOORS. PARTICLE CORE DOORS: LIFE OF ORIGINAL INSTALLATION.
SOLID CORE DOORS: ROTARY CUT PREMIUM GRADE NATURAL BIRCH VENEER TWO FACES, PARTICLEBOARD CORE, HARDWOOD STILES AND RAILS, FIVE PLY CONSTRUCTION, TYPE I ADHESIVE. FINISH TO BE REVIEWED FROM MANUFACTURER'S STANDARD RANGE OF COLORS, BASIS NATURAL STAIN OR CLOSEST MATCH TO PLAM
LOUVERS: PROVIDE SIGHT PROOF STOCK LOUVERS OF SAME WOOD AS FACE VENEER, TYPE 109.
GLASS OPENINGS: SOLID MATCHING WOOD BEVELED BEAD MOLDING. ALLOW FOR 1/4-INCH GLAZING MATERIAL, BEAD 101
VT INDUSTRIES, HOLSTEIN, IA 51025. OR APPROVED SUBSTITUTION.

08 31 16 -- STEEL ACCESS PANELS

- ARCHITECTURAL FLUSH ACCESS DOOR : STYLE BNW AS MANUFACTURED BY BARCOCK DAVIS WITH CONCEALED FLANGES FOR GYPSUM BOARD INSTALLATION. FRAME AND DOOR: 16 GAUGE STEEL FRAME WITH RECESSED 16-GAUGE STEEL DOOR PANEL FOR INSTALLATION OF 5/8-INCH DRYWALL. FINISH: WHITE POWDER COAT. HINGE: CONTINUOUS TYPE, STEEL WITH STAINLESS STEEL PIN, CONCEALED. LOCKING DEVICE: SCREWDRIVER CAM LATCH. SIZE: AS INDICATED ON DRAWINGS.
EXPOSED FLANGE STEEL DRAFTSTOP ACCESS DOOR : STYLE BDT AS MANUFACTURED BY BARCOCK DAVIS. FRAME: 16 GAUGE STEEL FRAME. DOOR: 14 GAUGE STEEL DOOR PANEL. FINISH: WHITE POWDER PAINTED STEEL. HINGE: CONTINUOUS TYPE, STEEL, SELF-CLOSING. LOCKING DEVICE: KEY OPERATED LATCH BOLT. SIZE: AS INDICATED ON DRAWINGS
BARCOCK DAVIS, BROOKLYN PARK, MN 55428. APPROVED SUBSTITUTION.

08 33 23 -- ROLLING SERVICE DOORS (RAYNOR DURACOL)

- REFERENCES: ASTM A653/A653M (GALVANIZED STEEL SHEET); ASTM B209 (ALUMINUM SHEET/PLATE); ASTM A240 (STAINLESS SHEET/PLATE/STRIP); ASTM A123 (HOT-DIP GALVANIZED COATINGS); ASTM A229 (SPRING WIRE); ASTM A924 (GENERAL REQUIREMENTS METALLIC-COATED STEEL SHEET); ASTM B221 (ALUMINUM EXTRUSIONS); ASTM E330 (STRUCTURAL PERFORMANCE BY UNIFORM STATIC AIR PRESSURE); ASTM E90 / ASTM E413 (ACOUSTICS/STC); ANS/DASMA 105 (THERMAL TRANSMITTANCE & AIR INFILTRATION); ANS/DASMA 104 (UNIFORM STATIC AIR PRESSURE STRUCTURAL TESTING); ANS/DASMA 203 (NON-RATED FIRE ROLLING DOOR SPECS REFERENCE); UL 325 (OPERATORS).
QUALITY ASSURANCE: AUTHORIZED INSTALLER WITH DEMONSTRATED SIMILAR-PROJECT EXPERIENCE; MANUFACTURER MINIMUM FIVE-YEAR EXPERIENCE PRODUCING SPECIFIED DOOR TYPE.
WARRANTY: PROVIDE MANUFACTURER LIMITED WARRANTY PER RAYNOR PUBLISHED TERMS: DOOR AND COMPONENTS 1 YEAR; OPERATOR AND COMPONENTS 2 YEARS; OPERATOR 3 YEARS (OPERATOR ONLY) WHEN PURCHASED WITH RAYNOR ROLLING SERVICE DOOR; ARMORBRITTE™ POWDER COAT 3 YEARS AGAINST CRACKING/PEELING.
OVERHEAD COILING DOOR: ROLLING SERVICE DOOR ASSEMBLY COMPLETE WITH CURTAIN, GUIDES, BRACKETS, BARREL/COUNTERBALANCE, HOOD/ENCLOSURES, AND ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION. PUSH-UP + HAND CHAIN OPERATION. MOUNTING: GUIDES MOUNTED TO INTERIOR FACE OF WALL. REFER TO STRUCTURAL NOTES FOR WIND RESISTANCE REQUIREMENTS. PROVIDE ASSEMBLY MEETING MAX 1.00 CFM/FT² AIR LEAKAGE (TESTED TO DASMA 105). CURTAIN / SLATS: INTERLOCKING ROLL-FORMED SLATS WITH ENDLOCKS ON ALTERNATE SLATS TO PREVENT LATERAL MOVEMENT, WITH INSULATED FLAT SLATS. MATERIALS (SELECT AS PROJECT REQUIRES): GALVANIZED STEEL: COMMERCIAL QUALITY G-90 PER ASTM A653. POWDER COAT FINISH FOR CURTAIN, SLATS, HOOD, DOOR GUIDES, HEAD PLATES, AND BOTTOM BAR FROM MANUFACTURER'S STANDARD RANGE OF COLORS. INTENT TO MATCH TRIM COLOR, FIELD VERIFY. R#1 8019 (GREY BROWN) OR R#1 7021 (BLACK GREY) CLOSE EQUIVALENT TO SW DEEP FOREST BROWN (SW 9175). GUIDES: STRUCTURAL ANGLE GUIDES WITH REMOVABLE CURTAIN STOPS. WEATHERSEALS: PROVIDE GUIDE WEATHERSEAL TO PREVENT AIR INFILTRATION. PROVIDE GUIDE SEAL AND BOTTOM EAR AS TRAGAL WHERE REQUIRED FOR EXTERIOR ENVIRONMENTAL SEPARATION. COUNTERBALANCE: BARREL MINIMUM 4-1/2 INCH OD, 0.120-INCH WALL STRUCTURAL STEEL PIPE; DEFLECTION LIMIT 0.03 INCH PER FOOT OF SPAN. HELICAL TORSION SPRINGS MOUNTED ON CONTINUOUS TORSION SHAFT; STANDARD 15,000 CYCLES (HIGH-CYCLE OPTION WHERE SCHEDULED). BRACKETS: MINIMUM 3/16-INCH STEEL PLATE; GRADE 5 BOLTING; SEALED BALL BEARING AT DRIVE BRACKET; FINISH TO MATCH PROJECT REQUIREMENTS. HOOD / ENCLOSURES: PROVIDE HOOD (ROUND OR SQUARE) AND BRACKET COVERS. MATERIAL: 24 GA STEEL OR STAINLESS, OR ALUMINUM AS SCHEDULED; FINISH TO MATCH CURTAIN.
DURACOL ROLLING SERVICE DOOR, RAYNOR GARAGE DOORS.

08 41 13 -- ALUMINUM ENTRANCES

- REFERENCE ASTM B221: SPECIFICATION FOR ALUMINUM AND ALUMINUM ALLOY, EXTRUDED BARS, RODS WIRES, SHAPES AND TUBES
ALUMINUM MEMBERS: EXTRUDED SHAPES, RODS, BARS, TUBING: ASTM B221, ALLOY 6063-T5. CASTINGS: ALUMINUM ALLOY OF SUFFICIENT THICKNESS AND STRENGTH FOR INTENDED PURPOSE. BOLTS, NUTS, SCREWS AND RIVETS. ALUMINUM OR STAINLESS STEEL.
FORM MITERS AND JOINTS WITH FLUSH, HAIRLINE JOINTS. REMOVE BURRS. JOINTS BETWEEN SECTIONS AND FIELD SPLICES AND FIELD SPLICES SHALL PRODUCE STRENGTH TO RESIST DEFORMATION AND MISALIGNMENT. FABRICATE AND INSTALL WITH CONCEALED FASTENINGS INSOFAR AS PRACTICABLE. PAINT CONCEALED SURFACES OF ALUMINUM WITH BLACK ASPHALTUM WHERE TOUCHING CONCRETE OR MASONRY.
SWING DOORS: MEDIUM STILE TYPE KAWNEER 500 WITH STILES AND RAILS FABRICATED FROM EXTRUDED TUBULAR SHAPES WITH WALLS NOT LESS THAN 0.125 INCH THICK. ARCHITECTURAL CLASS 1, #29 BLACK ANODIZED. TOP RAIL: 5 INCHES. BOTTOM RAIL: 10 INCHES. HORIZONTAL INTERMEDIATE RAIL: 8- 3/4 INCHES. VERTICAL STILE: 5 INCHES. GLAZING MOLDINGS: SNAP-IN TYPE, COATED TO MATCH RAILS. INSULATED GLAZING. GLAZING GASKETS: EPDM ELASTOMERIC EXTRUSIONS. WEATHERSTRIPPING: WOOL PILE WOVEN INTO FABRIC BASE HELD IN A CONCEALED CHANNEL.
FRAMES: FABRICATE FROM EXTRUDED TUBULAR SHAPES WITH WALLS NOT LESS THAN 1/8 INCH THICK, ARCHITECTURAL CLASS I, #29 BLACK ANODIZED. SWING DOOR FRAMING: KAWNEER TRIFAB V6 451, 2" X 4-1/2", SHEAR BLOCK FABRICATION. INSULATED GLAZING. GLAZING GASKETS: EPDM ELASTOMERIC EXTRUSIONS.
FURNISHED AND INSTALLED BY ALUMINUM ENTRANCE SYSTEM INSTALLER. SWING DOOR HARDWARE: CLOSER: NORTON 1605 SURFACE CLOSER. PIVOTS: TOP, BOTTOM AND INTERMEDIATE OFFSET PIVOTS. PUSH AND PULL: ROUND BENT BAR CP-2/CO-9 CLEAR ANODIZED #14. LOCK: ADAMS RITE 4510 DEAD LATCH, LEVER DESIGN. CYLINDER FURNISHED BY FINISH HARDWARE SUPPLIER AND KEYS TO BUILDING. THRESHOLD: FOR OFFSET PIVOT AND OVERHEAD CLOSER.
SWING DOORS: KAWNEER COMPANY, INC., NORCROSS, GA 30092. OR APPROVED SUBSTITUTION

08 46 00 -- AUTOMATIC DOOR OPERATORS

- UNIT DESCRIBED COMPLIES WITH CURRENT ANSI A156.10 FOR POWER OPERATED PEDESTRIAN DOORS. UNIT DESCRIBED COMPLIES WITH CURRENT ANSI A156.19 FOR POWER ASSIST AND LOW ENERGY POWER OPERATED DOORS AND WITH ANSI A117.1. UNIT IS LISTED WITH UL 325 STANDARD FOR DOOR, DRAPERY, GATE, LOUVER, AND WINDOW OPERATORS AND SYSTEMS AND U1991. UNIT COMPLIES WITH NFPA 101 LIFE SAFETY CODE. UNIT COMPLIES WITH NFPA 70 NATIONAL ELECTRICAL CODE
AUTOMATIC DOOR COMPONENTS ARE WARRANTED TO BE FREE OF DEFECTS IN MATERIALS OR WORKMANSHIP UNDER NORMAL USE FOR A PERIOD OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION FACTORY WHEN AN AUTHORIZED MANUFACTURER'S PROVIDER HAS INSTALLED THE COMPONENTS. ABUSE, MISUSE, MODIFICATION OR IMPROPER REPAIR OR SERVICE BY UNAUTHORIZED TECHNICIANS NEGATES THIS WARRANTY. DURING THE PERIOD OF THIS WARRANTY MANUFACTURER, AT ITS SOLE OPTION, WILL REPAIR OR REPLACE ANY AUTOMATIC DOOR COMPONENT OR PARTS THEREOF FOUND TO BE DEFECTIVE IN MATERIAL OR WORKMANSHIP IF ANY NECESSARY RETURN CHARGES ARE PREPAID. COMPONENTS REPAIRED OR REPLACED UNDER THIS WARRANTY ARE WARRANTED ONLY FOR THE REMAINDER OF THE PERIOD COVERED BY THIS WARRANTY
ALUMINUM: ALLOY AND TEMPER RECOMMENDED BY MANUFACTURER FOR TYPE OF USE AND FINISH INDICATED. HEADERS, STILES, RAILS, AND FRAMES: 6063-T6. EXTRUDED BARS, RODS, PROFILES, AND TUBES: ASTM B 221. SHEET AND PLATE: ASTM B 209. SEALANTS AND JOINT FILLERS AS SPECIFIED ELSEWHERE.
AUTOMATIC ENTRANCE DOOR ASSEMBLIES: A. DURAGLIDE™ 3000 SERIES SLIDING AUTOMATIC ENTRANCES. PROVIDE MANUFACTURER'S STANDARD AUTOMATIC ENTRANCE DOOR ASSEMBLIES INCLUDING DOORS, SIDELIGHTS, FRAMING, HEADERS, CARRIER ASSEMBLIES, ROLLER TRACKS, DOOR OPERATORS, ACTIVATION AND SAFETY DEVICES, AND ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION. SINGLE SLIDE ENTRANCES: CONFIGURATION: ONE SLIDING LEAF AND ONE FULL SIDELIGHT. TRAFFIC PATTERN: TWO-WAY. EMERGENCY BREAKAWAY CAPABILITY: SLIDING LEAF ONLY. MOUNTING: BETWEEN JAMBS.
FRAMING MEMBERS: MANUFACTURER'S STANDARD EXTRUDED ALUMINUM REINFORCED AS REQUIRED TO SUPPORT IMPOSED LOADS. NOMINAL SIZE: 1 3/4 INCH BY 4 1/2 INCH. CONCEALED FASTENING: FRAMING SHALL INCORPORATE A CONCEALED FASTENING POCKET, AND CONTINUOUS FLUSH INSERT COVER, EXTENDING FULL LENGTH OF EACH FRAMING MEMBER.
STILE AND RAIL DOORS AND SIDELIGHTS: MANUFACTURER'S STANDARD 1 1/4 INCH (45 MM) THICK GLAZED DOORS WITH EXTRUDED-ALUMINUM TUBULAR STILE AND RAIL MEMBERS. INCORPORATE CONCEALED TIE-RODS THAT SPAN FULL LENGTH OF TOP AND BOTTOM RAILS. GLAZING STOPS AND GASKETS: SNAP-ON, EXTRUDED-SECURITY ALUMINUM STOPS AND PREFORMED GASKETS. STILE DESIGN: MEDIUM STILE; 3-1/2 INCH NOMINAL WIDTH. BOTTOM RAIL DESIGN: 10 INCH NOMINAL HEIGHT. MUNTIN BARS: 4-1/4 INCH INTERMEDIATE MUNTIN.
GLAZING: FURNISHED UNDER DIVISION 8 SECTION GLAZING. ALL GLAZING FURNISHED UNDER SEPARATE SECTION SHALL BE 1/4 INCH (6 MM) TEMPERED.
HEADERS: FABRICATED FROM EXTRUDED ALUMINUM AND EXTENDING FULL WIDTH OF AUTOMATIC ENTRANCE DOOR UNITS TO CONCEAL DOOR OPERATORS, CARRIER ASSEMBLIES, AND ROLLER TRACKS. PROVIDE HINGED OR REMOVABLE ACCESS PANELS FOR SERVICE AND ADJUSTMENT OF DOOR OPERATORS AND CONTROLS. SECURE PANELS TO PREVENT UNAUTHORIZED ACCESS. MOUNTING: CONCEALED, WITH ONE SIDE OF HEADER FLUSH WITH FRAMING. CAPACITY: CAPABLE OF SUPPORTING UP TO 220 LB (100 KG) PER PANEL, UP TO FOUR PANELS, OVER SPANS UP TO 14 FEET (4.3 M) WITHOUT INTERMEDIATE SUPPORTS.
CARRIER ASSEMBLIES AND OVERHEAD ROLLER TRACKS: MANUFACTURER'S STANDARD CARRIER ASSEMBLY THAT ALLOWS VERTICAL ADJUSTMENT OF AT LEAST 1/8 INCH (3 MM); CONSISTING OF URETHANE WITH PRECISION STEEL LUBRICATED BALL-BEARING WHEELS, OPERATING ON A CONTINUOUS ROLLER TRACK. SUPPORT PANELS FROM CARRIER ASSEMBLY BY LOAD WHEELS AND ANTI-RISER WHEELS WITH FACTORY ADJUSTED CANTILEVER AND PIVOT ASSEMBLY. MINIMUM TWO BALL-BEARING LOAD WHEELS AND TWO ANTI-RISE ROLLERS FOR EACH ACTIVE LEAF. MINIMUM LOAD WHEEL DIAMETER SHALL BE 2 1/2 INCH (64 MM); MINIMUM ANTI-RISE ROLLER DIAMETER SHALL BE 2 INCH (51 MM).

- THRESHOLDS: MANUFACTURER'S STANDARD THRESHOLDS AS INDICATED BELOW: CONTINUOUS STANDARD SQUARE EXTRUSION, FOR RECESSED INSTALLATION. ALL THRESHOLDS TO CONFORM TO DETAILS AND REQUIREMENTS FOR CODE COMPLIANCE.
FASTENERS AND ACCESSORIES: MANUFACTURER'S STANDARD CORROSION-RESISTANT, NON-STAINING, NON-BLEEDING FASTENERS AND ACCESSORIES COMPATIBLE WITH ADJACENT MATERIALS.
SIGNAGE: PROVIDE SIGNAGE IN ACCORDANCE WITH ANS/BHMA A156.10.
DOOR OPERATORS PROVIDE DOOR OPERATORS OF SIZE RECOMMENDED BY MANUFACTURER FOR DOOR SIZE, WEIGHT, AND MOVEMENT; FOR CONDITION OF EXPOSURE; AND FOR LONG-TERM, OPERATION UNDER NORMAL TRAFFIC LOAD FOR TYPE OF OCCUPANCY INDICATED. ELECTROMECHANICAL OPERATORS: SELF-CONTAINED OVERHEAD UNIT POWERED BY A MINIMUM OF 1/4 HORSEPOWER, PERMANENT-MAGNET DC MOTOR WITH GEAR REDUCTION DRIVE, MICROPROCESSOR CONTROLLER, AND ENCODER.
OPERATION: POWER OPENING AND POWER CLOSING. FEATURES: ADJUSTABLE OPENING AND CLOSING SPEEDS, ADJUSTABLE BACK-CHECK AND LATCHING, ADJUSTABLE BRAKING, ADJUSTABLE HOLD-OPEN TIME BETWEEN 0 AND 30 SECONDS, OBSTRUCTION RECYCLE, ON/OFF SWITCH TO CONTROL ELECTRIC POWER TO OPERATOR, ENERGY CONSERVATION SWITCH THAT REDUCES DOOR-OPENING WIDTH, CLOSED LOOP SPEED CONTROL WITH ACTIVE BRAKING AND ACCELERATION, ADJUSTABLE OBSTRUCTION RECYCLE TIME DELAY, SELF ADJUSTING STOP POSITION, SELF ADJUSTING CLOSING COMPRESSION FORCE. ONBOARD SENSOR POWER SUPPLY. ONBOARD SENSOR MONITORING. OPTIONAL SWITCH TO OPEN/SWITCH TO CLOSE OPERATION. MOUNTING: CONCEALED. DRIVE SYSTEM: SYNCHRONOUS BELT TYPE. ELECTRICAL SERVICE TO DOOR OPERATORS SHALL BE PROVIDED UNDER DIVISION 26 ELECTRICAL. MINIMUM SERVICE TO BE 120 VAC, 5 AMPS.
ELECTRICAL CONTROL SYSTEM: ELECTRICAL CONTROL SYSTEM SHALL INCLUDE A MICROPROCESSOR CONTROLLER AND POSITION ENCODER. THE ENCODER SHALL MONITOR REVOLUTIONS OF THE OPERATOR SHAFT AND SEND SIGNALS TO MICROPROCESSOR CONTROLLER TO DEFINE DOOR POSITION AND SPEED. SYSTEMS UTILIZING EXTENDED MAGNETS AND MAGNETIC SWITCHES ARE NOT ACCEPTABLE.
PERFORMANCE DATA: THE MICROPROCESSOR SHALL COLLECT AND STORE PERFORMANCE DATA. CONTROLLER PROTECTION: THE MICROPROCESSOR CONTROLLER SHALL INCORPORATE THE FOLLOWING FEATURES TO ENSURE TROUBLE FREE OPERATION. SOFT START/STOP: A "SOFT-START" "SOFT-STOP" MOTOR DRIVING CIRCUIT SHALL BE PROVIDED FOR SMOOTH NORMAL OPENING AND RECYCLING. OBSTRUCTION RECYCLE: PROVIDE SYSTEM TO RECYCLE THE SLIDING PANELS WHEN AN OBSTRUCTION IS ENCOUNTERED DURING THE CLOSING CYCLE. IF AN OBSTRUCTION IS DETECTED, THE SYSTEM SHALL SEARCH FOR THAT OBJECT ON THE NEXT CLOSING CYCLE BY REDUCING DOOR CLOSING SPEED PRIOR TO THE PREVIOUSLY ENCOUNTERED OBSTRUCTION LOCATION, AND WILL CONTINUE TO CLOSE IN CHECK SPEED UNTIL DOORS ARE FULLY CLOSED, AT WHICH TIME THE DOORS WILL RESET TO NORMAL SPEED. IF OBSTRUCTION IS ENCOUNTERED AGAIN, THE DOOR WILL COME TO A FULL STOP. THE DOORS SHALL REMAIN STOPPED UNTIL OBSTRUCTION IS REMOVED AND OPERATE SIGNAL IS GIVEN, RESETTING THE DOOR TO NORMAL OPERATION. PROGRAMMABLE CONTROLLER: MICROPROCESSOR CONTROLLER SHALL BE PROGRAMMABLE AND SHALL BE DESIGNED FOR CONNECTION TO A LOCAL CONFIGURATION TOOL. LOCAL CONFIGURATION TOOL SHALL BE A SOFTWARE DRIVEN HANDHELD INTERFACE. THE FOLLOWING PARAMETERS MAY BE ADJUSTED VIA THE CONFIGURATION TOOL.
MOTION SENSORS: MOTION SENSORS SHALL BE MOUNTED ON EACH SIDE OF DOOR HEADER TO DETECT PEDESTRIANS IN THE ACTIVATING ZONE, AND TO PROVIDE A SIGNAL TO OPEN DOORS IN ACCORDANCE WITH ANS/BHMA A156.10. UNITS SHALL BE PROGRAMMABLE FOR BI-DIRECTIONAL OR UNI-DIRECTIONAL OPERATION AND SHALL INCORPORATE K-BAND MICROWAVE FREQUENCY TO DETECT ALL MOTION IN BOTH DIRECTIONS.
HARDWARE: PROVIDE UNITS IN SIZES AND TYPES RECOMMENDED BY AUTOMATIC ENTRANCE DOOR AND HARDWARE MANUFACTURERS FOR ENTRANCES AND USES INDICATED.
EMERGENCY BREAKAWAY FEATURE: PROVIDE RELEASE HARDWARE THAT ALLOWS PANEL(S) TO SWING OUT IN DIRECTION OF EGRESS TO FULL 90 DEGREES FROM ANY POSITION IN SLIDING MODE. MAXIMUM FORCE TO OPEN PANEL SHALL BE 50 LBF (222 N) ACCORDING TO ANS/BHMA A156.10. INTERRUPT POWERED OPERATION OF PANEL OPERATOR WHILE IN BREAKAWAY MODE. DEADLOCKS: MANUFACTURER'S STANDARD DEADBOLT OPERATED BY EXTERIOR CYLINDER AND INTERIOR THUMB TURN; WITH MINIMUM 1 INCH (25 MM) LONG THROW BOLT; ANS/BHMA A156.5, GRADE 1.
CONTROL SWITCH: PROVIDE MANUFACTURER'S STANDARD HEADER MOUNTED ROCKER SWITCHES AND DOOR POSITION SWITCH TO ALLOW FOR FULL CONTROL OF THE AUTOMATIC ENTRANCE DOOR. CONTROLS TO INCLUDE, BUT ARE NOT LIMITED TO:
POWER SWITCH: SLIDING AUTOMATIC ENTRANCES SHALL BE EQUIPPED WITH A TWO POSITION ON/OFF ROCKER SWITCH TO CONTROL POWER TO THE DOOR.
SLIDING WEATHER STRIPPING: MANUFACTURER'S STANDARD REPLACEABLE COMPONENTS COMPLYING WITH AAMA 701; MADE OF WOOL, POLYPROPYLENE, OR NYLON WOVEN PILE WITH NYLON-FABRIC OR ALUMINUM-STRIP BACKING.
WEATHER SWEEPS: MANUFACTURER'S STANDARD ADJUSTABLE NYLON BRUSH SWEEP MOUNTED TO UNDERSIDE OF DOOR BOTTOM
GENERAL: COMPLY WITH NAAMM METAL FINISHES MANUAL FOR ARCHITECTURAL AND METAL PRODUCTS FOR RECOMMENDATIONS FOR APPLYING AND DESIGNING FINISHES. CLASS 1, COLOR ANODIC FINISH: AA-M12C22A42/A44 MECHANICAL FINISH: AS FABRICATED; CHEMICAL FINISH: ETCHED, MEDIUM MATTE; ANODIC COATING: ARCHITECTURAL CLASS I, INTEGRALLY COLORED OR ELECTROLYTICALLY DEPOSITED COLOR COATING 0.70 MILS MINIMUM COMPLYING WITH AAMA 611-98, AND THE FOLLOWING COLOR: ARCHITECTURAL CLASS 1, #29 BLACK ANODIZED.

08 51 13 - ALUMINUM WINDOWS

- REFERENCE ASTM B 221: SPECIFICATION FOR ALUMINUM AND ALUMINUM ALLOY, EXTRUDED BARS, RODS WIRES, SHAPES AND TUBES. ASTM E 330 FOR STRUCTURAL PERFORMANCE. ASTM E 283 FOR AIR INFILTRATION. ASTM E 331 AND E 547 FOR WATER PENETRATION
FURNISH A SPECIAL PROJECT WARRANTY, EXECUTED BY THE CONTRACTOR, INSTALLER AND ALUMINUM WINDOW MANUFACTURER, AGREEING TO REPAIR OR REPLACE ALUMINUM WINDOW UNITS WHICH FAIL IN MATERIALS OR WORKSMANSHIP WITHIN THE SPECIFIED WARRANTY PERIOD. FAILURES INCLUDE, BUT ARE NOT LIMITED TO, STRUCTURAL FAILURES INCLUDING EXCESSIVE DEFLECTION, EXCESSIVE LEAKAGE OR AIR INFILTRATION, FAULTY OPERATION OF SASH AND HARDWARE, AND DETERIORATION OF METALS, METAL FINISHES AND OTHER MATERIALS BEYOND NORMAL WEATHERING. THIS WARRANTY SHALL BE IN ADDITION TO AND NOT A LIMITATION OF OTHER RIGHTS THE OWNER MAY HAVE AGAINST THE CONTRACTOR UNDER THE CONTRACT DOCUMENTS. WARRANTY PERIOD FOR ALUMINUM WINDOWS IS 3 YEARS AFTER THE DATE OF SUBSTANTIAL COMPLETION.
WINDOWS, SERIES 0251: SOLID LOCK. ALUMINUM EXTRUSIONS: PROVIDE ALLOY AND TEMPER RECOMMENDED BY THE WINDOW MANUFACTURER FOR THE STRENGTH, CORROSION-RESISTANCE, AND APPLICATION OF REQUIRED FINISH, BUT NOT LESS THAN 22,000 PSI ULTIMATE TENSILE STRENGTH AND NOT LESS THAN 0.125" THICKNESS AT ANY LOCATION FOR MAIN FRAME AND SASH MEMBERS. FASTENERS: ALUMINUM OR STAINLESS STEEL. DO NOT USE EXPOSED FASTENERS. ANCHORS, CLIPS AND ACCESSORIES: FABRICATE OF ALUMINUM, NON-MAGNETIC STAINLESS STEEL OR HOT-DIPPED ZINC-COATED STEEL OR IRON COMPLYING WITH ASTM A 386. PROVIDE SUFFICIENT STRENGTH TO WITHSTAND DESIGN PRESSURE INDICATED. COMPRESSION TYPE GLAZING STRIPS AND WEATHERSTRIPPING: AT MANUFACTURER'S OPTION, PROVIDE MOLDED EPDM OR NEOPRENE GASKETS COMPLYING WITH AAMA 56-1 OR MOLDED PVC GASKETS COMPLYING WITH ASTM D 2287, OR MOLDED EXPANDED EPDM GASKETS COMPLYING WITH ASTM C 509, GRADE 4. SLIDING TYPE WEATHERSTRIPPING: PROVIDE WOVEN TYPE OF WOOL, NYLON OR POLYPROPYLENE PILE AND RESIN-IMPREGNATED BACKING FABRIC, AND ALUMINUM BACKING STRIP. COMPLY WITH AAMA 701.2. FINISH: BLACK ANODIZED, ARCHITECTURAL CLASS I
FORM MITERS AND JOINTS WITH FLUSH, HAIRLINE JOINTS. REMOVE BURRS. JOINTS BETWEEN SECTIONS AND FIELD SPLICES AND FIELD SPLICES SHALL PRODUCE STRENGTH TO RESIST DEFORMATION AND MISALIGNMENT. FABRICATE AND INSTALL WITH CONCEALED FASTENINGS INSOFAR AS PRACTICABLE. PAINT CONCEALED SURFACES OF ALUMINUM WITH BLACK ASPHALTUM WHERE TOUCHING CONCRETE OR MASONRY.
KAWNEER COMPANY, INC., NORCROSS, GA 30092.; OR APPROVED SUBSTITUTION

08 52 00 -- CLAD WOOD WINDOW

- REFERENCE NWWDA: 1.5 - 2 AND 1.5 - 4
WARRANTY WINDOWS AGAINST DEFECTS IN MATERIAL AND WORKSMANSHIP UNDER NORMAL USE, AND SERVICE, FOR 10 YEARS FROM DATE OF COMPLETION OF THE PROJECT. WARRANTY INSULATING GLASS TO BE FREE OF OBSTRUCTION OF VISION BY FILM FORMATION OR DUST COLLECTION BETWEEN INTERIOR SURFACES OF GLASS PANES FOR A PERIOD OF TWENTY YEARS FROM THE DATE OF COMPLETION OF PROJECT.
WINDOWS: 400 SERIES. FRAME: WOOD SUB-FRAME, WATER REPELLENT PRESERVATIVE-TREATED, EXTERIOR EXPOSED SURFACES COVERED WITH RIGID VINYL, WEATHERSTRIPPING APPLIED, PINE STOPS AND MULLIONS, CASINGS FURNISHED, PRE-DRILLED EXTENSION JAMBS. SASH: 2" THICK WOOD CORE, WATER REPELLENT PRESERVATIVE-TREATED, COVERED WITH RIGID VINYL, HIGH-PERFORMANCE QUALITY, WEATHERSTRIPPING APPLIED. CASEMENT SASH SNUGGERS APPLIED TO UNITS 4" AND TALLER. HARDWARE: CASEMENT: STAINLESS STEEL HINGES, ZINC DIE-CAST CASE SASH LOCKS, UNDER-SCREEN ROTO-OPERATOR, ZINC AND DICHROMATE PLATING, ZINC DIE-CAST BASE AND HANDLE. ENGINEERED PLASTIC OPERATOR COVERS. AWNING: STAINLESS STEEL HINGES, ZINC DIE-CAST CASE SASH LOCKS, UNDER-SCREEN ROTO-OPERATOR, ZINC AND DICHROMATE PLATING, ZINC DIE-CAST BASE AND HANDLE. PERMA-SHIELD® AWNING VENTILATING PICTURE UNITS HAVE ZINC DICHROMATE PLATED HINGES. INSULATING GLASS: FACTORY GLAZED, CLEAR 7/8 INCH SEALED INSULATING GLASS, WITH LOW E COATING. COMPLY WITH ASTM E744, CLASS A. INSECT SCREEN: ALUMINUM FRAME. ALUMINUM SCREEN CLOTH, GUMMETAL FINISH, 18X16 MESH. LOCKS AND ATTACHING HARDWARE APPLIED. RESTRAINT SCREENS NOT FROM ANDERSEN. FINISH FROM MANUFACTURERS STANDARD RANGE OF COLORS, BLACK
ANDERSEN CORPORATION, BAYPORT, MN 55003. OR APPROVED SUBSTITUTION

08 71 00 -- DOOR HARDWARE

- REFERENCE ALUMINUM ASSOCIATION (AA) AA DAF-45, DESIGNATION SYSTEM FOR ALUMINUM FINISHES. BUILDERS HARDWARE MANUFACTURERS ASSOCIATION (BHMA): BHMA A156.1, BUTTS AND HINGES, BHMA A156.13, MORTISE LOCKS AND LATCHES BHMA A156.16, AUXILIARY HARDWARE, BHMA A156.18, MATERIALS AND FINISHES, BHMA A156.2, THRESHOLDS, BHMA A156.4, DOOR CONTROLS - CLOSERS, BHMA A156.5, AUXILIARY LOCKS & ASSOCIATED PRODUCTS, BHMA A156.6, ARCHITECTURAL DOOR TRIM; STEEL DOOR INSTITUTE (SDOI) SDI-100, STANDARD STEEL DOORS AND FRAMES
FASTENERS OF THE PROPER TYPE, SIZE, QUANTITY, AND FINISH FOR EACH HARDWARE ITEM SHALL BE PROVIDED. ALL VISIBLE FASTENERS SHALL BE PHILLIPS-HEAD, BRONZE OR STAINLESS STEEL FINISHED TO MATCH SPECIFIED HARDWARE.
HINGES SHALL BE FULL MORTISE, HEAVY WEIGHT, ANTI-FRICTION BEARING, BUTTON TIP, TEMPLATE TYPE CONFORMING TO BHMA A156.1, GRADE 1. SIZE SHALL BE 4-1/2 BY 4-1/2 INCHES.
MORTISE LOCKSETS AND LATCH-SETS SHALL CONFORM TO BHMA A156.13, GRADE 1. LOCKSETS AND LATCH-SETS SHALL HAVE STANDARDIZED FRONTS, CASES, AND STRIKES SO THAT VARYING FUNCTIONS WILL BE INTERCHANGEABLE AND WILL REQUIRE ONLY ONE MORTISE FOR THEIR INSTALLATION. LOCKS AND LATCHES SHALL HAVE BEVELED BRONZE FRONTS, BRONZE BOLTS AND STRIKES, BRASS HUBS, AND CASES WITH SPECIFIED FINISH. LOCKS SHALL HAVE CYLINDERS CONFORMING TO BHMA A156.5, GRADE 1.
LOCKSETS AND LOCK CYLINDERS SHALL BE MASTER KEYS TO THE KEY SYSTEM ESTABLISHED FOR THE INSTALLATION BY THE OWNER
PULLS AND PUSH PLATES SHALL CONFORM TO BHMA A156.6. TYPES AND MATERIAL SPECIFIED HEREIN. DOOR PULLS ON PLATES SHALL BE TYPE 1405, SPECIFIED FINISH, WITH THE WROUGHT PLATE NOT LESS THAN 14 BY 3-1/2 INCHES BY 0.050-INCH THICK, GRIP CENTER TO CENTER, 6 INCHES, WITH CUTOUTS FOR CYLINDERS AND THUMB TURNS AS REQUIRED. PUSH PLATES SHALL BE STAINLESS STEEL, SPECIFIED FINISH, TYPE J301 OR J302, NOT LESS THAN 3-1/2 BY 14 INCHES BY 0.050-INCH THICK, WITH CUTOUTS FOR CYLINDERS AND THUMB TURNS AS REQUIRED.
THRESHOLDS SHALL BE EXTRUDED ALUMINUM 6063-ALLOY MILL FINISH CONFORMING TO BHMA A156.21, TYPE J601 (CORRUGATED). THRESHOLDS SHALL BE PROVIDED FOR THE FULL WIDTH OF THE OPENING AT EXTERIOR DOORS. THRESHOLD SHALL BE CAULKED AND SEALED UNDER DOORS
LEVER EXTENSION FLUSH BOLTS: FLUSH BOLTS SHALL BE CAST OR EXTRUDED ALUMINUM, SPECIFIED FINISH, CONFORMING TO BHMA A156.16, WITH 12-INCH LEVER EXTENSIONS.
CLOSERS SHALL CONFORM TO BHMA A156.4. CLOSERS SHALL BE THE SURFACE MOUNTED HEAVY DUTY, PARALLEL ARM TYPE, GRADE 1. STYLE SHALL BE MODERN. BRACKETS, REINFORCING PLATES, AND ACCESSORY FITTINGS SHALL BE PROVIDED AS REQUIRED.
ASTRAGALS SHALL BE PRIME STEEL, 13-GAGE MINIMUM BY 1-5/8-INCH MINIMUM
COORDINATING DEVICE SHALL BE PROVIDED FOR EACH PAIR OF DOORS WITH AN OVERLAPPING ASTRAGAL OR WITH RABBETED STILES. COORDINATING DEVICES SHALL CONFORM TO BHMA A156.3, BRONZE OR STAINLESS STEEL, FINISH TO MATCH THE LOCKSETS.
MISCELLANEOUS HARDWARE SHALL CONFORM TO BHMA A156.16, EXCEPT AS NOTED, AND SHALL MATCH OR HAVE THE SAME FINISH AS LOCKSET FINISH.
DOOR STOPS: DOOR STOPS AND BUMPERS SHALL CONFORM TO BHMA A156.16. DOOR STOPS SHALL BE HEAVY DUTY TYPE C0541 (OVERHEAD MOUNTED), WHERE IMPOSSIBLE TO INSTALL OVERHEAD MOUNTED DOOR STOPS, WALL MOUNTED STOPS TYPE L02251 (WALL BUMPER), FLOOR MOUNTED STOPS TYPE L02141 (DOME TYPE) OR TYPE L02161 (DOME TYPE FOR DOOR WITH THRESHOLDS) SHALL BE SUBMITTED FOR REVIEW BY OWNER.
DOOR SILENCERS: DOOR SILENCERS CONFORMING TO BHMA A156.16 SHALL BE PROVIDED EXCEPT ON FIRE-RATED DOOR FRAMES. DOOR SILENCERS SHALL BE TYPE L03011 FOR METAL FRAMES AND TYPE L03021 FOR WOOD FRAMES.
METAL KICK PLATES: PLATES SHALL BE 0.050-INCH THICK STAINLESS STEEL, BEVEL EDGE, TYPE J102 (KICK), CONFORMING TO BHMA A156.6, FINISH AS SPECIFIED HEREIN. WIDTH OF KICK PLATES SHALL BE 2 INCHES LESS THAN THE DOOR WIDTH. HEIGHT OF KICK PLATES SHALL BE 8 INCHES.
DOOR SHOES: EXTRUDED TEMPERED ALUMINUM 6063-T6 WITH THERMO-PLASTIC ELASTOMER SEAL. WIDTH TO BE EQUAL TO DOOR BOTTOM. FASTEN WITH STAINLESS STEEL SCREWS.
SLIDING BARN DOOR: AD SYSTEMS -- EXAMSLIDE HIGH PERFORMANCE SLIDING BARN DOOR. HARDWARE TO INCLUDE EXTRUDED ALUMINUM TOP TRACK, STANDARD SQUARE VALANCES WITH INTEGRAL END CAPS, TANDEM NYLON ROLLERS, CONCEALED INTEGRAL FLOOR GUIDE, SOFT-CLOSING DAMPENERS, STANDARD STRAIGHT PULL HANDLES FINISHED IN US320 SATIN STAINLESS STEEL. FRAMES OF EXTRUDED ALUMINUM WITH INTEGRAL VERTICAL JAMB, REQUIRED TO COMPLETE SEAL AROUND DOOR LEAF WITH GASKETING. FRAMES TO RECEIVE MANUFACTURER'S STANDARD PRIMER TO RECEIVE FINISH PAINT COLOR FOR TRIM AS SPECIFIED IN SECTION 09 91 00 -- PAINTS.
DOOR SILL WEATHER-STRIPPING: WEATHER-STRIPPING SHALL CONSIST OF A 1/8-INCH THICK BY 1-3/8-INCH-HIGH NEOPRENE STRIP HOUSED IN AN EXTRUDED, ANODIZED ALUMINUM HOUSING APPROXIMATELY 0.070-INCH THICK BY 1-1/4-INCHES HIGH BY THE FULL WIDTH OF THE DOOR AND ATTACHED TO THE DOOR WITH COUNTERSUNK SCREWS
HARDWARE SHALL RECEIVE THE FOLLOWING FINISHES CONFORMING TO BHMA A156.18, AS FOLLOWS: HINGES, LOCKSETS AND LATCH SETS: SATIN STAINLESS STEEL. BHMA CODE G06 CLOSERS, SPRAYED, MATCHING LOCKSETS AND LATCH SETS. ALUMINUM HARDWARE ITEMS SHALL BE ANODIZED TO AN ARCHITECTURAL CLASS 1 NATURAL FINISH NOT LESS THAN 0.70" THICK CONFORMING TO AA DAF-45 (DESIGNATION AA M21 C22 A31

08 80 00 -- GLAZING

- FS-DD-G-451: GLASS, FLOAT OR PLATE, SHEET, FIGURED, (FLAT, FOR GLAZING, MIRRORS AND OTHER USES). B. ANS1 297.1: SAFETY GLAZING MATERIAL USED IN BUILDINGS
PROVIDE MANUFACTURERS 10-YEAR WARRANTY FOR INSULATING GLASS UNITS.
TEMPERED GLASS: CLEAR FLOAT, 1/4" THICK, MEETING REQUIREMENTS OF FS DD-G-45LD AND ANS1 Z 97.1-1975.
CLEAR GLASS: 1/8" OR 1/4" THICK FLOAT GLASS MEETING REQUIREMENTS OF FS DD-G-45LD.
INSULATING GLASS UNITS: SHALL CONSIST OF ONE LIGHT OF 1/4" THICK REFLECTIVE GLASS ON THE EXTERIOR AND ONE LIGHT OF 1/4" CLEAR GLASS WITH LOW-E COATING ON THE INTERIOR, SEPARATED BY A 1/2" SPACER FILLED WITH MOISTURE ABSORBING DESICCANT SPACE BETWEEN LIGHTS HERMETICALLY SEALED USING DOUBLE SEALED ORGANIC SEALANTS. CORNERS FUSED. EXTERIOR GLASS LAYER: SOLARCOOL (2) SOLEXIA. INTERIOR GLASS LAYER: CLEAR GLASS. SOLARBAN 60 (3) SOLAR CONTROL LOW-E.
GLAZING COMPOUNDS, SETTING BLOCKS, GASKETS: AS RECOMMENDED BY FRAME AND GLASS MANUFACTURER.
VITRO GLASS INDUSTRIES, CARLSLE, PA 17013.

G:\Projects\2025\250095_Horizon_Form_Credit_AE_Design_Services\Drawings\Working Sets\01_3_OUTLINE_SPECIFICATIONS.dwg, 3/15/2026 3:14 PM, Deane L. Townsend

DATE: _____
SCALE: N.T.S.
DESIGN BY: MHH
DRAWN BY: AUB
CHECKED BY: MHH
GMB FILE: 250095
DATE: 12/30/2025
NEW CONSTRUCTION FOR: HORIZON FARM CREDIT DHQ BRIDGEVILLE, DE
OUTLINE SPECIFICATIONS
WONG HALL HILL TRIC
No. SS-0007846
STATE OF DELAWARE
REGISTERED ARCHITECT

CS1.6

OUTLINE SPECIFICATIONS (CONTINUED)

09 21 16 GYPSUM BOARD SYSTEMS

- GENERAL REQUIREMENTS FOR WALLBOARD: GYPSUM WALLBOARD SHALL CONFORM TO ASTM C 36 OF GRADE AND FORM AS SPECIFIED FOR EACH TYPE OF BOARD. WALLBOARD SHALL BE 48-INCHES (1200 MILLIMETER) WIDE, SHALL HAVE THICKNESS AS INDICATED, AND A MAXIMUM PRACTICAL LENGTH FOR END USE.
- CEILING: BOARD FOR DRYWALL CEILINGS SHALL BE 5/8-INCH (15.9 MILLIMETER) THICK, REGULAR GYPSUM WALLBOARD.
- REGULAR GYPSUM WALLBOARD: REGULAR GYPSUM WALLBOARD SHALL CONFORM TO ASTM C 36, 48-INCHES WIDE AND AT LEAST 5/8 INCH THICK, TAPERED EDGES, TYPE-X.
- SOUND-DEADENING GYPSUM WALLBOARD: QUIETROCK 530 AS MANUFACTURED BY PARCO., HIGH PERFORMANCE SOUND DAMPING GYPSUM PANEL. UL FIRE-RATED, STC-RATED, SHEAR-RATED, AND IMPACT-RESISTANT. CONFORMS TO ASRM C1396, - FEDERAL SPECIFICATION 55-1.300 GRADE X. FURNISH BATTENS AND ACUSTIC CAULKING AS NECESSARY TO SEAL DRYWALL SEAMS, FASTENERS AND WALL PENETRATIONS AS SPECIFIED IN SECTION 07929. INSTALL ALL JOINT MATERIALS AND ACCESSORIES AS REQUIRED BY MANUFACTURER ASSEMBLY DETAILS TO ACHIEVE STC RATING INDICATED ON THE DRAWINGS.
- WATER-RESISTANT WALL BOARD: WATER-RESISTANT GYPSUM WALL BOARD SHALL CONFORM TO ASTM C 630 WATER-REPELLENT-TREATED CORE, MOLD RESISTANT, TAPERED EDGE, AT LEAST 5/8-INCH THICK, TYPE-X. USG FIBEROCK INTERIOR PANEL OR APPROVED SUBSTITUTION. STC-RATED WALL: QUIETROCK 530. INSTALL IN ALL JANITORIAL ROOMS AND IN WALLS CONTAINING PLUMBING AND WET SERVICES.
- JOINT MATERIALS: JOINT TAPE SHALL BE PLAIN OR PERFORATED MATERIAL CONFORMING TO ASTM C 475, TYPE II, STYLES 1 AND 2. JOINT COMPOUND SHALL BE AN ADHESIVE, WITH FILLERS, CONFORMING TO ASTM C 475, TYPE I, STYLE 3.
- METAL FASTENERS: SCREWS SHALL BE STEEL, SELF-TAPPING DRYWALL TYPE, BUGLE HEAD, SELF-DRILLING POINT; THE LENGTH SHALL BE AS RECOMMENDED BY THE DRYWALL MANUFACTURER FOR THE TYPE OF SYSTEM BEING INSTALLED.
- METAL ACCESSORIES AND TRIM: CORNER BEADS SHALL BE FORMED TO AN ANGLE OF 90 DEGREES AND SHALL BE ZINC-COATED STEEL NOT LIGHTER THAN 30-GAUGE (0.40 MILLIMETER) BEFORE COATING WITH WINGS NOT LESS THAN 7/8-INCH (23 MILLIMETER) WIDE AND PERFORATED FOR NAILS AND CEMENT TREATMENT. ZINC-COATED STEEL SHALL CONFORM TO SMCANCA-02, SMCANCA-02A, AND AASHTO M 111, TYPE I, CLASS C. CASING TRIM SHALL BE 28-GAUGE (0.47 MILLIMETER) NOMINAL THICKNESS, HOT-DIP GALVANIZED STEEL CHANNEL, DEPTH AS REQUIRED FOR WALLBOARD, WITH ATTACHED TAIL FLANGE.
- CONTROL JOINT MATERIAL: CONTROL JOINT MATERIAL SHALL BE ONE PIECE, 29-GAUGE, (0.44 MILLIMETER) ROLL-FORMED ZINC, FORMED 7/16-INCH DEEP BY 1/4-INCH(11.1 MILLIMETER DEEP BY 6.4 MILLIMETER) WIDE WITH A PERFORATED FLANGE 7/8-INCH (22.2 MILLIMETER) WIDE ON EACH SIDE OF THE JOINT OPENING, WITH A PROTECTIVE PLASTIC STRIP. CAULKING SHALL BE AS RECOMMENDED BY THE DRYWALL MANUFACTURER.
- UNITED STATES GYPSUM, PABCO BUILDING PRODUCTS, LLC., NEWARK, CA 94560; OR APPROVED SUBSTITUTION
- ENVIRONMENTAL REQUIREMENTS: TEMPERATURE- A TEMPERATURE OF NOT LESS THAN 55 DEGREES F (13 DEGREES C) SHALL BE PROVIDED IN AREAS OF WORK DURING THE APPLICATION OF THE MATERIALS AND SHALL BE MAINTAINED UNTIL THE JOINT TREATMENT COMPOUNDS ARE DRY. VENTILATION: VENTILATION SHALL BE PROVIDED TO ELIMINATE MOISTURE WITHIN THE BUILDING. MOISTURE CONTROL: GYPSUM WALLBOARD INSTALLATION AND JOINT TREATMENT SHALL BE ACCOMPLISHED IN A UNIFORM TEMPERATURE WITH SUFFICIENT VENTILATION TO ENSURE THAT THROUGHOUT THE APPLICATION PERIOD THE WALLBOARD MOISTURE DOES NOT EXCEED 8 PERCENT. WALLBOARD THAT HAS MOISTURE CONTENT IN EXCESS OF 8 PERCENT SHALL NOT BE INSTALLED.

09 51 13 ACOUSTICAL LAY-IN PANEL CEILING

- ACT #1: 24"x24" REGULAR EDGE DESIGN, 5/8" NOMINAL THICKNESS, WITH FACTORY APPLIED WHITE LATEX FACE. APPROXIMATE VALUES NRC 0.60, R-VALUE AT 75 F. = 1.50, ARMSTRONG CORTEGA.
- ACT #2: 24"x24" SQUARE EDGE DESIGN, 5/8" NOMINAL THICKNESS, MOLD AND MILDEW RESISTANT, PERFORATED FACE. APPROXIMATE NRC 0.55. ARMSTRONG CERAMAGUARD FINE FISSURED.
- ACT #3: 24"x24" REGULAR EDGE DESIGN, 5/8" NOMINAL THICKNESS, MOLD AND MILDEW RESISTANT, HIGH-PERFORMING ACOUSTIC PROPERTIES. APPROXIMATE NRC 0.75, APPROXIMATE CAC UP TO 40. ARMSTRONG ULTIMA. SEE SECTION 09133, EXPOSED ACOUSTICAL SUSPENSION SYSTEM, FOR THE SPECIFIED SUSPENSION SYSTEM TO BE USED WITH THIS ACOUSTICAL PANEL.
- ARMSTRONG, MALVERN, PA 19355. APPROVED SUBSTITUTION.

09 53 00 EXPOSED ACOUSTICAL SUSPENSION SYSTEM

- REFERENCE APPLICABLE PUBLICATIONS BY ACOUSTICAL AND INSULATING MATERIALS ASSOCIATION (AIMA), INCLUDING "PERFORMANCE DATA, ARCHITECTURAL ACOUSTICAL MATERIALS", ASTM A641: ZINC-COATED (GALVANIZED CARBON STEEL WIRE. ASTM C635: METAL SUSPENSION SYSTEMS FOR ACOUSTICAL TILE AND LAY-IN PANEL CEILINGS. ASTM C636: INSTALLATION OF METAL CEILING SUSPENSION SYSTEMS FOR ACOUSTICAL TILE AND LAY-IN PANELS.
- AC-L #1: COMPLY WITH ASTM C 635, AS APPLICABLE TO TYPE OF SUSPENSION REQUIRED FOR TYPE OF CEILING UNITS INDICATED. COORDINATE WITH OTHER WORK SUPPORTED BY OR PENETRATING THROUGH CEILINGS, INCLUDING LIGHT FIXTURES, HVAC EQUIPMENT. PROVIDE INTERMEDIATE DUTY SYSTEM, DIRECT HUNG, EQUAL TO ARMSTRONG PRELUDE ML 15/16" EXPOSED GRID TEE SYSTEM.
- AC-L #2: ARMSTRONG AL PRELUDE PLUS XL STAINLESS STEEL INTERMEDIATE DUTY EXPOSED GRID TEE SYSTEM.
- ATTACHMENT DEVICES: HANGER WIRES OF GALVANIZED CARBON STEEL, ASTM A 641, SOFT TEMPER, PRE-STRETCHED, NOT LESS THAN 12 GAUGE (0.106"). EXPOSED SUSPENSION SYSTEM: PROVIDE UNIFORM FACTORY-APPLIED BAKED ENAMEL FINISH ON EXPOSED SURFACES INCLUDING MOLDINGS, TRIM AND ACCESSORIES. EDGE MOLDINGS: MANUFACTURER'S STANDARD ANGLE MOLDING FOR EDGES AND PENETRATIONS OF CEILING, WITH SINGLE FLANGE EXPOSED, BAKED ENAMEL FINISH. PROVIDE HOLD DOWN CLIPS WHEN PANELS WEIGH LESS THAN ONE POUND PER SQUARE FOOT.
- ARMSTRONG, MALVERN, PA 19355. APPROVED SUBSTITUTION.

09 65 00 - RESILIENT FLOORING

- REFERENCE ASTM F 970: STATIC LOAD LIMIT.F5 55-W-40: WALL BASE: RUBBER AND VINYL PLASTIC. ASTM E 648 FLOORING RADIANT PANEL CRITICAL RADIANT FLUX 0.45 WATTS/CM2 OR MORE, CLASS 1, (PASSES). ASTM E662 SMOKE CHAMBER SPECIFIC OPTICAL SMOKE DENSITY 450 OR LESS, (PASSES). ASTM F1700: STANDARD SPECIFICATION FOR SOLID VINYL TILE.
- PROVIDE WRITTEN WARRANTY FOR MATERIALS AND WORKMANSHIP USED IN FLOOR COVERING WORK AGAINST DEFECTS FOR A PERIOD OF 20 YEARS FROM DATE OF SUBSTANTIAL COMPLETION, AGREEING TO REPAIR OR REPLACE RESILIENT FLOORING THAT FAILS WITHIN THE WARRANTY PERIOD.
- LUXURY VINYL TILE FLOORING: ASTM F 1700, CLASS III, TYPE B. OVERALL THICKNESS 0.98 IN., WEAR LAYER THICKNESS 0.022 IN., STATIC LOAD LIMIT PASSING ASTM F970.
- FLOORING TYPE A: AVA FLOORING, ALPINE OAK SYRUP, A02D007
- FLOORING TYPE B: PATCRAFT, EARTHEN MOUNTAIN
- FLOORING TYPE C: PATCRAFT, NUMIX, SEPIA FLECK
- RUBBER BASE: HEIGHT 4", STANDARD 5/8" TOE, TOP SET COVE TYPE, CONTINUOUS ROLLS. JOHNSONITE DURACOVE. COLOR FROM MANUFACTURER'S STANDARD RANGE OF COLORS: BASTAWAY (AGAINST PAINT COLOR JOGGING PATH) - FUDGE (AGAINST PAINT COLOR URBAN BRONZE). PROVIDE BACKER ROD AT TOE TO PREVENT FLARE OUT.
- ADHESIVE: ADHESIVE FOR FLOORING AND WALL BASE SHALL BE AS RECOMMENDED BY THE FLOORING MANUFACTURER. WELD RODS: SELECT FROM PATTERNED OR SOLID DESIGNS FURNISHED BY SHEET VINYL MANUFACTURER. ACCESSORIES: FURNISH ALUMINUM TRANSITION STRIPS AT CHANGES OF SHEET FLOORING SYSTEMS AND AS OTHERWISE DIRECTED BY ARCHITECT: LINEAR EDGES: DT-024, RADIUSED EDGES: DT-037.

09 65 10 - RUBBER AND CORK FLOORING

- ASTM D883 - STANDARD TERMINOLOGY RELATING TO PLASTICS. ASTM D1566 - STANDARD TERMINOLOGY RELATING TO RUBBER. ASTM D2047 - STANDARD TEST METHOD FOR STATIC COEFFICIENT OF FRICTION OF POLISHCOATED FLOORING SURFACES AS MEASURED BY THE JAMES MACHINE. ASTM D2240 - STANDARD TEST METHOD FOR RUBBER PROPERTY DUROMETER HARDNESS. ASTM E84 - STANDARD TEST METHOD FOR SURFACE BURNING CHARACTERISTICS OF BUILDING MATERIALS. ASTM E90 - STANDARD TEST METHOD FOR LABORATORY MEASUREMENT OF AIRBORNE SOUND TRANSMISSION LOSS OF BUILDING PARTITIONS AND ELEMENTS. ASTM E413 - CLASSIFICATION FOR RATING SOUND INSULATION (STC). ASTM E492 - STANDARD TEST METHOD FOR LABORATORY MEASUREMENT OF IMPACT SOUND TRANSMISSION THROUGH FLOOR-CEILING ASSEMBLIES USING THE TAPPING MACHINE. ASTM E648 - STANDARD TEST METHOD FOR CRITICAL RADIANT FLUX OF FLOOR-COVERING SYSTEMS USING A RADIANT HEAT ENERGY SOURCE. ASTM E662 - STANDARD TEST METHOD FOR SPECIFIC OPTICAL DENSITY OF SMOKE GENERATED BY SOLID MATERIALS. ASTM E989 - STANDARD CLASSIFICATION FOR DETERMINATION OF IMPACT INSULATION CLASS (IIC). ASTM F137 - STANDARD TEST METHOD FOR FLEXIBILITY OF RESILIENT FLOORING MATERIALS WITH CYLINDRICAL MANDREL APPARATUS. ASTM F141 - STANDARD TERMINOLOGY RELATING TO RESILIENT FLOOR COVERINGS. ASTM F376 - STANDARD TEST METHOD FOR THICKNESS OF RESILIENT FLOORING MATERIALS HAVING FLAT SURFACES. ASTM F710 - STANDARD PRACTICE FOR PREPARING CONCRETE FLOORS TO RECEIVE RESILIENT FLOORING. ASTM F925 - STANDARD TEST METHOD FOR RESISTANCE TO CHEMICALS OF RESILIENT FLOORING. ASTM F970 - STANDARD TEST METHOD FOR STATIC LOAD LIMIT. ASTM F1514 - STANDARD TEST METHOD FOR MEASURING HEAT STABILITY OF RESILIENT FLOORING BY COLOR CHANGE.
- PROVIDE MANUFACTURER 10 YEARS COMMERCIAL WARRANTY.

- RUBBER & CORK PRODUCT COMPRISED OF A BLEND OF EPDM RUBBER AND PRE-CONSUMER CORK GRANULES (RUBBER CORK), IN MANUFACTURER'S STANDARD ROLL FORMAT THICKNESSES OF 8 MM, GLUE DOWN FORMAT. FROM MANUFACTURER'S STANDARD RANGE OF COLORS, CAROB AD 4010.
- ADHESIVES/PRIMERS/PATCHING: MANUFACTURER-RECOMMENDED SYSTEMS COMPATIBLE WITH THE SUBSTRATE AND AND/OR 2.0 INSTALLATION METHOD (GLUE-DOWN), SUBSTRATE CONDITIONS COMPATIBLE WITH MANUFACTURER'S CONDITIONS FOR INSTALLATION. TRANSITIONS/EDGE TRIMS/REDUCERS: FURNISH ALUMINUM TRANSITION STRIPS AT CHANGES OF SHEET FLOORING SYSTEMS AND AS OTHERWISE DIRECTED BY ARCHITECT: LINEAR EDGES: DT-024, RADIUSED EDGES: DT-037.
- AND/OR 2.0 RUBBER CORK. CAPRI COLLECTIONS

09 67 00 - LIQUID TYPE CONCRETE FLOOR HARDENER

- PROVIDE MANUFACTURER'S GUARANTEE THAT FLOORS COATED WITH THIS PRODUCT WILL NOT DUST AS A RESULT OF ABRASION AND WEAR WITHIN 5 YEARS FROM DATE OF APPLICATION.
- "DAY-CHEM SURE HARD (J-17)", MANUFACTURED BY DAYTON SUPERIOR SPECIALTY CHEMICAL CORPORATION, KANSAS CITY, KS 66106; OR APPROVED SUBSTITUTION.
- USE POTABLE WATER. APPLY ONLY WHEN TEMPERATURES ARE ABOVE 40 F. AFTER FINISHING IS COMPLETE AND SURFACE WATER HAS DISAPPEARED, CURE WITH DAY-CHEM SIL-CURE (J-13), WATER, OR PROPERLY USED SHEET MATERIAL, IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. SPREADING RATE: COMPLY WITH MANUFACTURER'S RECOMMENDATIONS.

09 68 00 - CARPETING

- REFERENCE ASTM D 1335: TEST FOR TUFT BIND OF PILE FLOOR COVERINGS. ASTM E 84: SURFACE BURNING CHARACTERISTICS OF BUILDING MATERIALS. DOC FF 1-70: STANDARD FLAMMABILITY TEST FOR SOFT FLOOR MATERIALS. CARPET FIRE RATED AND CERTIFIED IN WRITING WHEN LABORATORY TESTED PER UL 992 AND NBS TESTS.
- CONTRACTOR TO PROVIDE HIS WRITTEN GUARANTEE AS FOLLOWS: "MATERIALS AND WORKMANSHIP ARE GUARANTEED AGAINST DEFECTS FOR A PERIOD OF ONE YEAR FROM DATE OF SUBSTANTIAL COMPLETION"
- PROVIDE MANUFACTURER'S WARRANTY THAT AGREES TO REPAIR OR REPLACE COMPONENTS OF CARPET TILE INSTALLATION THAT FAIL IN MATERIALS OR WORKMANSHIP WITHIN SPECIFIED WARRANTY PERIOD. FAILURES INCLUDE, BUT ARE NOT LIMITED TO: THE FOLLOWING: MORE THAN 10 PERCENT FACE FIBER LOSS, AND EDGE RAVELING. DIMENSIONAL INSTABILITY: EXCESS STATIC DISCHARGE. LOSS OF TUFT-BIND STRENGTH. DELAMINATION, WHERE FACE FIBER IS 100 PERCENT SOLUTION DYED, IN ABILITY TO REMOVE ACID BASED STAINS. LACK OF COLORFASTNESS TO ATMOSPHERIC CONTAMINANTS.
- CARPET TYPE D: RATIONAL. SOLUTION Q EXTREME NYLON FILAMENT WITH BUILT-IN HIGH PERFORMANCE MODULAR BACKING TIE FOR DIRECT GLUE DOWN WITH THE FOLLOWING MINIMUM REQUIREMENTS: 24" X 24" TILE. MULTI-LEVEL PATTERN LOOP, HEAVY WEAR RATING, 100% SOLUTION DYED. RADIANT PANEL / ASTM E648"; CLASS I. 24 IN X 24 IN. 1/12 INCHES. 0.095 INCHES FINISHED PILE THICKNESS. TOTAL THICKNESS 0.24 INCHES. PRIMARY BACKING: NON-WOVEN SYNTHETIC. SECONDARY BACKING: ECOWORX™ TILE. COLOR: EXPERIENCE - OUTCOME
- PATCRAFT, A DIVISION OF SHAW INC., DALTON, GA 30721.
- CARPET GUARD: RUBBER, DESIGNED TO OVERLAP EDGES OF FLOOR COVERING TO PREVENT LOOSENING UNDER TRAFFIC. CARPET ADHESIVE: PRODUCT FORMULATED FOR THE PARTICULAR TYPE OF INSTALLATION. CARPET ADHESIVES SHALL HAVE A VOC CONTENT OF 50 G/L OR LESS. ACCESSORIES: FURNISH ALUMINUM TRANSITION STRIPS AT CHANGES OF FLOORING SYSTEMS: LINEAR EDGES: DT-024, RADIUSED EDGES: DT-037.

09 91 00 - PAINTS

- AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI): ANSI/ASTM D16: DEFINITION OF TERMS RELATING TO PAINT, VARNISH, LACQUER AND RELATED PRODUCTS. ANSI/CODE Z53.1: COLOR AND PIPELINE IDENTIFICATION
- MANUFACTURER'S STANDARD WARRANTY DOCUMENT EXECUTED BY AUTHORIZED COMPANY OFFICIAL. MANUFACTURER'S WARRANTY IS IN ADDITION TO, AND NOT A LIMITATION OF, OTHER RIGHTS OWNER MAY HAVE UNDER THE CONTRACT DOCUMENTS. WARRANTY PERIOD: ONE YEAR COMMENCING ON DATE OF SUBSTANTIAL COMPLETION.
- ALL ITEMS OF PAINTING MATERIALS SHALL BE PROPRIETARY PRODUCTS OF SPECIFIED MANUFACTURERS. SUCH MATERIAL SHALL BE USED WITHOUT ALTERATIONS AND ONLY WITH SUCH THINNING AS CALLED FOR IN MANUFACTURER'S DIRECTIONS. COLORS SCHEDULED SHALL BE FACTORY MIXED AND EXACTLY MATCH APPROVED SAMPLES. MATERIALS SELECTED FOR A COATING SYSTEM FOR EACH TYPE OF SURFACE SHALL BE PRODUCTS OF A SINGLE MANUFACTURER, EXCEPT WHERE OTHERWISE REQUIRED BY CONTRACT DOCUMENTS. WHERE SHOP PRIMED MATERIALS ARE TO BE FINISH PAINTED OR PRIME COAT MATERIALS ARE BY A DIFFERENT MANUFACTURER THAN FINISH COAT MATERIALS, CONFIRM COMPATIBILITY OF PRIMERS WITH MANUFACTURER OF FINISH COAT PAINTS. USE ONLY PRIMERS AND UNDER-COATERS THAT ARE SUITABLE FOR EACH SURFACE TO BE COVERED AND THAT ARE COMPATIBLE WITH FINISH COAT REQUIRED. SHELLAC AND SPOT PRIME WITH INDUSTRY ACCEPTED STAIN KILLERS ANY MARKS WHICH MAY BLEED THROUGH SURFACE FINISHES. OBTAIN PAINT AND COATING PRODUCTS FROM A SINGLE MANUFACTURER. COMPLY WITH MASTER PAINTERS INSTITUTE "MPI GLOSS AND SHEEN LEVELS" SEVEN LEVEL STANDARD.
- SCHEDULE - EXTERIOR SURFACES PAINT SCHEDULE
- WOOD (PAINTED): SEMI-GLOSS FINISH (GLOSS LEVEL 5): ONE COAT: EXTERIOR LATEX WOOD PRIMER. TWO COATS: DURATION EXTERIOR LATEX COATING
- STEEL (UNPRIMED): SEMI-GLOSS FINISH (GLOSS LEVEL 5): ONE COAT: KEM KROMICK UNIVERSAL METAL PRIMER. TWO COATS: DTM ACRYLIC COATING.
- STEEL (SHOP PRIMED): SEMI-GLOSS FINISH (GLOSS LEVEL 5): TOUCH UP WITH KEM KROMICK UNIVERSAL PRIMER. TWO COATS: DTM ACRYLIC COATING.
- STEEL (GALVANIZED): SEMI-GLOSS FINISH (GLOSS LEVEL 5): ONE COAT: GALVITE HS. TWO COATS: DTM ACRYLIC COATING.
- PVC, PLASTIC, FIBERGLASS (PAINTED): SEMI-GLOSS FINISH (GLOSS LEVEL 5): ONE COAT: PREPRITE PROBLOCK LATEX PRIMER. TWO COATS: SOLO ACRYLIC SEMI-GLOSS
- FIBER CEMENT SIDING (FACTORY PRIMED): SEMI-GLOSS FINISH (GLOSS LEVEL 5): TWO COATS: DURATION EXTERIOR ACRYLIC LATEX
- SIDING COLOR: JOGGING PATH (SW7638); TRIM: URBANE BRONZE (SW 7048)
- SCHDEULE - INTERIOR SURFACES
- WOOD (STAINED): SATIN FINISH (POLYURETHANE): ONE COAT: WOOD CLASSICS INTERIOR STAIN. TWO COATS: WOOD CLASSICS POLYURETHANE VARNISH.
- WOOD (PAINTED): SEMI-GLOSS FINISH (GLOSS LEVEL 5): ONE COAT: PREP RITE CLASSIC PRIMER. TWO COATS: CLASSIC 99 INTERIOR LATEX.
- STEEL (UNPRIMED): SEMI-GLOSS FINISH (GLOSS LEVEL 5): ONE COAT: KEM KROMICK UNIVERSAL PRIMER. TWO COATS: DTM ACRYLIC COATING.
- STEEL (PRE-PRIMED): SEMI-GLOSS FINISH (GLOSS LEVEL 5): TWO COATS: DTM ACRYLIC COATING.
- STEEL (GALVANIZED): SEMI-GLOSS FINISH (GLOSS LEVEL 5): ONE COAT: GALVITE HS. TWO COATS: DTM ACRYLIC COATING.
- GYPSUM BOARD (PAINTED): SATIN FINISH (GLOSS LEVEL 4): ONE COAT: PREP RITE 200. TWO COATS: CLASSIC 99 INTERIOR LATEX.
- PLYWOOD (PAINTED): SATIN FINISH (GLOSS LEVEL 4): ONE COAT: PREP RITE CLASSIC PRIMER. TWO COATS: CLASSIC 99 INTERIOR LATEX.
- WALL FIELD COLOR: MORTAR (SW 9584), CEILINGS AND TRIM: PURE WHITE (SW 7005), ACCENT COLORS, ALLOW: GREENFIELD (SW 6439), BROCOFLOWER (SW 9039), INKY BLUE (SW 9149), FAVORITE JEANS (SW 9147).

10 14 20 - INTERIOR SIGNS

- SIGNS MUST COMPLY WITH APPLICABLE PROVISIONS OF ICC/ANSI A117.1 AND ADAAG
- ELEVATE FRAMELESS MODULAR SIGN SYSTEM
- APCO, ATLANTA, GA 30312.
- SIGN ASSEMBLY: SIGN SHALL FEATURE A FULLY RECESSED BLACK ANODIZED ALUMINUM CHASSIS TO WHICH MODULAR DISPLAY PANELS SECURELY ENGAGE. CHASSIS SHALL BE NO MORE THAN 3/8" IN DEPTH AND SHALL BE RECESSED SUFFICIENTLY BEHIND THE PANELS TO GIVE THE APPEARANCE THE PANELS/INSERTS ARE FLOATING OFF THE MOUNTING SURFACE.
- DISPLAY PANELS / INSERTS: PRIMARY DISPLAY PANELS SHALL BE 1/8" THICK PAINTED ACRYLIC PLAQUES WITH DIRECT-PRINT GRAPHICS. OPTIONAL DISPLAY PANELS SHALL BE 1/8" ALUMINUM COMPOSITE PLAQUES WITH THE .012" ALUMINUM SKIN FORMED PRECISELY AROUND ALL FOUR EDGES OF THE PANEL TO CONCEAL THE PANEL'S COMPOSITE CORE. DISPLAY PANELS ENGAGE WITH THE CONCEALED CHASSIS IN A PRECISE MANNER TO ENSURE A 1/16" REVEAL BETWEEN ALL PANELS.
- FULL BLEED GRAPHICS: SYSTEM SHALL OFFER OPTIONS FOR DIRECT-PRINT GRAPHICS THAT BLEED AROUND ALL FOUR EDGES/RETURNS OF THE DISPLAY PANELS. STANDARD GRAPHICS ARE UV-CURED, DIRECT-PRINT WITH TRUE 600DPI RESOLUTION AND THE OPTION TO BLEED AROUND ALL FOUR EDGES/RETURNS OF THE ACM DISPLAY PANELS.
- TAMPER RESISTANCE: SIGNS ARE TO BE A TAMPER PROOF ASSEMBLY.
- MOUNTING: SIGNS MUST BE ABLE TO ACCOMMODATE INSTALLATION VIA FULLY CONCEALED MECHANICAL FASTENERS. MODULARITY: ALL DISPLAY PANELS SHALL BE SECURELY ENGAGED WITHIN A CONCEALED CHASSIS BUT MUST BE EASILY UPDATABLE TO ACCOMMODATE CHANGE. DISPLAY PANELS MUST BE REMOVABLE WITHOUT THE USE OF A SPECIAL, PROPRIETARY TOOL.
- DISPLAY COMPONENTS: TOP BAND OF SIGNS: ALUMINUM COMPOSITE DECORATIVE IMAGE BAND EV-ACM. 1/8" THICK ALUMINUM COMPOSITE WITH THE .012" ALUMINUM FACE FORMED PRECISELY AROUND ALL FOUR EDGES OF THE PANEL TO CONCEAL ITS COMPOSITE CORE AND A DIRECT-PRINT BACKGROUND IMAGE THAT BLEEDS AROUND ALL FOUR EDGES/RETURNS OF THE PANEL. CUSTOM IMAGE AS INDICATED

- IN THE DRAWINGS, MIDDLE BAND OF SIGNS: ACRYLIC COLOR BAND EV-ACR. 1/8" THICK ACRYLIC PANEL WITH PAINTED. DGE/BACKGROUND AND DIRECT PRINT GRAPHICS. LOWER BAND OF SIGNS: ADA COLOR BAND EV-341A-A. 1/8" THICK PETG-BACKED PHOTOPOLYMER WITH A PAINTED BACKGROUND AND SILKSCREEN PRINTED RAISED COPY.
- GRAPHICS AND TYPOGRAPHY: AS SELECTED FROM MANUFACTURER'S STANDARDS.
- SIZES AND CONFIGURATIONS: SELECTED FROM MANUFACTURER'S RANGE OF STANDARD SIGN CONFIGURATIONS. WIDTH: 8.5 INCHES.

10 14 19 - BUILDING LETTERS

- FLAT CUT ACRYLIC LETTERS. VICAT SOFTENING TEMPERATURE OF 227 DEGREES F. RESISTANT TO CHEMICALS AND CORROSION AND INCORPORATES UV INHIBITORS TO REDUCE FADING OF COLORS. SIZES AS INDICATED ON DRAWINGS, FONT SELECTED BY ARCHITECT. MOUNTING METHOD: A MOUNTING TEMPLATE DESIGNATING STUD LOCATIONS SHALL BE PROVIDED. STUD SIZE AND TYPE SHALL BE AS REQUIRED BY MANUFACTURER FOR APPLICATION AND DESIGN INTENT.
- THE SOUTHWELL COMPANY, SAN ANTONIO, TX 78291. OR APPROVED SUBSTITUTION

10 14 33 - EXTERIOR SIGN ILLUMINATED

- REFERENCE SIGNUM ASSOCIATION (AA), AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI), AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM), UNDERWRITERS' LABORATORIES, INC. (UL).
- MANUFACTURER'S STANDARD SEVEN (7) YEAR LIMITED WARRANTY COVERING COATING DEGRADATION, CHALKING, FADING, AND FIBERGLASS DELAMINATION.
- SIGN PANEL FACES AND FRAME: CUSTOM ENGINEERED ONE PIECE SEAMLESS FIBER-REINFORCED (FRP) CONSISTING OF INITIAL GELCOAT LAYER WITH MULTILAYERS OF TRANSLUCENT THERMOSET POLYESTER RESIN AND TRANSLUCENT GLASS FIBER STRANDS IN FLAT SHEET MAINTAINING CONFIGURATION TO 1.025" THICKNESS. FRAME: SEAMLESS WELDED EXTRUDED ALUMINUM FRAME WITH EXTRUDED TOP HINGE AND RESIN HOOD SURFACE FOR FACER BAND. MOLD FACES TO EXTRUDED ALUMINUM. USE OF EXPOSED FASTENERS IS PROHIBITED. CABINET: ASTM B221-90 EXTRUDED ALUMINUM CONTAINING TOP RECEIVING HINGE FOR PANEL. ELECTRICAL: UL LISTED FLUORESCENT LAMPS AND BALLASTS CONTAINED IN INTERNAL RACEWAYS: 120 VOLTS, 60 HERTZ. VERTICAL EDGE PROFILE: FLAT END PIECES. FINISH: AA 1M022A31 NATURAL SATIN ANODIZED ALUMINUM. EMBLEM: CORPORATE LOGO AND LETTERING AS SHOWN ON THE DRAWINGS.
- SEALANT MUST BE APPROVED BY SIGN MANUFACTURER, SHALL COMPLY WITH ASTM C290-79, TYPE S, GRADE NS, CLASS 25. FURNISH MOUNTING BRACKETS, MISCELLANEOUS HARDWARE, AND ITEMS FOR INSTALLATION OF SIGN MODULES.

10 21 13 - TOILET COMPARTMENTS

- COMPARTMENTS: HIGH DENSITY POLYETHYLENE, OVERHEAD BRACED, ALUMINUM ANTI-GRIP HEAD RAIL, FLOOR SUPPORTED, WITH STAINLESS STEEL FASTENER SHOE, DOORS AND PANELS: 1" THICK SINGLE COMPONENT CONSTRUCTION. STAINLESS STEEL HEAD STRIPS SHALL BE APPLIED TO BOTTOM EDGES OF PANELS AND DOORS. PILASTERS: 1" THICK SINGLE COMPONENT CONSTRUCTION, FITTED WITH 11-GAUGE STAINLESS STEEL FOOT FOR ATTACHMENT TO MIN. 3/8" FLOOR STUDS AND EXPANSION SHIELDS. PANELS: 76 INCHES HIGH, MOUNTED TO PILASTERS WITH CONTINUOUS BRACKETS AND TO PANELS WITH CONTINUOUS EXTRUDED ALUMINUM BRACKETS OR CONTINUOUS EXTRUDED ALUMINUM SHOWER CORNER BRACKETS. PILASTERS: 82 INCHES HIGH, FASTENED TO PANELS WITH CONTINUOUS BRACKETS. HEADRAIL: HEAVY-DUTY EXTRUDED ALUMINUM, ANTI-GRIP DESIGN, CLEAR ANODIZED FINISH, FASTENED TO HEADRAIL BRACKETS AND TOP OF PILASTER USING STAINLESS STEEL TAMPERS. RESISTANT TORX HEAD SCREWS: 20 GAUGE STAINLESS STEEL. SECURED USING STAINLESS STEEL TAMPER-RESISTANT TORX HEAD SCREWS. BRACKETS: 76 INCHES LONG, EXTRUDED ALUMINUM, CLEAR ANODIZED FINISH, ATTACHED USING STAINLESS STEEL TAMPER-RESISTANT TORX HEAD SCREWS. COLOR TO BE SELECTED FROM MANUFACTURER'S STANDARD RANGE OF COLORS: BLACK ORANGE PEEL. BASIS OF DESIGN: ARIA PARTITIONS BY SCRANTON PRODUCTS.
- URINAL SCREENS: 1" THICK SINGLE COMPONENT CONSTRUCTION HIGH DENSITY POLYETHYLENE. COLOR TO BE SELECTED FROM MANUFACTURER'S STANDARD RANGE OF COLORS: BLACK ORANGE PEEL.
- HARDWARE: STAINLESS STEEL. THEFT PROOF BOLTS. COMBINATION COAT HOOK AND RUBBER TIPPED BUMPER. GRAVITY HINGES, LATCH, KEEPER WITH EMERGENCY ACCESS. BRACKETS FULL HEIGHT ALUMINUM WITH MILL FINISH.
- MANUFACTURER: SCRANTON PRODUCTS, SCRANTON, PA 18505.

10 22 39 - VERTICALLY FOLDING PANEL PARTITION

- WARRANTY: MANUFACTURER STANDARD WARRANTY: 2 YEARS OR 5,000 CYCLES FROM DATE OF SHIPMENT. WITH EXTENDED PARTS WARRANTY: 10 YEARS OR 5,000 CYCLES EXCLUDING TOUCH SCREEN OPERATOR STATIONS). PER OWNER'S MANUAL. ACOUSTICAL PERFORMANCE RETENTION: WALL SHALL RETAIN ACOUSTICAL PROPERTIES FOR 10 YEARS FROM SHIPMENT, CONTINGENT ON PROPER MAINTENANCE.
- VERTICALLY RETRACTABLE WALL: SKYFOLD ZENITH® 51. RATINGS: SYSTEM STC 51 (RW 51); PANEL CONSTRUCTION STC 61 (RW 60). PANEL SURFACES: MANUFACTURER STANDARD FABRIC AND WHITE MARKER BOARD SURFACE. PANELS SHALL BE ARCHITECTURALLY FLAT; NO BOWING, OIL CANNING, WARPING, WAVINESS, OR SURFACE DEFORMATION/DISCONTINUITY. ACOUSTICAL TESTING: PANELS SHALL MEET STATED STC RATINGS IN ACCORDANCE WITH ASTM E90 (ISO 140-3) BY INDEPENDENT LABORATORY.
- FOLDING / LIFT MECHANISM: HANGING/FOLDING/EXTENSION MECHANISM TO BE, AS MUCH AS POSSIBLE, STRUCTURAL-GRADE ALUMINUM EXTRUSIONS AND SHAPES TO MINIMIZE SYSTEM WEIGHT. WEAR SURFACES (BUSHINGS, SPACERS, PINS, DISCS, BEARINGS, SLEEVES) DESIGNED FOR QUIET OPERATION AND MINIMUM WEAR OVER 10,000 CYCLE DESIGN LIFE. HANGERS FASTENING LIFTING MECHANISM TO SUPPORT STEEL: STEEL, WELDED OR BOLTED TO SUPPORT STEEL BY OTHERS.
- MOTOR DRIVE: SIZED TO OPEN/CLOSE EFFECTIVELY OVER 10,000-CYCLE DESIGN LIFE AT THE MINIMUM DESIGN SPEED REFERENCED IN SPEC. DESIGNED FOR SMOOTH, QUIET, SAFE OPERATION: USE BALL BEARINGS WHERE POSSIBLE; CHAIN OR BELT DRIVE SYSTEMS ARE NOT ACCEPTABLE. PROVIDE WIRE ROPE CABLE PER FOLDING MECHANISM SET: 6X31 AIRCRAFT CABLE, GALVANIZED STEEL, SIZED TO HOLD FULL WALL WEIGHT WITH APPROPRIATE SAFETY FACTOR; WRAPS ON YOYO DRUMS WITH 2 SAFETY WRAPS AND MULTIPLE LAYERS. LINE SHAF T SIZED FOR REQUIRED TORQUE WITH MINIMUM DEFLECTION; SUPPORTS/ROTATES CABLE DRUMS. FLANGE BEARINGS LOCATED IMMEDIATELY ON BOTH SIDES OF DRUM ASSEMBLY.
- SAFETY EQUIPMENT: ELECTROMAGNETIC BRAKE ACTIVATES FIRMLY UPON POWER LOSS; MINIMUM RETARDING TORQUE = 200% OF MOTOR FULL-LOAD TORQUE; INCLUDE MANUAL OVERRIDE AND BRAKE RELEASE LEVER. PROVIDE DYNAMIC BRAKE SEPARATE FROM ELECTROMAGNETIC BRAKE TO CONTROL DESCENT (i.e. ~150% NORMAL DOWN SPEED) DURING CATASTROPHIC POWER-TRAIN FAILURE. OR ALTERNATELY A SEPARATE BRAKE TO HALT DOWNWARD MOTION IN SUCH FAILURE. PROVIDE LIMIT SWITCHES TO STOP WALL AT UPPER AND LOWER TRAVEL LIMITS. PROVIDE OVER-TORQUE DETECTOR TO SENSE JAMS AND SERVE AS UP-DIRECTION OVERTRAVEL LIMIT IF PRIMARY LIMIT FAILS; MECHANICAL SENSOR USING MOTOR TORQUE ARM. PROVIDE CONTINUOUS PRESSURE-SENSING STRIP ALONG FULL BOTTOM EDGE TO CUT POWER AND ACTIVATE BRAKE UPON CONTACT BEFORE FULL DOWN POSITION; WALL SHALL AUTO-REVERSE UPWARD ~3 SECONDS TO CLEAR OBSTRUCTION; POWER REMAINS CUT UNTIL SWITCHES RELEASED; OPERATION MAY RESUME ONCE OBSTRUCTION REMOVED.
- ELECTRICAL / CONTROLS: EQUIP FOR THREE-PHASE POWER SUPPLY TO CONTROL BOX. STANDARD CONTROL BOX: NEMA 1 (NEMA 4 AVAILABLE UPON REQUEST). LOW-VOLTAGE WIRING BY OTHERS: 18-GAUGE FROM SWITCHES TO CONTROL BOX. STANDARD SWITCHES: TWO (2) PUSH-BUTTON SWITCHES WIRED IN SERIES. POWER CONTROLLED BY SINGLE THREE-POSITION KEY SWITCH; ONE PUSH BUTTON WITH LED FAULT-CODE FLASHING. (INSTALLATION WIRING BY OTHERS.)
- FABRICATION: FACTORY ASSEMBLE COMPONENTS INTO LARGEST POSSIBLE ASSEMBLIES TO MINIMIZE FIELD ASSEMBLY. FLOOR AXIS: ONE-WAY TRAVEL WITHIN 1/4" OVER CENTER. PEAK-TO-VALLEY ±1/4" NOT CLOSER THAN 24". PEAK-TO-VALLEY ±1/8" NOT CLOSER THAN 12". SUPPORT STAGE ABOVE WALL AXIS: PARALLEL TO FLOOR WITHIN ±1/2" FOR ENTIRE LENGTH (INCLUDING LOADED DEFLECTION); BEAM ALSO PARALLEL TO WALL CENTERLINE WITHIN ±1/8" LEFT-TO-RIGHT. FIXED END WALLS: WITHIN +1/4" /-0" FROM PLUMB; AND FLAT WITHIN +0" /-1/4". NOTIFY ARCHITECT IN WRITING OF UNSUITABLE FIELD CONDITIONS PRIOR TO INSTALLATION.
- INSTALLATION: INSTALL PER MANUFACTURER PRINTED INSTRUCTIONS.
- MANUFACTURER: SKYFOLD INC., BAIE D'URFE (MONTREAL), QUÉBEC, CANADA; OR APPROVED SUBSTITUTION.

10 26 00 - WALL AND CORNER GUARDS

- CORNER GUARD: MODEL 130 SURFACE MOUNTED CORNER GUARD WITH RIGID VINYL WALL COVERING INSERT WHERE REQUIRED DUE TO VARYING WALL THICKNESSES AND/OR END WALL APPLICATIONS WITH DOUBLE CORNER GUARDS. TOP OF CORNER GUARD SHALL BE 40" A.F.F. ALLOW FOR ONE (1) MAIN COLOR AND ONE (1) ACCENT COLORS. TO MATCH WALL COLOR.
- EXTRUSIONS: HIGH IMPACT VINYL/ACRYLIC WITH A MATTE FINISH PEBBLETTE GRAIN SURFACE IN COLOR. FURNISH END CAPS IN COORDINATING COLOR, DESIGNED FOR DIRECT MECHANICAL ATTACHMENT TO THE RETAINER. RETAINERS: ALUMINUM EXTRUSION OF .070" THICKNESS. INCLUDE NON-CORROSIVE ATTACHMENT HARDWARE.
- INPRO CORPORATION, MUSKEGO, WI 53150.

10 26 13 - VINYL WALL PROTECTION SYSTEMS

- REFERENCE NFPA CLASS A FIRE RATING SURFACE BURNING CHARACTERISTICS AS DETERMINED BY UL-723 (ASTM E-84), ASTM D-635-74, STANDARD TEST METHOD FOR RATE OF BURNING, ASTM D-256-90B, IMPACT RESISTANCE OF PLASTICS. CHEMICAL STAIN RESISTANCE OF ASTM D-543. FUNGAL OR BACTERIAL GROWTH AS TESTED IN ACCORDANCE WITH ASTM G-21 AND ASTM G-22.

- STANDARD IPC LIMITED LIFETIME WARRANTY AGAINST MATERIAL AND MANUFACTURING DEFECTS
- RIGID VINYL SHEE: IPC RIGID VINYL SHEET. MOLDINGS: PALLADIUM 3D BOARDS: HORIZONTAL BOARD, HORIZONTAL TOP CAP BOARD, VERTICAL BOARD, INSIDE CORNERS PARTIAL HEIGHT, INSIDE CORNERS FULL HEIGHT, OUTSIDE CORNERS, OUTSIDE CORNERS FULL HEIGHT, TOP/BASE SHOE. VINYL: IPC RIGID SHEET SHALL BE MANUFACTURED FROM CHEMICAL AND STAIN RESISTANT POLYVINYL CHLORIDE WITH THE ADDITION OF IMPACT MODIFIERS. NO PLASTICIZERS SHALL BE ADDED (PLASTICIZERS MAY AID IN BACTERIAL GROWTH). ALL MATERIALS SHALL BE DERIVED FROM A SINGLE SOURCE. PALLADIUM 3D BOARDS: 3D BOARDS SHALL BE MADE FROM .040" IPC RIGID SHEET FACTORY BONDED TO MDF BOARD. MDF BOARD SHALL HAVE NO ADDED UREA FORMALDEHYDE. COLOR OF RIGID SHEET, SURFACE SHALL HAVE A VELVET TEXTURE. COLOR FROM MANUFACTURERS STANDARD RANGE OF COLORS.
- INPRO CORPORATION, MUSKEGO, WI 53150. OR APPROVED SUBSTITUTIONS

10 26 00 - WALL AND CORNER GUARDS

- CORNER GUARD: MODEL 130 SURFACE MOUNTED CORNER GUARD WITH RIGID VINYL WALL COVERING INSERT WHERE REQUIRED DUE TO VARYING WALL THICKNESSES AND/OR END WALL APPLICATIONS WITH DOUBLE CORNER GUARDS. TOP OF CORNER GUARD SHALL BE 40" A.F.F. ALLOW FOR ONE (1) MAIN COLOR AND ONE (1) ACCENT COLORS

10 28 13 - TOILET ACCESSORIES

- ALUMINUM: ASTM B221, ALLOY 6063-T5 AND ALLOY 6463-T5. STAINLESS STEEL: ASTM A167, TYPE 302, 304, OR 304L, EXCEPT ASTM A176 WHERE TYPE 430 IS SPECIFIED, 0.0299-INCH THICK UNLESS OTHERWISE SPECIFIED. STAINLESS STEEL TUBING: ASTM A269, GRADE 304 OR 304L, SEAMLESS OR WELDED. STAINLESS STEEL PIPE: ASTM A312; GRADE TP 304 OR TP 304L. STEEL SHEET: ASTM A526, ZINC-COATED (GALVANIZED) COATING DESIGNATION 690. GLASS: ASTM C1036, TYPE 1, CLASS 1, QUALITY Q1, FOR MIRRORS.
- FASTENERS: EXPOSED FASTENERS: STAINLESS STEEL OR CHROMIUM PLATED BRASS, FINISH TO MATCH ADJACENT SURFACE. CONCEALED FASTENERS: STEEL, HOT-DIP GALVANIZED (EXCEPT IN HIGH MOISTURE AREAS SUCH AS SHOWERS OR BATH TUBS USE STAINLESS STEEL). TOGGLE BOLTS: FOR USE IN HOLLOW MASONRY OR FRAME CONSTRUCTION. LAG BOLTS: FOR THROUGH BOLTING ON THIN PANELS. EXPANSION SHIELDS: LEAD OR PLASTIC AS RECOMMENDED BY ACCESSORY MANUFACTURER FOR COMPONENT AND SUBSTRATE FOR USE IN SOLID MASONRY OR CONCRETE.
- TOILET ACCESSORIES:
- GRAB BARS: 18 GAUGE STAINLESS STEEL WITH OUTSIDE DIAMETER OF 1-1/2". CONCEALED MOUNTING. BASIS OF DESIGN: BOBRICK B-6806 SERIES. LENGTH 42" AT SIDES OF WATER CLOSET, 36" BEHIND WATER CLOSET.
- FRAMELESS SINGLE-USER RESTROOM MIRRORS: FLOAT GLASS MIRROR UNITS WITH CLIP FASTENERS. BASIS OF DESIGN: ASI MODEL 8026 SERIES
- FRAMELESS STAFF RESTROOM MIRRORS: 1/2" GLASS MIRROR WITH SAFETY BACKING. MIRROR MASTIC TO BE AN ADHESIVE SETTING COMPOUND, ASBESTOS-FREE, PRODUCED SPECIFICALLY FOR SETTING MIRRORS AND APPROVED BY MIRROR MANUFACTURER AND SUBSTRATE MANUFACTURER. MIRROR HARDWARE: TOP AND BOTTOM ALUMINUM J-CHANNELS, CLEAR ANODIZED FINISH, WITH A RETURN DEEP ENOUGH TO PRODUCE A GLAZING CHANNEL TO ACCOMMODATE 1/2" THICKNESS AND IN LENGTHS REQUIRED TO COVER EDGES IN A SINGLE PIECE. MIRROR TOP AND BOTTOM CLIPS: PROVIDE WALL MOUNTING BRACKET AND SELF-TAPPING SCREWS AS PROVIDED IN MANUFACTURERS INSTALLATION DETAILS. BASIS OF DESIGN: ASI MODEL 8287 SERIES
- UTILITY SHELF WITH MOP/ROOM HOLDERS: STAINLESS STEEL UTILITY SHELF WITH MOP/BROOM HOLDERS AND RAG HOOKS. SHELF 18 GAUGE 1/2" DEEP. UNIT 44" LONG WITH 3 SHELF BRACKETS, 5 HOOKS AND 4 MOP HOLDERS. BASIS OF DESIGN: BOBRICK B-239
- HAT AND COAT HOOK: TYPE 304 STAINLESS STEEL WITH SATIN FINISH. BASIS OF DESIGN: BOBRICK B-6827. FOR ALL TOILET ROOMS, NURSING ROOMS, AND OFFICES.
- SURFACE MOUNTED WASTE RECEPTACLE. BASIS OF DESIGN: BOBRICK B-9279. FOR WOMEN'S RESTROOM STALLS.
- PARTITION MOUNTED SANITARY NAPKIN DISPOSAL. BASIS OF DESIGN: BOBRICK B-4354.
- SURFACE MOUNTED MULL-ROLL TOILET TISSUE DISPENSER. BASIS OF DESIGN: B-2888.
- RECESSED PAPER TOWELL DISPENSER. BASIS OF DESIGN: BOBRICK B-35903.
- RECESSED CONVERTIBLE AUTOMATV UNIVERSAL ROLL PAPER TOWELL DISPENSER AND WASTER RECEPTACLE. BASIS OF DESIGN: BOBRICK B-39747

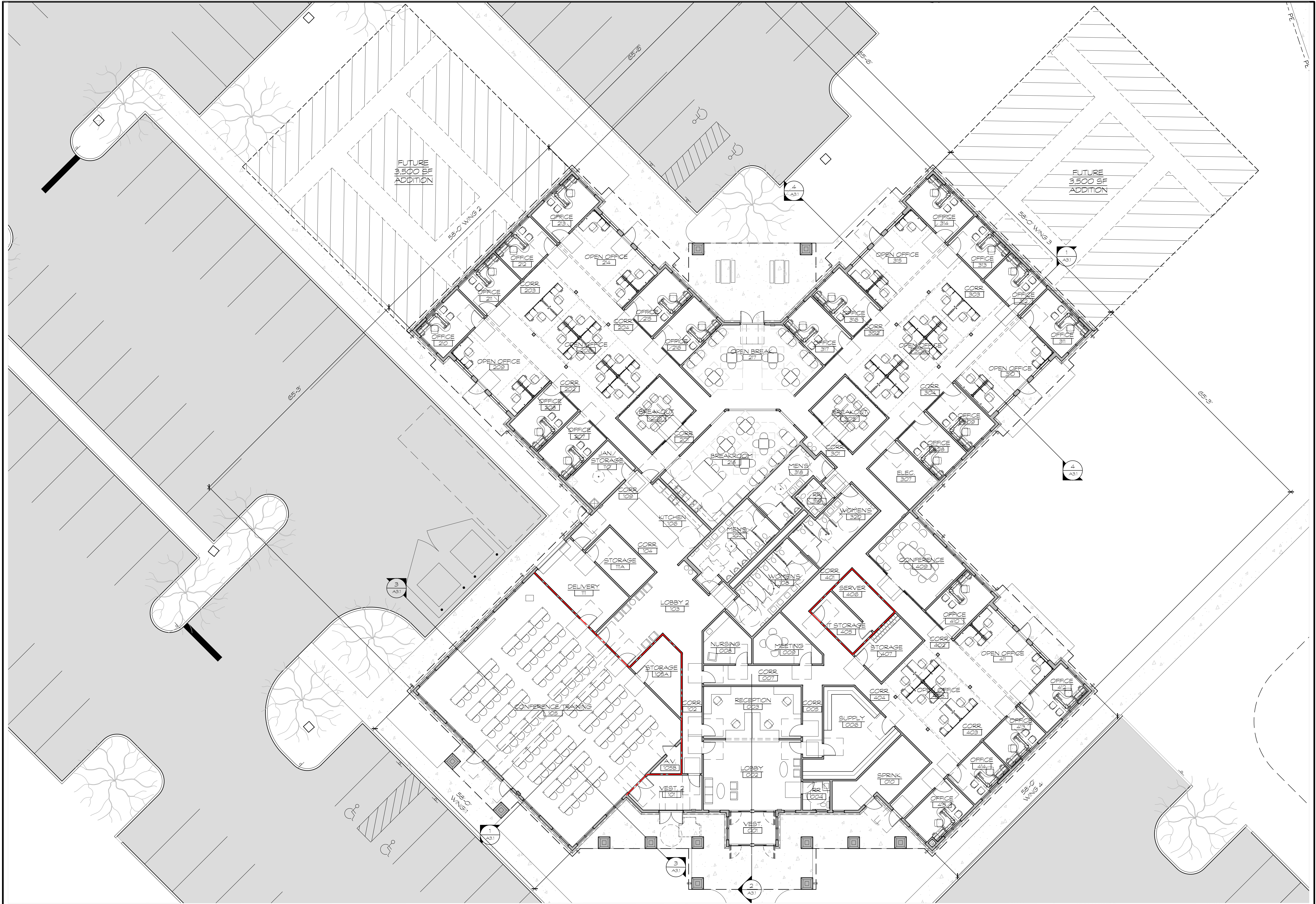
10 44 00 - FIRE EXTINGUISHERS

- FIRE EXTINGUISHER CABINET: SEMI-RECESSED ROLLER EDGE SATIN FINISH STAINLESS STEEL FRAME AND DOOR, WITH 1/4" CLEAR ACRYLIC PLASTIC PANEL INSERT IN DOOR. COSMOPOLITAN SERIES, FULL GLASS ±10 DOOR, SERIES 1037.
- FIRE EXTINGUISHER BRACKET: WALL-MOUNTED STEEL BRACKET WITH POWDER-COAT PAINT, SIZED TO FIT EXTINGUISHER MODEL. MODEL: MB846 (C) AND MB818C.
- FIRE EXTINGUISHER TYPICAL: UL RATING 4A-80BC, 10 LB. CAPACITY, FOR CLASS ABC FIRES, WITH STEEL CYLINDER. MODEL: COSMIC 10E, MULTI-PURPOSE DRY CHEMICAL.
- FIRE EXTINGUISHER MAKERSPACE: UL RATING 5BC, 5 LB. CAPACITY, FOR CLASS ABC FIRES, WITH STEEL CYLINDER. MODEL: MERCURY 5, HALOTRON.
- IL INDUSTRIES, BLOOMINGTON, MN 55435

11 31 00 - RESIDENTIAL APPLIANCES

- VERIFY ROUGH-IN LOC

G:\Projects\2025\250095 Horizon Farm Credit AE Design Services\Drawings\Working Sets\Iterations\Horizon Floor Plan Iterations.dwg, 3/5/2026 3:13 PM, Deane L. Townsend



1

FLOOR PLAN
3/32" = 1'-0"



NO.	REVISION	DATE

GMB
 GEORGE, MILES & BUHR, LLC
 ARCHITECTS & ENGINEERS
 SAUSURY • BALTIMORE • SEAFORD
 www.gmbnet.com

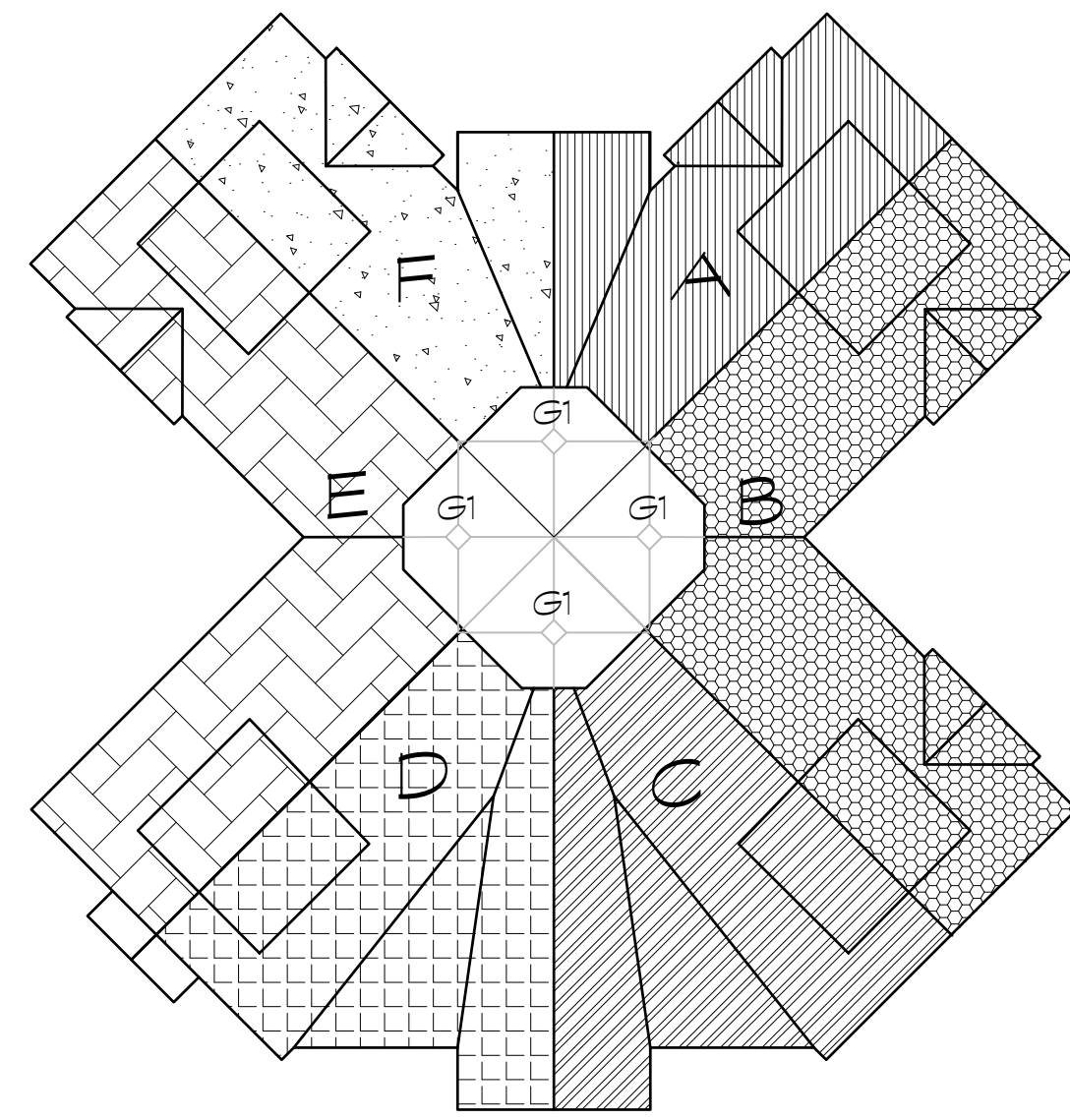
NEW CONSTRUCTION FOR:
HORIZON FARM CREDIT DHQ
 BRIDGEVILLE, DE

FLOOR PLAN



SCALE : 3/32" = 1'-0"
 DESIGN BY : MHH
 DRAWN BY : AJB
 CHECKED BY : MHH
 GMB FILE : 250095
 DATE : 12/30/2025

A1.1



KEY PLAN
1/32" = 1'-0"

ROOF AREA CALCS:

AREA A:
 1. 2,549 SF. X 1.05 (4:12 ROOF PITCH FACTOR, PER SMACNA TABLE 1-1) = 2,676 TOTAL SF.
 2. 2,676 SF / 2 DOWNSPOUT = 1,338 SF EACH
 3. 1,338 / 120 S.F./S.I. (RAINFALL FOR 100 YEAR STORM) = 11.15' MIN. AREA REQD FOR DOWNSPOUT.

AREA B:
 1. 4,471 SF. X 1.05 (4:12 ROOF PITCH FACTOR, PER SMACNA TABLE 1-1) = 4,695 TOTAL SF.
 2. 4,695 SF / 6 DOWNSPOUT = 782 SF EACH
 3. 782 / 120 (RAINFALL FOR 100 YEAR STORM) = 6.52' MIN. AREA REQD FOR DOWNSPOUTS.

AREA C:
 1. 3,322 SF. X 1.05 (4:12 ROOF PITCH FACTOR, PER SMACNA TABLE 1-1) = 3,488 TOTAL SF.
 2. 3,488 SF / 2 DOWNSPOUT = 1,744 SF EACH
 3. 1,744 / 120 (RAINFALL FOR 100 YEAR STORM) = 14.53' MIN. AREA REQD FOR DOWNSPOUTS.

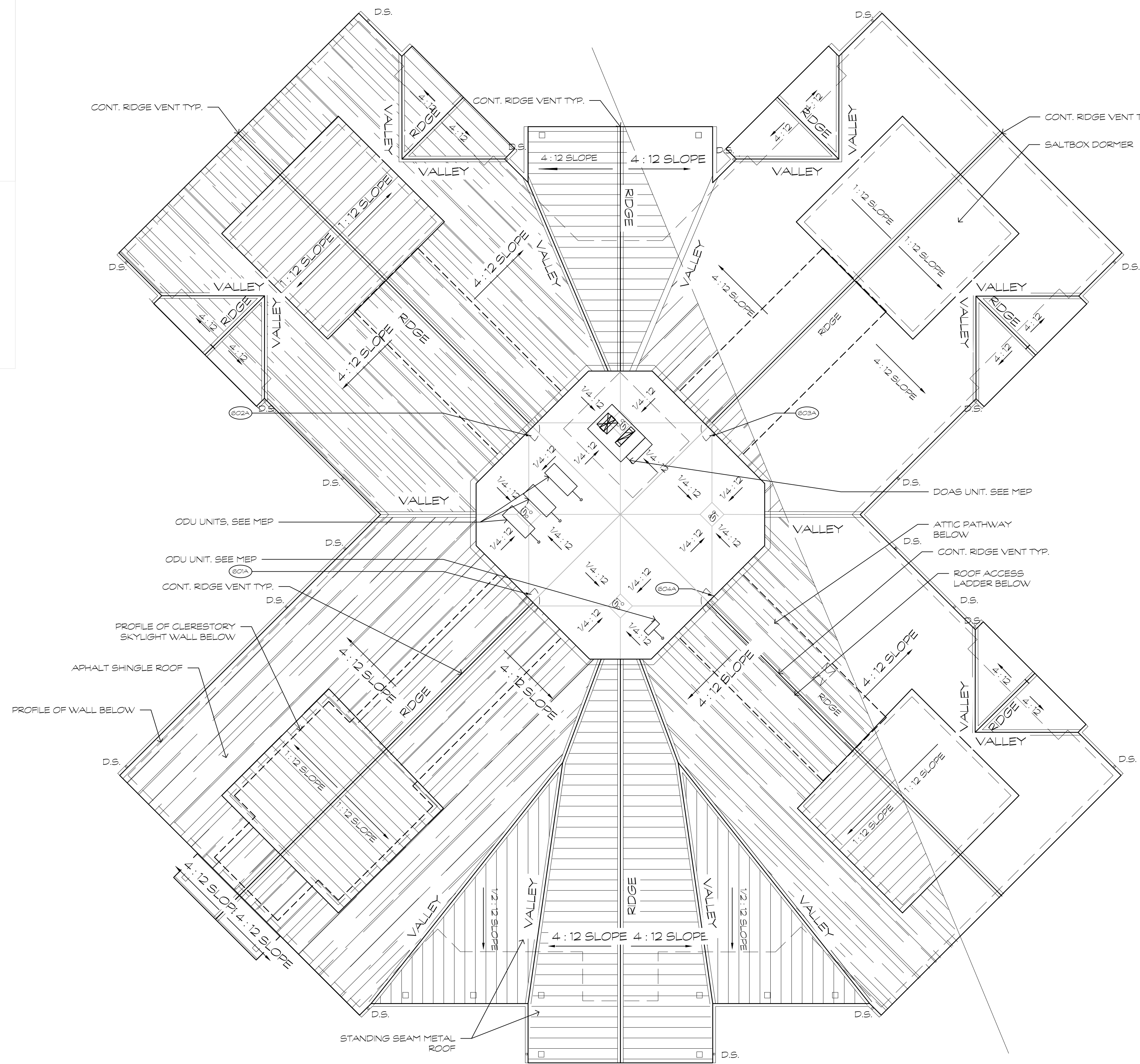
AREA D:
 1. 3,322 SF. X 1.05 (4:12 ROOF PITCH FACTOR, PER SMACNA TABLE 1-1) = 3,488 TOTAL SF.
 2. 3,488 SF / 2 DOWNSPOUT = 1,744 SF EACH
 3. 1,744 / 120 (RAINFALL FOR 100 YEAR STORM) = 14.53' MIN. AREA REQD FOR DOWNSPOUTS.

AREA E:
 1. 4,420 SF. X 1.05 (4:12 ROOF PITCH FACTOR, PER SMACNA TABLE 1-1) = 4,641 TOTAL SF.
 2. 4,641 SF / 6 DOWNSPOUT = 774 SF EACH
 3. 774 / 120 (RAINFALL FOR 100 YEAR STORM) = 6.45' MIN. AREA REQD FOR DOWNSPOUTS.

AREA F:
 1. 2,549 SF. X 1.05 (4:12 ROOF PITCH FACTOR, PER SMACNA TABLE 1-1) = 2,676 TOTAL SF.
 2. 2,676 SF / 2 DOWNSPOUT = 1,338 SF EACH
 3. 1,338 / 120 S.F./S.I. (RAINFALL FOR 100 YEAR STORM) = 11.15' MIN. AREA REQD FOR DOWNSPOUT.

MEMBRANE ROOF SECTION:
 1. 2,000 S.F.
 2. RAINFALL RATES ARE BASED ON A STORM OF 1-HOUR DURATION AND 100 YEAR STORM. GEORGETOWN, DE. 3.0 INCHES PER HOUR (PC 2021 - APPENDIX B)
 3. GALLONS PER MINUTE = .0104 x R x A
 .0104 = RAINFALL CONVERSION FACTOR
 R = RAINFALL INTENSITY
 A = ROOF AREA

G1 - DRAIN AREA
 1. 500 SF. MAX AREA PER DRAIN
 2. .0104 x 3.0 INCH/HR x 500 = 15.6 GPM
 3. TYPICAL VERTICAL LEADER SIZING SHALL BE 2 INCHES MINIMUM (3/4 SQUARE INCHES) FOR A CAPACITY OF 30 GPM (PC 2021 - TABLE 1106.3)



NOTES:

- CONTRACTOR TO PROVIDE GUTTER AND DOWNSPOUT SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION.
- ROOF AREA CALCULATIONS SHOWN ARE FOR GUIDANCE ONLY. CONTRACTOR SHALL DESIGN & CERTIFY GUTTER & D.S. CALCULATIONS TO MEET OR EXCEED 100 YEAR STORM REQUIREMENTS PER LATEST SMACNA EDITION.
- ALL DOWNSPOUT AND GUTTER SIZING TO BE UNIFORM. THEREFORE THE WORST CASE SCENARIO (LARGEST REQUIRED SIZING) SHALL PREVAIL.
- ATTIC DRAFT STOP AREAS ARE LIMITED TO 3,000 S.F. MAX. CONTRACTOR TO PROVIDE DRAFTSTOP MATERIAL & CONSTRUCTION SUBMITTAL FOR APPROVAL PRIOR TO INSTALLATION.
- ROOF TOP EQUIPMENT SHOWN FOR ILLUSTRATION ONLY. SEE M.E.P. DRAWINGS FOR ACTUAL EQUIPMENT SCHEDULE AND QUANTITIES.

VENTILATION CALCS

VENTILATION OF ENCLOSED ATTICS AND OR ENCLOSED RAFTER SPACES SHALL PROVIDE A VENTILATING AREA NOT LESS THAN 1 / 150 OF THE AREA OF THE ENCLOSED SPACE. (BC 1202.2.1)

TOTAL ROOF AREA: 22,450 SF

MECHANICAL WELL WITH PROVIDED WITH EXTERIOR RIGID INSULATION AND CREATE CONCEALED INSULATION AREA: -1,803 SF

TOTAL ROOF AREA (A) REQUIRED TO BE VENTILATED: 20,647 SF

FORMULA FOR NET FREE VENTILATION AREA (NFVA) AT 1/150:
 TOTAL NFVA (FT²) = ATTIC AREA (FT²) x 150 X 144
 NFVA = 20,647 SF x 150 X 144 = 19,821.12 S.I.

TOTAL NFVA = 19,821.12 S.I.
 MIN. AREA REQUIRED AT RIDGE VENTS = 9,910.56 S.I.
 MIN. AREA REQUIRED AT SOFFITS = 9,910.56 S.I.

MIN. RIDGE VENT LENGTH:
 9,910.56 S.I. / 21 S.I. = 471.93 L.F.
 (NOTE BASED UPON GAF MASTER FLOW RIDGE - ALUM. WITH NET FREE AREA OF 21 S.I.)

PROVIDED:
 LOBBY ENTRANCE RIDGE VENT: 71.5 L.F.
 WING 1 RIDGE VENT: 73.5 L.F.
 WING 2 RIDGE VENT: 73.5 L.F.
 GABLE RIDGE VENT: 14.75 L.F. x 2
 REAR ENTRANCE RIDGE VENT: 43.25 L.F.
 WING 3 RIDGE VENT: 73.5 L.F.
 GABLE RIDGE VENT: 14.75 L.F. x 2
 WING 4 RIDGE VENT: 73.5 L.F.
 GABLE RIDGE VENT: 14.75 L.F.
 TOTAL RIDGE VENTS PROVIDED 482.5 L.F.

PROVIDED SOFFIT AREA:
 1,978 S.F. x 144 = 284,903 S.I.

G:\Projects\2025\250095 Horizon Farm Credit AE Design Services\Drawings\Working Sets\ROOF PLAN.dwg, 3/5/2026 3:14 PM, Deane L. Townsend

DATE: _____
 REVISION: _____
 NO: _____

GMB
 GEORGE, MILES & BUHR, LLC
 ARCHITECTS & ENGINEERS
 SALESBURY, BALTIMORE • SEAFORD
 www.gmbnet.com

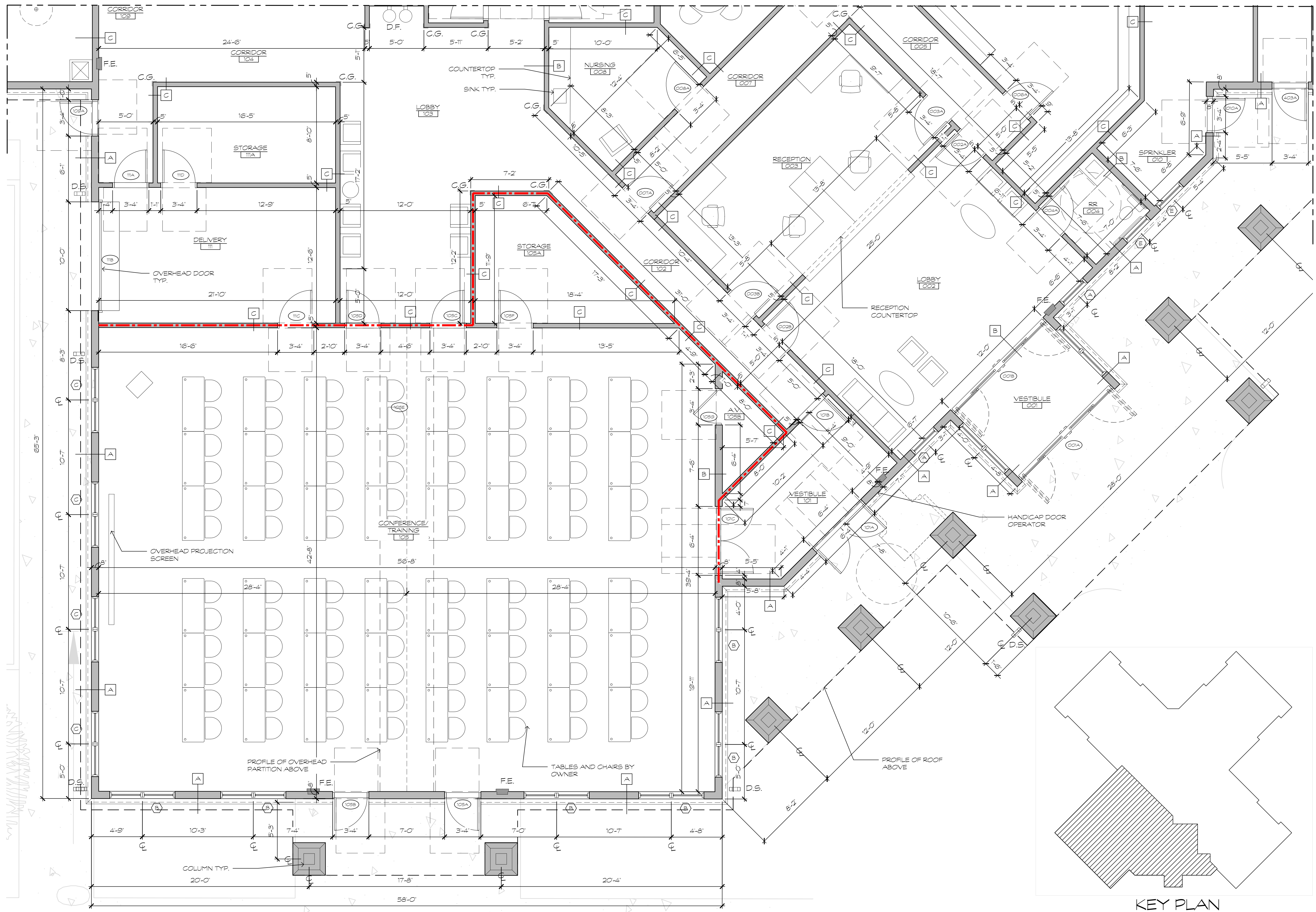
NEW CONSTRUCTION FOR:
HORIZON FARM CREDIT DHQ
 BRIDGEVILLE, DE

ROOF PLAN

MORGAN HALL HEWITT
 No. SS-0007846
 STATE OF DELAWARE
 REGISTERED ARCHITECT

SCALE : 3/32" = 1'-0"
 DESIGN BY : MHH
 DRAWN BY : AUB
 CHECKED BY : MHH
 GMB FILE : 250095
 DATE : 12/30/2025

G:\Projects\2025\250095 Horizon Farm Credit AE Design Services\Drawings\Working Sets\A1.3 ENLARGED FLOOR PLAN - WING 1.dwg, 12/30/2025 9:41 AM, Deane L. Townsend



1

ENLARGED FLOOR PLAN - WING 1
1/4" = 1'-0"

DATE	1/19/2026
REVISION	ISSUED FOR PERMIT
NO.	1

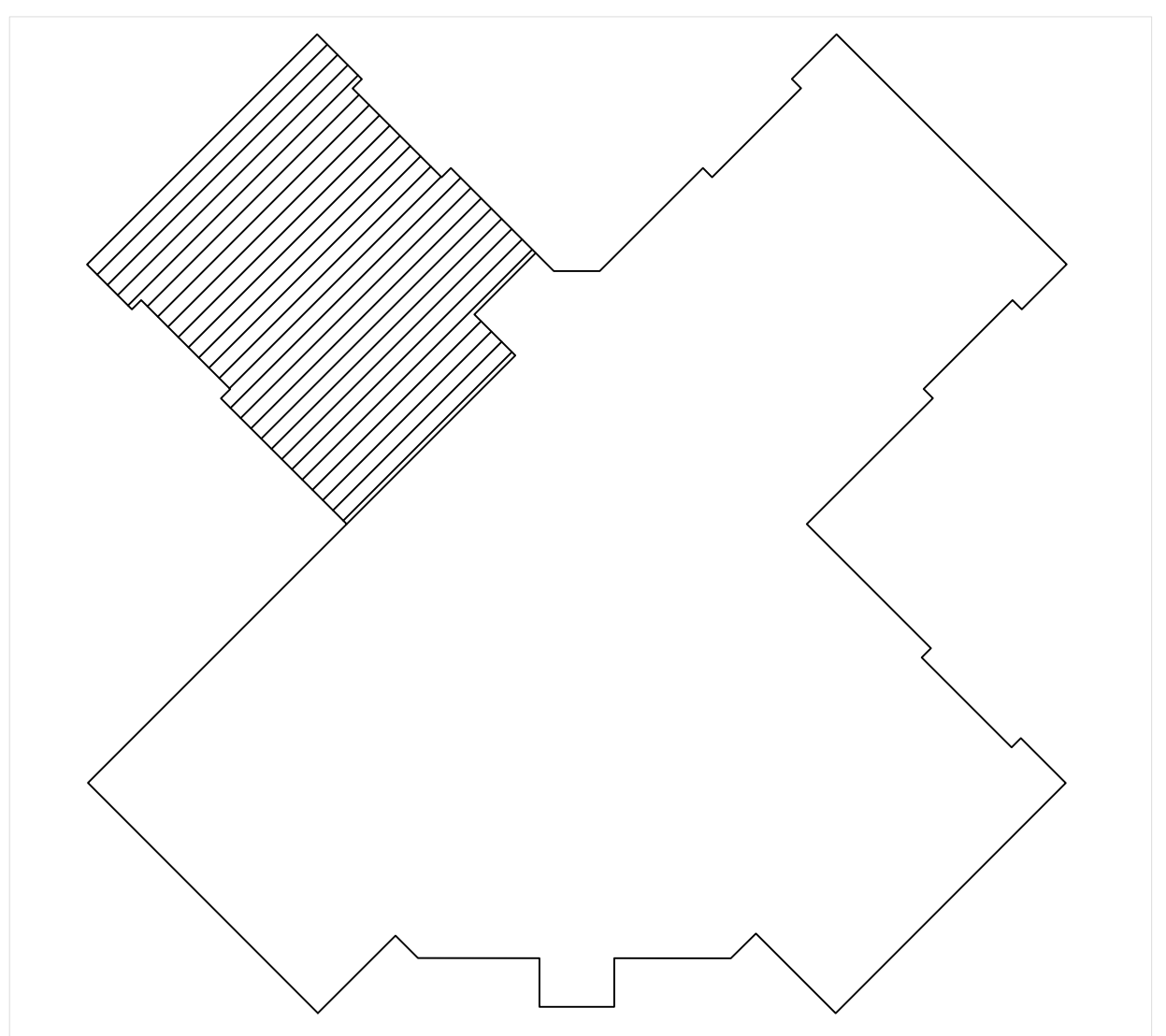
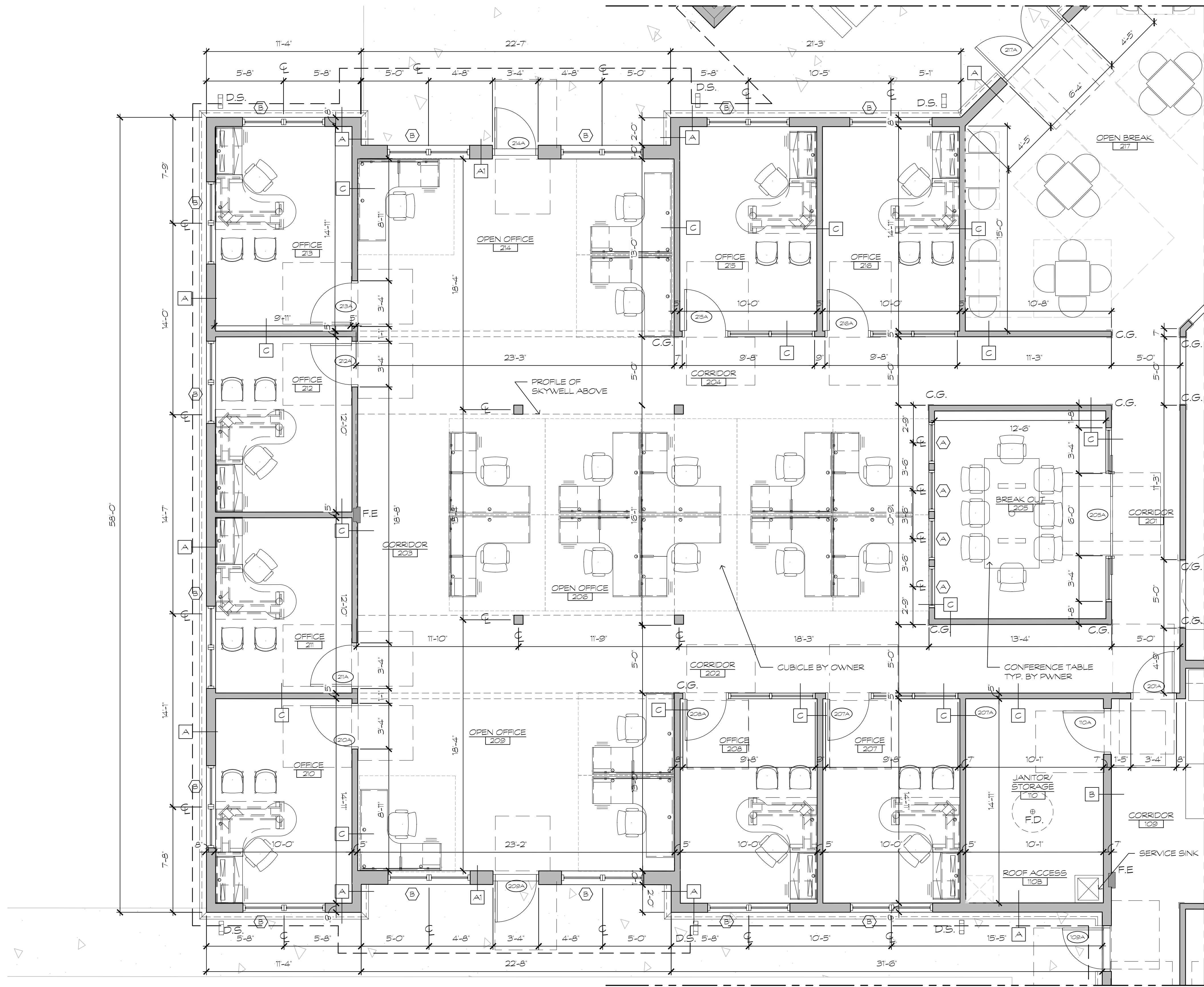
NEW CONSTRUCTION FOR:
HORIZON FARM CREDIT DHQ
BRIDGEVILLE, DE

ENLARGED
FLOOR PLAN -
WING 1



SCALE : 1/4" = 1'-0"
DESIGN BY : MHH
DRAWN BY : AUB
CHECKED BY : MHH
GMB FILE : 250095
DATE : 12/30/2025

A1.3

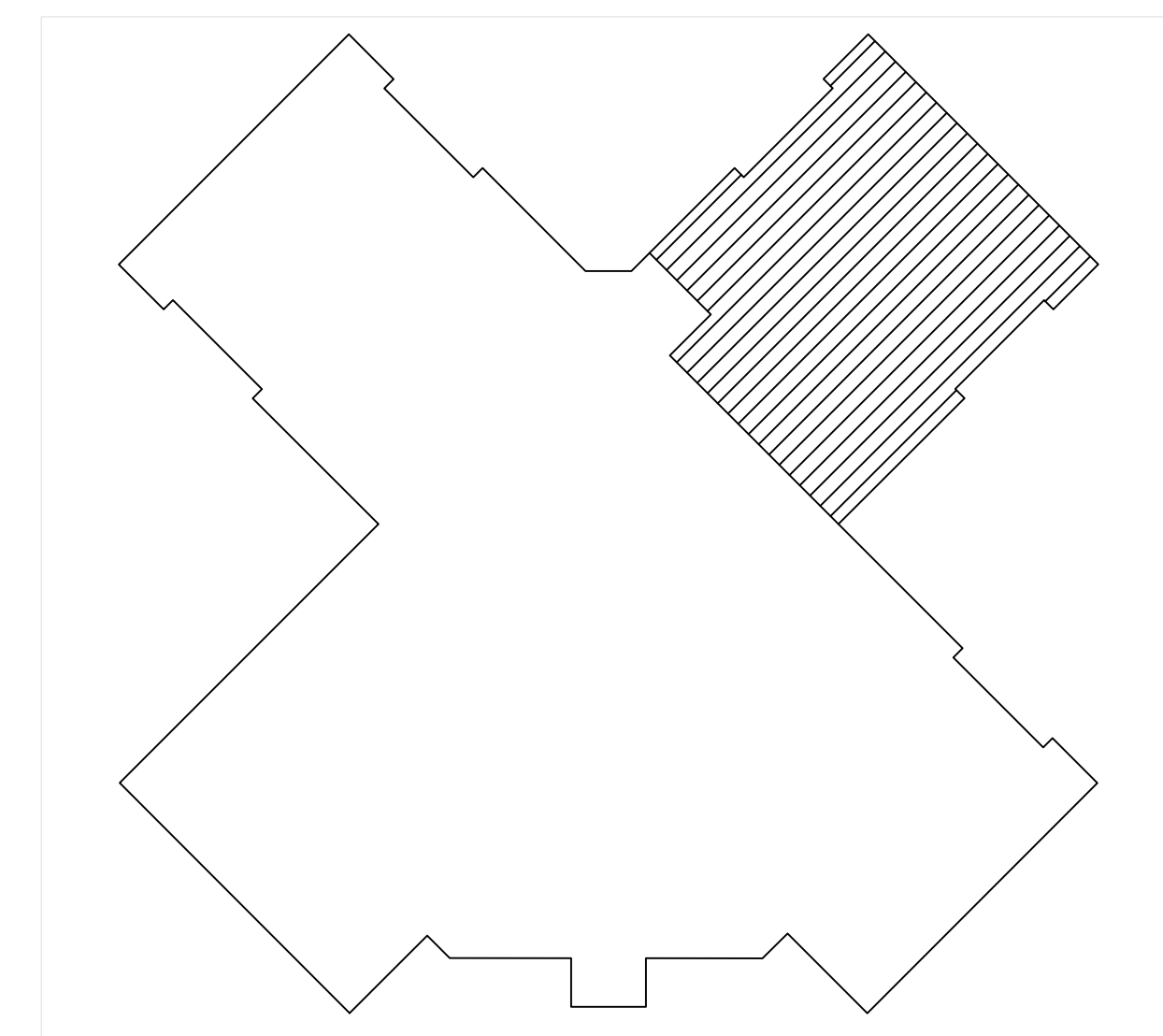
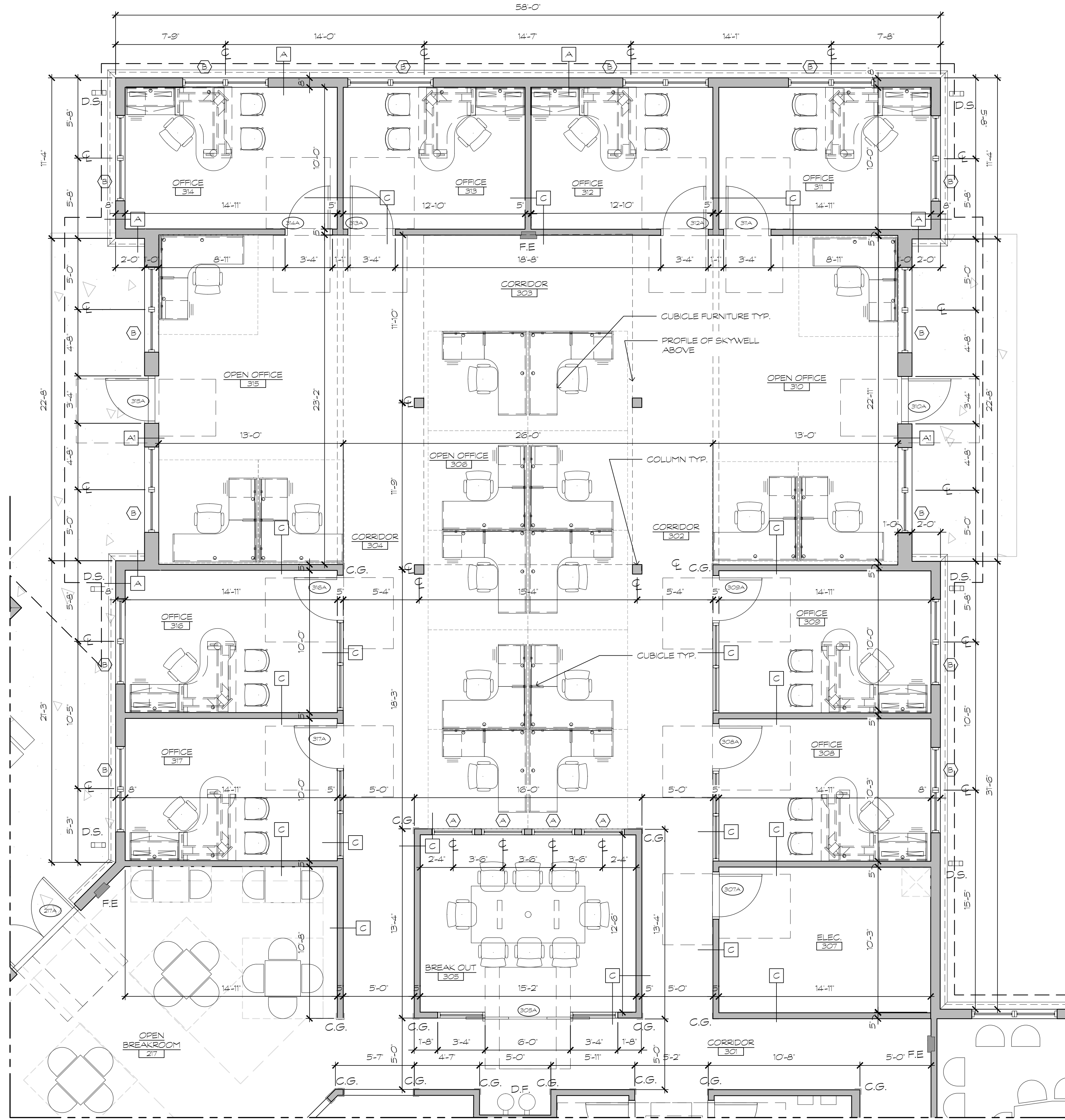


KEY PLAN
1/32" = 1'-0"

1 ENLARGED FLOOR PLAN - WING 2
1/4" = 1'-0"

	NO. 1 REVISION ISSUED FOR PERMIT	DATE 1/19/2026
	NEW CONSTRUCTION FOR: HORIZON FARM CREDIT DHQ BRIDGEVILLE, DE	
ENLARGED FLOOR PLAN - WING 2		
SCALE : 1/4" = 1'-0" DESIGN BY : MHH DRAWN BY : AJS CHECKED BY : MHH GMB FILE : 250095 DATE : 12/30/2025		
A1.4		

G:\Projects\2025\250095 Horizon Farm Credit AE Design Services\Drawings\Working Sets\A1.5 ENLARGED FLOOR PLAN - WING 3.dwg, 12/30/2025 9:41 AM, Deane L. Townsend



KEY PLAN
1/32" = 1'-0"

1

ENLARGED FLOOR PLAN - WING 3
1/4" = 1'-0"

NO.	1
REVISION	ISSUED FOR PERMIT
DATE	1/19/2026

GMB
GEORGE, MILES & BUHR, LLC
ARCHITECTS & ENGINEERS
SALISBURY, BALTIMORE, SEAFORD
www.gmbnet.com

NEW CONSTRUCTION FOR:
HORIZON FARM CREDIT DHQ
BRIDGEVILLE, DE

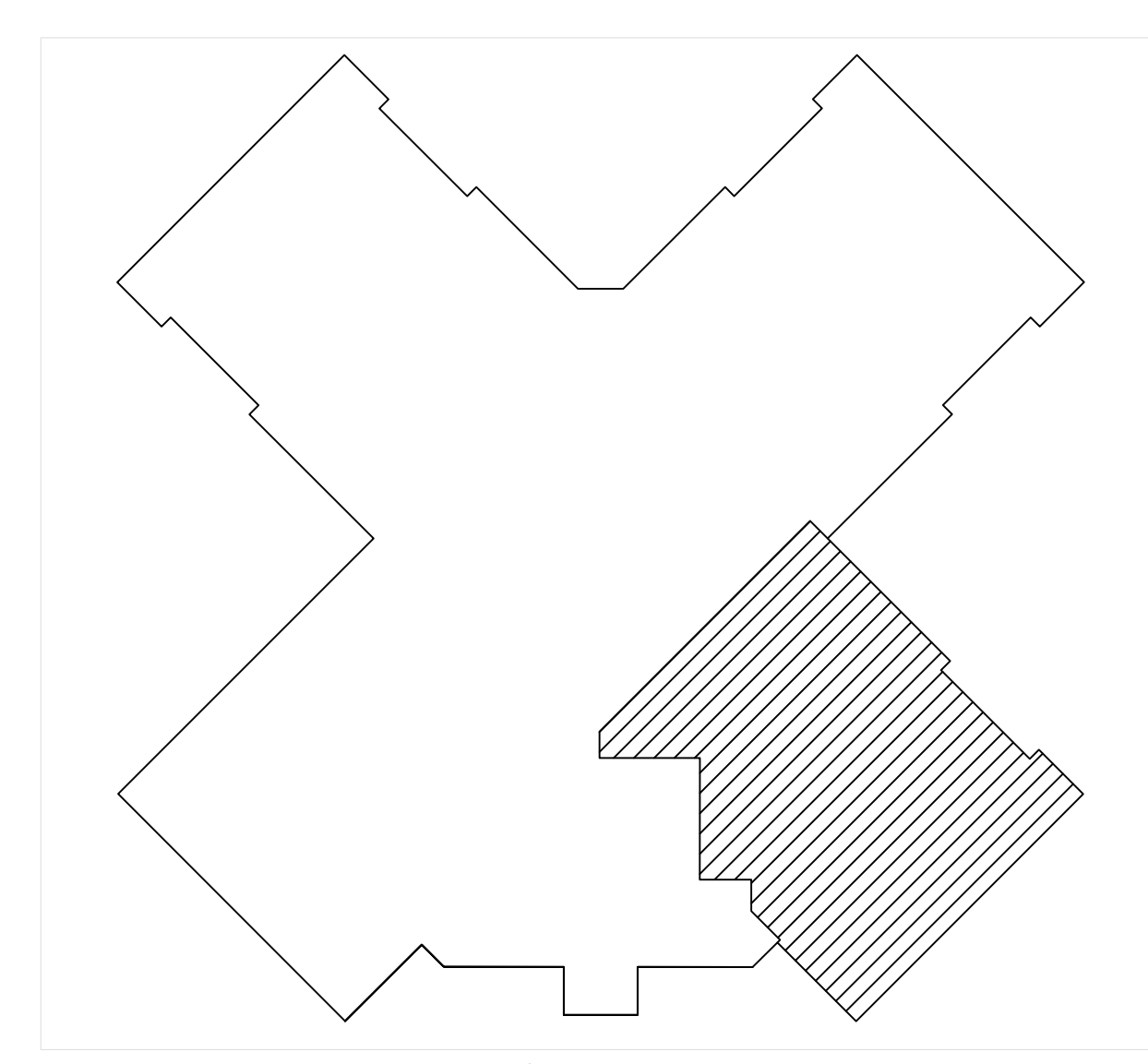
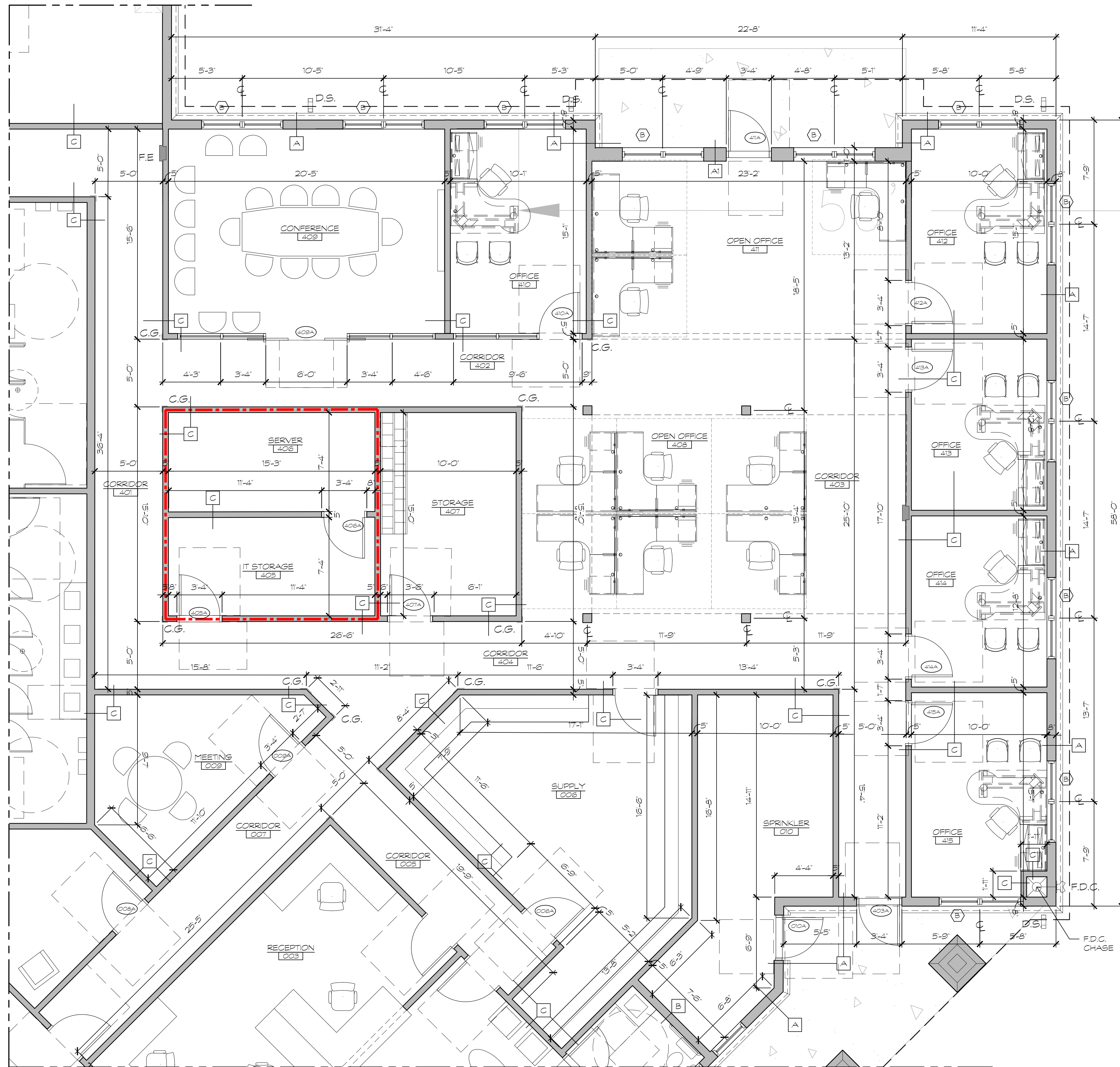
ENLARGED
FLOOR PLAN -
WING 3



SCALE	1/4" = 1'-0"
DESIGN BY	MHH
DRAWN BY	AJB
CHECKED BY	MHH
GMB FILE	250095
DATE	12/30/2025

A1.5

G:\Projects\2025\250095 Horizon Farm Credit AE Design Services\Drawings\Working Sets\A1.6 ENLARGED FLOOR PLAN - WING 4.dwg, 3/5/2026 3:13 PM, Deane L. Townsend



KEY PLAN
1/32" = 1'-0"

1 ENLARGED FLOOR PLAN - WING 4
1/4" = 1'-0"

NO.	REVISION	DATE

GMB
 GEORGE, MILES & BUHR, LLC
 ARCHITECTS & ENGINEERS
 SALISBURY, BALTIMORE • SEAFORD
 www.gmbnet.com

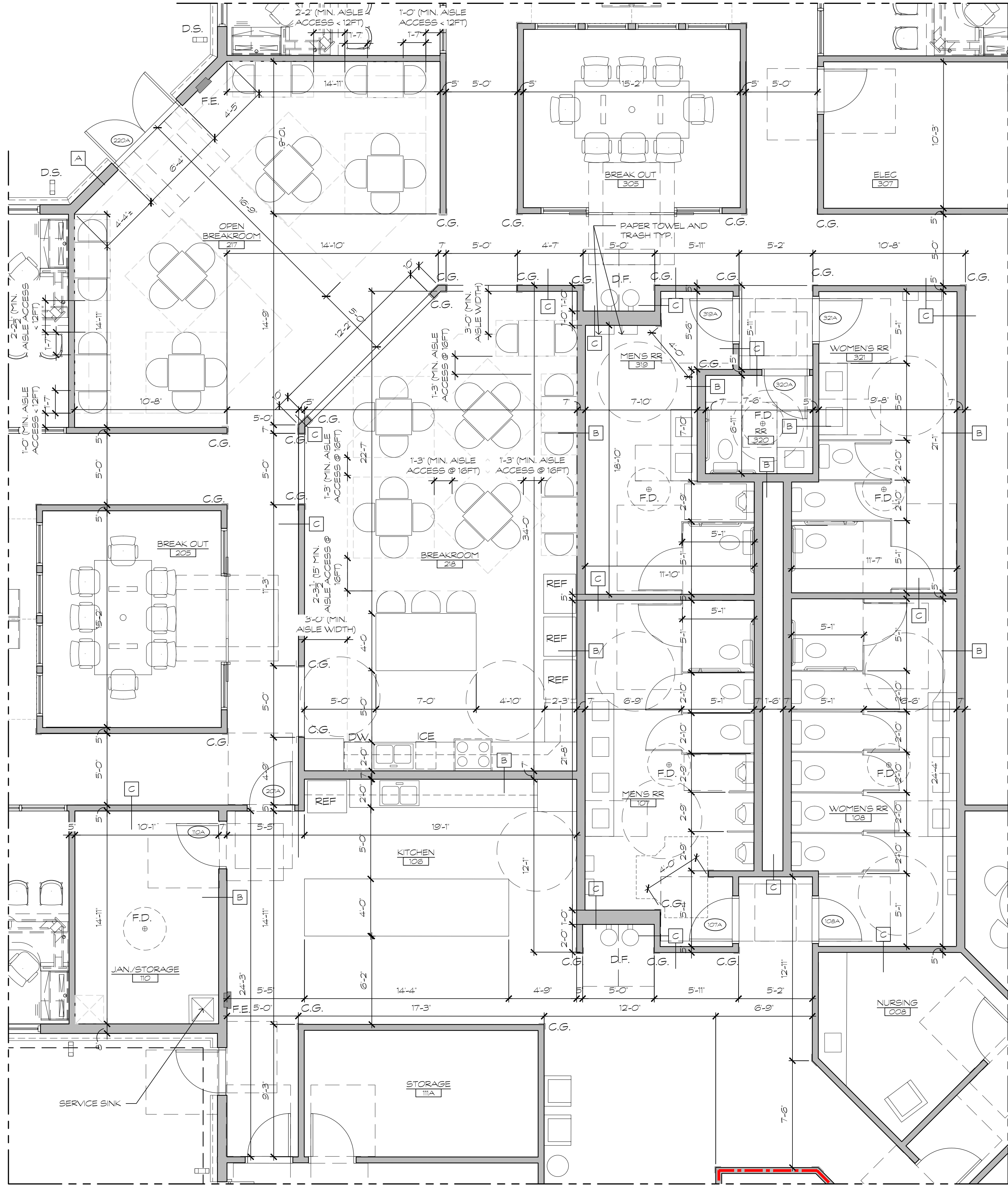
NEW CONSTRUCTION FOR:
HORIZON FARM CREDIT DHQ
 BRIDGEVILLE, DE

ENLARGED
FLOOR PLAN -
 WING 4



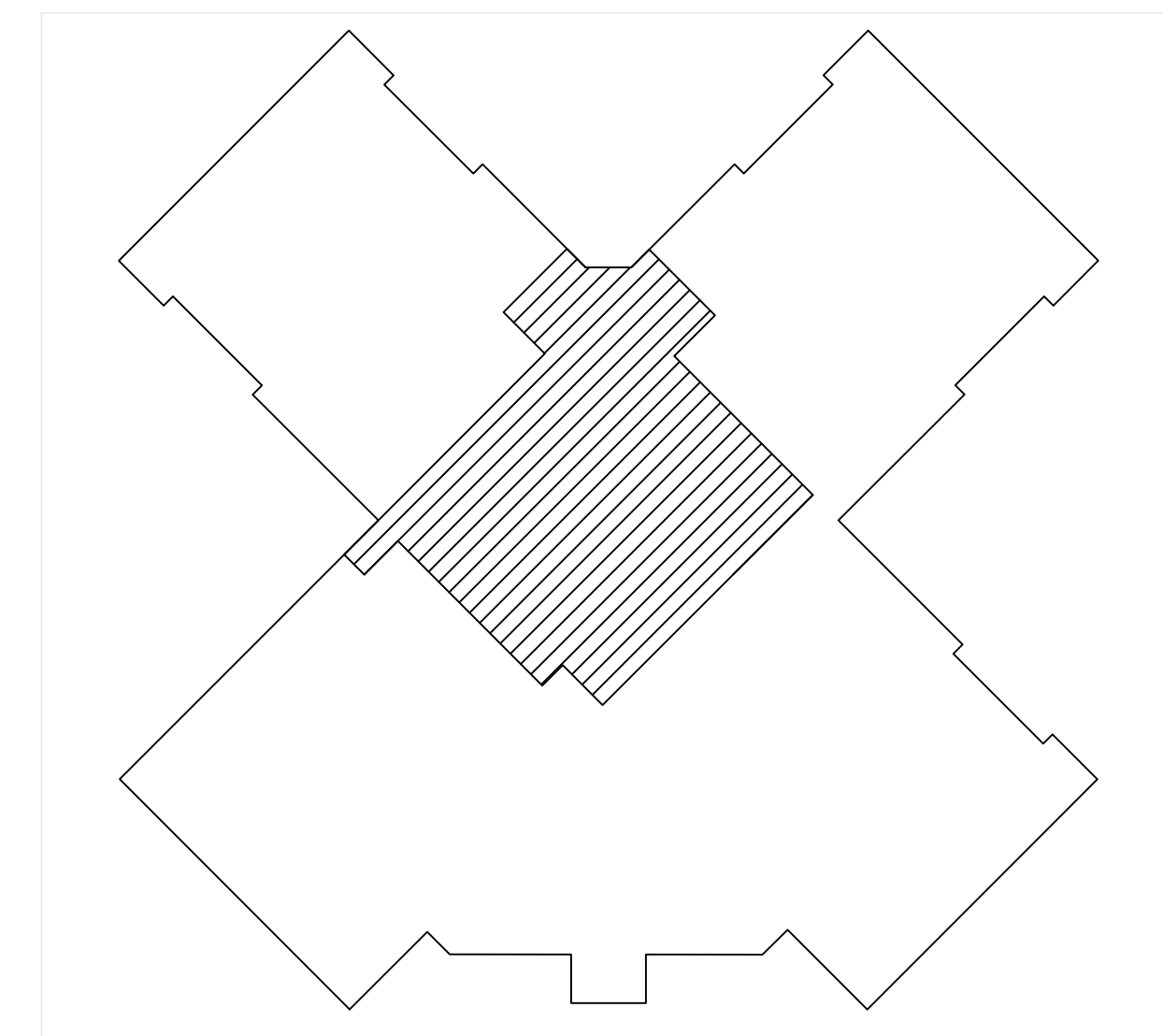
SCALE : 1/4" = 1'-0"
 DESIGN BY : MHH
 DRAWN BY : AUB
 CHECKED BY : MHH
 GMB FILE : 250095
 DATE : 12/30/2025

A1.6



1

ENLARGED FLOOR PLAN - CORE
1/4" = 1'-0"

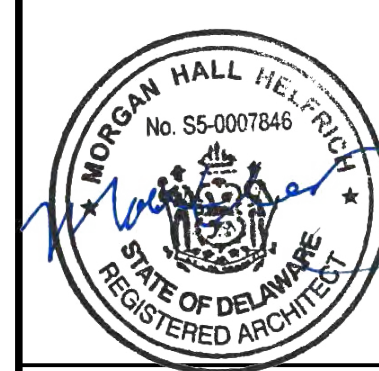


KEY PLAN
1/32" = 1'-0"

DATE	1/19/2026
REVISION	ISSUED FOR PERMIT
NO.	1

NEW CONSTRUCTION FOR:
HORIZON FARM CREDIT DHQ
BRIDGEVILLE, DE

ENLARGED
FLOOR PLAN -
CORE



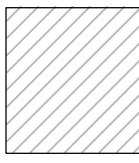
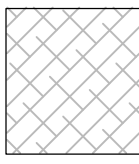
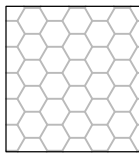

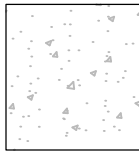
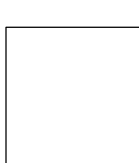
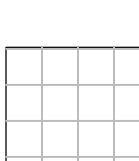
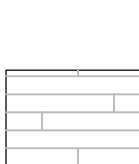
SCALE	1/4" = 1'-0"
DESIGN BY	MHH
DRAWN BY	AJB
CHECKED BY	MHH
GMB FILE	250095
DATE	12/30/2025

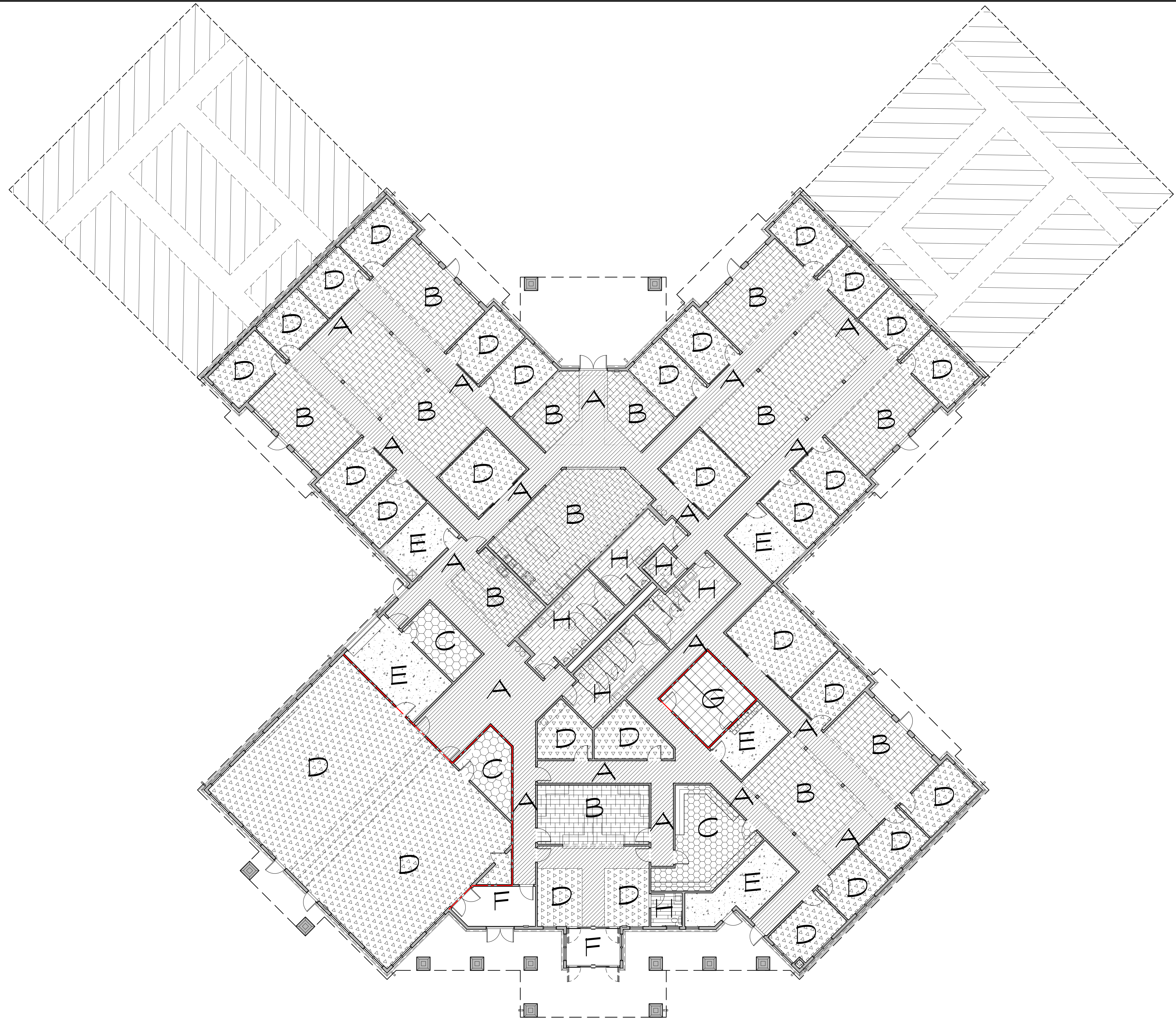
A1.7

G:\Projects\2025\250095 Horizon Farm Credit AE Design Services\Drawings\Working Sets\A1.8 FLOORING PLAN.dwg, 12/30/2025 9:40 AM, Deane L. Townsend

FLOORING LEGEND

N.T.S.

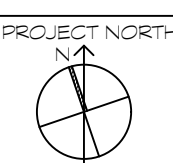
- A  LUXURY VINYL TILE
AVA FLOORING
RSRV
KYOTO LOFT
- B  LUXURY VINYL TILE
PATCRAFT FLOORING
EARTHEN
MOUNTAIN
- C  LUXURY VINYL TILE
PATCRAFT FLOORING
NUMIX
SEPIA FLECK
- D  CARPET
PATCRAFT FLOORING
EXPERIENCE
OUTCOME
- E  SEALED
CONCRETE
- F  RUBBER
- G  ELECTROSTATIC TILE
STATIC STOP
DESIGNER
QUARRY SAND
- I  CERAMIC TILE
DAL TILE
ACREAGE
STETSON



1

FLOORING PLAN

3/32" = 1'-0"

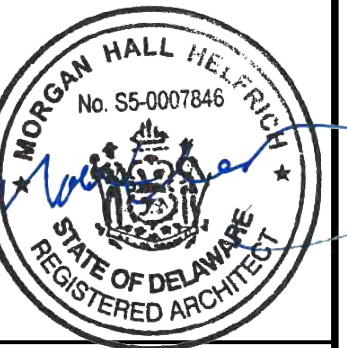


NO.	1	DATE	1/19/2026
REVISION	ISSUED FOR PERMIT		

GMB
 GEORGE, MILES & BUHR, LLC
 ARCHITECTS & ENGINEERS
 SALESBURY • BALTIMORE • SEAFORD
 www.gmbnet.com

NEW CONSTRUCTION FOR:
HORIZON FARM FARM CREDIT DHQ
 BRIDGEVILLE, DE

FLOORING PLAN



SCALE	: 3/32" = 1'-0"
DESIGN BY	: MHH
DRAWN BY	: AUB
CHECKED BY	: MHH
GMB FILE	: 250095
DATE	: 12/30/2025

A1.8

SIGNAGE KEY

N.T.S.

- ▲ ACCESS CONTROL
- ROOM SIGN (TACTILE)
- ★ RESTROOM SIGN (TACTILE)
- ✕ EXIT SIGN (TACTILE)
- + EVACUATION MAP SIGN (TACTILE)

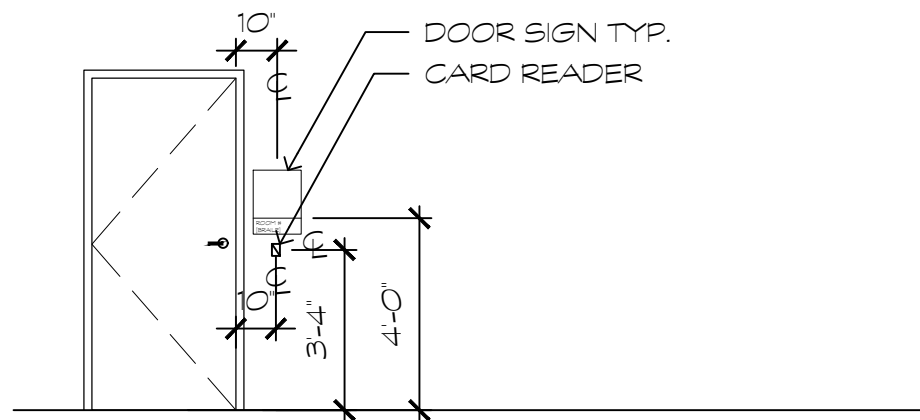
ACCENT COLOR LEGEND

N.T.S.

- PA #2 = SW9039 'BROCCOFLOWER'
- PA #3 = SW9149 'INKY BLUE'
- PA #5 = SW7048 'URBANE BRONZE'

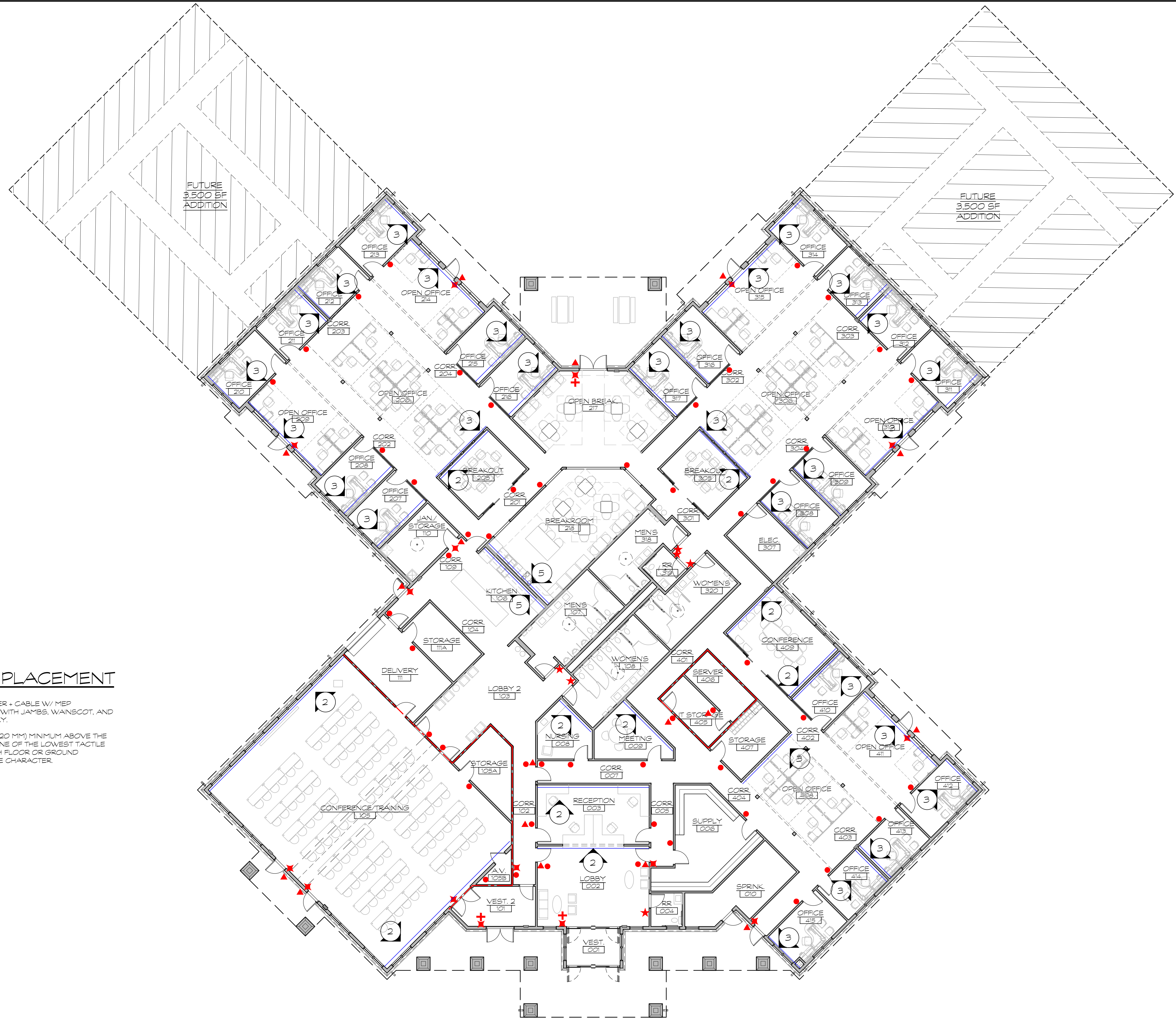
NOTES:

1. REFER TO THE SPECIFICATIONS FOR SIGNAGE INFORMATION AND TYPES.
2. ALL ROOM SIGNS, RESTROOMS, AND EXIT SIGNS SHALL MEET TACTILE SIGNAGE REQUIREMENTS.

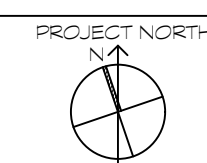


TYP. SIGN + CARD READER PLACEMENT

1/4" = 1'-0"
 WORK BOXES TO BE RECESSED IN WALL. COORD. LOCATION, POWER + CABLE W/ MEP COORD. LOCATION OF SIGNS, VIDEO BOX, AND/OR CARD READERS WITH JAMBS, WANSCOT, AND OTHER MISC. SURFACE FEATURES. ADJUST LOCATION ACCORDINGLY.
 TACTILE CHARACTERS OF SIGNS SHALL BE LOCATED 48 INCHES (1220 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND SURFACE, MEASURED FROM THE BASELINE OF THE LOWEST TACTILE CHARACTER AND 60 INCHES (1525 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND SURFACE, MEASURED FROM THE BASELINE OF THE HIGHEST TACTILE CHARACTER.



G:\Projects\2025\250095 Horizon Farm Credit AE Design Services\Drawings\Working Sets\A1.9 SIGNAGE PLAN.dwg, 3/5/2026 3:13 PM, Deane L. Townsend

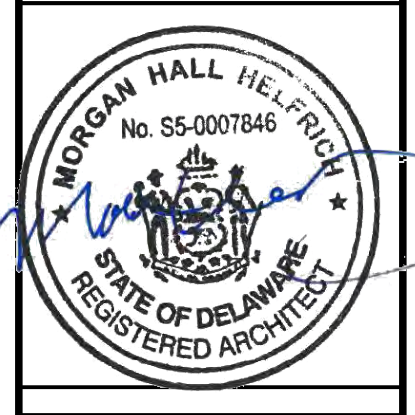


NO.	REVISION	DATE

GMB
 GEORGE, MILES & BUHR, LLC
 ARCHITECTS & ENGINEERS
 SALESBURY • BALTIMORE • SEAFORD
 www.gmbnet.com

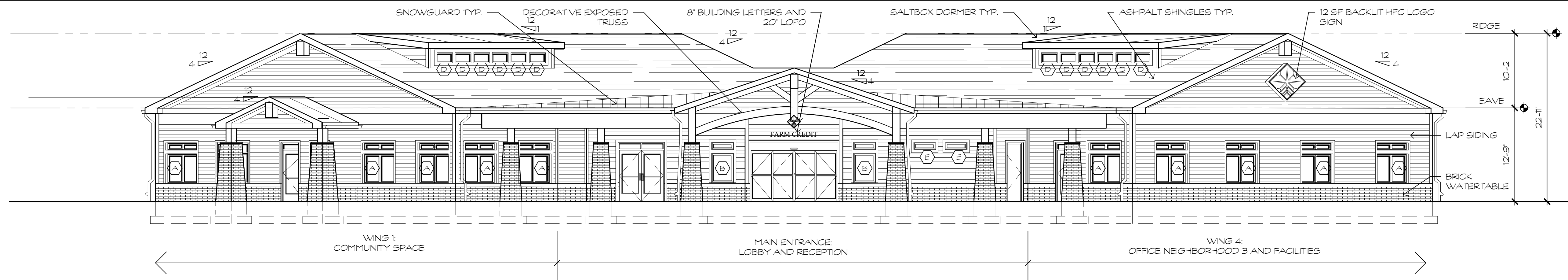
NEW CONSTRUCTION FOR:
HORIZON FARM CREDIT DHQ
 BRIDGEVILLE, DE

SIGNAGE PLAN

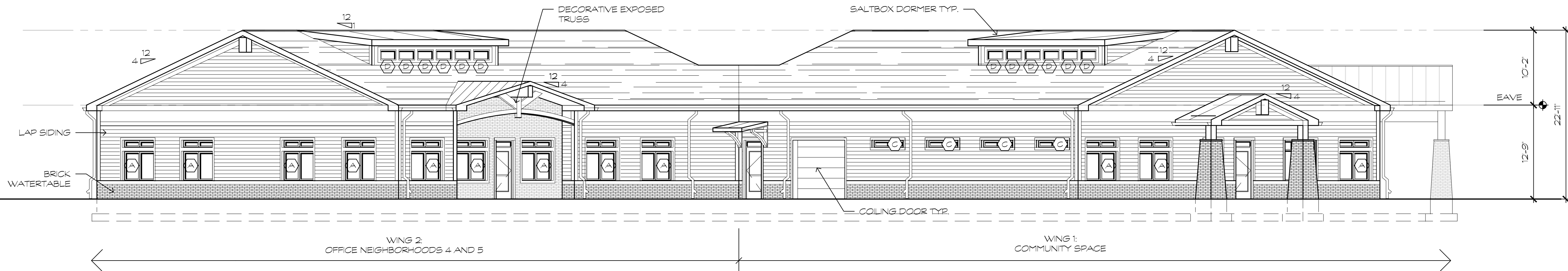


SCALE	: 3/32" = 1'-0"
DESIGN BY	: MHH
DRAWN BY	: AUB
CHECKED BY	: MHH
GMB FILE	: 250095
DATE	: 12/30/2025

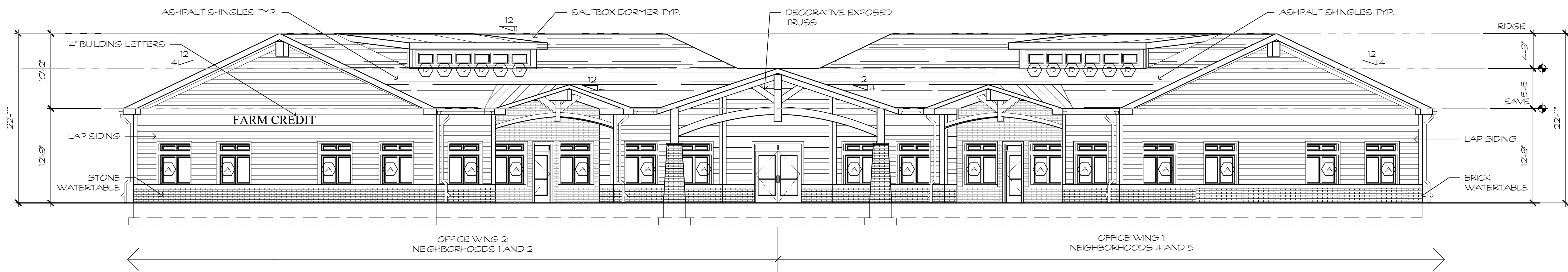
G:\Projects\2025\250095 Horizon Farm Credit AE Design Services\Drawings\Working Sets\A2.1 ELEVATIONS.dwg, 12/30/2025 9:40 AM, Deane L. Townsend



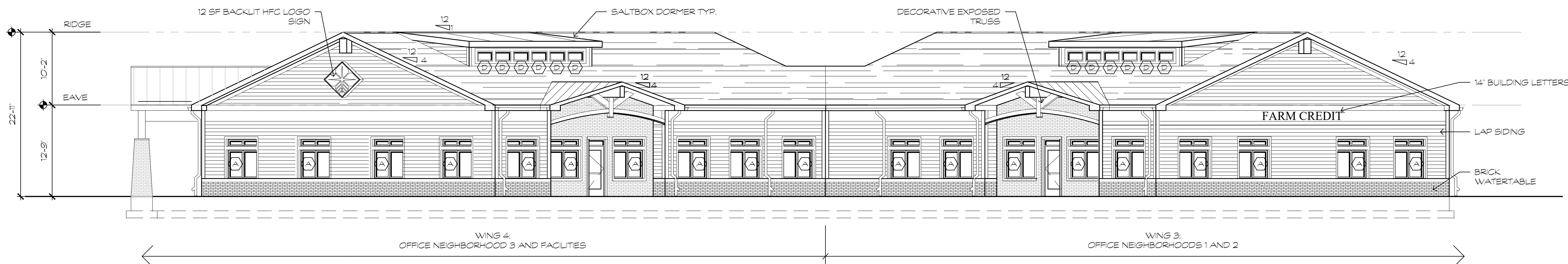
SOUTHWEST ELEVATION



NORTHWEST ELEVATION



NORTHEAST ELEVATION



SOUTHEAST ELEVATION

DATE	1/19/2026
REVISION	ISSUED FOR PERMIT
NO.	1

GMB
 GEORGE, MILES & BUHR, LLC
 ARCHITECTS & ENGINEERS
 SALISBURY, BALTIMORE • SEAFORD
 www.gmbnet.com

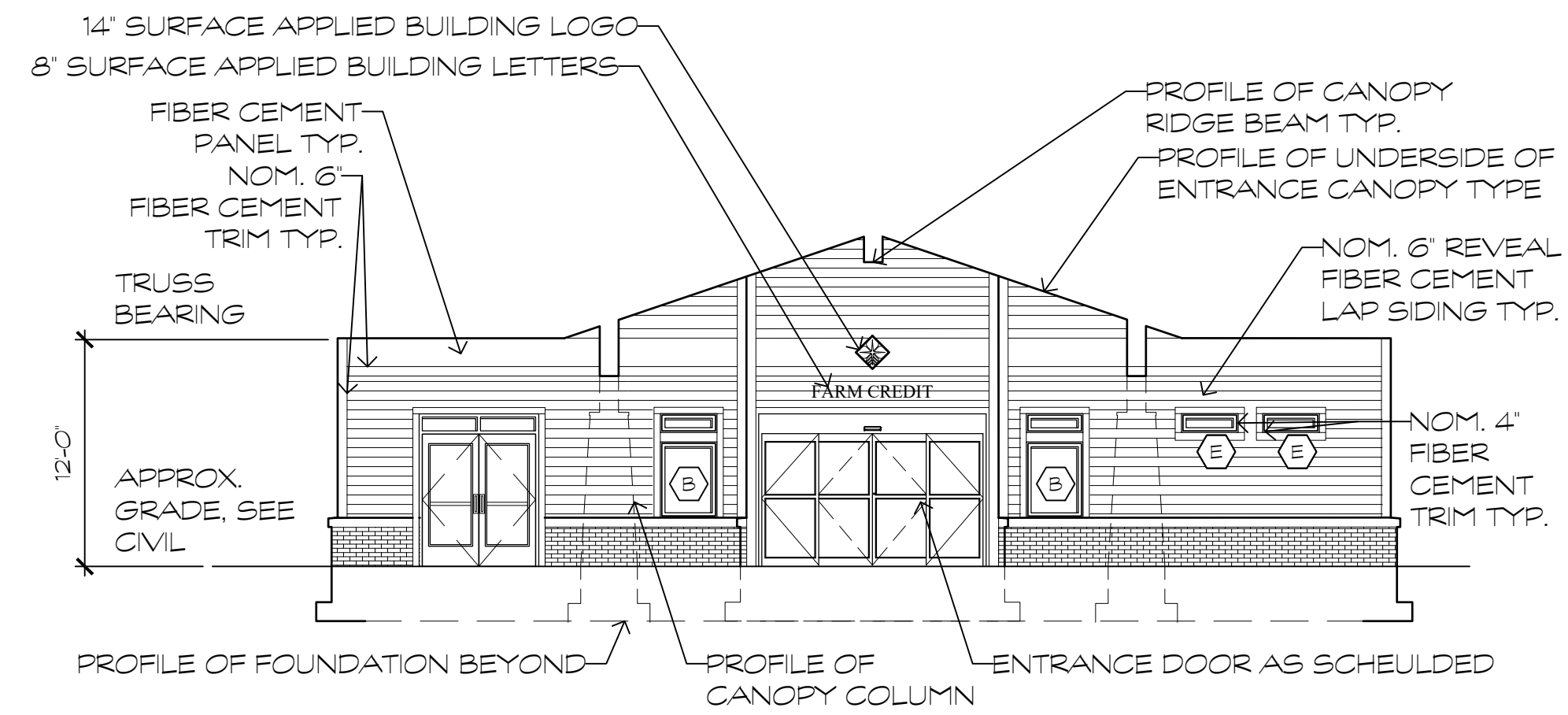
NEW CONSTRUCTION FOR:
HORIZON FARM CREDIT DHQ
 BRIDGEVILLE, DE

ELEVATIONS

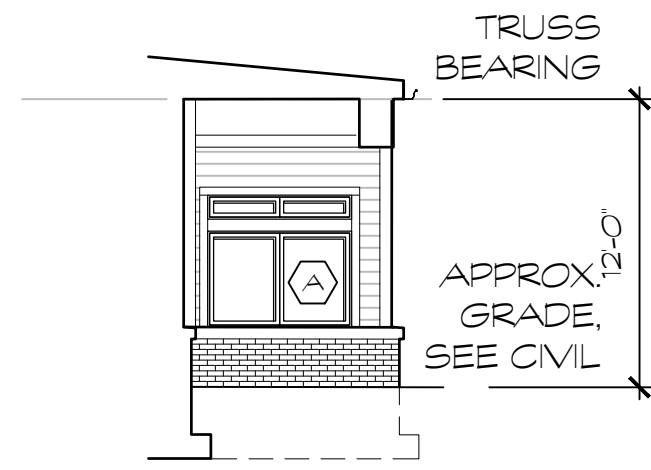


SCALE	: 1/8" = 1'-0"
DESIGN BY	: MHH
DRAWN BY	: AUB
CHECKED BY	: MHH
GMB FILE	: 250095
DATE	: 12/30/2025

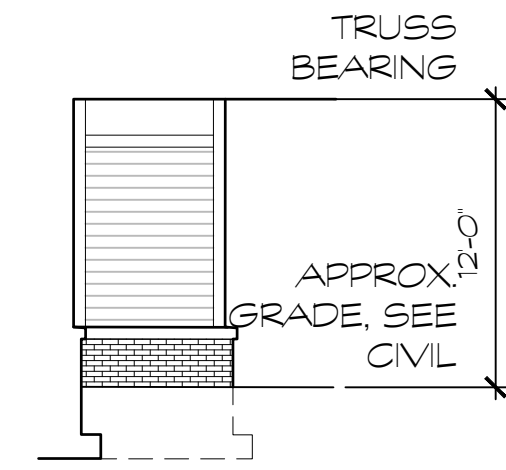
G:\Projects\2025\250095 Horizon Farm Credit AE Design Services\Drawings\Working Sets\A2.2 PARTIAL ELEVATIONS.dwg, 12/30/2025 9:43 AM, Deane L. Townsend



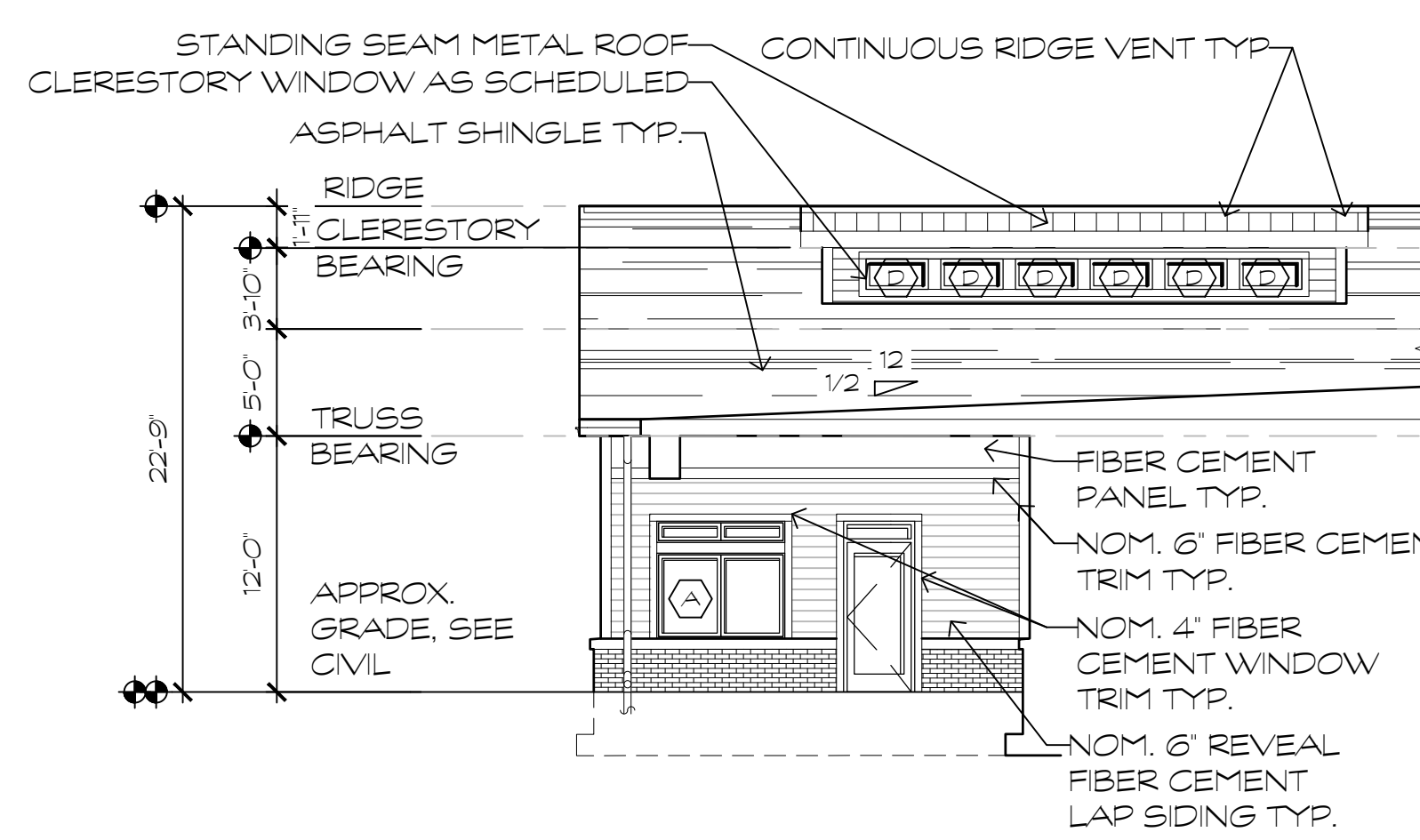
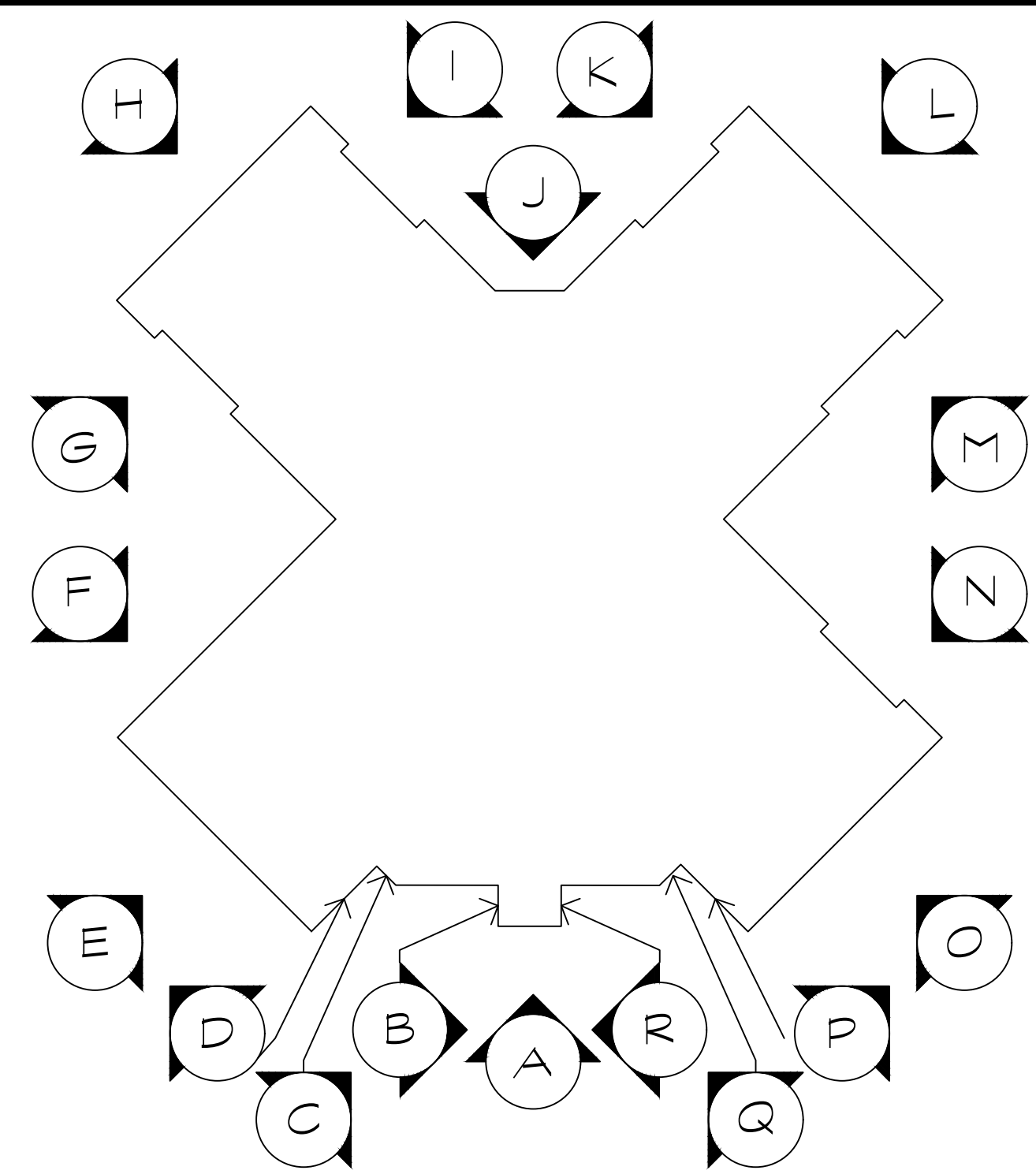
A LOBBY FRONT ELEVATION



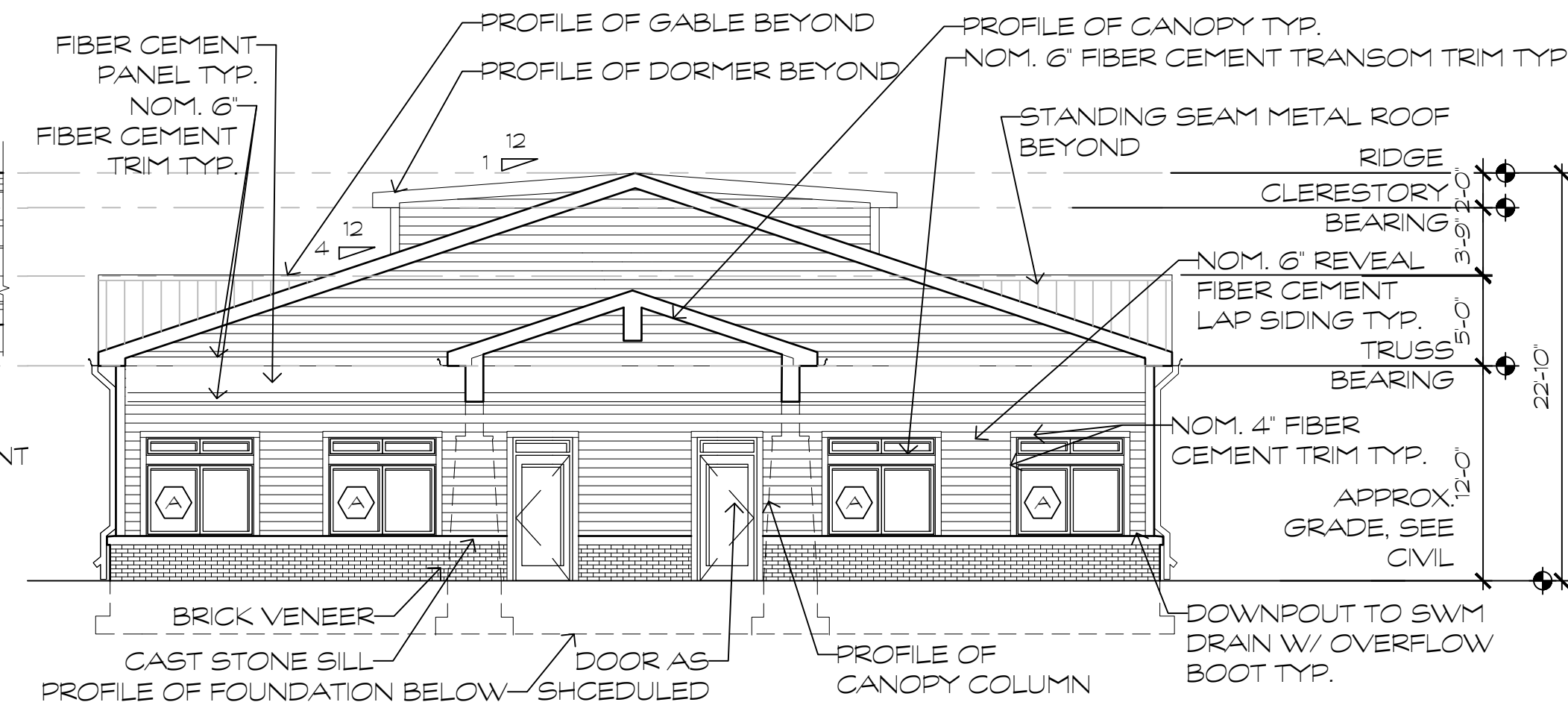
B LOBBY SIDE ELEVATION



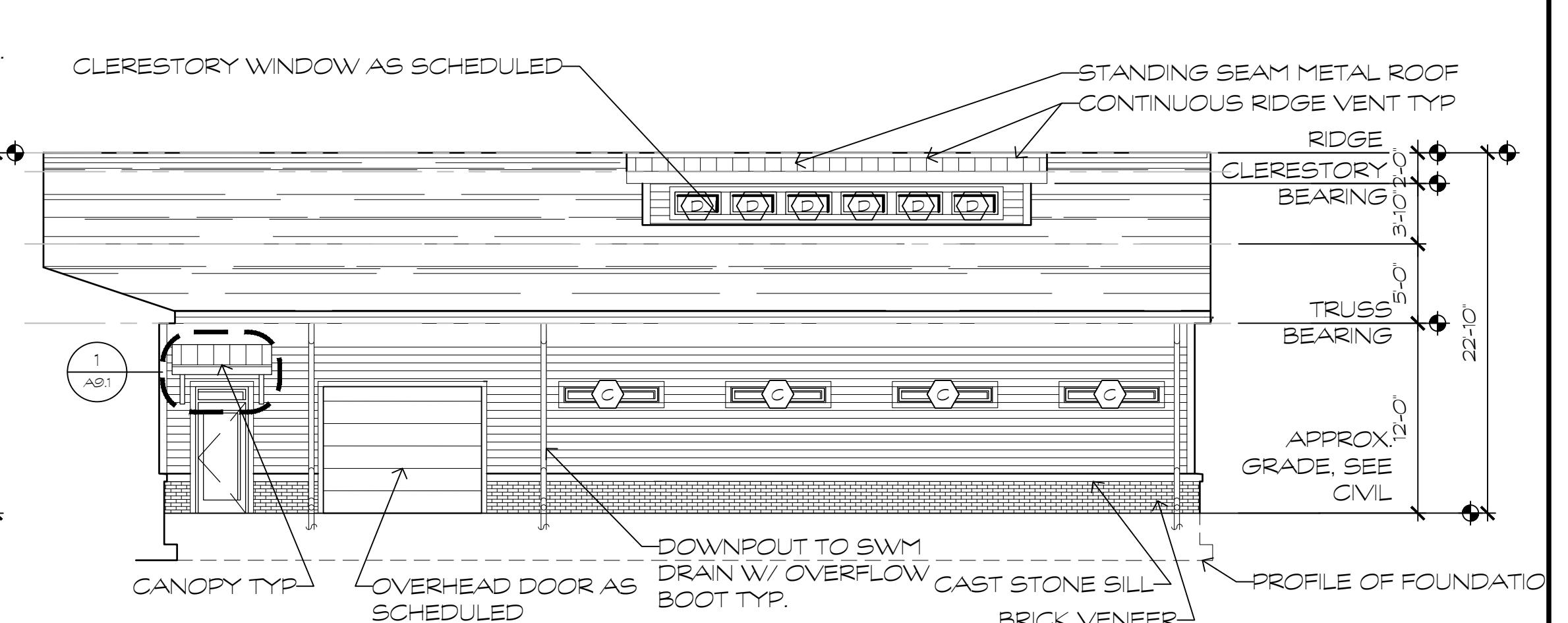
C LOBBY - W-1 GROIN



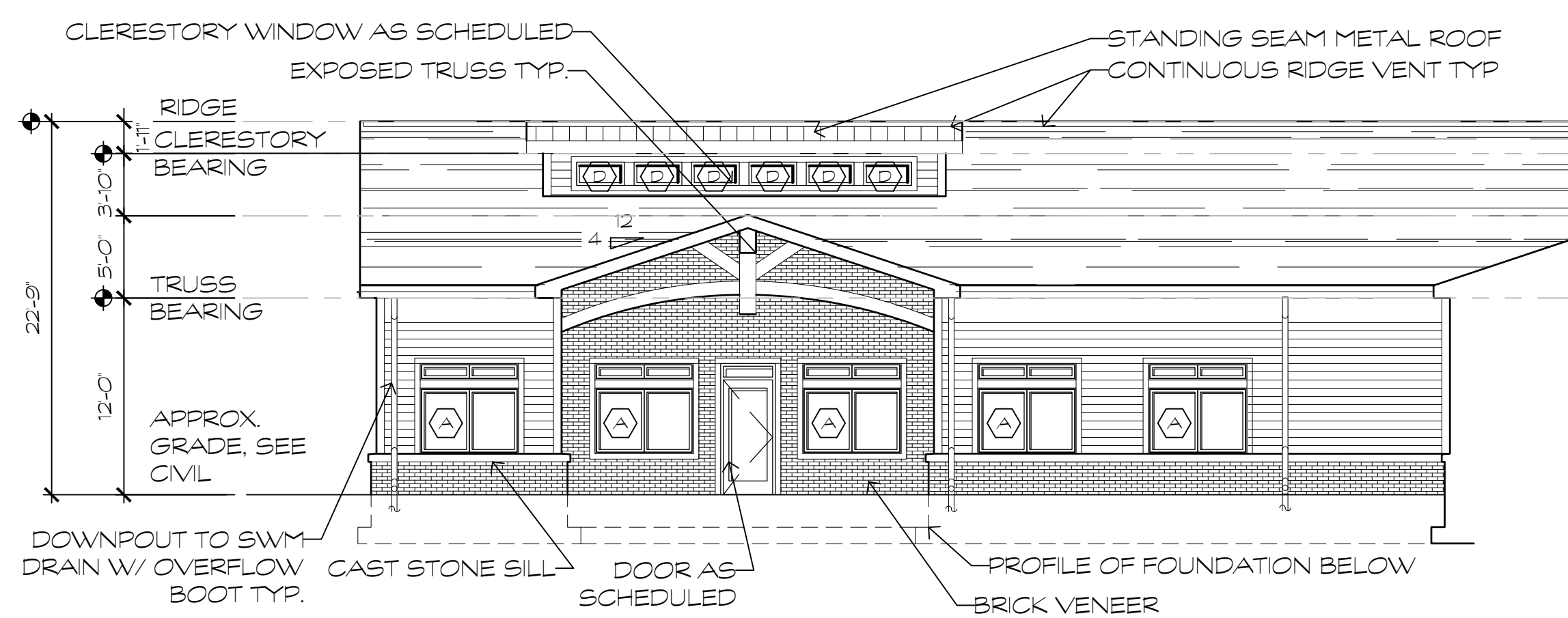
D WING 1 SOUTH ELEVATION



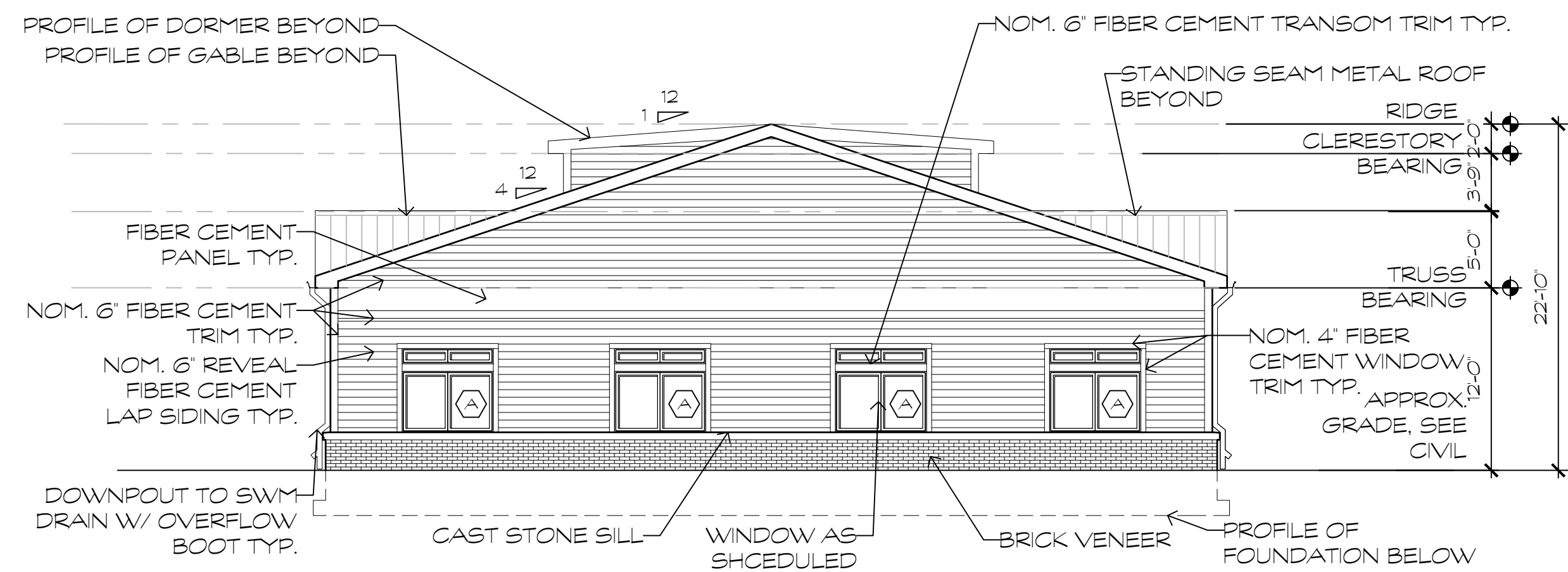
E WING 1 GABLE END ELEVATION



F WING 1 NORTH ELEVATION

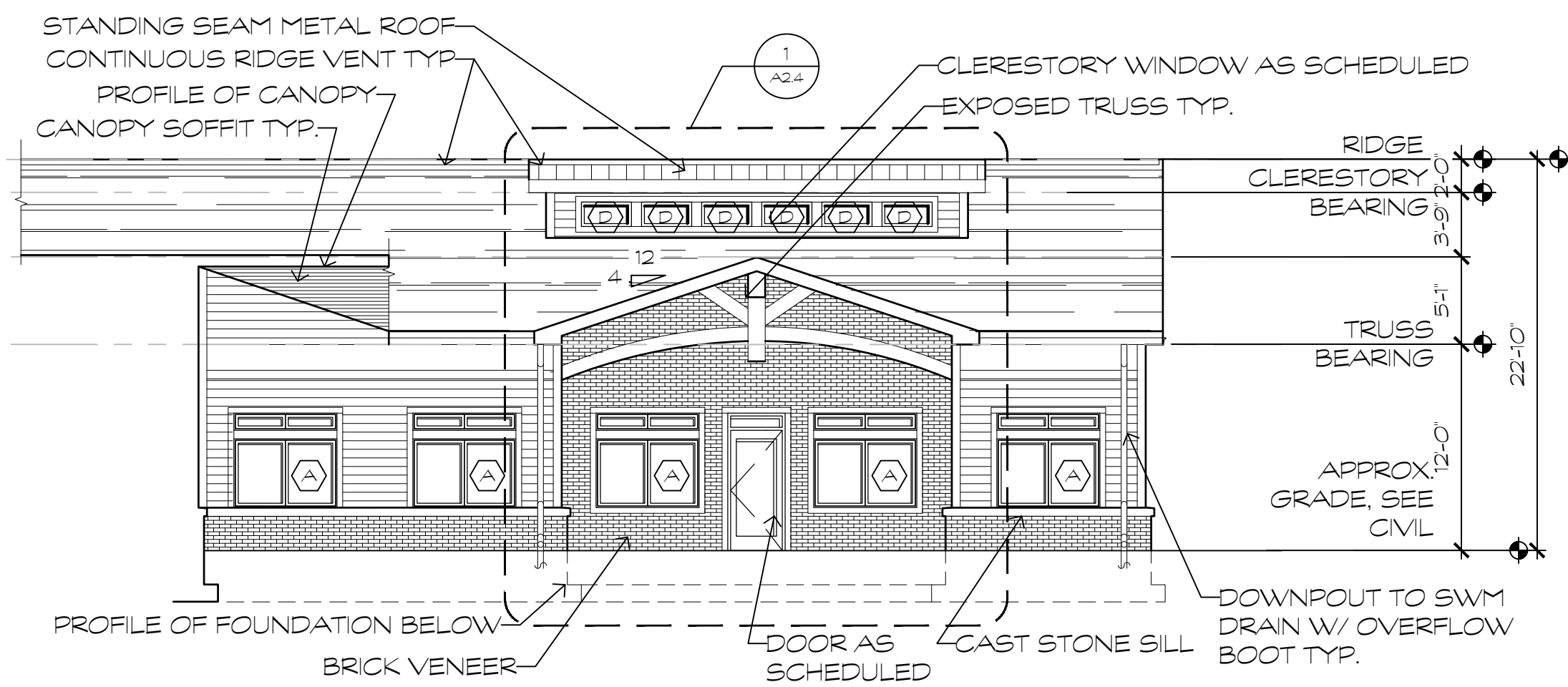


G WING 2 WEST ELEVATION

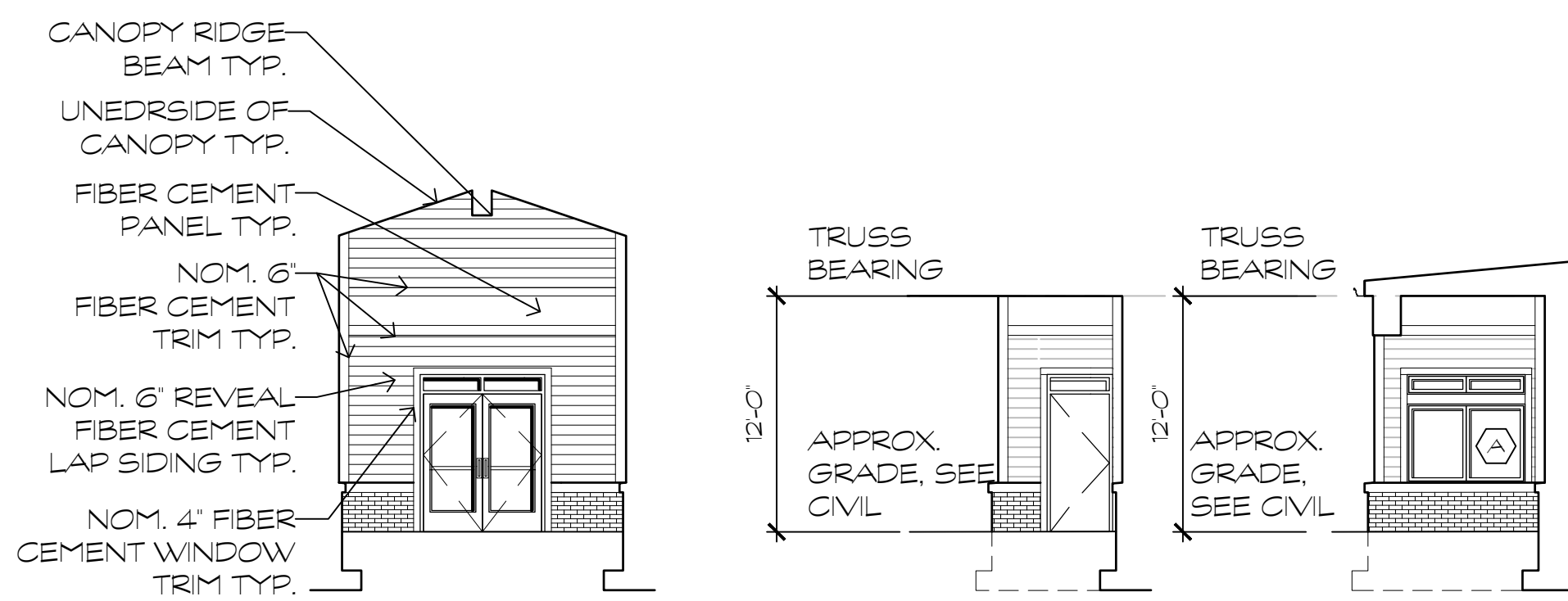


H WING 2 GABLE ELEVATION

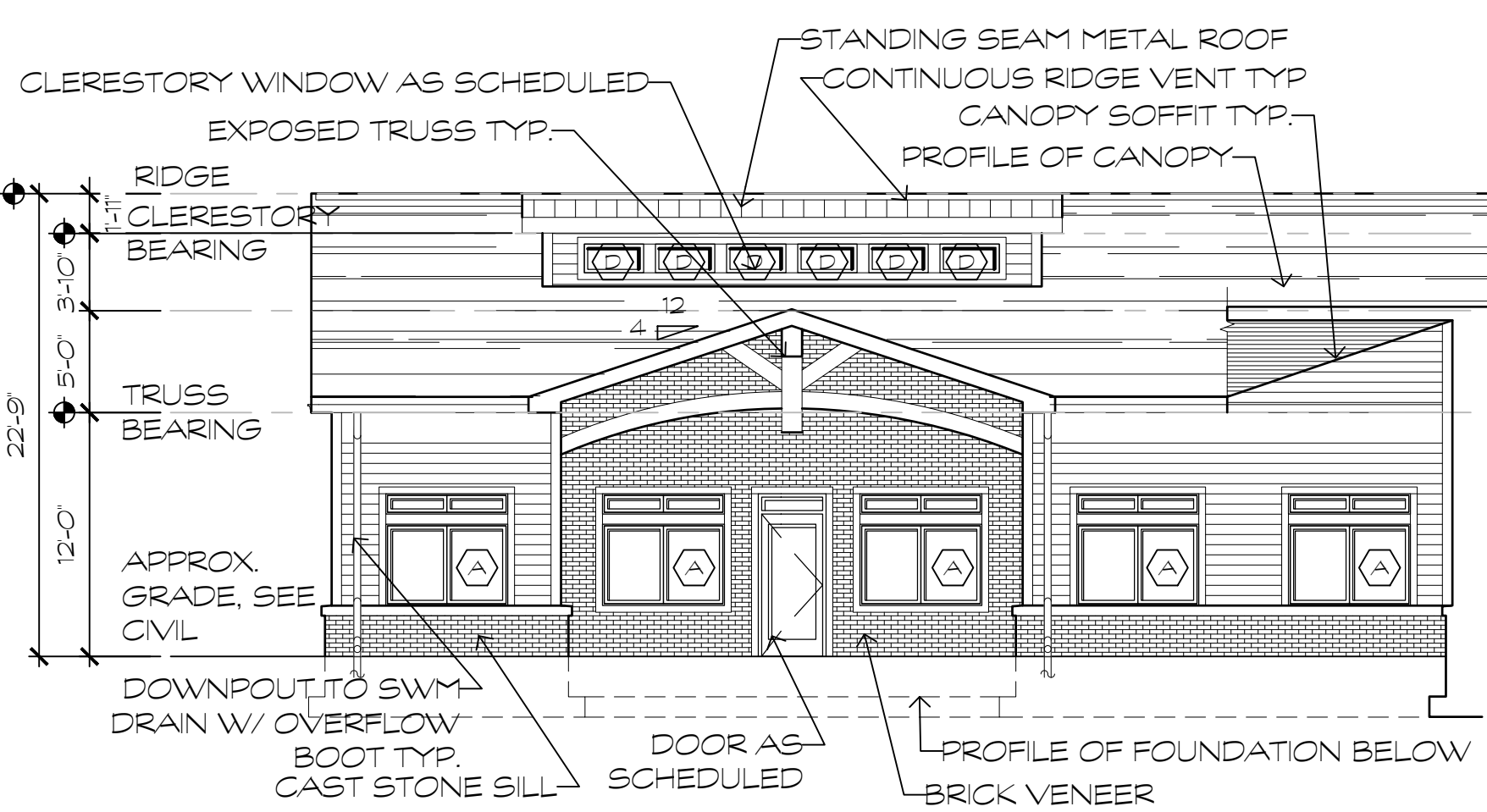
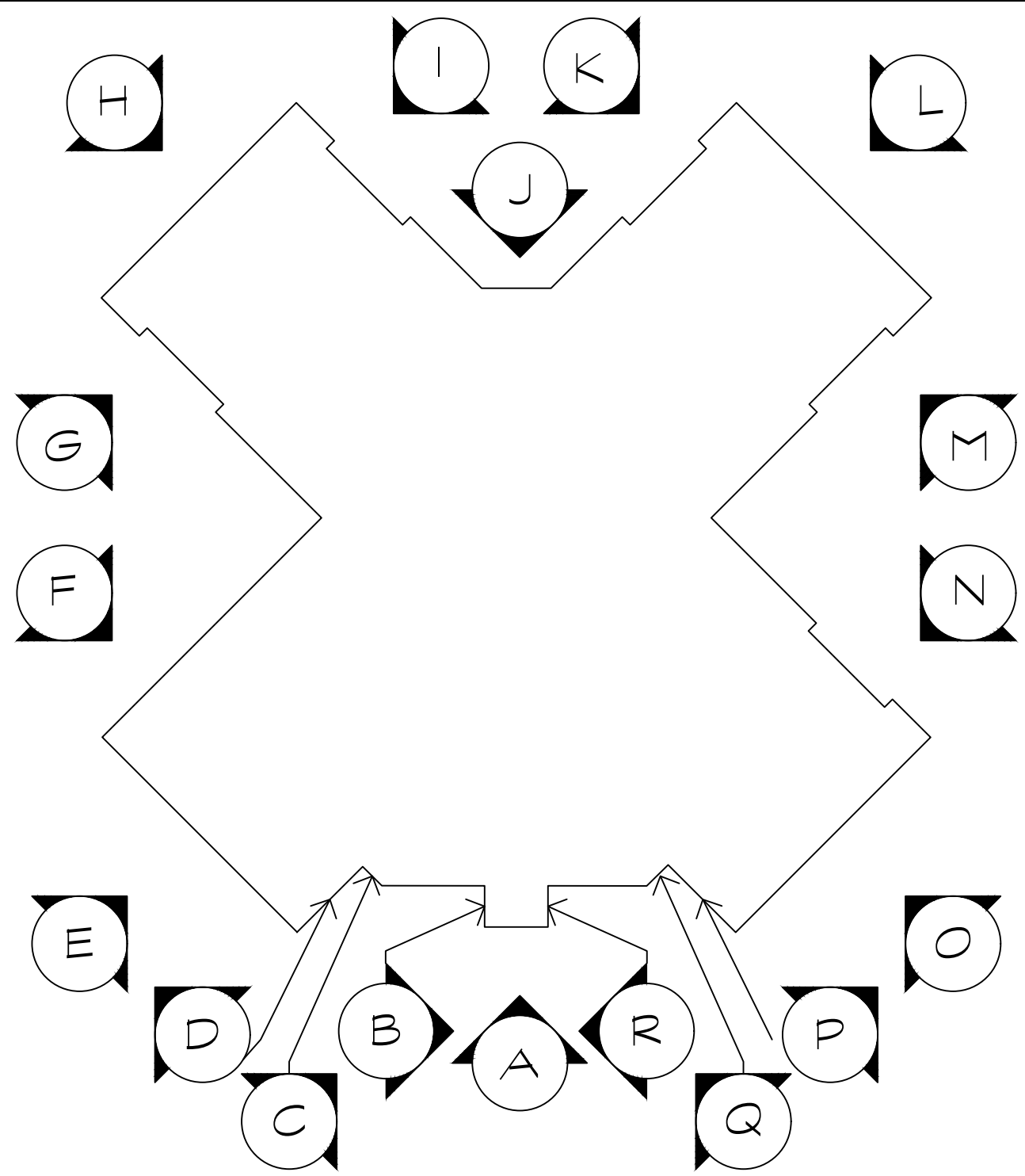
G:\Projects\2025\250095 Horizon Farm Credit AE Design Services\Drawings\Working Sets\A2.2 PARTIAL ELEVATIONS.dwg, 12/30/2025 9:41 AM, Deane L. Townsend



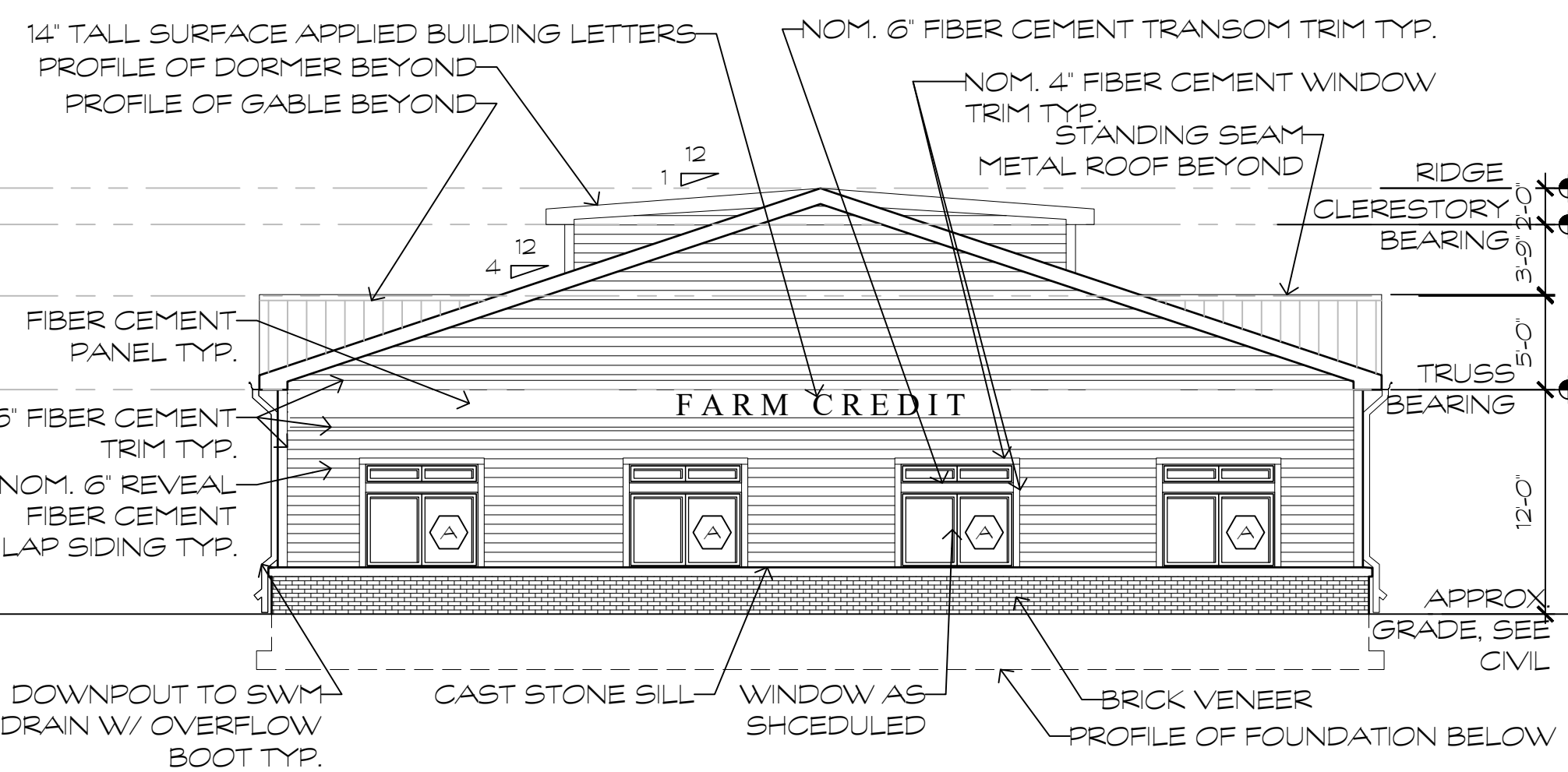
1 WING 2 EAST ELEVATION



J WING 2 - 3 GROIN ELEVATION



K WING 3 NORTH ELEVATION



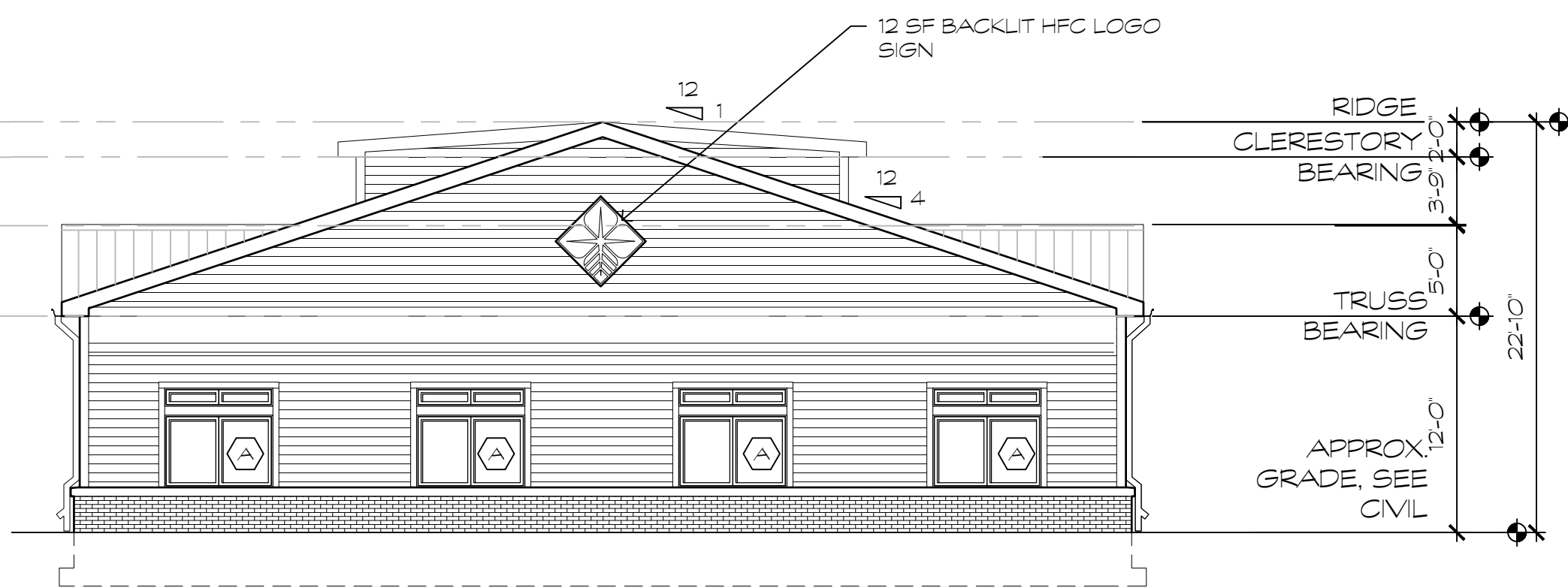
L WING 3 GABLE ELEVATION



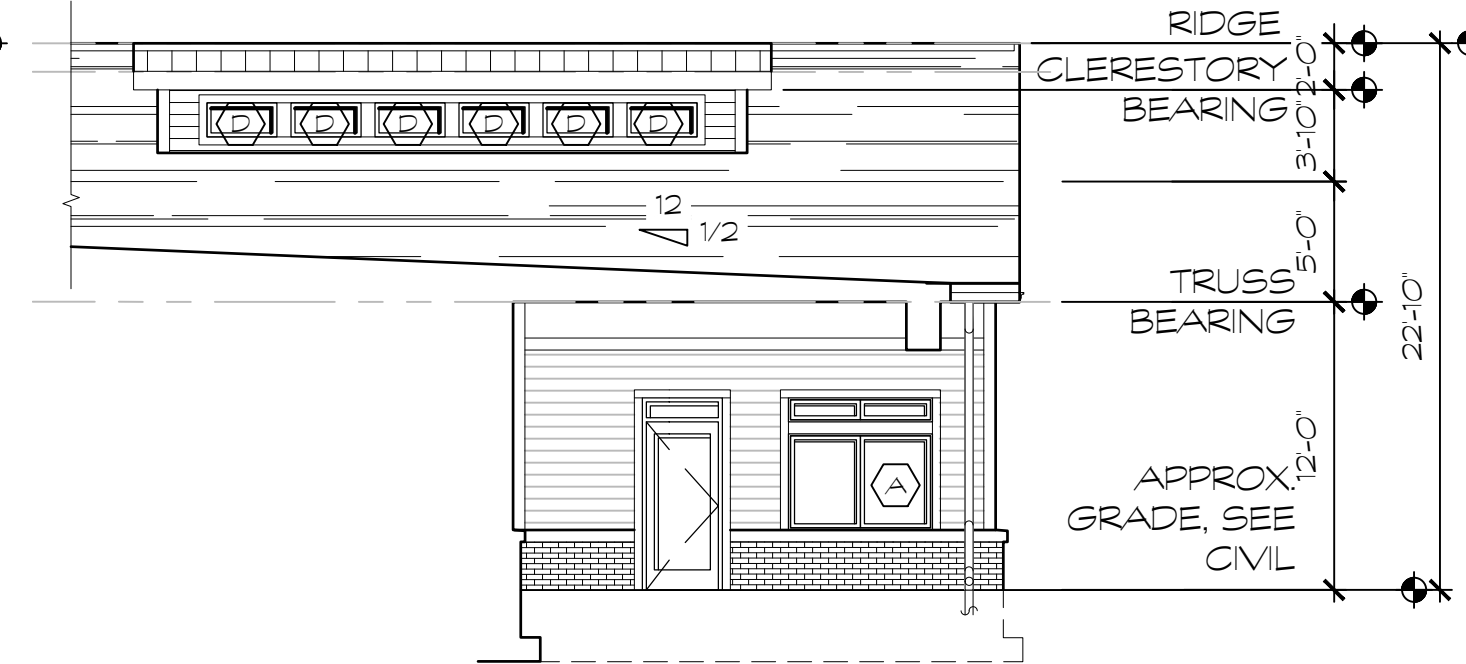
M WING 3 SOUTH ELEVATION



N WING 4 EAST ELEVATION



O WING 4 GABLE ELEVATION



P WING 4 WEST ELEVATION

GMB
GEORGE, MILES & BUHR, LLC
ARCHITECTS & ENGINEERS
SALISBURY, BALTIMORE • SEAFORD
www.gmbnet.com

NEW CONSTRUCTION FOR:
HORIZON FARM CREDIT DHQ
BRIDGEVILLE, DE

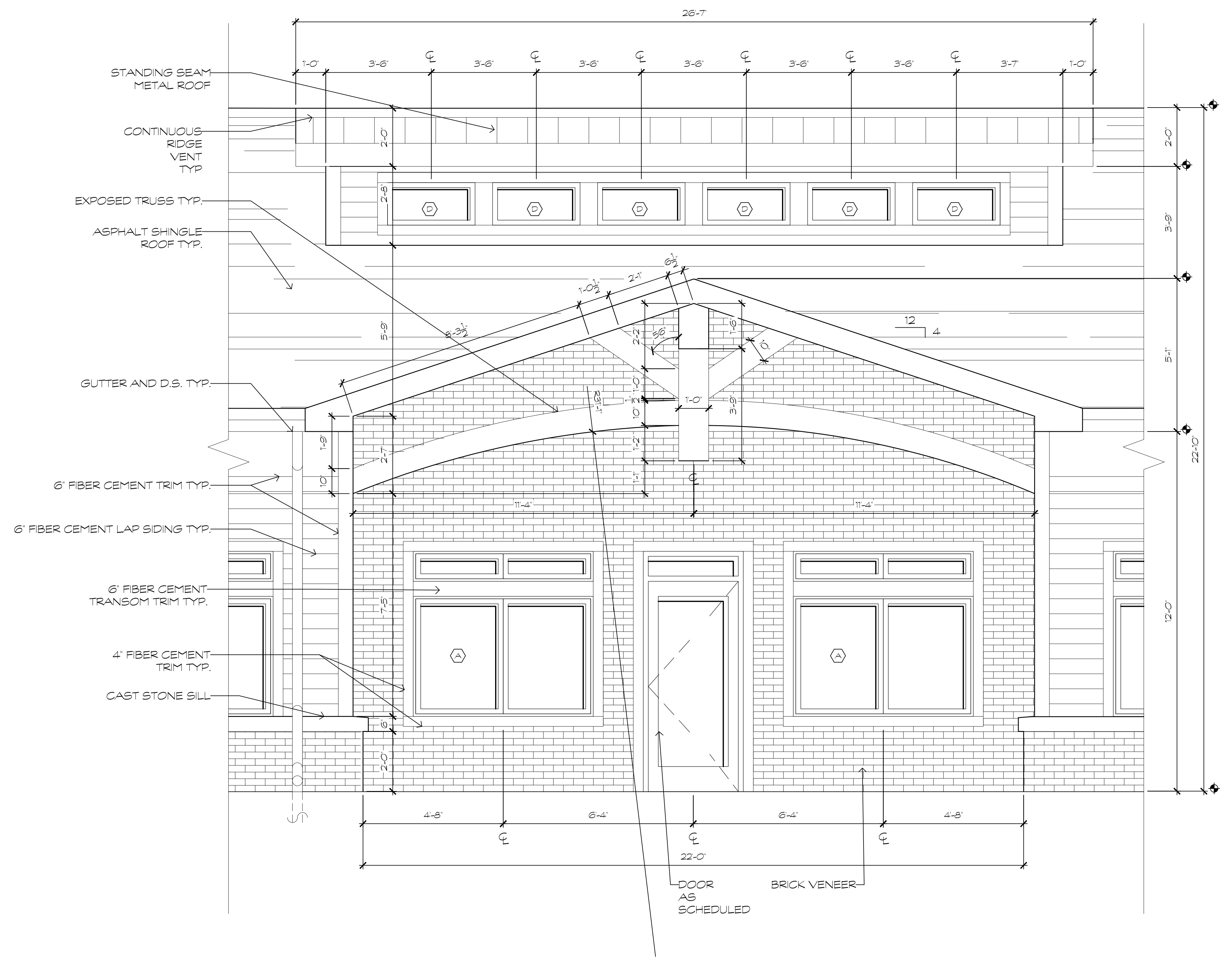
PARTIAL
ELEVATIONS



SCALE : 1/8" = 1'-0"
DESIGN BY : MHH
DRAWN BY : AUB
CHECKED BY : MHH
GMB FILE : 250095
DATE : 12/30/2025

2 NOT USED
N.T.S.

1 TYP. RECESSED GABLE ELEVATION
1/2" = 1'-0"



GMB
 GEORGE, MILES & BUHR, LLC
 ARCHITECTS & ENGINEERS
 SALESBURY, BALTIMORE • SEAFORD
 www.gmbnet.com

NEW CONSTRUCTION FOR:
HORIZON FARM CREDIT DHQ
 BRIDGEVILLE, DE

PARTIAL
 ELEVATIONS

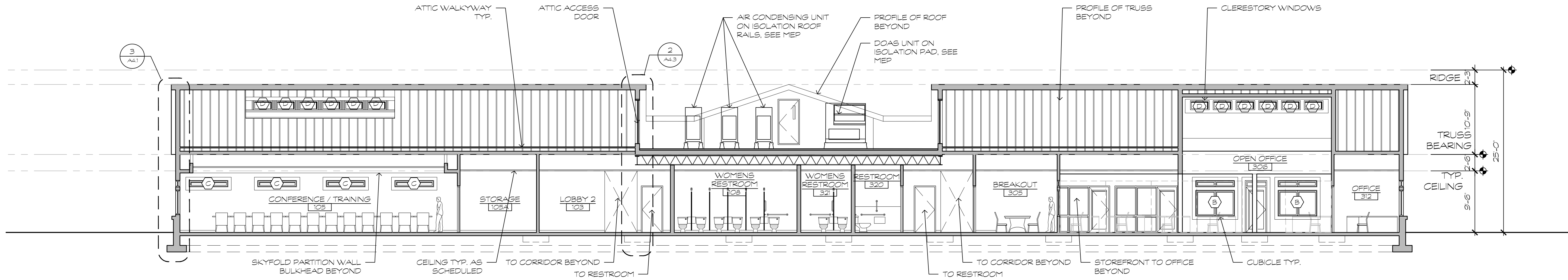


SCALE	: 1/8" = 1'-0"
DESIGN BY	: MHH
DRAWN BY	: AUB
CHECKED BY	: MHH
GMB FILE	: 250095
DATE	: 12/30/2025

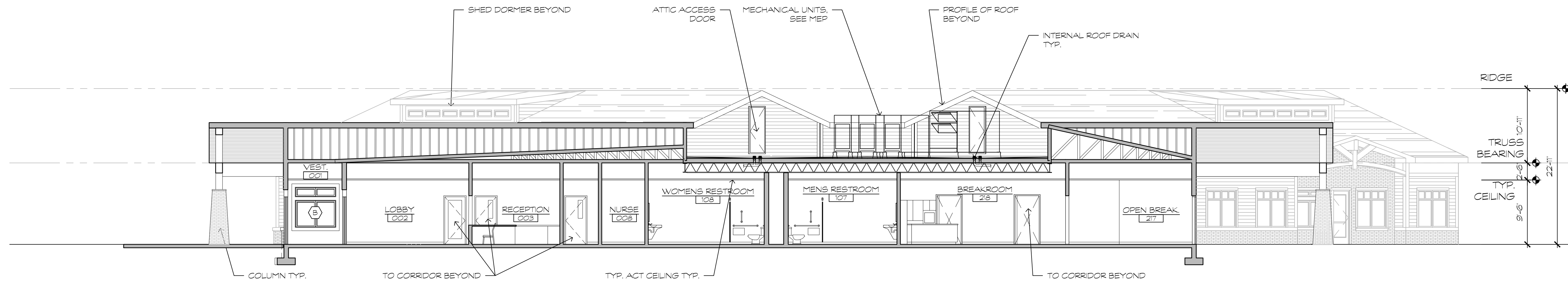
A2.4

NO.	1	REVISION	ISSUED FOR PERMIT	DATE	1/19/2026
-----	---	----------	-------------------	------	-----------

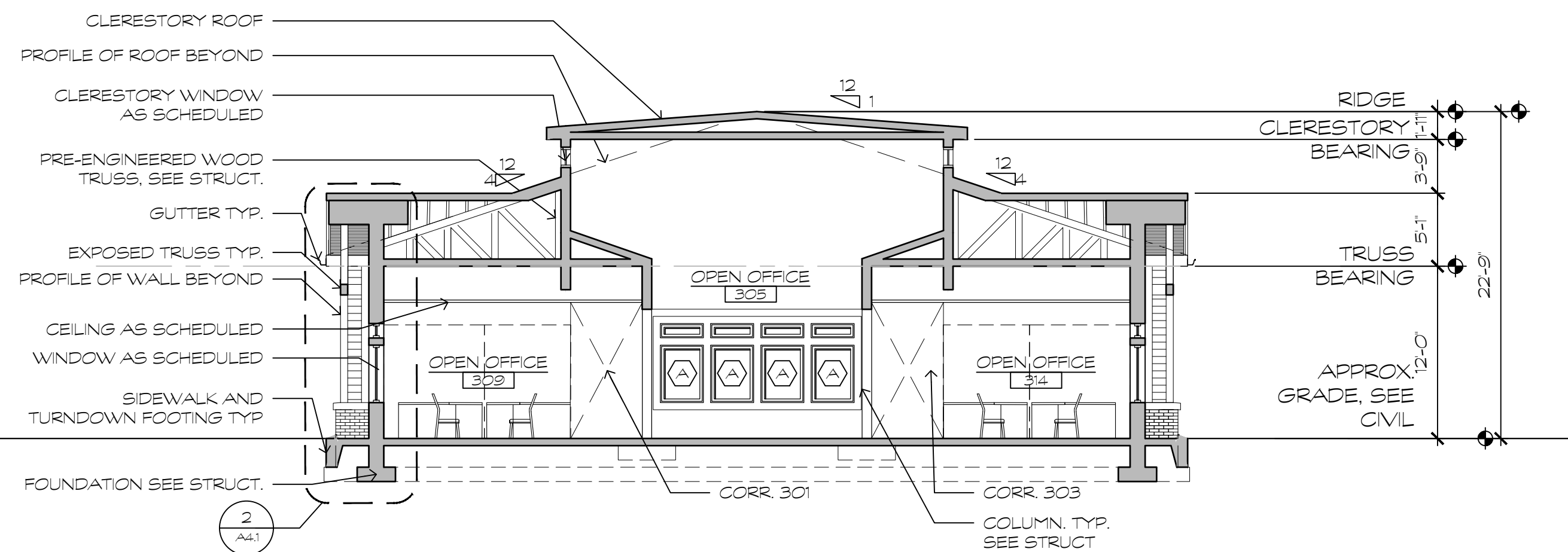
G:\Projects\2025\250095 Horizon Farm Credit AE Design Services\Drawings\Working Sets\A3.1 BUILDING SECTIONS.dwg, 12/30/2025 9:42 AM, Deane L. Townsend



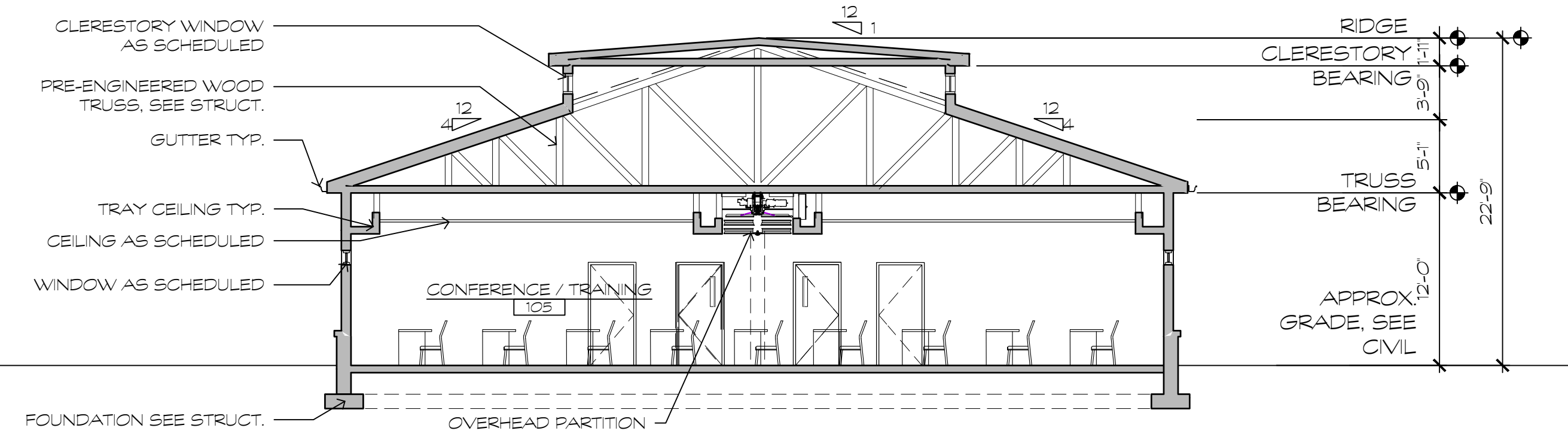
1 BUILDING SECTION
1/8" = 1'-0"



2 BUILDING SECTION
1/8" = 1'-0"



4 BUILDING SECTION
1/8" = 1'-0"



3 BUILDING SECTION
1/8" = 1'-0"

DATE	1/19/2026
REVISION	ISSUED FOR PERMIT
NO	1

GMB
GEORGE, MILES & BUHR, LLC
ARCHITECTS & ENGINEERS
SALESBURY, BALTIMORE • SEAFORD
www.gmbnet.com

NEW CONSTRUCTION FOR:
HORIZON FARM CREDIT DHQ
BRIDGEVILLE, DE

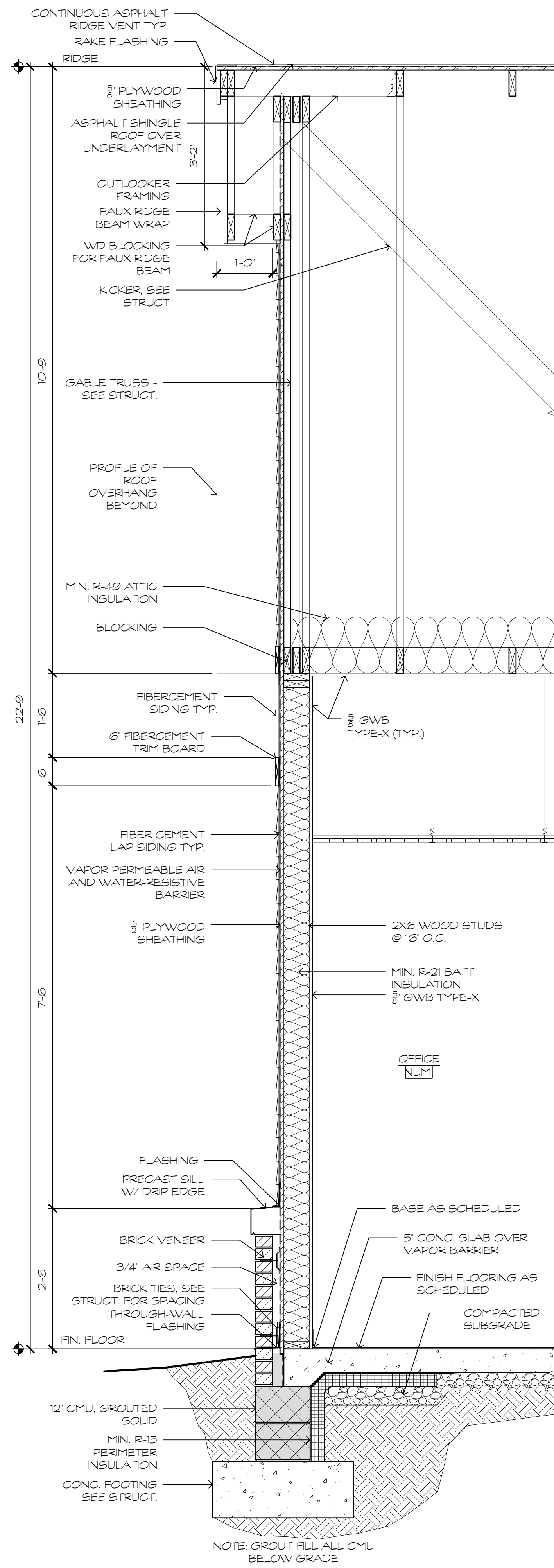
BUILDING SECTIONS



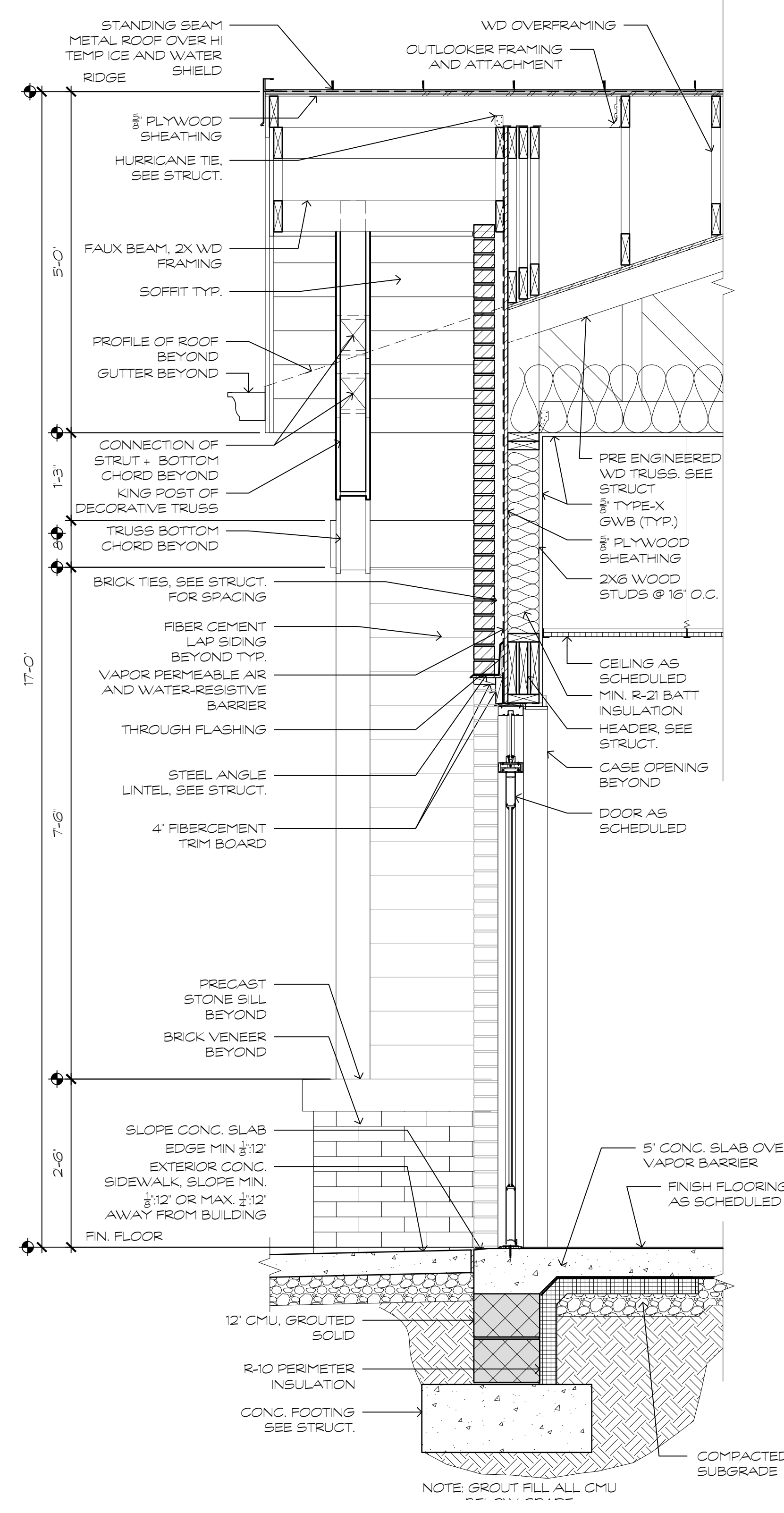
SCALE	1/8" = 1'-0"
DESIGN BY	MHH
DRAWN BY	AJB
CHECKED BY	MHH
GMB FILE	250095
DATE	12/30/2025

A3.1

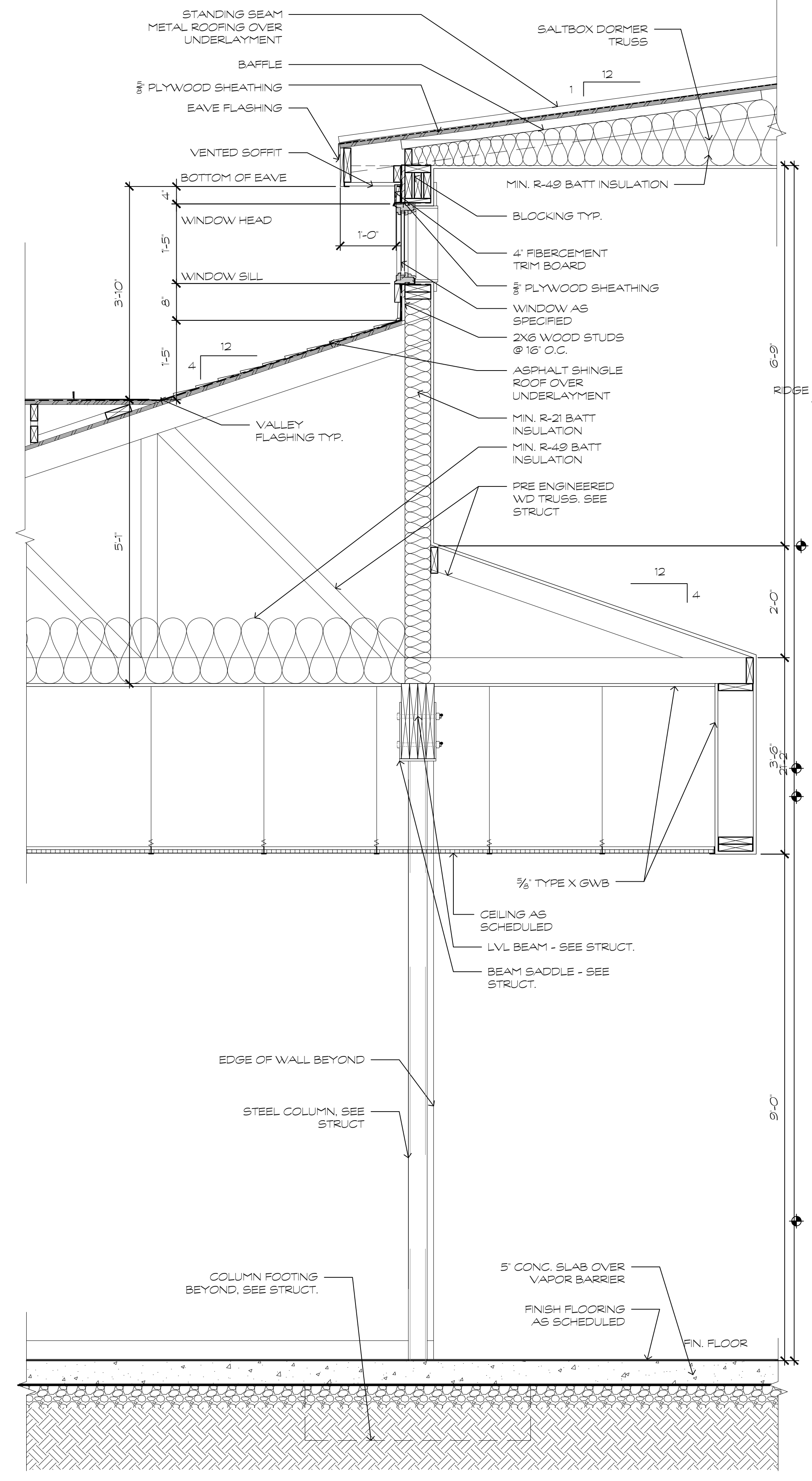
G:\Projects\2025\Horizon Farm Credit AE Design Services\Drawings\Working Sets\A4.1 WALL SECTIONS.dwg, 12/30/2025 9:42 AM, Deane L. Townsend



NOTE: GROUT FILL ALL CMU BELOW GRADE



NOTE: GROUT FILL ALL CMU BELOW GRADE



3 TYP. WALL SECTION
3/4" = 1'-0"

2 TYP. WALL SECTION
3/4" = 1'-0"

1 TYP. WALL SECTION
3/4" = 1'-0"

DATE	1/19/2026
REVISION	ISSUED FOR PERMIT
NO	1

GMB
GEORGE, MILES & BUHR, LLC
ARCHITECTS & ENGINEERS
SALISBURY, BALTIMORE • SEAFORD
www.gmbnet.com

NEW CONSTRUCTION FOR:
HORIZON FARM CREDIT DHQ
BRIDGEVILLE, DE

WALL SECTIONS

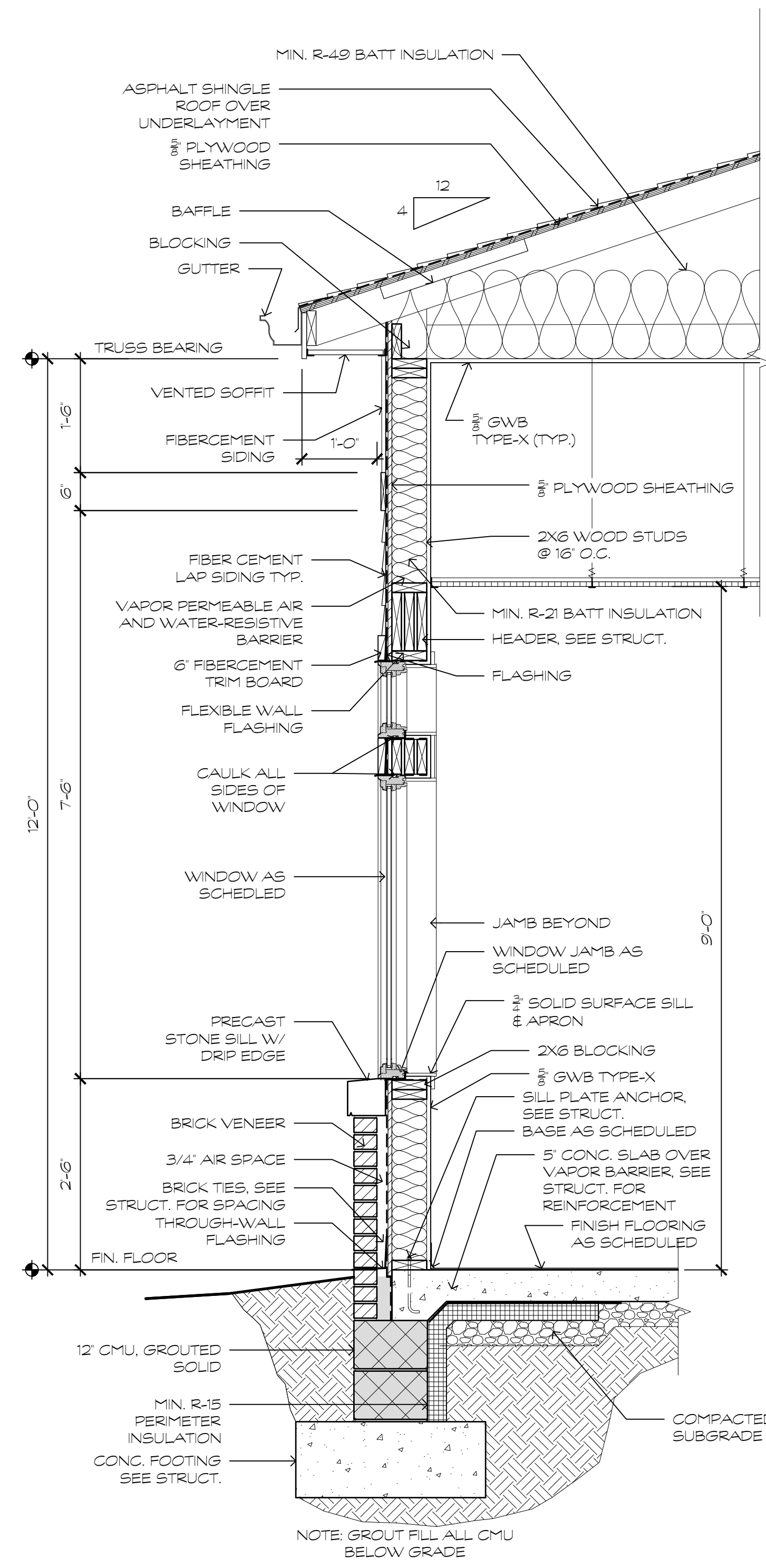
MORRIS HALL FIELD RICH
No. 55-0007646
STATE OF DELAWARE
REGISTERED ARCHITECT

SCALE : 3/4" = 1'-0"
DESIGN BY : MHH
DRAWN BY : AUB
CHECKED BY : MHH
GMB FILE : 250095
DATE : 12/30/2025

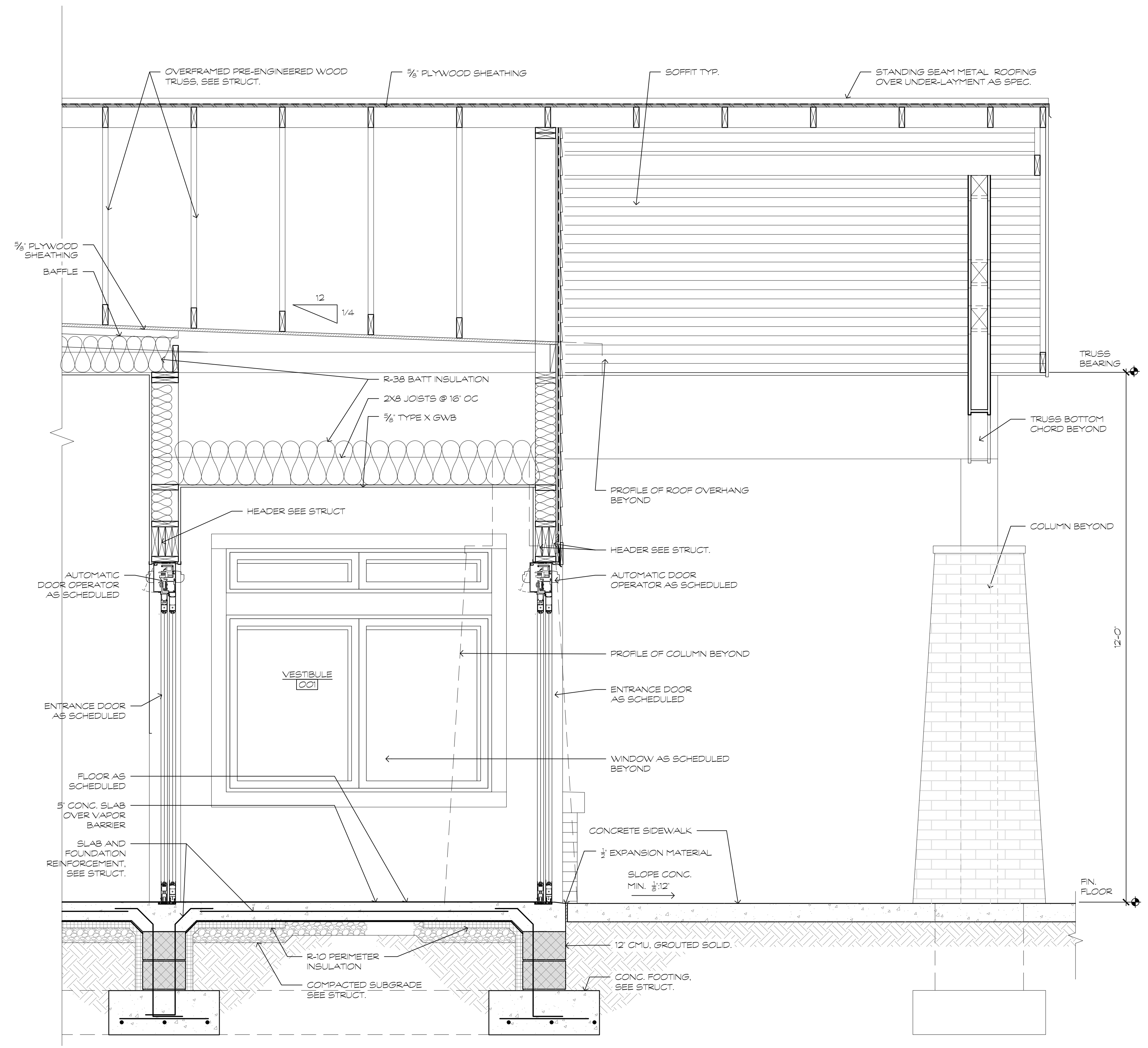
A4.1

© COPYRIGHT 2025 GEORGE, MILES & BUHR, LLC

G:\Projects\2025\250095 Horizon Farm Credit AE Design Services\Drawings\Working Sets\A4.1 WALL SECTIONS.dwg, 12/30/2025 2:27 PM, Deane L. Townsend



2 TYP. WALL SECTION
3/4" = 1'-0"



1 TYP. WALL SECTION
3/4" = 1'-0"

DATE	1/19/2026
REVISION	ISSUED FOR PERMIT
NO.	1

GMB
GEORGE, MILES & BUHR, LLC
ARCHITECTS & ENGINEERS
SALISBURY, BALTIMORE • SEAFORD
www.gmbnet.com

NEW CONSTRUCTION FOR:
HORIZON FARM CREDIT DHQ
BRIDGEVILLE, DE

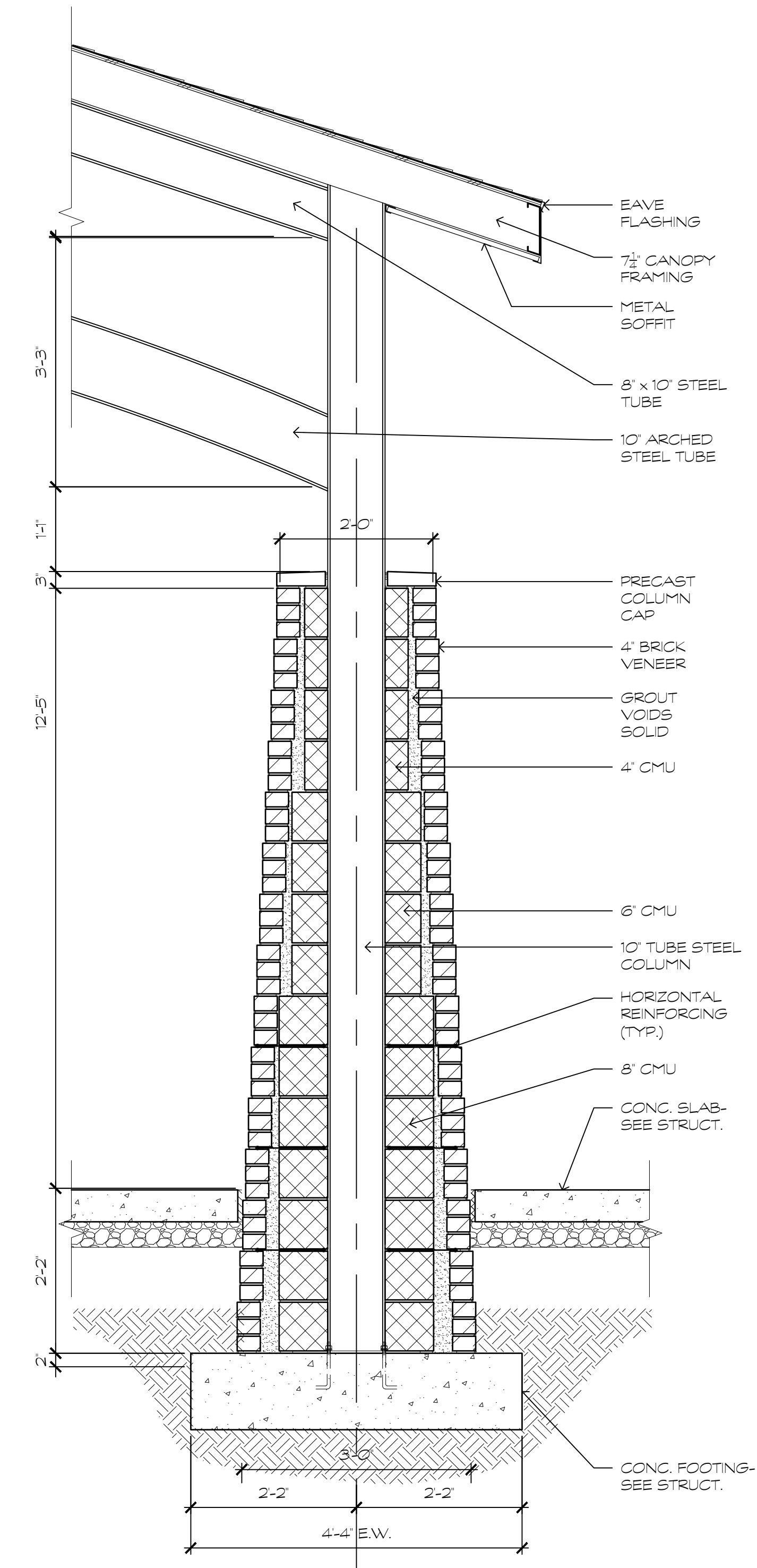
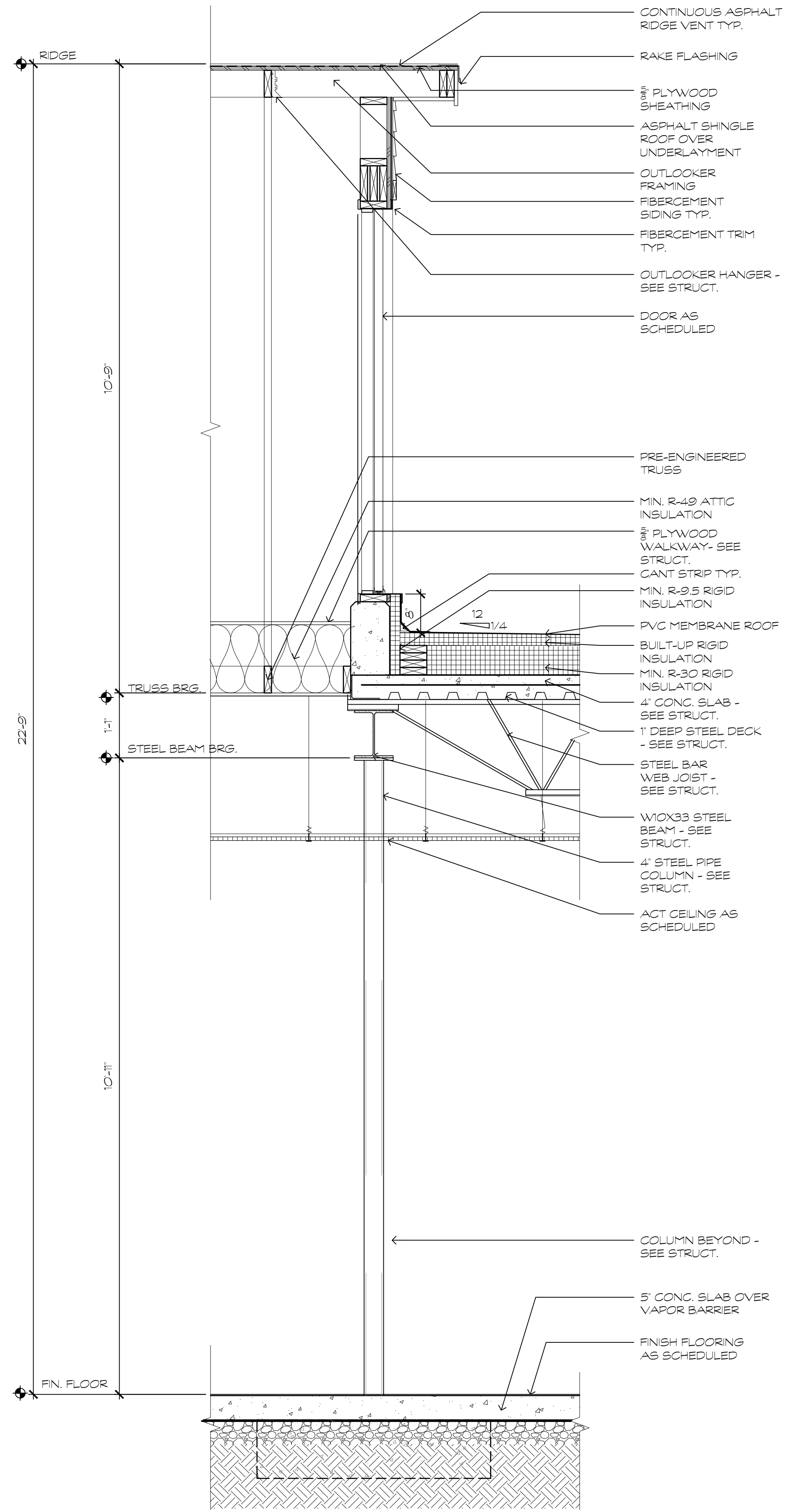
WALL SECTIONS



SCALE	: 3/4" = 1'-0"
DESIGN BY	: MHH
DRAWN BY	: AJB
CHECKED BY	: MHH
GMB FILE	: 250095
DATE	: 12/30/2025

A4.2

G:\Projects\2025\250095 Horizon Farm Credit AE Design Services\Drawings\Working Sets\A4.1 WALL SECTIONS.dwg, 12/30/2025 9:41 AM, Deane L. Townsend



3

NOT USED
 N.T.S.

2

MECHANICAL MEZZANINE SECTION
 3/4" = 1'-0"

1

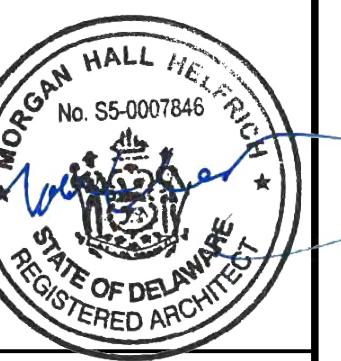
ENTRY CANOPY COLUMN SECTION
 3/4" = 1'-0"

NO. 1
 REVISION
 ISSUED FOR PERMIT
 DATE 1/19/2026



NEW CONSTRUCTION FOR:
 HORIZON FARM CREDIT DHQ
 BRIDGEVILLE, DE

WALL SECTIONS



SCALE : 3/4" = 1'-0"
 DESIGN BY : MHH
 DRAWN BY : AUB
 CHECKED BY : MHH
 GMB FILE : 250095
 DATE : 12/30/2025

A4.3

FINISH SCHEDULE										
ROOM #	ROOM NAME	FLOOR	BASE	WALLS				CEILING	CLG. HT.	NOTES
				N	E	S	W			
001	VESTIBULE	D	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
002	LOBBY	A/B/C/D	RUBBER	PA #2	PA #1	PA #1	PA #1	ACT	9'-6"	
003	RECEPTION	A	RUBBER	PA #2	PA #1	PA #1	PA #1	ACT	9'-6"	
004	RESTROOM	A	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
005	CORRIDOR	A	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
006	SUPPLY	A	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
007	CORRIDOR	A	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
008	NURSING	A	RUBBER	PA #2	PA #1	PA #1	PA #2	ACT	9'-6"	
009	MEETING	D	RUBBER	PA #1	PA #2	PA #1	PA #1	ACT	9'-6"	
010	SPRINKLER	E	RUBBER	PA #1	PA #1	PA #1	PA #1	GWB	9'-6"	
CORE										
101	VESTIBULE 2	D	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
102	CORRIDOR	A	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
103	LOBBY 2	A	RUBBER	PA #1	PA #1	PA #1	PA #2	ACT	9'-6"	
104	CORRIDOR	A	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
105	CONFERENCE/TRAINING	D	RUBBER	PA #2	PA #1	PA #2	PA #1	ACT/GWB	9'-6"	
105A	STORAGE	A	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
105B	AV. CLOSET	D	RUBBER	PA #1	PA #1	PA #1	PA #1	GWB	9'-6"	
106	KITCHEN	C	RUBBER	PA #1	PA #5	PA #1	PA #1	ACT	9'-6"	
107	MENS RESTROOM	C	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
108	WOMENS RESTROOM	C	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
109	CORRIDOR	A	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
110	JANITOR/STORAGE	E	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
111	DELIVERY	E	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
111A	STORAGE	E	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
WING 1										
201	CORRIDOR	A	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
202	CORRIDOR	A	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
203	CORRIDOR	A	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
204	CORRIDOR	A	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
205	BREAKOUT ROOM	A	RUBBER	PA #1	PA #2	PA #1	PA #2	ACT	9'-6"	
206	OPEN OFFICE	D	RUBBER	PA #3	PA #3	PA #3	PA #3	GWB	VARIES	
207	OFFICE	D	RUBBER	PA #1	PA #1	PA #4	PA #1	ACT	9'-6"	
208	OFFICE	D	RUBBER	PA #1	PA #1	PA #4	PA #1	ACT	9'-6"	
209	OPEN OFFICE	D	RUBBER	PA #3	PA #3	PA #3	PA #3	ACT	9'-6"	
210	OFFICE	D	RUBBER	PA #1	PA #4	PA #1	PA #1	ACT	9'-6"	
211	OFFICE	D	RUBBER	PA #1	PA #1	PA #4	PA #1	ACT	9'-6"	
212	OFFICE	D	RUBBER	PA #1	PA #4	PA #1	PA #1	ACT	9'-6"	
213	OFFICE	D	RUBBER	PA #1	PA #1	PA #4	PA #1	ACT	9'-6"	
214	OPEN OFFICE	D	RUBBER	PA #3	PA #3	PA #3	PA #3	ACT	9'-6"	
215	OFFICE	D	RUBBER	PA #1	PA #1	PA #4	PA #1	ACT	9'-6"	
216	OFFICE	D	RUBBER	PA #1	PA #1	PA #4	PA #1	ACT	9'-6"	
217	OPEN BREAKROOM	D	RUBBER	PA #3	PA #3	PA #3	PA #3	ACT	9'-6"	
218	BREAKROOM	C	RUBBER	PA #1	PA #1	PA #1	PA #5	ACT	9'-6"	
WING 2										

FINISH SCHEDULE										
ROOM #	ROOM NAME	FLOOR	BASE	WALLS				CEILING	CLG. HT.	NOTES
				N	E	S	W			
301	CORRIDOR	A	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
302	CORRIDOR	A	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
303	CORRIDOR	A	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
304	CORRIDOR	A	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
305	BREAKOUT ROOM	D	RUBBER	PA #1	PA #2	PA #1	PA #2	ACT	9'-6"	
306	OPEN OFFICE	D	RUBBER	PA #3	PA #3	PA #3	PA #3	GWB	VARIES	
307	ELEC	E	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
308	OFFICE	D	RUBBER	PA #1	PA #1	PA #4	PA #1	ACT	9'-6"	
309	OFFICE	D	RUBBER	PA #1	PA #1	PA #4	PA #1	ACT	9'-6"	
310	OPEN OFFICE	D	RUBBER	PA #3	PA #3	PA #3	PA #3	ACT	9'-6"	
311	OFFICE	D	RUBBER	PA #4	PA #1	PA #1	PA #1	ACT	9'-6"	
312	OFFICE	D	RUBBER	PA #1	PA #1	PA #4	PA #1	ACT	9'-6"	
313	OFFICE	D	RUBBER	PA #4	PA #1	PA #1	PA #1	ACT	9'-6"	
314	OFFICE	D	RUBBER	PA #1	PA #1	PA #4	PA #1	ACT	9'-6"	
315	OPEN OFFICE	D	RUBBER	PA #3	PA #3	PA #3	PA #3	ACT	9'-6"	
316	OFFICE	D	RUBBER	PA #1	PA #1	PA #4	PA #1	ACT	9'-6"	
317	OFFICE	D	RUBBER	PA #1	PA #1	PA #4	PA #1	ACT	9'-6"	
318	MENS RESTROOM	C	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
319	RESTROOM	C	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
320	WOMENS RESTROOM	C	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
WING 3										
401	CORRIDOR	A	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
402	CORRIDOR	A	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
403	CORRIDOR	A	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
404	CORRIDOR	A	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
405	IT STORAGE	A	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
406	SERVER	F	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
407	STORAGE	A	RUBBER	PA #1	PA #1	PA #1	PA #1	ACT	9'-6"	
408	OPEN OFFICE	D	RUBBER	PA #3	PA #3	PA #3	PA #3	GWB	VARIES	
409	CONFERENCE	D	RUBBER	PA #2	PA #1	PA #2	PA #1	ACT	9'-6"	
410	OFFICE	D	RUBBER	PA #4	PA #1	PA #1	PA #1	ACT	9'-6"	
411	OPEN OFFICE	D	RUBBER	PA #3	PA #3	PA #3	PA #3	ACT	9'-6"	
412	OFFICE	D	RUBBER	PA #1	PA #1	PA #4	PA #1	ACT	9'-6"	
413	OFFICE	D	RUBBER	PA #4	PA #1	PA #1	PA #1	ACT	9'-6"	
414	OFFICE	D	RUBBER	PA #1	PA #1	PA #4	PA #1	ACT	9'-6"	
415	OFFICE	D	RUBBER	PA #4	PA #1	PA #1	PA #1	ACT	9'-6"	
WING 4										

NOTES:

- REFER TO SPECIFICATIONS FOR DETAILS AND REQUIREMENTS OF FLOORING, BASEBOARD, WALL FINISH AND CEILING TYPES.
- SEE FLOORING PLAN A1.2 FOR ADDITIONAL INFORMATION AND ACCENT FLOORING.

KEY:

- PA #1 = SW9584 'MORTAR'
- PA #2 = SW9039 'BROCCOFLOWER'
- PA #3 = SW9149 'INKY BLUE'
- PA #4 = SW9147 'FAVORITE JEANS'
- PA #5 = SW7048 'URBANE BRONZE'
- FLOORING A = LUXURY VINYL TILE STYLE #1
AVA FLOORING - RSRV - KYOTO LOFT
- FLOORING B = LUXURY VINYL TILE STYLE #2
PATCRAFT FLOORING - EARTHEN - MOUNTAIN
- FLOORING C = LUXURY VINYL TILE STYLE #3
PATCRAFT FLOORING - NUMIX - SEPIA FLECK
- FLOORING D = CARPET STYLE #1
PATCRAFT FLOORING - EXPERIENCE - OUTCOME
- FLOORING E = SEALED CONCRETE
- FLOORING F = ELECTROSTATIC TILE
STATIC STOP - DESIGNER - QUARRY SAND
- FLOORING H = CERAMIC TILE
DAL TILE - ACREAGE - STETSON

DATE: 1/19/2026
 REVISION: ISSUED FOR PERMIT
 NO: 1

NEW CONSTRUCTION FOR:
HORIZON FARM CREDIT DHQ
 BRIDGEVILLE, DE

FINISH SCHEDULE



SCALE : N.T.S.
 DESIGN BY : MHH
 DRAWN BY : AUB
 CHECKED BY : MHH
 GMB FILE : 250095
 DATE : 12/30/2025

A5.1

G:\Projects\2025\250095 Horizon Farm Credit AE Design Services\Drawings\Working Sets\A5.2 DOOR AND HARDWARE SCHEDULE.dwg, 3/5/2026 3:14 PM, Deane L. Townsend

DOOR SCHEDULE													
DOOR #	ROOM NAME	TYPE	MATL.	SIZE	THICK	RATING	FRAME	HDWR.	HEAD	JAMB	SILL	ACC. CTRL.	REMARKS
001A	VESTIBULE	B	ALUM.	3'-0" x 7'-0" PAIR	1 3/4"	--	F-2	HW-1	--	--	--		
001B	LOBBY	B	ALUM.	3'-0" x 7'-0" PAIR	1 3/4"	--	F-2	HW-1	--	--	--		
002A	LOBBY	E	WD.	3'-0" x 7'-0"	1 3/4"	--	F-1	HW-4	--	--	--		
002B	LOBBY	E	WD.	3'-0" x 7'-0"	1 3/4"	--	F-1	HW-4	--	--	--		
003A	RECEPTION	E	WD.	3'-0" x 7'-0"	1 3/4"	--	F-1	HW-3	--	--	--		
003B	RECEPTION	E	WD.	3'-0" x 7'-0"	1 3/4"	--	F-1	HW-3	--	--	--		
004A	RESTROOM	C	WD.	3'-0" x 7'-0"	1 3/4"	--	F-1	HW-8	--	--	--		
006A	SUPPLY	C	WD.	3'-0" x 7'-0"	1 3/4"	--	F-1	HW-5	--	--	--		
007A	CORRIDOR	E	WD.	3'-0" x 7'-0"	1 3/4"	--	F-1	HW-4	--	--	--		
008A	NURSING	C	WD.	3'-0" x 7'-0"	1 3/4"	--	F-1	HW-8	--	--	--		
009A	MEETING	E	WD.	3'-0" x 7'-0"	1 3/4"	--	F-1	HW-3	--	--	--		
010A	SPRINKLER	C	HM	3'-0" x 7'-0"	1 3/4"	--	F-7	HW-5C	--	--	--		
101A	VESTIBULE 2	A	ALUM.	3'-0" x 7'-0" PAIR	1 3/4"	--	F-6	HW-1	--	--	--		
101B	VESTIBULE 2	D	WD.	3'-0" x 7'-0"	1 3/4"	--	F-1	HW-4	--	--	--		
101C	VESTIBULE 2	E	ALUM.	3'-0" x 7'-0" PAIR	1 3/4"	60 MIN.	F-1	HW-1	--	--	--		
105A	CONFERENCE/ TRAINING	A	ALUM.	3'-0" x 7'-0"	1 3/4"	--	F-7	HW-2	--	--	--		
105B	CONFERENCE/ TRAINING	A	ALUM.	3'-0" x 7'-0"	1 3/4"	--	F-7	HW-2	--	--	--		
105C	CONFERENCE/ TRAINING	E	WD.	3'-0" x 7'-0"	1 3/4"	60 MIN.	F-1	HW-3	--	--	--		
105D	CONFERENCE/ TRAINING	E	WD.	3'-0" x 7'-0"	1 3/4"	60 MIN.	F-1	HW-3	--	--	--		
105E	CONFERENCE/ TRAINING	G	COMP.	42'-8" x 9'-6"	1 3/4"	--	--	--	--	--	--		OVERHEAD PARTITION
105F	STORAGE	C	WD.	3'-0" x 7'-0"	1 3/4"	--	F-1	HW-5	--	--	--		
105G	AV.	C	WD.	3'-0" x 7'-0"	1 3/4"	--	F-1	HW-5	--	--	--		
107A	MENS RESTROOM	C	WD.	3'-0" x 7'-0"	1 3/4"	--	F-1	HW-4B	--	--	--		
108A	WOMENS RESTROOM	C	WD.	3'-0" x 7'-0"	1 3/4"	--	F-1	HW-4B	--	--	--		
109A	CORRIDOR	A	ALUM.	3'-0" x 7'-0"	1 3/4"	--	F-7	HW-2	--	--	--		
110A	JANITOR	C	WD.	3'-0" x 7'-0"	1 3/4"	--	F-1	HW-5	--	--	--		
111A	DELIVERY	C	WD.	3'-0" x 7'-0"	1 3/4"	--	F-1	HW-5	--	--	--		
111B	DELIVERY	F	ALUM.	10'-0" x 8'-0" OVERHEAD	1 3/4"	--	F-4	HW-1A	--	--	--		
111C	DELIVERY	C	WD.	3'-0" x 7'-0"	1 3/4"	60 MIN.	F-1	HW-5	--	--	--		
111D	STORAGE	C	WD.	3'-0" x 7'-0"	1 3/4"	--	F-1	HW-5	--	--	--		
201A	CORRIDOR	E	WD.	3'-0" x 7'-0"	1 3/4"	--	F-1	HW-4	--	--	--		
205A	BREAKOUT ROOM	D	WD.	3'-0" x 7'-0" PAIR	1 3/4"	--	F-3	HW-1A	--	--	--		
207A	OFFICE	D	WD.	3'-0" x 7'-0"	1 3/4"	--	F-5	HW-3	--	--	--		
208A	OFFICE	D	WD.	3'-0" x 7'-0"	1 3/4"	--	F-5	HW-3	--	--	--		
209A	OPEN OFFICE	A	ALUM.	3'-0" x 7'-0"	1 3/4"	--	F-7	HW-2	--	--	--		
210A	OFFICE	D	WD.	3'-0" x 7'-0"	1 3/4"	--	F-5	HW-3	--	--	--		
211A	OFFICE	D	WD.	3'-0" x 7'-0"	1 3/4"	--	F-5	HW-3	--	--	--		
212A	OFFICE	D	WD.	3'-0" x 7'-0"	1 3/4"	--	F-5	HW-3	--	--	--		
213A	OFFICE	D	WD.	3'-0" x 7'-0"	1 3/4"	--	F-5	HW-3	--	--	--		
214A	OPEN OFFICE	A	ALUM.	3'-0" x 7'-0"	1 3/4"	--	F-7	HW-2	--	--	--		
215A	OFFICE	D	WD.	3'-0" x 7'-0"	1 3/4"	--	F-5	HW-3	--	--	--		
216A	OFFICE	D	WD.	3'-0" x 7'-0"	1 3/4"	--	F-5	HW-3	--	--	--		
217A	OPEN BREAK	A	ALUM.	3'-0" x 7'-0" PAIR	1 3/4"	--	F-6	HW-1	--	--	--		

WING 1/CORE

WING 2

DOOR SCHEDULE													
DOOR #	ROOM NAME	TYPE	MATL.	SIZE	THICK	RATING	FRAME	HDWR.	HEAD	JAMB	SILL	ACC. CTRL.	REMARKS
305A	BREAKROOM	D	WD.	3'-0" x 7'-0" PAIR	1 3/4"	--	F-3	HW-1A	--	--	--		
307A	ELEC.	C	WD.	3'-0" x 7'-0"	1 3/4"	--	F-1	HW-5	--	--	--		
308A	OFFICE	D	WD.	3'-0" x 7'-0"	1 3/4"	--	F-5	HW-3	--	--	--		
309A	OFFICE	D	WD.	3'-0" x 7'-0"	1 3/4"	--	F-5	HW-3	--	--	--		
310A	OPEN OFFICE	A	ALUM.	3'-0" x 7'-0"	1 3/4"	--	F-7	HW-2	--	--	--		
311A	OFFICE	D	WD.	3'-0" x 7'-0"	1 3/4"	--	F-5	HW-3	--	--	--		
312A	OFFICE	D	WD.	3'-0" x 7'-0"	1 3/4"	--	F-5	HW-3	--	--	--		
313A	OFFICE	D	WD.	3'-0" x 7'-0"	1 3/4"	--	F-5	HW-3	--	--	--		
314A	OFFICE	D	WD.	3'-0" x 7'-0"	1 3/4"	--	F-5	HW-3	--	--	--		
315A	OPEN OFFICE	A	ALUM.	3'-0" x 7'-0"	1 3/4"	--	F-7	HW-2	--	--	--		
316A	OFFICE	D	WD.	3'-0" x 7'-0"	1 3/4"	--	F-5	HW-3	--	--	--		
317A	OFFICE	D	WD.	3'-0" x 7'-0"	1 3/4"	--	F-5	HW-3	--	--	--		
318A	MENS RESTROOM	C	WD.	3'-0" x 7'-0"	1 3/4"	--	F-1	HW-4B	--	--	--		
319A	RESTROOM	C	WD.	3'-0" x 7'-0"	1 3/4"	--	F-1	HW-8	--	--	--		
320A	WOMENS RESTROOM	C	WD.	3'-0" x 7'-0"	1 3/4"	--	F-1	HW-4B	--	--	--		
403A	CORRIDOR	A	ALUM.	3'-0" x 7'-0"	1 3/4"	--	F-7	HW-2	--	--	--		
405A	IT STORAGE	E	WD.	3'-0" x 7'-0"	1 3/4"	60 MIN.	F-1	HW-5A	--	--	--		
406A	SERVER	C	WD.	3'-0" x 7'-0"	1 3/4"	--	F-1	HW-5B	--	--	--		
407A	STORAGE	E	WD.	3'-0" x 7'-0"	1 3/4"	--	F-1	HW-5	--	--	--		
409A	CONFERENCE	D	WD.	3'-0" x 7'-0" PAIR	1 3/4"	--	F-8	HW-3	--	--	--		
410A	OFFICE	D	WD.	3'-0" x 7'-0"	1 3/4"	--	F-5	HW-3	--	--	--		
411A	OPEN OFFICE	A	ALUM.	3'-0" x 7'-0"	1 3/4"	--	F-7	HW-2	--	--	--		
412A	OFFICE	D	WD.	3'-0" x 7'-0"	1 3/4"	--	F-5	HW-3	--	--	--		
413A	OFFICE	D	WD.	3'-0" x 7'-0"	1 3/4"	--	F-5	HW-3	--	--	--		
414A	OFFICE	D	WD.	3'-0" x 7'-0"	1 3/4"	--	F-5	HW-3	--	--	--		
415A	OFFICE	D	WD.	3'-0" x 7'-0"	1 3/4"	--	F-5	HW-3	--	--	--		
601A	WING 1 ATTIC	E	HM.	3'-0" x 6'-8"	1 3/4"	--	F-9	HW-5A	--	--	--		
602A	WING 2 ATTIC	E	HM.	3'-0" x 6'-8"	1 3/4"	--	F-9	HW-5A	--	--	--		
603A	WING 3 ATTIC	E	HM.	3'-0" x 6'-8"	1 3/4"	--	F-9	HW-5A	--	--	--		
604A	WING 4 ATTIC	E	HM.	3'-0" x 6'-8"	1 3/4"	--	F-9	HW-5A	--	--	--		

WING 3

WING 4

ATTIC

HARDWARE SCHEDULE

HW-1 - AUTOMATIC DOOR OPERATOR w/ KEYPAD LOCK CYLINDER. BALANCE OF HARDWARE FURNISHED BY DOOR SUPPLIER, INCLUDING PANIC HARDWARE.	HW-5B - SAME AS HW-5 w/ WALL/FLOOR BUMPER 1 CLOSER 2 KICKPLATES
HW-2 1/2 PR HINGES (BB) ENTRANCE/OFFICE LOCKSET INT. PUSHBUTTON W/O 90° ROTATION CLOSER 2 KICKPLATES DOOR STOP	HW-5C - SAME AS HW-5 w/ WALL/FLOOR BUMPER 1 WEATHER STRIP DOOR SHOE 1 HW-5D - SAME AS HW-5 w/ WALL/FLOOR BUMPER 1 KEYPAD
HW-2A - SAME AS HW-2 w/ NO CLOSER	HW-5E - SAME AS HW-5 w/ WALL/FLOOR BUMPER 1 PANIC HARDWARE CLOSER
HW-2B - SAME AS HW-2 w/ DEADBOLT OCCUPANCY INDICATOR	HW-6 3 PR HINGES (BB) STORAGE LOCKSET 1 T & B FLUSH BOLT (NACTIVE LEAF) 2 CLOSERS COORDINATING DEVICE 4 KICKPLATES DOOR STOP
HW-3 1/2 PR HINGES (BB) 1 ENTRY LOCKSET 2 KICKPLATES DOOR STOP	HW-7 HARDWARE PROVIDED BY DOOR MANUFACTURER
HW-4 1/2 PR HINGES (BB) 1 PASSAGE SET 1 CLOSER 2 KICKPLATES DOOR STOP	HW-7A - SAME AS HW-7 w/ PANIC HARDWARE w/ ALARM KIT
HW-4A - SAME AS HW-4 w/ NO CLOSER	HW-8 1/2 PR HINGES (BB) 1 PRIVACY LOCKSET 1 CLOSER 2 KICKPLATES DOOR STOP
HW-4B - SAME AS HW-4 w/ NO LOCKSET, PUSH/PULL PLATE ONLY	HW-8A - SAME AS HW-8 w/ NO CLOSER
HW-5 1/2 PR HINGES (BB) 1 STORAGE LOCKSET DOOR STOP	HW-9 1/2 PR HINGES (BB) 1 LOCKSET w/o CYLINDER 1 CLOSER 2 KICKPLATES DOOR STOP
HW-5A - SAME AS HW-5 w/ WALL/FLOOR BUMPER 1 CLOSER 1 WEATHER STRIP 1 THRESHOLD	



NEW CONSTRUCTION FOR:
HORIZON FARM CREDIT DHQ
BRIDGEVILLE, DE

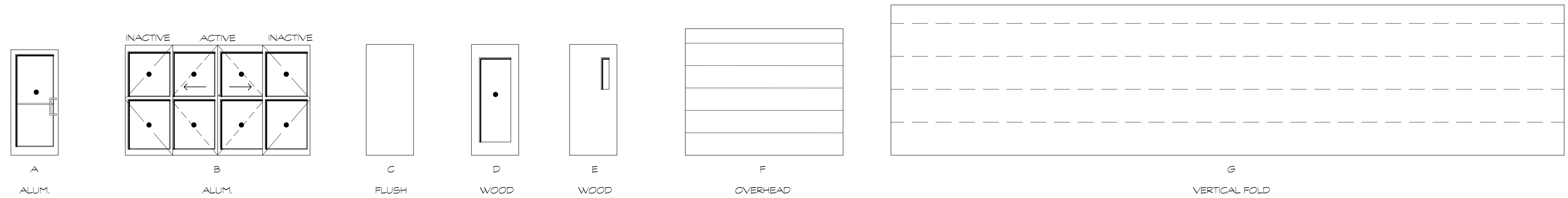
DOOR &
HARDWARE
SCHEDULE



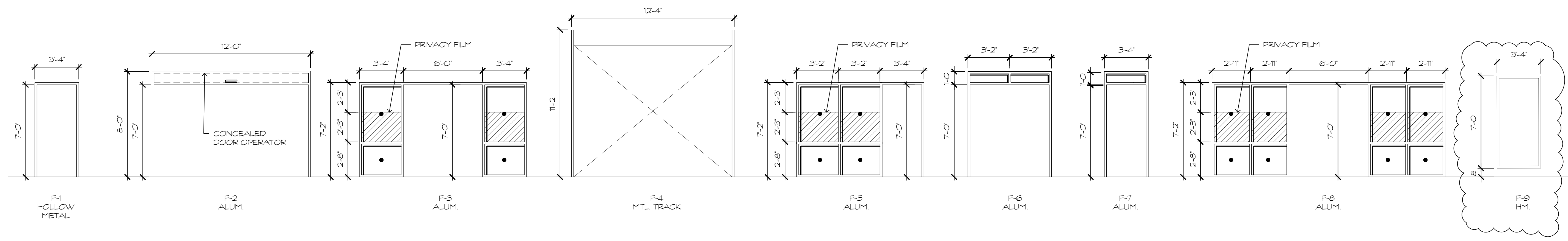
SCALE : N.T.S.
DESIGN BY : MHH
DRAWN BY : AUB
CHECKED BY : MHH
GMB FILE : 250095
DATE : 12/30/2025

A5.2

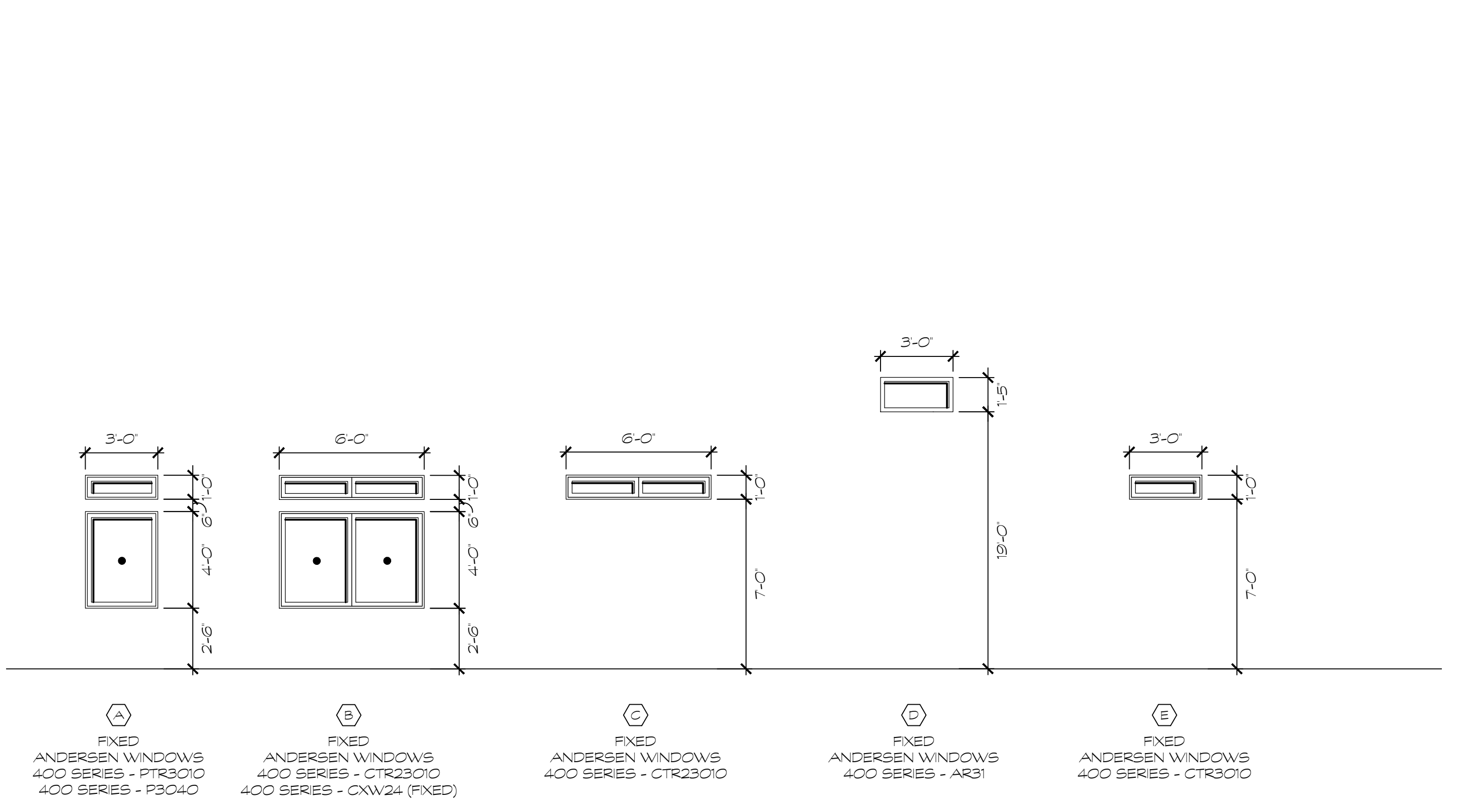
G:\Projects\2025\250095 Horizon Farm Credit AE Design Services\Drawings\Working Sets\A5.3 DOOR, FRAME & WINDOW TYPES.dwg, 3/5/2026 3:13 PM, Deane L. Townsend



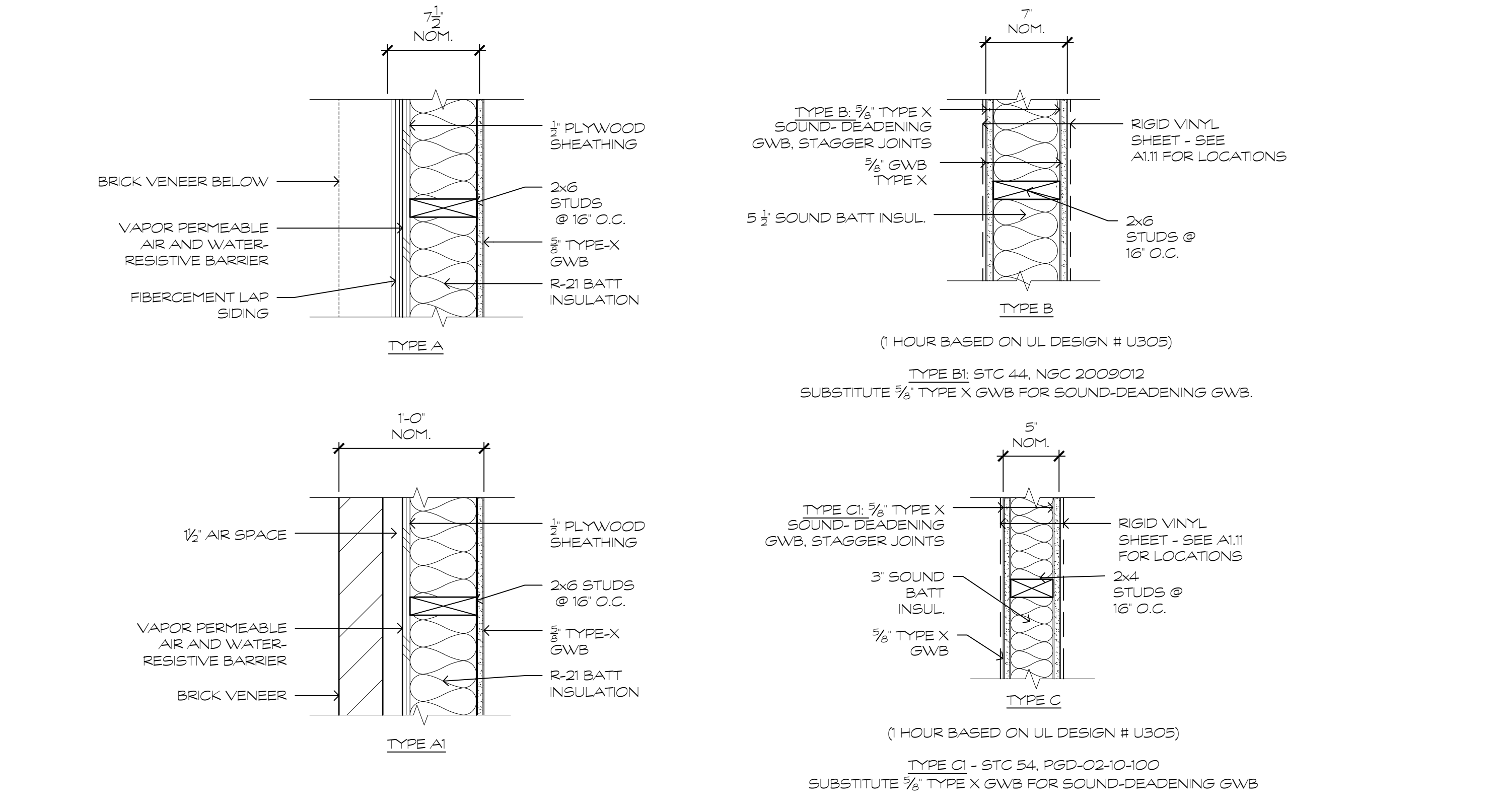
1 DOOR TYPES
1/4" = 1'-0" • DENOTES TEMPERED GLASS



2 FRAME TYPES
1/4" = 1'-0" • DENOTES TEMPERED GLASS



3 WINDOW + VENT TYPES
1/4" = 1'-0" • DENOTES TEMPERED GLASS



4 WALL TYPES
1 1/2" = 1'-0"

DATE	
REVISION	
NO.	

GMB
GEORGE, MILES & BUHR, LLC
ARCHITECTS & ENGINEERS
SALISBURY, BALTIMORE, SEAFORD
www.gmbnet.com

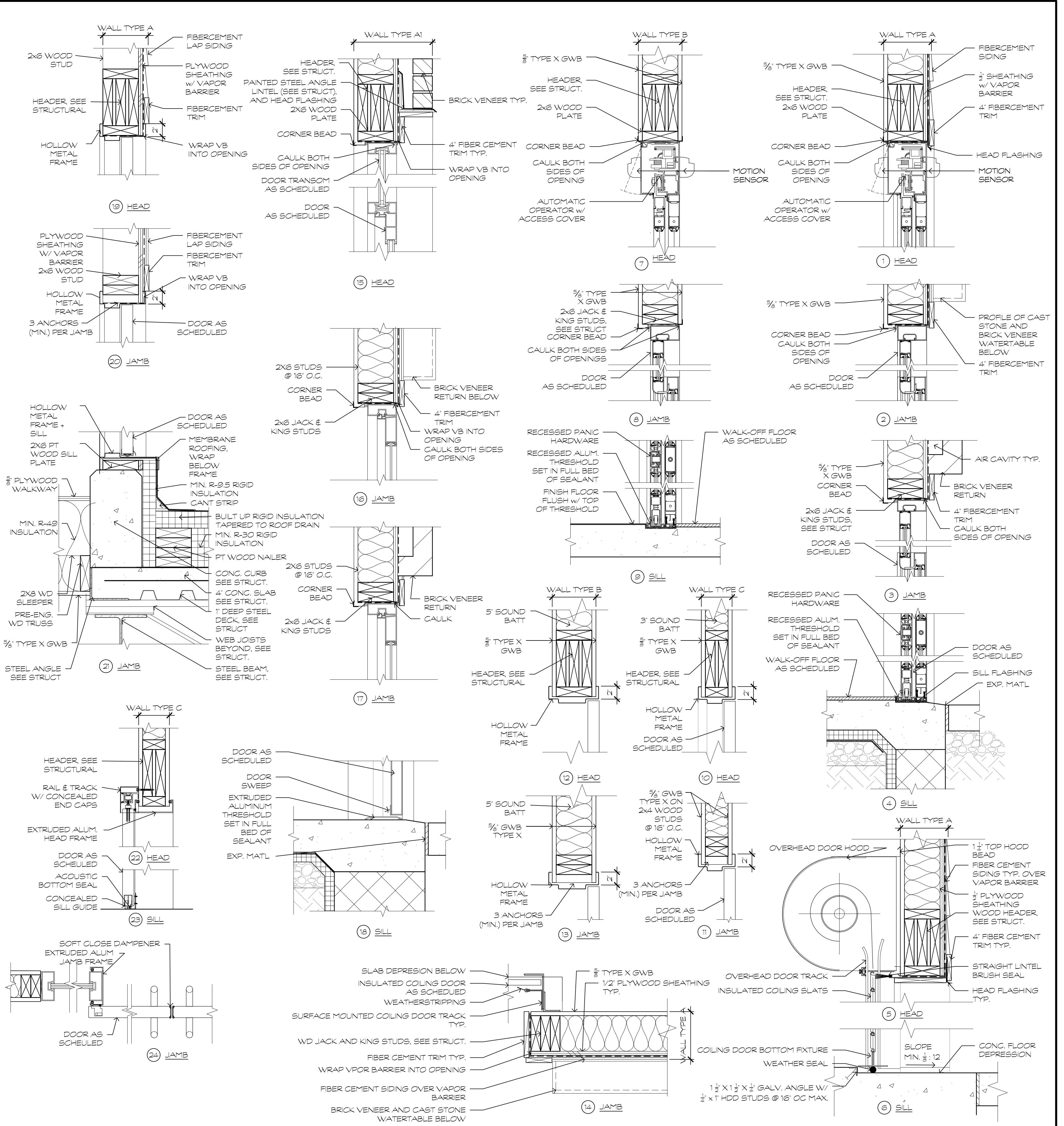
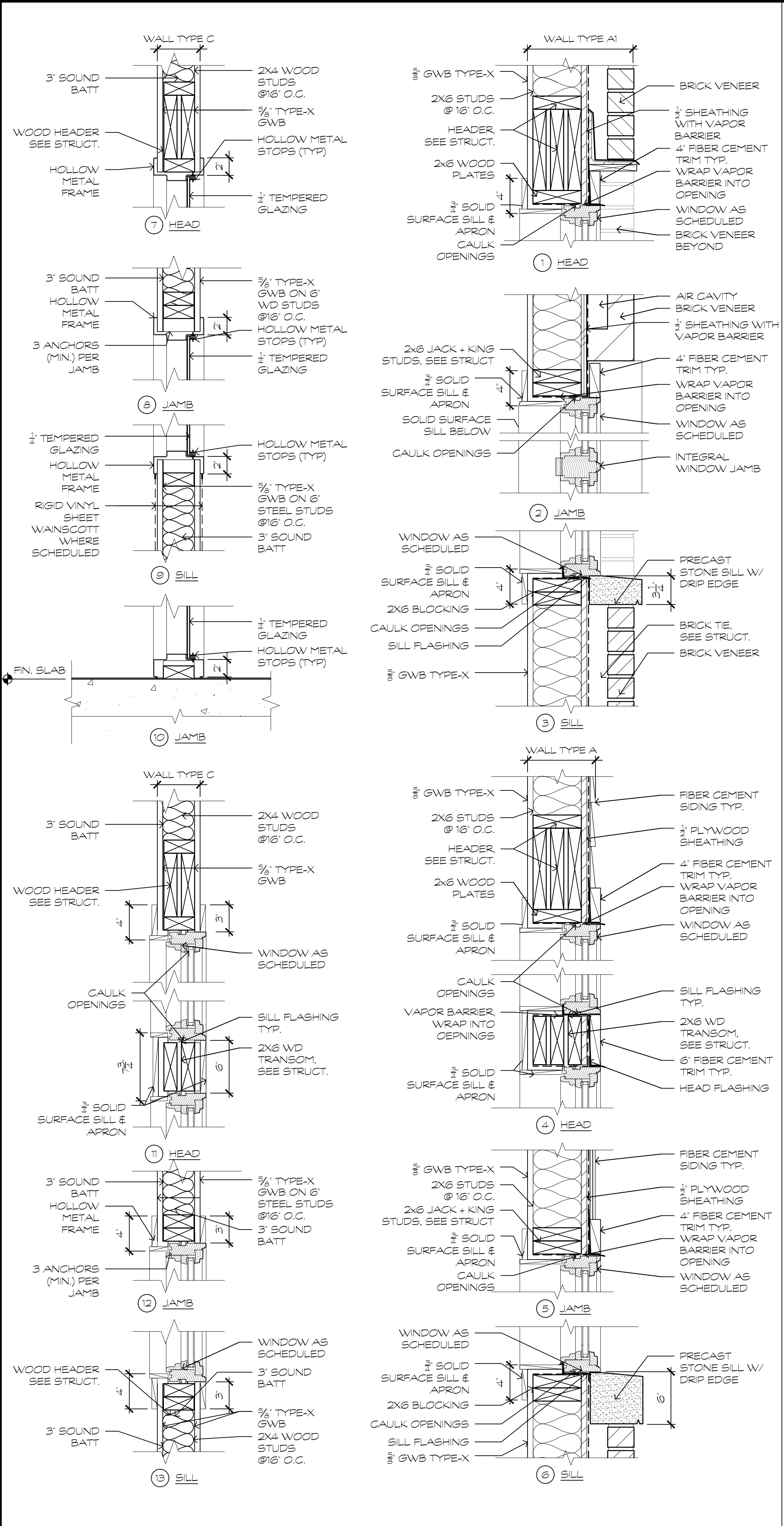
NEW CONSTRUCTION FOR:
HORIZON FARM CREDIT DHQ
BRIDGEVILLE, DE



SCALE	: AS NOTED
DESIGN BY	: MHH
DRAWN BY	: AJB
CHECKED BY	: MHH
GMB FILE	: 250095
DATE	: 12/30/2025

A5.3

G:\Projects\2025\250095 Horizon Farm Credit AE Design Services\Drawings\Working Sets\A5.4 DOOR & WINDOW DETAILS.dwg, 12/30/2025 9:41 AM, Deane L. Townsend



2 WINDOW FRAME DETAILS
11/2" = 1'-0"

1 DOOR FRAME DETAILS
11/2" = 1'-0"

DATE: 1/19/2026
REVISION: ISSUED FOR PERMIT
NO: 1

GMB
GEORGE, MILES & BUHR, LLC
ARCHITECTS & ENGINEERS
SALISBURY, BALTIMORE • SEAFORD
www.gmbnet.com

NEW CONSTRUCTION FOR:
HORIZON FARM CREDIT DHQ
BRIDGEVILLE, DE

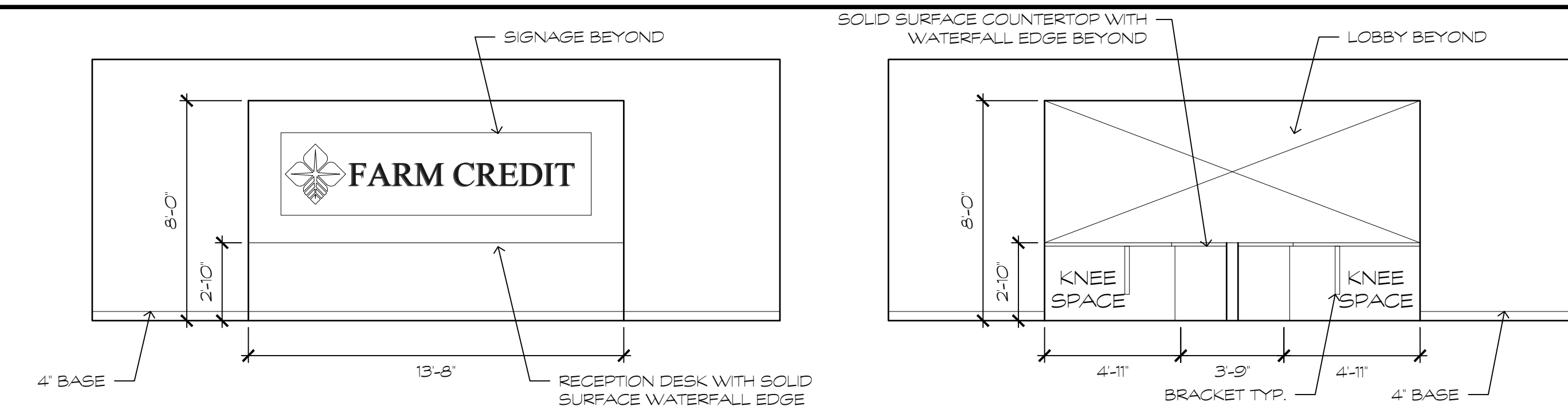
DOOR & WINDOW DETAILS

SEAL: 11/2" = 1'-0"
DESIGN BY: MHH
DRAWN BY: AJB
CHECKED BY: MHH
GMB FILE: 250095
DATE: 12/30/2025

A5.4

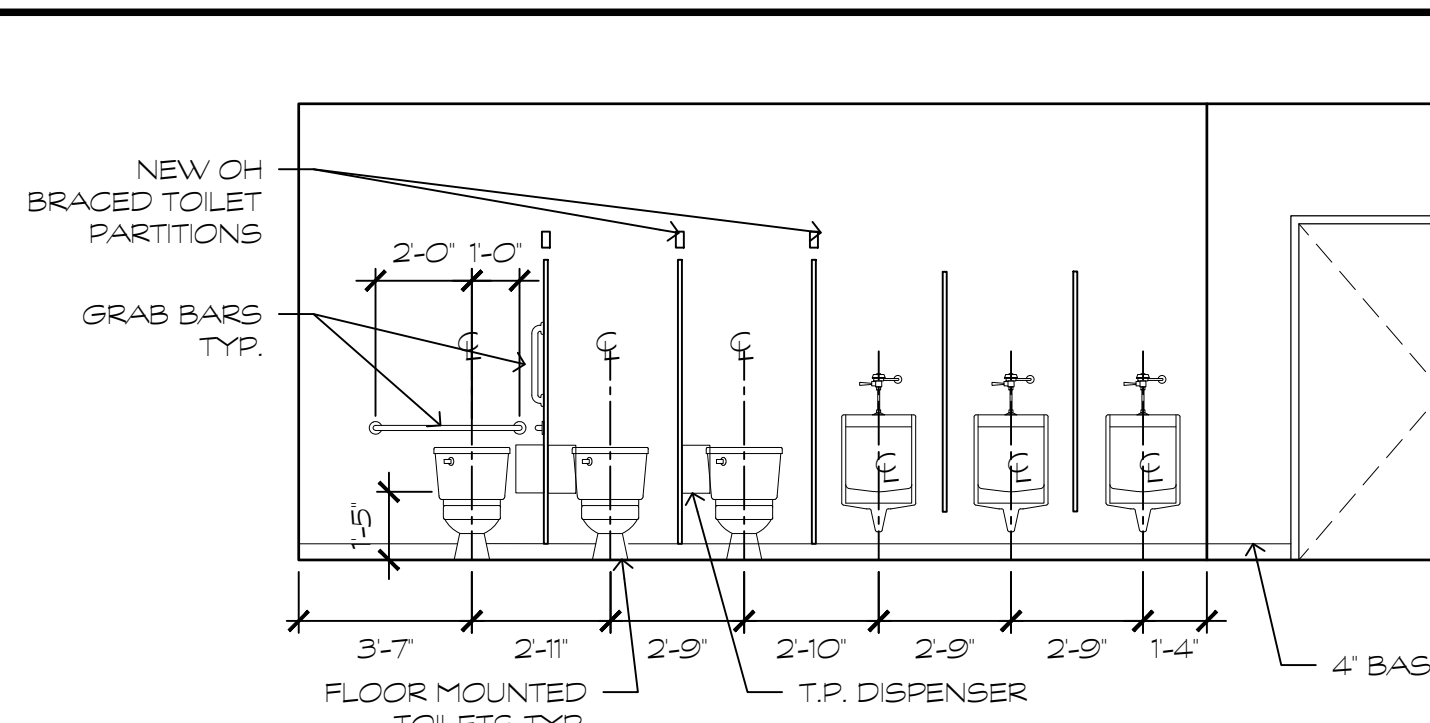
STATE OF DELAWARE REGISTERED ARCHITECT

G:\Projects\2025\250095 Horizon Farm Credit AE Design Services\Drawings\Working Sets\A7.1 INTERIOR ELEVATIONS.dwg, 3/5/2026 3:14 PM, Deane L. Townsend



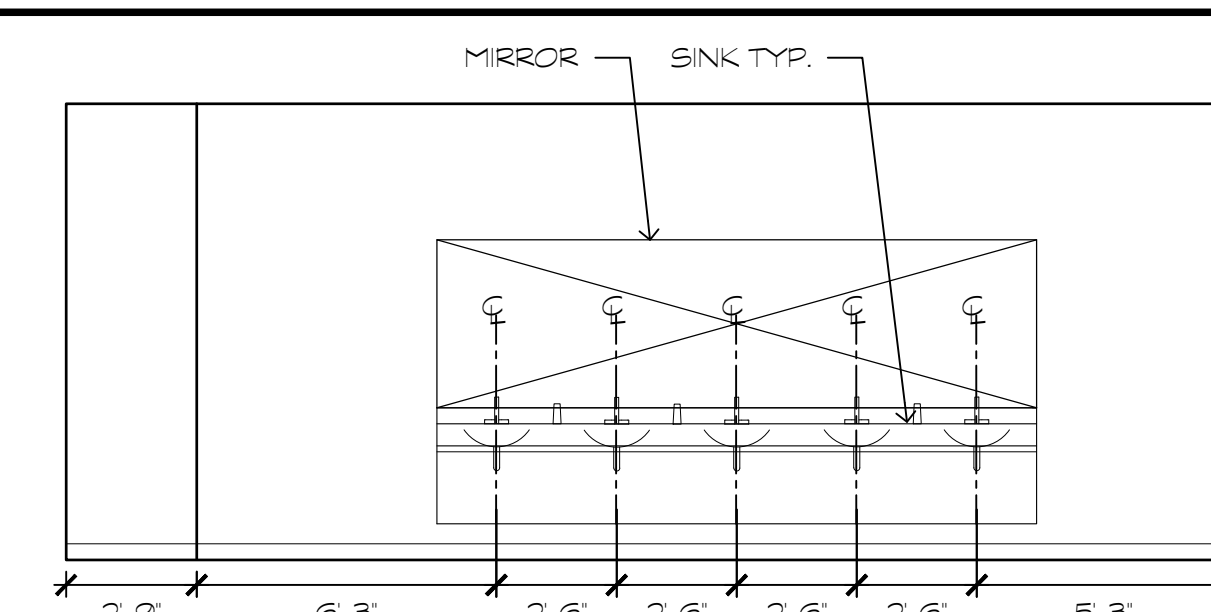
RECEPTION

003



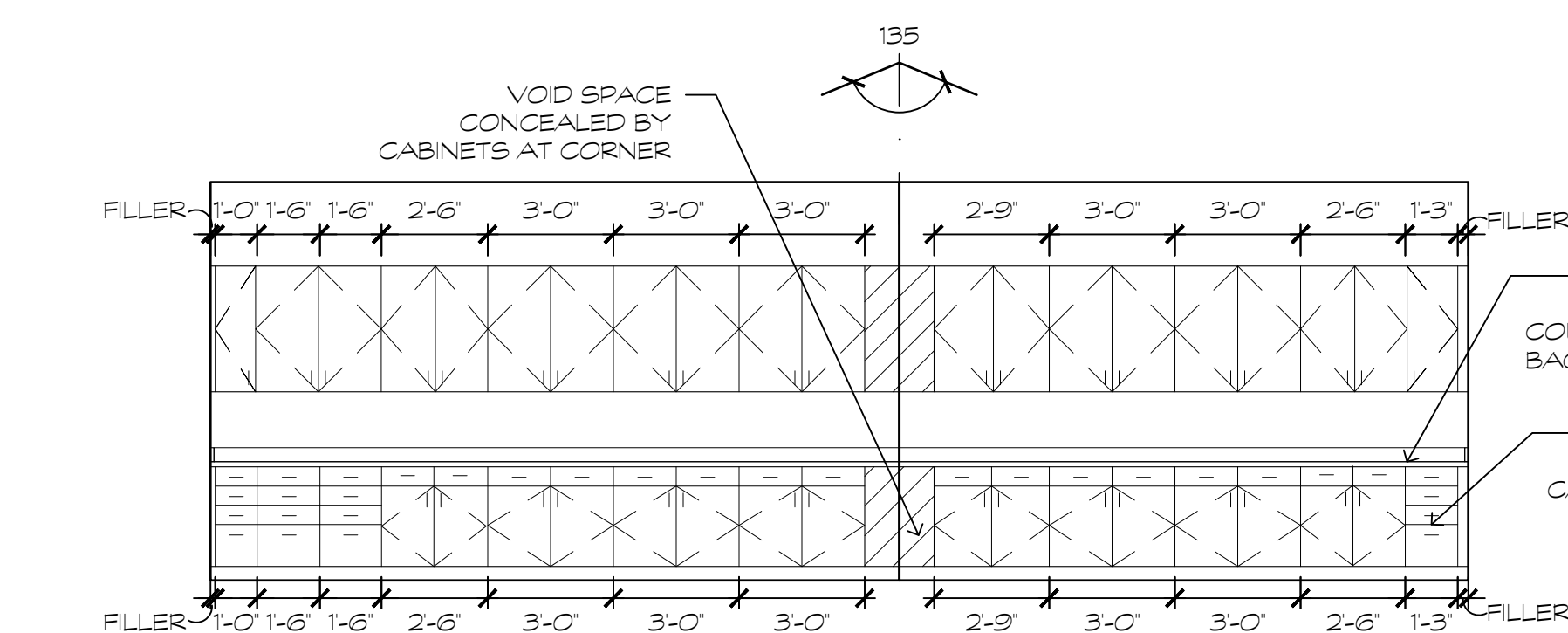
MEN'S RESTROOM

107

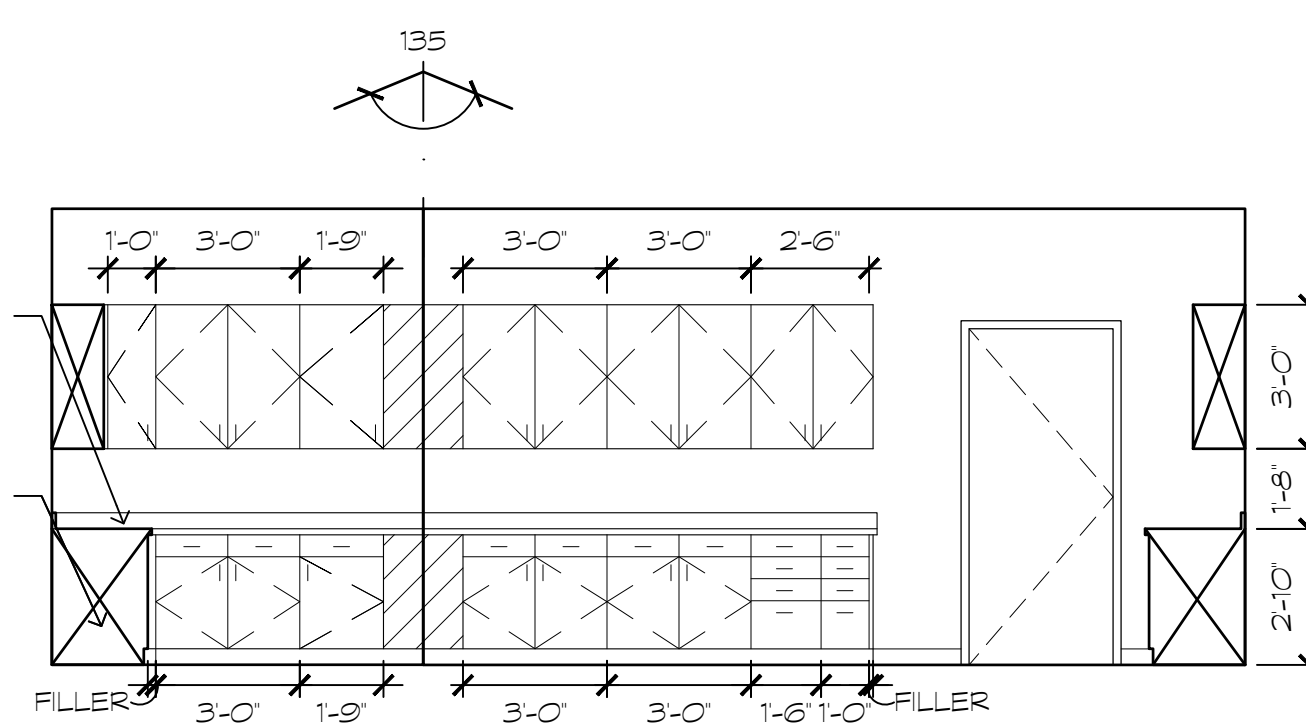


NURSING

008

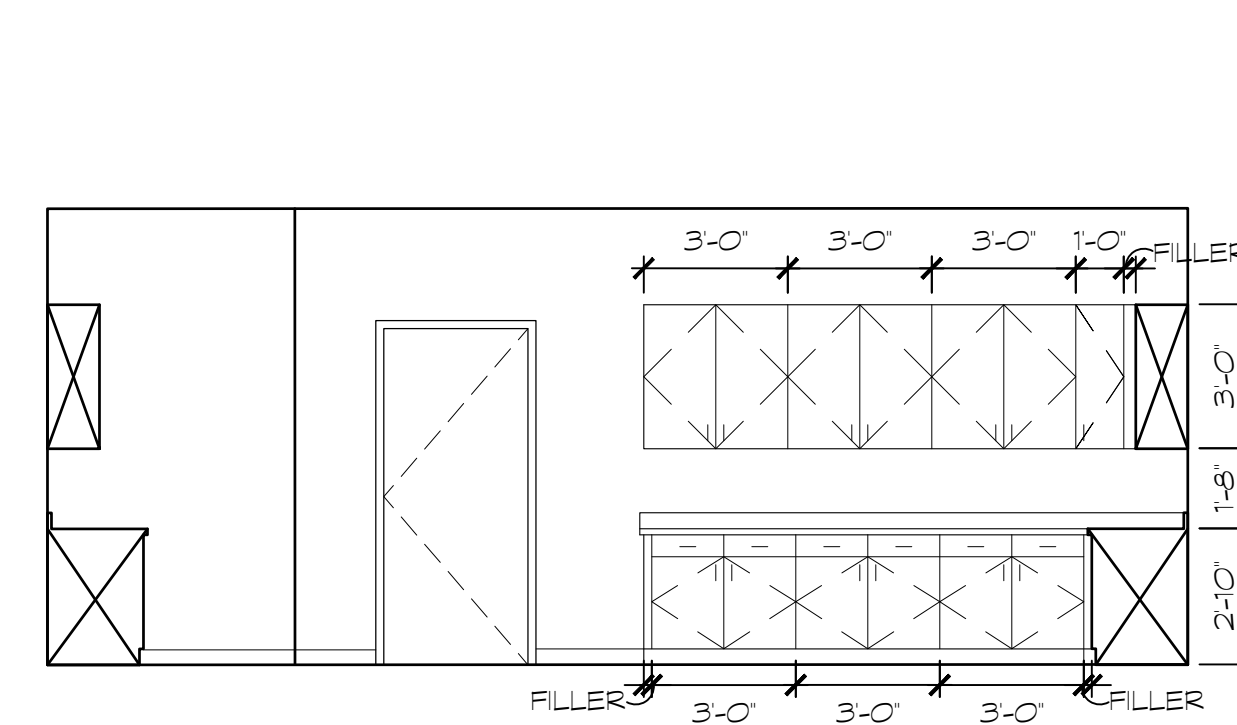


SUPPLY



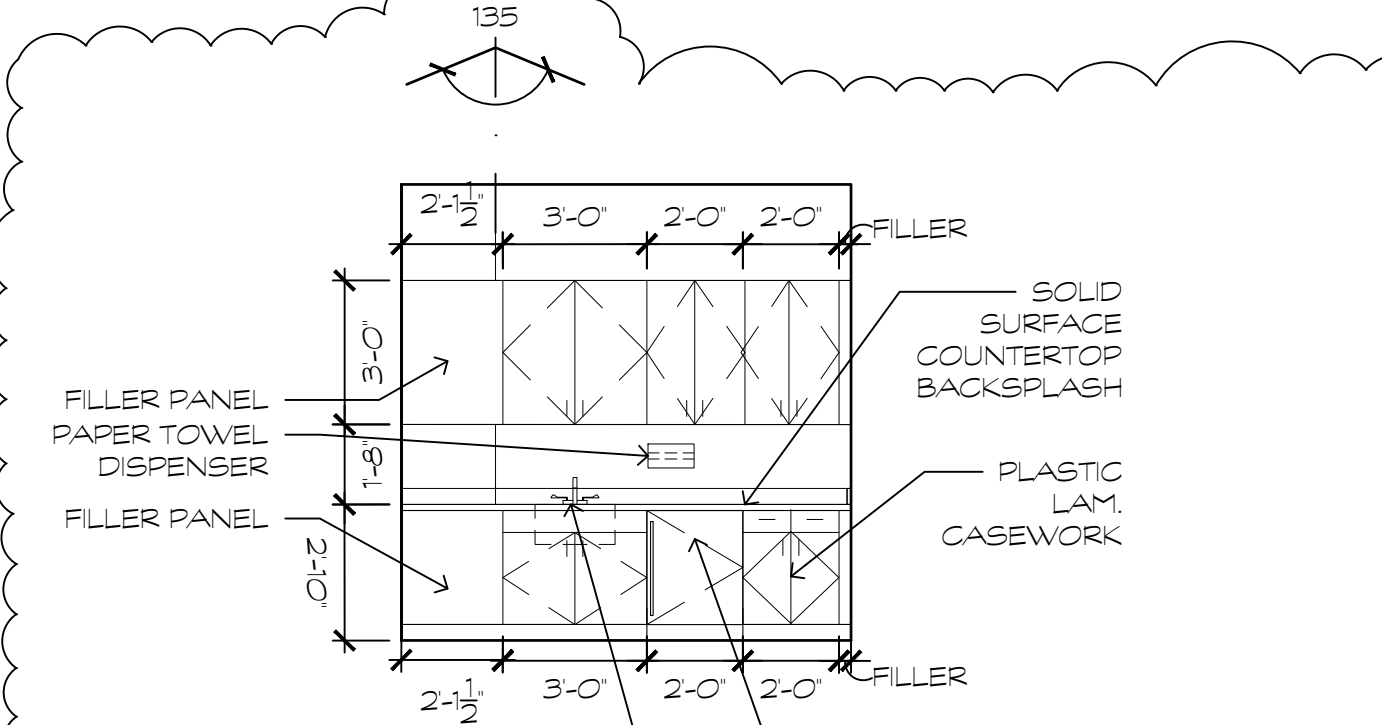
KITCHEN

109



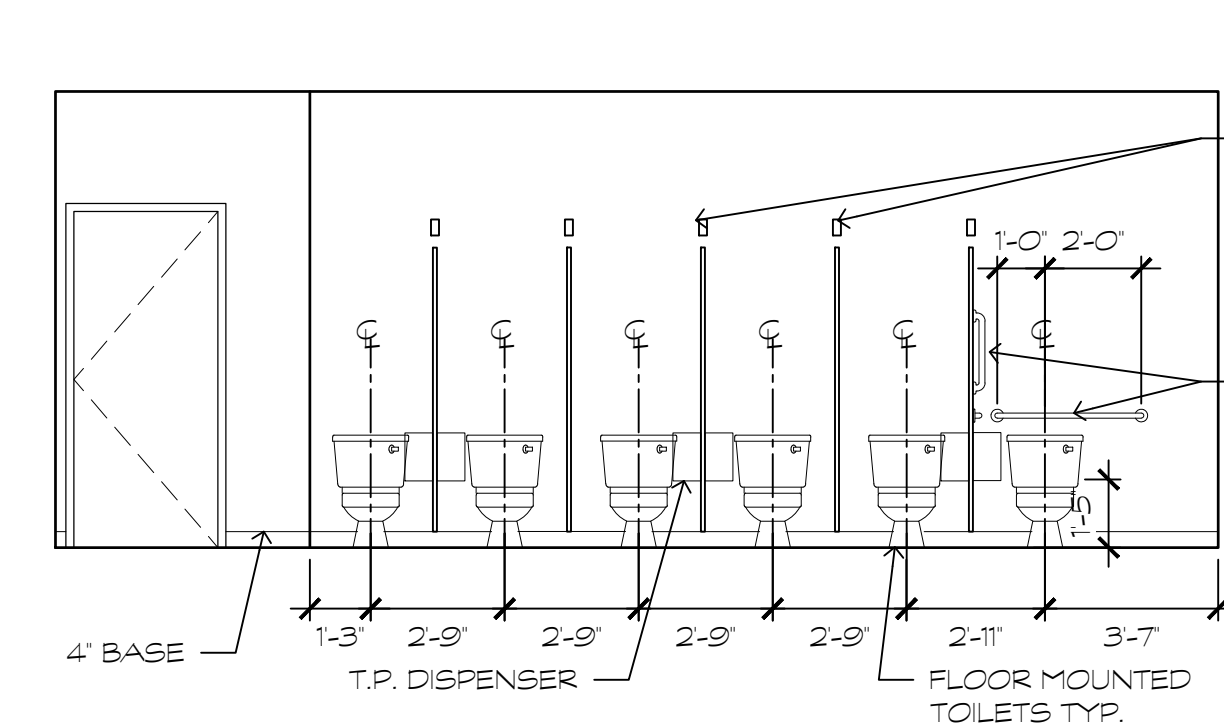
KITCHEN

109



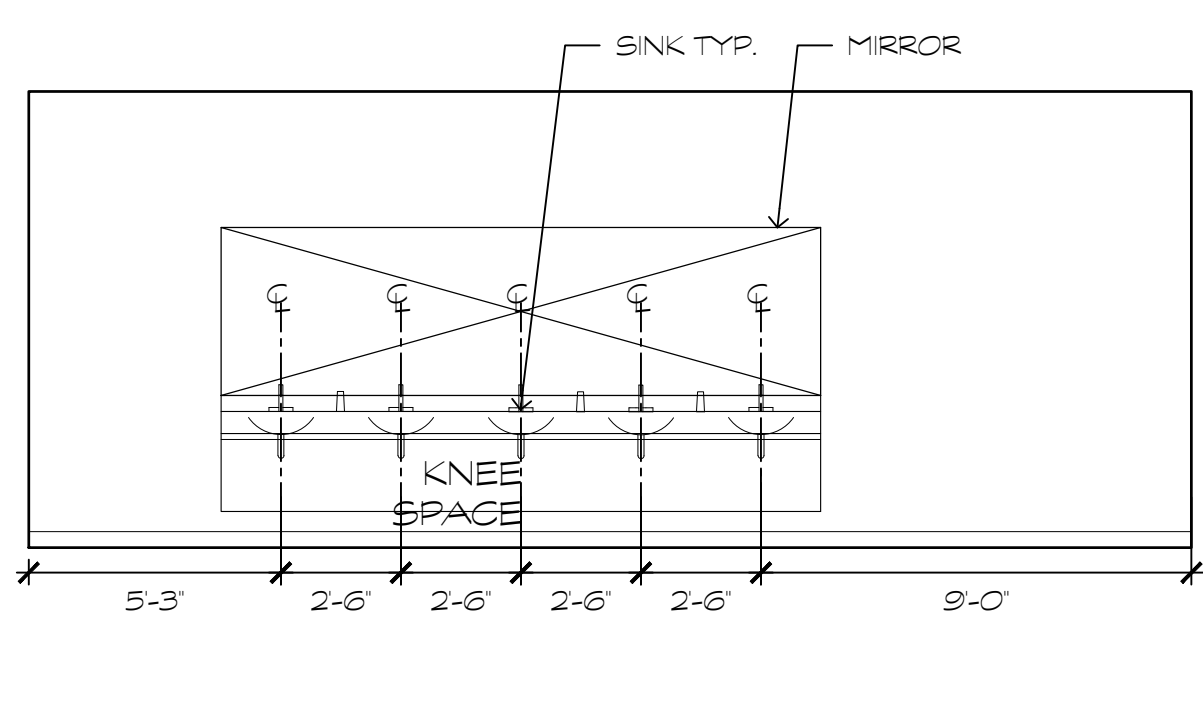
NURSING

008



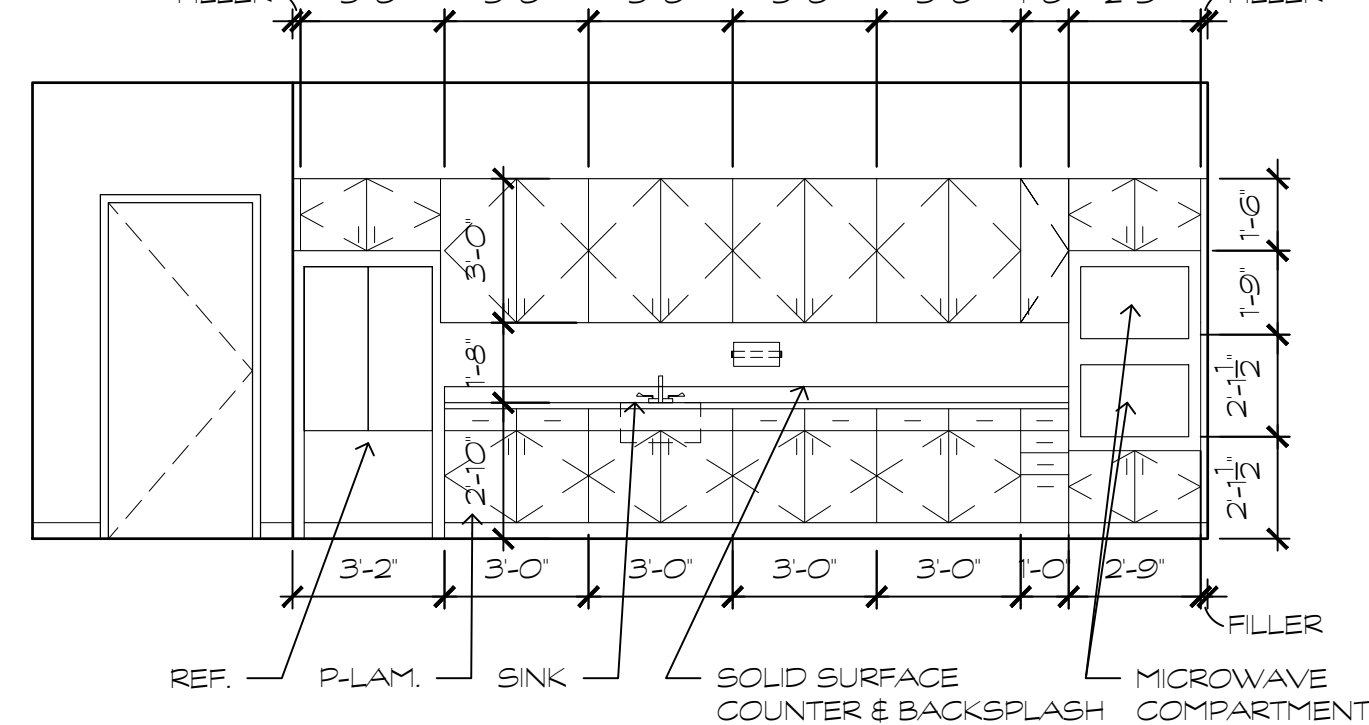
WOMEN'S RESTROOM

109



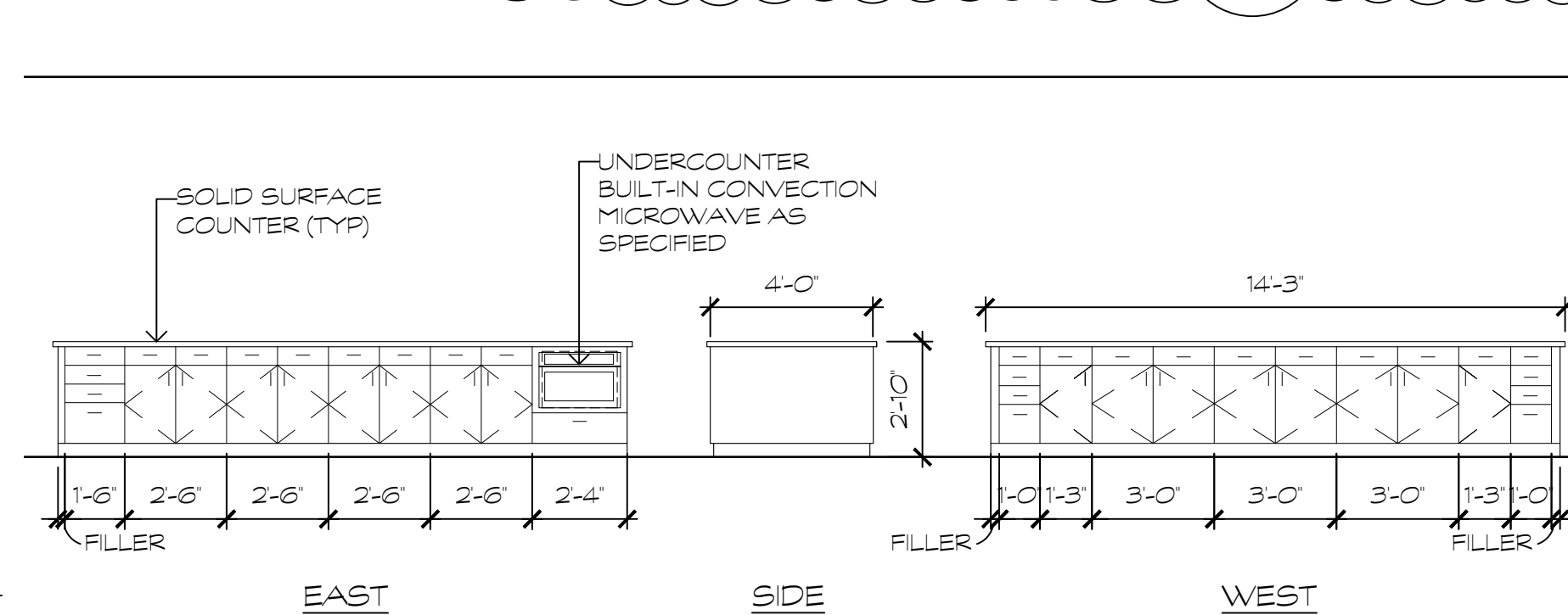
KITCHEN

109



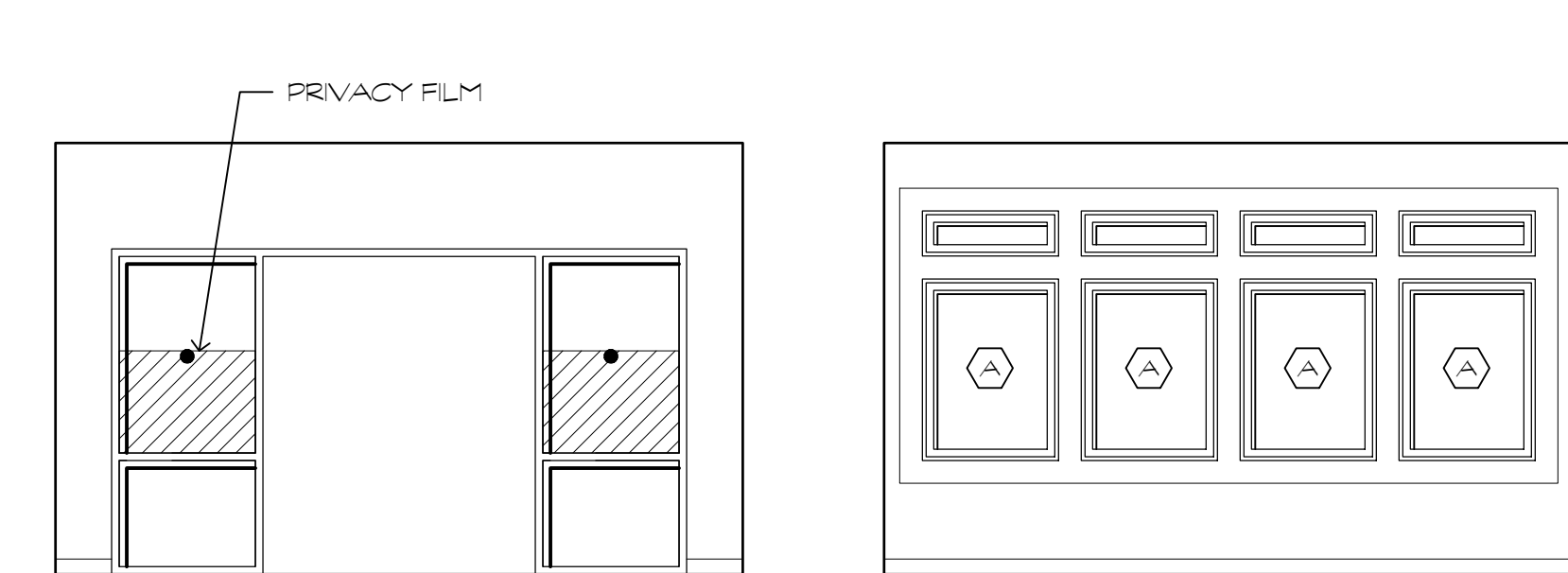
KITCHEN

109



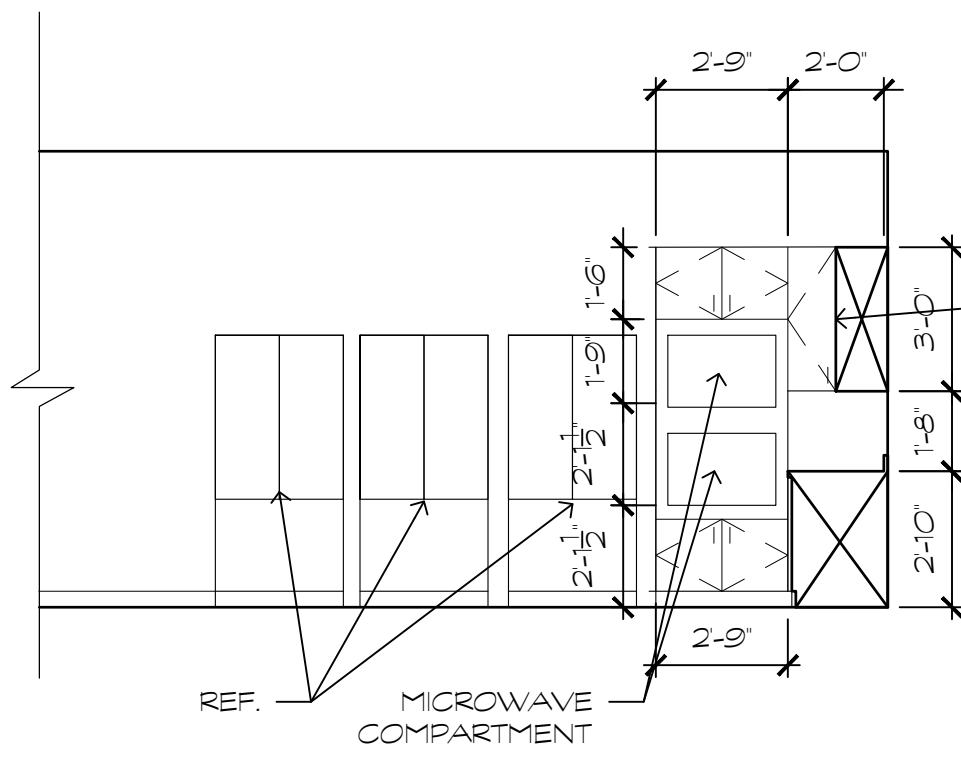
KITCHEN

109



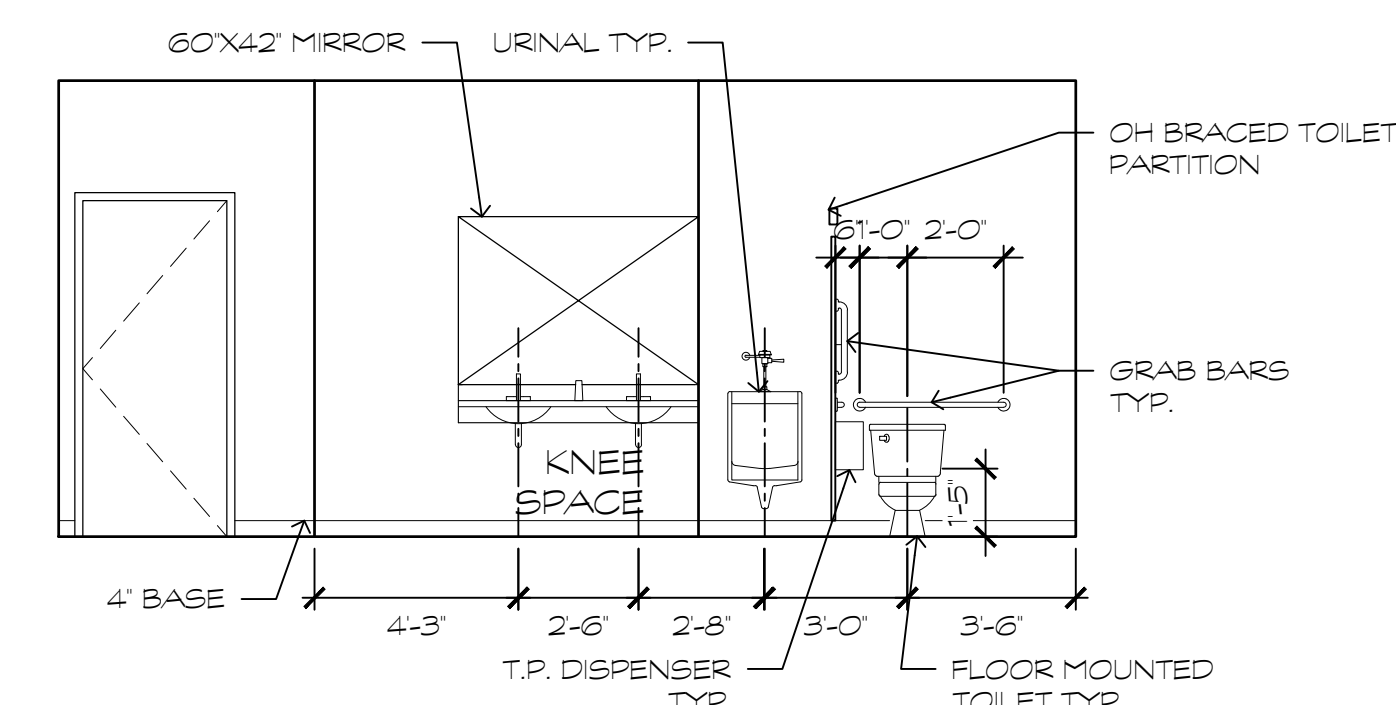
TYP. BREAKOUT ROOM

203



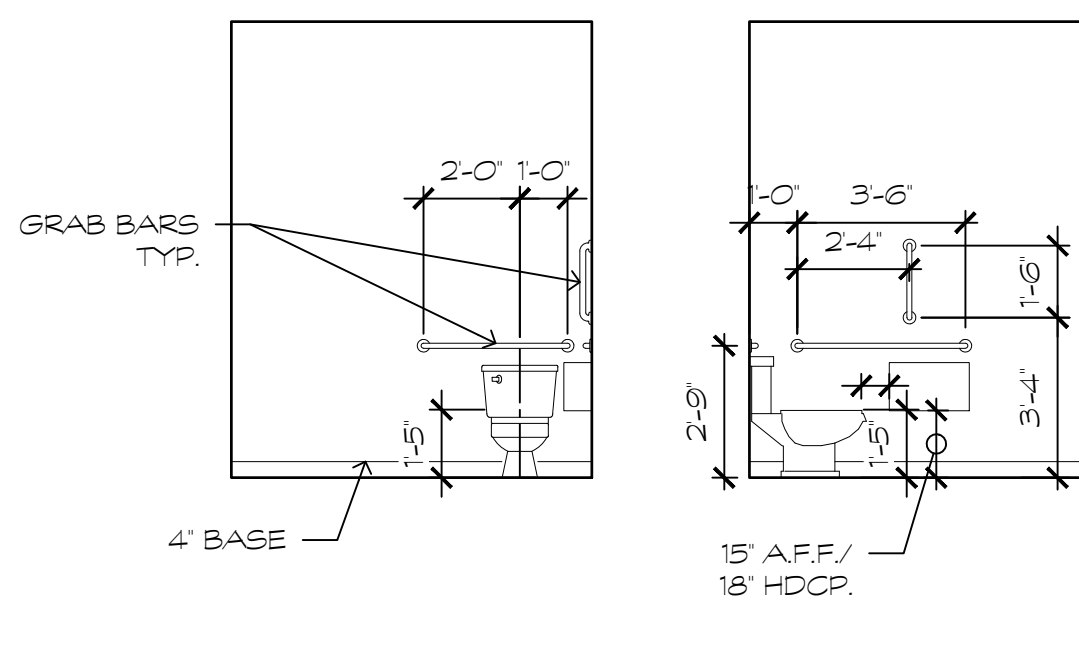
BREAKROOM

320



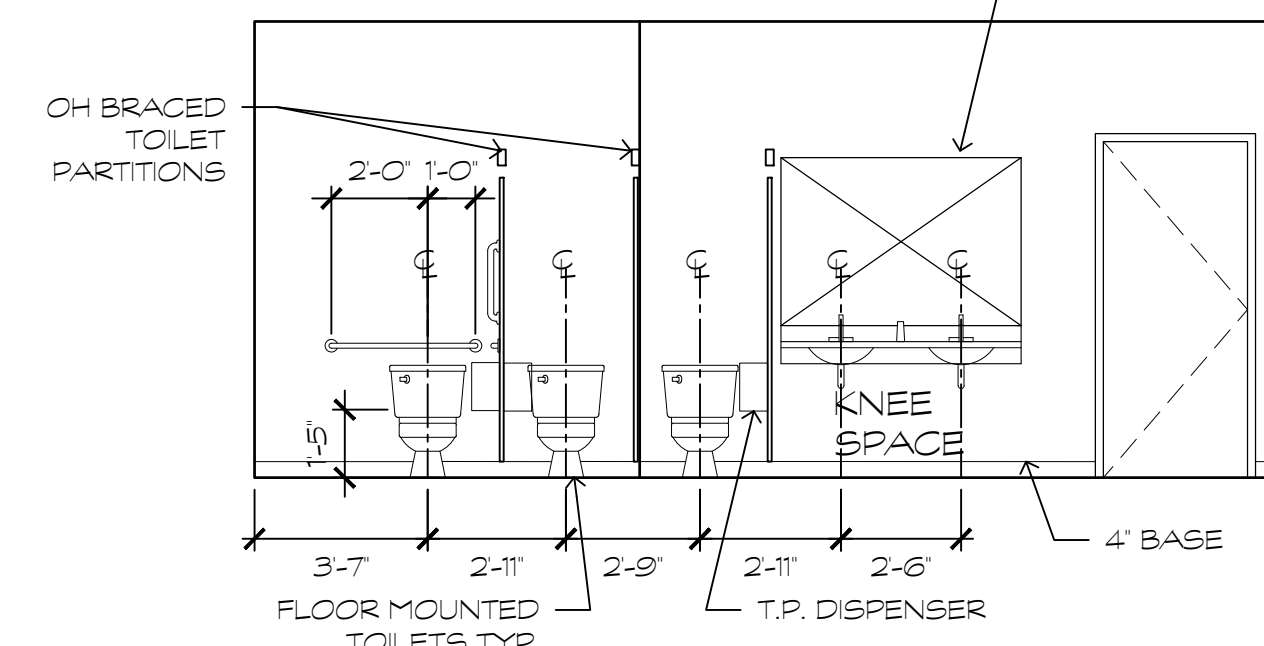
MEN'S RESTROOM

319



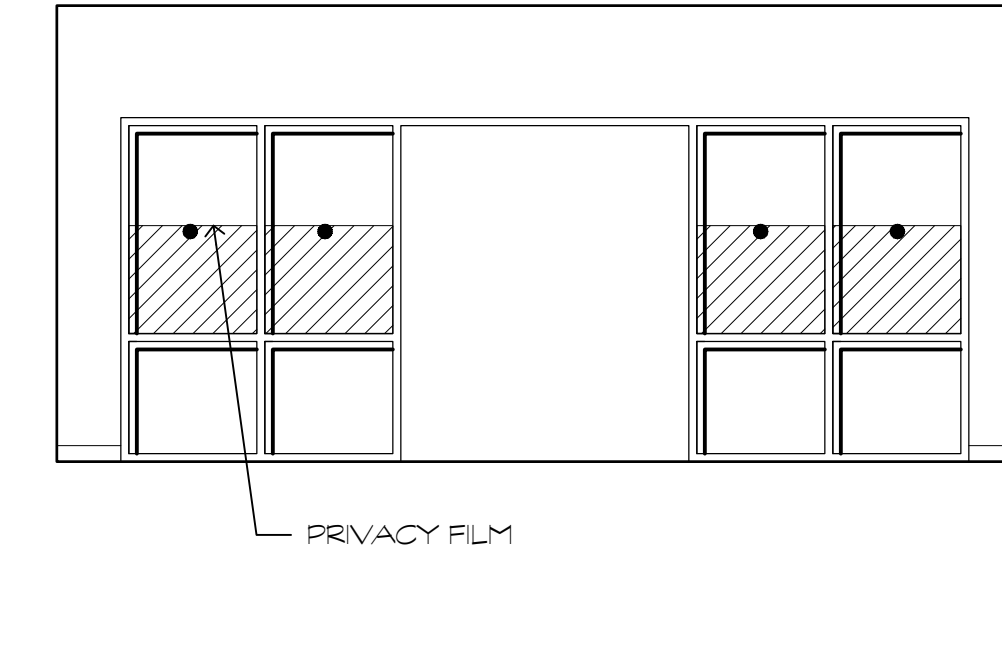
RESTROOM

320



WOMEN'S RESTROOM

321



CONFERENCE ROOM

409

NO.	REVISION	DATE

GMB
 GEORGE, MILES & BUHR, LLC
 ARCHITECTS & ENGINEERS
 SALESBURY, BALTIMORE • SEAFORD
 www.gmbnet.com

NEW CONSTRUCTION FOR:
HORIZON FARM CREDIT DHQ
 BRIDGEVILLE, DE

INTERIOR
 ELEVATIONS



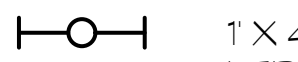






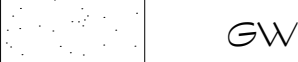



SCALE : 1/4" = 1'-0"
 DESIGN BY : MHH
 DRAWN BY : AUB
 CHECKED BY : MHH
 GMB FILE : 250095
 DATE : 12/30/2025

A7.1

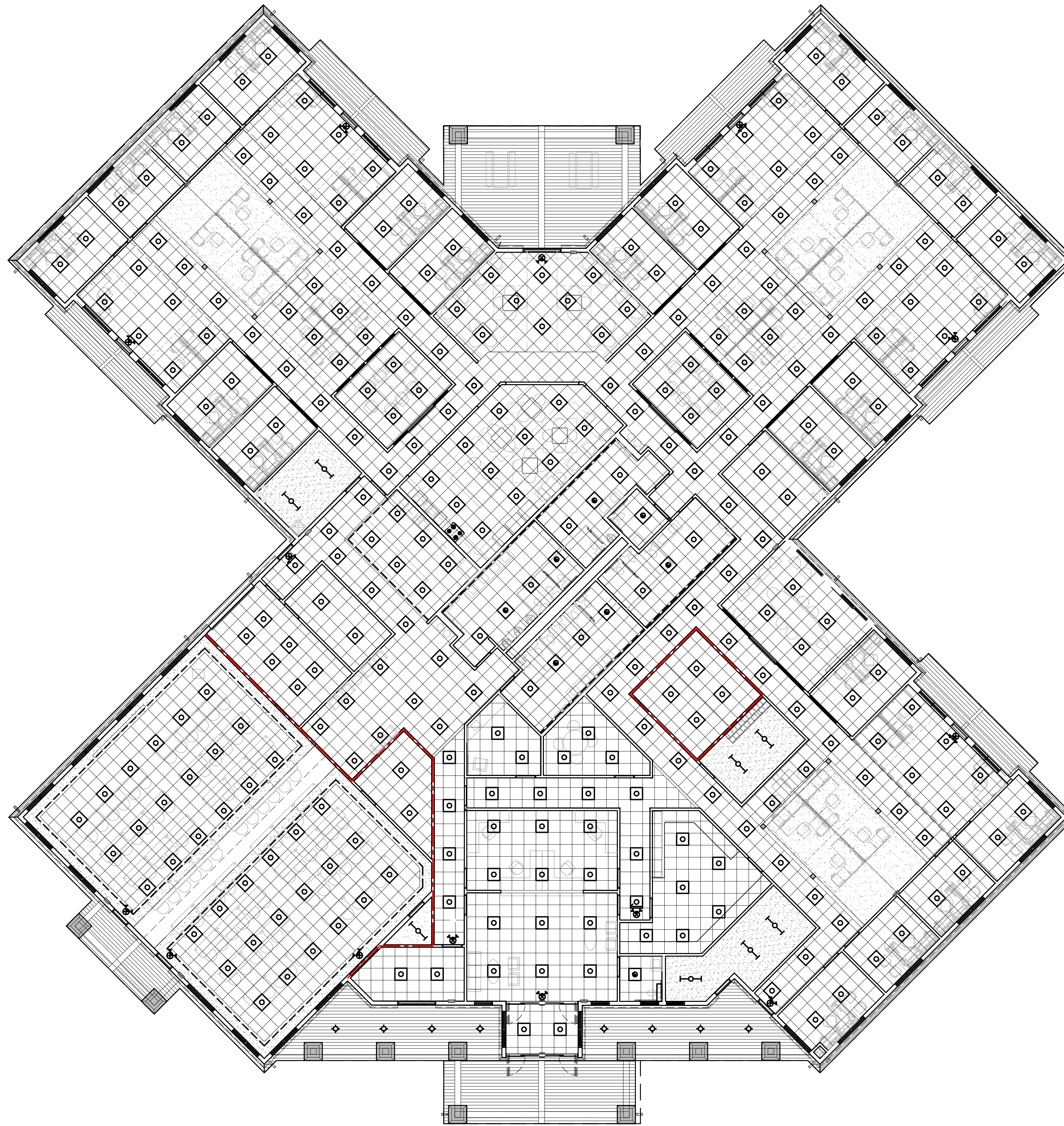
G:\Projects\2025\250095 Horizon Farm Credit AE Design Services\Drawings\Working Sets\A8.1 REFLECTED CEILING PLAN.dwg, 12/30/2025 9:43 AM, Deane L. Townsend

LEGEND

-  SUPPLY AIR DUCT
-  RETURN AIR DUCT
-  1 X 4' SURFACE MOUNTED LED
-  2 X 2 RECESSED LED
-  WALL MOUNTED VANITY LED
-  RECESSED LED
-  RECESSED LED/
EXHAUST FAN COMBO
-  EMERGENCY LIGHT
-  COMBO EXIT/
EMERGENCY LIGHT
-  GWB CEILING
-  2X2 ACOUSTICAL TILE
CEILING
-  FINISH TBD

NOTES

1. SEE ELECTRICAL PLANS FOR EXIT AND EMERGENCY LIGHTING.
2. SEE MECHANICAL PLANS FOR DUCTWORK, REGISTER AND GRILLE LOCATIONS.
3. REFER TO FINISH SCHEDULE FOR CEILING HEIGHTS UNLESS OTHERWISE NOTED.



1

REFLECTED CEILING PLAN

3/32" = 1'-0"

DATE	1/19/2026
REVISION	ISSUED FOR PERMIT
NO.	1

GMB
 GEORGE, MILES & BUHR, LLC
 ARCHITECTS & ENGINEERS
 SALESBURY • BALTIMORE • SEAFORD
 www.gmbnet.com

NEW CONSTRUCTION FOR:
HORIZON FARM CREDIT DHQ
 BRIDGEVILLE, DE

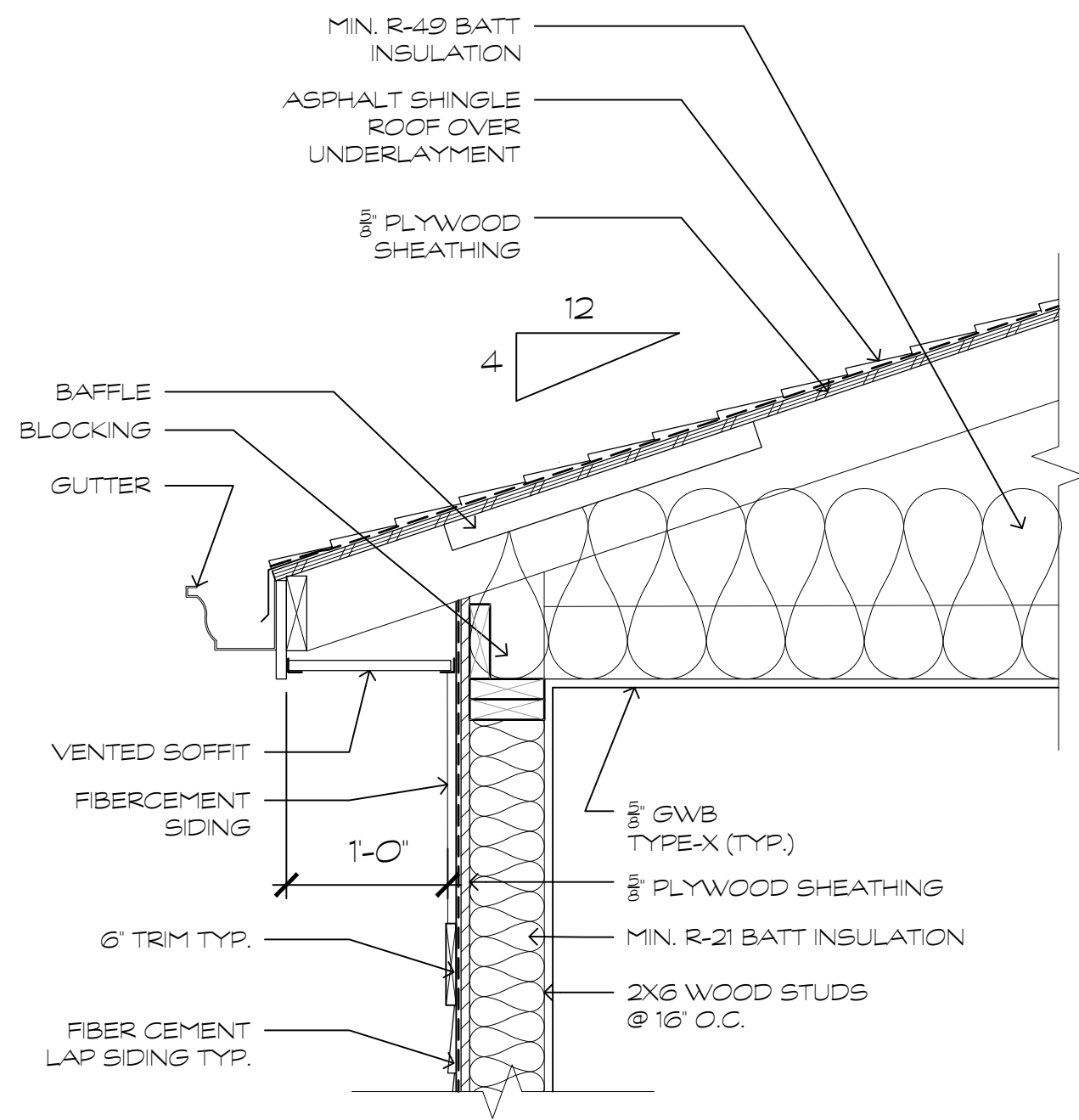
REFLECTED
 CEILING PLAN



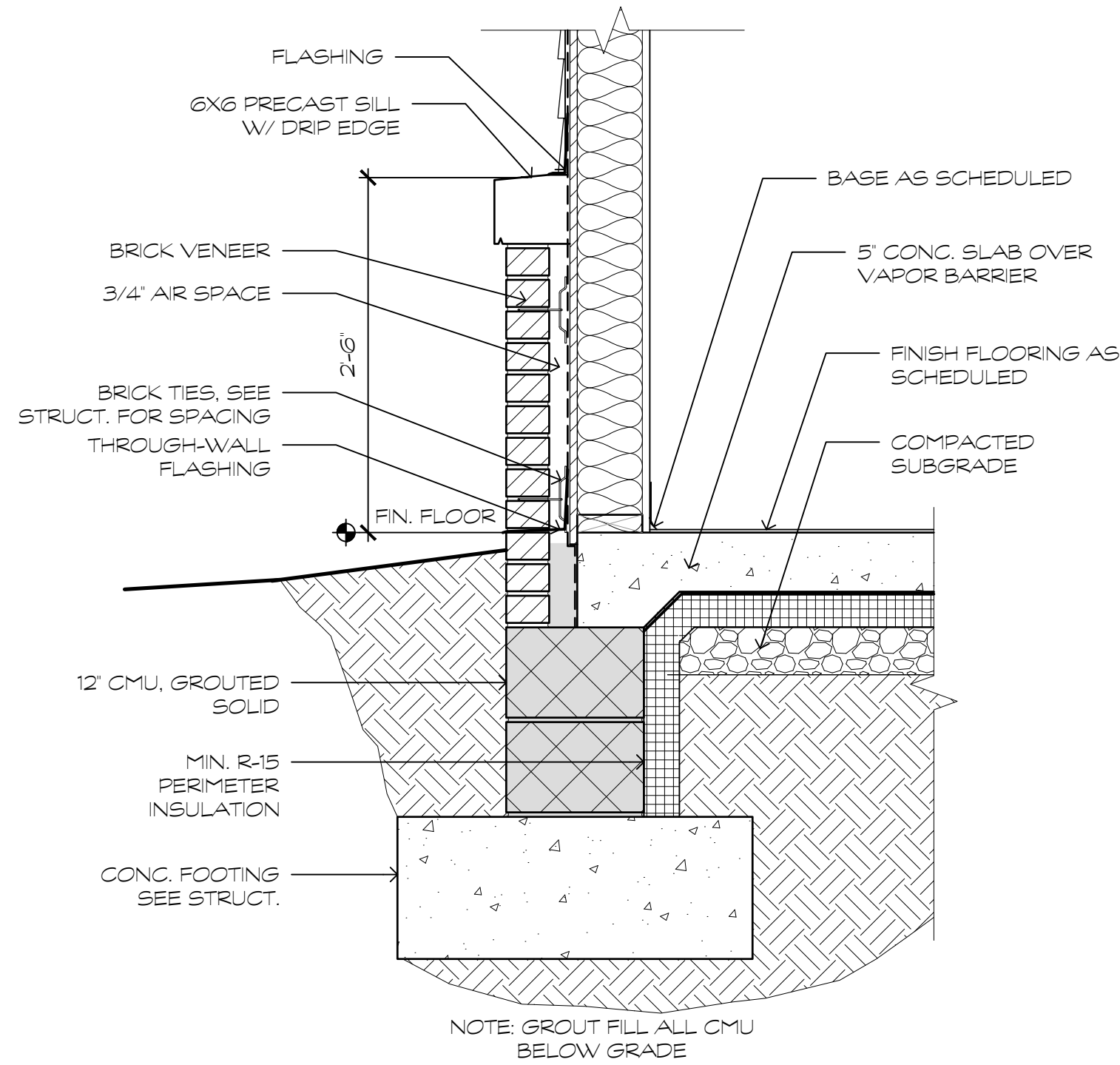
SCALE	: 3/32" = 1'-0"
DESIGN BY	: MHH
DRAWN BY	: JDM
CHECKED BY	: MHH
GMB FILE	: 250095
DATE	: 12/30/2025

A8.1

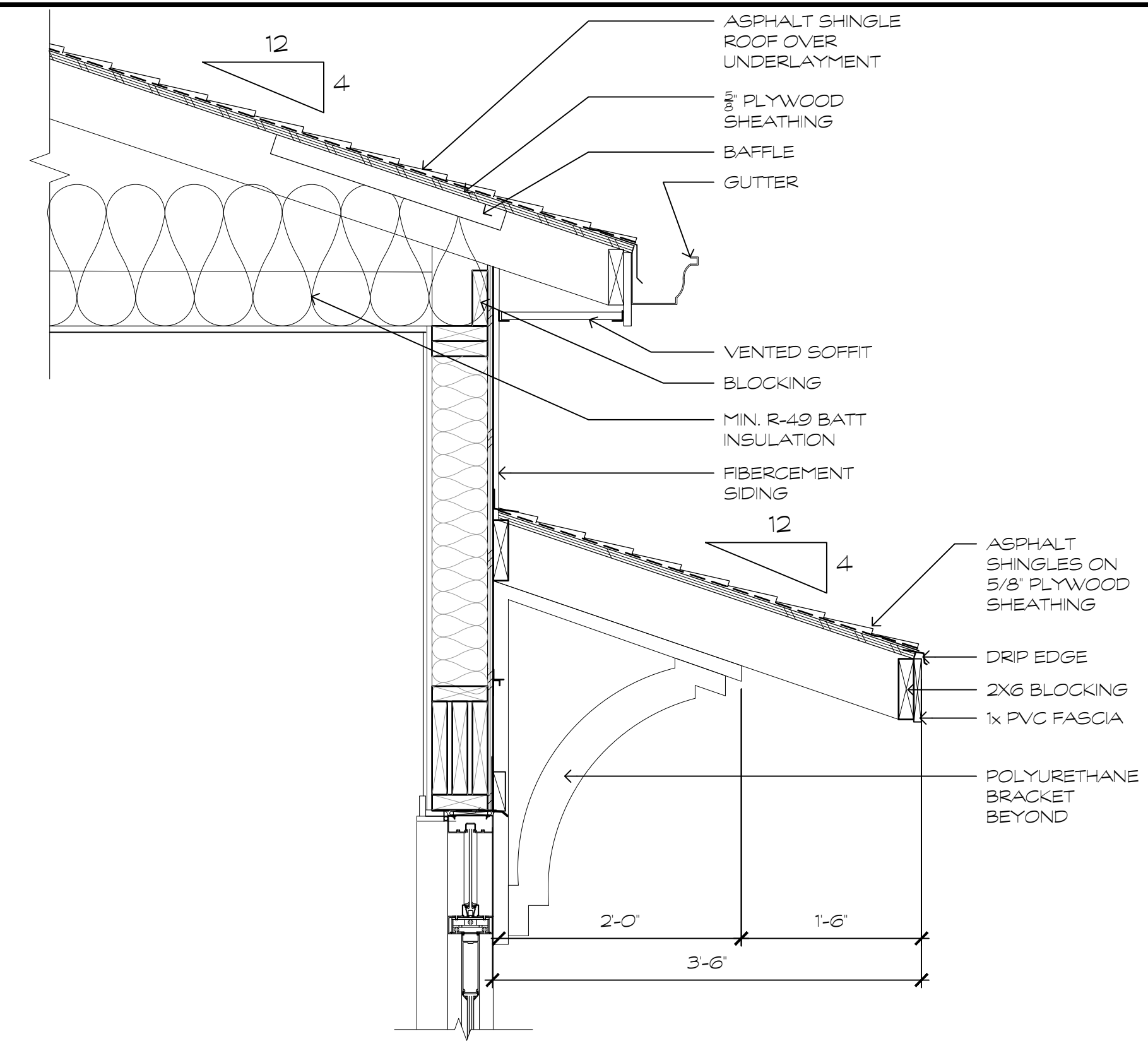
G:\Projects\250095 Horizon Farm Credit AE Design Services\Drawings\Working Sets\A9.1 OPERABLE PARTITION DETAILS.dwg, 1/5/2026 12:22 PM, Deane L. Townsend



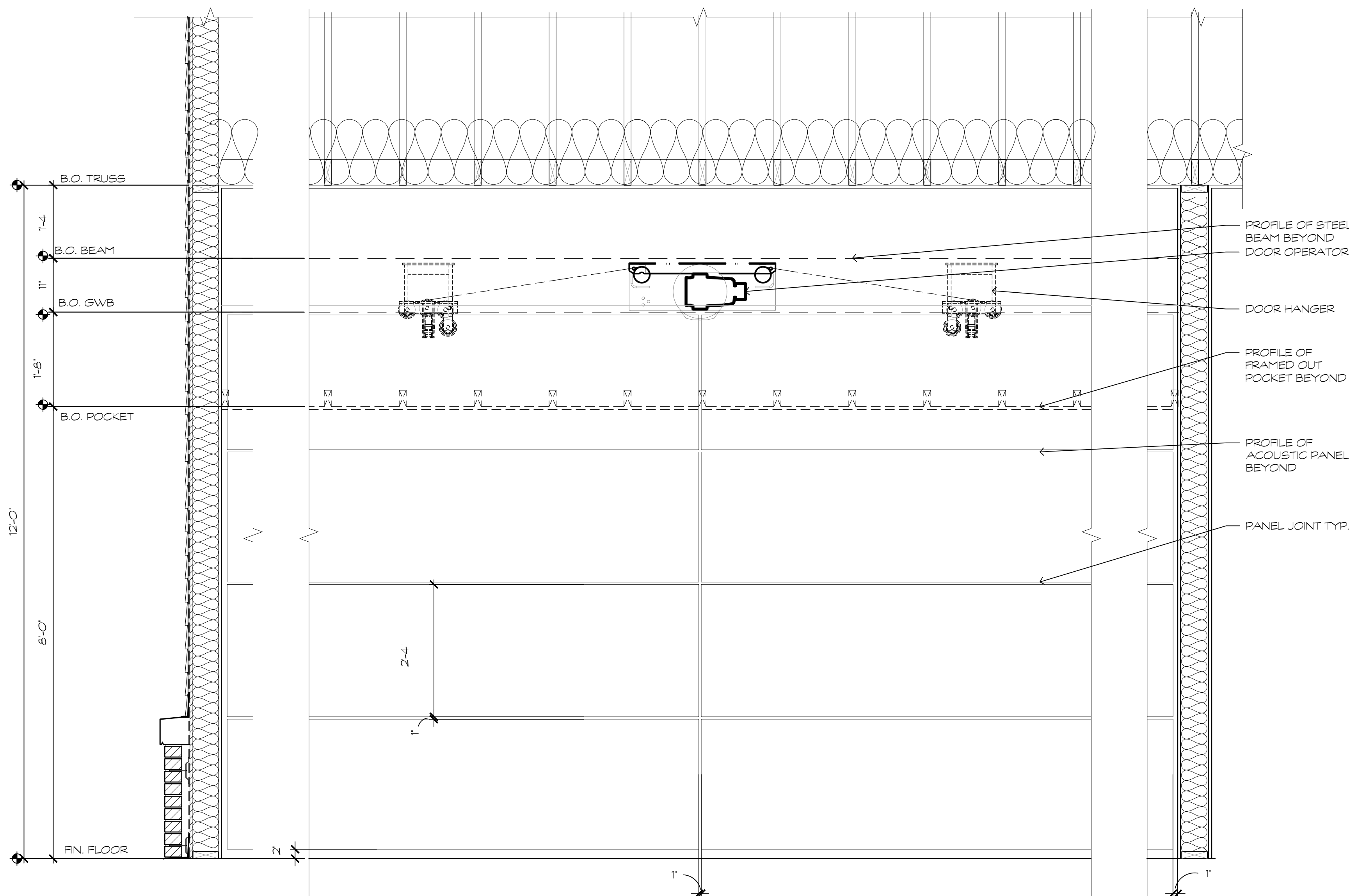
4 TYP. EAVE DETAIL
1' = 1'-0"



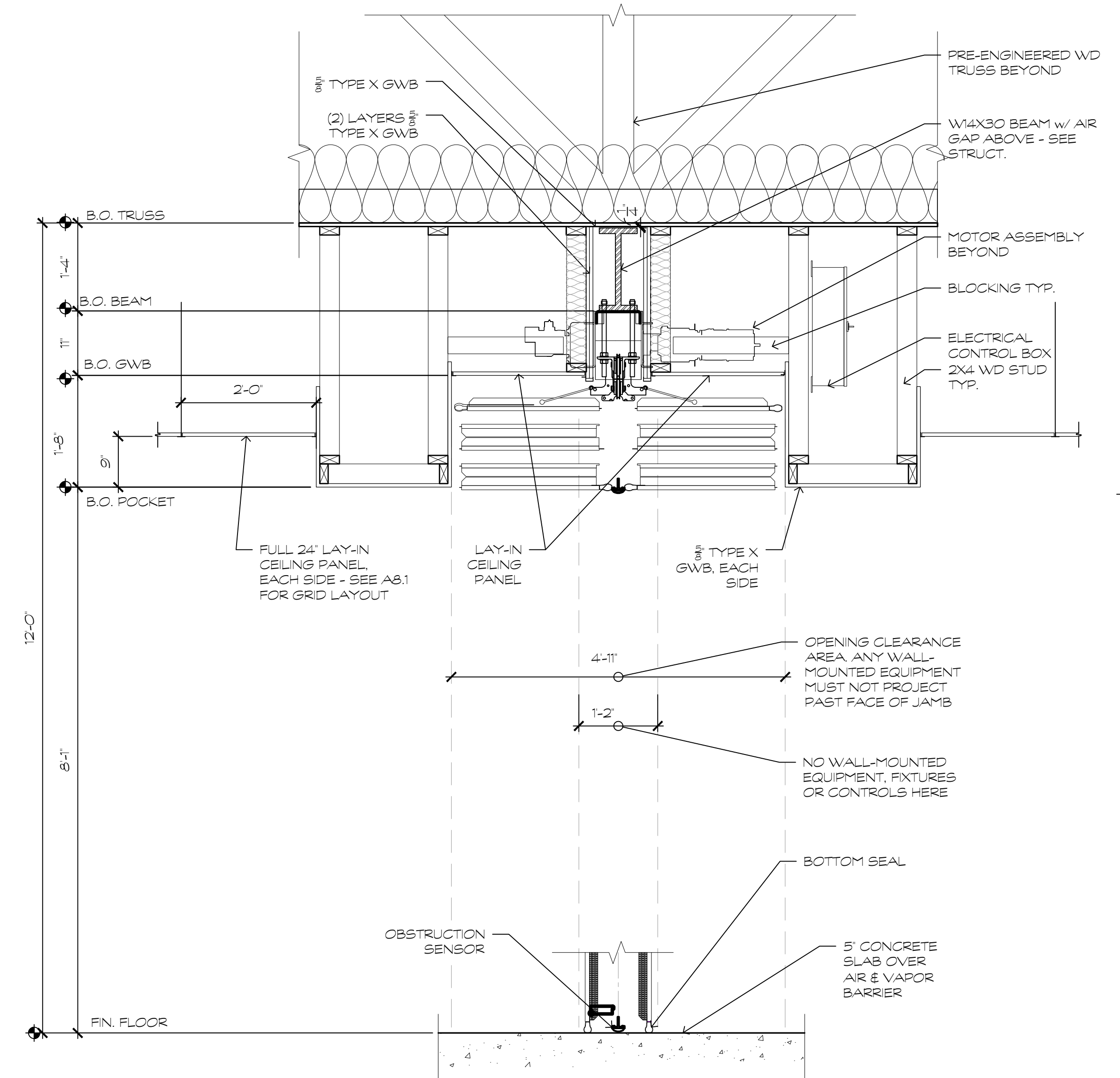
3 TYP. WATERTABLE DETAIL
1' = 1'-0"



1 TYP. CANOPY DETAIL
N.T.S.



5 DOOR ELEVATION - 105E
3/4" = 1'-0"



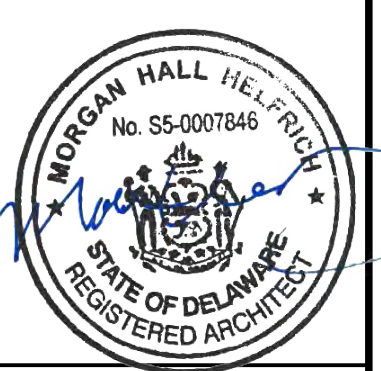
2 DOOR SECTION - 105E
3/4" = 1'-0"

DATE	1/19/2026
REVISION	ISSUED FOR PERMIT
NO	1

GMB
GEORGE, MILES & BUHR, LLC
ARCHITECTS & ENGINEERS
SALESBURY, BALTIMORE, SEAFORD
www.gmbnet.com

NEW CONSTRUCTION FOR:
HORIZON FARM CREDIT DHQ
BRIDGEVILLE, DE

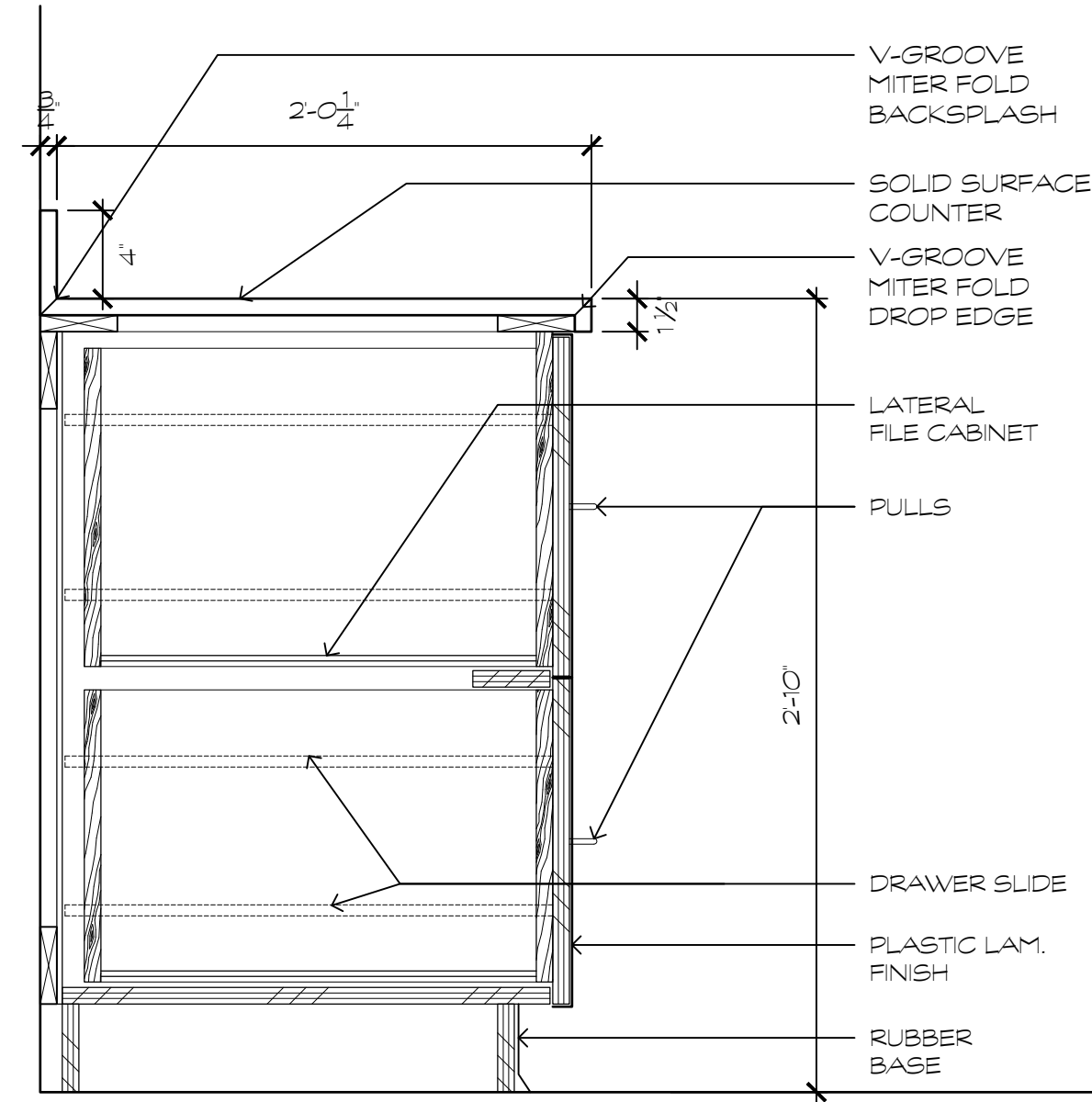
DETAILS



SCALE	: AS NOTED
DESIGN BY	: MHH
DRAWN BY	: AUB
CHECKED BY	: MHH
GMB FILE	: 250095
DATE	: 12/30/2025

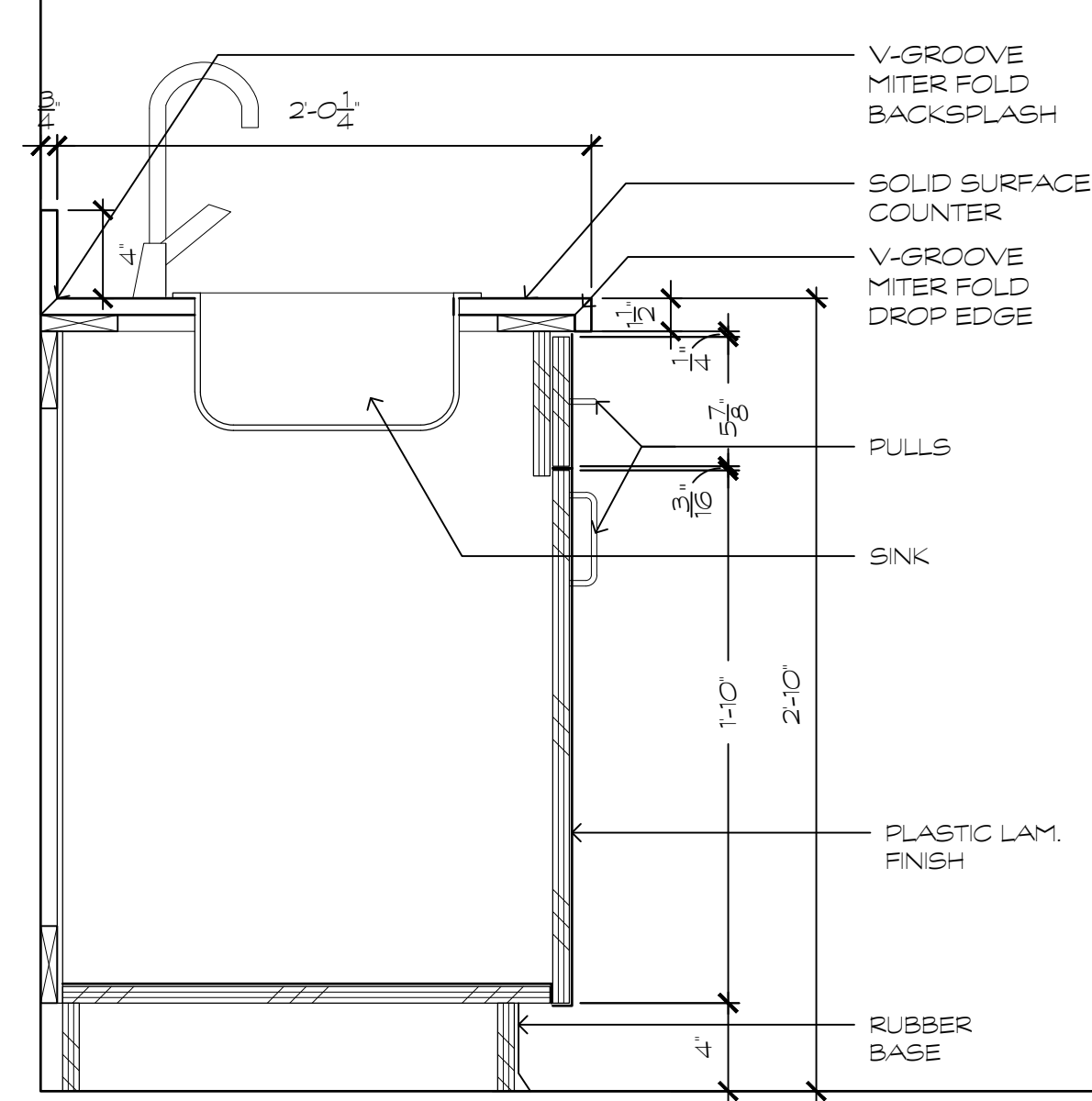
A9.1

G:\Projects\2025\250095 Horizon Farm Credit AE Design Services\Drawings\Working Sets\A9.2 CABINETRY DETAILS.dwg, 12/30/2025 9:40 AM, Deane L. Townsend



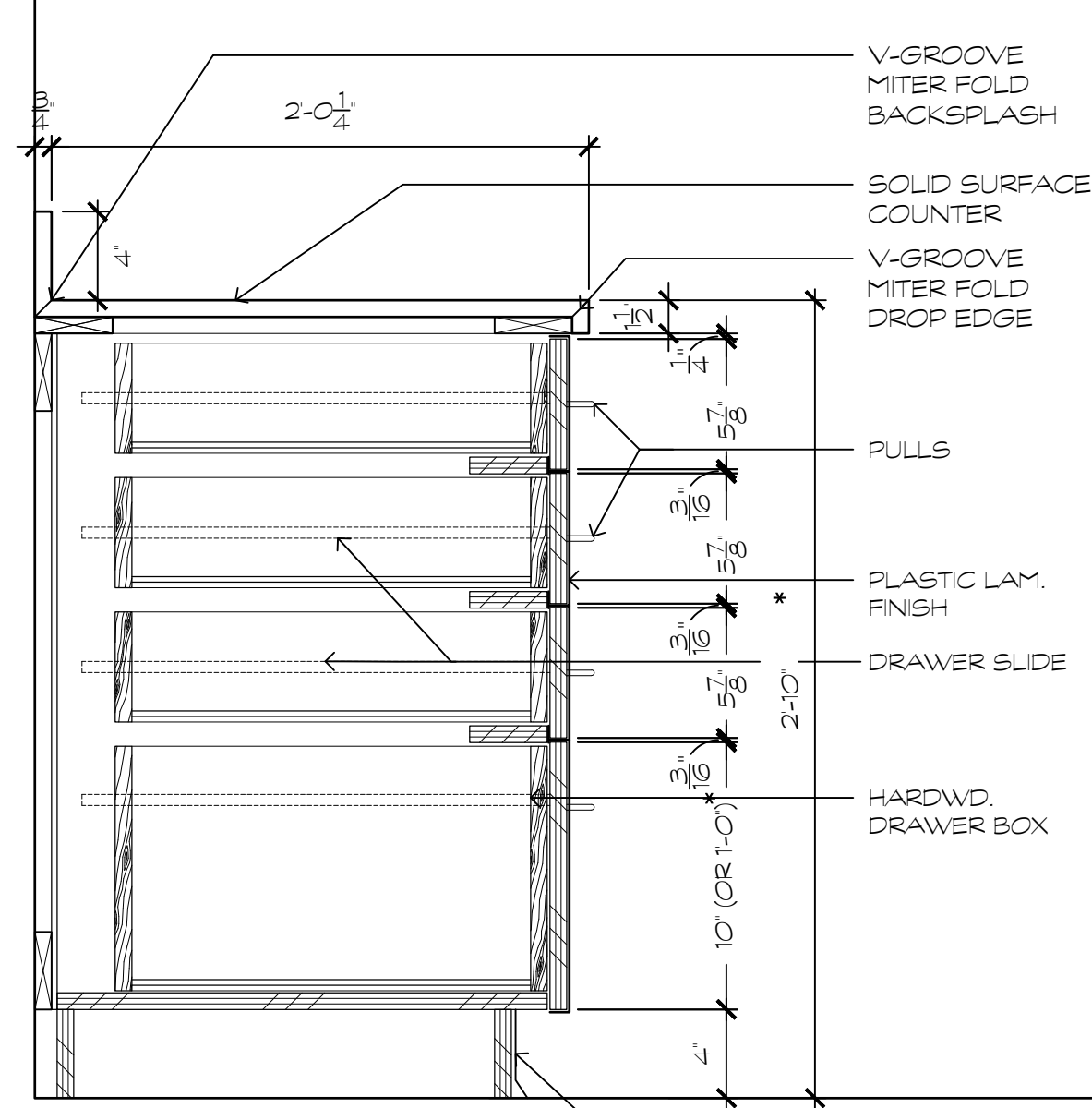
COUNTERTOP 3/4" PLYWOOD
CABINET 3/4" MDF W/ MELAMINE INTERIOR

A BASE DRAWER CABINET



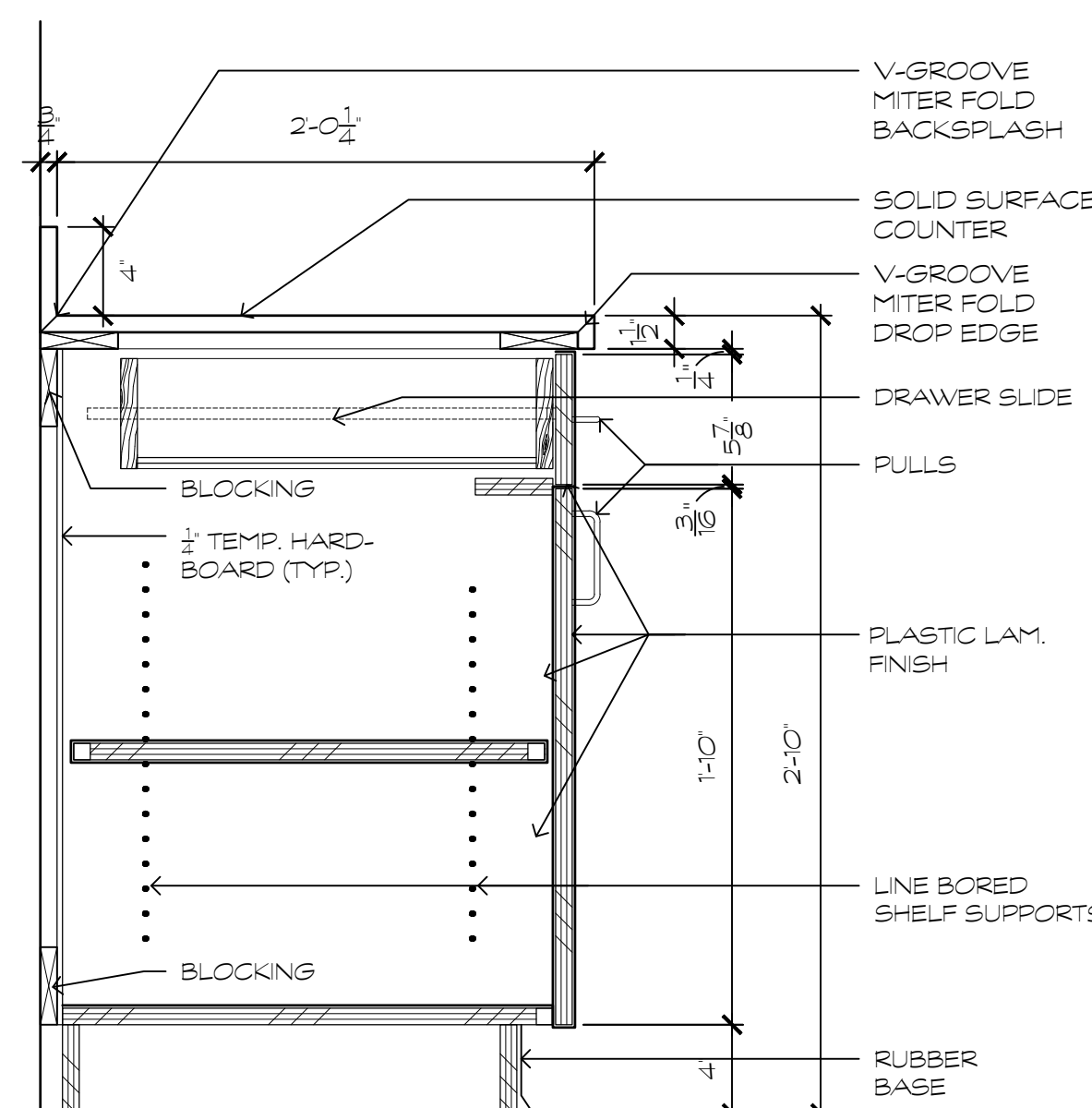
COUNTERTOP 3/4" PLYWOOD
CABINET 3/4" MDF W/ MELAMINE INTERIOR

B BASE SINK CABINET



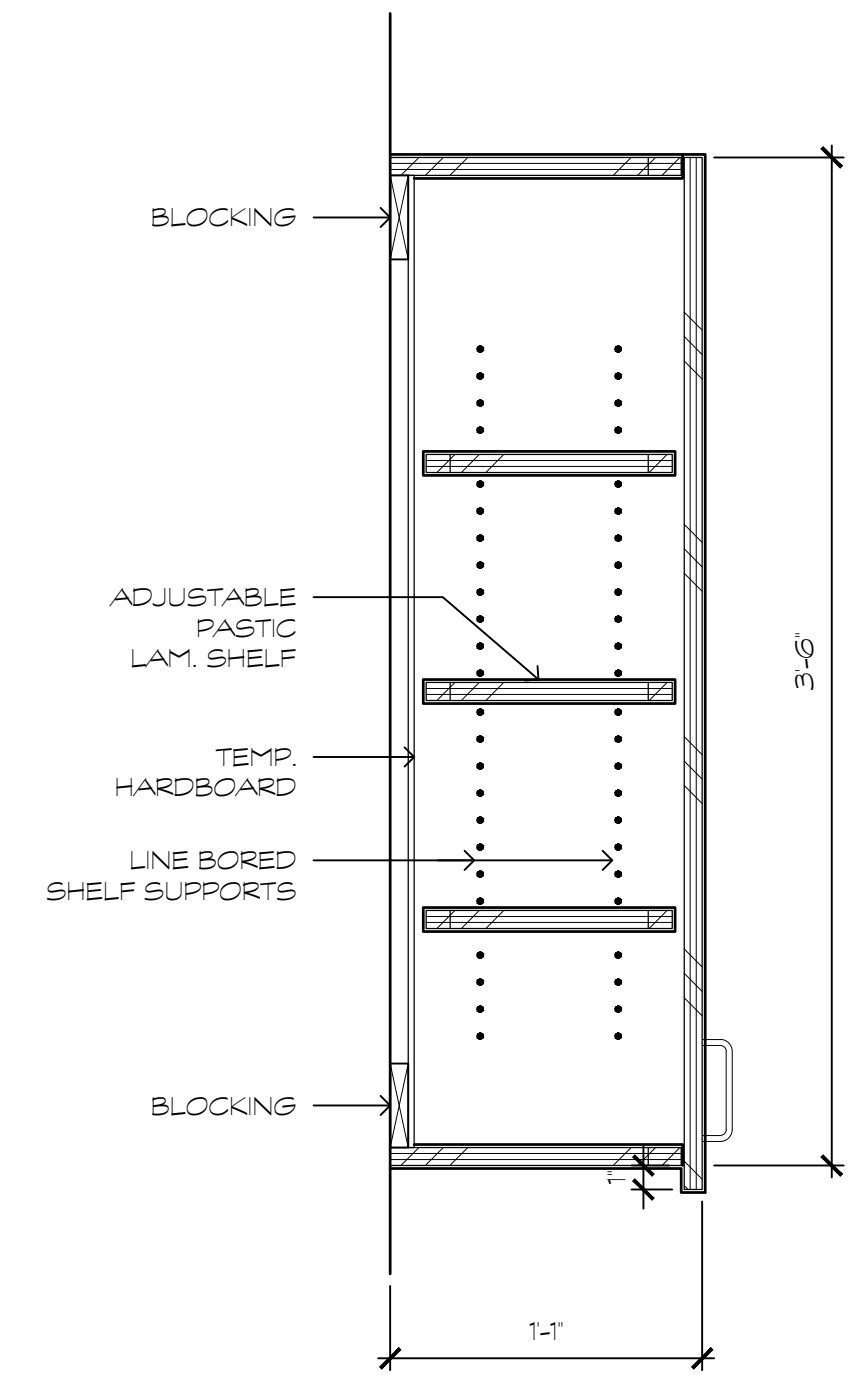
COUNTERTOP 3/4" PLYWOOD
CABINET 3/4" MDF W/ MELAMINE INTERIOR

C BASE CABINET



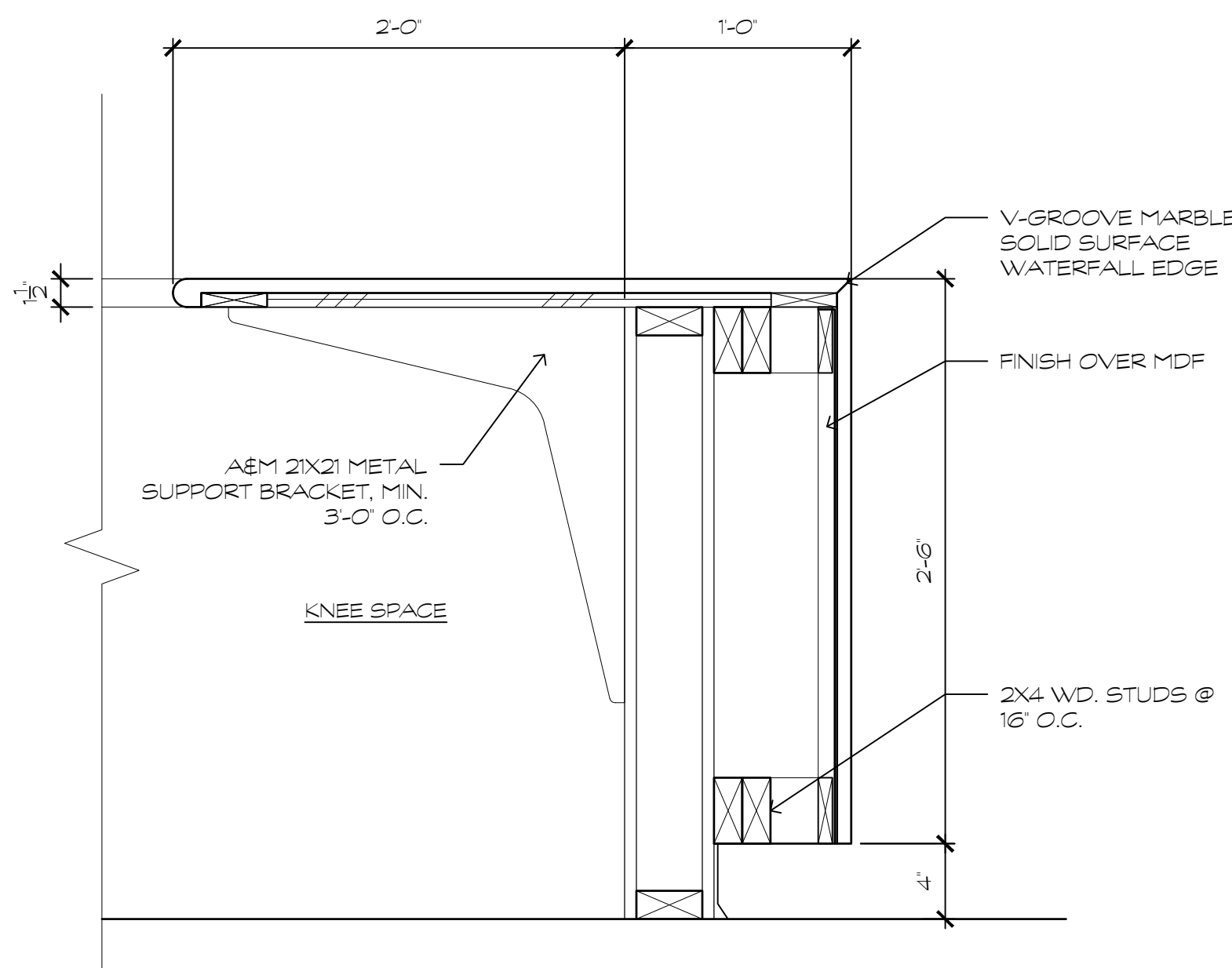
COUNTERTOP 3/4" PLYWOOD
CABINET 3/4" MDF W/ MELAMINE INTERIOR

D BASE CABINET



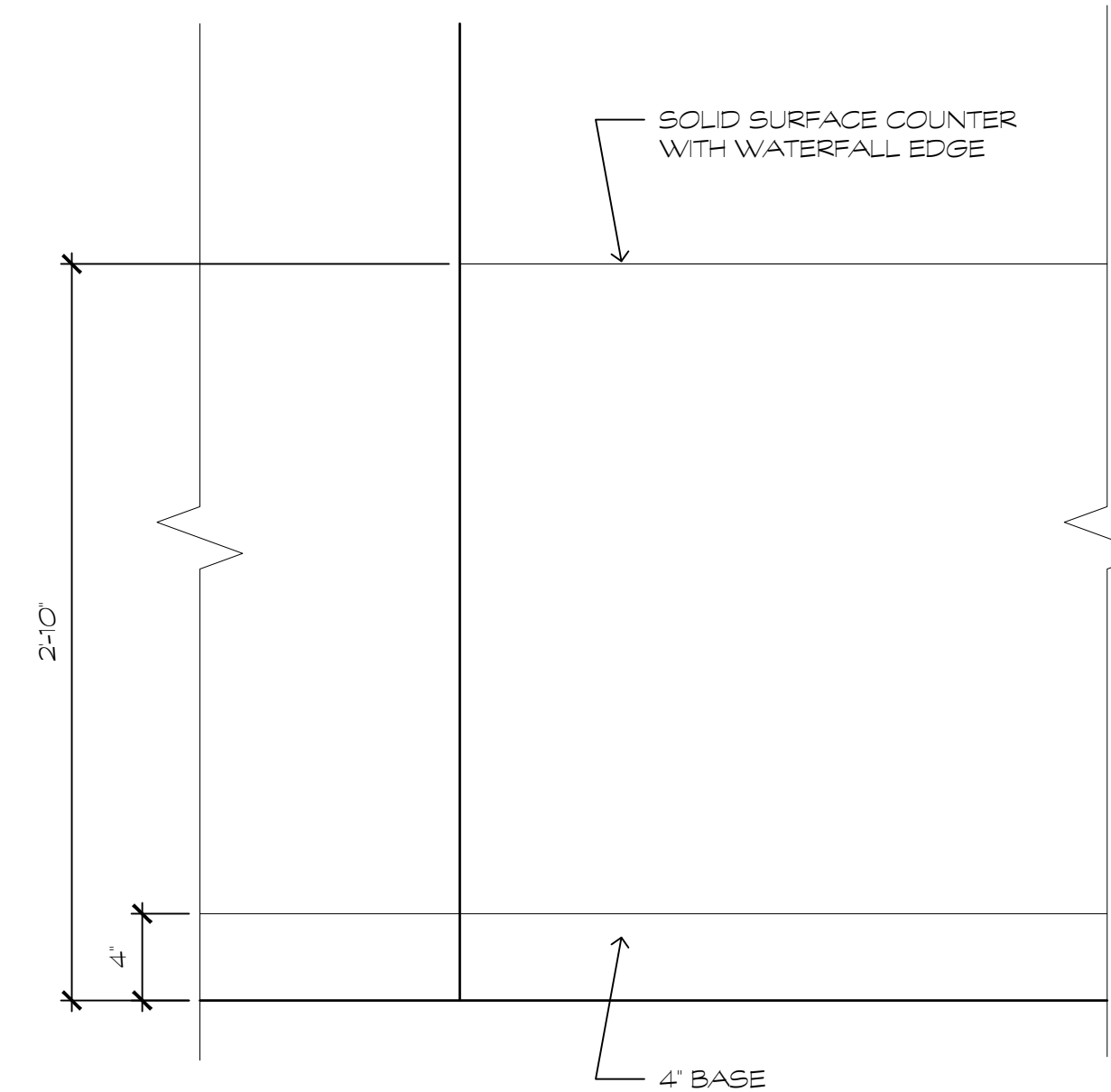
CABINETS 3/4" MDF WITH MELAMINE INTERIOR

E WALL CABINET

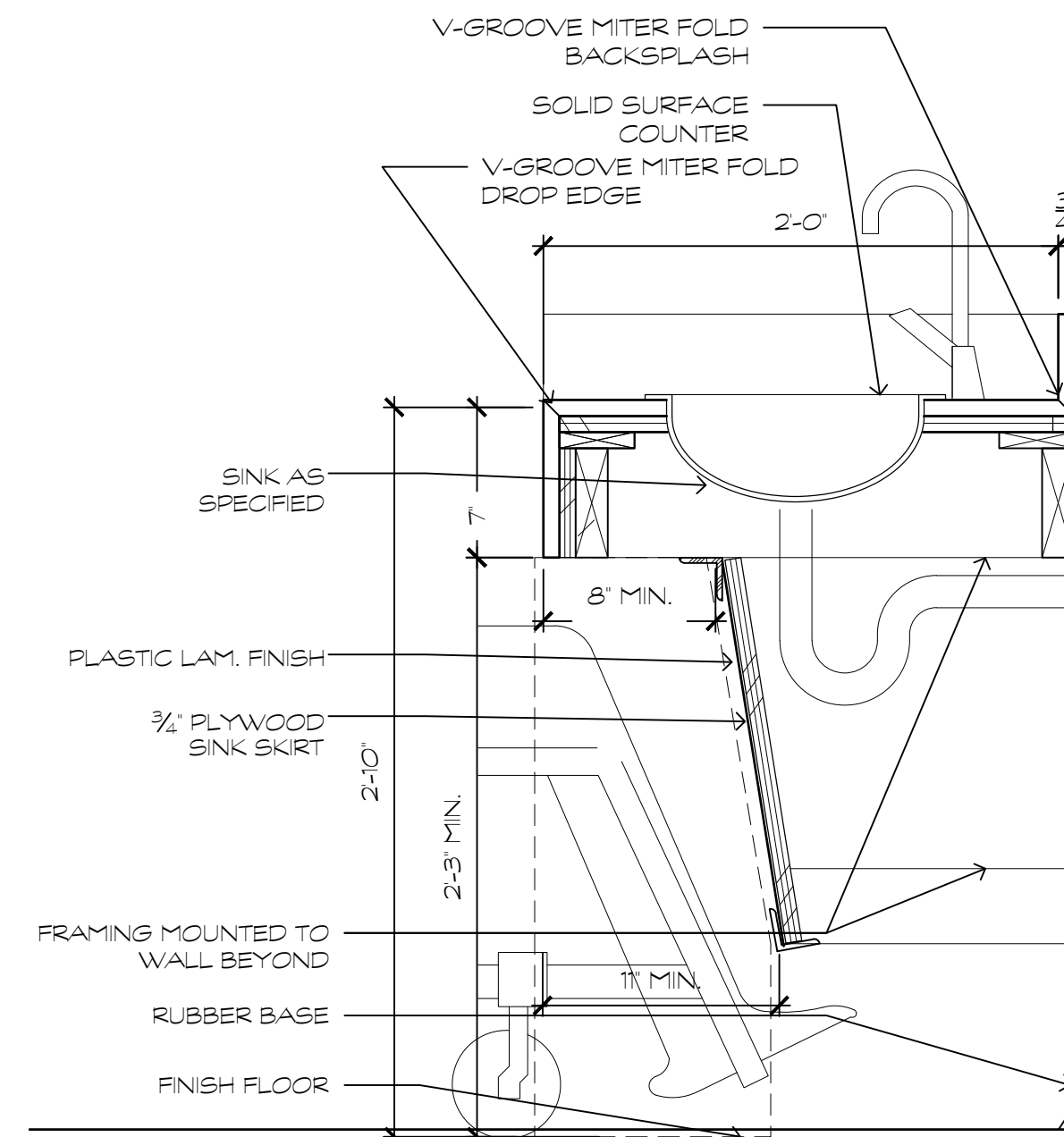


WATERFALL DETAIL
COUNTERTOP 3/4" PLYWOOD
CABINET 3/4" MDF W/ MELAMINE INTERIOR

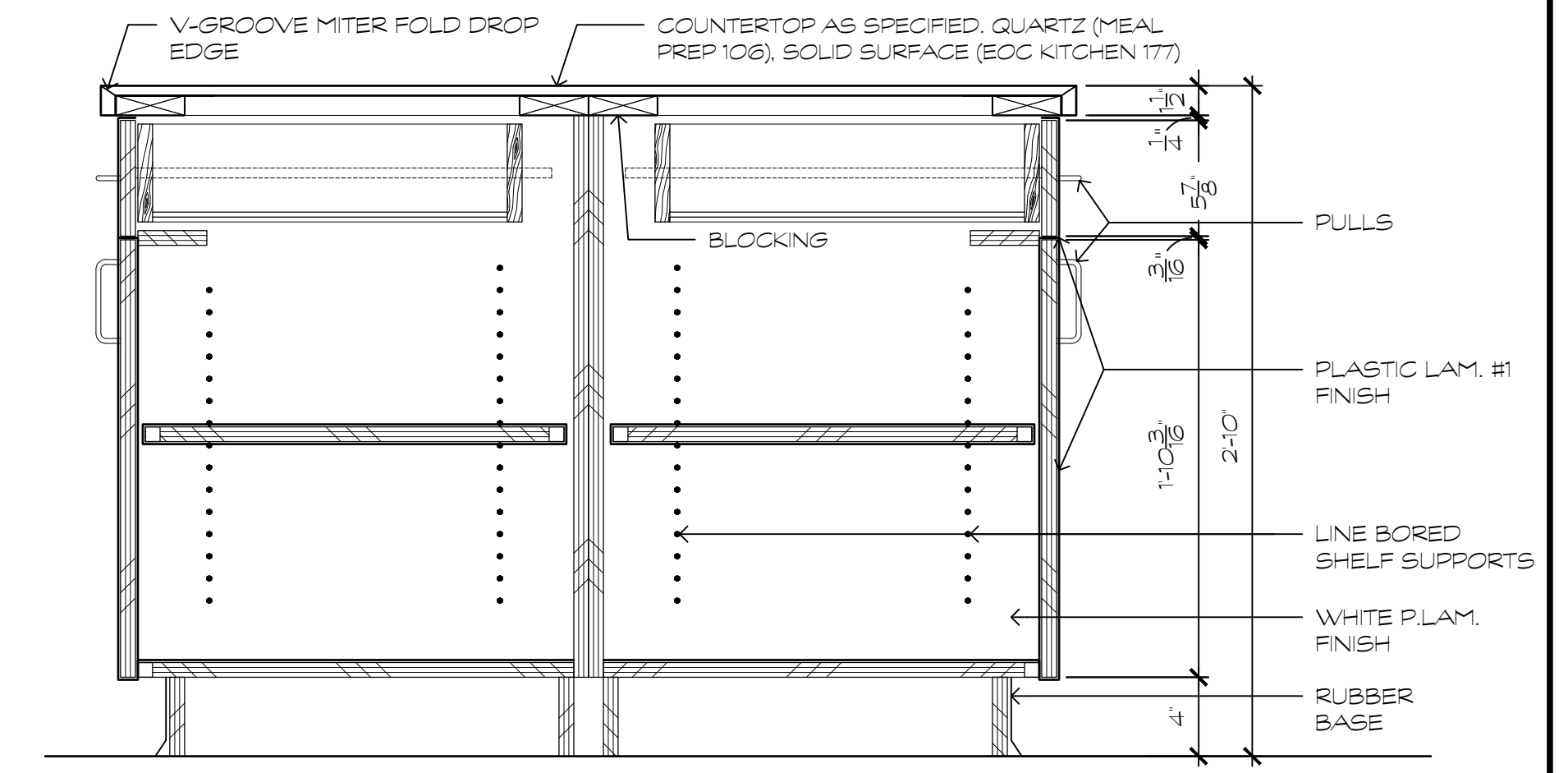
F RECEPTION COUNTER



G RECEPTION ELEVATION



H BUILT-IN RR COUNTER



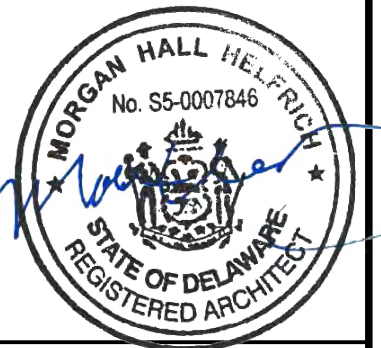
I MICROWAVE CABINET

DATE	1/19/2026
REVISION	ISSUED FOR PERMIT
NO.	1

GMB
GEORGE, MILES & BUHR, LLC
ARCHITECTS & ENGINEERS
SALISBURY, BALTIMORE • SEAFORD
www.gmbnet.com

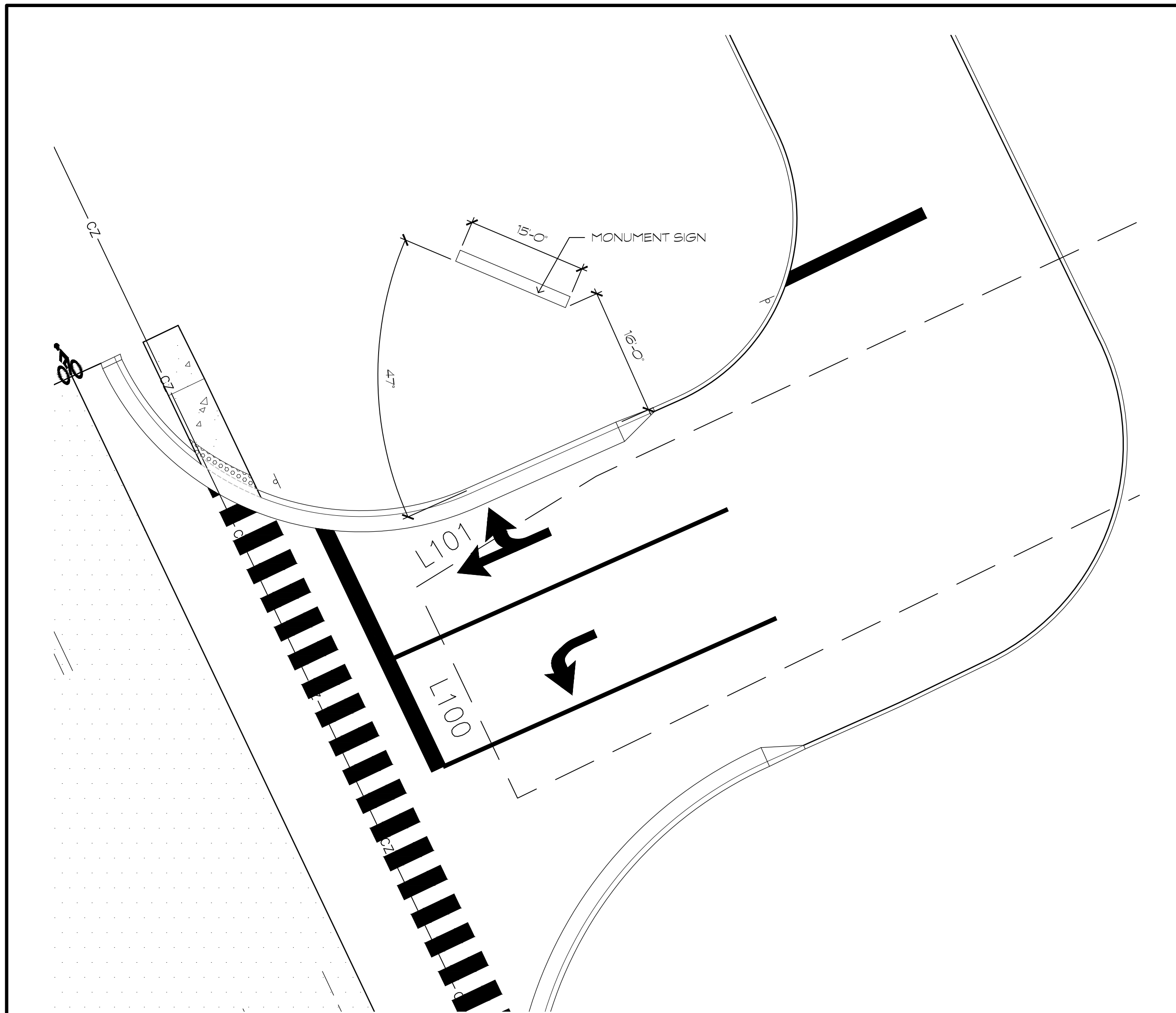
NEW CONSTRUCTION FOR:
HORIZON FARM CREDIT DHQ
BRIDGEVILLE, DE

CABINETRY
DETAILS

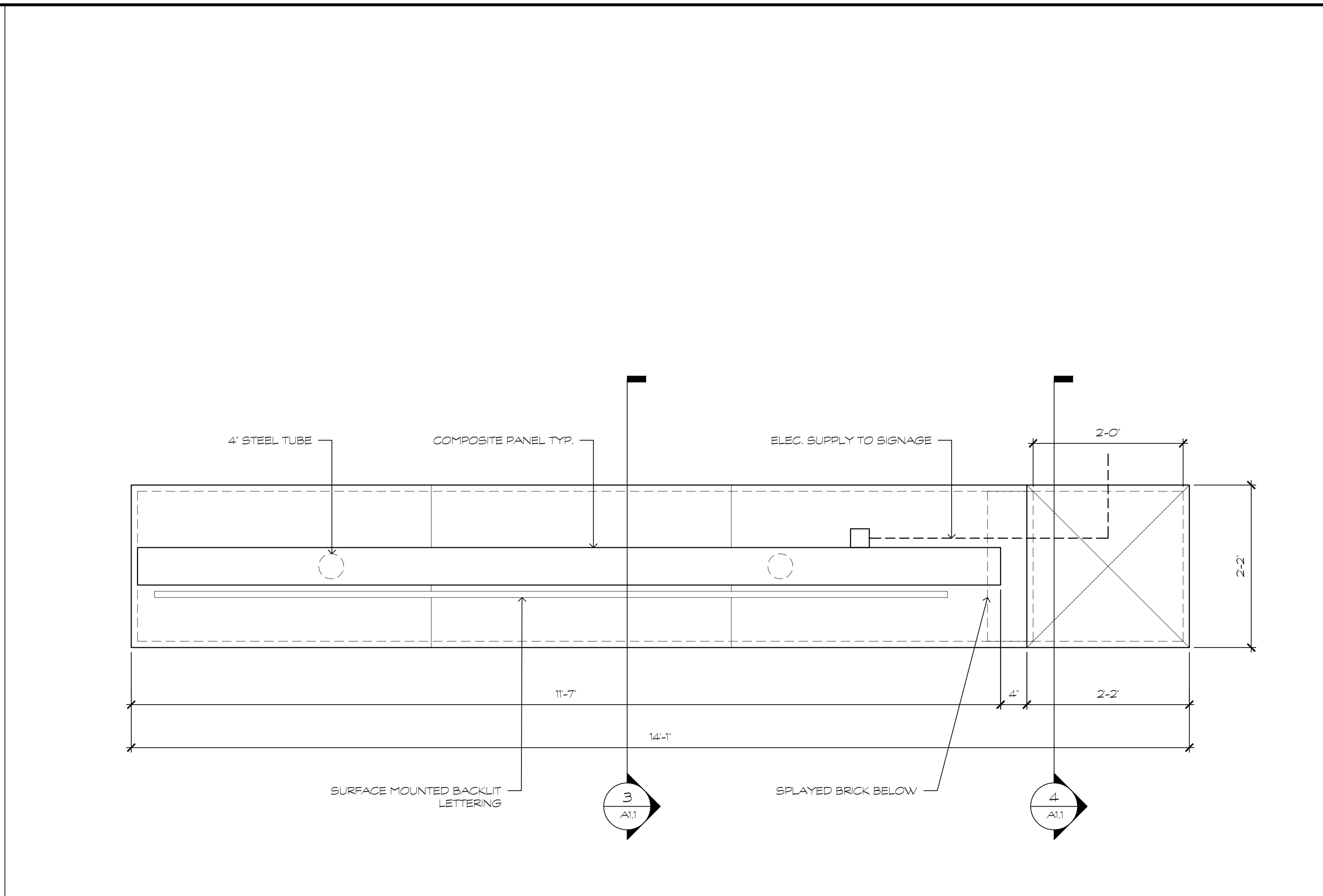


SCALE	1 1/2" = 1'-0"
DESIGN BY	MHH
DRAWN BY	AJB
CHECKED BY	MHH
GMB FILE	250095
DATE	12/30/2025

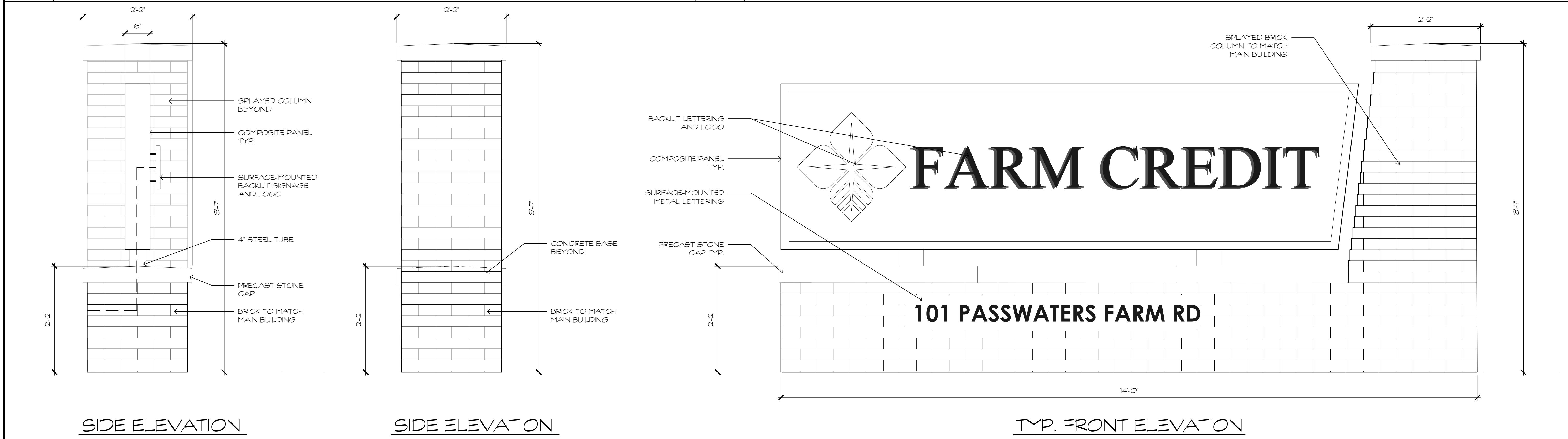
G:\Projects\2025\250095 Horizon Farm Credit AE Design Services\Drawings\Working Sets\A1.1 MONUMENT SIGN.dwg, 12/30/2025 9:42 AM, Deane L. Townsend



1 PARTIAL SITE PLAN
1/16" = 1'-0"



2 MONUMENT SIGN PLAN
3/4" = 1'-0"



3 ELEVATIONS
3/4" = 1'-0"

DATE: 1/19/2026

REVISION: ISSUED FOR PERMIT

NO. 1

GMB
GEORGE, MILES & BUHR, LLC
ARCHITECTS & ENGINEERS
SAUSBURY, BALMORE • SEAFORD
www.gmbnet.com

NEW CONSTRUCTION FOR:
HORIZON FARM CREDIT DHQ
BRIDGEVILLE, DE

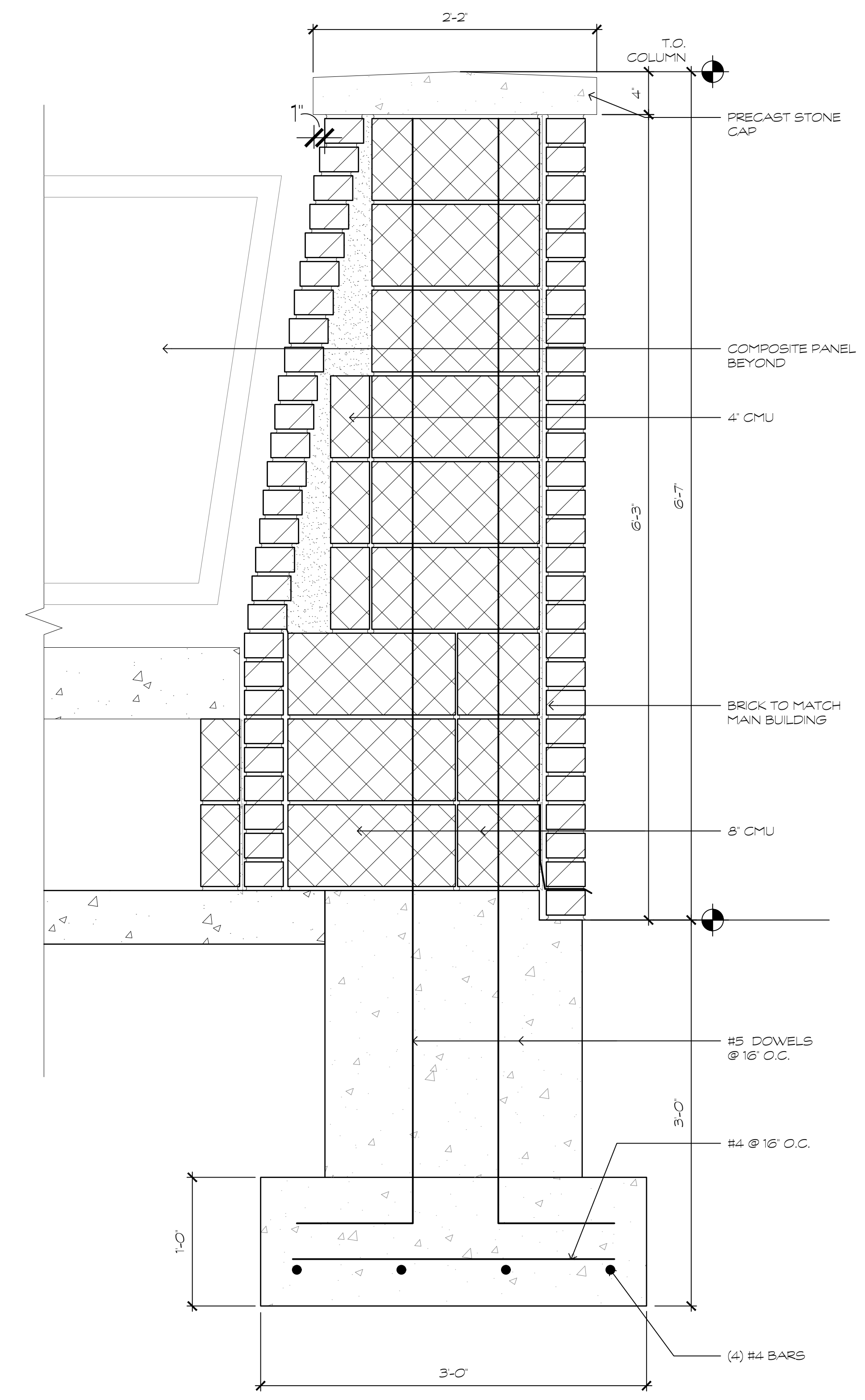
MONUMENT SIGN



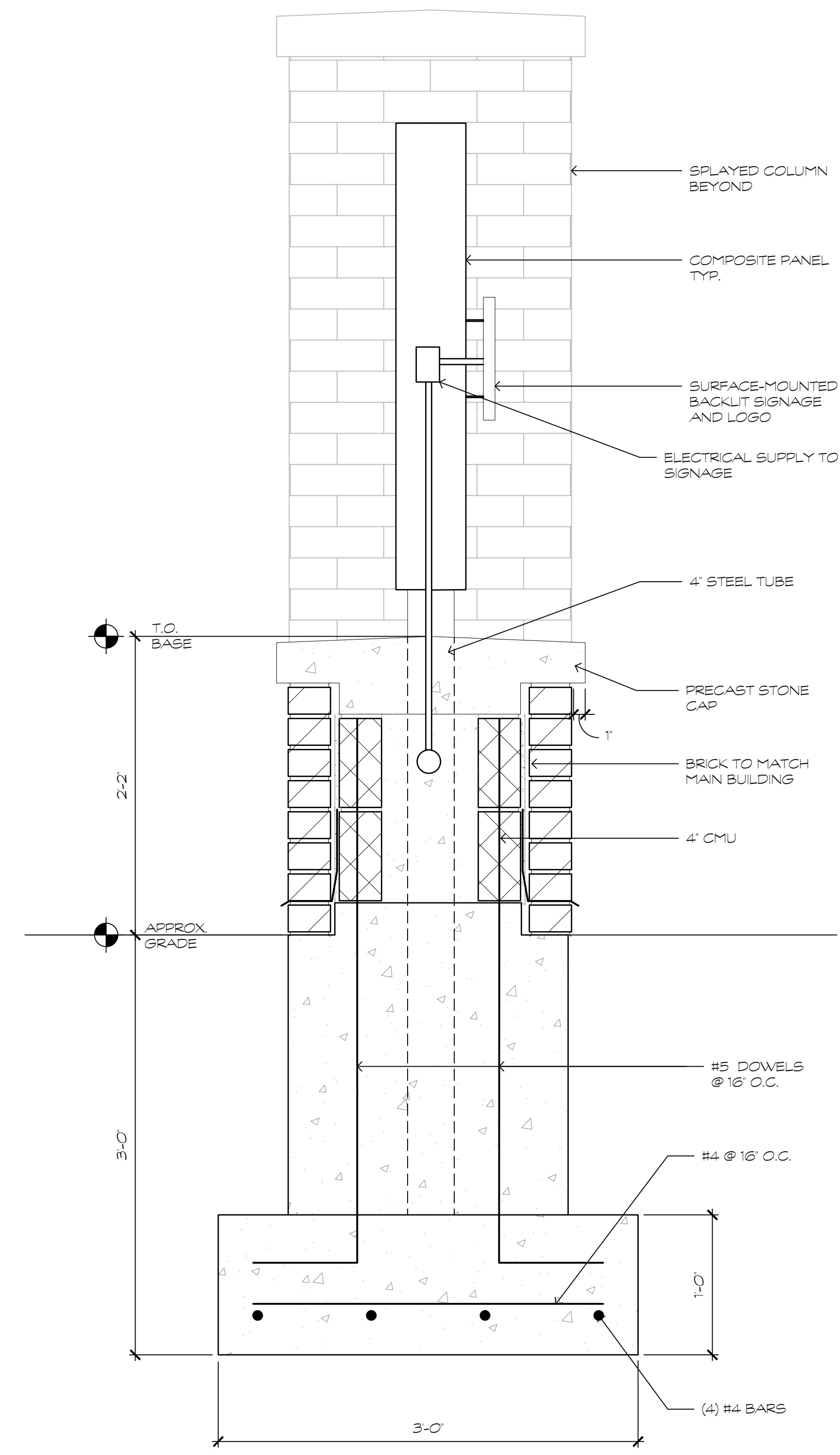
SCALE : AS NOTED
DESIGN BY : MHH
DRAWN BY : AUB
CHECKED BY : MHH
GMB FILE : 250095
DATE : 12/30/2025

A0.3

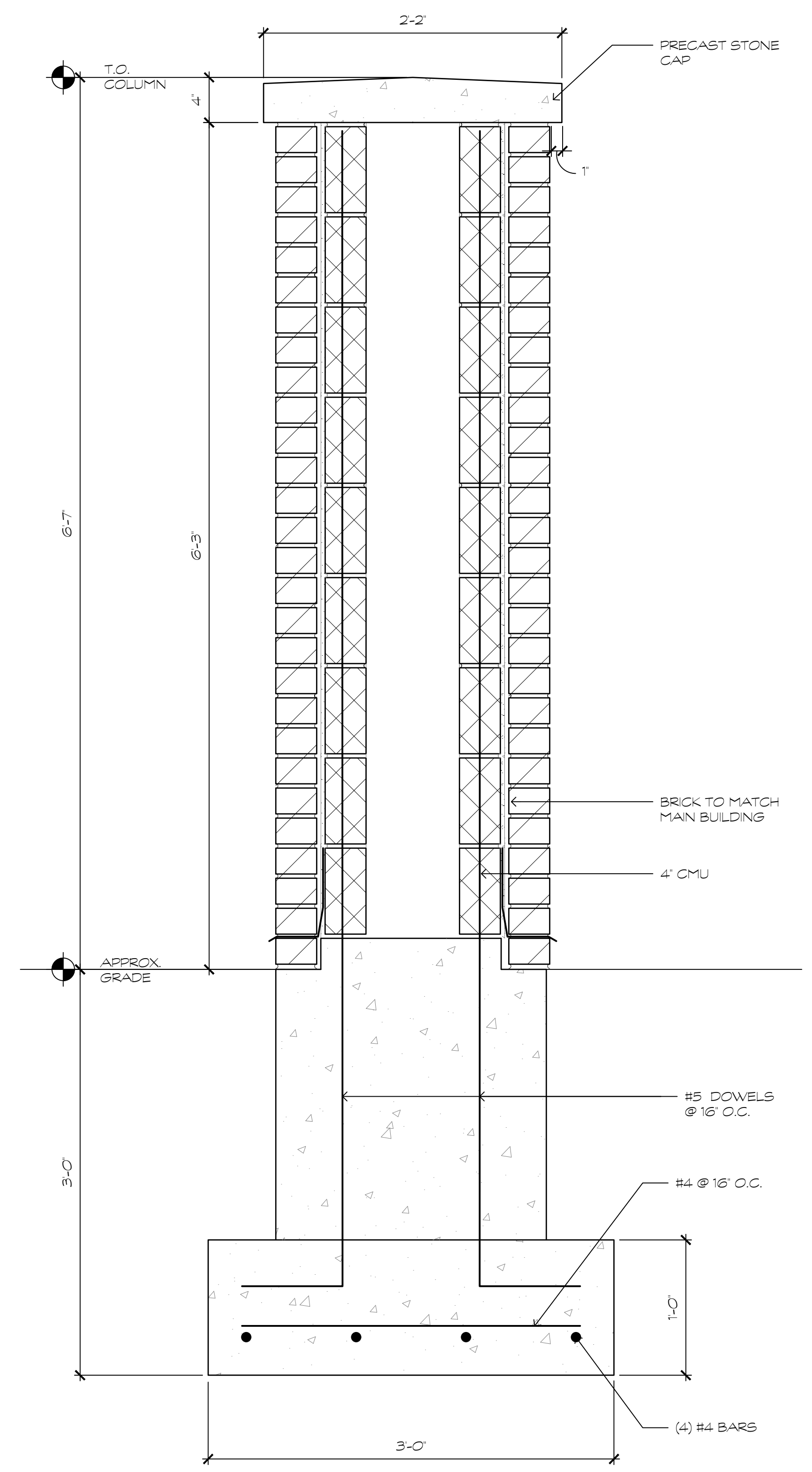
G:\Projects\2025\250095 Horizon Farm Credit AE Design Services\Drawings\Working Sets\A1.1 MONUMENT SIGN.dwg, 12/30/2025 9:40 AM, Deane L. Townsend



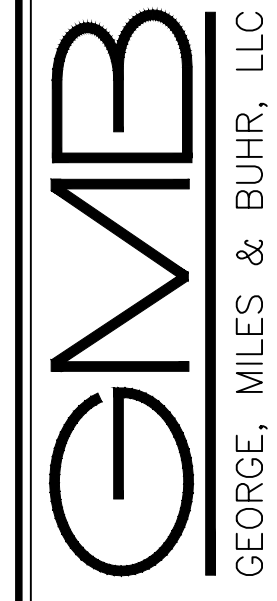

3 SECTION
3/4" = 1'-0"



2 SECTION
3/4" = 1'-0"



2 SECTION
3/4" = 1'-0"

DATE	1/19/2026
REVISION	ISSUED FOR PERMIT
NO	1
 GMB GEORGE, MILES & BUHR, LLC ARCHITECTS & ENGINEERS SALISBURY • BALTIMORE • SEAFORD www.gmbnet.com	
NEW CONSTRUCTION FOR: HORIZON FARM CREDIT DHQ BRIDGEVILLE, DE	
MONUMENT SIGN	
	
SCALE	: AS NOTED
DESIGN BY	: MHH
DRAWN BY	: AUB
CHECKED BY	: MHH
GMB FILE	: 250095
DATE	: 12/30/2025
A0.4	