



CECIL COUNTY PUBLIC SCHOOLS PURCHASING DEPARTMENT

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Superintendent of Schools

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December 8, 2023

CCPS RFP # 24-09 – Perryville High School – New Field House Project

ADDENDUM #2

This addendum is to answer questions asked during the question period which ended November 30, 2023. Proposers and related parties will be responsible to have read and understand all documents, the scope of work, addenda and all related solicitation documents issued. These documents will become attached to and part of the solicitation and award of bid contract.

ITEM No. 1 REVISED DRAWINGS

G1 - In response to Question #20, signage details have been updated to include Braille detail.

G3 - Corrected color selection for locker specification.

G4 - In response to Question #48, added site work specification sections.

A1 - In response to Question #47, added washer and dryer basis of design and model.

M1- In response to question#2&11. Updated locations of Mitsubishi mechanical units.

ITEM No. 2 PROJECT MANUAL CORRECTION – 01 10 00 SUMMARY OF WORK 1.7 PROJECT SCHEDULING

A. The project shall be completed, including commissioning and training, and the school is to be fully functional by ~~April 1, 2025.~~ **August 31, 2024.**

B. This project is primarily a summer project. The work is to be completed in an orderly, sequential manner to allow for turnover to the school in sections for cleaning and preparation for school opening. All sections of the work are to be completed no later than ~~April 1, 2025.~~ **August 31, 2024**

QUESTION 1: Per drawing A0, they are going to be pitching the floor in both locker room restrooms and shower stalls. Unfortunately, we are not able to set a 12x24 on a pitched floor. They will need to select a mosaic sized tile for the floors in those areas. Please advise.

ANSWER 1: Mosaic tile is acceptable ONLY in the shower stall areas of the restrooms, mosaic shall be from same product line as large format tile. Contractor shall submit mosaic tile product to Architect/Owner for color selection and approval. The remaining areas of Rooms 112 and 113 shall be the specified large format tile and shall be cut to accommodate floor sloping.

QUESTION 2: The Mitsubishi units as drawn have a maximum line set length of 60' with 2 90's. Anything over that and not only will you have a huge BTU loss, the units probably won't even come on. Lines sets as drawn are 115', 90', and 75'. As drawn, the exhaust louver is terminating on the interior of the building, please advise.

ANSWER 2: Mitsubishi unit locations have been updated, see attached revised drawing sheet M1. Exhaust louvers do not terminate on the interior of the building, see architectural roof plan and sections for more information regarding louver locations.

QUESTION 3: Is the exterior sign to be supplied and installed by owner or GC? Or a combination?

ANSWER 3: Sign shall be supplied and installed by GC. Owner shall be responsible for sign design and approval to match all other project signage, in an industry standard format.

QUESTION 4: Can 2" rigid foam board insulation be substituted for the closed cell spray foam insulation?

ANSWER 4: 2" Rigid foam board is acceptable. Contractor to submit product information confirming that rigid board product meets minimum R-9.5 requirement.

QUESTION 5: On Sheet S4 details 1 and 3, the note states "...w/1 #5 cont" but the drawings show qty 2. Please clarify the quantities of #5 needed for the bond beam application.

ANSWER 5: Provide (2) #5 at each bond beam.

QUESTION 6: The architectural and structural details indicate differing foundation conditions. A dwgs show 3 courses of foundation block while the structural plans indicate 4 courses. Please advise which detail is to be used for bidding.

ANSWER 6: Structural plans indicate foundation depths to top of footing. Contractor shall construct number of block courses required to provide minimum depths indicated in relation to final grade elevations at building exterior.

QUESTION 7: Schedule [P2] please confirm that cold water supply for P-1 water closet is ½".

ANSWER 7: Flush valve water closets should be 1" per Domestic Water Riser diagram. Schedule connection size is a typo.

QUESTION 8: Drawing [P1] refers to a fixture labeled P-7. Please list P-7 in fixture schedule.

ANSWER 8: P-7 on P-1 plan is equivalent to the washing machine box on the riser diagram. Use model number for washing machine box on riser diagram.

QUESTION 9: Drawing [P1] Note 15 designates Trap Primer model PR-500. However, this model is not capable of serving all 8 floor drains (a max of 2-4 drains with additional DU-U) and is also not capable of reaching all of the floor drains for this project (a maximum of 20 linear feet per line when primer is mounted 12' Above Finished Floor). Please advise. Are Trap Guards acceptable?

ANSWER 9: Trap guards are acceptable as a substitute for trap primers if allowed by the AHJ.

QUESTION 10: Please confirm that an inline domestic water expansion tank is not required for this project.

ANSWER 10: An expansion tank is required on all new water heater installations by code. We can provide a detail if requested.

QUESTION 11: Citing manufacturer's specifications, the split system units can have a maximum piping length of 65'. 2 of 3 proposed piping layouts are not possible, at lengths exceeding 72' and 93'. Please provide new locations for condensing units serving Training Room (106) and Office (102).

ANSWER 11: Mitsubishi unit locations have been updated, see attached revised drawing sheet M1.

QUESTION 12: When is the anticipated Notice to Proceed?

ANSWER 12: 1/11/2024

QUESTION 13: Please provide a model number for the locker benches on Drawing G3.

ANSWER 13: Locker specification is a performance specification with a basis of design. Contractor shall submit product complying with specifications to Architect/Owner for review.

QUESTION 14: On Sections 1 and 3 on A5, spray insulation is called out but it appears to be pointing to rigid insulation. Please clarify which insulation is required.

ANSWER 14: Closed cell spray insulation is the basis of design. Rigid insulation is an acceptable substitution. Contractor to submit product information confirming that rigid board product substitution meets minimum R-9.5 requirement.

QUESTION 15: Can we use MC cable in concealed conditions?

ANSWER 15: Yes, MC Cabling may be used where properly protected from damage per NEC requirements.

QUESTION 16: Please provide a signage schedule.

ANSWER 16: See Sheet G3, Specification Section 101400 – Signage.

QUESTION 17: Confirm the restroom signs apply to the exterior plaque specification.

ANSWER 17: Confirmed.

QUESTION 18: We believe interior ADA Restroom signs may be required by code. If so, provide details and specifications.

ANSWER 18: See Sheet G3, Specification Section 101400 – Signage.

QUESTION 19: Are other interior room signs required? If so, provide details and specifications.

ANSWER 19: See Sheet G3, Specification Section 101400 – Signage.

QUESTION 20: The Men and Women's standard signage detail has no handicap or braille detail. Please confirm this detail is correct.

ANSWER 20: See revised drawing sheet G1. Signage detail has been updated to include Braille detail.

QUESTION 21: Confirm all other exterior entrances are handicap accessible and require ADA signage per notes on G1.

ANSWER 21: Confirmed.

QUESTION 22: Are exit signs required? If so, provide details and specifications.

ANSWER 22: Yes, exit signs are required. See drawing sheet E2 – Lighting Fixture Schedule for product and mounting information.

QUESTION 23: Are visitor and home team signs required? If so, provide details and specifications.

ANSWER 23: Signs shall be supplied and installed by GC. Owner shall be responsible for sign design and approval to match all other project signage, in an industry standard format.

QUESTION 24: Please clarify the extent of the interior 1x4 PVC Trim Board shown on A5 Wall sections only. Plan view would be most helpful.

ANSWER 24: 1x4 PVC trim to be installed at all wall to ceiling connections where GWB ceiling is to be installed.

QUESTION 25: Confirm the utility company is furnishing and installing conduit and wiring from the source of power to the meter socket.

ANSWER 25: If this is typical, then yes, otherwise contractor provided.

QUESTION 26: Please provide the orientation and spacing of the batten board specified in section 074646.

ANSWER 26: See Reflected Ceiling Plan (Detail 2/A1) for information on orientation and spacing of batten trim board at soffit.

QUESTION 27: Is there a shutoff valve to assist in connecting the 3" water line?

a. Can we perform the connection on the weekends?

ANSWER 27: To be coordinated with owner during construction.

QUESTION 28: Can we substitute a USA-made Locker by Penco in lieu of the schoollockers? The product would provide all identical gauges and sizes and a powder coat finish.

ANSWER 28: Contractor shall submit requested product via formal submission request to the Architect/Owner for review.

QUESTION 29: Schoollockers.com SKU number is not an all-welded - please clarify if welded or KD construction is preferred. The front frame of the locker is always welded.

ANSWER 29: This is an open front end locker. Welded channel frame construction preferred.

QUESTION 30: Can we substitute Bradley Partitions in lieu of the ASI partitions? Bradley offers identical specifications and is a USA-made product.

ANSWER 30: Contractor shall submit requested product via formal submission request to the Architect/Owner for review.

QUESTION 31: Who supplies the water meter for this building? If the GC is to provide, please specify the make and model for the Town of Perryville.

ANSWER 31: Per water service pressure reducing valve schematic, GC to provide. Meter to be Neptune T-10 Cold Water Meter/Displacement Type, magnetic drive with registration in gallons.

QUESTION 32: Please provide a specification for the incoming domestic water pit for the Town of Perryville.

ANSWER 32: 42" deep pit with manhole cover shown on domestic water riser diagram on Sheet P2 can be ignored. Contractor to provide gate valve and roadway box as indicated on Sheet C1. All other equipment to be inside building per plumbing drawings.

QUESTION 33: Please provide a specification for the pressure-reducing valve for the Town of Perryville.

ANSWER 33: Town of Perryville has no active specification for pressure reducing valve. Contractor to coordinate exact requirements with Town of Perryville during construction.

QUESTION 34: On Structural Drawing S-1; Foundation Subgrade Preparation Requirements: Has there been a Geotechnical Engineering Survey / Report done on the proposed location of the new field house site? There was no survey found in the construction documents listed. Will the Geotechnical Survey on file with the county be made available to the Bidding GC's. Please Advise

ANSWER 34: Foundations have been designed based on a presumptive bearing capacity of 2 KSF. Presumptive bearing capacity shall be verified by GC prior to placing foundations.

QUESTION 35: Drawing E-4: Drawing Note #9 States to extend one (1) 2" conduit from backboard location in the mechanical room underground to existing school demark/telephone closet. Coordinate exact conduit routing and termination location with school rep. in the field. No location found on drawings for the demark/ telephone closet location. Please advise the distance this 2" conduit is to run.

ANSWER 35: 150'

QUESTION 36: Are we to assume there will be a new power supply service to the new field house? Is the GC responsible for the cost of this new service? Is the GC responsible for the permits for the new service? Will the power supply service come from the existing press box? Please Advise

ANSWER 36: Yes, Contractor to be responsible for cost and permits. Existing press box feed to remain as existing.

QUESTION 37: What linear footage should be covered for the BGE ducts and telecom to the building? Will 5' out from the building be acceptable? Please advise

ANSWER 37: For Bid purposes assume 5' past building footprint. Location and total length not established with local utility company yet.

QUESTION 38: Will fire alarm be required and if so, who is the vendor?

ANSWER 38: No a fire alarm is not required.

QUESTION 39: Will temp power to the job sight trailer be required? If so, please provide footage/amperage/location for the job sight trailer.

ANSWER 39: Job site trailer shall be provided if required by contractor. Not required by contract.

QUESTION 40: Will temp power service be required?

ANSWER 40: Yes.

QUESTION 41: After review of the site drawings there is no "limit of disturbance" shown. Is it the PM thought to temp fence the entire work area, including the tie in locations for the utilities? If so, that will limit the access to the stadium area from the parking lots and to foot traffic during stadium games, and the use by students while classes are in session. As shown on Addenda #1 Item #3 response to the work hours, Item #4 bus lane use and question 11 football field use.

ANSWER 41: Temporarily fence the area as required by work scheduled and work completed. Once utility work is completed, it is expected that related areas be turned back over to school with fencing removed.

QUESTION 42: Is there a phasing plan to be used during the construction to limit the restricted use of the areas around the football stadium and press box.

ANSWER 42: No. Work to be completed prior to field use.

QUESTION 43: What are the requirements for "silt fencing" at the excavation site, no specifications shown in the drawings/specs. What are the county's requirements for these items.

ANSWER 43: Silt fencing not required. Contractor to provide same day stabilization as required by the work.

QUESTION 44: On the temp construction fencing will the use of screening be required to restrict the view of the jobsite? Are there guidelines from the county that need to be utilized? Please advise.

ANSWER 44: No.

QUESTION 45: Can kraft faced insulation in the attic be used in lieu of foil face? Foil face insulation is no longer available with the facing attached directly to the batts. We would have to apply a separate foil facing to the bottom chord of the trusses. By doing this, it would prohibit us from applying drywall adhesive to the wood truss prior to screwing the drywall to the truss. Please advise on how to proceed.

ANSWER 45: Foil faced batts are readily available from Johns Manville, Certainteed and others.

QUESTION 46: What is the projected start date and final completion date of the project? Project manual has conflicting dates. Project manual, page 16 – section 00 31 00 Available Project Information states construction begins 1/16/24, final completion is 8/31/24 also in project manual section-01 10 00 project scheduling Project to be completed on April 1,2025. Which construction information is correct? Please advise.

ANSWER 46: Project completion date is 8/31/24.

QUESTION 47: Is the GC responsible to supply the washer and dryer in room 110. If so, what are the specifications for these appliances. Please advise.

ANSWER 47: Yes. See revised drawing sheet A1 for product information of washer and dryer.

QUESTION 48: There will be damaged landscaping and grasses to be replaced on project completion. There is no mention of re seeding or sod work to be done. No specifications found on drawings or project manual. Please Advise.

ANSWER 48: Specification sections for mentioned site work have been added. See attached added drawing sheet G4.

QUESTION 49: Electrical Specifications calls out minimum conduit size ½”, but notes on E1 say ¾”. Which is the correct dimension for the conduit to be used.

ANSWER 49: Minimum conduit size shall be ½” EMT for small branch circuits, contractor shall coordinate branch circuit size and requirements with plans.

QUESTION 50: Specifications say MC cable is permitted in concealed walls and ceilings, but the notes on E1 say lighting whips only, which is correct?

a. If MC cable is permitted, can it be used for branch homeruns? Please advise.

ANSWER 50: Yes, MC Cabling may be used where properly protected from damage per NEC requirements.

QUESTION 51: The communications spec mentions both ¾ conduit stub and ring & string for outlets. Which is correct?

ANSWER 51: Conduit and pull string is required based on open structure.

QUESTION 52: What is the chosen run length for the incoming utility company service?

ANSWER 52: For Bid purposes assume 5’ past building footprint. Location and total length not established with local utility company yet.

QUESTION 53: Will BIM or coordinated drawings be required?

ANSWER 53: Conformance set/As-Builts will be required at the end of the project.

QUESTION 54: What are the sites temporary power requirements?

ANSWER 54: As by contractor and its subcontractors.

QUESTION 55: Will on site temp storage be allowed?

ANSWER 55: Yes. Coordinate location with owner prior to lay-down.

QUESTION 56: Is this project Tax exempt?

ANSWER 56: No.

QUESTION 57: Will there be space allowed for GC construction trailer?

ANSWER 57: Yes, if required by contractor. Coordinate location with owner.

QUESTION 58: The scale on the architectural drawings are shown as 1/8" per foot and 1/4" per foot on the electrical plans which isn't measuring correctly. Please confirm the correct scale for the electrical drawings

ANSWER 58: 1/8" / 1'-0".

Authorized Signature/Date: _____

Printed Name/Title: _____

Contractor Name: _____

Address: _____

***Note: Bidder must sign and submit Addenda with the proposal submission. The same person signing the Addenda acknowledgement(s) must sign the Bid Form.**

ABOVE	ABV	EXTERIOR INSULATION	EIFS	PAINTED	PT
ABOVE FINISH FLOOR	AFV	FINISH SYSTEM	PAIR	PAIR	PR
ACCESSIBLE	ACC	FASTEN (ER)	FAS	PAPER TOWEL DISPENSER	PTD
ACOUSTIC or ACOUSTICAL	AC	FEET or FOOT	FT	PAPER TUB	PTT
ACOUSTICAL CEILING TILE	ACT	FEMININE NAPKIN DISPOSAL	FND	PARTITION	PTN
ADHESIVE	ADH	FIELD VERIFY	FV	PERPENDICULAR	PERP
ALTERNATE	ALT	FINISH	FIN	PLASTIC OR PLASTER	PLAS
ALUMINUM	ALUM	FINISH FLOOR	FF	PLATE	PL
ANCHOR BOLT	AB	FIRE CODE	FC	PLYWOOD	PWD
ANGLE	ANG	FIRE EXTINGUISHER	FE	PUMP/ACCUTED	PAF
ANODIZE(D)	ANOD	FIREPROOFING	FP	FASTENER	
APPROXIMATE	APPROX	FLASHING	FLASH	PREENGINEERED	PRE-ENG
ARCHITECT(URAL)	ARCH	FLOOR	FLR	PREFABRICATED	PREFAB
AT	@	FLOURESCENT	FLUOR	PREFINISHED	PREFIN
BABY CHANGING STATION	BOS	FLTNG	FTG	PROF. LINE	PL
BEAM	BM	FOUNDATION	FDN	QUARRY TILE	QT
BEARING	BRG	FULL SCALE	FS	RADIATOR or RADIUS	RAD
BELOW	BEL	FURNISH	FURN	RAIN LEADER	RL
BELOW FINISH FLOOR	BFF	FURRING	FUR	RECOMMENDATION	RECOM
BITUMINOUS	BIT	GALVANIZED	GALV	REFERENCE	REF
BLACK	BLK	GALVANIZED IRON	GVI	REFRIGERATOR	REFR
BLOCKING	BLKG	GAUGE	GA	REINFORCE (ING) (ED)	REINF
BOARD	BD	GLASS	GL	REINFORCED CONCRETE	RC
BOTTOM	BOT	GRAB BAR	GB	REQUIRE	REQ'D
BOTTOM OF DECK	BOD	GRADE	GD	RESILIENT	RES
BOTTOM OF FOOTING	BOF	GYPSPUM	GYP	RETURN	RET
BUILDING	BLDG	GYPSPUM WALL BOARD	GWB	REVISE	REV
BUILT UP ROOF	BUR	HARDWARE	HDW	RISER	R
BULKHEAD	BLKHD	HEATING	HTG	ROOF DRAIN	RD
CABINET	CAB	HEATING/VENTING	HVAC	ROOFING	RFG
CARPET (ED)	CPT	AIR CONDITIONING	ND	ROOM	RM
CARPET EDGE	CE	HEAVY DUTY	HD	ROUGH OPENING	RO
CAST IRON	CI	HEIGHT	HT	SANITARY NAPKIN	SND
CEILING	CLG	HIGH	H	DISPENSER	
CEMENT	CEM	HOLLOW CORE	HC	SCHEDULE	SCHED
CENTER	CTR	HOLLOW METAL	HM	SECTION	SECT
CENTRAL LINE	CL	HORIZONTAL	HORIZ	SHEATHING	SHTG
CERAMIC TILE	CT	HORIZONTAL CONTROL JOINT	HCJ	SHEET	SHT
CHANNEL	CHAN	INCLUDE	INCL	SIMILAR	SIM
CLEAR	CLR	INSIDE DIAMETER	ID	SOAP DISPENSER	SD
CLOSET	CLO or CLST	INSULATION	INSUL	SOLID CORE	SC
COLUMN	COL	INTERMEDIATE	INTER	SPECIAL	SPL
COMBINATION	COMB	INTERIOR	INT	SPECIFICATION	SPEC
CONCRETE	CONC	INVERT	INV	SPLASH BLOCK	SB
CONCRETE MASONRY UNIT	CMU	JANITORS CLOSET	JAN	SQUARE	SQ
CONSTRUCTION	CONSTR	JOINT	JO	SQUARE FOOT	SQ FT or SF
CONTINUOUS or CONTINUE	CONT	KITCHEN	KITCH	SQUAT YARD	SQ YD or SY
CONTROL JOINT	CJ	LAMINATE (D)	LAM	STAIN (ED)	STN
CORNER GUARD	CG	LAMINATED PLASTIC	LP	STAINLESS STEEL	SS
CORRIDOR	CORR	LAVATORY	LAV	STANDARD	STD
COUNTER SINK	CS	LIGHT	LT	STEEL	STL
COURSE	CRS	LINEAR FEET	LN FT	STORAGE	STOR
CUBIC	CU	LIQUID SOAP DISPENSER	LSD	STRUCTURAL	STRUCT
CUBIC FEET	CU FT or CF	LONG or LENGTH	L	STRUCTURAL FACING TILE	SFT
CUBIC YARD	CU YD or CY	LOUVER	LVR	SUSPEND (ED)	SUSP
CYLINDER	CYL	MANUFACTURER	MFR	SYSTEM	SYS
DEMOLITION or DEMOLISH	DEMO	MASONRY	MAS	TELEPHONE	TEL
DETAIL	DET	MASONRY OPENING	MO	TELEVISION	TV
DEEP or DEPTH	D	MATERIAL	MATL	TERRAZZO	T
DIAMETER	DIA	MAXIMUM	MAX	THICK	THK
DIMENSION	DIM	MECHANICAL	MECH	TO BE SELECTED	TBS
DIVISION	DIV	METAL	MTL	TOILET TISSUE DISPENSER	TTD
DOOR	DR	DOOR THRESHOLD	DT	TOLERANCE	TOL
DOUBLE	DBL	MINIMUM	MIN	TONGUE AND GROOVE	T&G
DOWN	DN	MIRROR	MIR	TOP OF STEEL	T/S
DOWNSPOUT	DS	MISCELLANEOUS	MISC	TOP OF FOOTING	TOF
DRAWING	DRWG or DWG	MODULAR	MOD	TREAD	T
DRAINING FOUNTAIN	DF	MOP AND BROOM HOLDER	MBH	TREATED	TRD
EACH	EAC	MOLDING	MLDG	TRIPLE	TRP
EACH FACE	EF	MOUNTED	MTD	TURN DOWN SLAB	TDS
EACH WAY	EW	NATURAL	NAT	TYPICAL	TYP
ELECTRIC or ELECTRICAL	ELEC	NOMINAL	NOM	UNFINISHED	UNF
ELECTRIC WATER COOLER	EW	NOT APPLICABLE	NA	UNLESS NOTED OTHERWISE	UNO
ELEVATION (GRADE)	ELEV	NOT IN CONTRACT	NIC	VERTICAL	VERT
ENCLOSURE	ENCL	NOT TO SCALE	NTS	VINYL BASE	VB
ENTRANCE	ENTR	NUMBER	NO or #	VERTICAL CONTROL JOINT	VCJ
EQUAL	EQ	ON CENTER	OC	VINYL COMPOSITION TILE	VCT
EQUIPMENT	EQUIP	OPENING	OPNG	WATER CLOSET	WC
ESTIMATE	EST	EXPOSITE	OPP	WATER HEATER	WH
EXHAUST	EXH	OUTSIDE DIAMETER	OD	WATER RESISTANT	WR
EXISTING	EXIST	OVERALL	OA	WATERPROOF (ING)	WP
EXISTING TO REMAIN	ETR	OVERHEAD	OH	WEIGHT	WT
EXPANSION BOLT	EXP BT			WELDED WIRE FABRIC	WWF
EXPANSION JOINT	EJ			WIDE or WIDTH	W
EXPOSED	EXP			WITH	WI
EXTENSION	EXTEN			WITHOUT	W/O
EXTERIOR	EXT			WOOD	WD

1. CONTRACTOR AND ANY SUB-CONTRACTOR HAVING SUBMITTED PROPOSAL FOR THIS WORK SHALL BE HELD AS HAVING CLEAR AND FULLY UNDERSTOOD AND AGREED TO THE SCOPE OF THEIR WORK UNDER THE CONTRACT. THIS TO INCLUDE BUT NOT LIMITED TO SITE/CIVIL, ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL, INFORMATION TECHNOLOGY, ETC., SO AS TO AVOID COORDINATION ERRORS, OMISSIONS AND MISINTERPRETATIONS. COOPERATION WILL BE AUTHORIZED FOR THE CORRECTION OF ALLEGED ERRORS, OMISSIONS AND MISINTERPRETATIONS. WHETHER THEY ARE A RESULT OF A FAILURE TO OBSERVE THESE REQUIREMENTS OR NOT. CONTRACTOR IS ALSO REQUIRED TO COORDINATE WITH ANY OWNER SUPPLIED EQUIPMENT REQUIREMENTS.

2. WHERE DISCREPANCIES EXIST BETWEEN VARIOUS DRAWINGS, THE CONTRACTOR WILL CONTACT ARCHITECT AND OWNER IN WRITING BEFORE PROCEEDING. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY MISAPPROPRIATE OR UNREASONABLE INTERPRETATION AT NO ADDITIONAL COST TO THE OWNER.

3. CONTRACTORS ARE RESPONSIBLE AND LIABLE FOR SAFETY AND PROTECTION OF SITE, PROJECT, WORKMEN, SUB-CONTRACTORS, ADJACENT PUBLIC PROPERTY AGAINST INJURY OR DAMAGE OF ANY TYPE. FROM ANY CAUSE, UNTIL FINAL ACCEPTANCE OF THE PROJECT. CONTRACTOR SHALL CARRY INSURANCE TO FULLY PROTECT THEIR INTEREST AND THOSE OF THE OWNER.

4. ALL WORK SHALL CONFORM TO LOCAL BUILDING CODES AND REGULATIONS AND SHALL BE INSTALLED ACCORDING TO THE JOINT REQUIREMENTS AND DECISIONS OF ALL LOCAL AUTHORITIES. IF ANY CONTRACTOR OR SUBCONTRACTOR PERFORMS ANY WORK CONTRARY TO THE LOCAL BUILDING CODE AND ORDINANCES, RULES AND REGULATIONS, WITHOUT PRIOR WRITTEN NOTICE TO THE OWNER, HE SHALL BEAR ALL COSTS ARISING THEREFROM.

5. COORDINATE AND SCHEDULE WORK WITH THE OWNER TO ACCOMMODATE THE OWNER'S NORMAL ACTIVITIES AND TO AVOID THE SAFETY OF THE OWNER'S PROPERTY, STAFF AND OTHERS USING THE SITE.

6. ALL CONTRACTORS SHALL CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS AT THE JOB SITE BEFORE STARTING THE WORK. DIMENSIONS SHOWN ARE FROM FACE OF FINISH OR FACE OF MASONRY WALL UNLESS OTHERWISE NOTED.

7. EVERY EFFORT HAS BEEN MADE TO IDENTIFY THOSE DIMENSIONS WHICH REQUIRE FIELD VERIFICATION WITH +/- DIMENSIONS NOT SO NOTED ARE INTENDED TO BE HELD. ALL DIMENSIONS, HOWEVER, SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO FABRICATION OR INSTALLATION OF BUILDING COMPONENTS.

8. ALL CONTRACTORS SHALL COORDINATE LOCATIONS, CLEARANCES, AND ELEVATIONS OF BUILDING STRUCTURE, HVAC WORK, ELECTRICAL WORK, LIGHT FIXTURES, MECHANICAL WORK, CEILINGS AND THE LIKE WITH THE OTHER RESPECTIVE WORK PRIOR TO FABRICATION AND INSTALLATION. CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCIES OR POTENTIAL CONFLICTS BEFORE PROCEEDING WITH THE WORK.

9. COORDINATE WITH MECHANICAL AND ELECTRICAL REQUIREMENTS FOR CONDITIONS WHICH WILL DISTURB EXISTING CONDITIONS AND WHICH WILL REQUIRE SELECTIVE DEMOLITION PARCHING AND FINISHING.

10. NOT EVERY CONDITION IS DETAILED. WHERE SPECIFIC DETAILING IS NOT SHOWN, EXECUTE THE CONSTRUCTION IN A SOUND, WORKMANLIKE MANNER IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDED INSTALLATION METHODS & PROCEDURES.

11. WHEN PRODUCT SPECIFICATIONS DO NOT EXIST, CONTRACTOR TO USE MANUFACTURERS RECOMMENDED INSTALLATION METHODS & PROCEDURES.

12. ADJACENT BUILDING SPACES NOT IN THE PROJECT AREA SHALL BE KEPT CLEAN AND PROTECTED. REMOVAL OF ALL EXISTING CONSTRUCTION, MECHANICAL AND ELECTRICAL EQUIPMENT AND FIXTURES SHALL BE EXECUTED IN A CAREFUL AND ORDERLY MANNER WITH THE LEAST POSSIBLE DISTURBANCE OF ADJOINING AREAS. ALL EXISTING WORK DISTURBED OR DAMAGED BY THE PROCESS OF DEMOLITION AND RECONSTRUCTION SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL COST TO THE OWNER. EVERY MEANS SHALL BE USED BY EACH TRADE TO PROTECT THE WORK AND MATERIALS OF ALL OTHERS. IN THE EVENT OF DAMAGE, IMMEDIATE REPAIRS AND REPLACEMENTS SHALL BE MADE TO THE SATISFACTION OF THE ARCHITECT.

13. THE AMOUNT OF DUST RESULTING FROM THE WORK SHALL BE CONTROLLED TO PREVENT THE SPREAD OF DUST TO THE OTHER PORTIONS OF THE BUILDING. THE USE OF WATER WILL GENERALLY NOT BE ALLOWED. PROTECTIVE DUST CURTAINS SHALL BE USED AS OTHER SUITABLE BARRIERS TO PREVENT THE DUST TRAVELING TO OTHER PORTIONS OF THE BUILDING. SEAL OFF ALL RETURN AIR REGISTERS AND OTHER MECHANICAL SYSTEMS TO PREVENT DUST FROM ENTERING SUCH SYSTEMS. IN ALL AREAS WHERE CONSTRUCTION DIRT AND DUST IS PRODUCED AS A RESULT OF THE WORK, SUCH AREAS SHALL BE VACUUMED AND/ OR DAMP MOPPED WITH APPROPRIATE EQUIPMENT.

14. MAINTAIN THE PREMISES FREE FROM ACCUMULATION OF WASTE, DEBRIS, AND RUBBISH CAUSED BY THE PROCESS OF DEMOLITION. AT THE END OF EACH DAY, ALL EXCESS DEBRIS, RUBBISH, TOOLS AND CONSTRUCTION EQUIPMENT, LEAVING THE AREA CLEAN AND READY FOR NEW CONSTRUCTION.

Legend:

- Name
- 44" ← STAIR WIDTH
- Occ ← REQUIRED # OF OCCUPANTS
- 220 ← IBC/NFPA ALLOWABLE
- 21 ← ACTUAL NUMBER OF PEOPLE
- 165 ← IBC/NFPA ALLOWABLE NUMBER OF PEOPLE
- 101 ← ROOM NUMBER
- Name ← ROOM NAME
- 150 SF ← ROOM SIZE
- 10cc/1005F ← IBC/NFPA OCCUPANCY FACTOR
- Occ = 312 ← OCCUPANT LOAD
- PATH OF EGRESS

Egress Calculations:

Room	Room Name	Room Size	IBC/NFPA Occupancy Factor	Occupant Load	Egress Width	Egress Capacity	Required Width
101	HOME LOCKER RM	688 SF	10cc/505F	Occ = 32	36"	165	36"
103	VISITOR LOCKER RM	688 SF	10cc/505F	Occ = 32	36"	165	36"
106	TRAINING RM	306 SF	10cc/505F	Occ = 7	36"	165	36"
105	UTILITY RM	84 SF	10cc/3005F	Occ = 1	36"	165	36"
102	OFFICE	103 SF	10cc/1505F	Occ = 1	36"	165	36"
104	OFFICE	103 SF	10cc/1505F	Occ = 1	36"	165	36"
110	STORAGE / DRYING RM	967 SF	10cc/3005F	Occ = 4	36"	165	36"

Notes:

- THE EGRESS CAPACITY OF 36" DOORS HAS BEEN CALCULATED USING 33" AS THE ACTUAL CLEAR WIDTH. 33"/0.20" = 165 PERSONS
- THE EGRESS CAPACITY OF 72" DOORS HAS BEEN CALCULATED USING 67" AS THE ACTUAL CLEAR WIDTH. 67"/0.20" = 335 PERSONS
- THE ABOVE CALCULATIONS ARE BASED ON EGRESS WIDTH REQUIREMENTS IN IBC AND NFPA.

KIT ACCESS TRAVEL DISTANCE = 200' MAX.	IBC, TABLE 1017.2	2
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PROJECT SHALL COMPLY WITH THE 2018 INTERNATIONAL BUILDING CODE (IBC); THE 2018 NFPA 101 LIFE SAFETY CODE; STATE OF MARYLAND ACCESSIBILITY CODE (COMAR 09.12.53); THE 2018 INTERNATIONAL ENERGY CONSERVATION CODE; THE AMERICAN WITH DISABILITIES ACT; AND ALL APPLICABLE CODES AND ORDINANCES.		
CODE REQUIREMENT	REFERENCE	PROJECT INFORMATION
USE GROUP	IBC, SECTION 302	USE - E-EDUCATIONAL
CONSTRUCTION TYPE	IBC, SECTION 602	TYPE - VB
FIRE RESISTIVE RATING REQUIREMENTS FOR BUILDING ELEMENTS	IBC, TABLE 601	STRUCTURAL FRAME = 0 HOURS; BEARING WALLS = 0 HOURS; NONBEARING WALLS EXTERIOR = 0 HOURS; NONBEARING WALLS INTERIOR = 0 HOURS; FLOOR CONSTRUCTION = 0 HOURS; ROOF CONSTRUCTION = 0 HOURS.
FIRE RESISTIVE RATING REQUIREMENTS FOR EXTERIOR WALLS	IBC, TABLE 602	FIRE SEPARATION DISTANCE IS GREATER THAN 30' THEREFORE NO FIRE RATING IS REQUIRED FOR EXTERIOR WALLS.
AUTOMATIC SPRINKLER SYSTEM	IBC, SECTION 903.2.3(1)	NONE REQUIRED LESS THAN 12,000 SQ.FT.
MAXIMUM HEIGHT & AREA = 40'-0" HIGH, 1 STORY & 6,000 SQ. FT.	IBC, TABLE 504.3, 504.4, 506.2	ACTUAL HEIGHT = 1 STORY + ATTIC ACTUAL AREA = 4,890 SQ. FT.
AREA MODIFICATIONS	IBC, SECTION 506	N/A
OCCUPANT LOAD	IBC, TABLE 1004.1.2	78 OCCUPANTS
MINIMUM NUMBER OF EXITS	IBC, TABLE 1006.3.1	2 REQUIRED; 7 PROVIDED
EXIT ACCESS TRAVEL DISTANCE = 200' MAX.	IBC, TABLE 1017.2	200'-0" EGRESS DISTANCE

NUMBER	NAME	REVISION
T1	TITLE SHEET	
C1	SITE PLAN	
G1	ADA STANDARDS	
G2	SPECIFICATIONS	
G3	SPECIFICATIONS	
A0	ARCH SITE/SLAB PLAN	
A1	FLOOR PLAN, REFLECTED CEILING PLAN	
A2	ROOF PLAN, ATTIC PLAN	
A3	ELEVATIONS, SECTIONS	
A4	ENLARGED PLANS, ELEVATIONS	
A5	WALL SECTIONS	
A6	WALL SECTIONS	
A7	DETAILS, DOOR SCHEDULE	
A8	ROOM FINISH SCHEDULE, ENLARGED ELEVATIONS	
S1	STRUCTURAL NOTES	
S2	FOUNDATION AND ROOF FRAMING PLANS	
S3	FOUNDATION SECTIONS AND TYPICAL DETAILS	
S4	FRAMING SECTIONS AND TYPICAL DETAILS	
M1	HVAC PLAN	
M2	FAN SCHEDULE, DETAILS	
M3	MECHANICAL SPECIFICATIONS	
P1	PLUMBING PLAN	
P2	DIAGRAM, DETAILS, SCHEDULES	
P3	DIAGRAMS, DETAILS	
P4	PIPING/PLUMBING SPECIFICATIONS	
E1	GENERAL NOTES AND SYMBOL S LIST	
E2	LIGHTING PLANS, SCHEDULE AND NOTES	
E3	POWER PLANS, SCHEDULE AND NOTES	
E4	POWER RISER, SCHEDULE AND NOTES	
E5	ELECTRICAL SPECIFICATIONS	

Diagram illustrating the notation for Section, Elevation, and Detail views:

- Section View:** A triangle containing the number '1' and the letter 'A1'. A reference note 'SIM' is shown. A section line is drawn through the triangle. Callouts explain: 'TOP NUMBER DESIGNATES LOCATION ON DRAWING' (pointing to '1'), 'REFERENCE NOTE (NOT ALWAYS USED)' (pointing to 'SIM'), and 'SECTION' (pointing to the section line).
- Elevation View:** A circle containing the number '1' and the letter 'A101'. A callout explains: 'ELEVATION' (pointing to the circle).
- Detail View:** A circle containing the number '1' and the letter 'A1'. A callout explains: 'DETAIL' (pointing to the circle).
- Interior Partition Tag:** A tag 'G4 1HR' is shown. A callout explains: 'INTERIOR PARTITION TYPE: REFER TO PARTITION SCHEDULE'.
- Door Tag:** A tag '101B' is shown. A callout explains: 'DOOR TAG: REFER TO DOOR SCHEDULE'.
- Window Tag:** A diamond shape containing the letter 'A' is shown. A callout explains: 'WINDOW TAG: REFER TO WINDOW SCHEDULE'.
- Bottom Letter/Number:** A callout explains: 'BOTTOM LETTER/NUMBER DESIGNATES WHICH SHEET DETAIL IS SHOWN' (pointing to 'A1' in the detail view).

I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME,
AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE
OF MARYLAND.

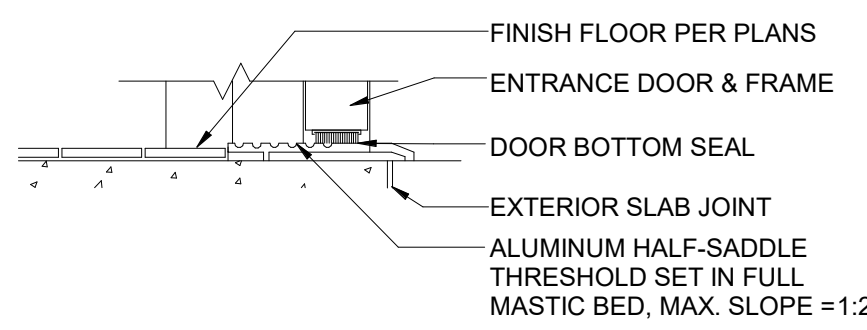
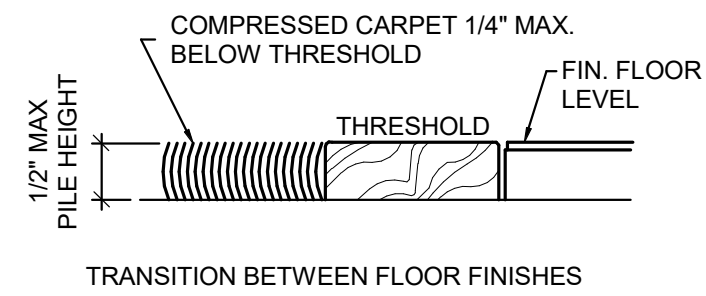
WM. STARR

10-20-2025

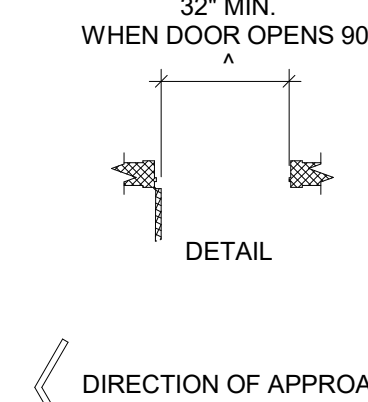
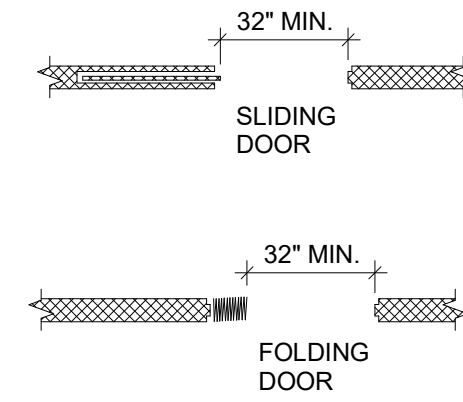
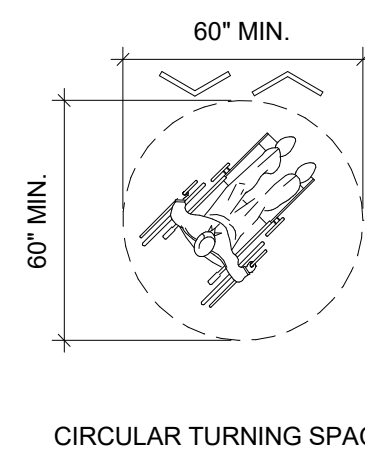
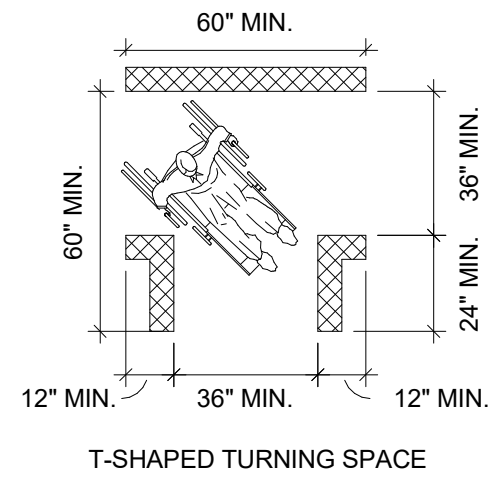
WILLIAM STARR DATE

MARYLAND REGISTRATION NO. 20121

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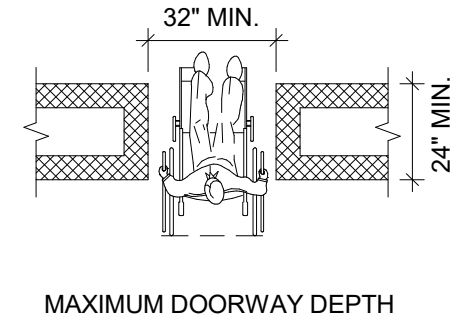


REFER TO DOOR SCHEDULE FOR SPECIFIC APPLICABLE DETAILS



DIRECTION OF APPROACH

NOTE: ALL DOORS IN ALCOVES SHALL COMPLY WITH THE CLEARANCES FOR FORWARD APPROACHES.



LETTERS AND NUMBERS:

- LETTERS AND NUMERALS SHALL BE RAISED 1/32" (0.8 MM) MINIMUM, UPPERCASE, SANS-SERIF OR SIMPLE SERIF AND SHALL BE ACCOMPANIED WITH GRADE 2 BRAILLE. RAISED CHARACTERS SHALL BE AT LEAST 5/8" (16 MM) HEIGHT, BUT NO HIGHER THAN 2" (50 MM). PICTOGRAMS SHALL BE ACCOMPANIED BY THE EQUIVALENT VERBAL DESCRIPTION PLACED DIRECTLY BELOW THE PICTOGRAM. THE BORDER DIMENSIONS OF THE PICTOGRAM SHALL BE 6" (152 MM) MINIMUM IN HEIGHT. (ADAAG SEC. 4.30.4)
- LETTER AND NUMBERS ON SIGNS SHALL HAVE A WIDTH-TO-HEIGHT RATIO BETWEEN 3.5 AND 1:1 AND A STROKE WIDTH-TO-HEIGHT RATIO BETWEEN 1:5 AND 1:10. (ADAAG SEC. 4.30.2)
- THE CHARACTERS AND BACKGROUND OF SIGNS SHALL BE EGGSHELL, MATTE, OR OTHER NON-GLARE FINISH. CHARACTERS AND SYMBOLS SHALL CONTRAST WITH THEIR BACKGROUND - EITHER LIGHT CHARACTERS ON A DARK BACKGROUND OR DARK CHARACTERS ON A LIGHT BACKGROUND. (ADAAG SEC. 4.30.5)
- CHARACTERS AND NUMBERS ON SIGNS SHALL BE SIZED ACCORDING TO THE VIEWING DISTANCE FROM WHICH THEY ARE TO BE READ. THE MINIMUM HEIGHT IS MEASURED USING AN UPPER CASE X. LOWER CASE CHARACTERS ARE PERMITTED. (ADAAG SEC. 4.30.3)
- BRAILLE SHALL BE CONTRACTED (GRADE 2) BRAILLE AND SHALL COMPLY WITH SECTION 703.4. (ICC/ANSI SEC. 703.4.1)
- BRAILLE SHALL BE BELOW THE CORRESPONDING TEXT. IF TEXT IS MULTILINE, BRAILLE SHALL BE PLACED BELOW THE ENTIRE TEXT. BRAILLE SHALL BE SEPARATED 3/8" (9.5 MM) MIN. FROM ANY OTHER TACTILE CHARACTERS AND 3/8" (9.5 MM) MIN. FROM RAISED BORDERS AND DECORATIVE ELEMENTS. BRAILLE PROVIDED ON ELEVATOR CAR CONTROLS SHALL BE SEPARATED 3/16" (4.8 MM) MIN. EITHER DIRECTLY BELOW OR ADJACENT TO THE CORRESPONDING RAISED CHARACTERS OR SYMBOLS. (ICC/ANSI SEC. 703.4.4)

SIGN LOCATIONS:

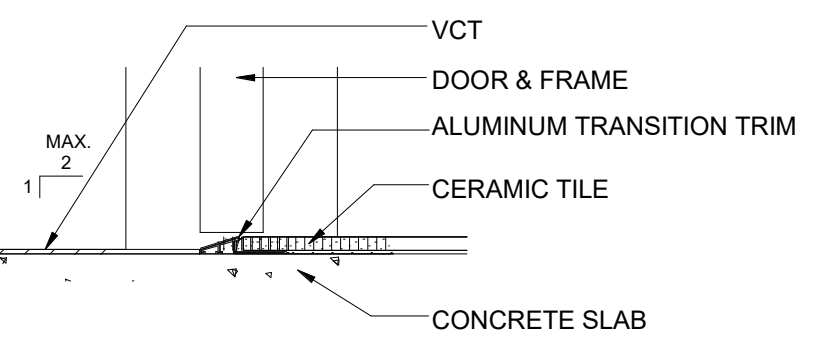
- ALL BUILDING ENTRANCES THAT ARE ACCESSIBLE TO AND USABLE BY PERSONS WITH DISABILITIES AND AT EVERY MAJOR JUNCTION ALONG OR LEADING TO AN ACCESSIBLE ROUTE OF TRAVEL SHALL BE IDENTIFIED WITH A SIGN DISPLAYING THE INTERNATIONAL SYMBOL OF ACCESSIBILITY AND WITH ADDITIONAL DIRECTIONAL SIGNS, AS REQUIRED, TO BE VISIBLE TO PERSONS ALONG APPROACHING PEDESTRIAN WAYS. (ICC/IBC SEC. 1110)
- WHERE PERMANENT IDENTIFICATION IS PROVIDED FOR ROOMS AND SPACES, SIGNS SHALL BE INSTALLED ON THE WALL ADJACENT TO THE LATCH SIDE OF THE DOOR. WHERE THERE IS NO WALL SPACE TO THE LATCH SIDE OF THE DOOR, INCLUDING AT DOUBLE LEAF DOORS, SIGNS SHALL BE PLACED ON THE NEAREST ADJACENT WALL. MOUNTING HEIGHT SHALL BE 60" (1525 MM) ABOVE THE FINISH FLOOR TO THE CENTERLINE OF THE SIGN. MOUNTING LOCATION FOR SUCH SIGNAGE SHALL BE SO THAT A PERSON MAY APPROACH WITHIN 3" (76 MM) OF THE SIGNAGE WITHOUT ENCOUNTERING PROTRUDING OBJECTS OR STANDING WITHIN THE SWING OF A DOOR. (ADAAG SEC. 4.30.6)
- ADDITIONAL DIRECTIONAL SIGNS ALONG ACCESSIBLE PATH OF TRAVEL ARE REQUIRED. (ICC/IBC SEC. 1110)
- BUILDING REMODELED TO PROVIDE ACCESSIBLE SANITARY FACILITIES FOR PUBLIC USE SHALL HAVE INFORMATION POSTED IN THE LOBBY AS PART OF THE BUILDING DIRECTORY.

INTERNATIONAL SYMBOL OF ACCESSIBILITY:

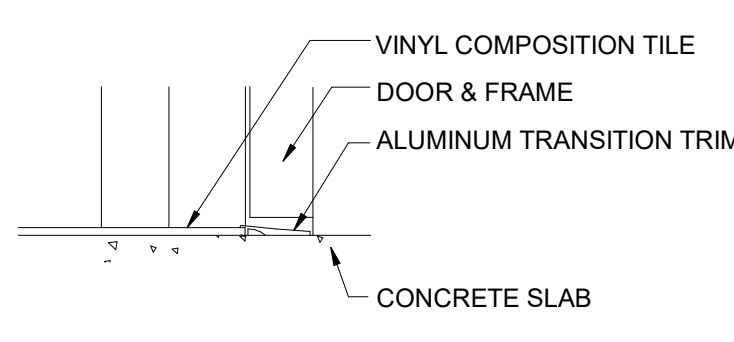
- STANDARD USED TO IDENTIFY ACCESSIBLE FACILITIES.
- WHITE FIGURE ON BLUE BACKGROUND, COLOR #15090 ON FEDERAL STANDARD #595A.
- WHEN ENFORCING AGENCY DETERMINES, IF APPROPRIATE, SPECIAL DESIGNS AND COLORS MAY BE APPROVED.
- BRAILLE: (ICC/ANSI TABLE 703.4.3)
- DOTS TO BE 0.09" (2.3 MM) TO 0.1" (1.5 MM) ON CENTER IN EACH CELL.
- 0.241" (6.1 MM) TO 0.3" (7.6 MM) SPACE BETWEEN CELLS HORIZONTALLY.
- 0.385" (10.0 MM) TO 0.4" (10.2 MM) SPACE BETWEEN CELLS HORIZONTALLY.
- DOTS RAISED 0.025" (0.6 MM) TO 0.037" (0.9 MM) ABOVE BACKGROUND.
- DOTS BASE DIAMETER TO BE 0.059" (1.5 MM) TO 0.063" (1.6 MM)

NOTE:
1. 1/2" MAXIMUM TOTAL HEIGHT WITH 1/4" MAXIMUM VERTICAL CHANGE AT EDGE.
2. 1:2 SLOPED BEVEL REQUIRED IF LEVEL CHANGE IS OVER 1/4" VERTICAL.
3. LEVEL CHANGES OF MORE THAN 1/2" MUST BE RAMPED AND COMPLY WITH RAMP REQUIREMENTS

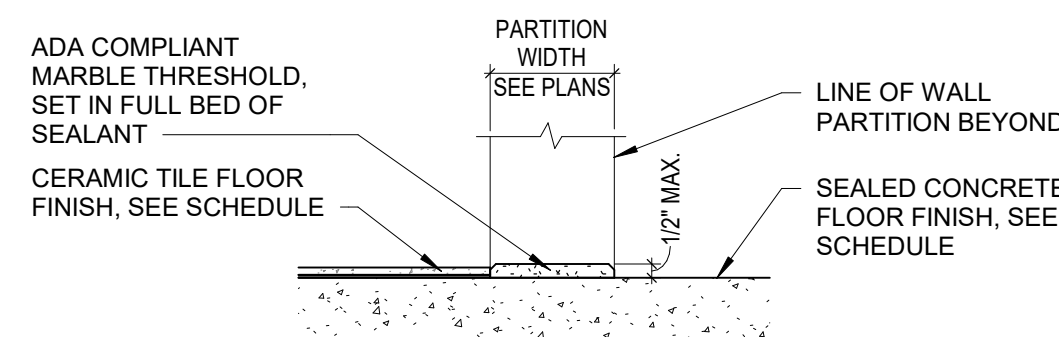
ACCESSIBLE ENTRANCE THRESHOLD



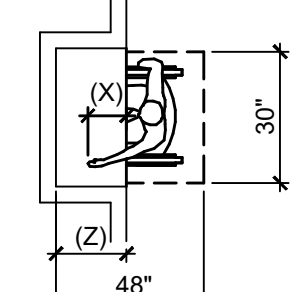
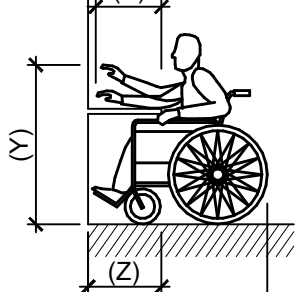
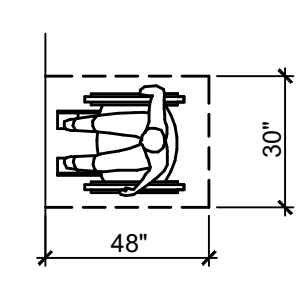
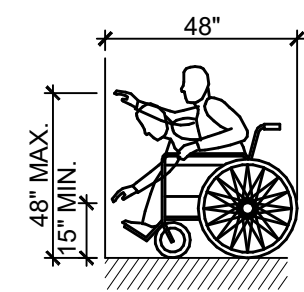
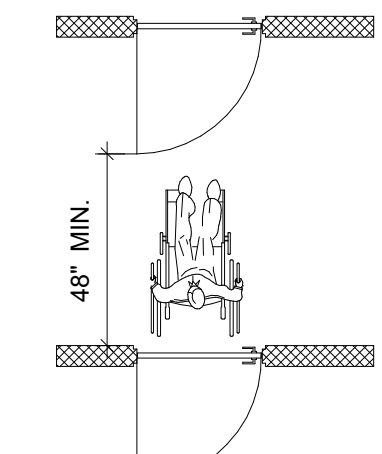
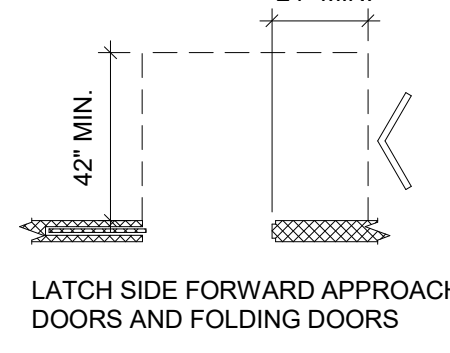
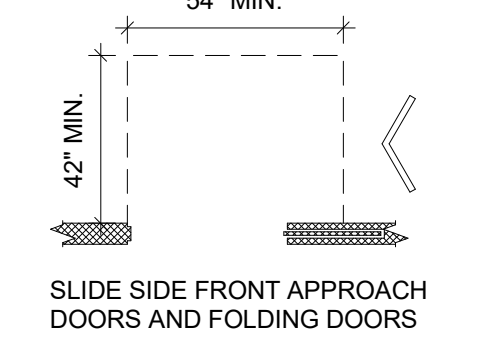
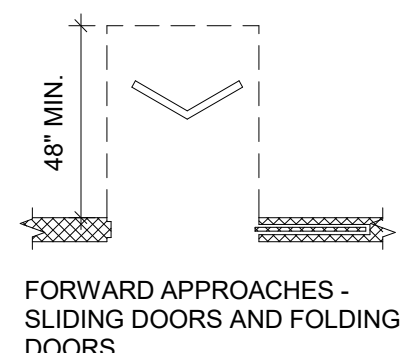
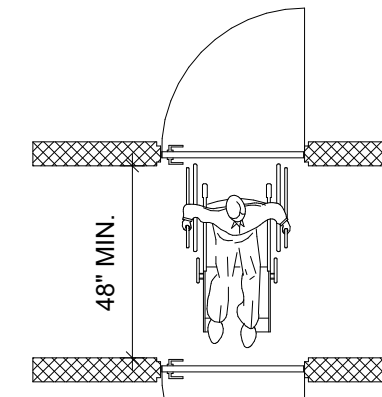
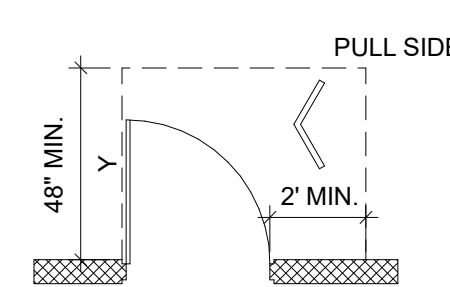
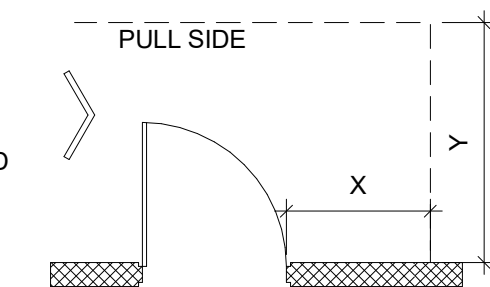
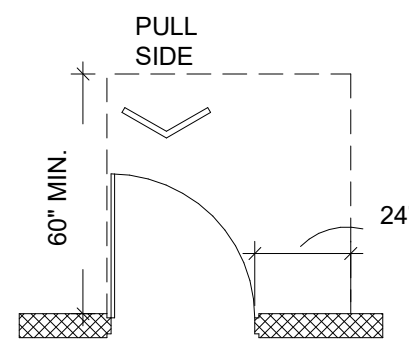
a) TRANSITION - VCT TO CT



b) TRANSITION - VCT TO CONC.



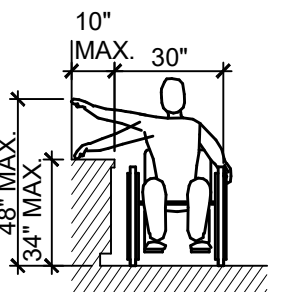
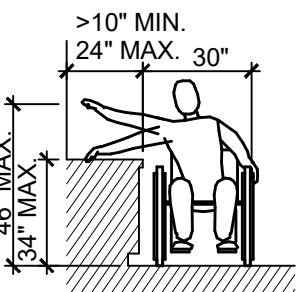
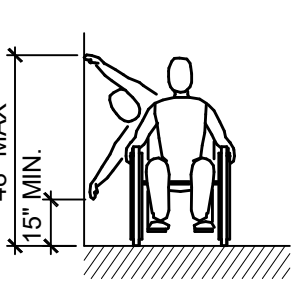
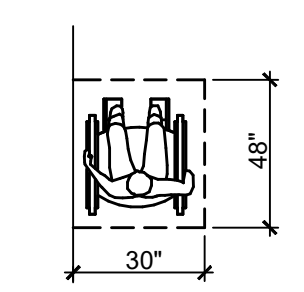
c) TRANSITION - CT TO SEALED CONC.



HIGH FORWARD REACH LIMIT

- NOTES:
1. X SHALL BE \leq 25 INCHES; Z SHALL BE \geq X.
2. WHEN X \leq 20 INCHES, THEN Y SHALL BE 48 INCHES MAXIMUM.
3. WHEN X IS $>$ 20 TO 25 INCHES, THEN Y SHALL BE 44 INCHES MAXIMUM.

MAXIMUM FORWARD REACH OVER AN OBSTRUCTION

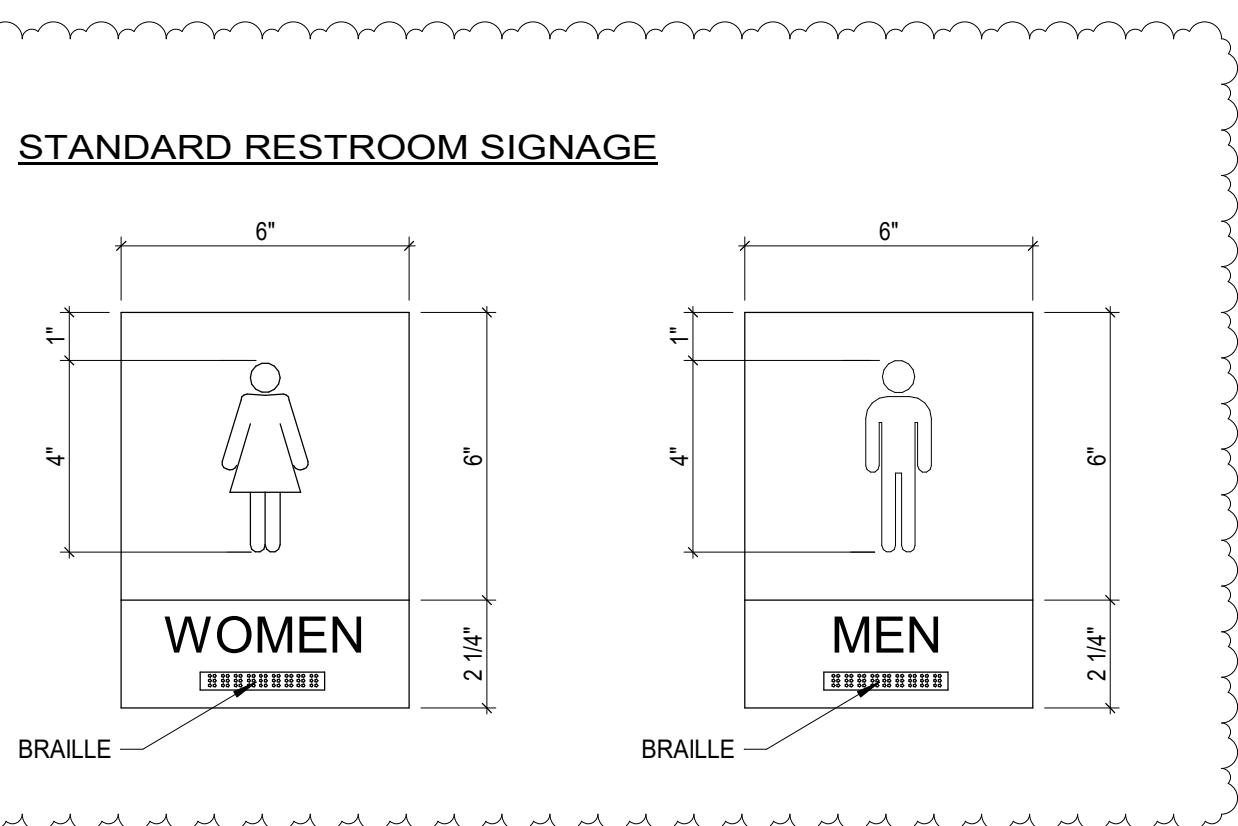


CLEAR FLOOR SPACE PARALLEL APPROACH

HIGH AND LOW SIDE REACH LIMITS

SIDE REACH OVER AN OBSTRUCTION

SIDE REACH OVER AN OBSTRUCTION



NOTES:
1. MOUNT w/ (4) MECHANICAL FASTENERS AND ADHESIVE (TYP.)
2. IF NO SPACE ON LATCH SIDE, SIGN SHALL BE PLACED ON THE NEAREST ADJACENT WALL

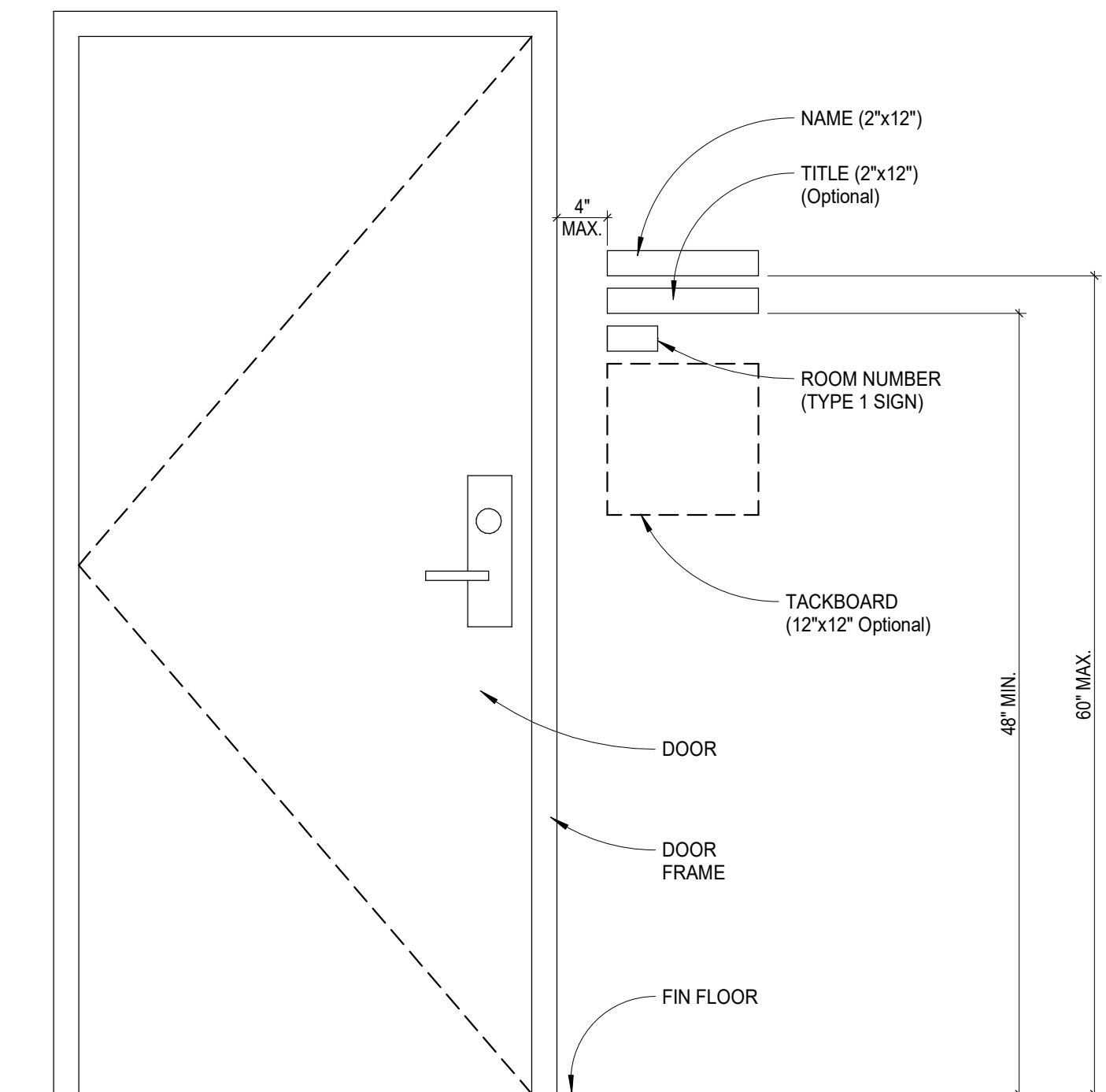
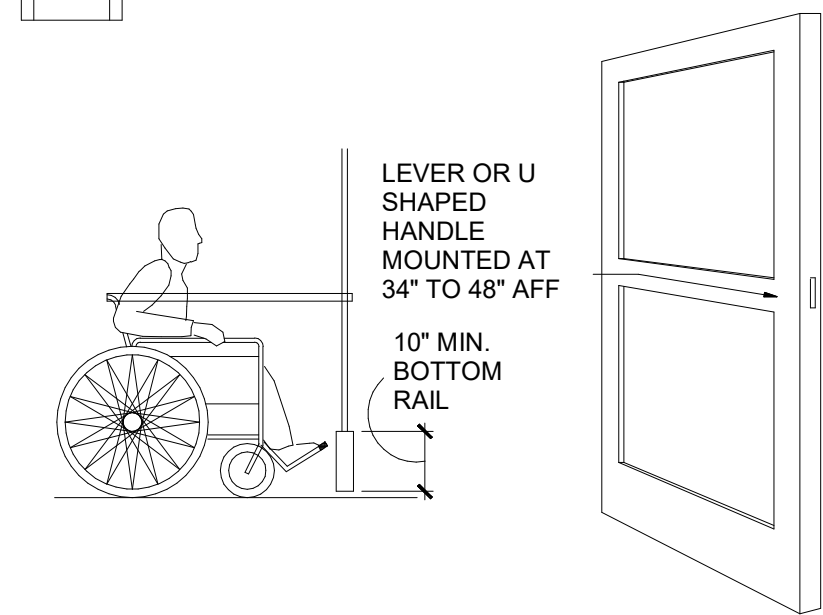
DOOR TYPE:

- MINIMUM 10" HIGH SMOOTH SURFACE AT DOOR BOTTOM, EITHER ATTACHED PANEL OR BOTTOM RAIL.

HARDWARE:

- OPEN FROM INSIDE WITHOUT USE OF KEY OR SPECIAL KNOWLEDGE OR EFFORT.
- OPEN BY SINGLE EFFORT LEVER-TYPE DEVICE (NOT REQUIRING GRASPING).
- HANDLING, PULLS, LATCHES, LOCKS AND OTHER OPERABLE HARDWARE TO BE MOUNTED AT 34" TO 48" AFF.
- MAXIMUM 8.5 LBS. EFFORT TO OPERATE EXTERIOR DOOR, 5 LBS. FOR INTERIOR.

(WHERE INDICATED)
A NARROW FRAME WITH A BEVELED TOP EDGE (60 DEGREE MAXIMUM BEVEL TO HORIZONTAL PLANE) INSTALLED AT THE BOTTOM OF A GLASS DOOR (WITH NO SIDE FRAMES) MAY BE USED IN LIEU OF PROVIDING THE REQUIRED 10-INCH UNINTERRUPTED SURFACE AT THE BOTTOM OF THE DOOR.



- NOTES:
1. MOUNT w/ (4) MECHANICAL FASTENERS AND ADHESIVE (TYP.)
2. IF NO SPACE ON LATCH SIDE, SIGN SHALL BE PLACED ON THE NEAREST ADJACENT WALL

CECIL COUNTY PUBLIC SCHOOLS
201 BOOTH ST, ELKTON, MD 21921

ADA STANDARDS
NEW FIELD HOUSE AT STADIUM
1696 PERRYVILLE RD, PERRYVILLE, MD 21903



DATE: 11/03/2023
SCALE: AS NOTED
DRAWN BY: CK, AH
CHECKED BY: VS
DRAWING NO: G1
PWA JOB NUMBER: 2181073.00

<div> <div>010000 - GENERAL CARPENTRY</div> <div> <div>1. LOCATE THE WORK AND COMPONENTS OF WORK ACCURATELY, IN CORRECT ALIGNMENT AND ELEVATIONS, AS INDICATED ON DRAWINGS. COMPLY WITH MANUFACTURERS' WRITTEN INSTRUCTIONS FOR INSTALLING PRODUCTS. INSTALL PRODUCTS AT A TIME AND UNDER CONDITIONS THAT WILL ENSURE THE BEST POSSIBLE RESULTS. PROTECT COMPLETED WORK FROM DAMAGE AND DETERIORATION. REPAIR OR REPLACE ANY PART OF THE WORK THAT HAS BEEN DAMAGED PRIOR TO SUBSTANTIAL COMPLETION.</div> <div>2. CONTRACTOR TO HOLD A PRE-CONSTRUCTION MEETING WITH OWNER, ARCHITECT, AND OTHER PERTINENT PARTIES TO DETERMINE AND DISCUSS TENTATIVE CONSTRUCTION SCHEDULE, CRITICAL ITEMS, ADMINISTRATIVE PROCEDURES, SITE MOBILIZATION, AGENDA, AND TIMING OF PROGRESS MEETINGS, AND OTHER ITEMS OF SIGNIFICANCE THAT COULD AFFECT PROGRESS.</div> <div>3. PROVIDE ELECTRONIC PDFS OR REQUIRED SUBMITTALS TO THE ARCHITECT FOR REVIEW. ARCHITECT SHALL REVIEW AND MARK AS "NO EXCEPTION TAKEN", "REVIEWED WITH COMMENTS", "REVISE AND RESUBMIT", OR "REJECTED" WITHIN 10 BUSINESS DAYS OF RECEIPT. CONTRACTOR TO RESUBMIT CORRECTED SUBMITTALS.</div> <div>4. ON THE DATE OF SUBSTANTIAL COMPLETION CONTRACTOR SHALL CONDUCT A WALK-THROUGH INSPECTION OF THE PROJECT WITH THE PROJECT TEAM. THE ARCHITECT SHALL COMPLETE A PUNCH LIST NOTING ANY DEFICIENCIES AND INCOMPLETE ITEMS.</div> <div>5. EMPLOY PROFESSIONAL CLEANERS FOR FINAL CLEANING. REMOVE ALL CONSTRUCTION EQUIPMENT, TOOLS, AND DEBRIS. CLEAN EXTERIOR, INCLUDING SWEEPING AND RAKING OF GROUNDS, CLEAN BUILDING SURFACES AND EQUIPMENT TO REMOVE DUST, DIRT, PAINT, STAINS, AND OTHER SUBSTANCES TO A LEVEL ACCEPTABLE BY THE OWNER.</div> <div>6. ABIDE BY ADDITIONAL DIVISION 0 AND DIVISION 1 REQUIREMENTS PROVIDED WITHIN BID DOCUMENTS THAT FORM A PART OF THIS SPECIFICATION</div> <div>7. PROVIDE DUMPSTER AND REMOVE ALL DEBRIS.</div> </div> <div> <div>042000 - UNIT MASONRY</div> <div> <div>1. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION ON MASONRY, ACCESSORIES, AND OTHER ITEMS NOT LISTED WITHIN THIS SECTION.</div> <div>2. PROVIDE SPLIT FACE CMU UNITS 3 5/8" X 7 5/8" X 15 5/8" YORK BUILDING PRODUCTS OR APPROVED EQUIVALENT. COLOR: TO BE SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE OF COLORS.</div> <div>3. SPECIAL SHAPES: PROVIDE SILL UNITS IN AREAS AS INDICATED ON THE DRAWINGS. PROVIDE CORNER UNITS WITH TWO FINISHED FACES FOR JAMB AND CORNER LOCATIONS. VERIFY REQUIREMENTS WITH MANUFACTURER.</div> <div>4. MORTAR MIXES TO COMPLY WITH ASTM C 270. SEE STRUCTURAL SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS REQUIREMENTS. COLOR TO BE SELECTED BY ARCHITECT FROM MANUFACTURERS FULL RANGE.</div> <div>5. WEEP HOLES AND VENTS TO BE FREE-DRAINING MESH WITH WEEPVENT CAVITY WALL VENTS BY MORTAR NET USA, OR EQUAL. COLOR MATCH MORTAR.</div> <div>6. CAVITY DRAINAGE MESH MATERIAL IS TO BE 3/4" THICK AND 10" HIGH WITH DIMPLED OR DOVETAIL SURFACE TO CATCH MORTAR DROPPINGS, BY "MORTAR NET USA" OR APPROVED EQUIVALENT.</div> <div>7. VINYL SHEET FLASHING; FLEXIBLE SHEET FLASHING ESPECIALLY FORMULATED USING VIRGIN POLY VINYL CHLORIDE AND PLASTICIZER AND OTHER MODIFIERS TO REMAIN FLEXIBLE AND WATERPROOF IN CONCEALED MASONRY APPLICATION, BLACK IN COLOR, AND 50 MILS THICK. USE WHERE FLASHING IS FULLY CONCEALED IN MASONRY. STOP FLASHING 1/2" FROM FACE OF EXTERIOR WALL.</div> <div>8. WALL ANCHORS TO BE HOHMANN & BARNARD, INC. 170-2X TRUSS EYE-WIRE ADJUSTABLE REINFORCEMENT, HOT-DIPPED GALVANIZED JOINT REINFORCEMENT WITH 2X-HOOK SIZED APPROPRIATELY FOR CAVITY/INSULATED WALLS.</div> <div>9. INSTALL MASONRY AS FULL SIZE UNITS IF POSSIBLE. IF CUTTING IS REQUIRED, PROVIDE CLEAN, SHARP, UNCHIPPED EDGES. INSTALL CUT UNITS WITH CUT SIDE CONCEALED.</div> <div>10. TOLERANCES: LINES AND LEVELS: DO NOT VARY MORE THAN 1/8"/10'-0", AND NO MORE THAN 1/2" TOTAL JOINTS: DO NOT VARY THICKNESS BY MORE THAN +/- 1/8"</div> <div>11. BOND PATTERN: RUNNING BOND.</div> <div>12. INSTALL ACCESSORIES AS INDICATED ON DRAWINGS AND ACCORDING TO MANUFACTURERS' WRITTEN INSTRUCTIONS.</div> </div> <div> <div>047200 - CAST STONE MASONRY</div> <div> <div>1. PROVIDE CAST STONE UNITS IN SIZES AND PROFILES AS SHOWN ON THE DRAWINGS. SHAPES ARE BASED ON "ARRISCRAFT INTERNATIONAL": A. WATERTABLE: WT 863 OR APPROVED EQUIVALENT - SEE DRAWINGS B. PRECAST REINFORCED LINTEL FOR DOORS - SEE DRAWINGS</div> <div>2. SPECIAL SHAPES - PROVIDE CORNER UNITS WITH TWO FINISHED FACES FOR BUILDING CORNER AND JAMB LOCATIONS. VERIFY REQUIREMENTS WITH MANUFACTURER.</div> <div>3. UNIT PROPERTIES : COMPRESSIVE STRENGTH (ASTM C1194): > 6,500 PSI AT 28 DAYS ABSORPTION: (ASTM C1195)< 6% AT 28 DAYS</div> <div>4. FINISHES: EXPOSED SURFACES - FINE-GRAINED TEXTURE SIMILAR TO NATURAL STONE, FREE OF CRACKS, CHIPS OR OTHER DEFECTS THAT WOULD EFFECT THE STREIGHT OR SERVICEABILITY OF THE UNIT OR BECOME EXPOSED ONCE INSTALLED AND VISIBLE WHEN VIEWED FROM A DISTANCE OF NOT LESS THAN 15 FEET UNDER DIFFUSED LIGHT. COLOR: COLOR AND FINISH SELECTED BY ARCHITECT FROM MANUFACTURERS FULL RANGE</div> <div>5. INSTALL CAST STONE AND ACCESSORIES AS INDICATED ON DRAWINGS AND ACCORDING TO MANUFACTURERS WRITTEN INSTRUCTIONS.</div> </div> </div></div></div>	<div> <div>054000 - LIGHT GAUGE STEEL FRAMING</div> <div> <div>1. LIGHT GAUGE METAL STUD DESIGNATION SHOWN ON DRAWINGS ASSUME MARINO WARE AS A DESIGN BASIS. MANUFACTURER MUST SUBMIT LITERATURE INDICATION THAT THE MEMBERS SUPPLIED PROVIDE EQUIVALENT STRENGTH AND STIFFNESS. MANUFACTURER AND/OR SUPPLIER TO PREPARE INFORMATION INDICATING CAPACITY OF MEMBERS, FRAMING DETAILS, CONNECTIONS, BRACING, BRIDGING AND ALL OTHER APPURTENANCES TO CONFIRM LOAD CRITERIA.</div> <div>2. ALL LINTELS INDICATED ON DRAWINGS AS METAL STUD LINTELS ARE TO BE PROVIDED BY STUD MANUFACTURER/SUPPLIER.</div> <div>3. ALL STEEL STUDS SHALL BE HOT-DIPPED GALVANIZED (G 60) IN ACCORDANCE WITH ASTM A924. STEEL STUDS SHALL BE DESIGNED, MANUFACTURED AND INSTALLED IN ACCORDANCE WITH THE LATEST AISI SPECIFICATIONS AND SHALL COMPLY WITH ASTM A653 & C955. ALL STUDS AND ACCESSORIES SHALL HAVE STRENGTHS RECOMMENDED BY THE MANUFACTURER.</div> <div>4. ALL WELDING OF LIGHT GAUGE STEEL FRAMING MUST BE DONE BY CERTIFIED WELDERS IN ACCORDNACE WITH AWS D1.3, SPECIFICATION FOR WELDING SHEET STEEL IN STRUCTURES.</div> <div>5. MAKE CONNECTIONS WITH SELF-TAPPING SCREWS OR WELDING SO THAT THE CONNECTIONS MEET OR EXCEED THE DESIGN LOADS.</div> <div>6. CUT ALL LIGHT GAUGE STEEL FRAMING MEMBERS WITH SAWS OR SHEARS. FRAME CUTTING IS NOT PERMITTED.</div> <div>7. THE LIGHT GAUGE STEEL FRAMING SUPPLIER AND ERECTOR SHALL HAVE A MINIMUM 5 YEARS EXPERIENCE IN THE FABRICATION AND ERECTION OF LIGHT GAUGE STEEL FRAMING SYSTEM.</div> </div> <div> <div>061000 - ROUGH CARPENTRY</div> <div> <div>1. FRAMING, BLOCKING, NAILER, FURRING, AND SUPPORTS TO BE CONSTRUCTED FIRE RETARDANT TREATED LUMBER NO. 2 GRADE LUMBER OF ANY SPECIES.</div> <div>2. ALL FASTENERS SHALL BE HOT-DIP GALVANIZED. SCREWS FOR FASTENING TO METAL FRAMING SHALL COMPLY WIT ASTM C 1002.</div> <div>3. COMPLY WITH AWPA WCD 1, "DETAILS FOR CONVENTIONAL WOOD FRAME CONSTRUCTION"</div> <div>4. SECURELY ATTACH CARPENTRY TO SUBSTRATE BY ANCHORING AND FASTENING TO COMPLY WITH TABLE 2304.9.3.2 "FASTENING SCHEDULE" OF IBC 2018.</div> <div>5. COORDINATE WITH STRUCTURAL SPECIFICATIONS.</div> </div> <div> <div>061600 - SHEATHING</div> <div> <div>1. PROVIDE EXTERIOR GRADE PLYWOOD SHEATHING IN THICKNESSES INDICATED ON DRAWINGS BY "GEORGIA PACIFIC" OR APPROVED EQUIVALENT.</div> <div>2. APPLY "3M AIR AND VAPOR BARRIER 3015NP," OR APPROVED EQUIVALENT WEATHER BARRIER MEMBRANE OVER SHEATHING. APPLY PER MANUFACTURERS SPECIFICATIONS.</div> <div>3. FOR WALL SHEATHING, PROVIDE FASTENERS WITH HOT-DIP ZINC COATING COMPLYING WITH ASTM A 153/A 153M.</div> </div> </div></div></div>	<div> <div>064100 - PLASTIC-LAMINATE CLAD ARCHITECTURAL CABINETS</div> <div> <div>1. PRODUCTS: A. QUALITY STANDARD FOR FABRICATION AND PRODUCTS: "ARCHITECTURAL WOODWORK INSTITUTE QUALITY STANDARDS", PREMIUM GRADE UNLESS NOTED OTHERWISE. B. TYPE OF CONSTRUCTION: FRAMELESS C. DOOR AND DRAWER - FRONT STYLE: FLUSH D. LAMINATE CLADDING FOR EXPOSED SURFACES: 1. HORIZONTAL SURFACES: GRADE HGS 2. POSTFORMED SURFACES: GRADE HGP 3. VERTICAL SURFACES: GRADE HGS VGP E. MATERIALS FOR SEMIEXPOSED SURFACES: HIGH - PRESSURE DECORATIVE LAMINATE, SHALL MEET NEMA LD 3, GRADE VGS</div> <div>2. MATERIALS: A. FIRE-RETARDED-TREATED MATERIALS USE WHERE INDICATED ON DRAWINGS B. WOOD WITH TRANSPARENT AND PAINTED FINISH: AVI PREMIUM GRADE. PLASTIC LAMINATE FINISH: AVI PREMIUM GRADE INCLUDING BALANCE SHEET. FINISHES: TRANSPARENT FINISH: CATALYZED POLYURETHANE, AVI FINISH SYSTEM NO. 5, PREMIUM GRADE. C. CABINET HARDWARE: 1. HINGES - FRAMELESS, CONCEALED EUROPEAN WITH SOFT CLOSE, SHALL MEET ANSI/BHMA, GRADE 1 2. PULLS - SATIN CHROME WIRE PULLS, ADA COMPLIANT 3. ADJUSTABLE SHELF SUPPORT-SHELVING: HARDWOOD OR MEDIUM DENSITY PARTICLEBOARD WITH HARDWOOD EDGE BANDS. 4. LOCKS - NOT REQUIRED 5. BEARING SIDE MOUNT DRAWER SLIDES D. COLOR TO BE SELECTED BY ARCHITECT FROM MANUFACTURER'S STANDARD RANGE.</div> <div>3. COUNTERTOPS AND BACKSPLASH A. PLASTIC LAMINATE COUNTERTOP SHALL BE SOLID 1 1/2" THICK PARTICLEBOARD W/ A HORIZONTAL GRADE HIGH - PRESSURE LAMINATE ON THE TOP SURFACE WITH SUITABLE BACKER SHEET ON THE BOTTOM SURFACE. B. BACKSPLASHES SHALL BE 3/4" THICK X 4" WIDE PARTICLEBOARD W/ HIGH-PRESSURE LAMINATE FINISH. C. COUNTERTOPS COLOR TO BE SELECTED BY ARCHITECT FROM MANUFACTURER'S STANDARD RANGE. D. COUNTERTOP TO BE INSTALLED PER MANUFACTURER'S WRITTEN INSTRUCTIONS.</div> </div> <div> <div>066620 - MANUFACTURED TRIM AND ORNAMENTS</div> <div> <div>1. CELLULAR PVC CEILING AND WALL ORNAMENTAL TRIM</div> <div>2. PRODUCT: 3/4" X 3-1/2" SMOOTH FLAT TRIM BOARD</div> <div>3. ACCEPTABLE MANUFACTURER'S INCLUDE: A. FYPON B. AZEK C. VERSATEX</div> <div>4. FINISHED SURFACES SHALL BE FREE FROM CRACKS, PITS, CHIPS, VOIDS, DEPRESSIONS, BUMPS, RIDGES, WAVES, SCRATCHES, DISCOLORATION OR OTHER DEFAACEMENTS</div> <div>5. SEALANT: AS RECOMMENDED BY MANUFACTURERS WRITTEN INSTALLATION INSTRUCTIONS</div> <div>6. FASTENERS: USE CORROSIVE-RESISTANT FASTENERS.</div> <div>7. FILLER: USE A COMPATIBLE FILLER PUTTY.</div> </div> <div> <div>072100 - THERMAL INSULATION</div> <div> <div>1. PROVIDE EXTRUDED POLYSTYRENE RIGID FOAM INSULATION BOARD BY "DOW BUILDING SOLUTIONS" OR EQUAL FOR FOUNDATIONS INSULATION. PROVIDE INSULATION IN THICKNESS REQUIRED TO ATTAIN INDICATED R-VALUE.</div> <div>2. PROVIDE FOIL-FACED, GLASS-FIBER BLANKET INSULATION BY "OWNS CORNING" OR EQUAL. INSULATION TO COMPLY WITH ASTM C 665, TYPE I, WITH MAXIMUM FLAME-SPREAD AND SMOKE-DEVELOPED INDEXES OF 25 AND 450, RESPECTIVELY. PER ASTM E 84; PASSING ASTM E 136 FOR COMBUSTION CHARACTERISTICS. PROVIDE INSULATION WITH R-VALUE AS INDICATED ON THE DRAWINGS.</div> <div>3. PROVIDE FOAMED-IN-PLACE INSULATION: CLOSED-CELL SPRAY POLYURETHANE FOAM BY "BASF" SPRAYTITE LIGHT COMMERCIAL SPRAY POLYURETHANE FOAM (SPF) OR EQUAL. PROVIDE INSULATION IN THICKNESS REQUIRED TO ATTAIN INDICATED R-VALUE. MINIMUM DENSITY 1.5 PCF.</div> <div>4. INSTALL ONLY INSULATION THAT IS DRY, UNDAMAGED, AND UNISOLED, AND HAS NOT BEEN EXPOSED TO ICE, RAIN, OR SNOW.</div> </div> </div></div></div>	<div> <div>074113 - PREFORMED METAL STANDING SEAM ROOFING</div> <div> <div>1. PRODUCT: A. BASIS OF DESIGN: PETERSEN ALUMINUM CORPORATION PETERSEN ALUMINUM CORP, ANNAPOLIS JUNCTION, MD, 800-344-1400. SNAP CLAD. B. MATERIAL TO COMPLY WITH ASTM A 653 STANDARD SPECIFICATION FOR STEEL SHEET, ZINC-COATED (GALVANIZED) OR ZINC-IRON ALLOY COATED (GALVANNEALED) BY THE HOT-DIP PROCESS C. ROOF SYSTEM SHALL BE DESIGNED TO MEET STANDARD BUILDING CODE WIND LOAD REQUIREMENTS. D. PANELS TO MEET: 1. WATER PENETRATION: WHEN TESTED PER ASTM E-283/1680 AND ASTM E-331/1646 THERE SHALL BE NO UNCONTROLLED WATER PENETRATION OR AIR INFILTRATION THROUGH THE PANEL JOINTS. 2. ROOF SYSTEM SHALL BE DESIGNED TO MEET A UL CLASS 90 WIND UPLIFT IN ACCORDANCE WITH UL STANDARD 580</div></div></div>
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RE-BID/PERMIT SET - 11/03/2023

<div>SECTION 311000 - SITE CLEARING</div> <div>1. GENERAL:</div> <div>1.1 SUMMARY<div>SECTION INCLUDES:<div>1. REMOVING EXISTING VEGETATION.</div><div>2. CLEARING AND GRUBBING.</div><div>3. STRIPPING AND STOCKPILING TOPSOIL.</div><div>4. REMOVING ABOVE- AND BELOW-GRADE SITE IMPROVEMENTS.</div><div>5. DISCONNECTING, CAPPING, OR SEALING SITE UTILITIES.</div><div>6. TEMPORARY EROSION AND SEDIMENTATION CONTROL.</div></div></div> <div>1.2 FIELD CONDITIONS<div>A. TRAFFIC: MINIMIZE INTERFERENCE WITH ADJOINING ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES DURING SITE-CLEARING OPERATIONS.<div>1. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS, OR OTHER ADJACENT OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM OWNER AND AUTHORITIES HAVING JURISDICTION.</div><div>2. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFICWAYS IF REQUIRED BY OWNER OR AUTHORITIES HAVING JURISDICTION.</div></div><div>B. UTILITY LOCATOR SERVICE: NOTIFY UTILITY LOCATOR SERVICE FOR AREA WHERE PROJECT IS LOCATED BEFORE SITE CLEARING.</div><div>C. DO NOT COMMENCE SITE CLEARING OPERATIONS UNTIL TEMPORARY EROSION- AND SEDIMENTATION-CONTROL MEASURES ARE IN PLACE.</div></div>

2. PRODUCTS:

2.1 MATERIALS

A. SATISFACTORY SOIL MATERIAL: REQUIREMENTS FOR SATISFACTORY SOIL MATERIAL ARE SPECIFIED IN SECTION 312000 "EARTH MOVING."

1. OBTAIN APPROVED BORROW SOIL MATERIAL OFF-SITE WHEN SATISFACTORY SOIL MATERIAL IS NOT AVAILABLE ON-SITE.

3. EXECUTION:

3.1 PREPARATION

A. PROTECT AND MAINTAIN BENCHMARKS AND SURVEY CONTROL POINTS FROM DISTURBANCE DURING CONSTRUCTION.

B. PROTECT EXISTING SITE IMPROVEMENTS TO REMAIN FROM DAMAGE DURING CONSTRUCTION.

1. RESTORE DAMAGED IMPROVEMENTS TO THEIR ORIGINAL CONDITION, AS ACCEPTABLE TO OWNER.

3.2 TEMPORARY EROSION AND SEDIMENTATION CONTROL

A. PROVIDE TEMPORARY EROSION- AND SEDIMENTATION-CONTROL MEASURES TO PREVENT SOIL EROSION AND DISCHARGE OF SOIL-BEARING WATER RUNOFF OR AIRBORNE DUST TO ADJACENT PROPERTIES AND WALKWAYS, ACCORDING TO EROSION- AND SEDIMENTATION-CONTROL DRAWINGS AND REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION.

B. VERIFY THAT FLOWS OF WATER REDIRECTED FROM CONSTRUCTION AREAS OR GENERATED BY CONSTRUCTION ACTIVITY DO NOT ENTER OR CROSS PROTECTION ZONES.

C. INSPECT, MAINTAIN, AND REPAIR EROSION- AND SEDIMENTATION-CONTROL MEASURES DURING CONSTRUCTION UNTIL PERMANENT VEGETATION HAS BEEN ESTABLISHED.

D. REMOVE EROSION AND SEDIMENTATION CONTROLS, AND RESTORE AND STABILIZE AREAS DISTURBED DURING REMOVAL.

3.3 EXISTING UTILITIES

A. LOCATE, IDENTIFY, DISCONNECT, AND SEAL OR CAP UTILITIES INDICATED TO BE REMOVED OR ABANDONED IN PLACE.

1. ARRANGE WITH UTILITY COMPANIES TO SHUT OFF INDICATED UTILITIES.

B. INTERRUPTING EXISTING UTILITIES: DO NOT INTERRUPT UTILITIES SERVING FACILITIES OCCUPIED BY OWNER OR OTHERS, UNLESS PERMITTED UNDER THE FOLLOWING CONDITIONS AND THEN ONLY AFTER ARRANGING TO PROVIDE TEMPORARY UTILITY SERVICES ACCORDING TO REQUIREMENTS INDICATED:

1. NOTIFY ARCHITECT NOT LESS THAN TWO DAYS IN ADVANCE OF PROPOSED UTILITY INTERRUPTIONS.

2. DO NOT PROCEED WITH UTILITY INTERRUPTIONS WITHOUT ARCHITECT'S WRITTEN PERMISSION.

C. REMOVAL OF UNDERGROUND UTILITIES IS INCLUDED IN EARTHWORK SECTIONS; IN APPLICABLE FIRE SUPPRESSION, PLUMBING, HVAC, ELECTRICAL, COMMUNICATIONS, ELECTRONIC SAFETY AND SECURITY, AND UTILITIES SECTIONS; AND IN SECTION 024116 "STRUCTURE DEMOLITION" AND SECTION 024119 "SELECTIVE DEMOLITION."

3.4 CLEARING AND GRUBBING

A. REMOVE OBSTRUCTIONS, TREES, SHRUBS, AND OTHER VEGETATION TO PERMIT INSTALLATION OF NEW CONSTRUCTION.

1. GRIND DOWN STUMPS AND REMOVE ROOTS LARGER THAN 3 INCHES IN DIAMETER, OBSTRUCTIONS, AND DEBRIS TO A DEPTH OF 18 INCHES BELOW EXPOSED SUBGRADE.

B. FILL DEPRESSIONS CAUSED BY CLEARING AND GRUBBING OPERATIONS WITH SATISFACTORY SOIL MATERIAL UNLESS FURTHER EXCAVATION OR EARTHWORK IS INDICATED.

1. PLACE FILL MATERIAL IN HORIZONTAL LAYERS NOT EXCEEDING A LOOSE DEPTH OF 8 INCHES, AND COMPACT EACH LAYER TO A DENSITY EQUAL TO ADJACENT ORIGINAL GROUND.

3.5 TOPSOIL STRIPPING

A. REMOVE SOD AND GRASS BEFORE STRIPPING TOPSOIL.

B. STOCKPILE TOPSOIL AWAY FROM EDGE OF EXCAVATIONS WITHOUT INTERMIXING WITH SUBSOIL OR OTHER MATERIALS. GRADE AND SHAPE STOCKPILES TO DRAIN SURFACE WATER. COVER TO PREVENT WINDBLOWN DUST AND EROSION BY WATER.

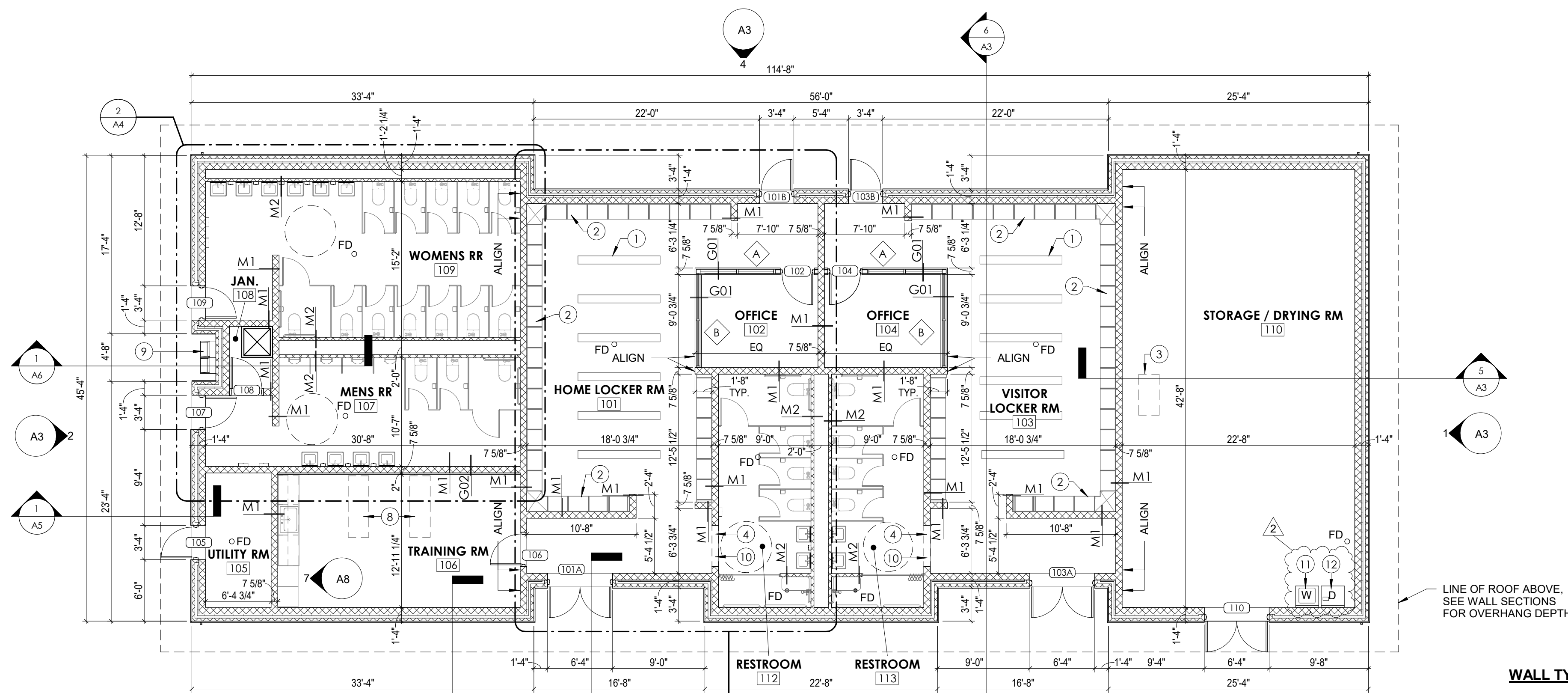
3.6 SITE IMPROVEMENTS

A. REMOVE EXISTING ABOVE- AND BELOW-GRADE IMPROVEMENTS AS INDICATED AND NECESSARY TO FACILITATE NEW CONSTRUCTION.

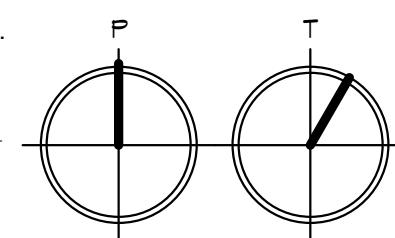
3.7 DISPOSAL OF SURPLUS AND WASTE MATERIALS

A. REMOVE SURPLUS SOIL MATERIAL, UNSUITABLE TOPSOIL, OBSTRUCTIONS, DEMOLISHED MATERIALS, AND WASTE MATERIALS INCLUDING TRASH AND DEBRIS, AND LEGALLY DISPOSE OF THEM OFF OWNER'S PROPERTY.

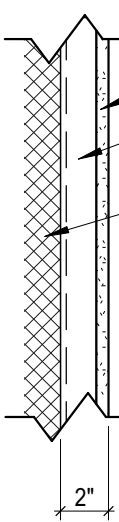
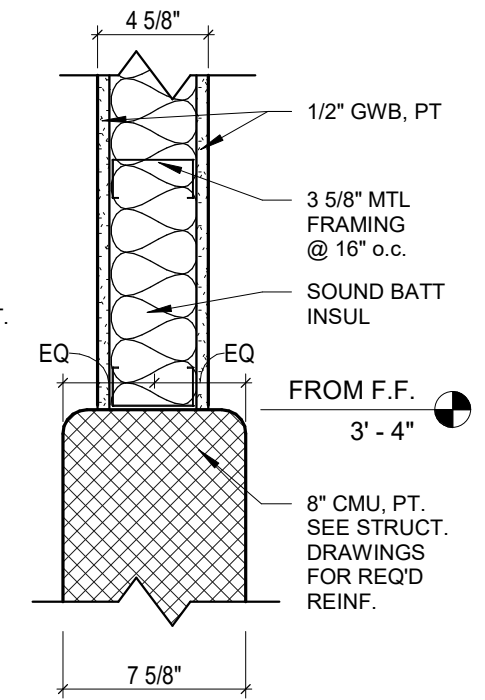
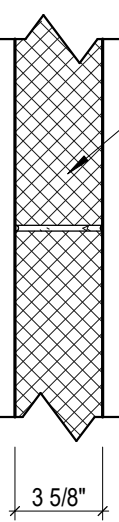
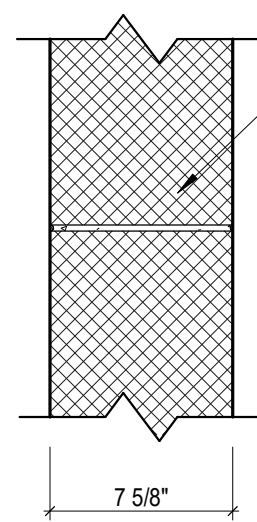
B. SEPARATE RECYCLABLE MATERIALS PRODUCED DURING SITE CLEARING FROM OTHER NONRECYCLABLE MATERIALS. STORE OR STOCKPILE WITHOUT INTERMIXING WITH OTHER MATERIALS, AND TRANSPORT THEM TO RECYCLING FACILITIES. DO NOT INTERFERE WITH OTHER PROJECT WORK.



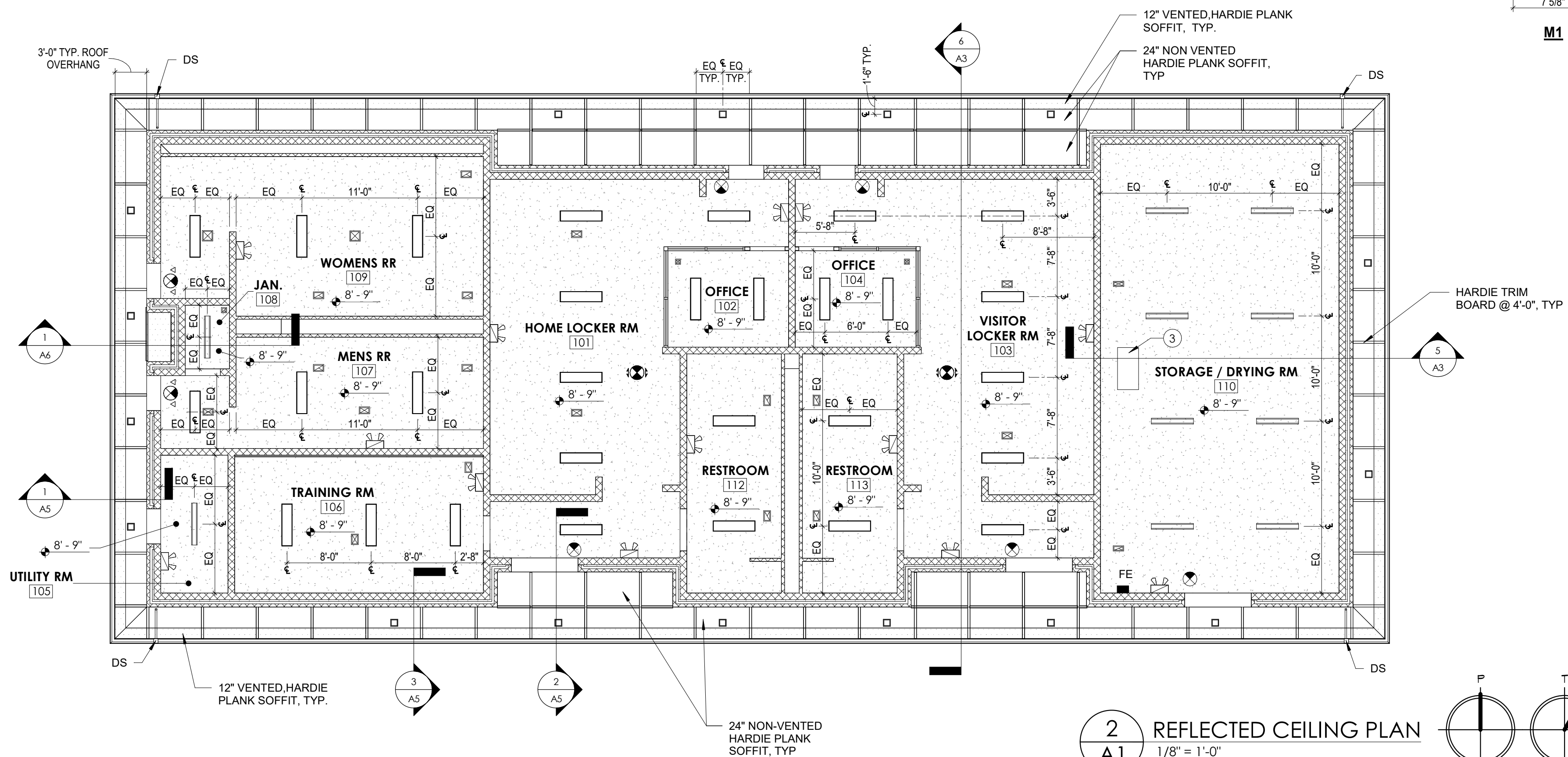
1 FLOOR PLAN
1/8" = 1'-0"



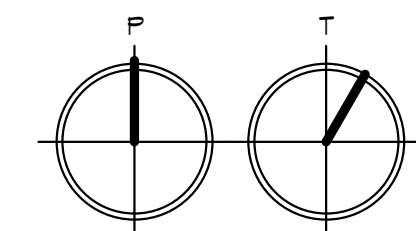
WALL TYPES



NOTE: ALL INTERIOR PARTITION WALLS TO EXTEND UP TO BOTTOM OF ROOF TRUSS.



2 REFLECTED CEILING PLAN
1/8" = 1'-0"



CEILING LEGEND

SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR SPECIFIC MODELS AND SIZES OF FIXTURES.

- GWB CEILING
- 4' STRIP LIGHT FIXTURE
- 4' VANDAL-RESISTANT LIGHT FIXTURE
- 6" X 6" SQUARE LED DOWN LIGHT
- CEILING HEIGHT TAG
- EXIT SIGN
- DIRECTIONAL EMERGENCY EXIT SIGN
- EMERGENCY EXIT SIGN W/ EMERGENCY LIGHTING
- EMERGENCY LIGHTING UNIT W/ (2) HEADS
- SUPPLY AIR DIFFUSER
- EXHAUST FAN

GENERAL CONSTRUCTION NOTES:

- A. FIELD VERIFY ALL EXISTING CONSTRUCTION RELATED CONDITIONS PRIOR TO STARTING NEW CONSTRUCTION. BRING ALL DISCREPANCIES TO THE ATTENTION OF THE ARCHITECT OR OWNER REPRESENTATIVE.
- B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY BRACING AND PROTECTING WORK DURING CONSTRUCTION AGAINST DAMAGE, BREAKAGE, COLLAPSE, DISTORTION, AND/OR MISALIGNMENT IN ACCORDANCE WITH APPLICABLE CODE STANDARDS AND GOOD PRACTICE.
- C. BUILDING SLAB TO BE AT ELEVATION 206.00 (0'-0"). EXCEPT ROOMS 107, 108, 109. BUILDING SLAB AT ROOMS 107, 108, 109 SHALL BE AT ELEVATION 206.33. COORDINATE W/ CIVIL DRAWINGS.
- D. GENERAL CONTRACTOR TO REGRADE TO PROVIDE POSITIVE SLOPE FROM BUILDING. COORDINATE W/ CIVIL DRAWINGS.
- E. CONTRACTOR TO COORDINATE BLOCKING REQUIREMENTS FOR ALL WALL MOUNTED EQUIPMENT AND ACCESSORIES.
- F. ALL DIMENSIONS ARE TO FACE OF MASONRY OR FACE OF FINISH UNLESS NOTED OTHERWISE.
- G. ALL NEW SIDEWALK TO HAVE MAX. SLOPE 5% WITH MAX. CROSS-SLOPE OF 2% SIDEWALK ELEVATION SHALL MATCH INTERIOR FLOOR SLAB AT ALL DOORS.

CONSTRUCTION KEYNOTES

- 1 PROVIDE LOCKER ROOM BENCHES, TYP.
- 2 PROVIDE LOCKERS, TYP.
- 3 24"x48" ACCESS DOOR WITH PULL DOWN WOODEN STAIRS WITH 375 LB MIN CAPACITY
- 4 MASONRY OPENING, HEIGHT: 7'-0". SEE STRUCT DRAWINGS FOR LINTEL.
- 5 PROVIDE 12" CMU LANDSCAPING WALL: ALLAN BLOCK AB STONES RETAINING WALL W/ AB CAP TOP COURSE OR EQUIV. T.O WALL ELEV.: 209.0. INSTALL PER MANUF. INSTRUCTIONS
- 6 PROVIDE CONC SLAB, SEE STRUCT
- 7 PROVIDE CONC. LANDING OF 60" X 60" MIN. W/ MAX SLOPE: 2%. TIE INTO EXIST. SIDEWALK W/ MAX. SLOPE 1:12 AND SIDE FLARE AT MAX. SLOPE 1:10.
- 8 TRAINING TABLE, TYP. PROVIDED BY OWNER
- 9 DRINKING FOUNTAIN
- 10 ADA COMPLIANT MARBLE THRESHOLD, SEE FLOORING TRANSITION DETAIL C/G1
- 11 ADA COMPLIANT WASHING MACHINE, BASIS OF DESIGN: GE MODEL: GFW655SPVDS - COLOR CARBON GRAPHITE
- 12 ADA COMPLIANT DRYER, BASIS OF DESIGN: GE MODEL: GFD655SPVDS - COLOR CARBON GRAPHITE

REVISIONS	DATE	DESCRIPTION
2	12/04/23	ADDENDUM 2

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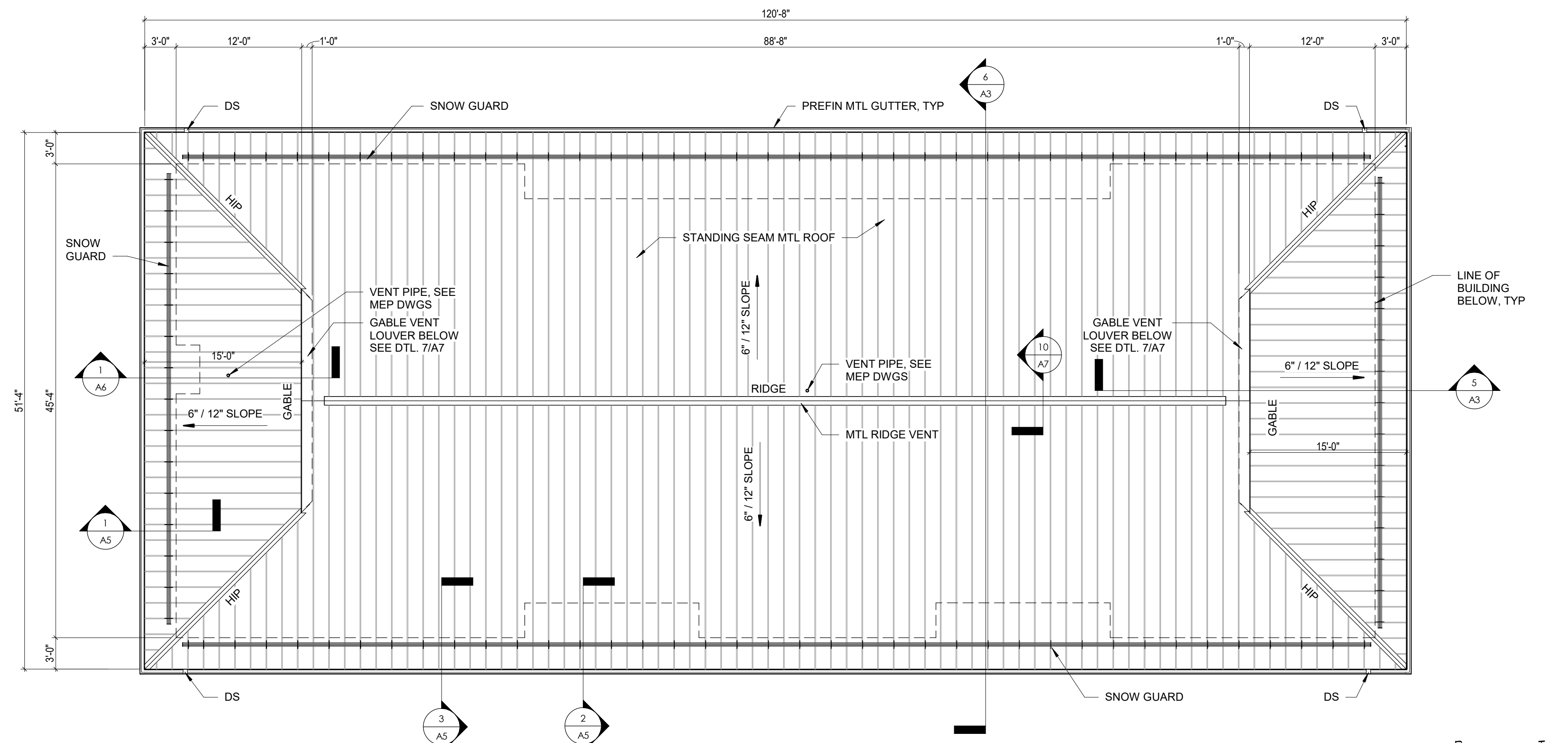
FLOOR PLAN, REFLECTED
CEILING PLAN

NEW FIELD HOUSE AT STADIUM

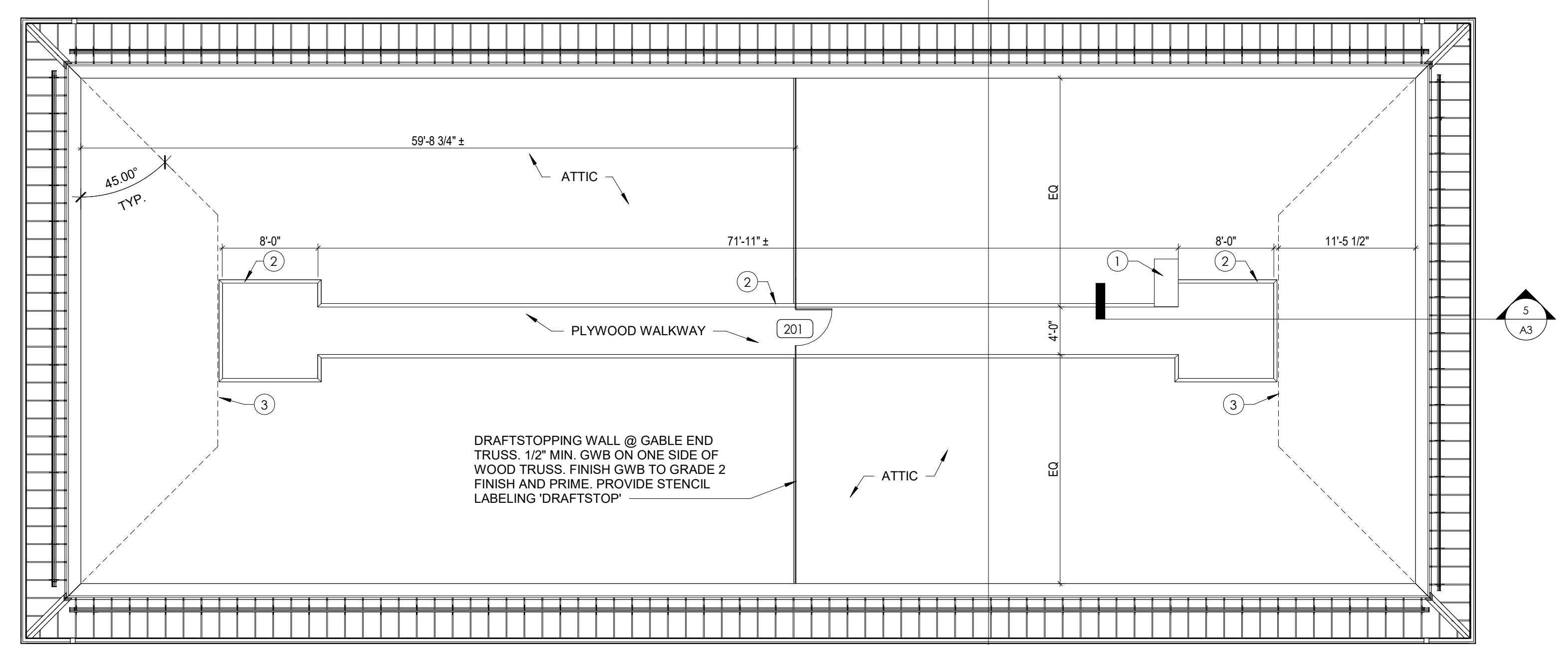
1686 PERRYVILLE RD, PERRYVILLE, MD 21903



DATE: 11/03/2023	DRAWING NO.:
SCALE: AS NOTED	A1
DRAWN BY: CK, AH	
CHECKED BY: WS	PWA JOB NUMBER 2181073.00




1 ROOF PLAN
1/8" = 1'-0"

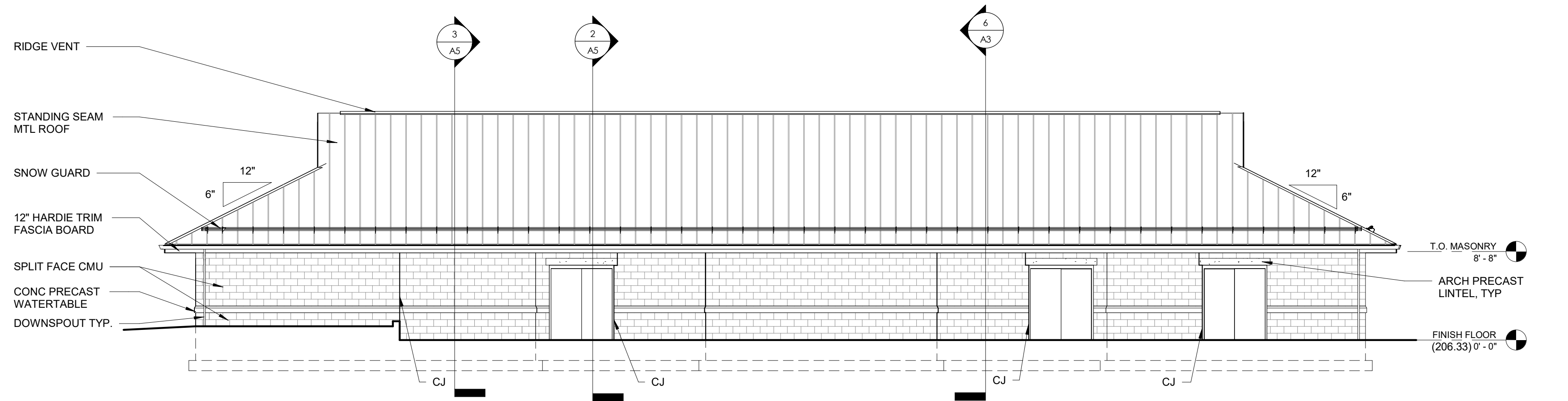


2 ATTIC PLAN
1/8" = 1'-0"

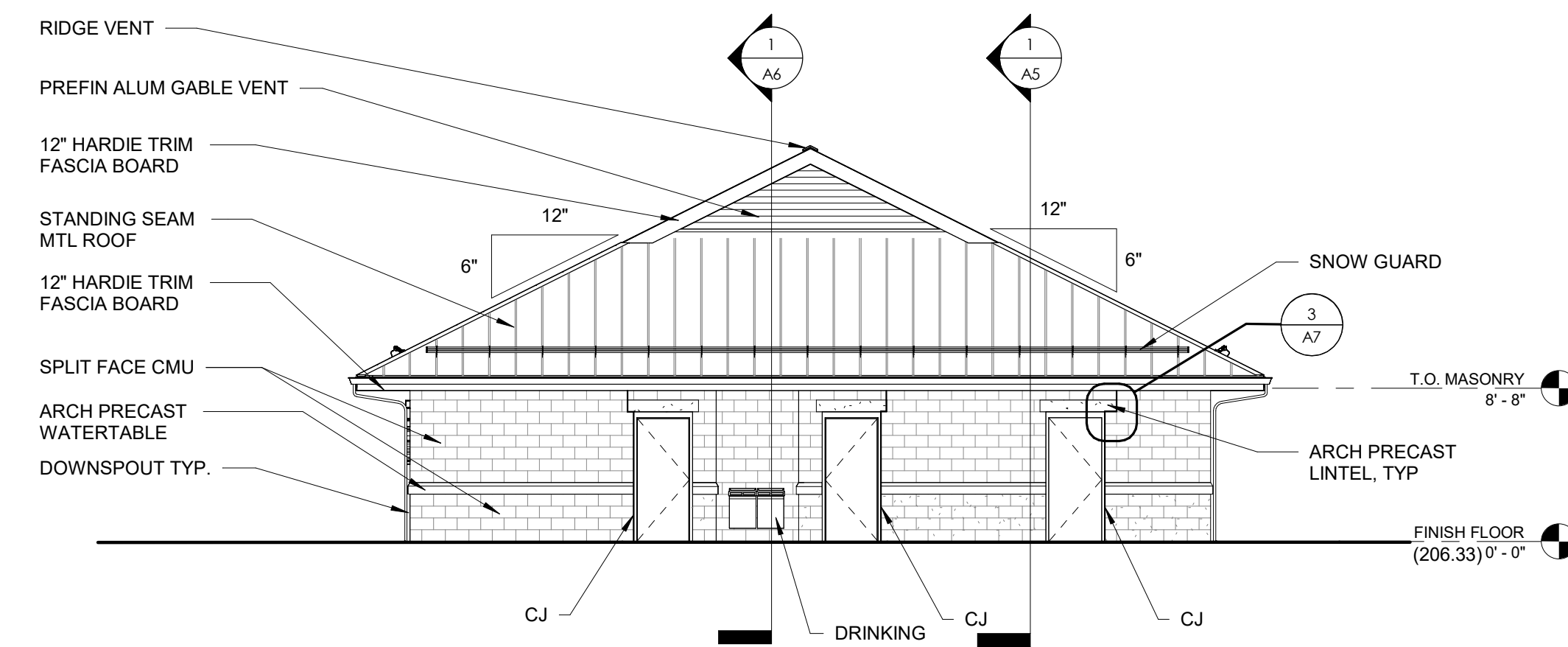
CONSTRUCTION KEYNOTES

- ① 24"x48" ACCESS DOOR WITH PULL DOWN WOODEN STAIRS WITH 375 LB MIN CAPACITY
- ② PROVIDE 42" HIGH GUARDRAIL
- ③ GABLE VENTS ABOVE, SEE DTL. 7/A7

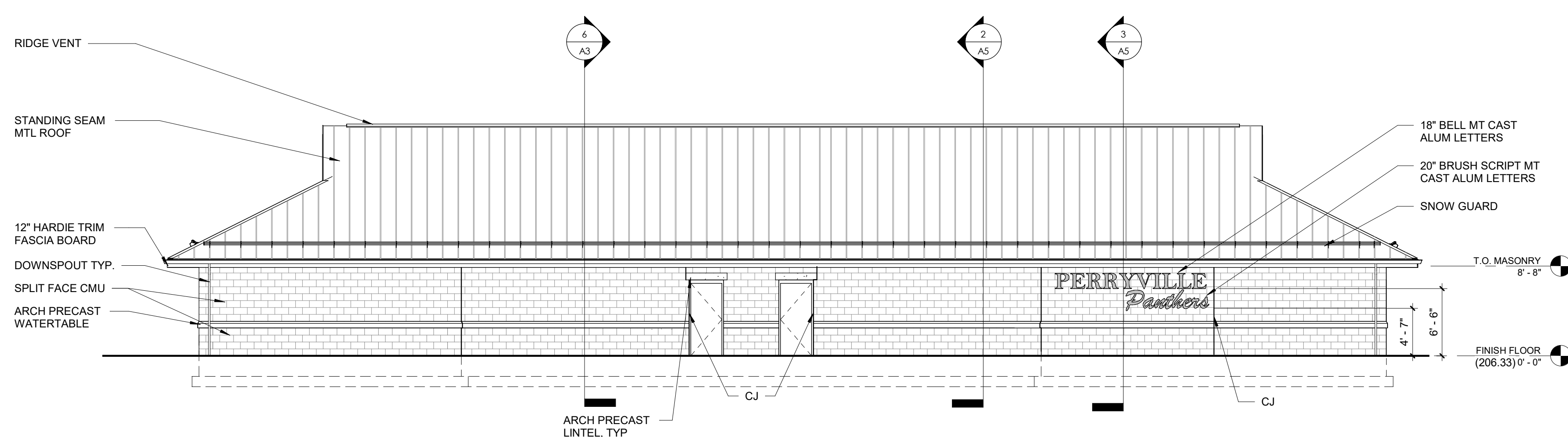
CECIL COUNTY PUBLIC SCHOOLS 201 BOOTH ST, ELKTON, MD 21821		NEW FIELD HOUSE AT STADIUM 1686 PERRYVILLE RD, PERRYVILLE, MD 21903																																		
																																				
ARCHITECTS ENGINEERS PLANNERS SURVEYORS FREDERICK WARD ASSOCIATES P.O. Box 727, 5 South Main Street, Baltimore, Maryland 21204 410-838-7900 www.frederickward.com		REVISIONS <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>REV#</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>		REV#	DATE	DESCRIPTION																														
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DATE: 11/03/2023 SCALE: AS NOTED DRAWN BY: CK, AH CHECKED BY: WS		DRAWING NO: A2 FWA JOB NUMBER: 2181073.00																																		



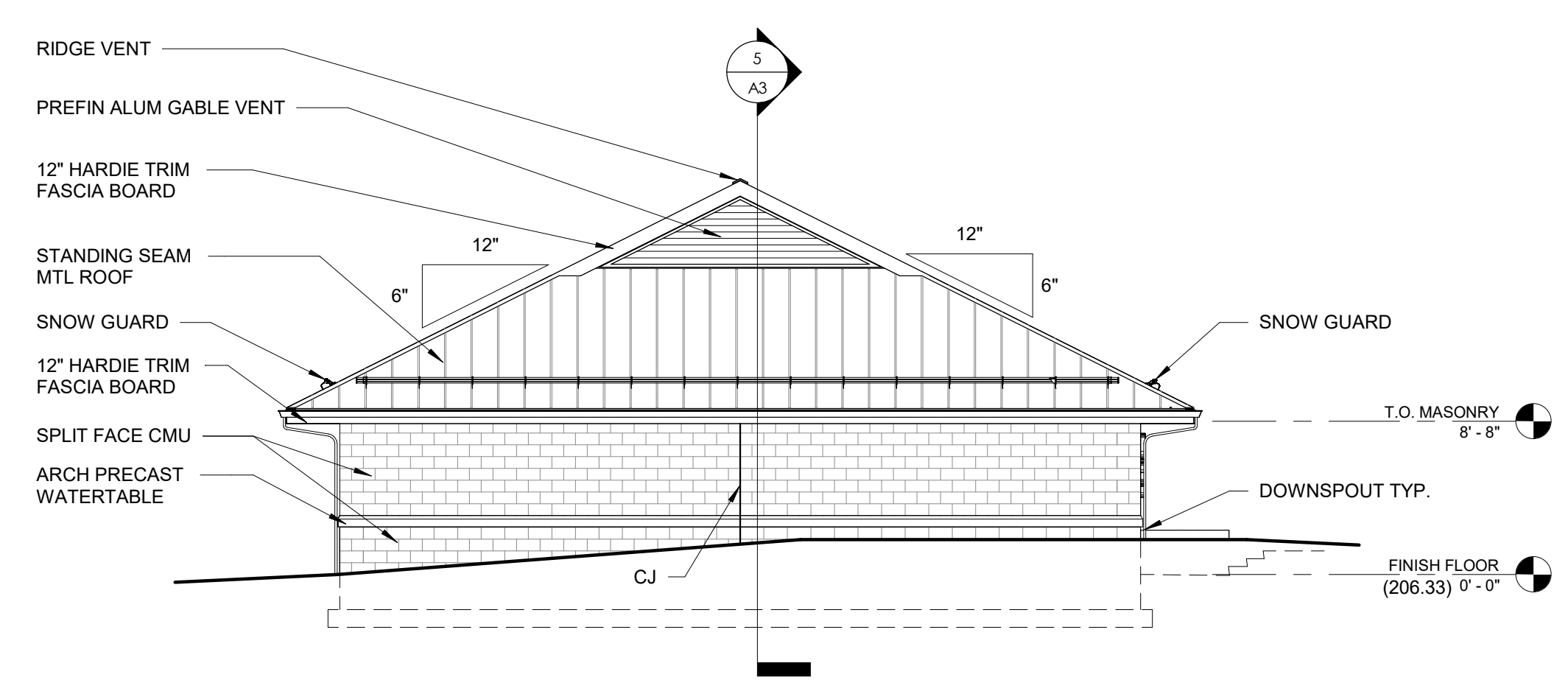
3 EAST ELEVATION
1/8" = 1'-0"



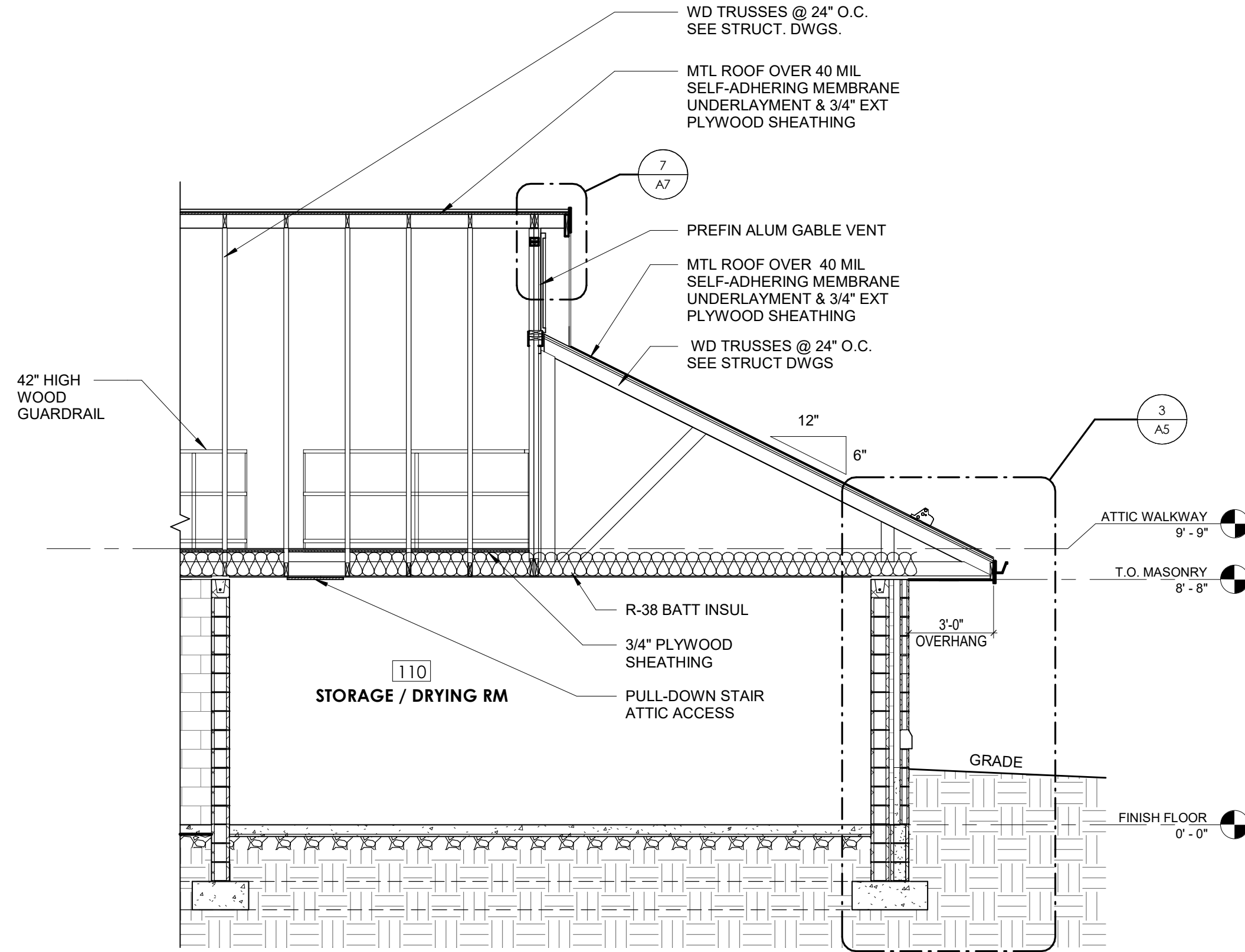
2 SOUTH ELEVATION
1/8" = 1'-0"



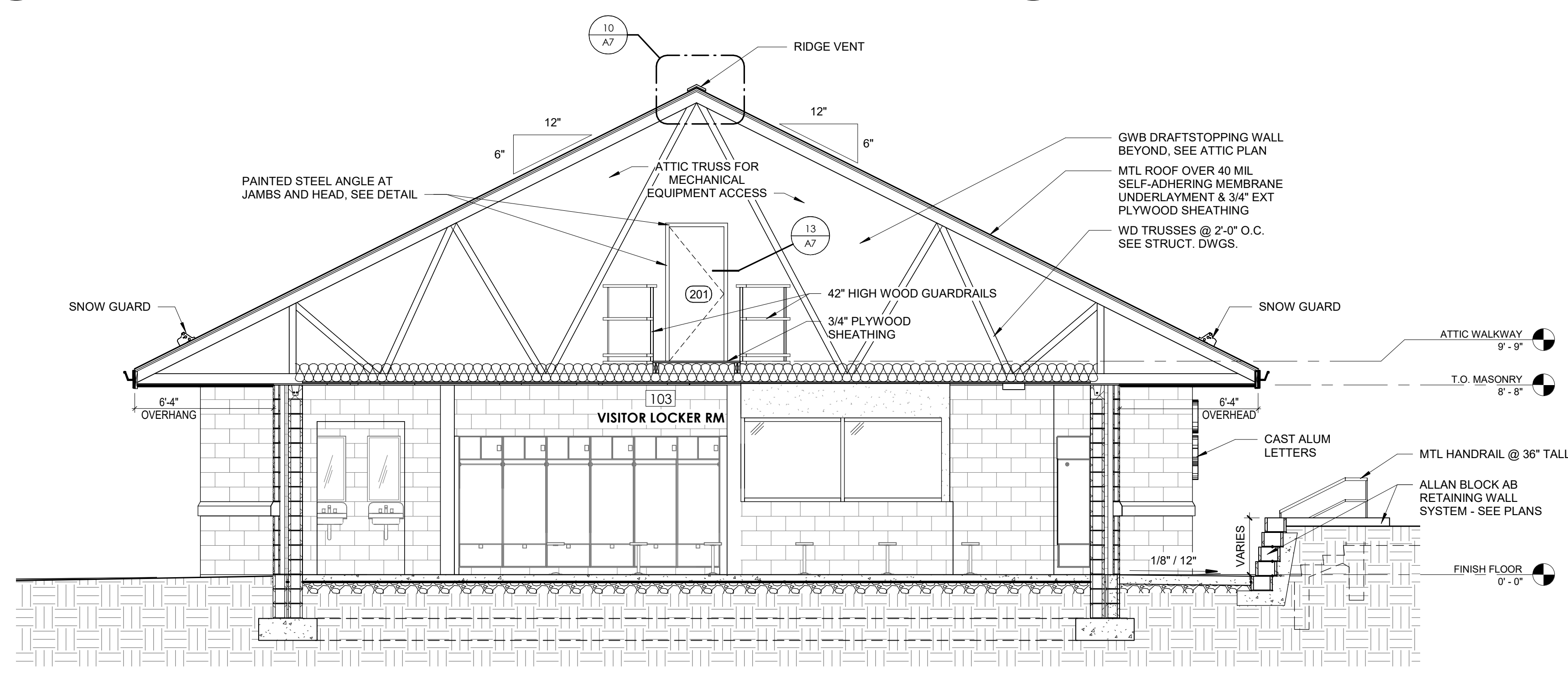
4 WEST ELEVATION
1/8" = 1'-0"



1 NORTH ELEVATION
1/8" = 1'-0"



5 BUILDING SECTION @ STORAGE/DRYING ROOM
1/4" = 1'-0"



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

REVISIONS		DESCRIPTION	
REV#	DATE		

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ELEVATIONS, SECTIONS

NEW FIELD HOUSE AT STADIUM

1696 PERRYVILLE RD, PERRYVILLE, MD 21903

DATE:
11/03/2023

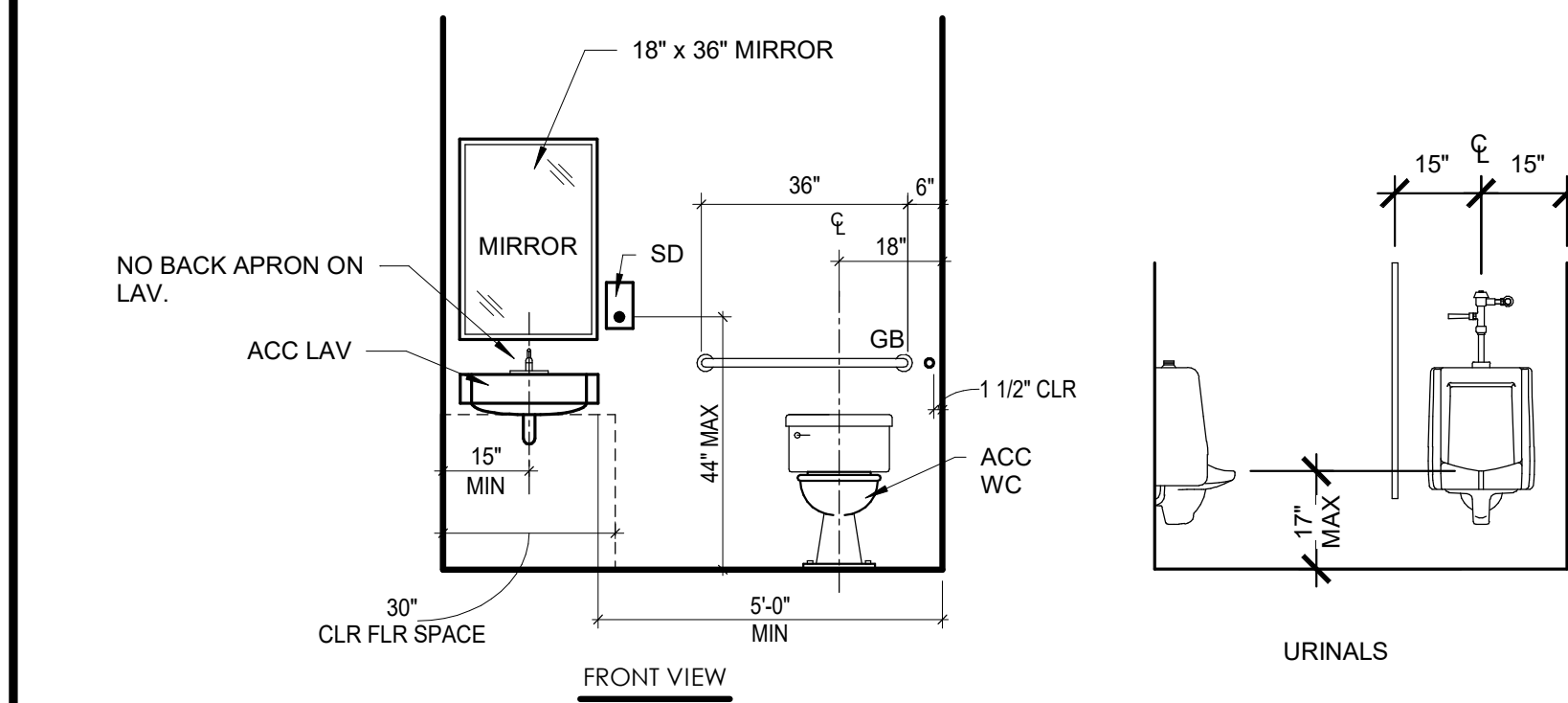
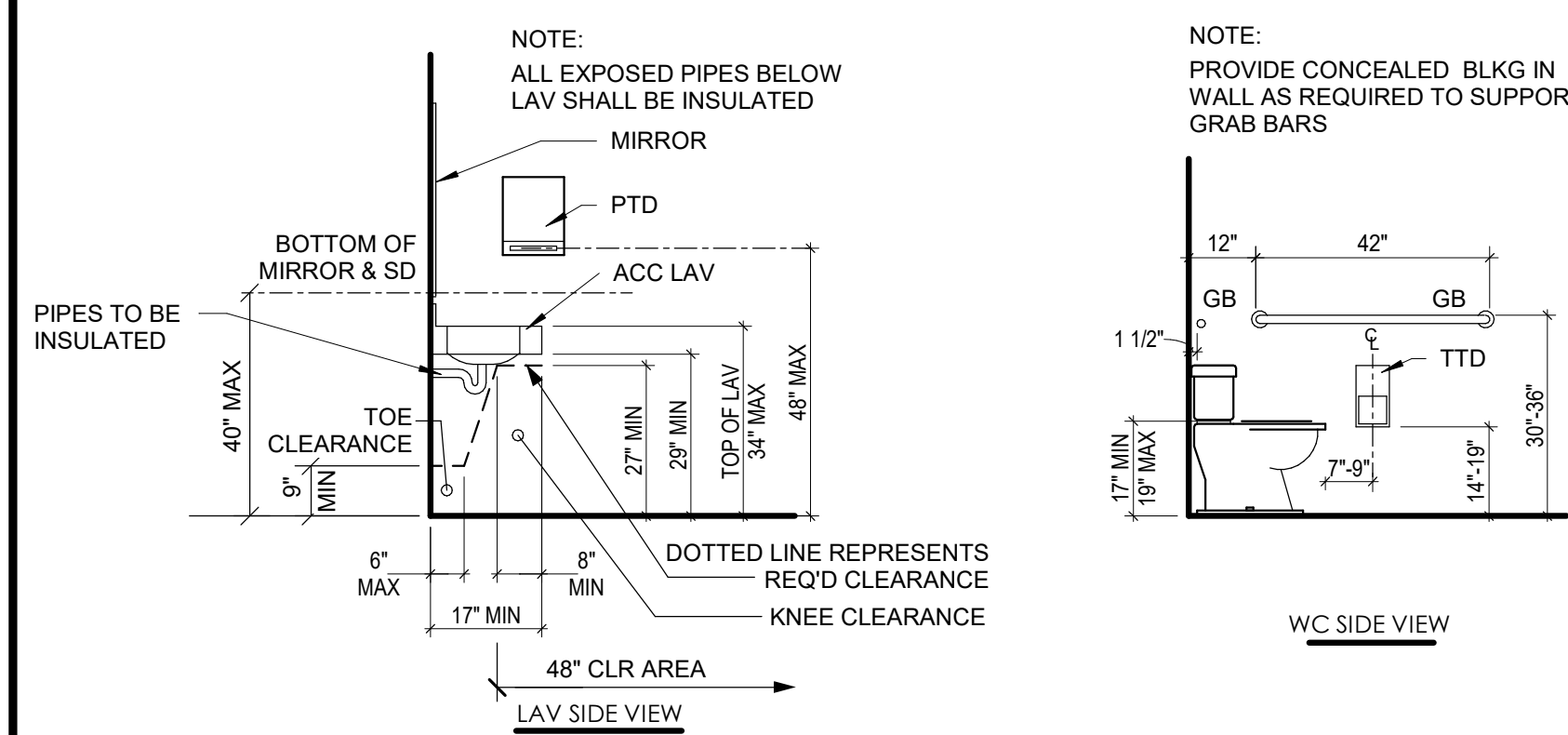
SCALE:
AS NOTED

DRAWN BY:
CK, AH

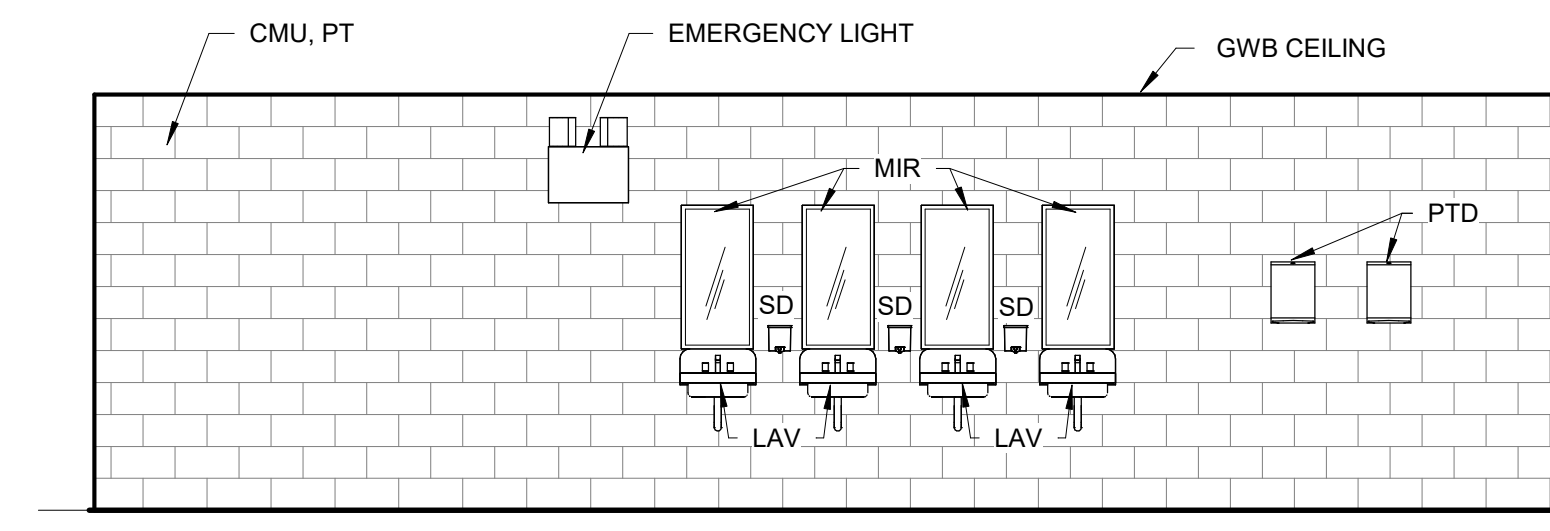
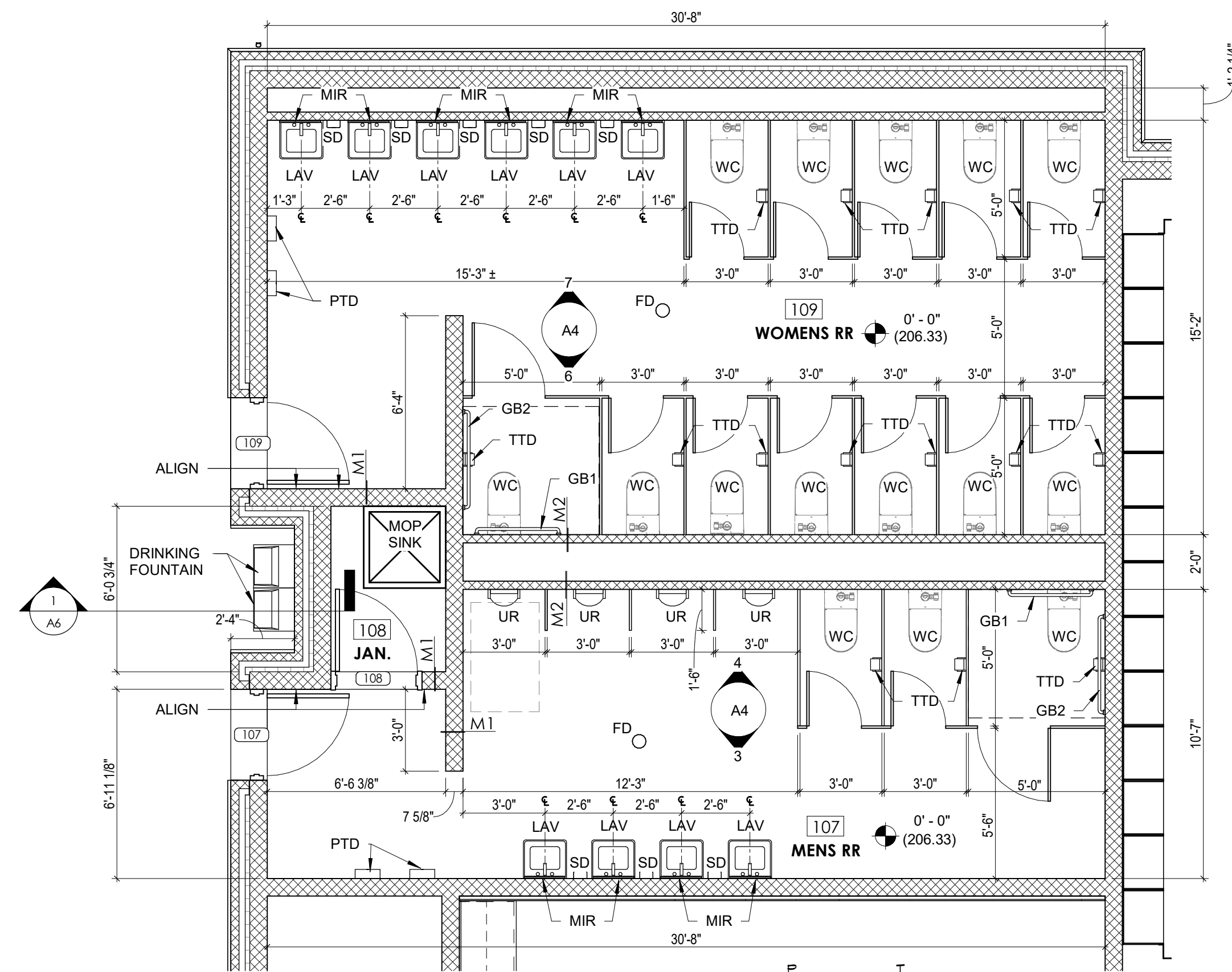
CHECKED BY:
WS

DRAWING NO:
A3

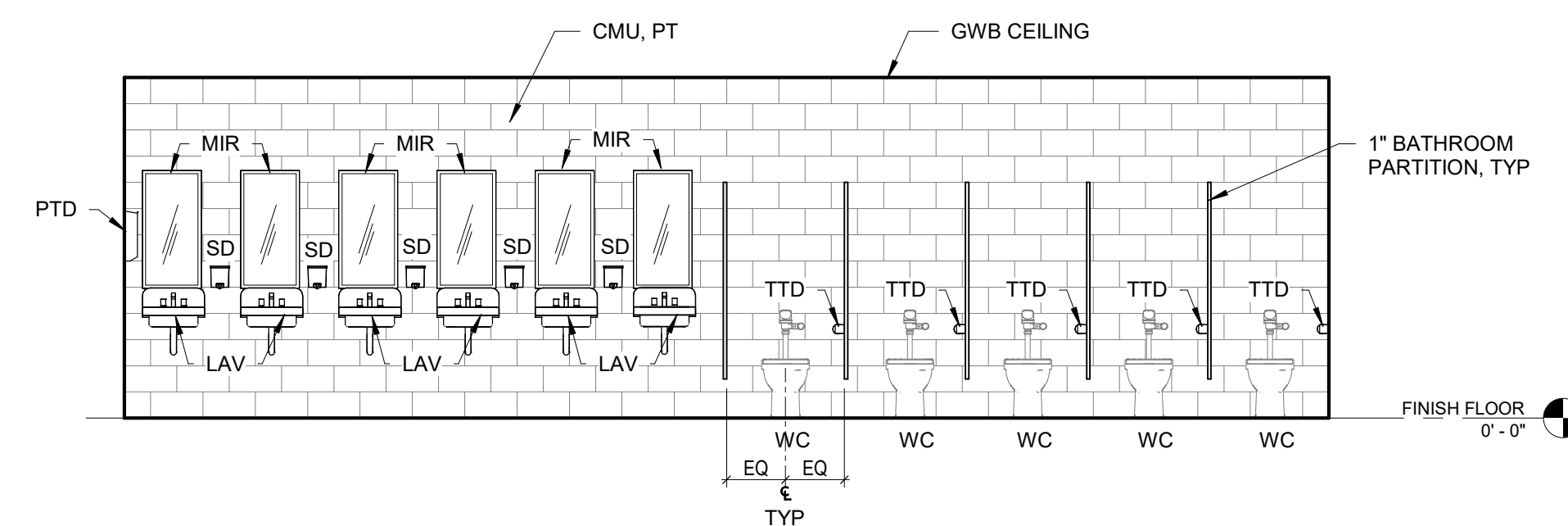
PWA JOB NUMBER:
2181073.00



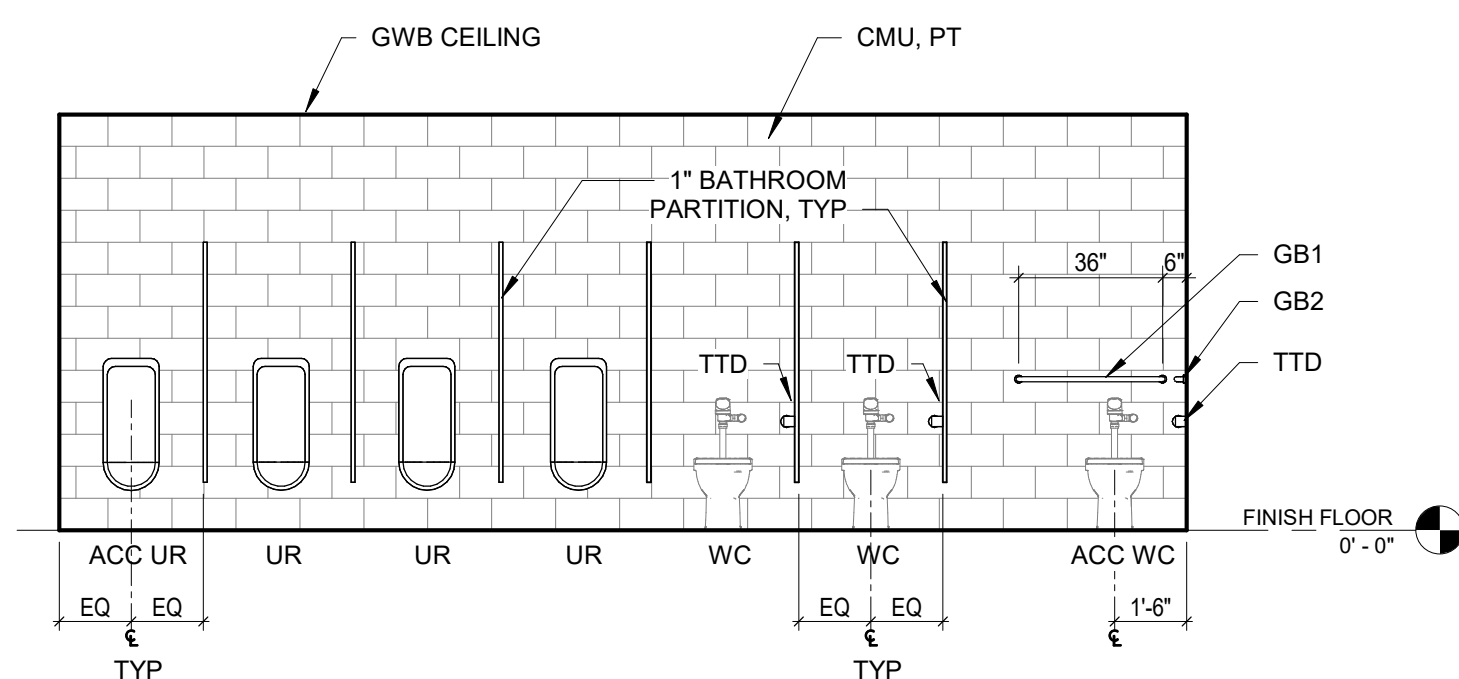
5 ADA RESTROOM MOUNTING HEIGHTS
3/8" = 1'-0"



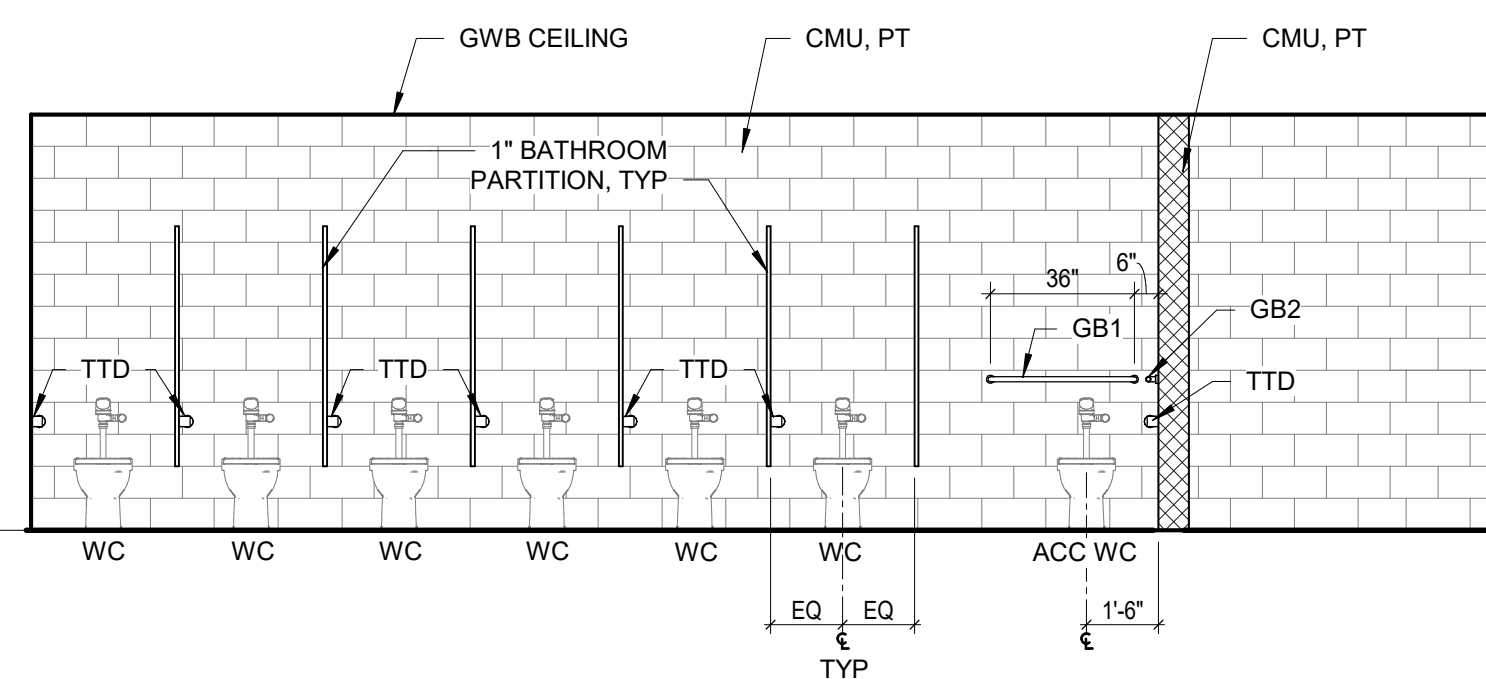
3 MENS RR 107 - ELEV @ ACC
1/4" = 1'-0"



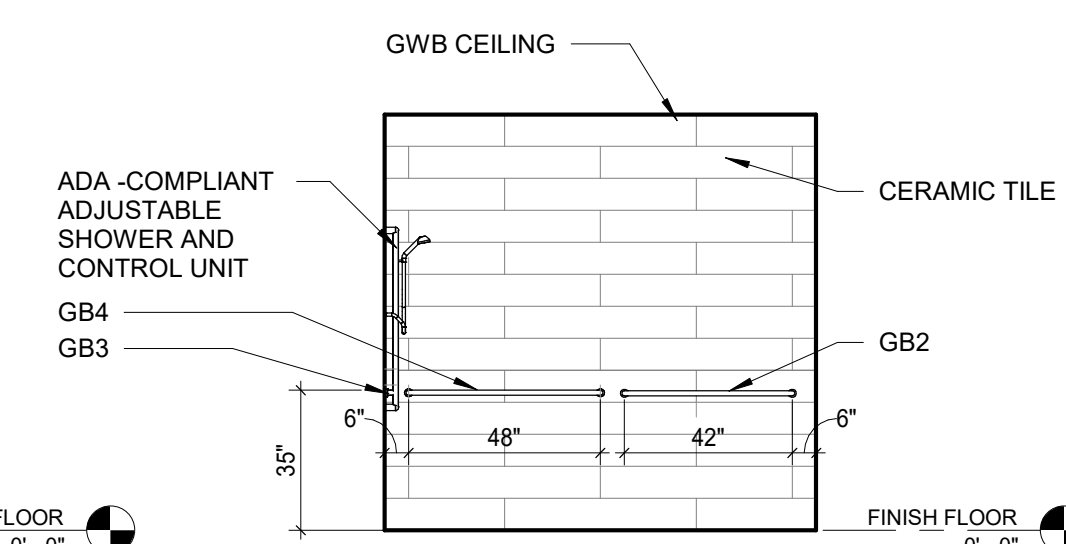
7 WOMENS RR 109 ELEV @ LAVATORIES & WC
1/4" = 1'-0"



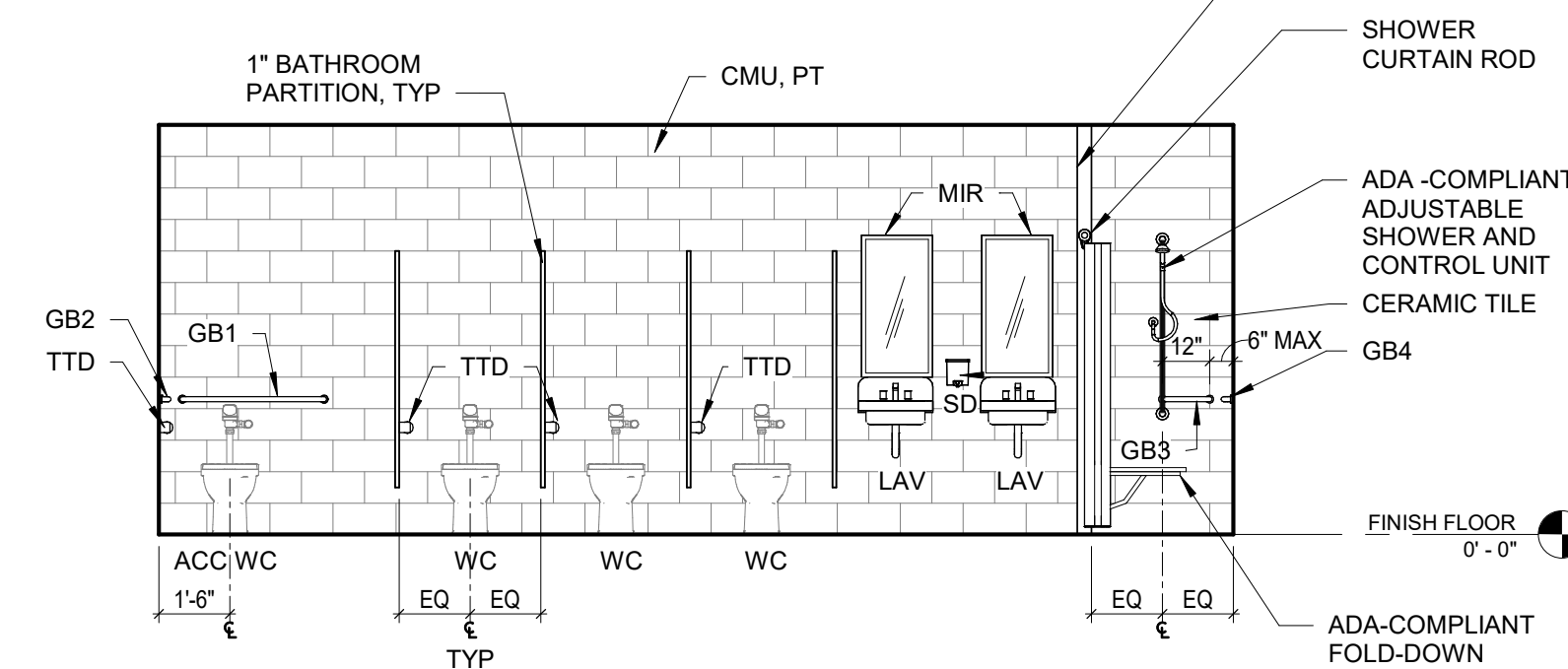
4 MENS RR 09 ELEV @ STALLS
1/4" = 1'-0"



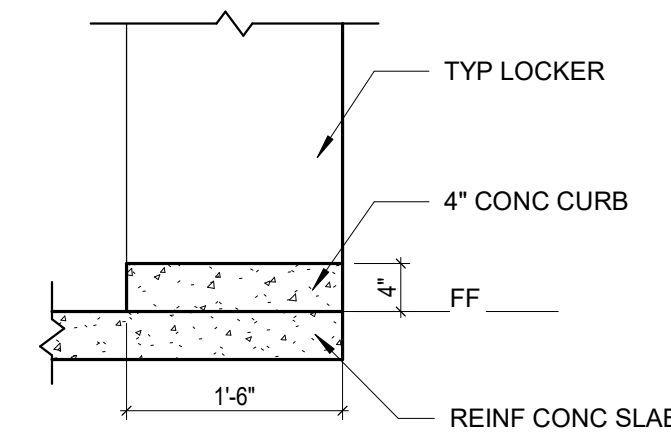
6 WOMENS RR 109 ELEV @ WC
1/4" = 1'-0"



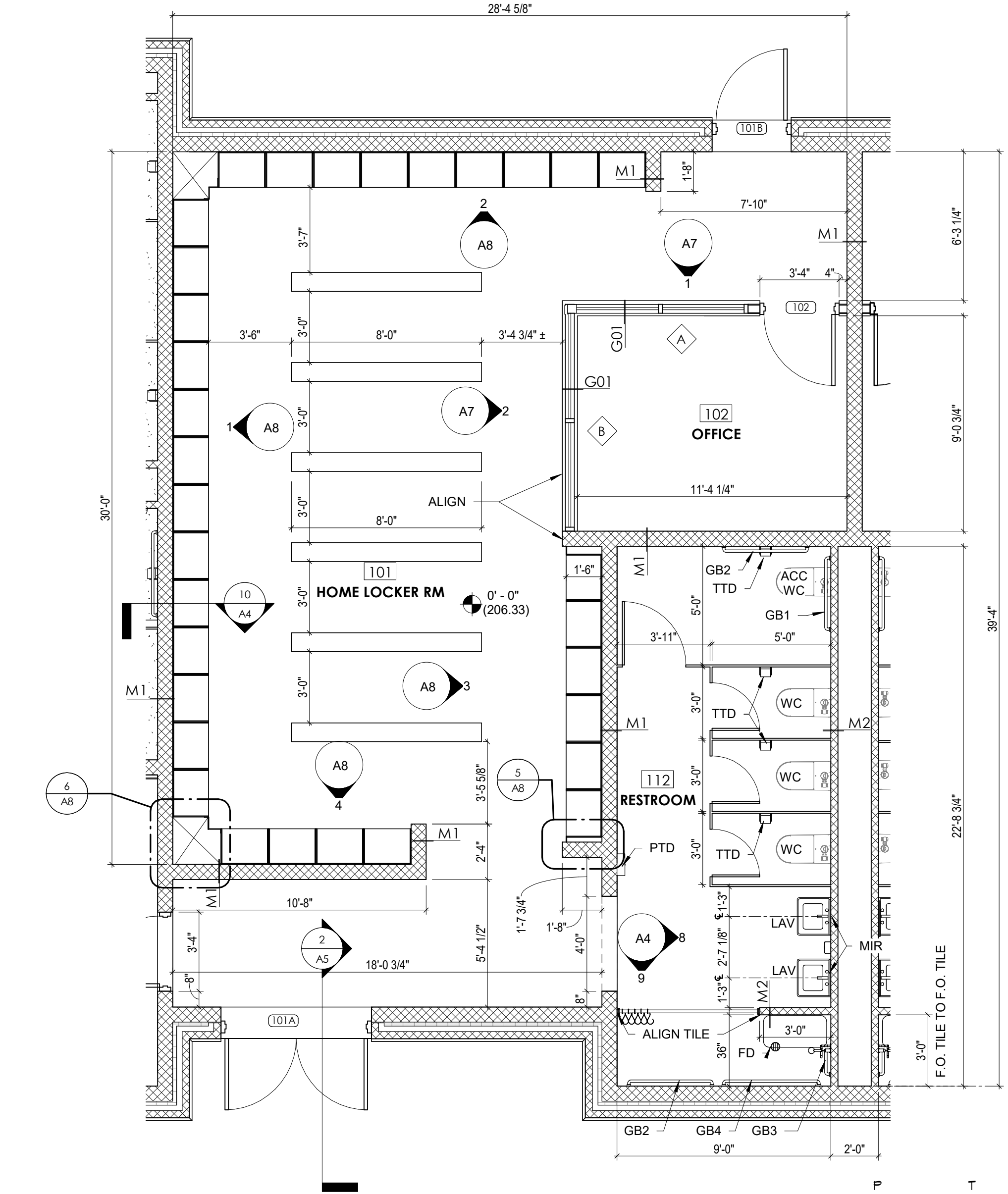
9 HOME LOCKER 112 SHOWER ELEV
1/4" = 1'-0"



8 HOME LOCKERS 112 RR ELEV
1/4" = 1'-0"



10 TYP LOCKER CURB DTL
3/4" = 1'-0"



MARK	DESCRIPTION	MANUFACTURER/ MODEL NO.
TTD	TOILET TISSUE DISPENSER	BOBRICK B-4288 CONTURA SERIES, SURFACE MOUNTED
GB-1	36" GRAB BAR	BOBRICK B-6806 x 36" OR APPROVED EQUIV.
GB-2	42" GRAB BAR	BOBRICK B-6806 x 42" OR APPROVED EQUIV.
GB-3	12" GRAB BAR	BOBRICK B-6806 x 12" OR APPROVED EQUIV.
GB-4	48" GRAB BAR	BOBRICK B-6806 x 48" OR APPROVED EQUIV.
PTD	PAPER TOWEL DISPENSER	BOBRICK B-2620 OR APPROVED EQUIV.
SD	SOAP DISPENSER	BOBRICK 818615 CONTURA SERIES, SURFACE MOUNTED
MIR	MIRROR	BRADLEY/ MODEL 781 SERIES 18"x36"
	ADA SHOWER SEAT	BOBRICK B-5191

NOTE: ACCESSORIES PROVIDED BY CCPS AND INSTALLED BY GC.

REVISIONS	DESCRIPTION	DATE	REW

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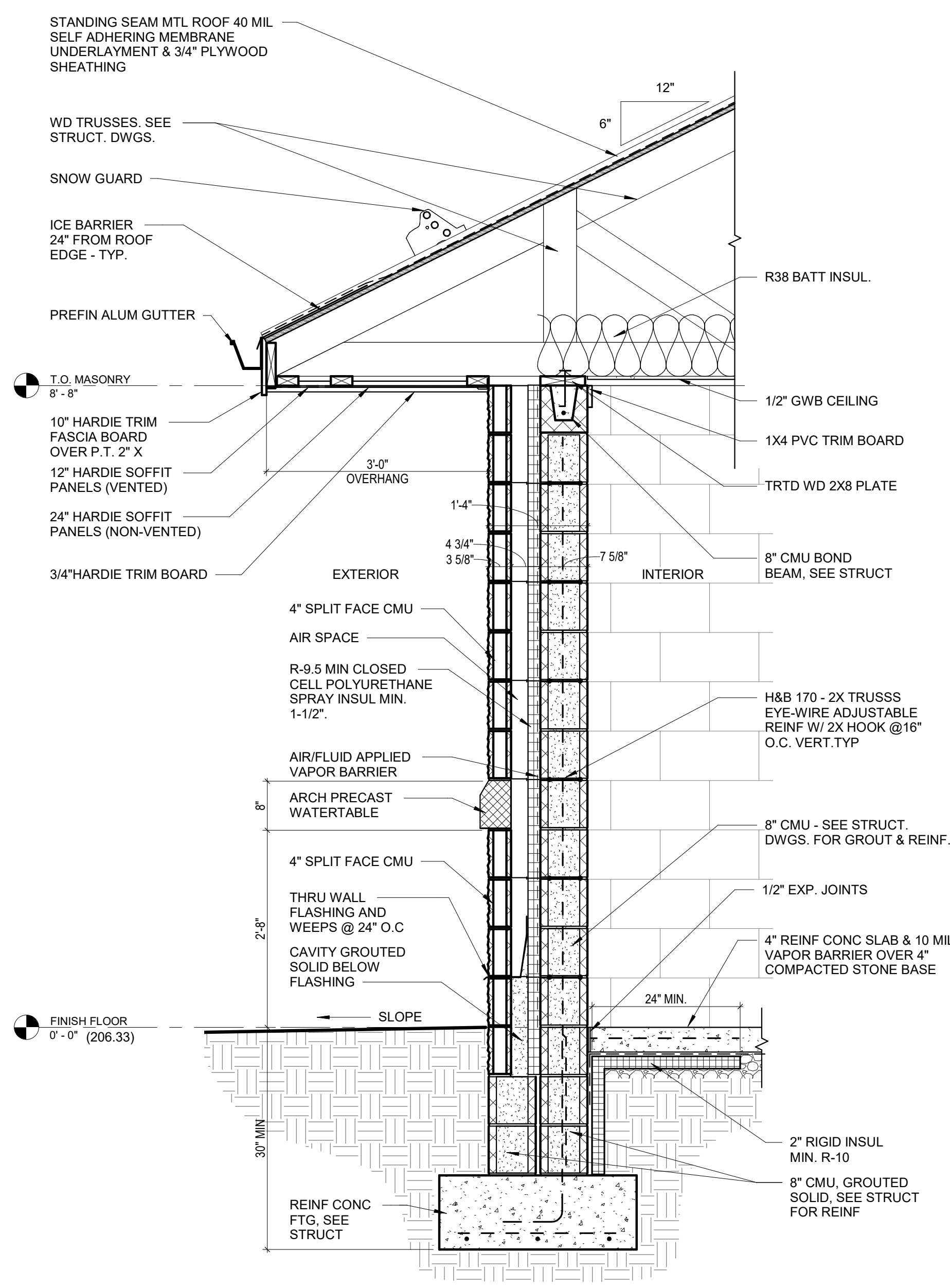
ENLARGED PLANS, ELEVATIONS

NEW FIELD HOUSE AT STADIUM

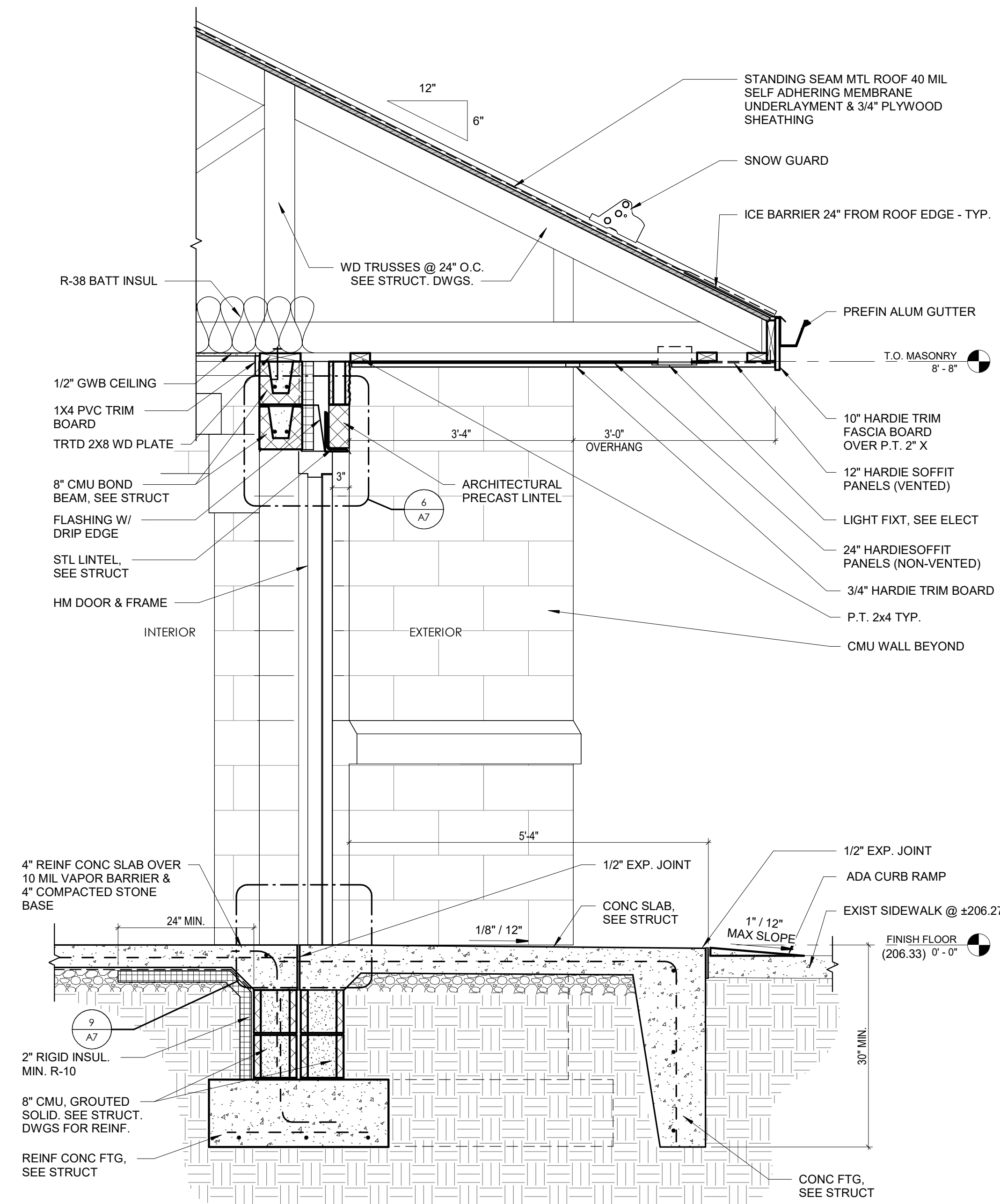
1686 PERRYVILLE RD, PERRYVILLE, MD 21903

STATE OF MARYLAND
JULIAN STRAIN
2020
ARCHITECT

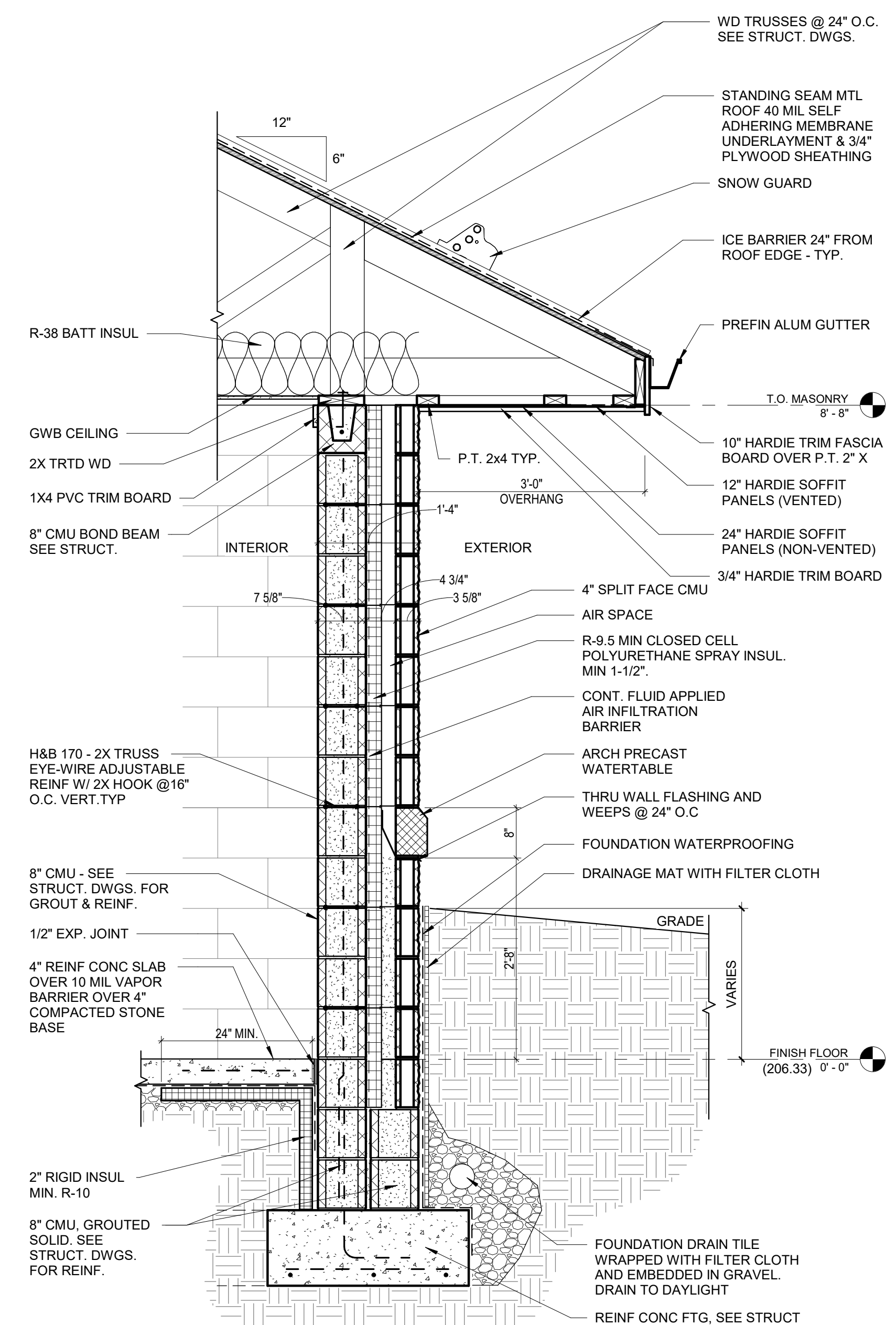
DATE: 11/03/2023
SCALE: AS NOTED
DRAWN BY: CK, AH
CHECKED BY: WS
DRAWING NO: A4
PWA JOB NUMBER: 2181073.00



1 WALL SECTION 1
A5 3/4" = 1'-0"



2 WALL SECTION 2
A5 3/4" = 1'-0"



3 WALL SECTION 3
A5 3/4" = 1'-0"

REVISIONS

DATE

REV#

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WALL SECTIONS

NEW FIELD HOUSE AT STADIUM

1696 PERRYVILLE RD, PERRYVILLE, MD 21903



DATE:

11/03/2023

SCALE:

AS NOTED

DRAWN BY:

CK, AH

CHECKED BY:

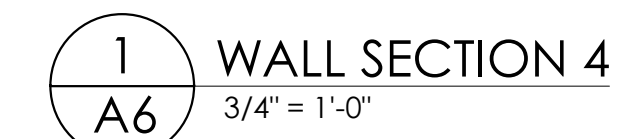
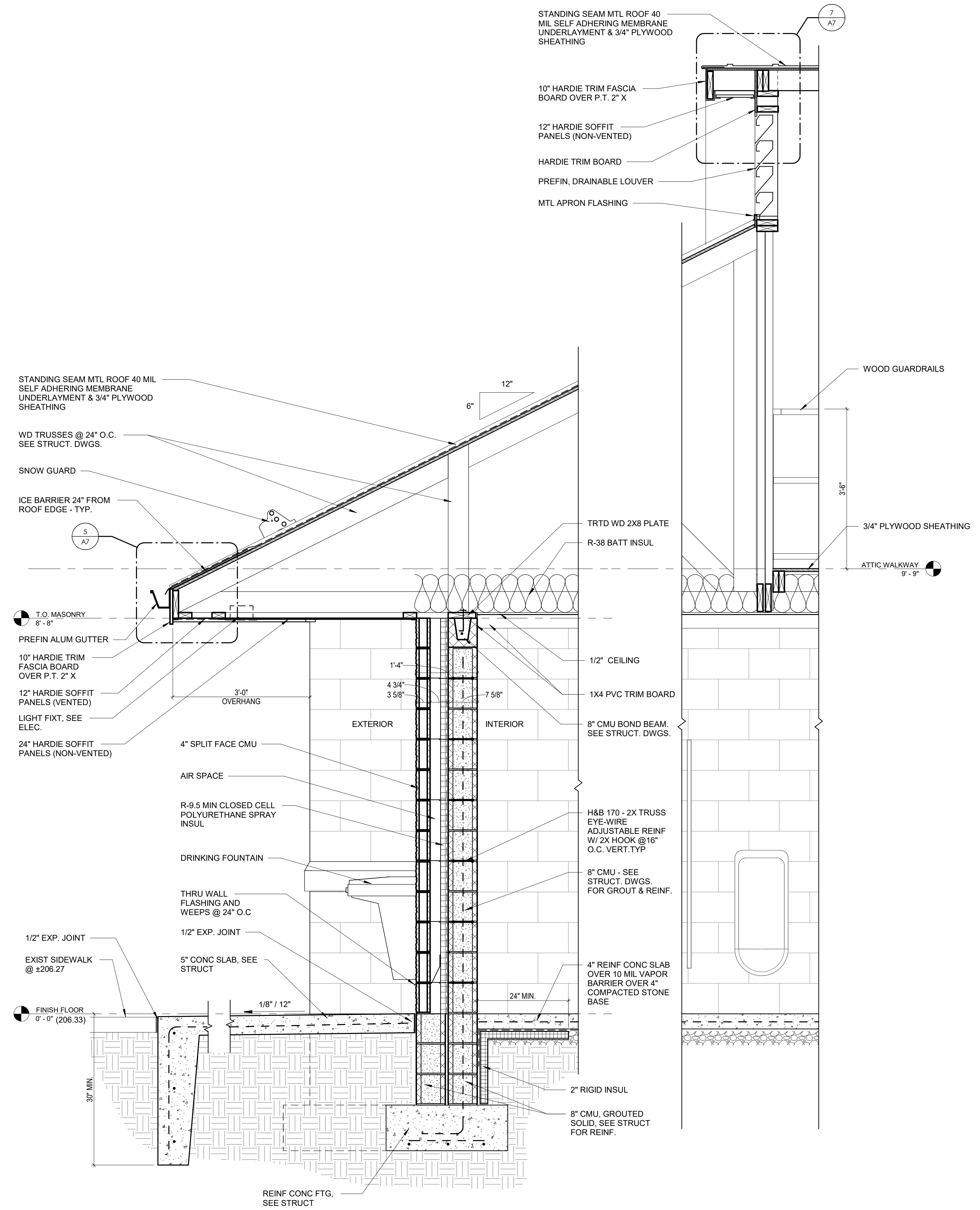
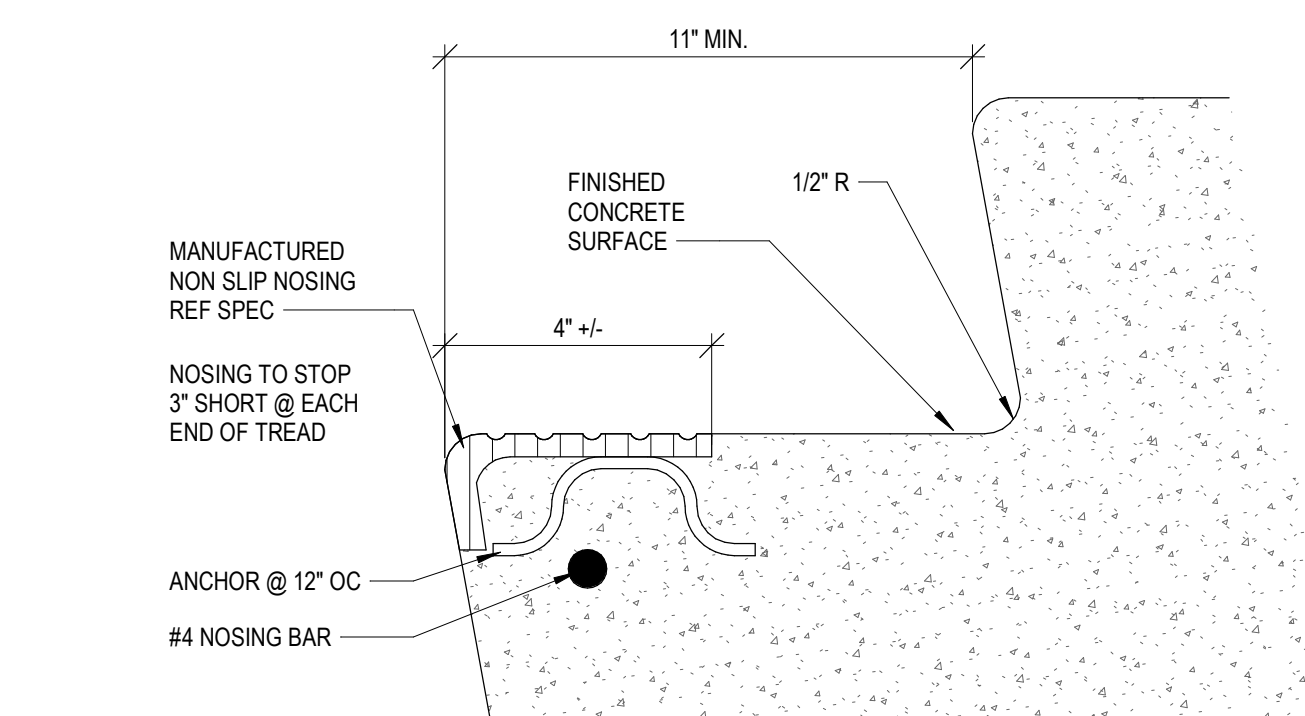
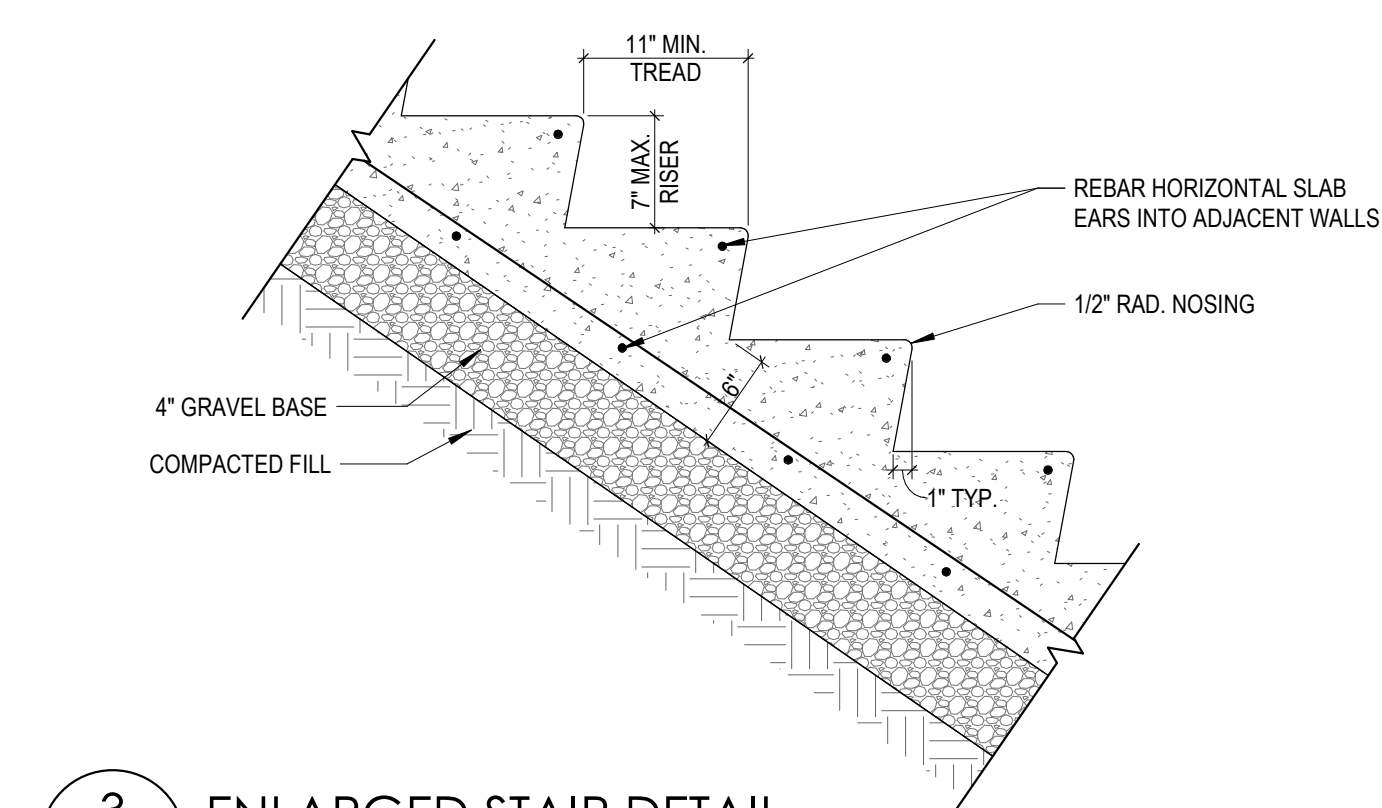
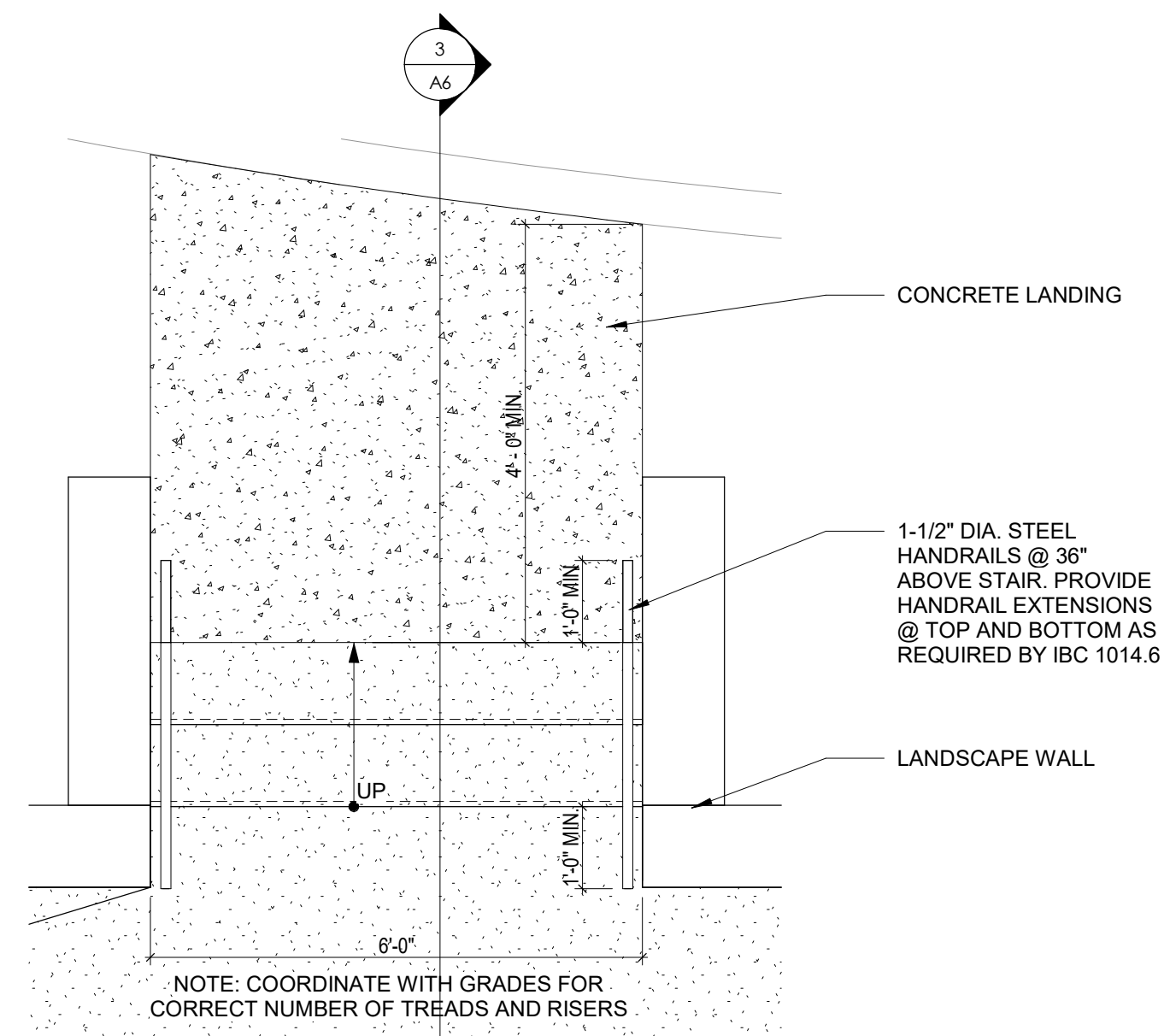
WS

DRAWING NO.:

A5

PWA JOB NUMBER

2181073.00

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WALL SECTIONS

NEW FIELD HOUSE AT STADIUM



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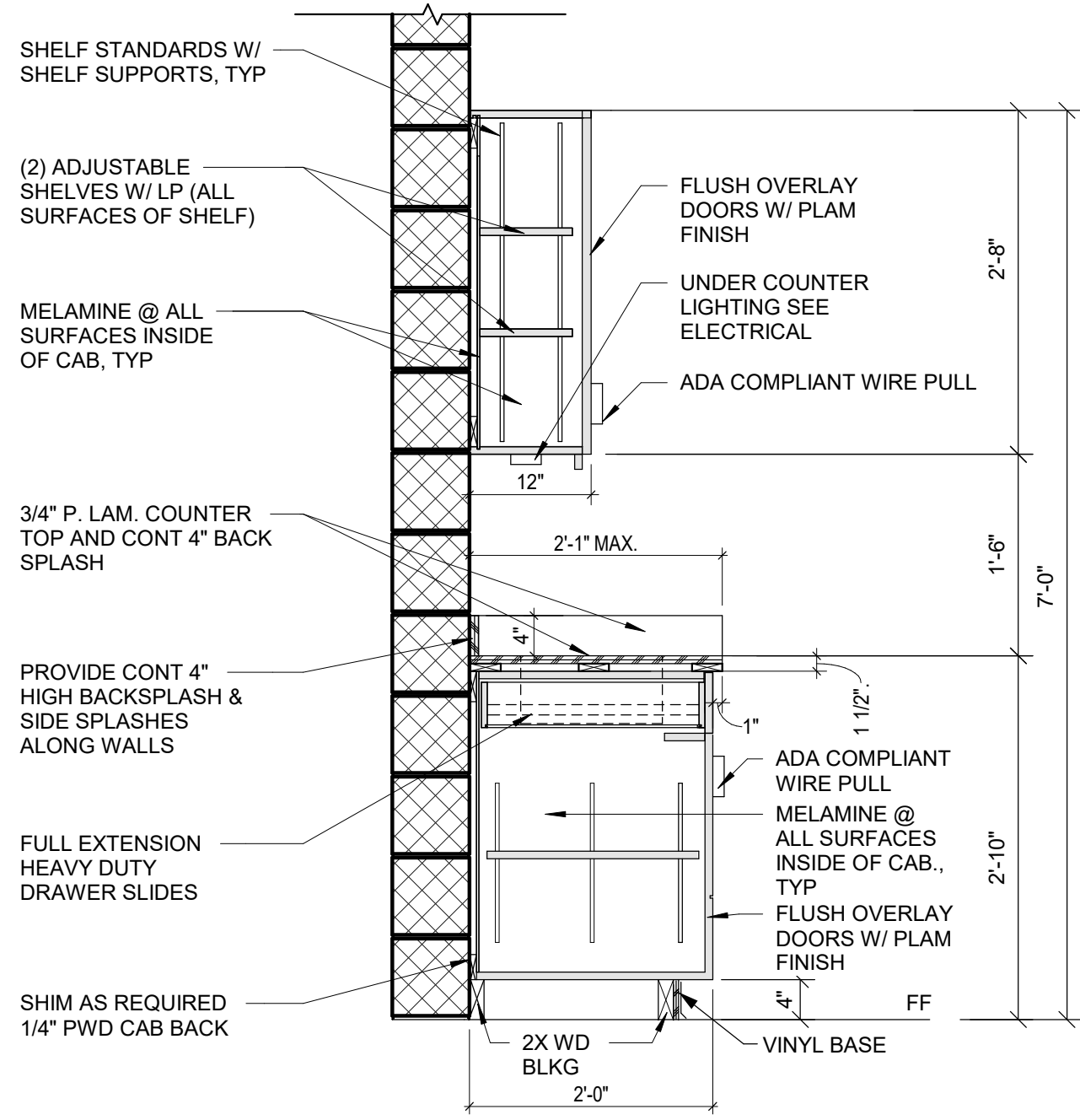
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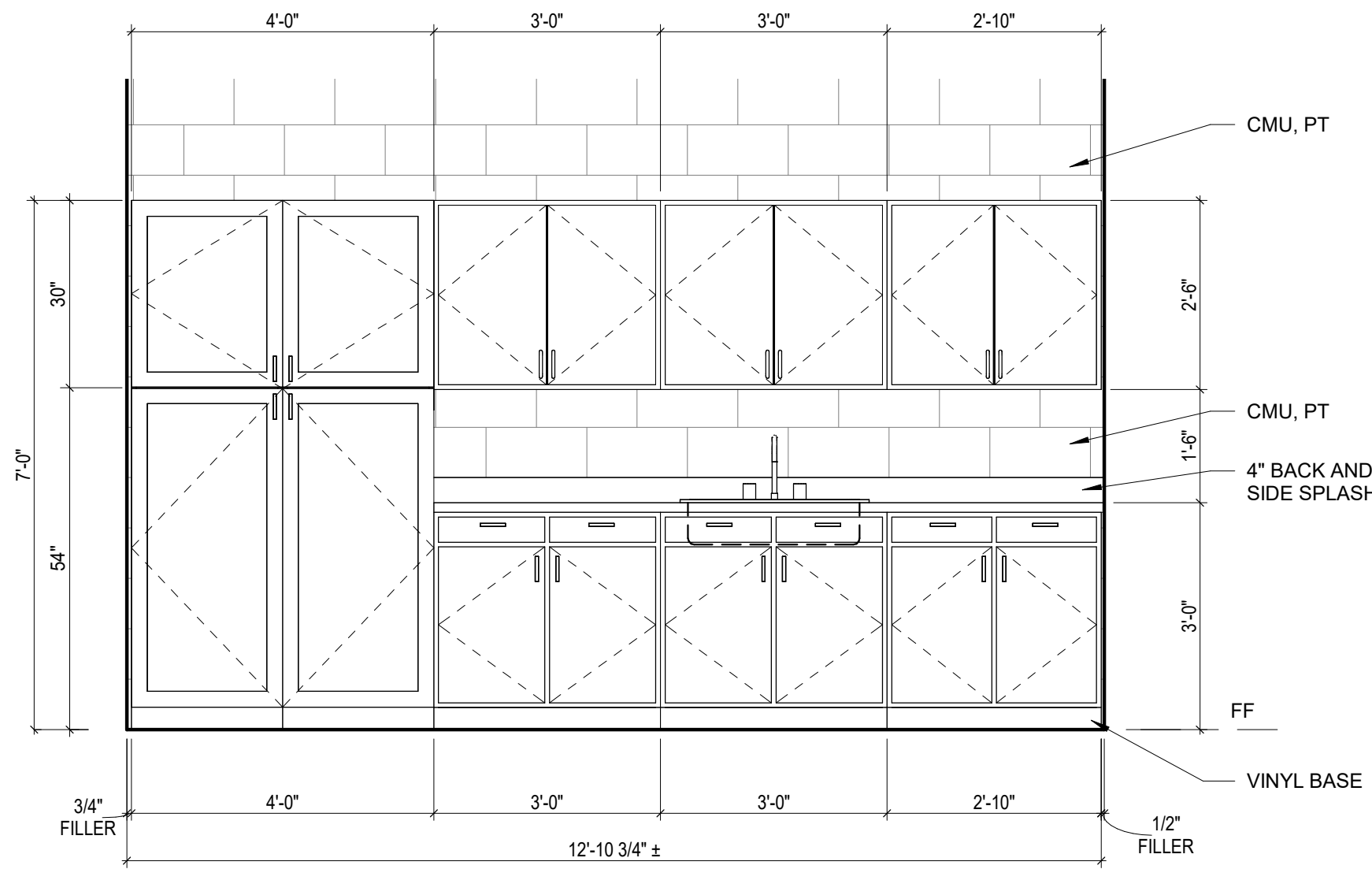
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K, AH

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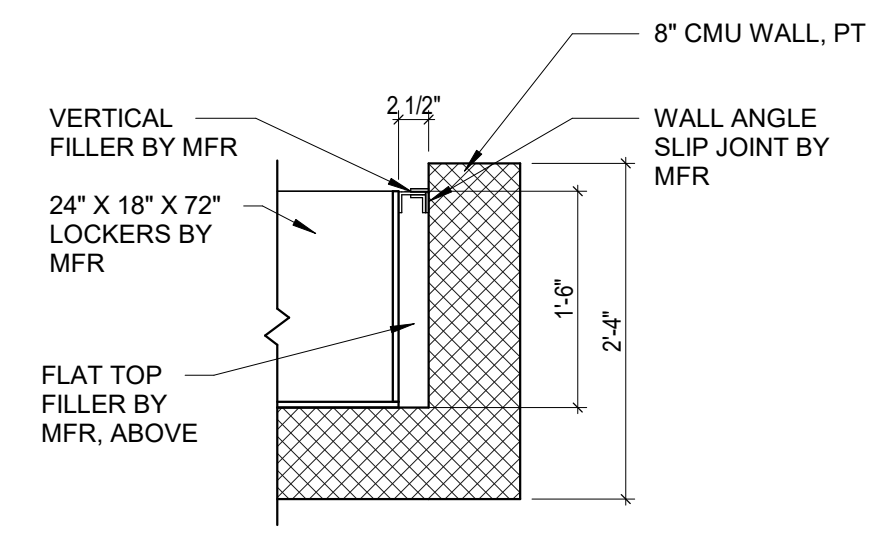
FWA JOB NUMBER
2181073.00



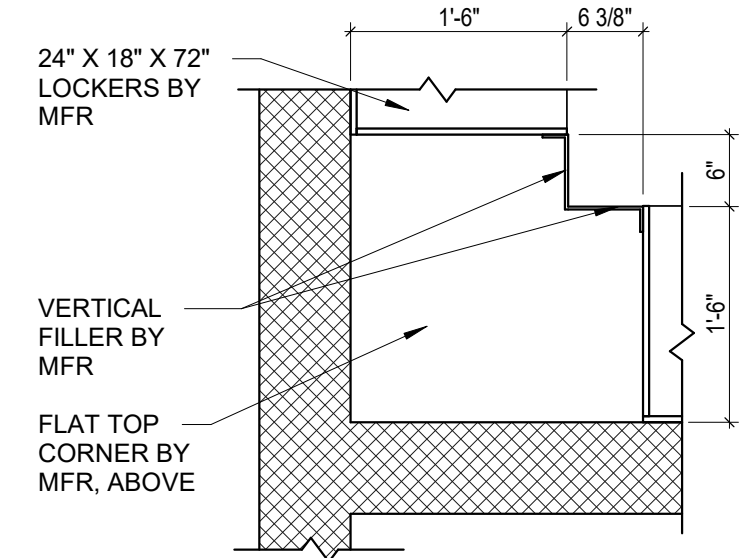
8
A8
TYPICAL CASEWORK SECTION
3/4" = 1'-0"



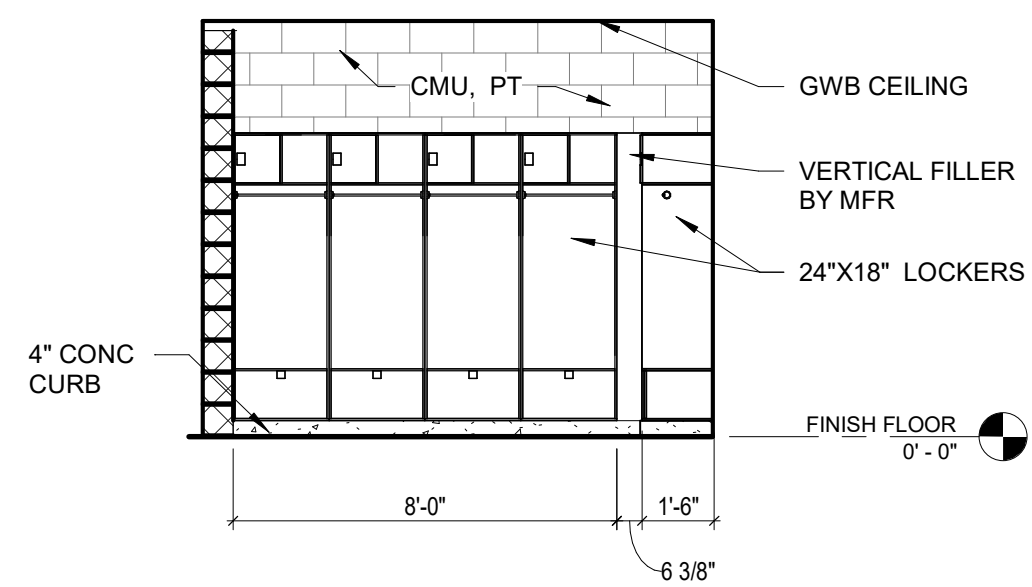
7
A8
TRAINING RM CSWK ELEV
1/2" = 1'-0"



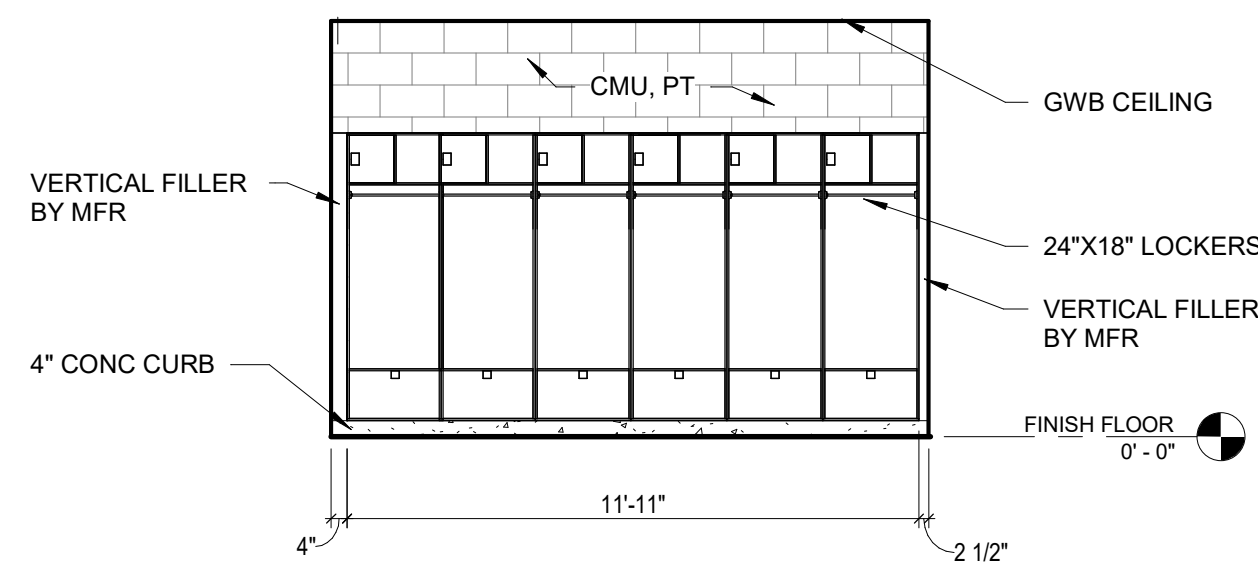
5
A8
DETAIL @ LOCKERS
3/4" = 1'-0"



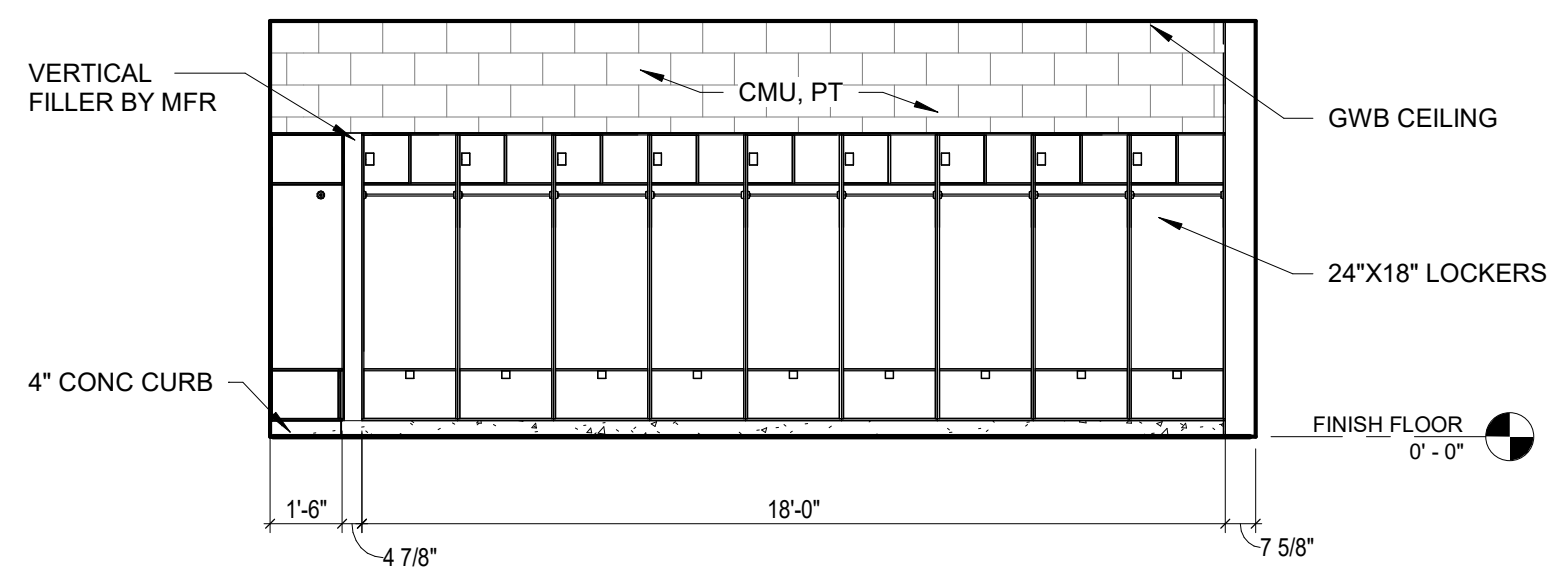
6
A8
DETAIL @ LOCKER - CORNER
3/4" = 1'-0"



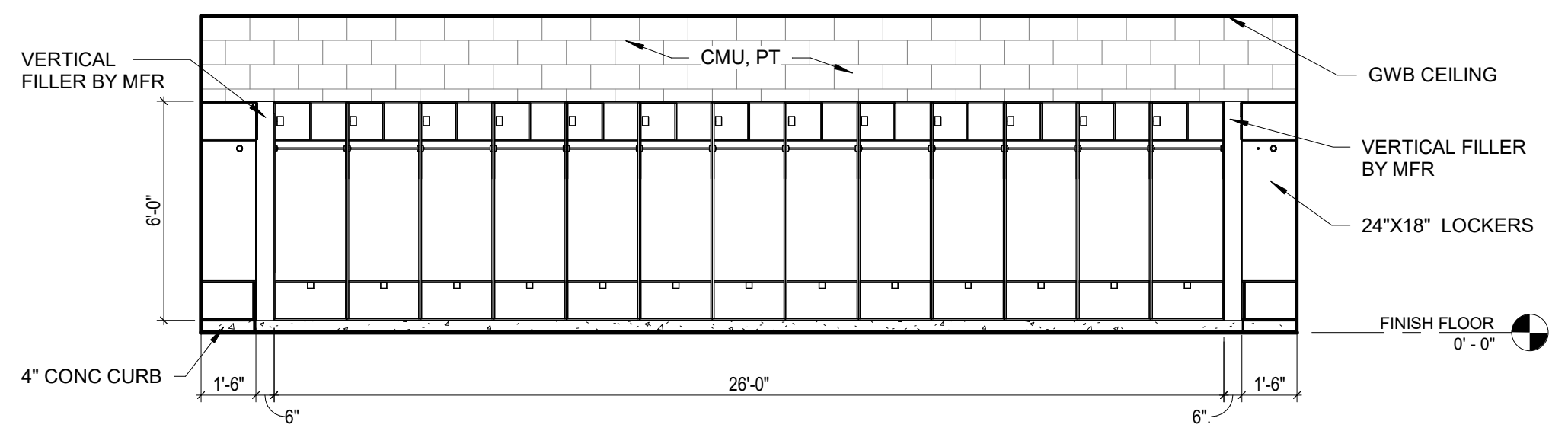
4
A8
LOCKERS ELEVATION 4
1/4" = 1'-0"



3
A8
LOCKERS ELEVATION 3
1/4" = 1'-0"



2
A8
LOCKERS ELEVATION 2
1/4" = 1'-0"



1
A8
LOCKERS ELEVATION 1
1/4" = 1'-0"

ROOM FINISH SCHEDULE								
RM	SCHEDULED NAME	FLR FIN	BASE TYPE	WALL FIN	CLG TYPE	CLG HT	TRIM	NOTES
101	HOME LOCKER RM	SC	-	BF/PT	PT GWB	8' - 9"	1X4 PVC	
102	OFFICE	SC	-	BF/PT	PT GWB	8' - 9"	1X4 PVC	
103	VISITOR LOCKER RM	SC	-	BF/PT	PT GWB	8' - 9"	1X4 PVC	
104	OFFICE	SC	-	BF/PT	PT GWB	8' - 9"	1X4 PVC	
105	UTILITY RM	SC	-	BF/PT	PT GWB	8' - 9"	1X4 PVC	
106	TRAINING RM	SC	-	BF/PT	PT GWB	8' - 9"	1X4 PVC	
107	MENS RR	SC	-	BF/PT	PT GWB	8' - 9"	1X4 PVC	
108	JAN.	SC	-	BF/PT	PT GWB	8' - 9"	1X4 PVC	
109	WOMENS RR	SC	-	BF/PT	PT GWB	8' - 9"	1X4 PVC	
110	STORAGE / DRYING RM	SC	-	BF/PT	PT GWB	8' - 9"	1X4 PVC	
112	RESTROOM	CT	-	BF/PT	PT GWB	8' - 9"	1X4 PVC	SHOWER RM CT 8' - 0" HIGH
113	RESTROOM	CT	-	BF/PT	PT GWB	8' - 9"	1X4 PVC	SHOWER RM CT 8' - 0" HIGH

ROOM FINISH SCHEDULE ABBREVIATIONS					
GWB	GYPSUM WALL BOARD	BF	BLOCK FILL	CT	CERAMIC TILE
RB	RUBBER FLOORING	SC	SEALED CONCRETE	PT	PAINT

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ROOM FINISH SCHEDULE,
ENLARGED ELEVATIONS
NEW FIELD HOUSE AT STADIUM
1686 PERRYVILLE RD, PERRYVILLE, MD 21903



DATE: 11/03/2023
SCALE: AS NOTED
DRAWN BY: CK, AH
CHECKED BY: WS
DRAWING NO: A8
PWA JOB NUMBER: 2181073.00

STRUCTURAL NOTES:

GENERAL

1. STRUCTURAL NOTES ARE NOT INTENDED TO REPLACE SPECIFICATIONS. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. FOR INCONSISTENCIES BETWEEN STRUCTURAL DRAWINGS, THE SPECIFICATIONS, AND ANY CODE OF STANDARD PRACTICE, THE STRICTER REQUIREMENT SHALL APPLY, AND THE ENGINEER SHALL BE NOTIFIED PRIOR TO PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.
2. STRUCTURAL CONSTRUCTION DOCUMENTS SHALL BE USED WITH OTHER CONSTRUCTION DOCUMENTS, INCLUDING ARCHITECTURAL, M/E/P, AND SITE DOCUMENTS. COORDINATE WITH THESE DOCUMENTS FOR LOCATIONS AND DIMENSIONS OF OPENINGS, CHASES, INSERTS, REGLETS, SLEEVES, DEPRESSIONS, ETC., NOT INDICATED ON THE STRUCTURAL DOCUMENTS. ALL DIMENSIONS AND CONDITIONS, EXISTING AND NEW, SHALL BE FIELD VERIFIED. THE ENGINEER SHALL BE NOTIFIED OF DISCREPANCIES PRIOR TO PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.
3. THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AFTER THE BUILDING IS CONCRETE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION SEQUENCES AND SEQUENCES TO ENSURE STABILITY AND SAFETY DURING CONSTRUCTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF SHEETING, SHORING, TEMPORARY BRACING, GUTS, AND TIEDOWNS. THE CONTRACTOR SHALL PROVIDE SHORING AND BRACING NECESSARY TO PROTECT EXISTING AND ADJACENT STRUCTURES.
4. SECTIONS AND DETAILS SHOWN ON ANY STRUCTURAL DOCUMENTS SHALL BE CONSIDERED TYPICAL FOR SIMILAR CONDITIONS THAT DO NOT HAVE A SPECIFIC SECTION INDICATED, AND SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
5. APPLICABLE FEDERAL, STATE AND MUNICIPAL REGULATIONS SHALL BE FOLLOWED, INCLUDING THE FEDERAL DEPARTMENT OF LABOR OSHA.
6. THE CONTRACTOR IS RESPONSIBLE FOR LIMITING THE AMOUNT OF CONSTRUCTION LOAD IMPOSED ON THE STRUCTURE. CONSTRUCTION LOADS SHALL NOT EXCEED THE SPECIFIED DESIGN LIVE LOADS. CONCRETE SLABS AND TOPPING SHALL NOT BE LOADED UNTIL THE CONCRETE HAS REACHED AT LEAST 75% OF THE SPECIFIED DESIGN COMPRESSIVE STRENGTH.
7. THE CONTRACTOR'S CONSTRUCTION SEQUENCES SHALL ALLOW FOR THE EFFECTS OF THERMAL MOVEMENTS DURING THE CONSTRUCTION PERIOD. PRIOR TO THE BUILDING BEING ENCLOSED AND TEMPERATURE CONTROLLED, NEGATIVE EFFECTS OF SUCH THERMAL MOVEMENTS, SUCH AS MATERIAL CRACKING, FROST HEAVE, ETC., SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
8. IN THE ABSENCE OF SPECIFIC INSTRUCTIONS TO THE CONTRARY IN THE CONTRACT DOCUMENTS, THE TRADE PRACTICES THAT ARE DEFINED IN ANY CODE OF STANDARD PRACTICE SHALL GOVERN.
9. DO NOT SCALE DRAWINGS TO DETERMINE DIMENSIONS, LOCATIONS, OR SIZES OF ANY ELEMENT.

STRUCTURAL DESIGN CRITERIA

- DESIGN LOADS ARE IN ACCORDANCE WITH THE 2018 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC) INCLUDING LOCAL CODES, WHERE APPLICABLE, AND THE FOLLOWING STANDARDS REFERENCED IN IBC 2018:
- ACI 318 - BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
 - ACI 530 - BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES
 - ACI 530.1 - SPECIFICATIONS FOR MASONRY STRUCTURES
 - AFPM NDS - NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION
 - ASCE 360 - SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS
 - ASCE 7 - MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
2. RISK CATEGORY / OCCUPANCY CATEGORY OF BUILDING : II
3. LIVE LOADS ARE AS FOLLOWS. LIVE LOAD REDUCTIONS HAVE BEEN TAKEN WHERE APPLICABLE, UNO.
- | | |
|----------------|--------|
| ROOF LIVE LOAD | 30 PSF |
|----------------|--------|
4. SNOW LOADS IS BASED ON THE FOLLOWING. DRIFTING OR SLIDING SNOW LOADS HAVE BEEN CONSIDERED WHERE APPROPRIATE.
- | | |
|--------------------------------|------------------|
| RAIN OR SNOW SURCHARGE | N/A (Pg. 20 PSF) |
| GROUND SNOW LOAD, Pg | 30 PSF |
| FLAT-ROOF SNOW LOAD, Pf | 21 PSF |
| SNOW EXPOSURE FACTOR, Ce | 1.0 |
| SNOW THERMAL FACTOR, Ct | 1.0 |
| SNOW LOAD IMPORTANCE FACTOR, I | 1.1 |
5. WIND LOADING IS BASED ON THE FOLLOWING:
- | | |
|--|-----------------|
| BASIC WIND SPEED (3 SEC GUST) | 115 MPH |
| EXPOSURE CATEGORY | B |
| BUILDING CATEGORY: SIMPLE DIAPHRAGM, LOW-RISE, ENCLOSED, RIGID | |
| INTERNAL PRESSURE COEFF. | +0.18 |
| COMPONENTS & GLADDING (LOAD FACTOR OF 0.6 IS NOT INCLUDED) | |
| WALLS | +14.5 -21.2 PSF |
| WALL CORNERS | +14.5 -26.2 PSF |
| ROOF ZONE 1 | +17.9 -32.7 PSF |
| ROOF ZONE 2 | +17.9 -32.7 PSF |
| ROOF ZONE 3 | +16.3 -40.4 PSF |
6. SEISMIC LOADING IS BASED ON THE FOLLOWING:
- | | |
|--|--------|
| SEISMIC IMPORTANCE FACTOR | 1.00 |
| SEISMIC SITE CLASS | D |
| SPECTRAL RESPONSE COEFF. (Sw) | 0.181g |
| SPECTRAL RESPONSE COEFF. (Sw) | 0.073g |
| LONG PERIOD TRANSITION (TL) | 6 |
| SEISMIC DESIGN CATEGORY, | B |
| ANALYSIS PROCEDURE | |
| EQUIVALENT LATERAL FORCE | |
| BASIC STRUCTURAL SYSTEM | |
| BEARING WALL | |
| SEISMIC FORCE RESISTING SYSTEM | |
| INTERMEDIATE REINFORCED MASONRY SHEAR WALL | |
| RESPONSE MODIFICATION FACTOR (R) | 3.5 |
| DESIGN BASE SHEAR | 3.6K |

SUBMITTALS

1. THE APPLICABLE CONTRACTOR SHALL SUBMIT THE FOLLOWING FOR APPROVAL:
- CONCRETE MIX DESIGNS FOR STRENGTHS INDICATED
 - CONCRETE REINFORCING SHOP DRAWINGS, INCLUDING ELEVATIONS OF ALL WALL
 - STRUCTURAL STEEL SHOP DRAWINGS & CONNECTION DESIGN
 - MASONRY REINFORCING SHOP DRAWINGS, INCLUDING ELEVATIONS OF ALL WALL
 - MASONRY GROUT AND MORTAR MIX DESIGNS
 - WOOD TRUSS SHOP DRAWINGS W/ P.E. SEALED CALCULATIONS
 - PRODUCT DATA & MILL TEST FOR EACH APPLICABLE PRODUCT

IBC SPECIAL INSPECTIONS

1. STRUCTURAL TESTS AND SPECIAL INSPECTIONS ARE REQUIRED BY THE INTERVENTION BUILDING CODE AND SHALL BE PERFORMED ON THIS PROJECT IN ACCORDANCE WITH REQUIREMENTS OF IBC CHAPTER 17, "SPECIAL INSPECTIONS AND TESTS."
2. AS REQUIRED BY IBC, THE SPECIAL INSPECTIONS AND TESTS SHALL BE PERFORMED BY AN INTERPRETER PROVIDED BY THE ENGINEER OF RECORD.
3. COPIES OF ALL EFFORTS DOCUMENTING THE SPECIAL INSPECTIONS AND TESTS PERFORMED BY THE INSPECTING AGENT SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER OF RECORD (BAKER, INGRAM & ASSOCIATES).
4. SPECIAL INSPECTIONS SHALL INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:

FABRICATOR INSPECTION: WHERE FABRICATION OF LOAD-BEARING MEMBERS, LATERAL LOAD-RESISTING MEMBERS AND ASSEMBLIES (SUCH AS STRUCTURAL STEEL, LIGHT-GAGE STEEL TRUSSES, ETC.) IS PERFORMED ON THE PREMISES OF A FABRICATOR'S SHOP, SPECIAL INSPECTION SHALL BE PROVIDED TO VERIFY FABRICATION AND QUALITY CONTROL PROCEDURES, IN ACCORDANCE WITH IBC SECTION 1704.2.5.

CONCRETE CONSTRUCTION: SPECIAL INSPECTIONS AND VERIFICATIONS SHALL CONFORM TO IBC SECTION 1705.3 AND TABLE 1705.3 "REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION."

MASONRY CONSTRUCTION: SPECIAL INSPECTIONS AND EVALUATION SHALL CONFORM TO IBC SECTION 1705.4.

STEEL CONSTRUCTION: SPECIAL INSPECTIONS SHALL CONFORM TO IBC SECTION 1705.2, AISC 360-10, SDI QA/QC AND TABLE 1705.2.3 "REQUIRED SPECIAL INSPECTIONS OF OPEN-WEB STEEL JOISTS AND JOIST GIRDERS." STEEL CONSTRUCTION INCLUDES STRUCTURAL STEEL, STEEL JOISTS, STEEL FLOOR, ROOF DECK, AND LIGHT-GAGE STEEL FRAMING.

WOOD CONSTRUCTION: SPECIAL INSPECTIONS AND EVALUATION SHALL CONFORM TO IBC SECTION 1705.5.

SOILS: SPECIAL INSPECTIONS AND EVALUATION SHALL CONFORM TO IBC SECTION 1705.6. AND TABLE 1705.6 "REQUIRED SPECIAL INSPECTIONS AND TESTS OF SOILS."

TYPICAL DETAILS

1. TYPICAL DETAILS APPLY AT ALL APPROPRIATE LOCATIONS.
2. TYPICAL DETAILS ARE GENERALLY NOT CUT ON THE PLANS.
3. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL TYPICAL DETAIL APPLICATIONS.

FOUNDATIONS

1. FOUNDATIONS HAVE BEEN DESIGNED BASED ON A PRESUMPTIVE BEARING CAPACITY OF 2 KSF. PRESUMPTIVE BEARING CAPACITY SHALL BE VERIFIED PRIOR TO PLACING FOUNDATIONS.
2. SPREAD FOOTINGS SHALL BEAR ON UNDISTURBED SOIL OR COMPACTED STRUCTURAL FILL HAVING A MINIMUM SAFE BEARING CAPACITY OF 3 KSF.
3. THE BOTTOMS OF EXTERIOR FOOTINGS SHALL BE 36 IN. MINIMUM BELOW FINISHED GRADE.
4. EDGES OF FOOTINGS SHALL NOT BE PLACED AT A GREATER THAN 1 (VERTICAL) TO 2 (HORIZONTAL) SLOPE WITH RESPECT TO ANY ADJACENT FOOTING OR EXCAVATION.
5. ADJACENT COLUMN FOOTINGS THAT ABUT SHALL BE SEPARATED BY A PAPER JOINT.
6. FOUNDATION CONCRETE SHALL BE NORMAL WEIGHT HAVING A MINIMUM 28 DAY DESIGN COMPRESSIVE STRENGTH AS FOLLOWS:

SPREAD FOOTINGS	3000 PSI
WALLS & PIERS	4000 PSI
SLAB-ON-GRADE (INTERIOR)	3500 PSI
SLAB-ON-GRADE (EXTERIOR)	4500 PSI, 0.45 W/C MAX.
7. PROVIDE AIR-ENTRAINMENT IN ALL CONCRETE EXPOSED TO FREEZE-THAW CONDITIONS DURING THE CONSTRUCTION PERIOD AND/OR IN THE COMPLETED STRUCTURE.
8. VERTICAL CRACK CONTROL AND/OR CONSTRUCTION JOINTS IN CONCRETE WALLS SHALL BE PROVIDED AT 30 FT. O/C MAX. CONSTRUCTION JOINTS SHALL BE PROVIDED AT 90 FT. O/C MAX.

FOUNDATION SUBGRADE PREPARATION REQUIREMENTS

1. A GEOTECHNICAL ENGINEER, LICENSED IN THE JURISDICTION WHERE THE PROJECT IS LOCATED, SHALL OBSERVE, REVIEW, AND APPROVE ALL WORK RELATED TO EXCAVATION, BACKFILL, COMPACTION, SUBGRADE AND SUBBASE PREPARATION, AND MATERIAL SELECTION.
2. THE BUILDING SITE SHALL BE STRIPPED OF ANY TOPSOIL, ORGANIC MATTER, VEGETATION, FILL, DEBRIS, OR UNSUITABLE OR SOFT SUBGRADE MATERIALS.
3. UNSUITABLE MATERIALS SHALL BE EXCAVATED DOWN TO RESIDUAL SOIL ELEVATIONS.
4. SOIL BEARING ELEVATIONS SHALL BE VERIFIED BY THE GEOTECHNICAL ENGINEER PRIOR TO BACKFILLING EXCAVATIONS OR CONSTRUCTING FOUNDATIONS.
5. WHERE ROCK IS ENCOUNTERED WITHIN 2 FEET OF FOUNDATION BEARING ELEVATION (SUBGRADE SHALL BE PROBED TO DETERMINE THIS), UNDERCUT ROCK BY 2 FEET MIN. BELOW BEARING ELEVATION AND REPLACE WITH COMPACTED STRUCTURAL FILL.
6. AT SLAB-ON-GRADE AREAS, FOLLOWING STRIPPING, THE SUBGRADES SHALL BE PROOFROLLED WITH A LOADED TANDEN AXLE DUMP TRUCK OR TENSION ROLLER UNDER OBSERVATION OF THE GEOTECHNICAL ENGINEER. AREAS WHICH EXHIBIT EXCESSIVE PUMPING OR HEAVING, AS DETERMINED BY THE GEOTECHNICAL ENGINEER, SHALL BE REPAIRED BY REPLACING WITH COMPACTED STRUCTURAL FILL.
7. COMPACTED FILL SHALL BE USED TO RAISE EXISTING GRADES TO THE PROPOSED NEW ELEVATION, WHERE REQUIRED.
8. UNDER-SLAB DRAINS, CONSISTING OF A 4-INCH WASHED GRAVEL OR CRUSHED STONE DRAINAGE LAYER (CORRESPONDING TO PA DOT 2B), SHALL BE USED BENEATH THE CONCRETE SLAB-ON-GRADE.

MORTAR AND GROUT MIX

1. CONCRETE MASONRY CONSTRUCTION SHALL CONFORM TO ACI 530 AND 530.1.
PORTAL CEMENT SHALL CONFORM TO THE FOLLOWING:
HYDRATED LIME ASTM C150 TYPE I OR II
AGGREGATE FOR MORTAR ASTM C207 TYPE S
ASTM C144
ASTM C404
2. WATER SHALL BE POTABLE.
3. DO NOT USE ADMIXTURES, INCLUDING AIR-ENTRAINING AGENTS, ACCELERATORS, AND RETARDERS.
5. MORTAR FOR UNIT MASONRY SHALL COMPLY WITH ASTM C270.
TYPE M (2,500PSI) FOR MASONRY BELOW GRADE OR IN CONTACT WITH EARTH
TYPE S (1,900PSI) FOR LOAD-BEARING MASONRY CONSTRUCTION OTHER THAN
FOUNDATION WALLS.
TYPE N (750PSI) FOR NON-LOAD BEARING MASONRY CONSTRUCTION
6. GROUP IN UNIT MASONRY SHALL COMPLY WITH C476 WITH A MINIMUM 28-DAY
COMPRESSIVE STRENGTH OF 3,000 PSI.
7. MORTAR TESTING: FOR EACH MIX PROVIDED, MORTAR SHALL BE SAMPLED AND
TESTED PER ASTM C1019 FOR COMPRESSIVE STRENGTH.
8. GROUT TESTING: FOR EACH MIX PROVIDED, GROUT SHALL BE SAMPLED AND
TESTED PER ASTM C1019 FOR COMPRESSIVE STRENGTH.

CONCRETE REINFORCING

1. REINFORCED CONCRETE CONSTRUCTION SHALL CONFORM TO ACI 318.
2. CONCRETE REINFORCING SHALL CONFORM TO THE FOLLOWING DESIGNATIONS:

DEFORMED BARS	ASTM A615, GRADE 60
DEFORMED BARS (WELDABLE)	ASTM A706
WELDED WIRE FABRIC	ASTM A1064
3. LAP DETECTION BARS: @ D14, 1 UNO. PROVIDE CORNER AND L BARS AT CORNERS AND INTERSECTIONS. REINFORCING INDICATED AS CONTINUOUS SHALL BE LAPPED. HOOKS SHALL BE STANDARD HOOKS. UNO LAP WELDED WIRE FABRIC SUCH THAT THE OVERLAP OF THE OUTERMOST CROSS-WIRES OF EACH ADJOINING SHEET IS NOT LESS THAN THE SPACING OF THE CROSS-WIRES PLUS TWO IN. UNO. PROVIDE CONTINUOUS REINFORCEMENT WHEREVER POSSIBLE; SPLICE ONLY AS SHOWN OR APPROVED; STAGGER SPLICES WHERE POSSIBLE; USE TENSION SPLICE CLASS "B" UNO. DONELS SHALL MATCH THE SIZE AND SPACING OF THE SPECIFIED REINFORCEMENT AND SHALL BE LAPPED WITH TENSION SPLICES.
4. CONCRETE PROTECTION FOR REINFORCEMENT:

CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH:	3 IN.
CONCRETE EXPOSED TO EARTH OR WEATHER:	
NO. 6 THROUGH NO. 18 BARS:	2 IN.
NO. 5 BAR AND SMALLER:	1-1/2 IN.
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:	
SLABS, WALLS, JOISTS:	
NO. 14 AND NO. 18 BARS	1-1/2 IN.
NO. 11 BAR AND SMALLER:	3/4 IN.
BEAMS, COLUMNS, PIERS:	1-1/2 IN.
5. REINFORCING FOR SLABS ON GRADE, WHERE NOT OTHERWISE SPECIFIED, SHALL BE AS FOLLOWS:

REINFORCING BARS:	SEE FOUNDATION AND TYPICAL DETAILS. AT SLAB BLOCKOUT AND RE-ENTRANT CORNERS, PROVIDE 2#5 X 4'-0" DIAGONALS.
WIRE MESH:	6#6-W2-9 x W2-9 WFF. REINFORCING SHALL BE SUPPORTED AT MID-DEPTH OF SLAB
6. WELDING, WELDING ELECTRODES AND FLUXES SHALL CONFORM TO AWS D1.4 "STRUCTURAL WELDING CODE - REINFORCED STEEL". ELECTRODES SHALL HAVE A MINIMUM TENSILE STRENGTH OF 70 KSI. ASTM A706 BARS OR DBA'S SHALL BE USED IN ALL WELDED APPLICATIONS.
7. DETAILING OF CONCRETE REINFORCING AND ACCESSORIES SHALL CONFORM TO ACI DETAILING MANUAL SP-66, AND WITH ACI 315, MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES.

CONCRETE SLABS ON GRADE

1. GEOTECHNICAL ENGINEER SHALL OBSERVE AND APPROVE SUBGRADE BEFORE CONCRETE PLACEMENT.
2. DO NOT PLACE CONCRETE SLABS ON FROZEN GROUND.
3. CONTROL JOINTS ARE REQUIRED IN CONCRETE SLABS. REFER TO PLANS AND TYPICAL DETAILS FOR JOINT CONSTRUCTION AND LOCATIONS.
4. INSTALL (2) #4 x 5'-0" LONG BARS DIAGONALLY AT RE-ENTRANT CORNERS AND OPENINGS.
5. COORDINATE LOCATIONS AND DIMENSIONS OF RECESSED SLABS.

CONCRETE MASONRY

3. CONCRETE MASONRY CONSTRUCTION SHALL CONFORM TO ACI 530 AND 530.1.
2. MINIMUM COMPRESSIVE STRENGTH OF CONCRETE MASONRY, F'M, SHALL BE 1500 PSI. (MIN NET AREA COMPRESSIVE STRENGTH OF UNIT = 1900 PSI.)
3. CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90.
4. CONCRETE MASONRY REINFORCING SHALL BE DEFORMED BARS CONFORMING TO ASTM A615, GRADE 60. DEFORMED BAR ANCHORS (DBA) SHALL CONFORM TO ASTM A496. DBA SHALL BE HELDED BY AUTOMATIC EQUIPMENT.
5. GROUT SHALL CONFORM TO THE PROPORTIONAL REQUIREMENTS OF ASTM C476. PROVIDE FINE AND COARSE GRADES APPROPRIATE FOR SIZE OF VOID SPACE. WHEN FILLED, GROUT SHALL HAVE A MINIMUM SLUMP OF 8 INCHES PROVIDED BY SUFFICIENT WATER CONTENT. ADMIXTURES ARE NOT PERMITTED IN GROUT. GROUT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI.
6. MORTAR SHALL CONFORM TO ASTM C270, TYPE M OR S, PCL OR MORTAR CEMENT. USE OF MASONRY CEMENT IS NOT PERMITTED.
7. ALL REINFORCED VOIDS SHALL BE GROUTED SOLID.
8. REINFORCED VOIDS, AND NON-REINFORCED VOIDS SPECIFIED TO BE GROUTED, IN CONCRETE MASONRY SHALL BE FILLED SOLID WITH GROUT IN 5 FT. MAXIMUM LIFTS STOP RODS 1'-1/2 INCHES BELOW THE BED JOINT TO FORM A KEY AT FOUR JOINTS.
9. REINFORCING BARS SHALL BE TIED TO ANCHORS AND LAPPED IN THE PROPER POSITION BY MECHANICAL BAR POSITIONERS DESIGNED FOR THAT PURPOSE.
10. REINFORCING SHALL NOT BE PLUNGED INTO NET GROUT.
11. LAP UNCOATED, DEFORMED BARS 40 BAR DIAMETERS.
12. CONCRETE MASONRY SHALL BE LAID IN RUNNING BOND, UNO. PILASTERS SHALL BE BONDED, UNO.
13. LOAD BEARING CHU SHALL HAVE FULL MORTAR BED JOINTS.
14. PROVIDE LADDER-TYPE, HORIZONTAL JOINT REINFORCEMENT AS FOLLOWS:
TYPICAL:
 a. AT BELON GRADE WALLS: PROVIDE AT 8 IN. O/C.
 b. AT PARAPETS: PROVIDE AT 8 IN. O/C.
 c. AT WALL OPENINGS: PROVIDE ADD'L REINF. NOT MORE THAN 8 IN. ABOVE AND BELON OPENING, TERMINATE 2 FT. BEYOND OPENING.
15. PROVIDE CONTINUITY AT INTERSECTIONS AND CORNERS USING PREFABRICATED T-SHAPED AND L-SHAPED UNITS, AND LAP ALL CONSECUTIVE SECTIONS OF TRUSS TYPE REINFORCING A MINIMUM OF 8'.
16. PROVIDE VERTICAL CONTROL JOINTS IN WALLS AT 24 FT. O/C MAX. UNO.
a. ALL CHU WALLS SHALL BE DOWELED TO SUPPORTING SLABS WITH MINIMUM #4 @ 8" HOOKED DOWELS. UNO. ALL CHU WALLS SUPPORTED DIRECTLY ON STEEL MEMBERS SHALL BE ANCHORED WITH 1/2" DIAMETER x 4" STUDS AT 32" O/C, OR WITH #4 x 2'-0" DBA'S AT 48" O/C, UNO.
17. THE TOPS OF ALL NON-LOAD BEARING CHU WALLS SHALL BE BRACED ACCORDING TO SPECIFIC SECTIONS AND / OR TYPICAL DETAILS.

CONCRETE MIX

1. REINFORCED CONCRETE CONSTRUCTION SHALL conform TO ACI 318.
2. CEMENTITIOUS MATERIAL SHALL conform TO ASTM C150 TYPE I OR II, SUPPLEMENT WITH THE FOLLOWING:
FLY ASH _____ ASTM C618, CLASS F
GROUND GRANULATED BLAST-FURNACE SLAG _____ ASTM C989, GRADE 100 OR 120
3. NORMAL HEIGHT AGGREGATE SHALL conform TO ASTM C33.
4. WATER SHALL BE POTABLE.
5. AIR ENTRAINING ADMIXTURES SHALL conform TO ASTM C260.
6. CONCRETE ADMIXTURES SHALL conform TO THE FOLLOWING:
WATER REDUCING _____ ASTM C494, TYPE A
WATER REDUCING & RETARDING _____ ASTM C494, TYPE D
HIGH RANGE WATER REDUCING _____ ASTM C494, TYPE A
7. CONCRETE WITH AIR ENTRAINING SHALL NOT EXCEED .06% AIR AND .45 WATER/CEMENT RATIO.

STRUCTURAL STEEL

1. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING DESIGNATIONS:
 - STRUCTURAL STEEL WF SHAPES ASTM A992
 - OTHER STRUCTURAL STEEL SHAPES ASTM A36, UNO
 - STEEL BARS, ANGLES AND PLATES ASTM A36, UNO
 - SQUARE, RECTANGULAR AND ROUND HSS ASTM A500, GRADE C
2. BOLTS SHALL BE MINIMUM 3/4 IN. DIA. AND SHALL CONFORM TO THE FOLLOWING DESIGNATIONS, UNO
 - HIGH STRENGTH BOLTS ASTM A325
3. BOLTED CONNECTIONS SHALL CONFORM TO RCSC'S "SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A325 OR A440 BOLTS."
4. WELDING, WELDING ELECTRODES, AND FLUXES SHALL CONFORM TO AWS D1.1 "STRUCTURAL WELDING CODE - STEEL". ELECTRODES SHALL HAVE A MINIMUM TENSILE STRENGTH OF TO KSI.
5. GROUT UNDER STEEL COLUMN OR POST BASE PLATES SHALL BE NONMETALLIC, SHRINKAGE-RESISTANT GROUT CONFORMING TO ASTM C1107 HAVING A MINIMUM DESIGN COMPRESSIVE STRENGTH OF 5000 PSI. GROUT UNDER STEEL BEAM BEARING PLATES IN CONCRETE MASONRY WALLS SHALL CONFORM TO ASTM C476.
6. HIGH STRENGTH BOLTED CONNECTIONS SHALL BE TIGHTENED TO THE SNUG-TIGHT CONDITION, UNO.
7. THE STEEL FABRICATOR IS RESPONSIBLE FOR CONNECTION DESIGN. CONNECTION DESIGN SHALL BE PERFORMED BY A LICENSED PROFESSIONAL ENGINEER.
8. MINIMUM CAPACITY OF BEAM CONNECTIONS: DESIGN CONNECTIONS USING THE "MAXIMUM TOTAL UNIFORM LOAD" TABLES IN THE AISC MANUAL. FOR NON-COMPOSITE BEAMS, THE CONNECTION CAPACITY SHALL BE AT LEAST 50% OF THE MAXIMUM TOTAL UNIFORM LOAD.
9. PRIOR TO DETAILING CONNECTIONS FOR STRUCTURAL STEEL, THE STEEL FABRICATOR SHALL SUBMIT FOR APPROVAL REPRESENTATIVE DETAILS FOR EACH TYPE OF PROPOSED STRUCTURAL CONNECTION. SUCH DETAILS SHALL INDICATE DESIGN CAPACITIES. AFTER APPROVAL, THE CONNECTIONS SHALL BE INCORPORATED INTO SHOP DRAWINGS.

WOOD

1. STRUCTURAL LUMBER SHALL CONFORM TO AFPA'S NDS, "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION."
2. STRUCTURAL LUMBER SHALL BE NO. 2 S-P-F, VISUALLY GRADED, OR BETTER.
3. PLYWOOD SHALL CONFORM TO APA'S "5-PANEL DESIGN SPECIFICATION", PDS-04, AND DOC'S PS 1, "CONSTRUCTION AND INDUSTRIAL PLYWOOD". ALL JOINTS SHALL BE STAGGERED. PANELS SHALL BE INSTALLED WITH THE LONG DIMENSION ACROSS SUPPORTS. NAILING SHALL COMPLY WITH MINIMUM APA REQUIREMENTS FOR PLYWOOD FLOOR/ROOF DIAPHRAGMS, AND IBC FASTENING SCHEDULE.
4. PLYWOOD ROOF SHEATHING SHALL BE APA STRUCTURAL 1 RATED SHEATHING, EXPOSURE 1, THICKNESS AS INDICATED. PROVIDE PANEL CLIPS AT UNSUPPORTED EDGES.
5. ROOF SHEATHING SHALL BE INSTALLED ON MAIN ROOF MEMBERS PRIOR TO THE INSTALLATION OF OVERFRAMING MEMBERS.
6. PLYWOOD SUB-FLOORING SHALL BE APA RATED STURD-1-FLOOR, EXPOSURE 1, THICKNESS AS INDICATED, WITH TONGUE AND GROOVE EDGES. FIELD-GLUE USING ADHESIVES MEETING APA SPECIFICATION APF-01.
7. CONNECTIONS SHALL BE MADE USING PREFABRICATED CONNECTORS. CONNECTOR SIZE AND CAPACITY SHALL MATCH MEMBER SIZE AND CAPACITY. TOE-NAILING IS NOT PERMITTED.
8. MINIMUM FASTENING SHALL CONFORM TO IBC TABLE 2304.4.1, "FASTENING SCHEDULE".
9. PROVIDE CONTINUOUS SOLID BLOCKING OR CROSS-BRIDGING LINES AT 8'-0" O/C MAX., ONE LINE MINIMUM. PROVIDE ADDITIONAL BRIDGING FOR MANUFACTURED WOOD PRODUCTS (JOISTS, TRUSSES, ETC.) AS SPECIFIED BY MANUFACTURER.
10. REFERS TO STRUCTURAL DESIGN CRITERIA FOR TRUSS DESIGN LOADS.
11. PRESSURE PRESERVATIVE TREATED LUMBER SHALL BE PROVIDED WHERE LUMBER IS IN CONTACT WITH CONCRETE OR MASONRY, OR EXPOSED TO THE WEATHER.
12. ALL FASTENERS AND PREFABRICATED CONNECTORS USED IN PRESERVATIVE TREATED WOOD SHALL HAVE A HOT-DIP GALVANIZING 6185 COATING ACCORDING TO ASTM A153 AND A123. (TYPE A304 OR 306 STAINLESS STEEL FASTENERS AND CONNECTORS)

METAL PLATE CONNECTED WOOD TRUSS FRAMING

1. ALL METAL PLATE CONNECTED WOOD TRUSS FRAMING INDICATED ON THE DRAWINGS IS FOR DESIGN INTENT ONLY. ALL METAL PLATE CONNECTED WOOD TRUSS FRAMING SHALL BE DESIGNED BY A LICENSED PROFESSIONAL ENGINEER IN ACCORDANCE WITH THE SPECIFIED DESIGN CRITERIA. SIGNED AND SEALED SHOP DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL.
2. CONTRACTOR SHALL, AT HIS EXPENSE DURING BIDDING, PERFORM SUFFICIENT PRELIMINARY ENGINEERING TO ADEQUATELY PRICE THE WORK WITH ALL REQUIRED COMPONENT AND FRAMING SIZES, SPACINGS, FRAME OPENINGS, ACCESSORIES, ETC.
3. PROVIDE TRUSSES WITH COLLAR CHORD AND WEB MEMBERS. ASSEMBLE TRUSS CONNECTIONS USING CONNECTOR PLATES THAT DEVELOP THE REQUIRED CONNECTION DESIGN STRENGTH.
4. MINIMUM COMPONENT SIZE (CHORDS AND WEBS) IS 2x4. WEB MEMBERS SHALL BE LOCATED BY TRUSS MANUFACTURER AS REQUIRED, UNLESS NOTED OTHERWISE.
5. DESIGN, FABRICATE, AND INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ANGUS STEEL NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION.
6. ALL TEMPORARY AND PERMANENT BRACING TO BE DESIGNED BY TRUSS MANUFACTURER. SHOW BRACING CONFIGURATION, COMPONENT SIZES, AND CONNECTIONS ON SHOP DRAWING SUBMITTAL.
7. PREFABRICATED METAL-PLATE-CONNECTED WOOD TRUSSES SHALL BE DESIGNED, CONSTRUCTED, AND INSTALLED IN ACCORDANCE WITH TPI'S "NATIONAL DESIGN STANDARDS FOR METAL-PLATE-CONNECTED WOOD TRUSS CONSTRUCTION", AFPA'S NDS-05, QUALITY STANDARD FOR METAL PLATE CONNECTED WOOD TRUSSES (QST), AND THE BRACING INSTALLATION AND BRACING MPC'ED WOOD TRUSSES (HIB-41) AND THE COMBINED DESIGN SPECIFICATION FOR TEMPORARY BRACING OF MPC'ED WOOD TRUSSES (DSB-94).
8. WOOD TRUSSES SHALL BE CONFIGURED TO ACCOMMODATE MECHANICAL DUCTWORK RUNS AND CATWALKS WITHIN THE TRUSS SPACE. COORDINATE WITH THE MECHANICAL CONTRACTOR AND ARCHITECTURAL DRAWINGS.

DRILLED ANCHORS

1. EXPANSION ANCHORS SHALL BE (UNO):
HILTI KNIX BOLT III, DENALT/POWERS POKER-STUD-501, OR EQUIVALENT
3/4-INCH DIAMETER
SUFFICIENT LENGTH TO PROVIDE 6-INCH MINIMUM EMBEDMENT
2. CHEMICAL ADHESIVE ANCHORS SHALL BE (UNO):
HILTI RE-500 SYSTEM, DENALT/POWERS PURE 110+, OR EQUIVALENT
3/4-INCH DIAMETER
SUFFICIENT LENGTH TO PROVIDE 7-INCH MINIMUM EMBEDMENT
3. GROUT AND COURSES CONT ANCHORS FOR 8" MIN ABOVE & BELOW ANCHOR LINES.
4. ANCHORS IN EXTERIOR APPLICATIONS SHALL BE HOT-DIPPED GALV.



"PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.: 53344. EXPIRATION DATE: OCTOBER 15, 2024."



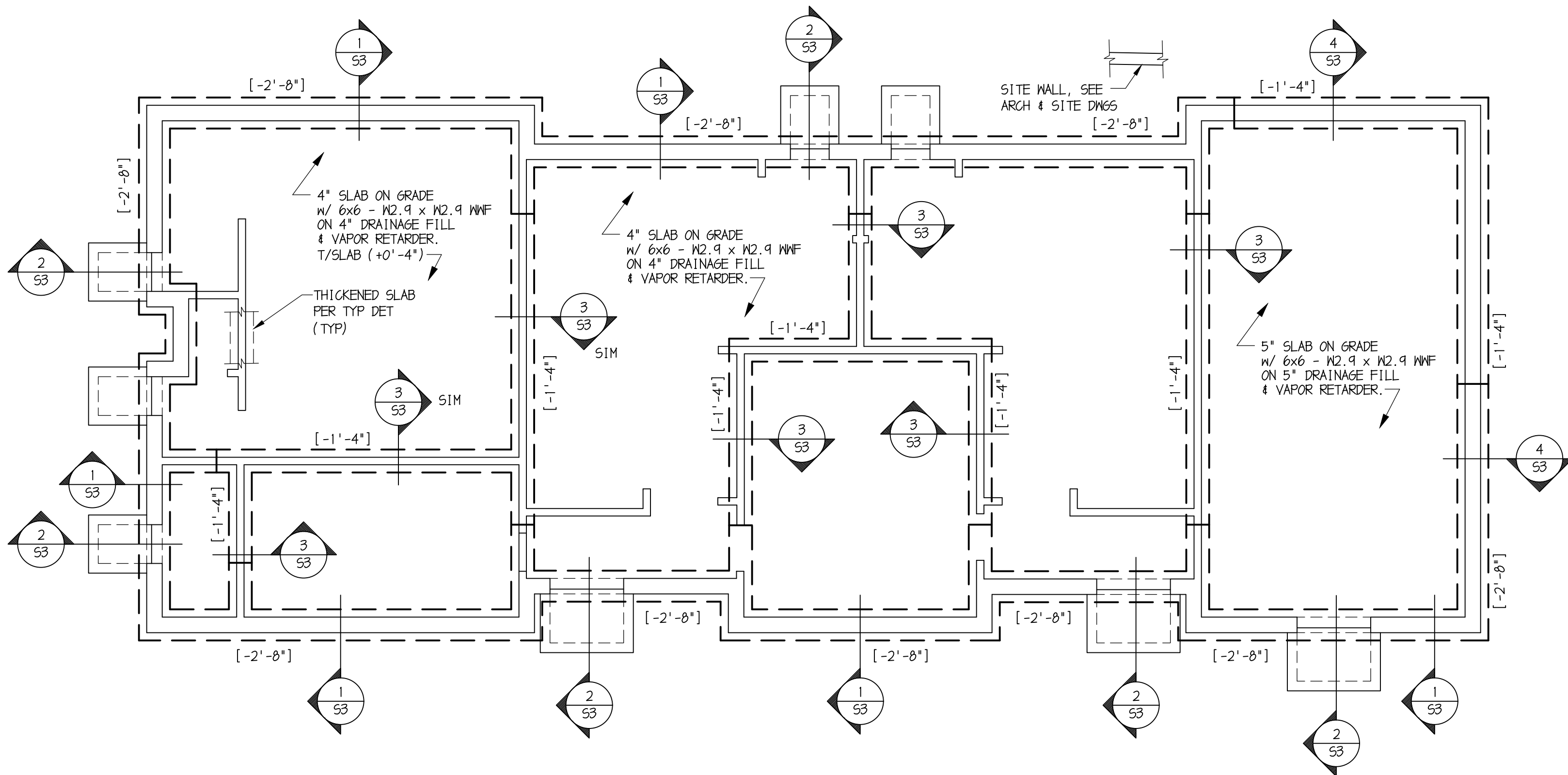
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Haddon Heights, New Jersey

PROJECT NO. L11701

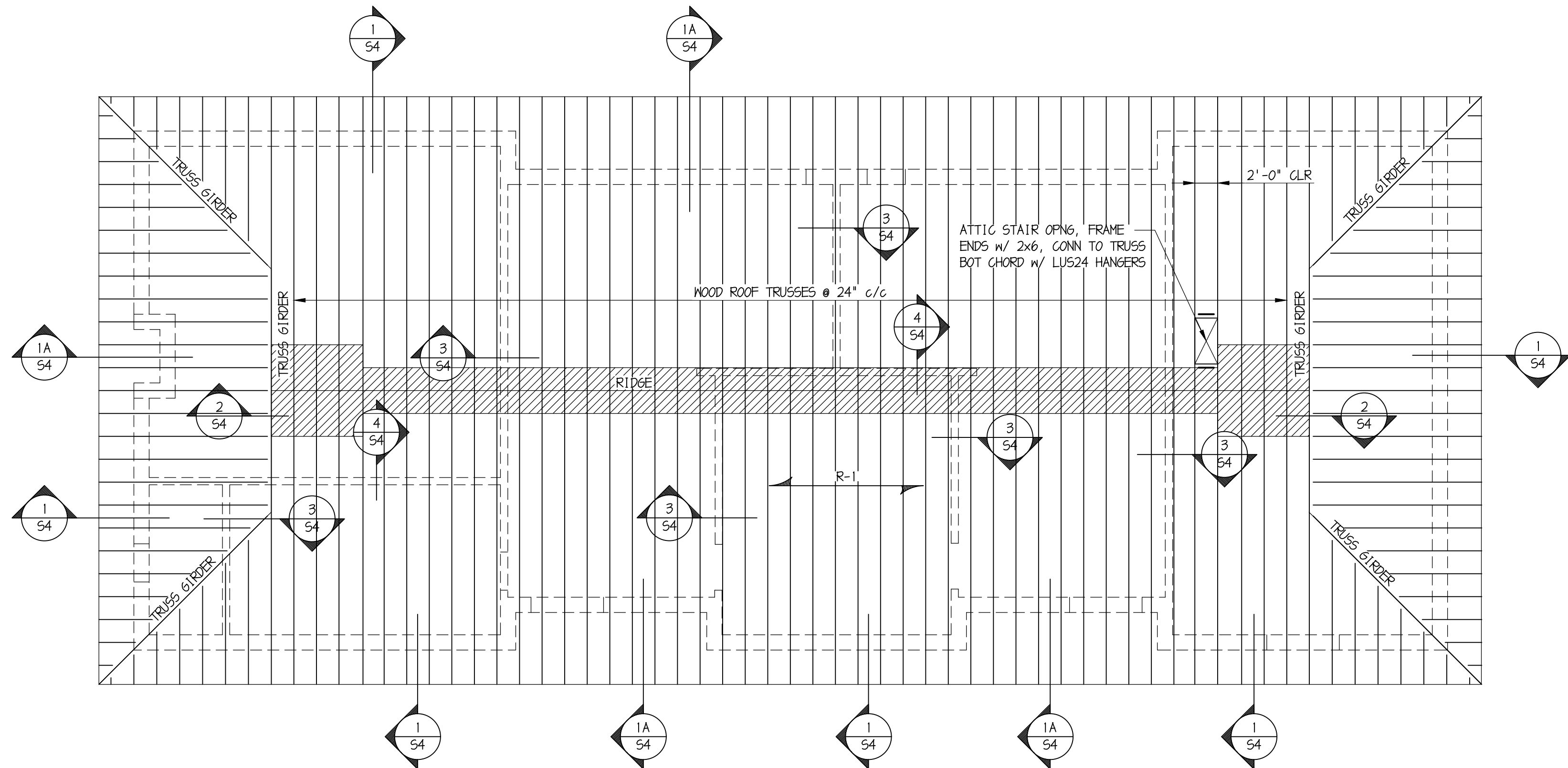
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1
S2
FOUNDATION PLAN
1/8" = 1'-0"


FOUNDATION / FIRST FLOOR PLAN NOTES

1. FIRST FLOOR IS REFERENCE ELEVATION (0'-0") = DATUM ELEV. OF 206.00'.
2. ELEVATIONS NOTED AS FOLLOWS ARE WITH RESPECT TO REFERENCE ELEV (0'-0").
[-#'-#] INDICATES TOP OF FOOTING
3. COORDINATE WITH ARCH, MECH, ELEC, AND PLMB DRAWINGS FOR FLOOR SLOPES, DRAINS, OPENINGS, DEPRESSIONS, ETC., NOT SHOWN ON THIS PLAN, AT ALL TOILETS AND OTHER ROOMS.
4. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT INDICATED.
5. UNDER SLAB PLUMBING SHOWN THUS - - - - - SEE TYP DETAILS FOR STEPPED FOOTINGS @ PLUMBING LINES.
6. PROVIDE (2) #5 x 4'-0" DIAGONAL BARS AT ALL RE-ENTRANT SLAB-ON-GRADE CORNERS.
7. REFER TO TYPICAL DETAILS ON DRAWING S3.
8. REFER TO STRUCTURAL NOTES ON DRAWING S1.



2
S2
ROOF FRAMING PLAN
1/8" = 1'-0"

ROOF FRAMING PLAN NOTES

1. ELEVATIONS ARE NOTED AS (+#'-#") ABOVE THE REFERENCE ELEVATION (0'-0").
2. WOOD TRUSS BEARING IS (+8'-8"), TYP UNO.
3. ROOF CONSTRUCTION TYPE R-1 IS 3/4" PLYWOOD ROOF DECK.
4. SPACE ROOF FRAMING MEMBERS EQUALLY, UNO, w/ QUANTITY AS SHOWN ON PLANS.
5. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT INDICATED.
6. PROVIDE FRAMING AT ROOF EQUIPMENT CURBS AND OPENINGS. SEE TYP DETAILS.
7. PROVIDE LINTELS ACCORDING TO STRUCTURAL NOTES AND LINTEL SCHEDULE.
8. REFER TO TYPICAL DETAILS ON DRAWING S4.
9. REFER TO STRUCTURAL NOTES ON DRAWINGS S1.
10. HATCH SHOWN THUS  INDICATE AREA OF ATTIC SPACE.



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Annapolis, Maryland PROJECT NO. L11701

FOUNDATION AND ROOF FRAMING PLANS

NEW FIELD HOUSE AT STADIUM

1666 Perryville Rd, Perryville, MD 21803

CECIL COUNTY PUBLIC SCHOOLS

201 Booth St, Elkon, MD 21821

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DATE:
10.30.23

SCALE:
AS NOTED

DRAWN BY:
JPC

CHECKED BY:
LRB

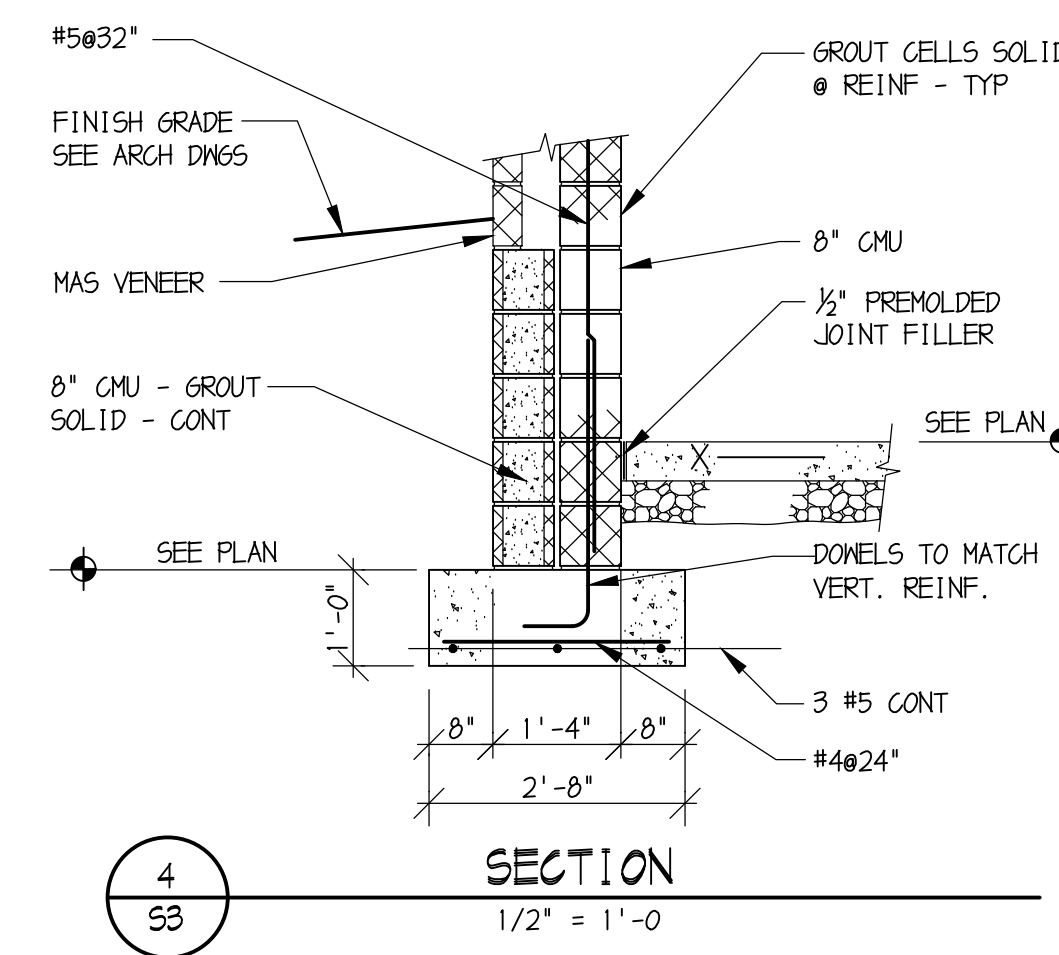
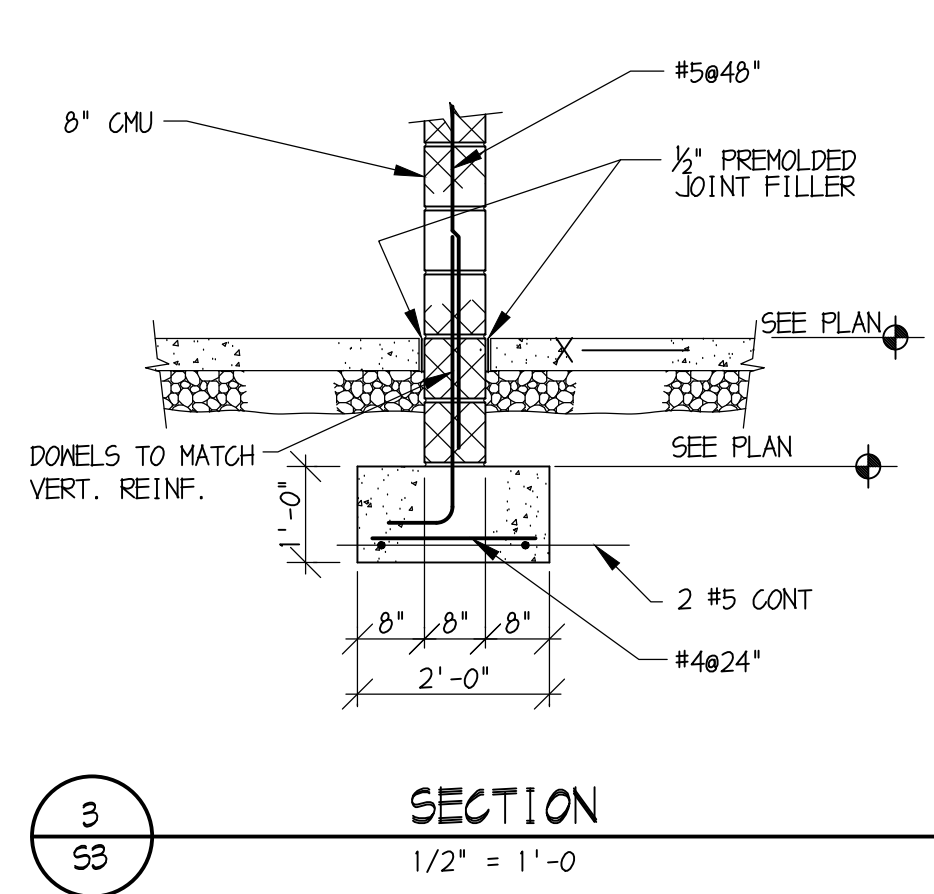
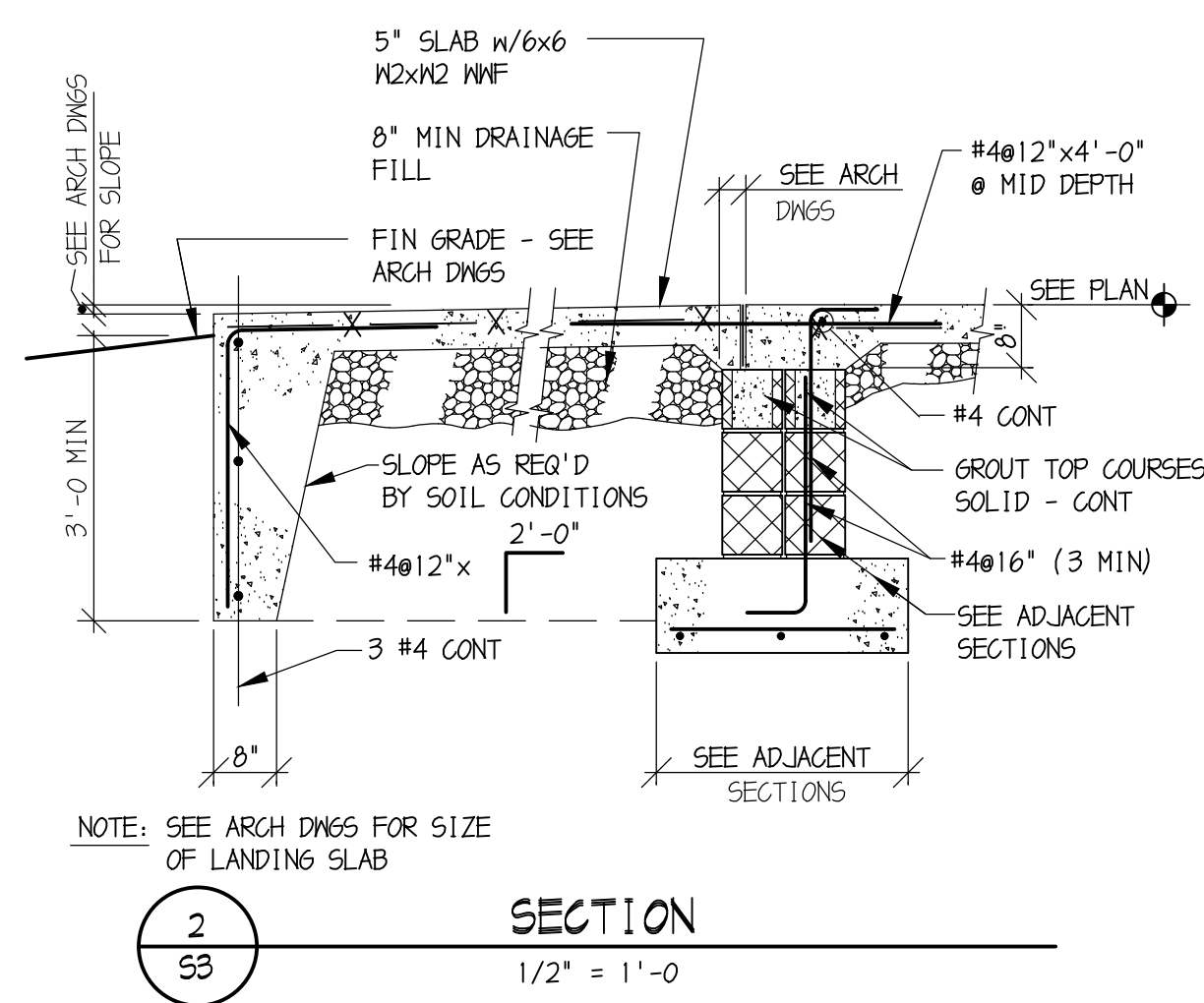
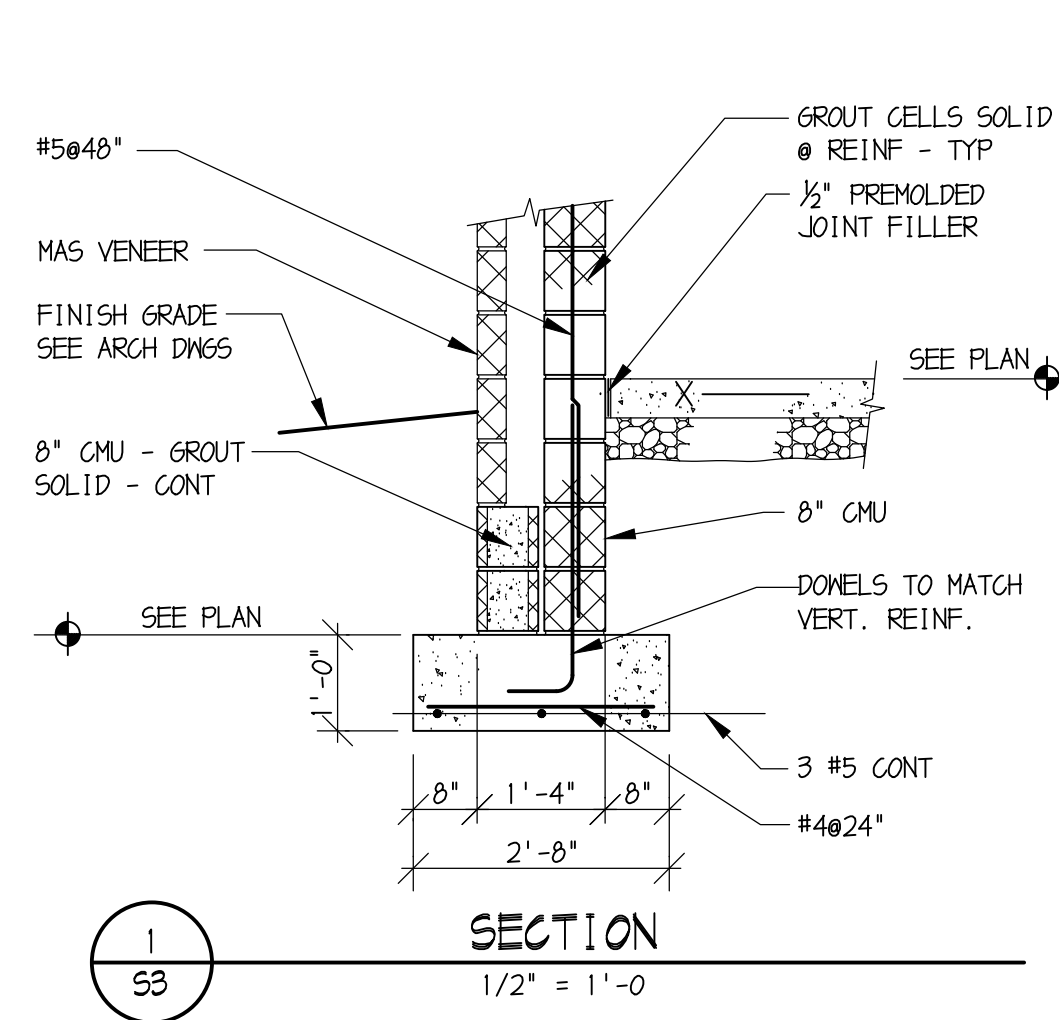
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S2

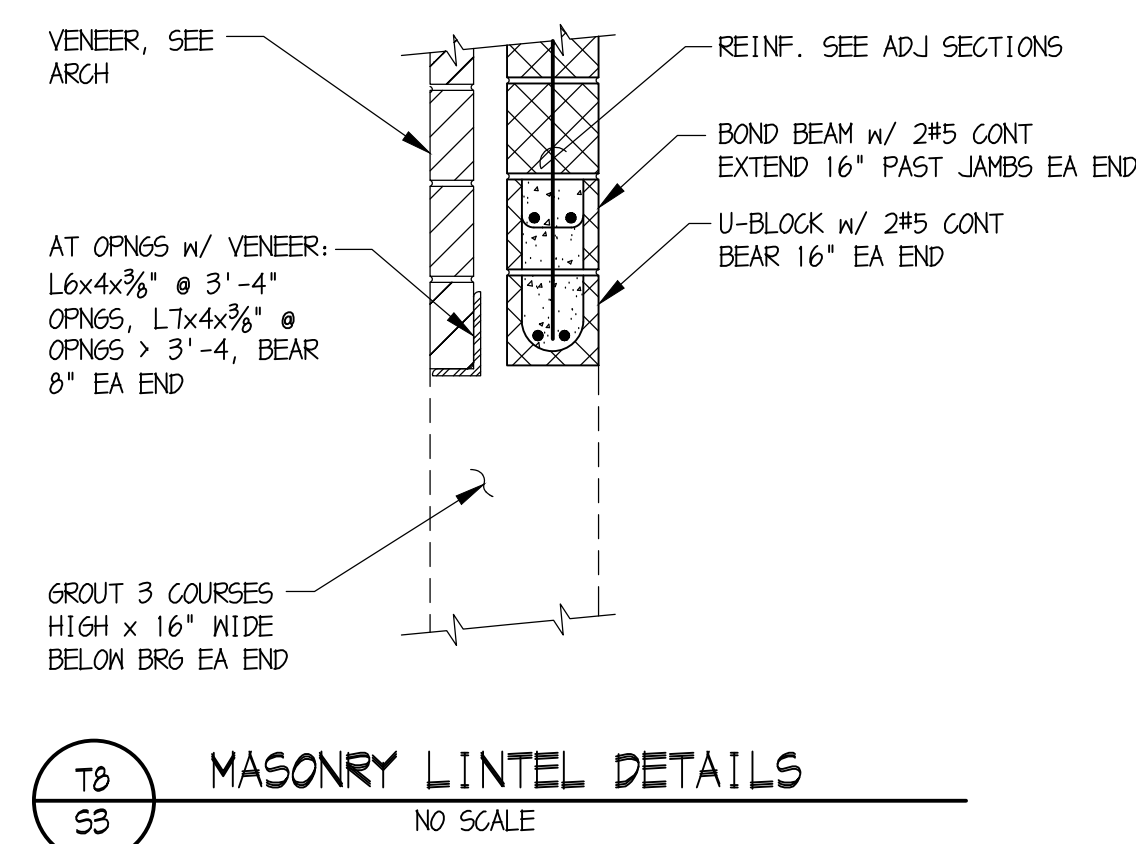
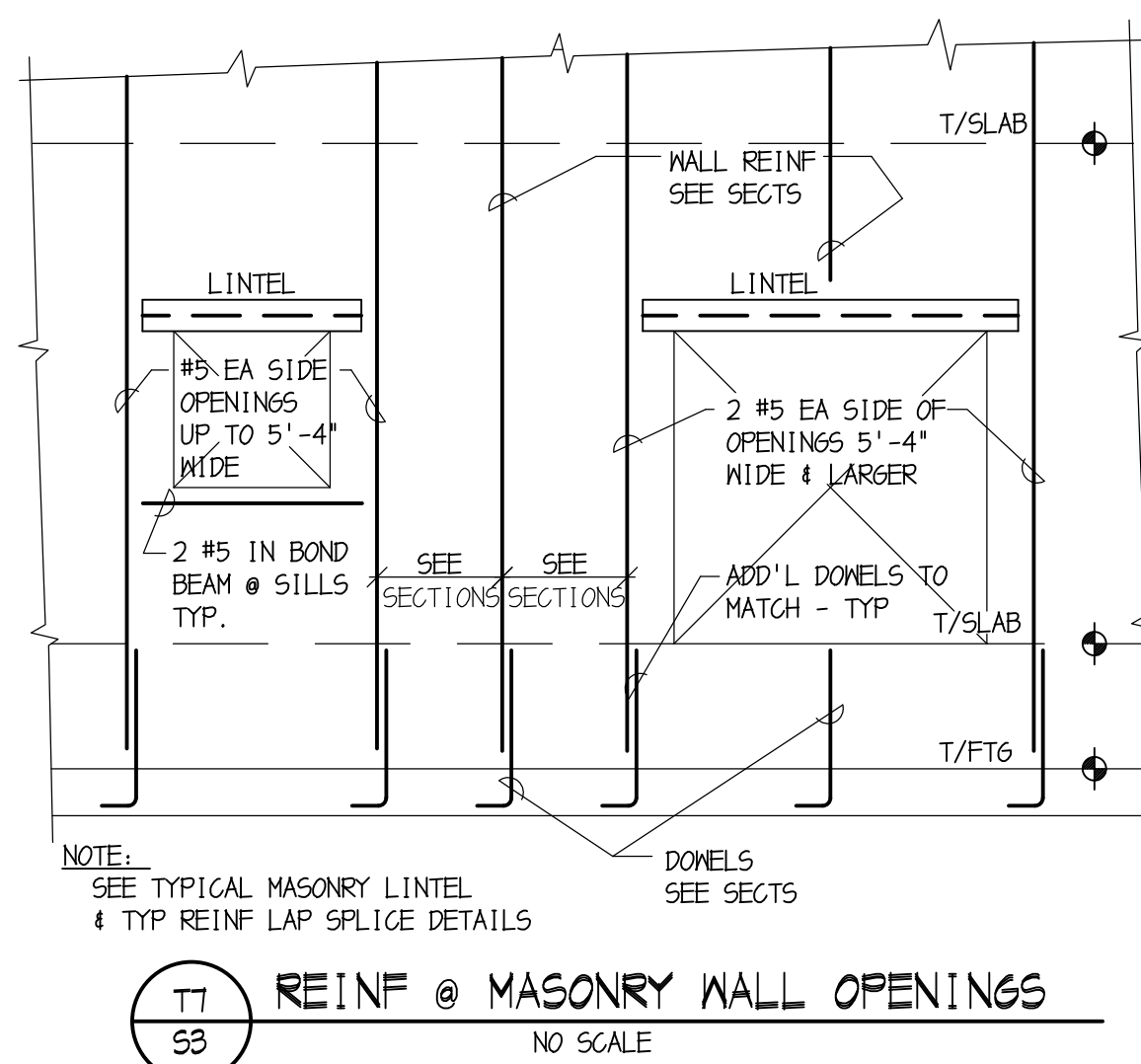
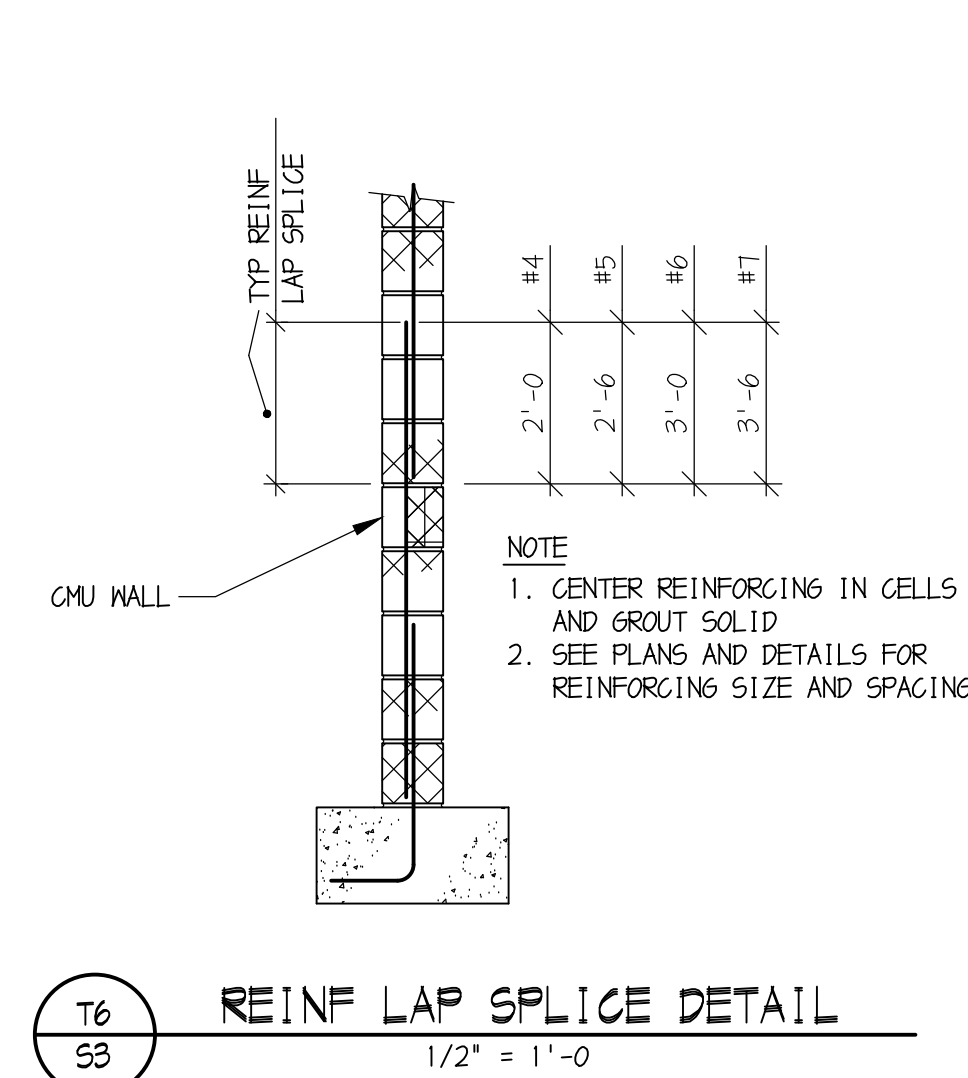
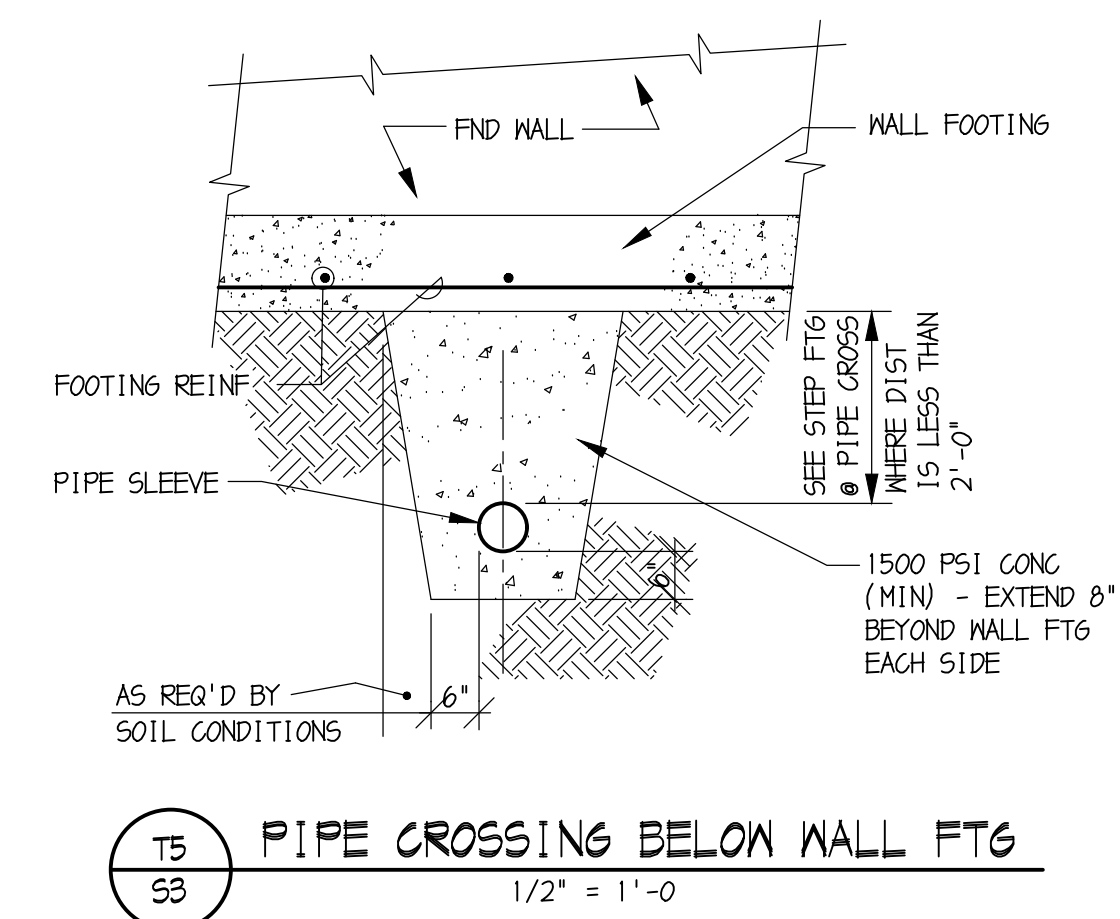
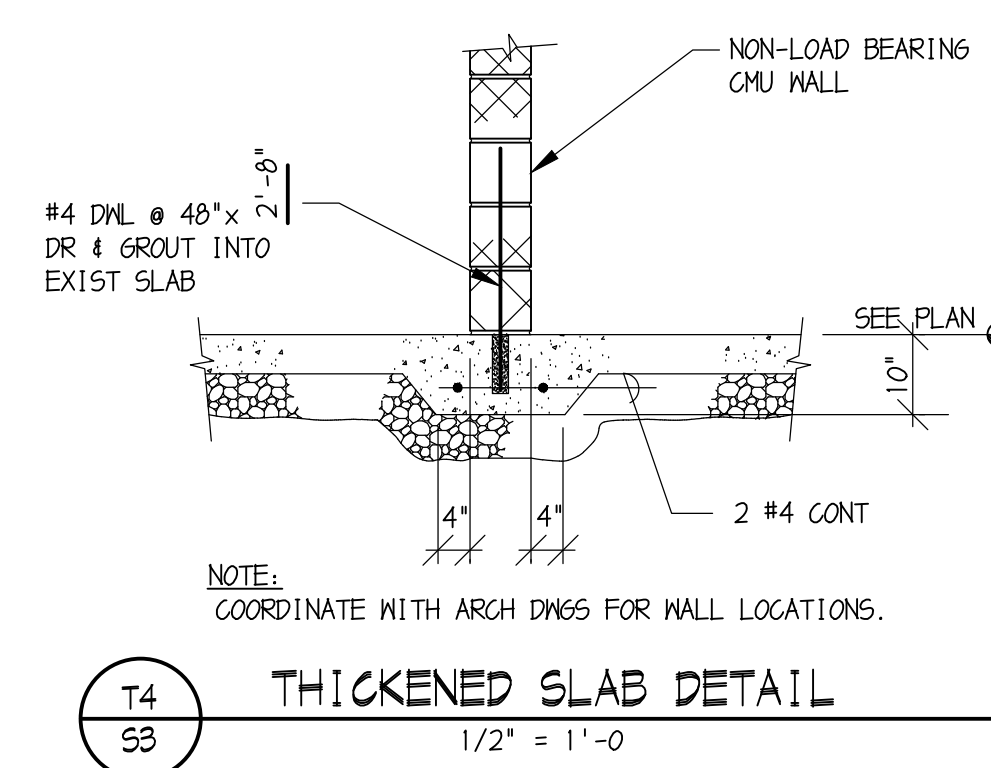
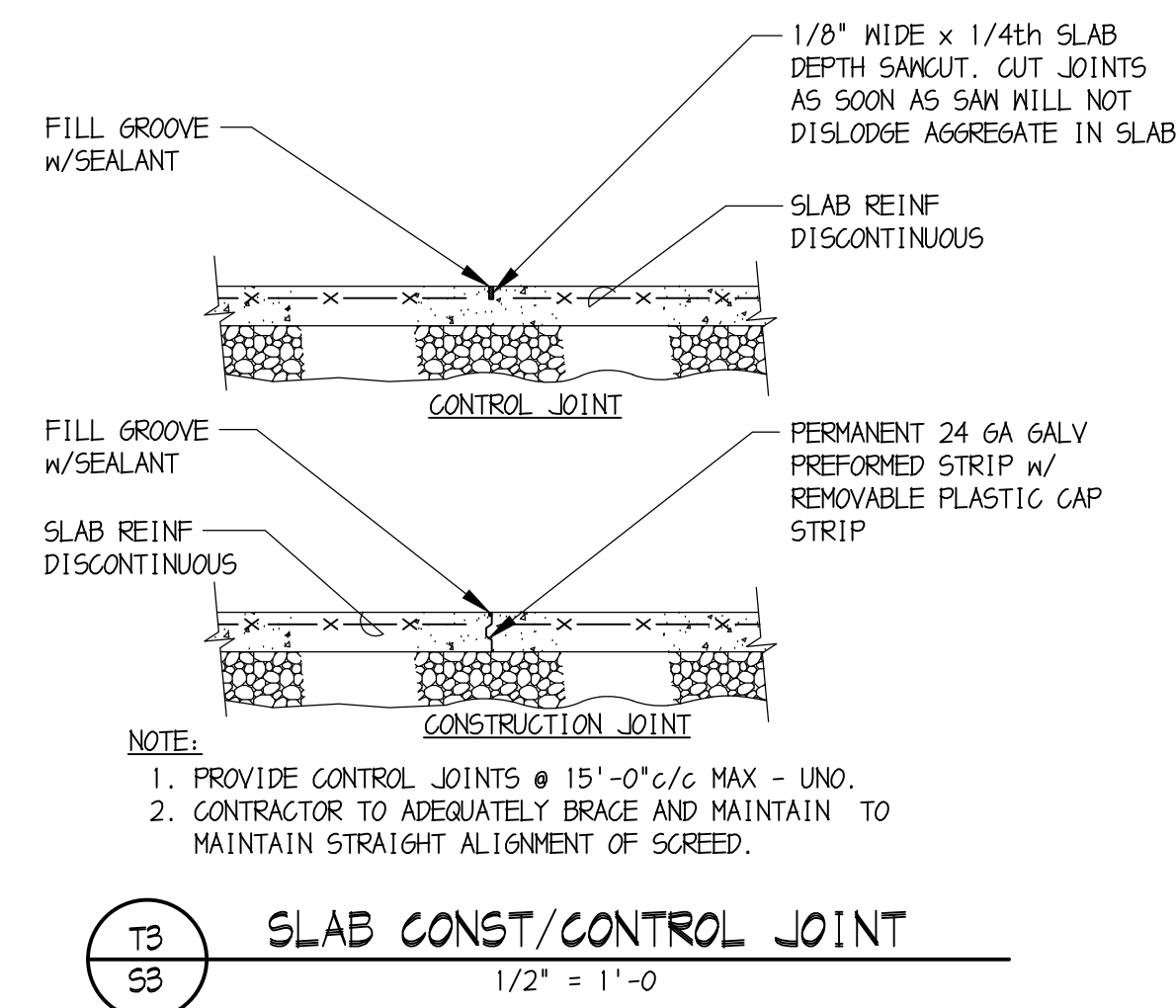
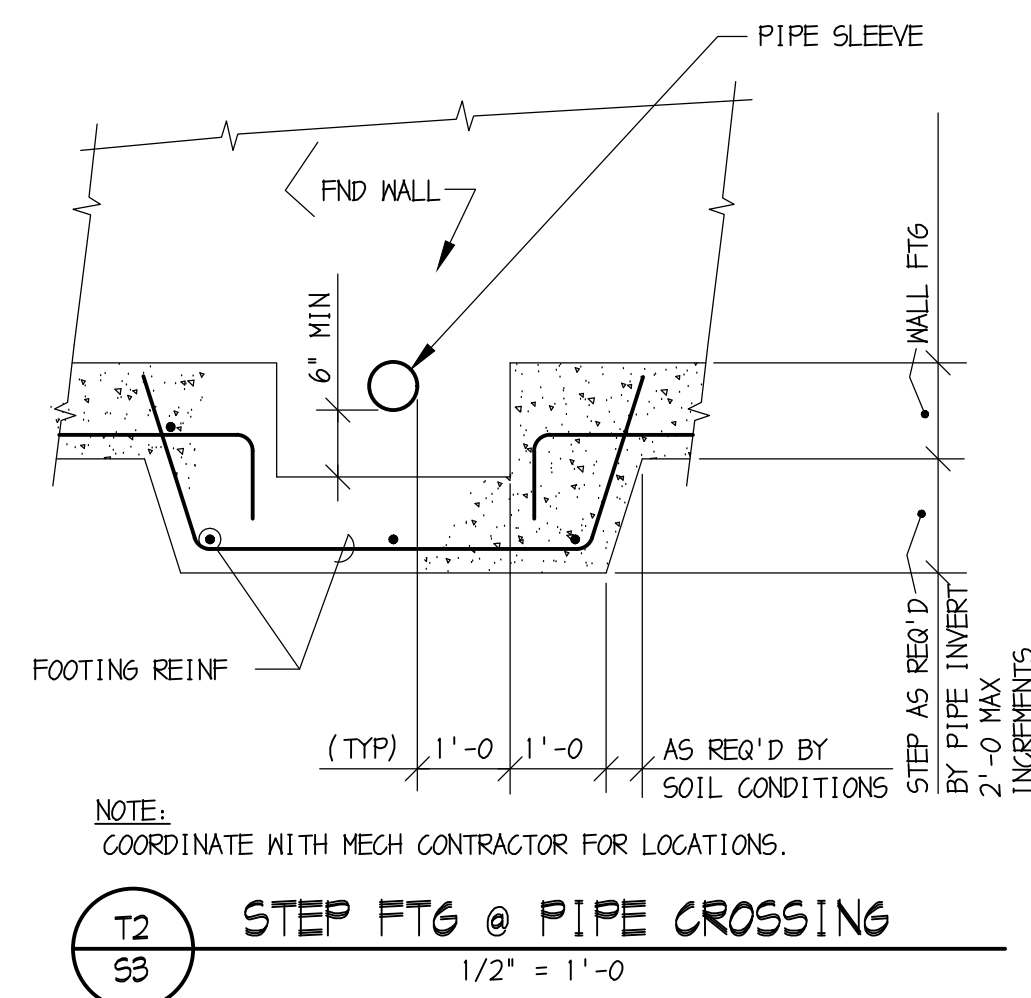
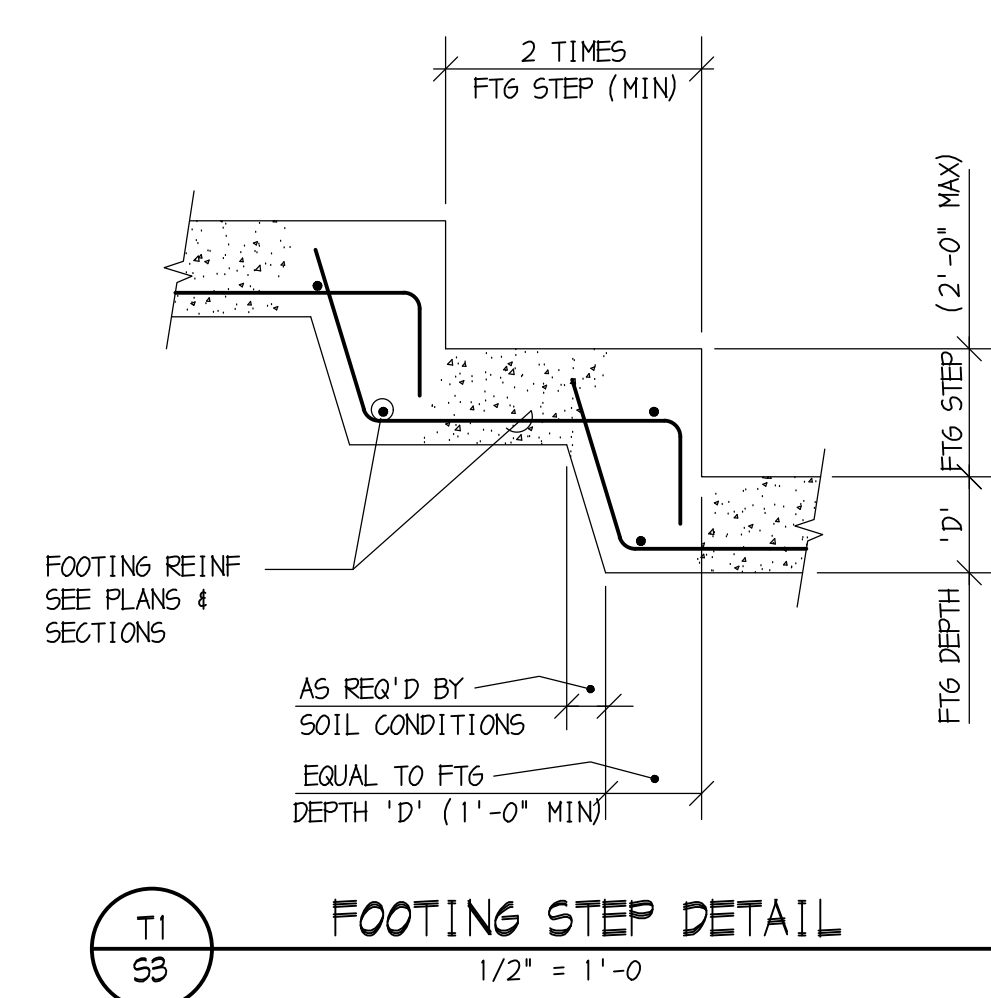
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ISSUE FOR BID/PERMIT



TYPICAL DETAILS



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BAKER, INGRAM, & ASSOCIATES
STRUCTURAL ENGINEER

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Newark, Delaware	mail@bakeringram.com
Haddon Heights, New Jersey	PROJECT NO. 1112

[illegible]

**ARCHITECTS
ENGINEERS
PLANNERS
SURVEYORS**
410-838-7900



CECIL COUNTY PUBLIC SCHOOLS
201 Beach St. Elders, MD 21021

FOUNDATION SECTIONS AND TYPICAL DETAILS

DATE: 10.30.2

SCALE:
AS NO

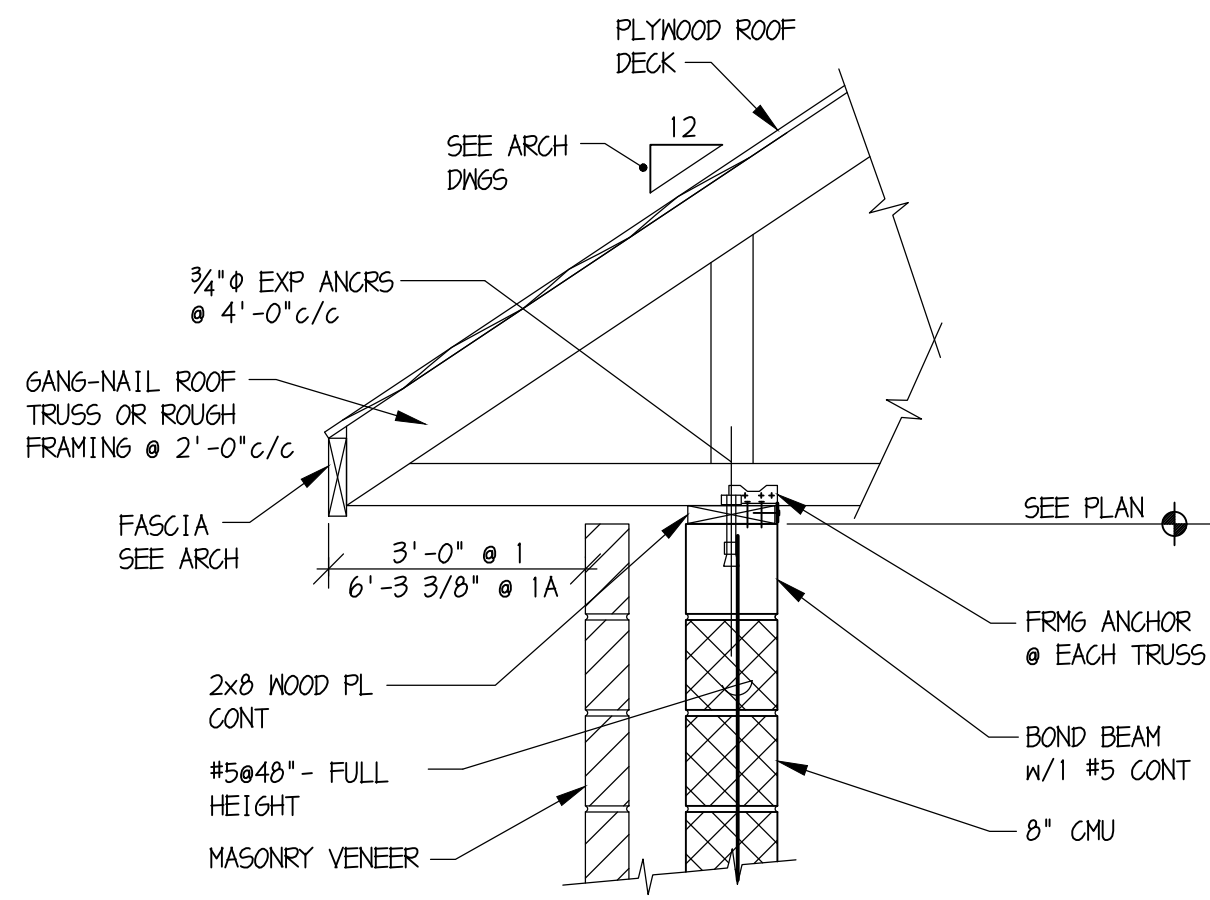
ES	DRAWN BY
S	IDO

Ph	JPL
ax	CHECKED

DRAWING NO

FWA JOB NUM

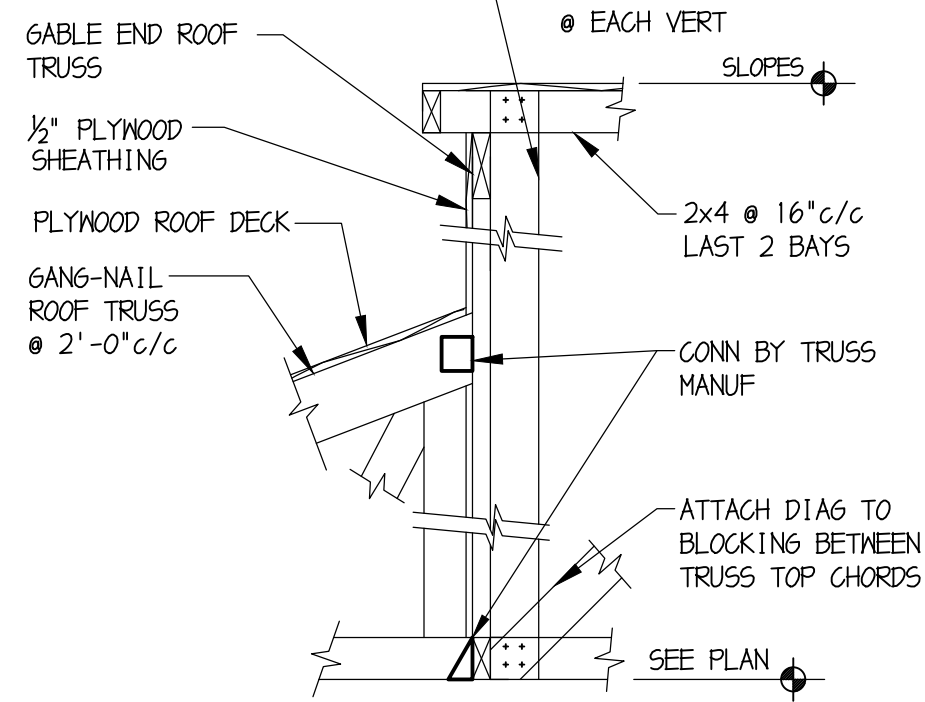
ISSUE FOR BID/PERMIT



1
S4

SECTION

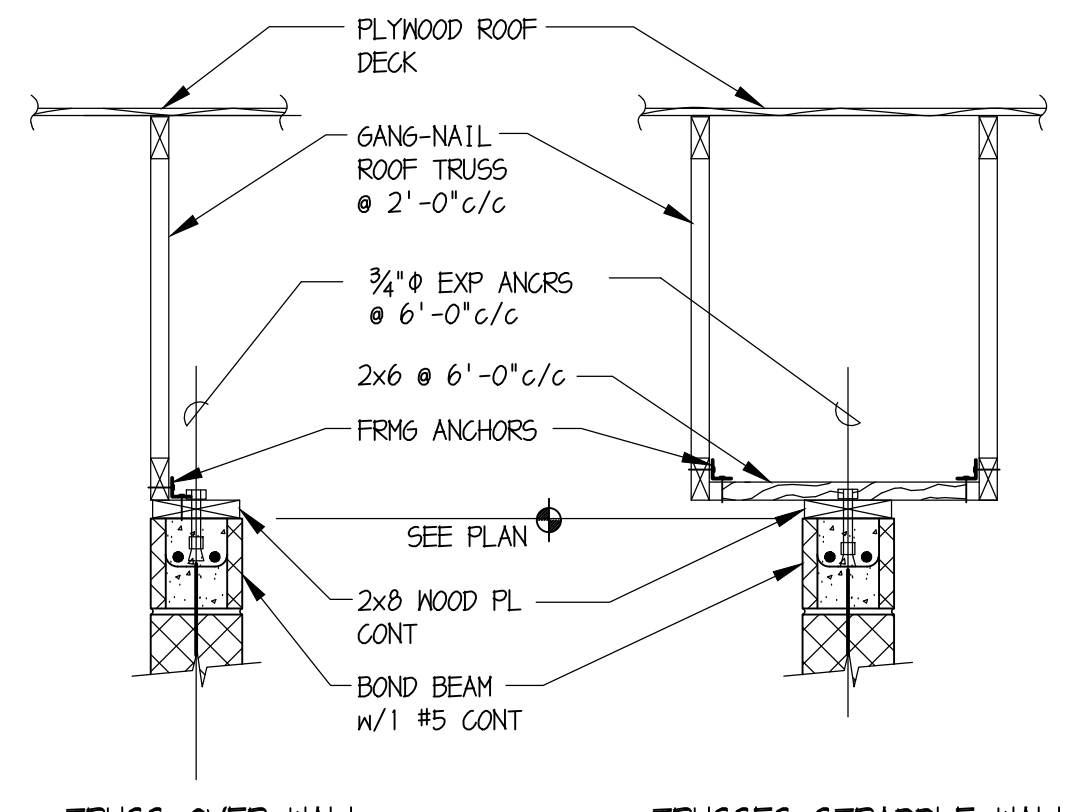
3/4" = 1'-0"



2
S4

SECTION

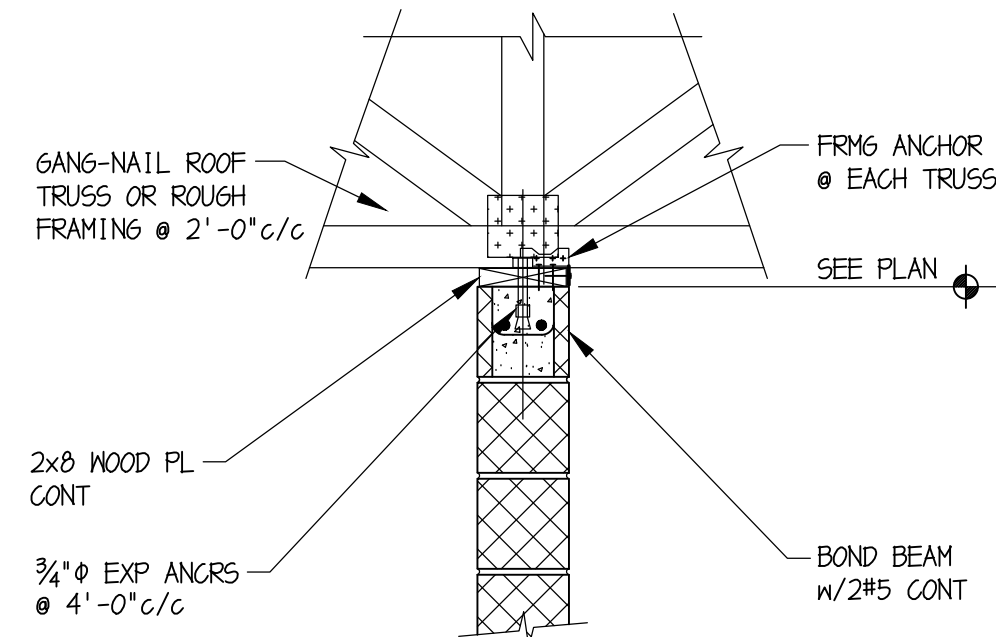
3/4" = 1'-0"



3
S4

SECTION

3/4" = 1'-0"

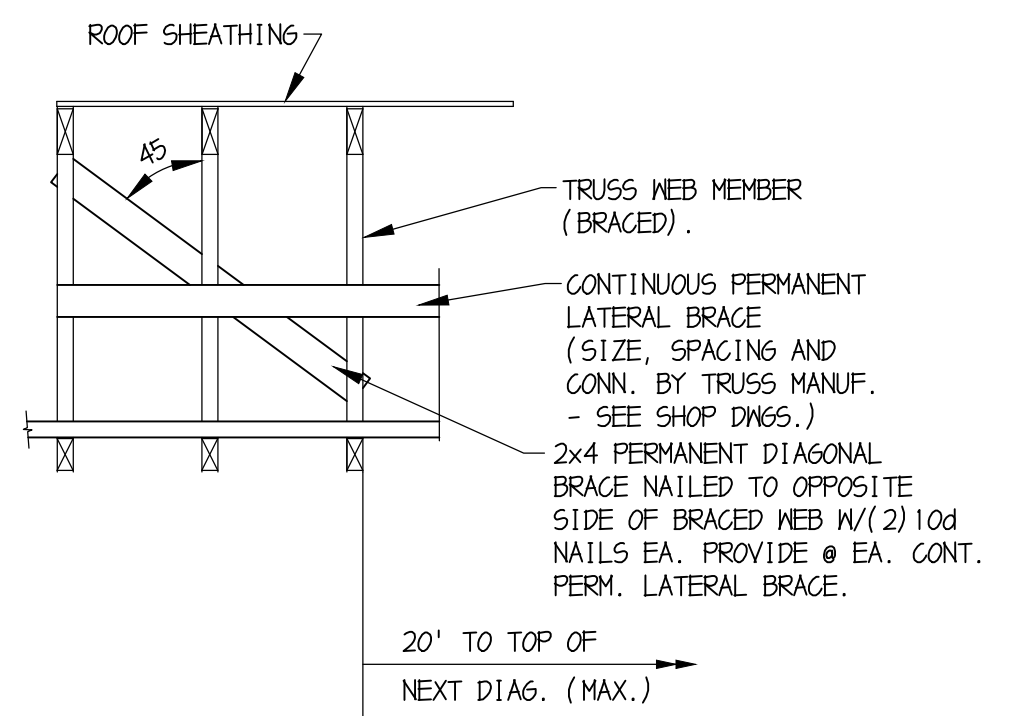


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S4

SECTION

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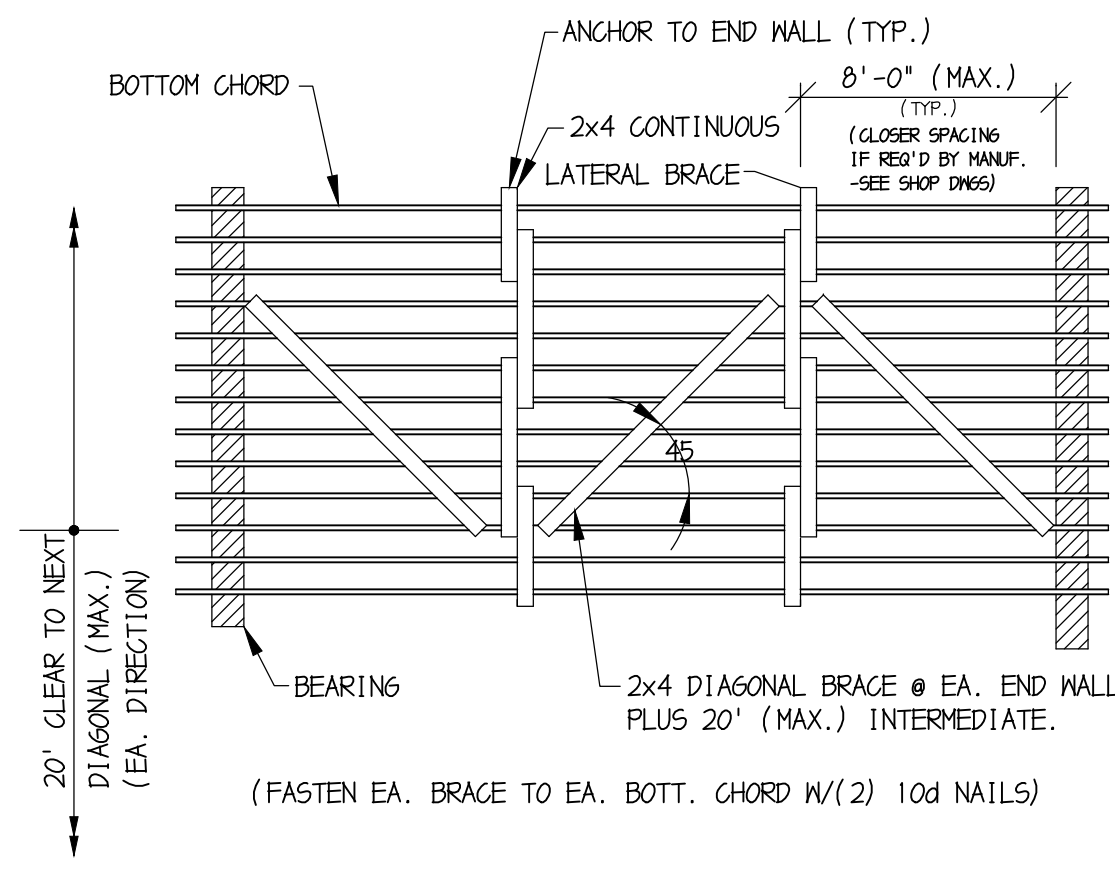
TYPICAL DETAILS



T1
S4

PERM. DIAG. BRACE @ CONT.
PERM. LAT. BRACE

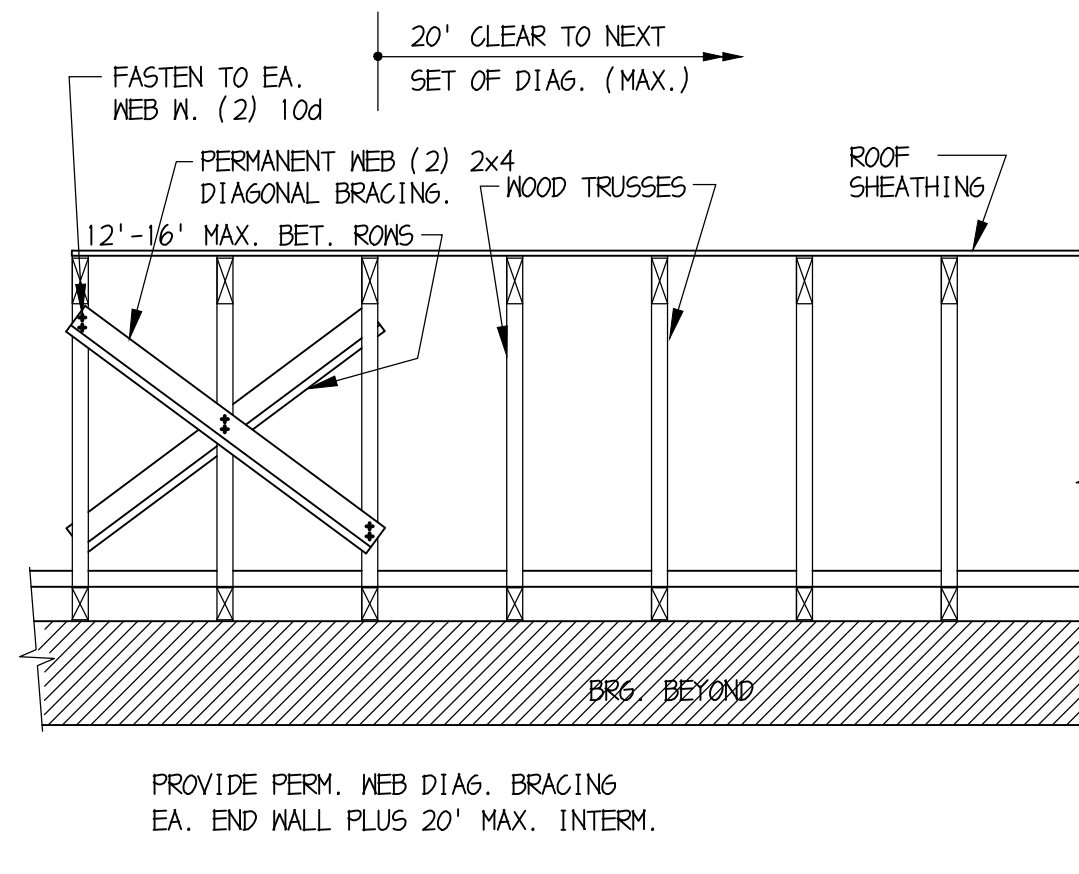
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T2
S4

PERMANENT BOT. CHORD BRACING

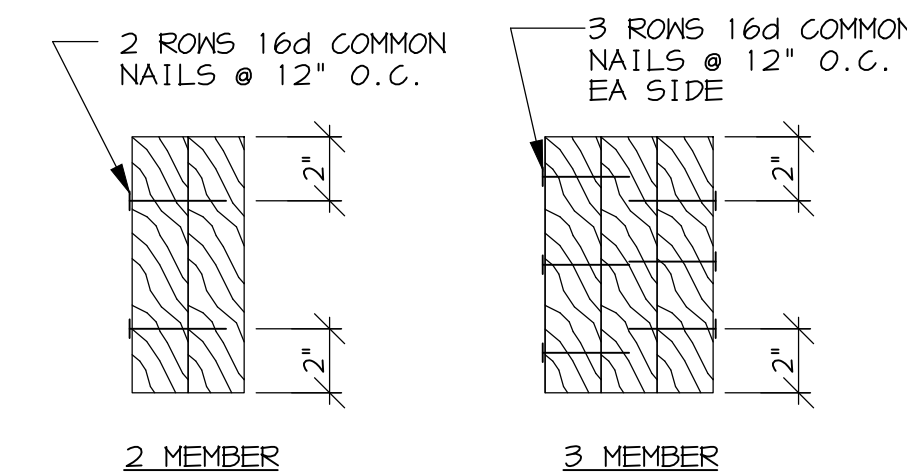
NO SCALE



T3
S4

PERM. WEB DIAG. BRACING

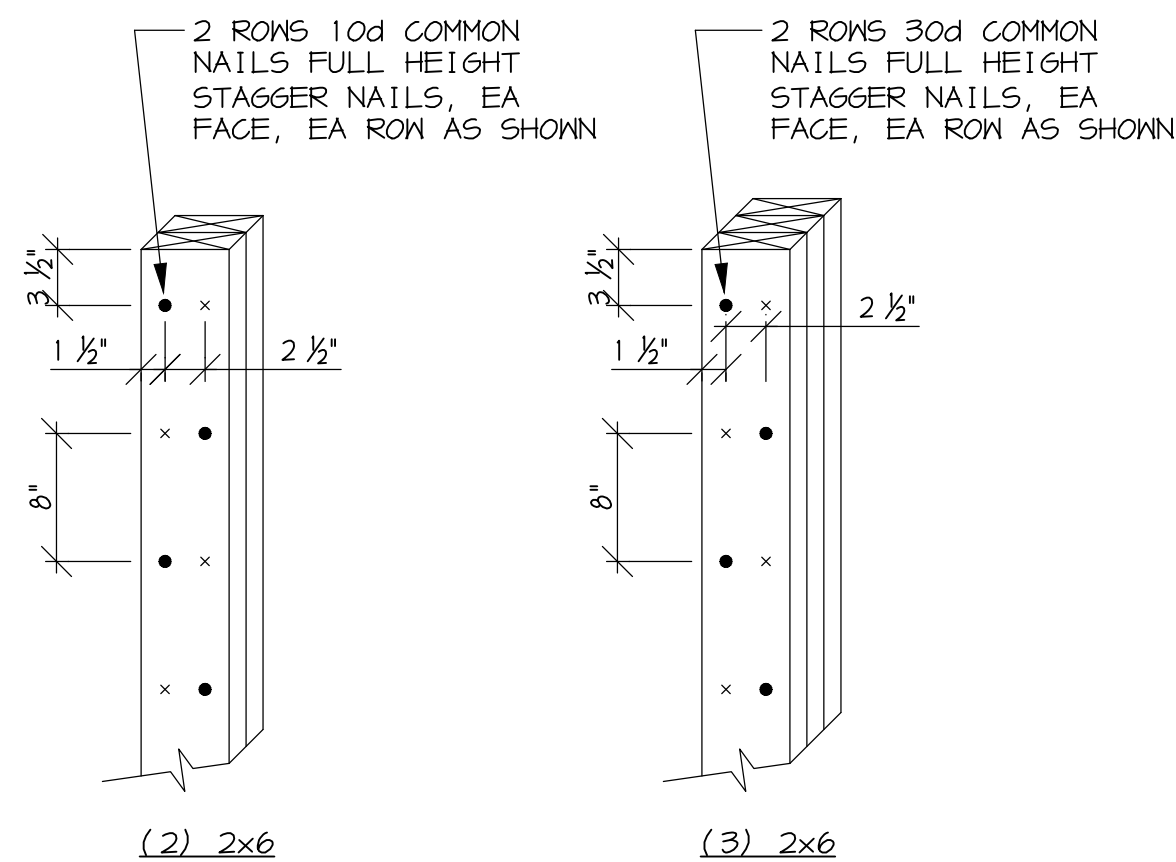
NO SCALE



T4
S4

MULTIPLE MEMBER CONNECTIONS
FOR BEAMS

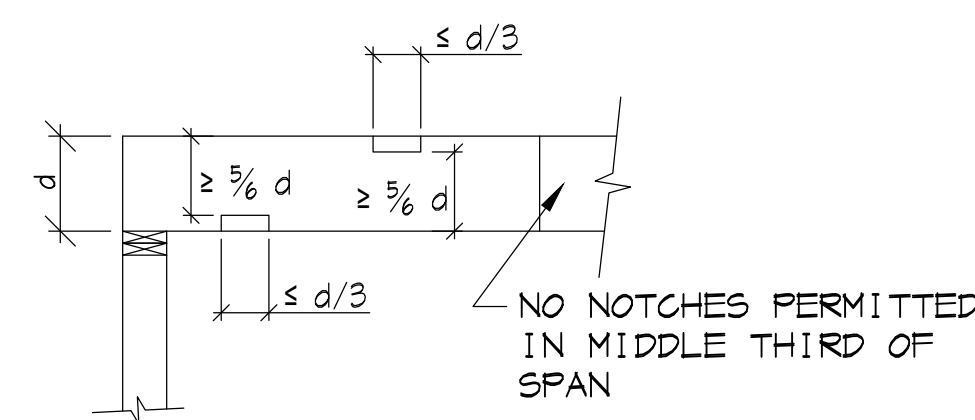
NOT TO SCALE



T5
S4

MULTIPLE MEMBER CONNECTIONS
FOR STUDS

NOT TO SCALE



T6
S4

ALLOWABLE NOTCHES IN SAWN LUMBER

NO SCALE

NOTE: LIMITATIONS APPLY TO NOTCHES AND HOLES.



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Lancaster, Pennsylvania 717.290.7400 P
Dover, Delaware 717.290.7402 Fax
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Haddon Heights, New Jersey
Annapolis, Maryland PROJECT NO. L11701

REV#	DATE	DESCRIPTION

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**CECIL COUNTY PUBLIC
SCHOOLS**
201 Booth St, Elkton, MD 21921

**FRAMING SECTIONS AND
TYPICAL DETAILS**

NEW FIELD HOUSE AT STADIUM

1666 Perryville Rd, Perryville, MD 21903

DATE:

10.30.23

SCALE:

AS NOTED

DRAWN BY:

JPC

CHECKED BY:

LRB

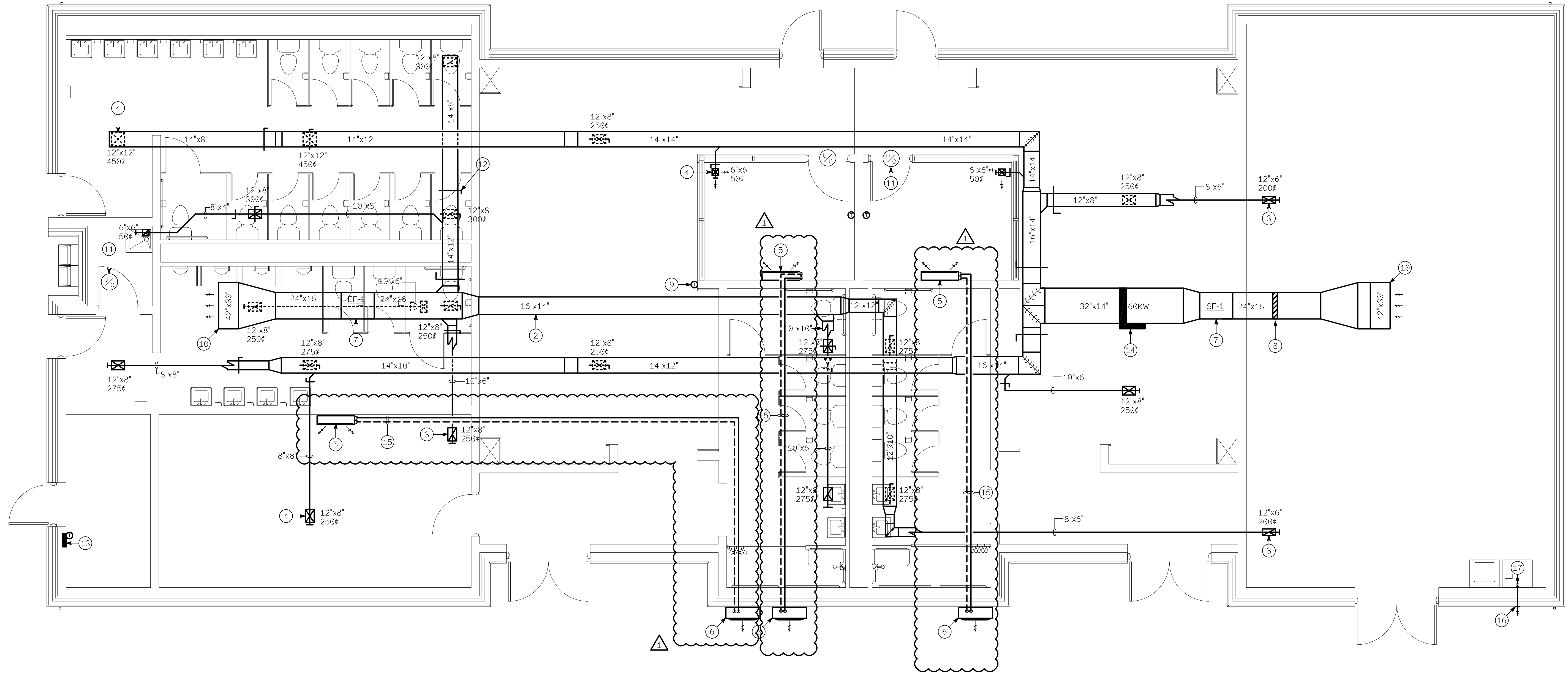
DRAWING NO:

S4

FWA JOB NUMBER

2181073.00

ISSUE FOR BID/PERMIT

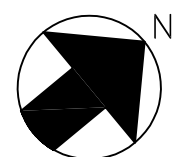


DRAWING NOTES

- SUPPLY AIR DUCTWORK SUPPORTED FROM STRUCTURE ABOVE CEILING. DUCTWORK RUN BELOW ATTIC PLATFORM THRU JOIST
- EXHAUST AIR DUCTWORK SUPPORTED FROM STRUCTURE ABOVE CEILING. DUCTWORK RUN BELOW ATTIC PLATFORM THRU JOIST
- CEILING MOUNTED EXHAUST AIR REGISTER WITH NECK SIZE AND AIR QUANTITY (TYP.) INDICATED.
- CEILING MOUNTED SUPPLY AIR REGISTER WITH NECK SIZE AND AIR QUANTITY (TYP.) INDICATED.
- WALL MOUNTED AIR CONDITIONER UNIT LOCATED APPROX. 6" BELOW CEILING. MITSUBISHI MODEL MSZ-GL12NA OR APPROVED EQUAL WITH THERMOSTAT MOUNTED ON WALL 48" ABOVE FLOOR WHERE INDICATED. UNIT SHALL BE: SEER 20.0, 12,000 BTUH, 208V/1Ø, 22 LBS. INDOOR UNIT RECEIVES POWER FROM OUTDOOR UNIT ON GRADE.
- WALL MOUNTED CONDENSING UNIT. MITSUBISHI MODEL MUZ-GL12NA-U1 OR APPROVED EQUAL. UNIT SHALL BE: 208V/1Ø, 15.0 AMP FUSE, 9.0 AMPS, 81 LBS. UNIT SHALL BE A SINGLE POINT CONNECTION. REFRIGERANT PIPING SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. INSTALL IN DIVERSITECH SECURITY CAGE MODEL CG-U-M AC.
- INLINE FAN SUPPORTED FROM STRUCTURE ABOVE CEILING. SEE SCHEDULE FOR MORE INFORMATION.
- FILTER RACK.
- WALL MOUNTED THERMOSTAT MOUNTED 48" ABOVE FLOOR WITH LOCKABLE COVER AND INTERLOCKED WITH UNIT INDICATED (TYPICAL).
- 42"x30" STORM PROOF WALL LOUVER(4.47 SF FREE AREA). SIZE AS INDICATED, WITH FULL SIZE PLENUM EXTENDING INTO SPACE AND LOW-LEAKAGE MOTORIZED DAMPER INTERLOCKED WITH AIR HANDLING UNIT INDICATED. LOUVER SHALL BE RUSKIN MODEL ELF375DX OR APPROVED EQUAL WITH BIRD SCREEN.
- 1" UNDERCUT DOOR (TYPICAL).
- MANUAL BALANCING DAMPER (TYPICAL).
- 2.0 KW ELECTRIC WALL MOUNTED (SURFACE MOUNTED) FAN FORCED HEATER WITH INTEGRAL THERMOSTAT AND TAMPER-PROOF ENCLOSURE. BERKO MODEL SRA2020DS OR APPROVED EQUAL. HEATER SHALL BE 6,826 BTUH, 65 CFM, 208V/1Ø.
- 60.0 KW "SLIP-IN" DUCT MOUNTED ELECTRIC HEATING COIL. INDECO MODEL "QUA" OR APPROVED EQUAL, 480V/3Ø WITH 3 STEPS, THERMAL CUT-OUT, AIRFLOW SWITCH, DOOR DISCONNECT, U.L. LABELED AND INTERLOCKED WITH WALL MOUNTED THERMOSTAT.
- RS AND RL PIPING SIZED, TRAPPED AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE LONG LINE SETS AS REQUIRED.
- DRYER EXHAUST DISCHARGE TO OUTSIDE. INSTALL PER MANUFACTURERS RECOMMENDATIONS.
- DRYER EXHAUST DOWN TO DRYER. INSTALL PER MANUFACTURERS RECOMMENDATIONS.

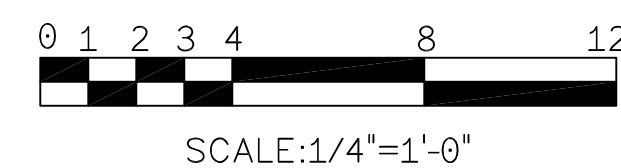
HVAC PLAN

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



MECHANICAL LEGEND

- | | | | |
|--|---------------------------------|--|---|
| | VOLUME DAMPER | | EXHAUST DUCT DOWN |
| | MOTOR OPERATED DAMPER | | EXHAUST DUCT UP |
| | FLEXIBLE CONNECTION | | AIR TITE FITTING W/INTEGRAL VOLUME DAMPER |
| | SOUND LINED DUCTWORK | | TOP AIR TITE FITTING CONNECTION |
| | DUCTWORK TRANSITIONS | | FLEXIBLE DUCT |
| | ROUND TO RECTANGULAR TRANSITION | | SUPPLY AIR DIFFUSER |
| | DUCTWORK TRANSITION | | RETURN AIR GRILLE |
| | RISE AND DROP IN DUCTWORK | | EXHAUST AIR REGISTER |
| | RISE AND DROP IN DUCTWORK | | DIRECTION OF AIR FLOW |
| | TURNING VANES | | CONNECT TO EXISTING SYMBOL |
| | RADIUS ELBOW | | THERMOSTAT |
| | SUPPLY DUCT DOWN | | SMOKE DETECTOR |
| | SUPPLY DUCT UP | | ON/OFF SWITCH |
| | RETURN DUCT DOWN | | CUBIC FEET PER MINUTE (CFM) |
| | RETURN DUCT UP | | DIAMETER |
| | | | DRAWING NOTE |
| | | | REVISION SYMBOL |
| | | | 1" UNDERCUT DOOR |



NOTICE TO CONTRACTORS:

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REVISIONS

REV#	DATE	DESCRIPTION
1	11/21/23	BID THIS

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SCHOOLS

201 Booth St. Elkton, MD 21921

NEW FIELD HOUSE AT STADIUM

1696 Perryville Rd. Perryville, MD 21903

"Professional Certification: I hereby certify that these documents were prepared and/or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No.: 28226, Expiration Date: 01/12/2025"



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DESIGN
CONSULTANTS
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BEL AIR, MD 21034 443.767.4264
MECHANICAL • ELECTRICAL • PLUMBING
ENGINEERING SERVICES

DATE:
11/02/2023

SCALE:
AS NOTED

DRAWN BY:
MRB/JAL

CHECKED BY:
EPL/GWB

DRAWING NO:

M1

IDC JOB NUMBER
18-076

FAN SCHEDULE													
ITEM#	AREA SERVED	C.F.M.	SONES	H.P./WATTS	FAN TYPE	E.S.P.	DRIVE TYPE	R.P.M.	ELECTRICAL DATA	CONTROL	WEIGHT (LBS.)	MODEL #	MANUFACTURER
EF-1	LOCKER/TOILET ROOMS	3,000	11	.75 HP	INLINE	.500	BELT	984	120/1	CONTINUOUS	200	180 SQN-B	COOK
SF-1	LOCKER/TOILET ROOMS	3,000	12.3	1.0	INLINE	.75	BELT	1087	120/1	CONTINUOUS	200	180 SQN-B	COOK

NOTES:
PROVIDE MANUFACTURER'S BACK DRAFT DAMPER AND DISCONNECT

SEQUENCE OF OPERATION

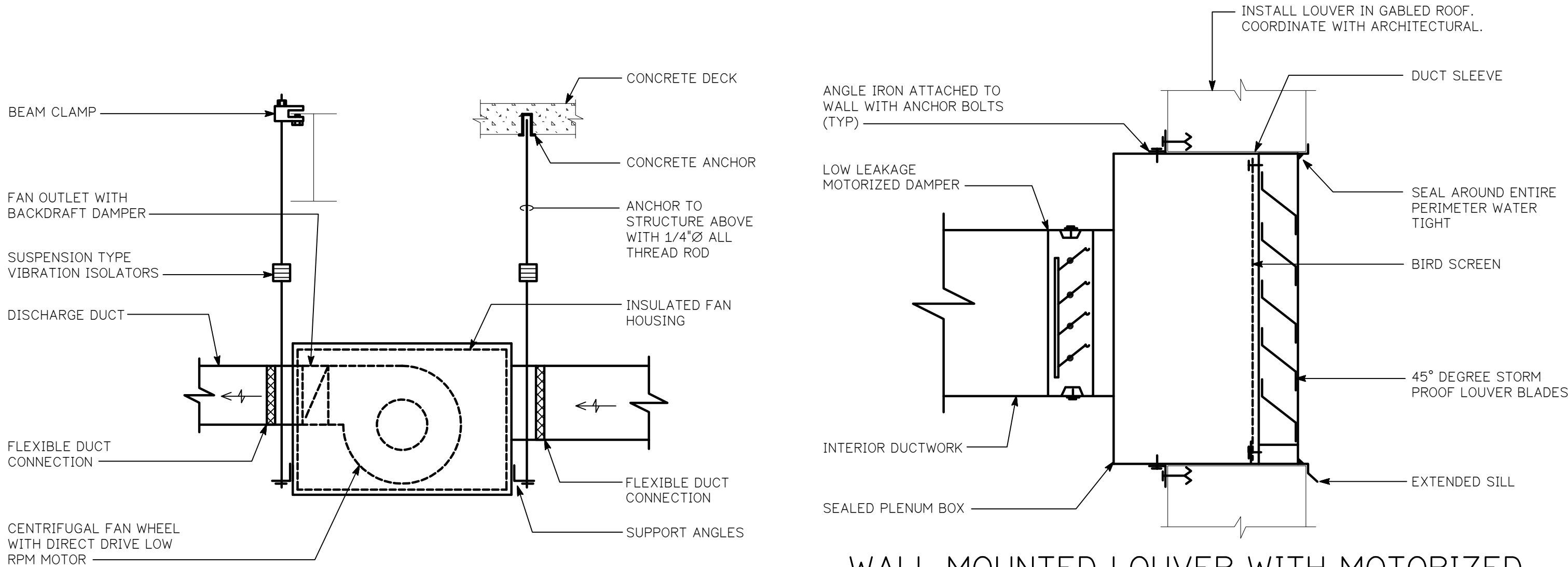
ELECTRIC WALL HEAT

FAN FORCED ELECTRIC WALL HEATERS SHALL BE CONTROLLED VIA UNIT/FACTORY MOUNTED INTEGRAL THERMOSTAT. HEATER SHALL BE ENERGIZED UPON A CALL FOR HEAT. UPON REACHING SET POINT HEATER SHALL BE DE-ENERGIZED.

VENTILATION AND HEATING CONTROL SEQUENCE

EXHAUST FAN EF-1 AND SUPPLY AIR FAN SF-1 SHALL BE ENERGIZED TO RUN CONTINUOUSLY.

SLIP IN DUCT COIL SHALL BE ENERGIZED AND DE-ENERGIZE BASED UPON SPACE THERMOSTAT T-1 SET POINT OF 68° (ADJUSTABLE)



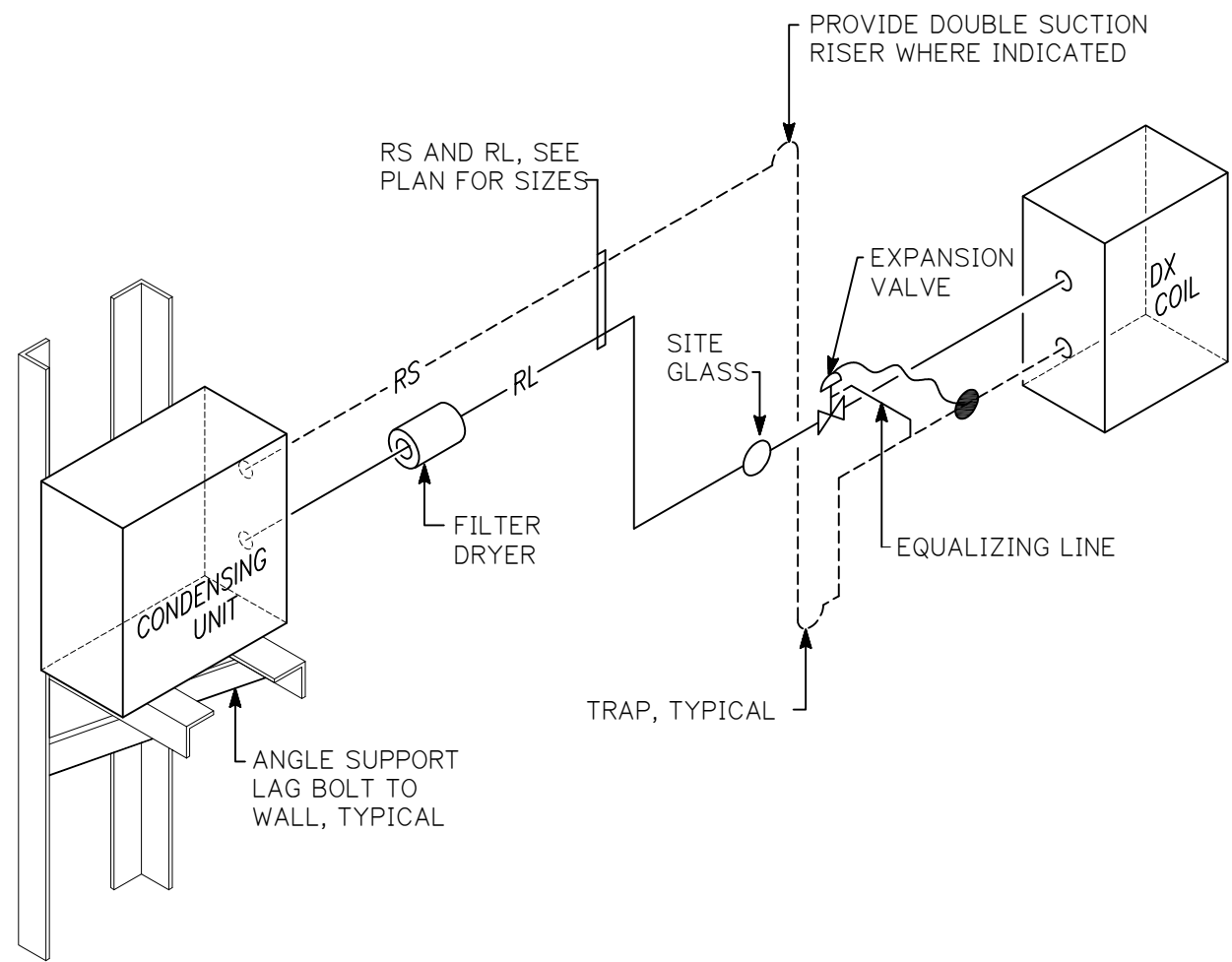
IN-LINE EXHAUST FAN DETAIL

NO SCALE

NOTE:
PROVIDE VARIABLE SPEED CONTROLLER ON SIDE OF CASING FOR PROPER AIR BALANCE

WALL MOUNTED LOUVER WITH MOTORIZED DAMPER AND DUCT CONNECTION DETAIL

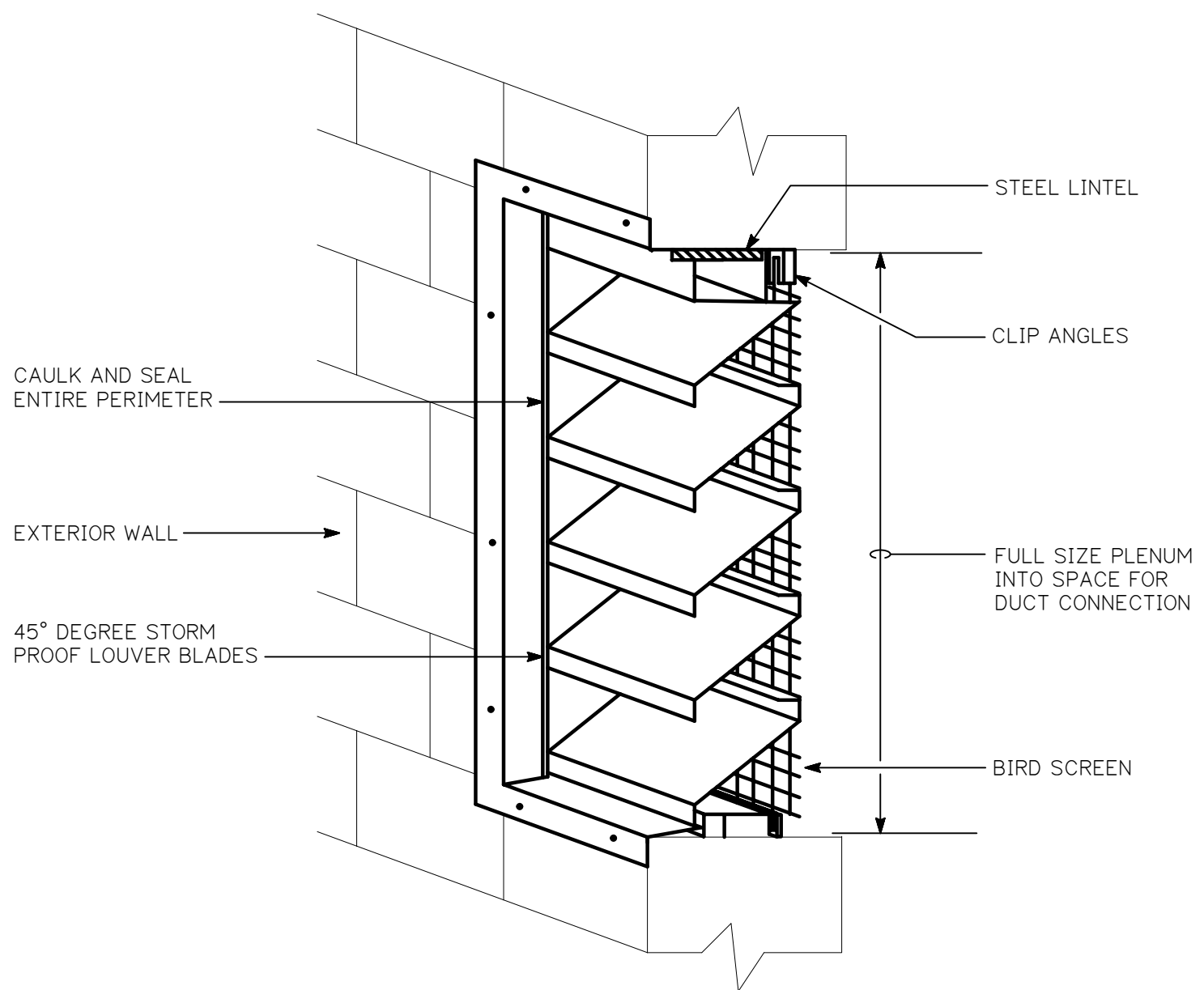
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WALL MOUNTED CONDENSING UNIT AND REFRIGERANT PIPING DETAIL

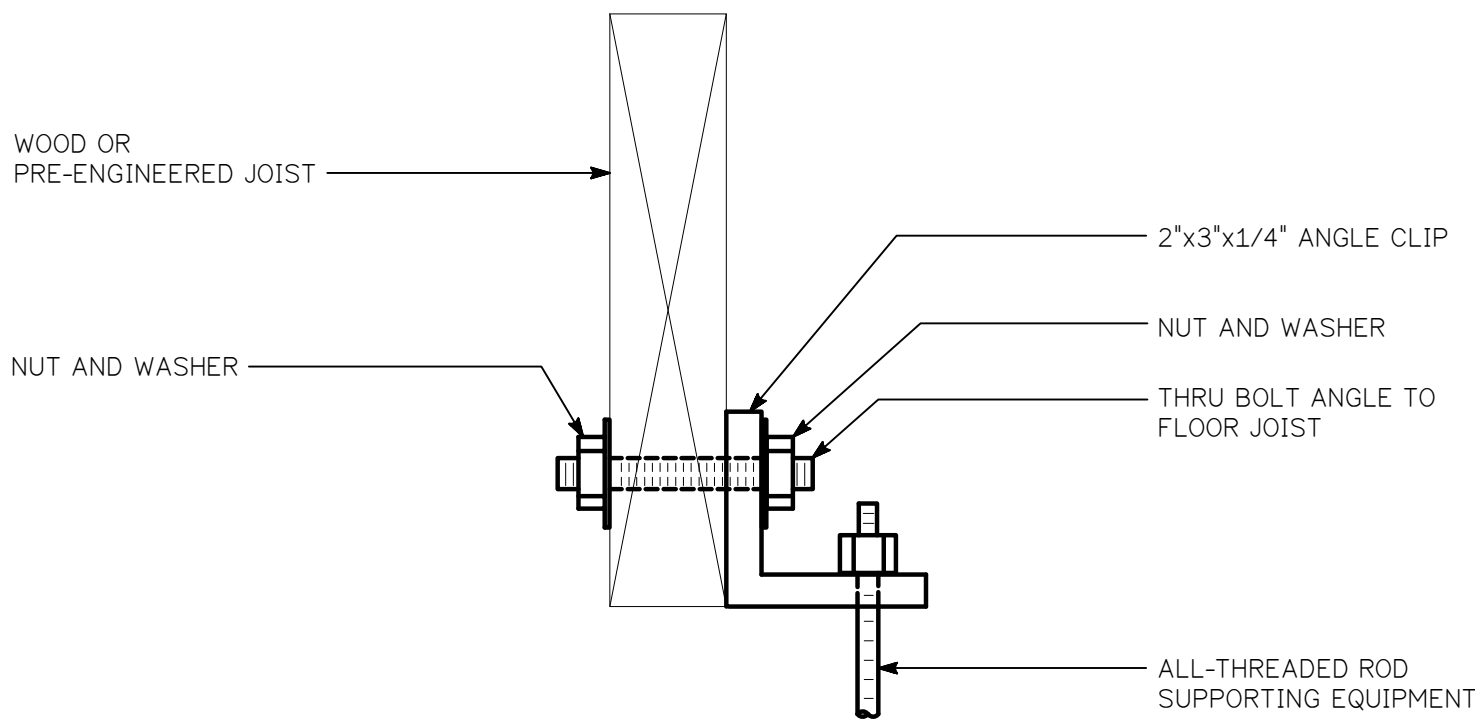
NO SCALE

NOTES:
1) ALL EXTERIOR PIPE INSULATION MUST BE PAINTED WITH U.V. INHIBITOR.
2) TRAP AND SIZE REFRIGERANT PIPING PER MANUFACTURERS RECOMMENDATIONS.
3) ALL SUCTION PIPING SHALL BE INSULATED.



WALL LOUVER WITH FRONT FLANGE DETAIL

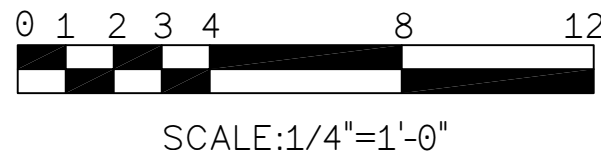
NO SCALE



WOOD JOIST SUPPORT DETAIL

NO SCALE

NOTE:
CONTRACTOR SHALL COORDINATE EXACT MOUNTING REQUIREMENTS WITH STRUCTURAL ENGINEER.



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REVISIONS		DESCRIPTION
REV#	DATE	

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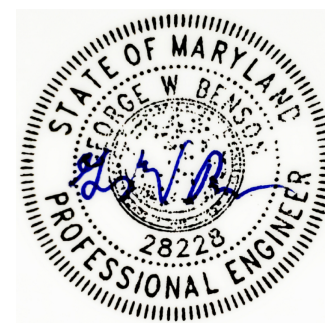
NEW FIELD HOUSE AT STADIUM

1688 Perryville Rd, Perryville, MD 21903

*Professional Certification: I hereby certify that these documents were prepared and/or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No.: 28228, Expiration Date: 01/12/2025



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MECHANICAL • ELECTRICAL • PLUMBING
ENGINEERING SERVICES



DATE:
11/02/2023

SCALE:
AS NOTED

DRAWN BY:
MRB/JAL

CHECKED BY:
EPU/GWB

DRAWING NO:

M2

IPC JOB NUMBER
18-076

MECHANICAL SPECIFICATIONS

1. SECTION 15010 - BASIC MECHANICAL REQUIREMENTS

- A. The work of each of the following sections includes furnishing and installing the material, equipment and systems complete as specified and/or indicated on the drawings. The installations, when finished, shall be complete and coordinated, ready for satisfactory service.
- B. All work under this contract shall be done in strict accordance with all applicable municipal, state, county, NFPA, International and local codes that govern each particular trade.
- C. The contractor shall make applications and pay all charges for all necessary permits, licenses and inspections as required under the above codes. Upon completion of the work, the customary certifications of approval shall be furnished. The contractor shall also coordinate and make all required submissions to the local utility companies as required.
- D. No materials or equipment shall be used in the work until approved. Before submission of the shop drawings, and not more than thirty (30) days after award of the contract, the contractor shall submit for approval, a complete list of all materials and equipment which he intends to furnish, giving manufacturer and catalog numbers. A complete list of proposed sub-contractors shall also be submitted.
- E. The contractor shall examine all drawings and specifications and shall visit the site and inspect the existing conditions in person. Certain areas may have been in-accessible at the time of the engineers survey and may only be visible during or after the demolition phase; therefore, those H.V.A.C. systems and coordination of those systems, shall become the responsibility of the contractors. Failure to comply with this requirement shall not relieve the contractors of their responsibilities for complying with the intent of the contract documents.
- F. The drawings indicate the general arrangement of the mechanical installations. Details of proposed departures due to actual field conditions or other causes shall be submitted for approval prior to installation. Reworking of completed items due to improper field coordination shall be at the contractor's expense.
- G. Provide sufficient access and clearance for all items of equipment requiring servicing and maintenance, such as valves, dampers, controls, drives, drains, vents, starters, switches, filters, traps and major items of equipment.
- H. The contractor shall perform all necessary cutting and patching as required to complete the installation of the all mechanical work. Patching of walls, floors, ceilings, roof, etc. shall match the adjacent surfaces.
- I. The contractor shall prepare three (3) copies of a record and information booklet. The booklet shall be bound in a three ring loose-leaf binder. Provide the following data in the booklet:
- 1) Catalog data on each piece of equipment furnished

2) Approved shop drawings on each piece of equipment furnished

3) Maintenance, operation and lubrication instruction on each piece of equipment furnished

4) Simplified temperature control diagrams of all H.V.A.C. systems

5) Manufacturer's and contractor's guarantees

6) Air balancing reports

7) Commissioning reports as required

8) Schedule/description of all service work/maintenance inspections required by the paragraphs of this section
- J. All parts of the heating, ventilating, air conditioning and exhaust systems shall be adjusted, checked, balanced and tested by an independent A.A.B.C. or N.E.B.B. certified testing and balancing contractor approved by the owner. The contractor shall put all systems and equipment into full operation, and shall test and balance all devices to within ten (10) percent of capacities indicated on the drawings. Submit copies of the balancing reports to the architect. Permanently mark the position of each balancing damper.
- K. Upon completion of the mechanical installations, the contractor shall provide a complete set of prints of the contract drawings which shall be legibly marked in red pencil to show all changes and departures of the installation as compared with the original design. They shall be suitable for use in preparation of as-built drawings.
- L. All new installations, including all materials and labor shall be guaranteed for a period of one (1) year from date of owner acceptance. The above shall not in any way void or abrogate equipment manufacturer's guarantee or warranty. Certificates of guarantee shall be delivered to the owner.
- M. Contractor shall also provide one (1) year free service to keep the equipment in operating condition. This service shall be provided and rendered upon request when notified of any equipment malfunction.
- N. In addition to the first year warranty period, the contractor shall provide, at no additional cost to the owner, a minimum of four (4) service calls and maintenance inspections. A complete outline of the required maintenance and the proposed schedule shall be included in a "record and information booklet", for review and acceptance by the owner/representative and engineer. The inspections are to be performed at three (3) month intervals for a total of four (4) service calls and inspections during the first year warranty period plus the original system start-up commissioning.
- The service work and inspections shall include, but not be limited to the following:
- Replace all H.V.A.C. air filters before occupancy

- Lubricate all motor and fan bearings as required

- Clean drain pans and drain lines

- Check and tighten all electrical connections as required

- Inspect all belts for adjustment and condition, replace as required

- Check operating pressures and refrigerant charge

- Inspect all controls for correct operation and calibrate as required

- Perform all maintenance as outlined in the equipment manufacturers operation and maintenance manuals
- Upon completion of each scheduled inspection, the contractor shall deliver to the building owner or owners representative, within (48) hours of completion, two (2) copies of the completed inspection report for record purposes.
- O. The service contractor shall, at the ninth month, advise the owner of the termination date of the above services. This contractor shall also provide the owner with a detailed proposal, reflecting annual escalation, for the continuation of the services and inspections described above.

2. SECTION 15250 - MECHANICAL INSULATION

- A. All rectangular supply, return, make-up air and outside air ductwork shall be insulated with fiberglass insulation. All insulation shall be noncombustible or shall have a flame spread index of not more then 25 and a smoke-development index of not more then 50 when tested in accordance with ASTM E84.
- B. Ductwork shall be wrapped with nominal 2" thick glass fiber blanket insulation with "installed" thermal conductivity 'K' value of 0.25 at 75°F mean temperature and thermal resistance 'R' value of 6.0 at 1-1/2" compressed thickness. Owens Corning "SOFTR" fiberglass type 100 with foil faced vapor barrier. Insulation shall be neatly installed and suitable for 40°F-250°F duct temperatures.
- C. All refrigerant suction piping shall have 1" of armaflex insulation. Liquid line piping shall not require insulation. All insulation exposed to weather shall be 100% coated with a "UV" inhibitor for protection from solar radiation.
- D. All internal duct lining shall be as specified under section 15880. All interior rectangular ductwork exposed within condition spaces may be provided with internal lining only, with no external duct wrap. Refer to drawings for additional notes. Internal lining shall not be used for ductwork system conveying wet/moist air (ie: shower rooms, dishwasher hoods, etc.).

3. SECTION 15500 - HEATING, VENTILATING & AIR CONDITIONING (HVAC)

- A. The work to be performed shall include all labor, materials and equipment necessary to furnish and install complete, all H.V.A.C. mechanical equipment as shown on drawings and/or hereinafter specified. It is the intent that the systems be installed complete with all items necessary to provide satisfactory service.
- B. All existing H.V.A.C. units serving the project areas shall be fully serviced including but not limited to: check/charge refrigerant, check/replace belts, change filters, check/clean heating and cooling coils, lubricate, rebalance, etc. and verify proper operation to ensure maximum capacity.
- B. All heating, ventilating and air conditioning equipment which contains compressors shall be provided with extended warranties covering the compressors for a minimum of four (4) years.
- C. Electric wall heaters:
- Wall heater shall be as manufactured by Berko or approved equal. Refer to drawings for capacities. Heater shall be complete with automatic reset thermal protection, metal sheath element, heavy duty concealed thermostat with disconnect, shaded 2-pole motor, anodized aluminum frame and shall be U.L. listed.
- D. Electric duct heaters:
- Duct heater shall be U.L. Listed and as manufactured by Indeeco model "QUA" or approved equal. Heater shall have open coil elements of 80% nickel, and 20% chromium, galvanized steel frame, dual safety protection, and automatic reset thermal cut-out.
- E. Smoke detectors:
- Detectors shall be installed in the supply and return air ductwork for all system supplying equal or greater then 2,000 cfm of air and shall be U.L. 268A, NFPA 90A, NFPA 72 and FM approved and listed. They shall contain an photoelectric type detector and air sampling chamber with sampling tubes extending through the width of the air duct. Unit shall be System Sensor. Innovaliflex series, photoelectric model D4120 (4 wire) or approved equal, with an ionization type detector and self-contained control unit.

Contractor shall provide and install a wall/ceiling mounted remote audible/visual alarm device with red trouble light and green power light, located in a public and visible location near the general area of the rooftop unit, which shall be System Sensor model APA151 or approved equal and compatible with smoke detector provided.

In areas where smoke detector maintenance and inspection is not easily accessible, contractor shall also provide a wall/ceiling mounted remote test/reset device (with key). Device shall be System Sensor model RT5151KEY or approved equal and compatible with smoke detector provided.

Coordinate installation of all detection devices with the controls contractor. Detectors connected to the building fire alarm system specified in Division 16-Electrical, shall be coordinated with the voltage and signal contact configuration.

- F. Mini-Split Air Conditioning/Heat Pump Units: The air conditioning system shall be a mini split system consisting of an indoor and outdoor condensing unit. Systems shall be listed by CSA to UL Standards and bear the CSA label, rated in accordance to ARI standard 240 and bear the ARI label and shall be manufactured in a facility that has met ISO 9002 and ISO 14001 international standards.

All wiring shall be in accordance with the National Electrical Code with a full charge of R-410a refrigerant.

The unit shall have a manufacturers' warranty on all parts for a period of one (1) year from date of installation.

The indoor air handling evaporator unit shall be complete, including cabinet, nonferrous DX cooling coil, centrifugal fan(s), drives, permanently lubricated multi-tap motor with thermal overload protection, filter, expansion valve, solenoid valve, R-410A refrigerant charge, insulated galvanized drain pan and other required components. Casings shall be constructed of zinc coated heavy gauge steel painted with baked-on enamel and internally insulated with R-4.2 fiber material. The indoor unit shall receive power from the outdoor unit.

The outdoor heat pump unit shall be complete, including cabinet, hermetic compressor, nonferrous condenser coil with guard, condenser fan and motor, refrigerant reservoir or receiver, charging valve, controls, refrigerant holding charge, heavy duty permanently lubricated motors with built-in thermal overload protection, locked rotor, over and under voltage protection, high pressure cutout with auto-reset, motor starters and contactors, compressor protection, crankcase heater, transformer, filter/drier, vibration isolation, and other required components. Casings shall be constructed of zinc-coated steel, double phosphatized and finished with baked enamel for positive weatherproof protection. Removable panels shall provide access to all components from one side of the unit. Drain holes shall be provided in the base for positive drainage. Unit shall be complete with low ambient controls and shall have a 6-year compressor warranty.

Both indoor and outdoor mini-split units shall be as manufactured by Panasonic, LG, Mitsubishi or approved equal.

4. SECTION 15880 - AIR DISTRIBUTION

- A. Furnish all labor and materials necessary to complete the sheet metal work associated with the heating, ventilating, air conditioning and exhaust systems, and other miscellaneous items shown and required.
- B. All outside air, make-up air, exhaust ductwork shall be constructed and installed in accordance with the sheet metal and air conditioning contractors national association (SMACNA) standards and ASHRAE standards.
- C. Support horizontal ducts with hangers spaced not more than six (6) feet apart. Use strap hangers for ducts up to thirty (30) inches wide, angle hangers or rods for ducts over thirty (30) inches wide. Strap hangers to be one (1) inch wide, 20 gauge minimum; fasten to sides and bottom of duct with sheet metal screws.
- D. Ducts shall be straight and smooth on the inside, with joints neatly finished. Ducts shall be suspended from the construction and shall be free from vibration. Curved elbows shall have a center radius equal to one and one-half (1-1/2) times the width of the duct. All square turns shall be vaned. Vanes consisting of curved metal blades shall permit the air to make abrupt turns without turbulence.
- E. All joints in the heating, ventilating, and air conditioning and exhaust system ductwork shall be sealed air tight. Sealant shall be as manufactured by Hard Cast Inc. or approved equal and shall consist of a mineral impregnated woven fiber tape and an actuator adhesive. Sealant shall be SMACNA and U.L. approved, with a flame spread of 10 and a smoke developed of 0, non-toxic and non-flammable. Sealant shall be approved for operating temperatures from 0 degrees F. to 200 degrees F. Sealant system shall be installed in strict accordance with the manufacturer's recommendations and when applied shall provide a permanent seal without any deterioration.
- F. Supply air registers shall have all steel construction with 3/4" spaced, double deflection louvers, opposed blade damper and finished with #26 off-white enamel. Titus model 300F, Metal-Aire, Krueger or approved equal.
- G. Exhaust air registers shall have all steel construction with 1/2" spaced louvers, 35 degree deflection, opposed blade damper and finished with #26 off-white enamel. Titus model 355R, Metal-Aire, Krueger or approved equal.
- H. Motorized control dampers shall be low leakage extruded aluminum airfoil with a maximum of 3 cfm/sq.ft. leakage rate at 1" static pressure and shall be AMCA listed as a Class 1A damper. Damper shall be Ruskin CD-50 or approved equal. Accuator shall be 120 VAC, with fail safe spring return and brushless DC motor

- I. Ceiling mounted and in-line exhaust fans shall be as manufactured by Cook. Fans shall have acoustically insulated housings and shall have a maximum sound level rating of 6.0 sones. Air deliveries shall be as indicated on the drawings and all fans shall bear the AMCA certified ratings seal and the U.L. label. Integral backdraft damper shall be totally chatter proof with no metal contact. Fan shall have true centrifugal wheels with inlet perpendicular to, or remote from, inlet grille. Ceiling mounted exhaust fan grilles shall be of aerodynamic design of white molded plastic eggcrate shape and provide eighty-five (85) percent free open area. Terminal box shall be provided on the housing with cord, plug, and receptacle inside the housing. Entire fan, motor and wheel assembly shall be easily removable without disturbing the housing. Motor speeds shall not exceed 1600 rpm and all fan motors shall be suitably grounded and mounted on rubber-in-shear vibration isolators.

5. SECTION 15950 - CONTROLS

- A. The controls contractor under this heading shall furnish and install all wiring and equipment necessary for a complete operational system including: automatic temperature controls, ventilation systems, exhaust systems, economizer systems, etc. as indicated on the drawings. The system shall include all necessary thermostats, relays, switches, transformers, contactors, etc. required for successful operation of all equipment as described in the sequence of operations. Electrical work in connection with all control systems shall be performed by the controls contractor and coordinated with the electrical contractor as needed to provide a full and complete package.

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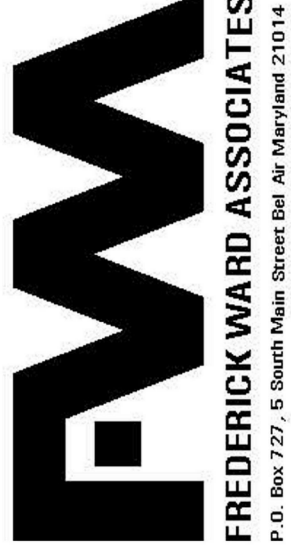


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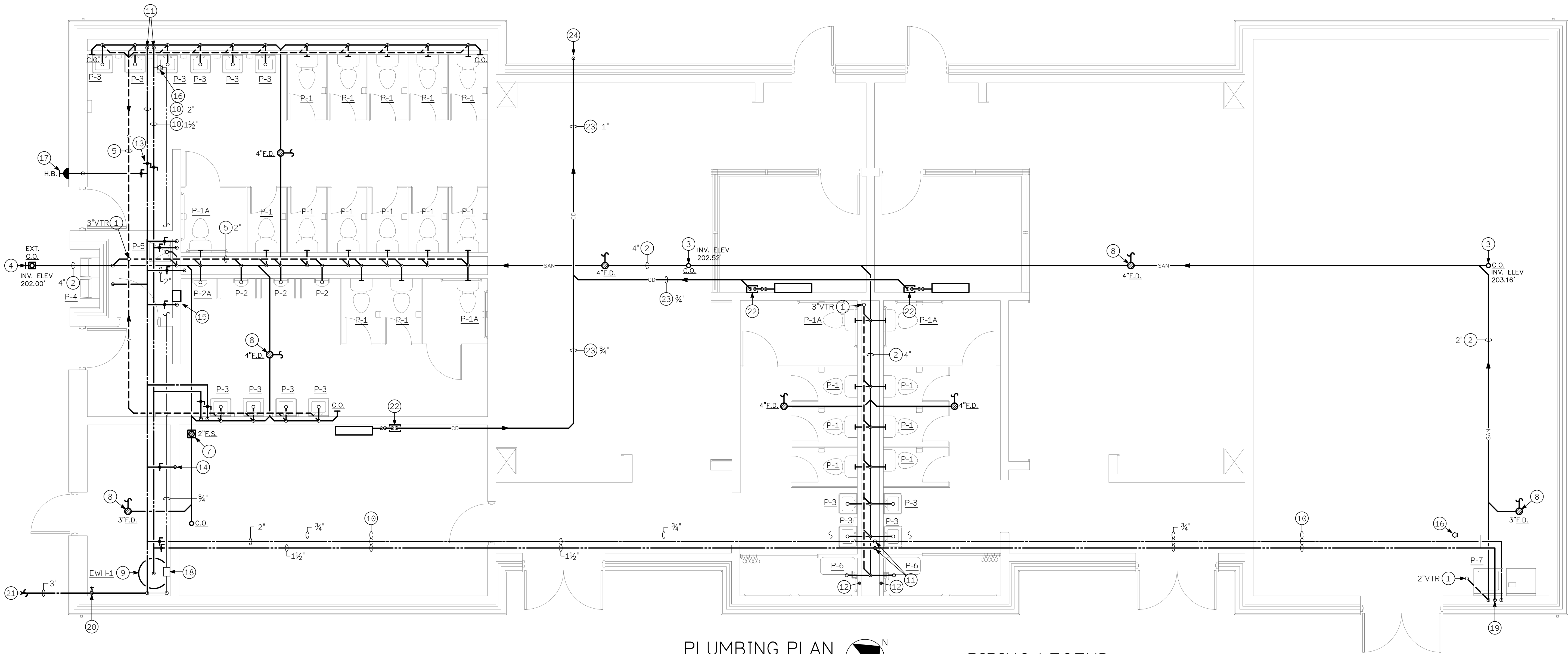
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201 Booth St, Elkton, MD 21921

NEW FIELD HOUSE AT STADIUM

1686 Perryville Rd, Perryville, MD 21903

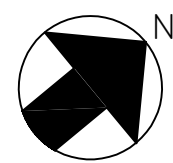


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SCALE: AS NOTED	M3
DRAWN BY: MRB/JAL	
CHECKED BY: EPJ/GWB	IPC JOB NUMBER 18-076



PLUMBING PLAN

SCALE: 1/4"=1'-0"
F.F. ELEVATION = 206.00'



DRAWING NOTES

- 1 SANITARY VENT PIPING UP THRU ROOF.
- 2 SANITARY PIPING BELOW FLOOR SLAB SLOPED AT MINIMUM 1/8" PER FOOT. ALL 2" SANITARY PIPING BELOW FIRST FLOOR SLAB/GRADE SHALL BE SLOPED AT 1/4" PER FOOT.
- 3 SANITARY CLEANOUT IN FLOOR (TYPICAL).
- 4 EXTERIOR SANITARY CLEANOUT. SEE CIVIL FOR CONTINUATION
- 5 SANITARY VENT PIPING SUPPORTED FROM STRUCTURE ABOVE CEILING.
- 6 SANITARY VENT PIPING UP INSIDE/ALONG WALL AND ROUTED ABOVE CEILING AS INDICATED (TYPICAL).
- 7 12"x12"x10" FLOOR SINK, SIZE AS INDICATED (TYPICAL).
- 8 FLOOR DRAIN, SIZE AS INDICATED, WITH TRAP PRIMER (TYPICAL).
- 9 FLOOR MOUNTED ELECTRIC WATER HEATER IN FULL SIZE DRAIN PAN. REFER TO SCHEDULE.
- 10 DOMESTIC WATER PIPING SUPPORTED FROM STRUCTURE ABOVE CEILING.
- 11 DOMESTIC WATER PIPING DOWN INSIDE WALL AND EXTENDED TO FIXTURE(S)/EQUIPMENT.
- 12 PRESSURE/TEMPERATURE BALANCING MIXING VALVE IN WALL FOR SHOWER WITH ACCESS DOOR FOR VALVE MAINTENANCE.
- 13 BALL VALVE (TYPICAL).
- 14 DOMESTIC WATER PIPING DOWN INSIDE WALL AT WATER VALVE BOX MOUNTED APPROXIMATELY 48" ABOVE FLOOR FOR ICE MAKER CONNECTION. WATER-TITE MODEL W9700 OR EQUAL WITH 1/2" CONNECTION AND 1/4 TURN VALVE. PROVIDE LEAD-FREE, ASSE1024 BRONZE DUAL CHECK BACKFLOW PREVENTER UPSTREAM OF VALVE BOX, WATTS MODEL SERIES LF7 OR APPROVED EQUAL.

- 15 AUTOMATIC TRAP PRIMER/DISTRIBUTION UNIT LOCATED INSIDE WALL WITH BALL VALVE AND ACCESS DOOR. EXTEND 1/2" PIPING TO EACH FLOOR DRAIN TRAP. UNIT SHALL BE PPP MODEL PR-500 PRIMER WITH DU-U-500 DISTRIBUTION UNIT, ASSE1018 LISTED, OR APPROVED EQUAL.
- 16 HOT WATER RECIRCULATING BALANCE VALVE.
- 17 EXTERIOR FREEZE-PROOF RECESSED WALL HYDRANT WITH VACUUM BREAKER, KEY CONTROL, NB BOX AND COVER. WATTS MODEL HY-725 OR APPROVED EQUAL.
- 18 HOT WATER RECIRCULATING PUMP. TACO MODEL 007 OR APPROVED EQUAL, WITH ALL BRONZE CONSTRUCTION, 4 G.P.M. @ 9' HEAD, 1/25 HP, 115V/1Ø. PROVIDE TACO TIMER/AQUASTAT UNIT TO ENERGIZE PUMP DURING OCCUPIED TIMES AND MAINTAIN SYSTEM TEMPERATURE OF 140°F.
- 19 GUY GRAY WALL MOUNTED VALVE BOX WITH "DOU-CLOZ" VALVES AND 2" STANDPIPE, LOCATED 48" ABOVE FLOOR WITH TRAP AS LOW TO FLOOR AS POSSIBLE.
- 20 DOMESTIC COLD WATER SERVICE UP THRU FLOOR IN SEALED PIPE SLEEVE WITH MAIN SHUT-OFF VALVE AND LOW POINT DRAIN VALVE. MOUNT DOMESTIC WATER ASSEMBLY AT APPROXIMATELY 36" ABOVE FLOOR.
- 21 2" DOMESTIC WATER INCOMING SERVICE BELOW GRADE, EXTENDED 5'-0" BEYOND BUILDING. REFER TO CIVIL DRAWINGS FOR CONTINUATION.
- 22 MANUFACTURER PROVIDE CONDENSATE PUMP FOR DUCTLESS SPLIT SYSTEM.
- 23 GRAVITY SLOPED CONDENSATE PIPING SLOPED AT 1/8" PER FOOT.
- 24 EXTEND TO SPLASH BLOCK OUTSIDE.

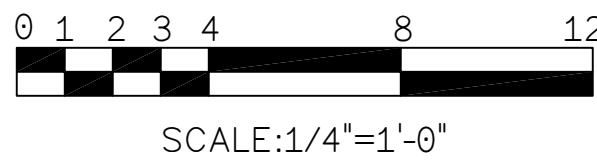
PIPING LEGEND

	SAN	SANITARY PIPE
	V	VENT PIPE
		COLD WATER PIPE
		HOT WATER PIPE
		HOT WATER RECIRC. PIPE
	CD	CONDENSATE DRAIN PIPE
	RS	REFRIGERANT SUCTION
	RL	REFRIGERANT LIQUID
	F	FIRE PIPE
	SP	SPRINKLER PIPE
		UNION
		PRESSURE REDUCING VALVE
		BALANCING VALVE
		DIRECTION OF LIQUID FLOW
		GAS COCK
		BALL VALVE
		CHECK VALVE
		STRAINER
		PRESSURE GAUGE
		THERMOMETER
		PIPE DOWN
		PIPE UP

	C.O.	CLEANOUT (FLOOR & WALL)
		ANGLE STOP VALVE
		HOSE BIBB
		WALL HYDRANT
		FLOOR DRAIN
		FLOOR SINK

ABBREVIATIONS LIST

EX.	EXISTING
F.D.	FLOOR DRAIN
F.S.	FLOOR SINK
F.P.M.	FEET PER MINUTE
FT.	FOOT
FT ²	SQUARE FEET
HP	HORSEPOWER
LBS.	POUNDS
TYP.	TYPICAL
V.T.R.	VENT THRU ROOF



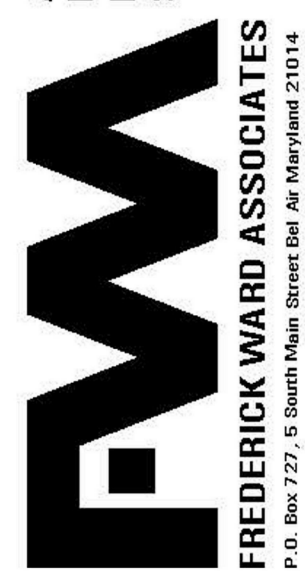
NOTICE TO CONTRACTORS:

ALL CONTRACTORS PRIOR TO BID SUBMISSION PROCESS SHALL VISIT PROPOSED WORK SITE AND FIELD VERIFY ALL EXISTING CONDITIONS. ANY CONDITIONS THAT DIFFERS FROM THAT SHOWN ON THIS PLAN SHALL BE REPORTED TO ARCHITECT/ENGINEER SO THAT NEW AND REVISED BID DRAWINGS OR INFORMATION MAY BE ISSUED. MODIFICATIONS TO SCOPE OF WORK WHICH RESULTS FROM CONTRACTORS NEGLECT TO VISIT THE SITE PRIOR TO SUBMITTING BID, SHALL BE THE CONTRACTORS SOLE RESPONSIBILITY.

REVISIONS

REV#	DATE	DESCRIPTION

ARCHITECTS
ENGINEERS
PLANNERS
SURVEYORS



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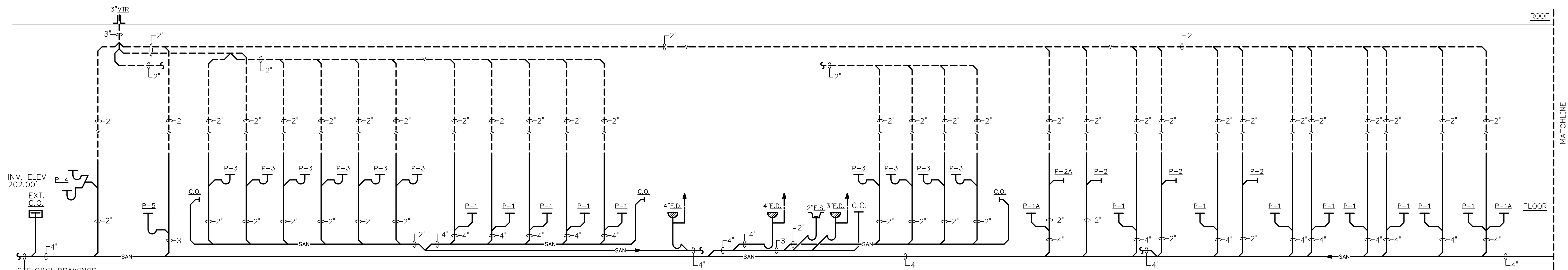
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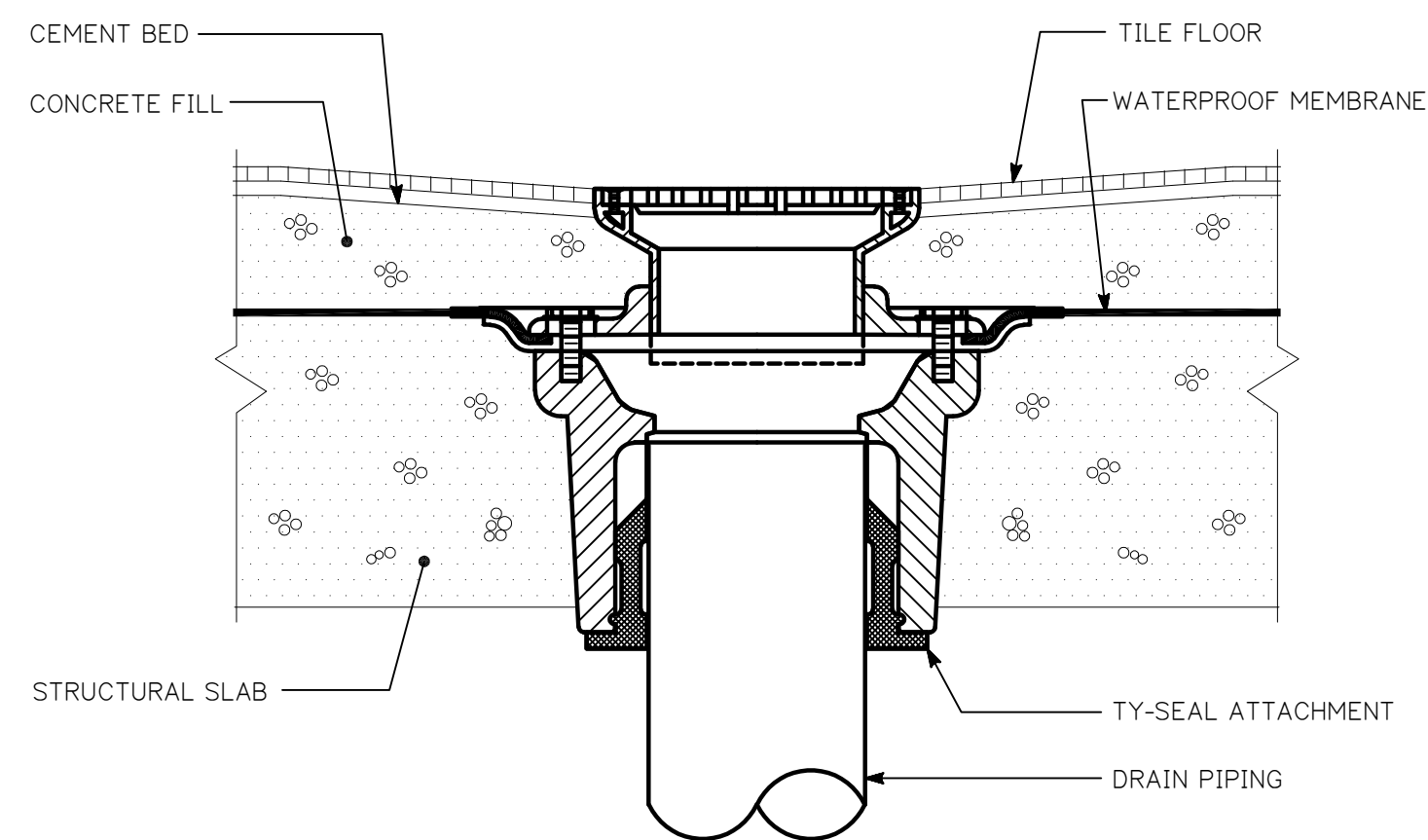
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IPC JOB NUMBER
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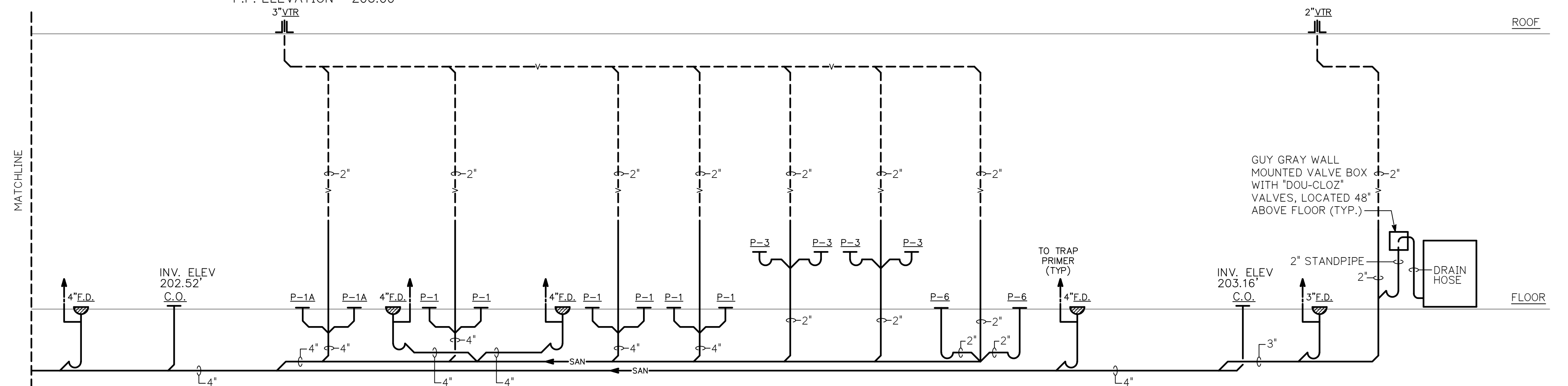


SANITARY RISER DIAGRAM

NO SCALE
F.F. ELEVATION = 206.00'

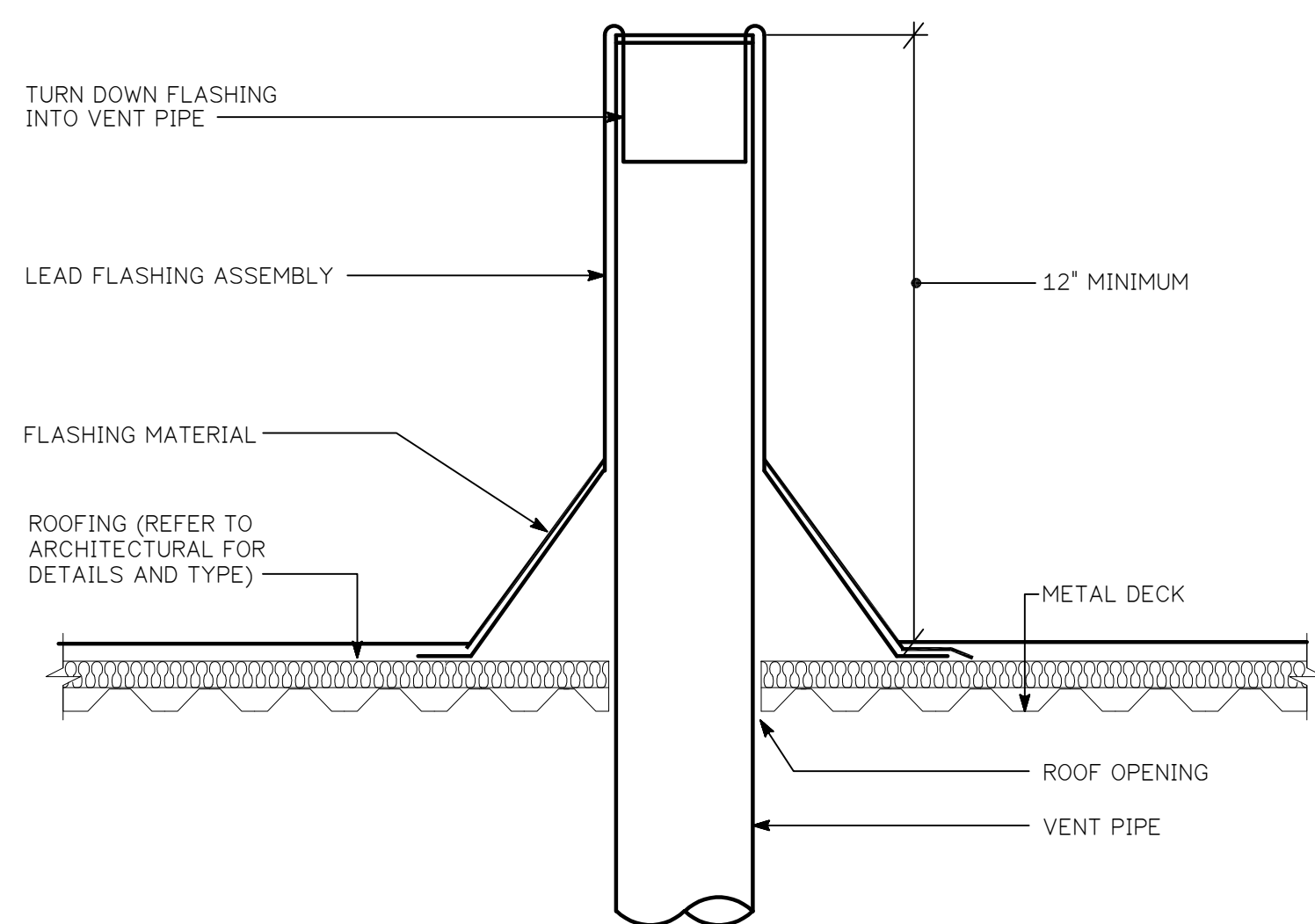


FLOOR DRAIN
NO SCALE

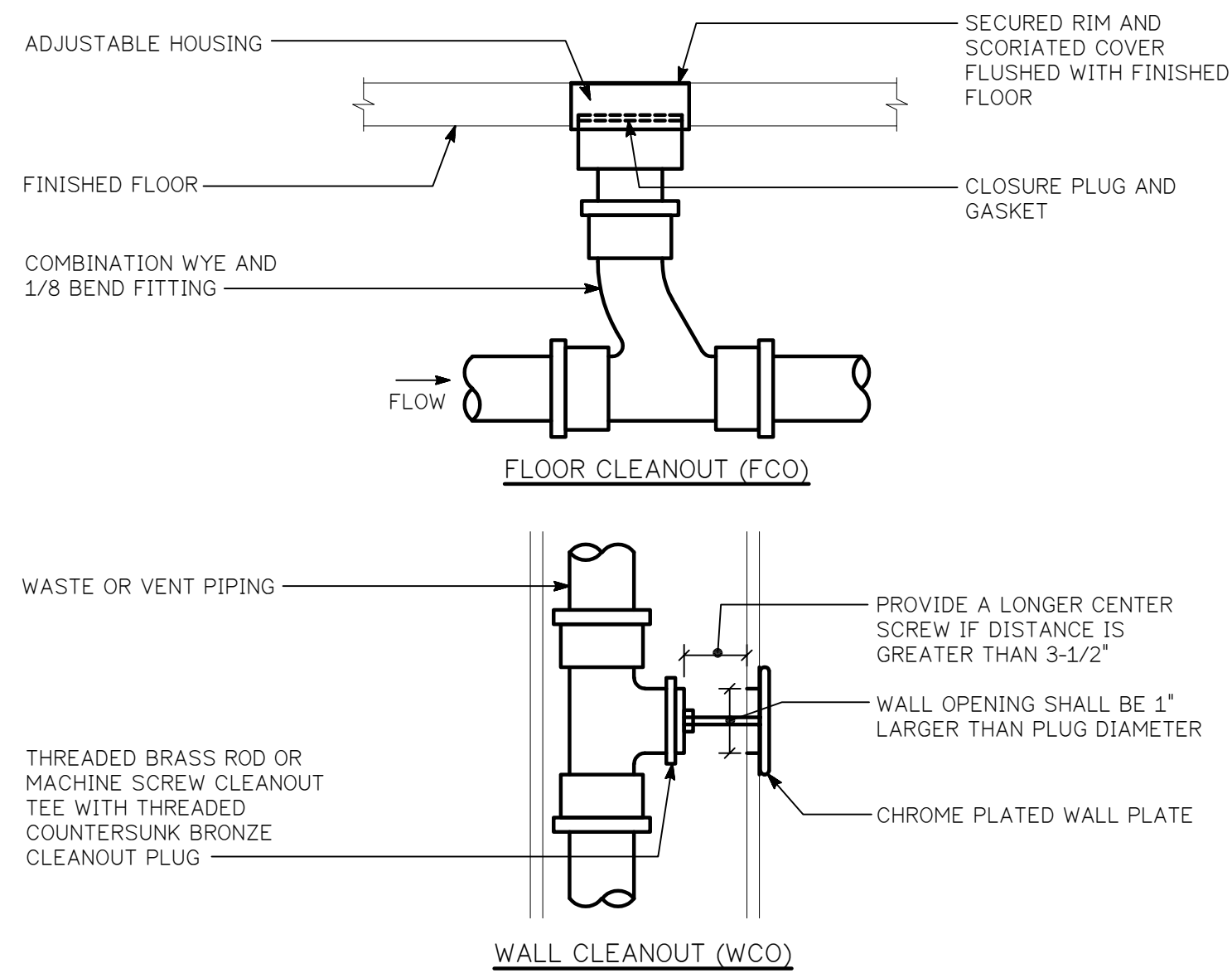


SANITARY RISER DIAGRAM

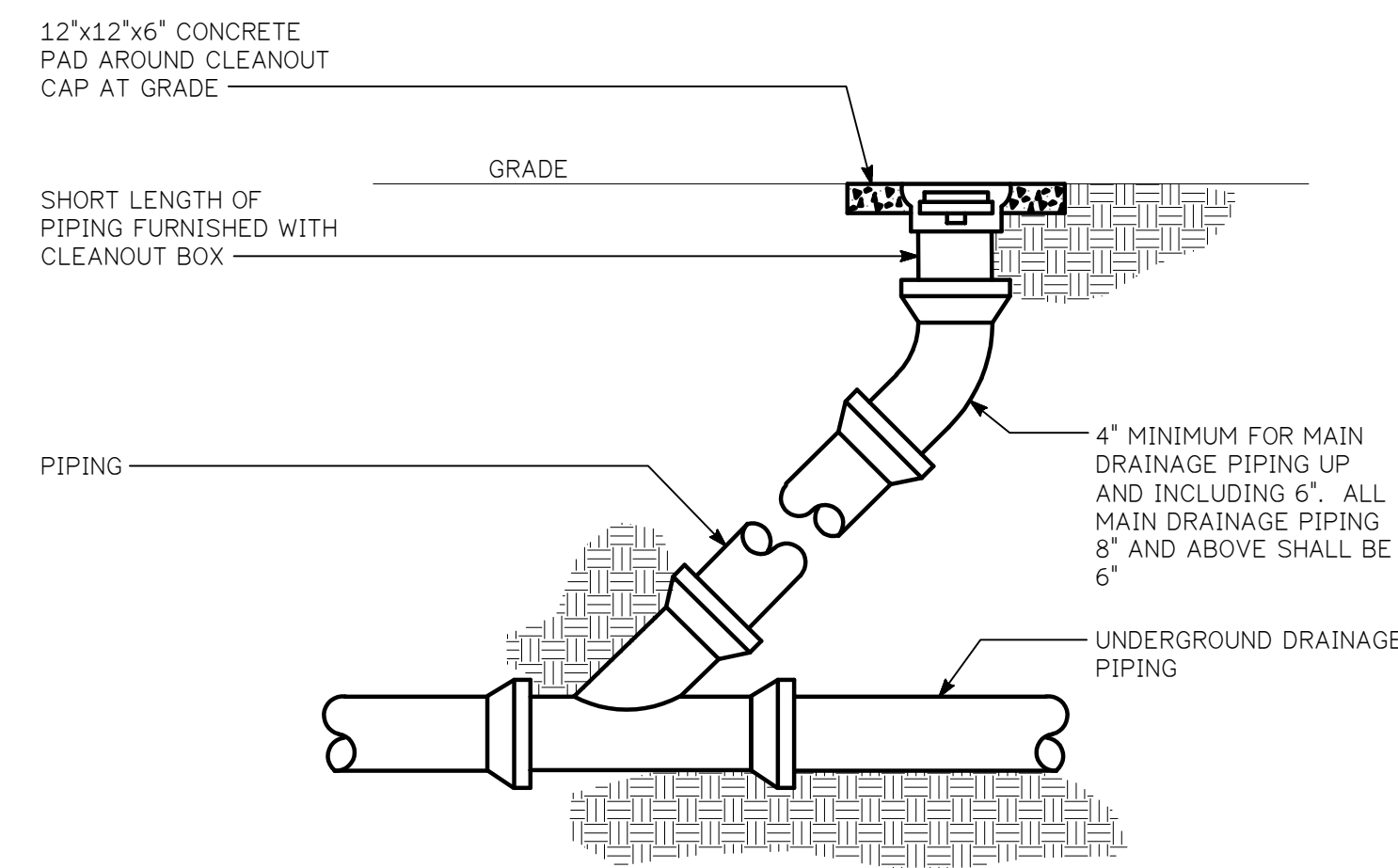
NO SCALE
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VENT PIPE THRU ROOF DETAIL
NO SCALE



INTERIOR CLEANOUT DETAIL
NO SCALE



EXTERIOR CLEANOUT DETAIL
NO SCALE

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DRAWING NO: P3
IDC JOB NUMBER: 18-076

RE-BID/PERMIT SET 11/03/2023



CECIL COUNTY PUBLIC SCHOOLS
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NEW FIELD HOUSE AT STADIUM
1688 Perryville Rd, Perryville, MD 21903

PIPING/PLUMBING SPECIFICATIONS

1. SECTION 15010 - BASIC PIPING/PLUMBING REQUIREMENTS

- A.

The work of each of the following sections includes furnishing and installing the material, equipment and systems complete as specified and/or indicated on the drawings. The installations, when finished, shall be complete and coordinated, ready for satisfactory service.

B.

All work under this contract shall be done in strict accordance with all applicable municipal, state, county, NFPA, International and local codes that govern each particular trade.

C.

The contractor shall make applications and pay all charges for all necessary permits, licenses and inspections as required under the above codes. Upon completion of the work, the customary certifications of approval shall be furnished. The contractor shall also coordinate and make all required submissions to the local utility companies (ie: load letters, water/gas demand forms, etc.).

D.

No materials or equipment shall be used in the work until approved. Before submission of the shop drawings, and not more than thirty (30) days after award of the contract, the contractor shall submit for approval, a complete list of all materials and equipment which he intends to furnish, giving manufacturer and catalog numbers. A complete list of proposed sub-contractors shall also be submitted.

E.

The contractor shall examine all drawings and specifications and shall visit the site and inspect the existing conditions in person. Certain areas may have been in-accessible at the time of the engineers survey and may only be visible during or after the demolition phase; therefore, those systems and coordination of those systems, shall become the responsibility of the contractors. Failure to comply with this requirement shall not relieve the contractors of their responsibilities for complying with the intent of the contract documents.

F.

The contractor shall snake/camera all existing below floor/grade sanitary systems serving the project area, as required, to verify sizes, inverts, direction of slope, etc. and ensure that the new sanitary system can connect to the existing system where indicated on the drawings.

G.

The drawings indicate the general arrangement of the plumbing installations. Details of proposed departures due to actual field conditions or other causes shall be submitted for approval prior to installation. Reworking of completed items due to improper field coordination shall be at the contractor's expense.

H.

Provide sufficient access and clearance for all items of equipment requiring servicing and maintenance, such as valves, drains, vents, filters, traps, etc. and major items of equipment.

I.

The contractor shall perform all necessary cutting and patching as required to complete the installation of the all plumbing work. Patching of walls, floors, ceilings, roof, etc. shall match the adjacent surfaces.

J.

The contractor shall prepare three (3) copies of a record and information booklet. The booklet shall be bound in a three ring loose-leaf binder. Provide the following data in the booklet:

1) Catalog data on each piece of equipment furnished

2) Approved shop drawings on each piece of equipment furnished

3) Maintenance, operation and lubrication instruction on each piece of equipment furnished

4) Manufacturer's and contractor's guarantees

5) Water balancing reports

6) Commissioning reports as required

7) Schedule/description of all service work/maintenance inspections required by the paragraphs of this section

K.

The entire new and existing piping/plumbing system shall be tested hydrostatically before insulation covering is applied and proved tight under the following gauge pressures:

Sanitary piping as specified below

Domestic water piping 100 psig

Refrigeration liquid and suction piping 225/400 psig

Fire protection piping Per NFPA

Contractor shall also inspect and verify all existing piping located within the project area which listed to remain, for leaks, defects, etc. and repair as required.

L.

All soil, waste and vent piping shall be tested by the contractor. The entire new drainage system and venting system shall have all necessary openings plugged and filled with water to the level of ten (10) feet above the main or branch being tested. The system shall hold this water for thirty (30) minutes without showing a drop greater than four (4) inches.

Note: If any code or authority requires testing which is different than the test listed above, the more stringent test shall be performed.

M.

Upon completion of the plumbing installations, the contractor shall provide a complete set of prints of the contract drawings which shall be legibly marked in red pencil to show all changes and departures of the installation as compared with the original design. They shall be suitable for use in preparation of as-built drawings.

N.

All piping and valve systems shall be identified with labels and tags. Materials shall be as manufactured by Seton name plate corporation. Color coding for piping shall be as follows:

Service

Domestic Cold Water

Domestic Hot Water and Recirc

Sanitary Sewer and Vent

Storm Water and Condensate

Refrigerant Liquid/Suction

Fire Protection

Color

Green

Yellow

Green

Green

Yellow

Red

O.

All new installations, including all materials and labor shall be guaranteed for a period of one (1) year from date of owner acceptance. The above shall not in any way void or abrogate equipment manufacturer's guarantee or warranty. Certificates of guarantee shall be delivered to the owner.

P.

Contractor shall also provide one (1) year free service to keep the equipment in operating condition. This service shall be provided and rendered upon request when notified of any equipment malfunction.

Q.

In addition to the first year warranty period, the contractor shall provide, at no additional cost to the owner, a minimum of four (4) service calls and maintenance inspections. A complete outline of the required maintenance and the proposed schedule shall be included in a "record and information booklet", for review and acceptance by the owner/representative and engineer. The inspections are to be performed at three (3) month intervals for a total of four (4) service calls and inspections during the first year warranty period plus the original system start-up commissioning.

Upon completion of each scheduled inspection, the contractor shall deliver to the building owner or owners representative, within (48) hours of completion, two (2) copies of the completed inspection report for record purposes.

R.

The service contractor shall, at the ninth month, advise the owner of the termination date of the above services. This contractor shall also provide the owner with a detailed proposal, reflecting annual escalation, for the continuation of the services and inspections described above.

2. SECTION 15050 - BASIC PIPING/PLUMBING MATERIAL & METHODS

A.

Provide all labor and materials necessary to furnish and install all piping systems on this project, including interior storm, sanitary, sanitary vent, domestic water, condensate drainage, condenser water, chilled water, natural gas and refrigerant piping systems.

B.

Piping and valves shall be as follows:

1) Sanitary drains below floor slab/grade:

Piping: Schedule 40 PVC DWV pipe.

Fittings: Solvent weld joints.

2) Sanitary drains and sanitary vents above floor inside building:

Piping: Schedule 40 PVC DWV pipe.

Fittings: Solvent weld joints.

3) Domestic hot, cold and hot water recirc water piping inside building:

Piping: All water pipings shall be hard copper, type L above ground, type K below ground.

Fittings: Lead free solder type wrought copper.

Gate Valves: 2-1/2" or 3"= 150 psi, union bonnet, rising stem, solid wedge, bronze body, bonnet and stem. Nibco S-134.

Ball Valves: 2" or smaller= 150 psi, two piece body, full port, blowout-proof stem, chrome plated ball, bronze body and stem, reinforced TFE seat ring. Nibco S-585-70.

Unions: 125 psi., wrought copper, ground joint solder ends.

4) Water heater T&P relief piping:

Piping: type DWV seamless copper tubing

Fittings: wrought copper solder drainage fittings

5) Atmospheric condensate drainage and indirect waste piping:

Piping: 1-1/4" or smaller= type DWV seamless copper tubing or schedule 40 plastic pipe. 2" or larger= schedule 40 plastic pipe.

Fittings: 1-1/4" or smaller= wrought copper solder drainage fittings or solvent sealed plastic fittings. 2" or larger= solvent sealed plastic fittings.

** All indirect waste lines shall be bolted to wall/floor with supports and flanges.

** All indirect waste piping greater then 24" in horizontal developed length or 48" in total developed length shall be provided with trap at equipment drain connection.

6) Refrigerant piping:

Piping: Type L hard copper refrigerant tube, dehydrated and sealed.

Fittings: Wrought copper solder type with silfos.

7) Fire protection:

Piping and fittings as required by N.F.P.A. regulations and as hereinafter specified.

C.

Copper pipe shall be revere, anaconda, or chase types "L" and "K" hard drawn, with approved solder fittings.

D.

Cast iron piping shall be service weight drainage piping and shall conform to the requirements of the C.I.S.P.I.. Each length of pipe and each fitting shall be clearly marked with the manufacturer's initials and pipe classifications.

E.

Steel piping shall be similar and equal to National Tube Company, Republic or Bethlehem black or zinc-coated (galvanized) steel as hereinbefore specified. Pipe shall be free from all defects which may affect the durability of the intended use. Each length of pipe shall be stamped with the manufacturer's name.

F.

All hangers for copper piping shall be copper clad, split ring swivel type, having rods with machine threads and threaded copper clad ceiling flange. Cast iron and steel piping supports shall be similar without copper clad and prime paint finish. Maximum horizontal distance between pipe hangers shall be as follows:

Copper Piping = 12'

Copper Tubing (<=1-1/4") = 6'

Copper Tubing (>=1-1/2" = 10'

PVC Piping = 4'

G.

Provide dielectric couplings where non-ferrous metal piping is joined to ferrous metal piping. The gasket material shall be capable of withstanding the temperatures and pressures within the piping system in which installed. Submit dielectric coupling and gasket material for approval.

3. SECTION 15250 - PIPING INSULATION

A.

All domestic water, piping systems shall be insulated with fiberglass insulation. All insulation shall be noncombustible or shall have a flame spread index of not more then 25 and a smoke-developement index of not more then 50 when tested in accordance with ASTM E84.

B.

Pipe insulation shall be premolded fiberglass insulation with an all service jacket, Owens Corning fiberglass SSL-II. Fittings shall be insulated and covered with PVC covers. All domestic hot water piping smaller then 1-1/2" shall have 1" of insulation and all domestic hot water piping between 1-1/2" and 4" shall have 1-1/2" of insulation. All domestic cold water and storm water piping shall have 1" of insulation.

5. SECTION 15400 - PLUMBING

A.

The work covered by this section of the specifications consists of furnishing all labor, equipment and materials in connection with the rough-in, final setting and connections to all plumbing fixtures. The contractor shall carefully review the conditions at the site and all of the contract drawings to determine the extent of the new and renovation plumbing work required.

B.

All plumbing fixtures shall be complete in every detail with all trimmings and connections. All fixtures shall be designed to prevent the backflow of polluted water or waste into the water supply system. Fixtures shall be as listed below or approved equal:

P-1 Flush Valve Water Closet: Crane #3325 "Whirltron", floor mounted, bottom outlet, elongated rim bowl, 15" high, 1.28 GPF with vitreous china construction, 2" trapway, 1-1/2" top spud, 12" rough-in, bolt caps, wall support and Church heavy duty white plastic seat with open front and check hinge. Provide Sloan #111-1.28 manual flush valve.

P-1A Flush Valve Water Closet (handicapped): Crane #3H701 "Hymont", floor mounted, bottom outlet, elongated rim bowl, 16-3/4" high, 1.28 GPF with vitreous china construction, 2" trapway, 1-1/2" top spud, 12" rough-in, bolt caps, wall support and Church heavy duty white plastic seat with open front and check hinge. Provide Sloan #111-1.28 manual flush valve.

P-2 Urinal: Crane #7309 "Manhattan", 1.0 GPF, vitreous china, wall hung, siphon jet action with integral trap with 3/4" top inlet spud and J.R. Smith fig. 0635 urinal support. Provide Sloan #8186 "Optima" sensor activated flush valve, 1.0 GPF flush rate, battery powered (4-"AA" batteries), ADA compliant, 3 second delay flush w/override flush control, adjustable sensor range.

P-2A Urinal (handicapped): Crane #7309 "Manhattan", 1.0 GPF, vitreous china urinal, siphon jet action with integral trap, 3/4" top inlet spud and J.R. Smith fig. 0635 urinal support. Provide Sloan #8186 "Optima" sensor activated flush valve, 1.0 GPF flush rate, battery powered (4-"AA" batteries), ADA compliant, 3 second delay flush w/override flush control, adjustable sensor range. Mount at handicapped height. Coordinate with local authorities.

P-3 Wall Hung Lavatory (handicapped): Crane #1412V "Harwich" with vitreous china construction, front overflow, faucet ledge, grid drain, tailpiece, cast brass "P" trap, tubing to wall escutcheon, key operated supply valves with rigid supplies and chair carrier. Provide Symmons S-74-G tempered supply/metering 4" center set vandal resistant faucet, mixing valve for adjustable tempering and adjustable time limit stop All exposed waste piping and hot and cold water piping shall be insulated with Truebro Handi Lav-Guard model 102 insulation kit with white finish.

P-4 Electric Water Cooler (handicapped): Oasis #P8ACSL air cooled, wall-hung, bi-level, barrier-free wheelchair level. Unit shall be constructed of heavy gauge stainless steel, with front/side push pads and one-piece bubbler. Unit shall deliver a minimum of 8.0 gph of 50 degree f. drinking water with 90 degree f. water inlet at room temperature. Compressor shall be 1/4 HP, 120V, using R-134A refrigerant.

P-5 Janitor's Sink: Fiat #MSB2424, 24"x24"x10" overall size, with one-piece molded stone basin and stainless steel drain body, #MSG2424 wall guard and 3" outlet. Provide Fiat #830AA faucet with wall to spout end, 10-1/2" spout, hose end connection, integral vacuum breaker, spout brace, adjustable union couplings and stop shanks.

P-6 Shower system (ADA compliant): Shower shall be fitted with Leonard Surfashower Wall-Mounted Shower Systems SS-7600-100/3ISA-D2L/501P(G)-44 Copper encapsulated thermostat assembly with brass shuttle, H-06 fixed spray shower head, inline diverter valve with lever handle, hand shower with spray head, 2.5 GPM (9.5 l/min) chrome hose, glide bar, double check valve, supply elbow, stainless steel cover, 18 gauge, #4 finish, sloping top cap, bottom cap, vandal resistant screws, factory-assembled.

C.

Sanitary vents thru roof shall be one-piece PVC/rubber boot assembly with pipe clamp flashed and sealed into existing roofing system.

D.

The Electric Water Heater shall be State or an approved equal. Heater shall be rated at volts and phase as indicated on drawings and be listed by Underwriters' Laboratories. Tank shall be factory fired with glass lining with 150 psi working pressure and equipped with extruded high density magnesium anode at T&P relief valve. Electric heating element shall be medium watt density with zinc plated copper sheath. The controls shall include a thermostat with each element and a high temperature cutoff. The jacket shall provide full size control compartments for performance of service and maintenance thru front panel openings and enclose the tank with insulation. The drain valve shall be located in the front for ease of servicing. Outer jacket shall be baked enamel finish. Heater shall have a three (3) year limited warranty for commercial installation, as outlined in the written warranty. Fully illustrated instruction manual shall be included. Insulation must meet ashrae standard 90a-1980 for energy efficiencies.

F.

Floor drains shall be Watts or approved equal. Drain shall be model FD-100, cast iron with anchor flange, reversible clamping collar, primary/ secondary weepholes and adjustabe round nickle-bronze strainer. Drain to be primed from nearest flush valve or where indicated on drawings.

G.

Floor sinks shall be Watts Drainage FS-750. Drain shall be 12"x12"x10" deep, with cast iron flange, acid resistant coated interior, acid resistant coated cast iron grate and aluminum dome bottom strainer.

H.

Domestic water service lead free, double check valve assembly shall be Watts series LF007 or approved equal. Valve shall be ASSE1015 listed and AWWA C510 compliant with sizes 1/2"-3". Construction shall be bronze body and cover and a maximum working pressure of 175 psi.

I.

Undersink thermostatic mixing valve shall be Watts USG-B-M1 or approved equal with ASSE1070 listing. Valve shall have bronze body construction with tamper-proof locking cap, internal check valves, strainer and complete with 3/8" compression fittings. Temperature setting range shall be 80-120 degree F with a flow range of 0.5-2.5 gpm.

J.

Potable water systems shall be disinfected prior to use. The method to be followed shall be that prescribed by the health authority and code requirements.

*Professional Certification: I hereby certify that these documents were prepared and/or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No.: 28228, Expiration Date: 01/12/2025

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CHECKED BY:
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DRAWING NO:

P4

IDC JOB NUMBER
18-076

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NEW FIELD HOUSE AT STADIUM
1688 Perryville Rd, Perryville, MD 21903

RE-BID/PERMIT SET 11/03/2023

GENERAL NOTES

- A. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE 2017 NATIONAL ELECTRICAL CODE AND ALL LOCAL CODES.
- B. CONNECT EXIT LIGHTS, EMERGENCY BATTERY UNITS AND NIGHT LIGHTS (NL) TO UNSWITCHED PORTION OF LIGHTING CIRCUIT SERVING RESPECTIVE AREA.
- C. ALL WIRING SHALL BE COPPER, #12 AWG MINIMUM, TYPE THWN/THHN INSULATION, INSTALLED IN CONDUIT (3/4" MINIMUM). NO ROMEX OR BX CABLE PERMITTED. MC CABLE MAY BE USED, WHERE PERMITTED BY CODE, FOR LIGHTING FIXTURE WHIPS ONLY.
- D. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION OF LIGHTING FIXTURES AND GRID COORDINATION. VERIFY THAT ADEQUATE CLEARANCE FOR INSTALLATION, MAINTENANCE AND HEAT DISSIPATION IS AVAILABLE BEFORE ORDERING LIGHTING FIXTURES.
- E. ELECTRICAL CONTRACTOR SHALL VERIFY ALL VOLTAGES OF MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
- F. THE WIRE SIZE INDICATED IN THE HOMERUN SHALL BE USED THROUGHOUT THE CIRCUIT.
- G. SEAL ALL CONDUIT PENETRATIONS THRU RATED WALLS AND FLOORS TO MAINTAIN FIRE INTEGRITY. REFER TO ARCHITECTURAL DRAWINGS FOR FIRE WALL LOCATIONS.
- H. CONTRACTOR SHALL CLEAN, RELAMP, REPAIR OR REPLACE ALL BROKEN OR DEFECTIVE BALLASTS AND PARTS OF EXISTING LIGHTING FIXTURES.
- I. GROUND, PHASE AND NEUTRAL CONDUCTORS SHALL BE PIG-TAILED IN OUTLET BOXES OR MULTI-OUTLET ASSEMBLY FOR RECEPTACLES SO THAT GROUND AND ELECTRICAL SERVICE TO OTHER RECEPTACLES ON THE SAME MULTI-WIRE CIRCUIT WILL NOT BE DISTURBED IF A RECEPTACLE IS REMOVED.
- J. ALL BRANCH CIRCUITS SHALL BE RUN CONCEALED IN EXISTING AND NEW WALLS. CUT AND PATCH EXISTING WALLS AND SURFACES AS REQUIRED.
- K. ELECTRICAL CONTRACTOR SHALL USE CONDULET SEALING FITTINGS WITH APPROVED SEALING COMPOUND ON ALL CONDUITS PASSING FROM INTERIOR TO EXTERIOR OF A BUILDING AND OF THE INTERFACE OF WIDELY DIFFERENT SPACE TEMPERATURE.
- L. PROVIDE TYPED, UPDATED PANELBOARD DIRECTORIES FOR ALL PANELBOARDS.

ELECTRICAL SYMBOLS LIST

NOTE: ALL MOUNTING HEIGHTS ARE TO CENTER LINE OF THE OUTLET BOX UNLESS OTHERWISE INDICATED.

SYMBOL	DESCRIPTION
	FIXTURE-FLUORESCENT-CEILING, STRIP
	FIXTURE-INCANDESCENT/HID-CEILING, WALL BRACKET
	EXIT LIGHT-CEILING, WALL
	EMERGENCY BATTERY UNIT, REMOTE HEAD
	SWITCH-SINGLE POLE M.H. 3'-10"
	SWITCH-MOTOR RATED
	RECEPTACLE-20A-125 VOLTS-DUPLEX, DOUBLE DUPLEX M.H. 1'-8"
	JUNCTION BOX
	TELEPHONE TERMINAL BACKBOARD
	PANELBOARD 120/208 VOLTS-M.H. 6'-6" TO TOP
	DISCONNECT SWITCH-UNFUSED, FUSED M.H. 5'-6" TO TOP
	MOTOR-SINGLE PHASE, THREE PHASE, HORSEPOWER AS NOTED
	HEATING ELEMENT-CAPACITY AS NOTED
	DRAWING NOTE
	GROUND CONNECTION
	BRANCH CIRCUIT-UNDERGROUND
	BRANCH CIRCUIT-EXPOSED ON CEILING OR WALLS
	BRANCH CIRCUIT-IN CEILING OR WALLS
	CONDUIT-DOWN, UP
	HOMERUN TO PANEL-LETTER AND NO. INDICATES CIRCUIT NUMBER. NO. OF CROSSLINES INDICATES NO. OF CONDUCTORS WHEN MORE THAN 3.

ABBREVIATIONS

AFF	- ABOVE FINISHED FLOOR	NEC	- NATIONAL ELECTRIC CODE
C,CDT	- CONDUIT	NL	- NIGHT LIGHT
DN	- DOWN	PC	- PHOTOCELL
DWG	- DRAWING	TC	- TIME CLOCK
EF	- EXHAUST FAN	UG	- UNDERGROUND
GFI	- GROUND FAULT INTERRUPTER	W/	- WITH
MH	- MOUNTING HEIGHT	WP	- WEATHERPROOF
MTD	- MOUNTED	XFMR	- TRANSFORMER

NOTICE TO CONTRACTORS:

ALL CONTRACTORS PRIOR TO BID SUBMISSION PROCESS SHALL VISIT PROPOSED WORK SITE AND FIELD VERIFY ALL EXISTING CONDITIONS. ANY CONDITIONS THAT DIFFERS FROM THAT SHOWN ON THIS PLAN SHALL BE REPORTED TO ARCHITECT/ENGINEER SO THAT NEW AND REVISED BID DRAWINGS OR INFORMATION MAY BE ISSUED. MODIFICATIONS TO SCOPE OF WORK WHICH RESULTS FROM CONTRACTORS NEGLECT TO VISIT THE SITE PRIOR TO SUBMITTING BID, SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY.

COMcheck Software Version 4.1.1.0
Interior Lighting Compliance Certificate

Project Information

Energy Code: 2018 IECC
Project Title: Cecil County Public Schools - Field House
Project Type: New Construction

Construction Site: 201 Booth Street, Elkton, MD 21921
Owner/Agent: Cecil County Public Schools - Field House
Designer/Contractor: Eric Levison, Integrated Design Consultants, 139 N. Main Street, Suite #308, Bel Air, MD 21014, 443.787.4264, EricL@IDCmap.net

Reduced interior lighting power. Requirements are implicitly enforced within interior lighting allowance calculations.

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft ²)	C Allowed Watts / ft ²	D Allowed Watts (B X C)
Exercise Center	4400	9.55	2574
Total Allowed Watts =			2574

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps / Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
Exercise Center LED 1: A: Other: LED 1 copy 1: B: Other:	1 1	30 13	50 42	1500 546
Total Proposed Watts =			2046	

Interior Lighting PASSES: Design 21% better than code

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2018 IECC requirements in COMcheck Version 4.1.1.0 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Eric Levison - Integrated Design Consultants
Name - Title Signature Date

Project Title: Cecil County Public Schools - Field House
Data Filename: S:\IDC Projects\2018\FWA\18-076 Cecil Co Field House\ELECDocs\LIGHTING COMCHECK.ccdk
Report date: 05/13/21
Page: 1 of 6

COMcheck Software Version 4.1.1.0
Exterior Lighting Compliance Certificate

Project Information

Energy Code: 2018 IECC
Project Title: Cecil County Public Schools - Field House
Project Type: New Construction
Exterior Lighting Zone: 2 (Neighborhood business district)

Construction Site: 201 Booth Street, Elkton, MD 21921
Owner/Agent: Cecil County Public Schools - Field House
Designer/Contractor: Eric Levison, Integrated Design Consultants, 139 N. Main Street, Suite #308, Bel Air, MD 21014, 443.787.4264, EricL@IDCmap.net

Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts / Unit	D Tradable Wattage	E Allowed Watts (B X C)
Walkway < 10 feet wide	300 ft of	0.5	Yes	150
Total Tradable Watts (a) =			150	
Total Allowed Watts =			150	
Total Allowed Supplemental Watts (b) =			400	

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.
(b) A supplemental allowance equal to 400 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Proposed Exterior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps / Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
Walkway < 10 feet wide (300 ft of walkway length): Tradable Wattage LED 1: D/O: Other:	1	16	13	202
Total Tradable Proposed Watts =			202	

Exterior Lighting PASSES: Design 63% better than code

Exterior Lighting Compliance Statement

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2018 IECC requirements in COMcheck Version 4.1.1.0 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Eric Levison - Integrated Design Consultants
Name - Title Signature Date

Project Title: Cecil County Public Schools - Field House
Data Filename: S:\IDC Projects\2018\FWA\18-076 Cecil Co Field House\ELECDocs\LIGHTING COMCHECK.ccdk
Report date: 05/13/21
Page: 2 of 7

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GENERAL NOTES AND
SYMBOLS LIST

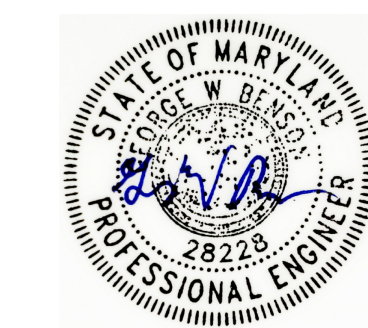
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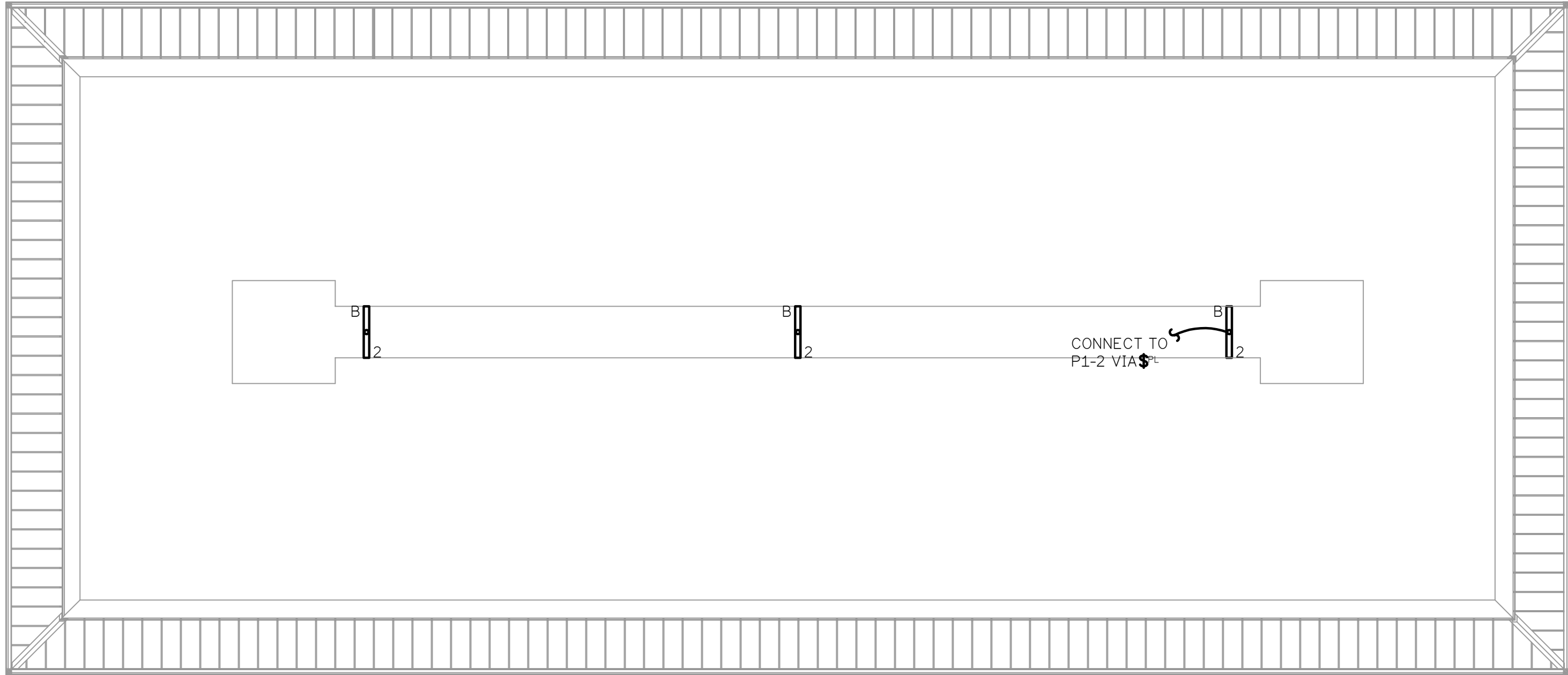
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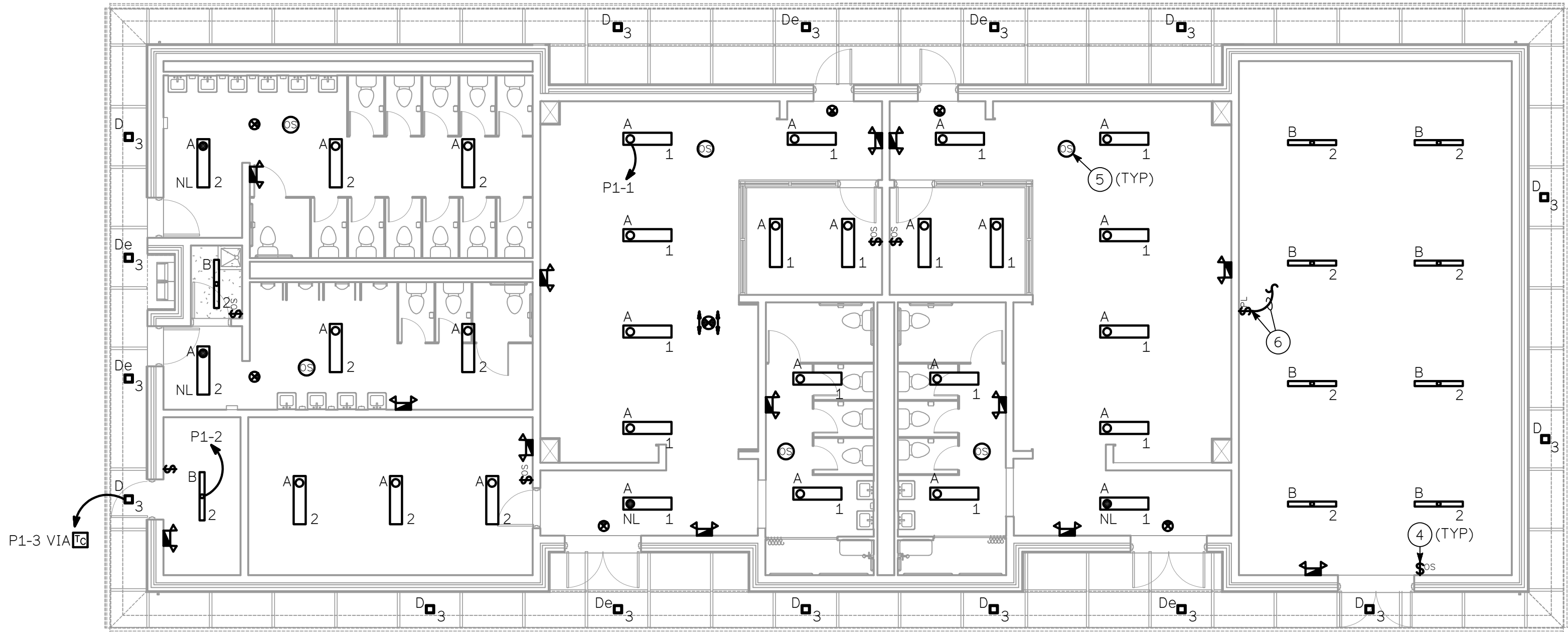
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①②③ LIGHTING PLAN - ATTIC/MECHANICAL SPACE
SCALE:1/4"=1'-0"



①②③ LIGHTING PLAN - MAIN LEVEL
SCALE:1/4"=1'-0"

DRAWING NOTES

- CONTRACTOR SHALL CONNECT ALL EMERGENCY EXIT SIGNS, BATTERY PACK FIXTURES, AND NIGHT LIGHTS TO UNSWITCHED PORTION OF LIGHTING CIRCUIT SERVING AREA.
- REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR GRID COORDINATION AND EXACT LOCATION OF LIGHT FIXTURES.
- THE CONTRACTOR SHALL NOTE BRANCH CIRCUIT WIRING IS NOT SHOWN; HOWEVER, CIRCUIT NUMBERS ARE SHOWN ADJACENT TO FIXTURES IN SUBSCRIPTS. ALL OCCUPANCY SENSORS AND SWITCHES SHALL CONTROL FIXTURE WITHIN SPACE SHOWN OR AS DESIGNATED WITH SUBSCRIPTS. PROVIDE BRANCH CIRCUIT WIRING AS REQUIRED TO ACCOMMODATE BOTH BRANCH CIRCUIT CONFIGURATION AND SWITCHING SCHEME AS INDICATED.
- PROVIDE WALL BOX MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR. COORDINATE EXACT MOUNTING LOCATION IN THE FIELD.
- PROVIDE CEILING MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR FOR CONTROL OF LIGHTING FIXTURES WITHIN AREA. CONTRACTOR SHALL PROVIDE INTERFACE, ASSOCIATED EQUIPMENT, ETC. TO INSTALL A FULLY FUNCTIONAL SYSTEM. COORDINATE EXACT MOUNTING LOCATION TO PROVIDE FULL VIEW OF AREA SERVED.
- PROVIDE PILOT LIGHT STYLE WALL SWITCH FOR CONTROL OF FIXTURE LOCATED IN ATTIC. CONTRACTOR SHALL LOCATE FIXTURE ADJACENT TO ATTIC ACCESS LADDER. COORDINATE EXACT MOUNTING LOCATION IN THE FIELD.

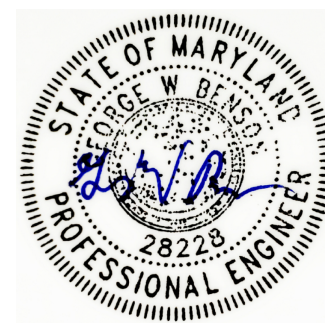
* LIGHTING FIXTURE SCHEDULE				
TYPE	INPUT	MOUNTING	DESCRIPTION/VOLTAGE	CATALOG NO.
A	50W LED 3500°K	SURFACE	4' LONG VANDAL RESISTANT LED FIXTURE WITH PRIMATIC POLYCARBONATE LENS AND STANDARD DRIVER. 120 VOLTS	LUMINAIRE CLF74-50W-3500K-120-277-CP-WHT
B	42W LED 3500°K	SURFACE	4' LONG LED STRIP FIXTURE WITH WRAP AROUND LENS AND STANDARD DRIVER. 120 VOLTS	COLUMBIA LCL4-35ML-EU
D	12.6W LED 4000°K	RECESSED	6"x6" SQUARE LED DOWN LIGHT WITH 1100 LUMEN OUTPUT, CLEAR LENS AND STANDARD DRIVER. 120 VOLTS	PRESCOLITE LF6SQSL-6SQSL 11L 40K 8 WT CL
De	12.6W LED 4000°K	RECESSED	6"x6" SQUARE LED DOWN LIGHT WITH 1100 LUMEN OUTPUT, CLEAR LENS AND EMERGENCY BATTERY BACK-UP WITH TEST SWITCH. 120 VOLTS	PRESCOLITE LF6SQSL EMR-6SQSL 11L 40K 8 WT CL
⦿	LED	UNIVERSAL	IMPACT RESISTANT EXIT SIGN WITH BLACK HOUSING AND RED LETTERING. COORDINATE LETTERING COLOR WITH LOCAL JURISTICATION. REFER TO FLOOR PLAN FOR MOUNTING. 277 VOLTS	EXITRONIX 600E SERIES
🚪	INCLUDED	SURFACE	VANDAL RESISTANT EMERGENCY EGRESS FIXTURE WITH BATTERY BACK-UP, WHITE HOUSING. 120 VOLTS	EXITRONIX CP-EMW SERIES
☼	INCLUDED	SURFACE	WEATHERPROOF EMERGENCY REMOTE HEAD. 12 VOLTS	EXITRONIX OCR SERIES

* COORDINATE FINISH OF ALL FIXTURES WITH ARCHITECT PRIOR TO PURCHASE

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EPL/GWB

DRAWING NO:

E2

IDC JOB NUMBER
18-076

LIGHTING PLANS,
SCHEDULE AND NOTES

NEW FIELD HOUSE AT STADIUM

1686 Perryville Rd, Perryville, MD 21903

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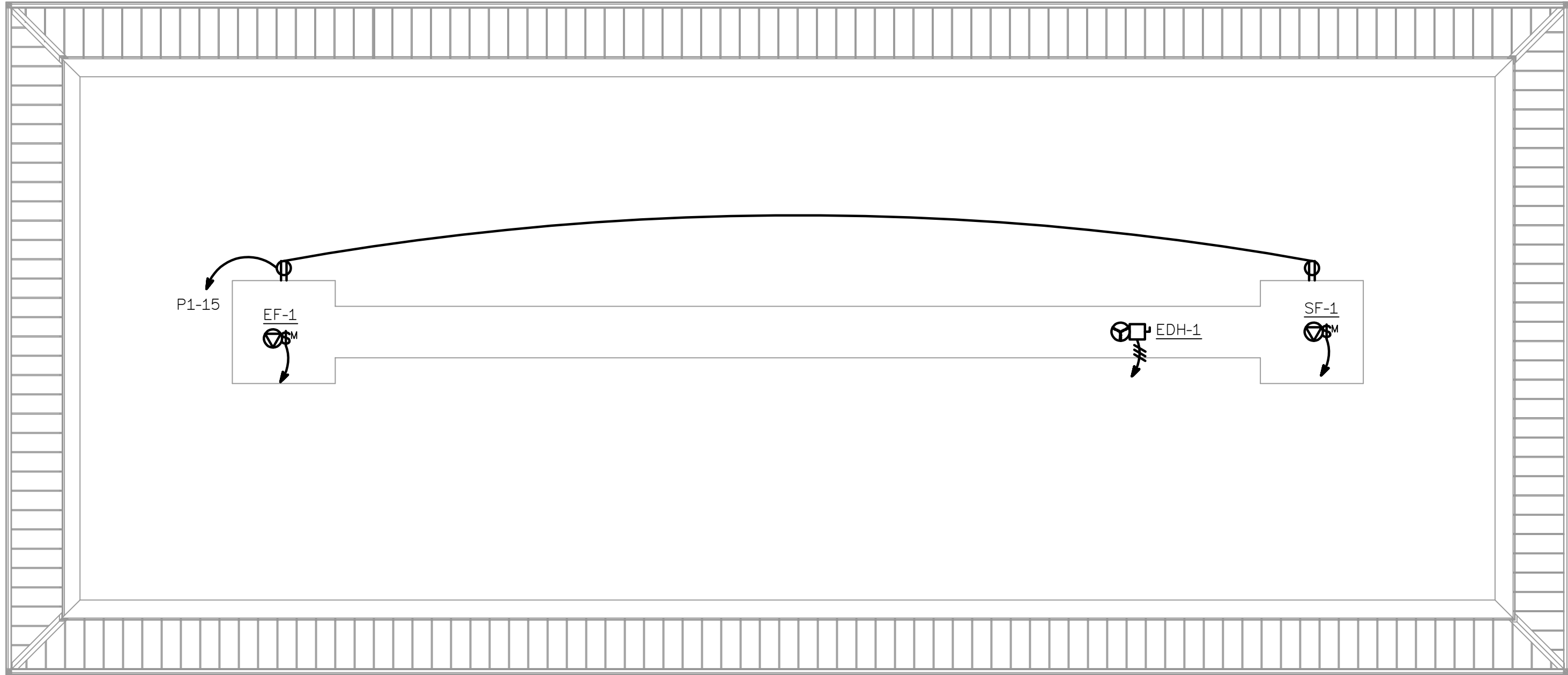
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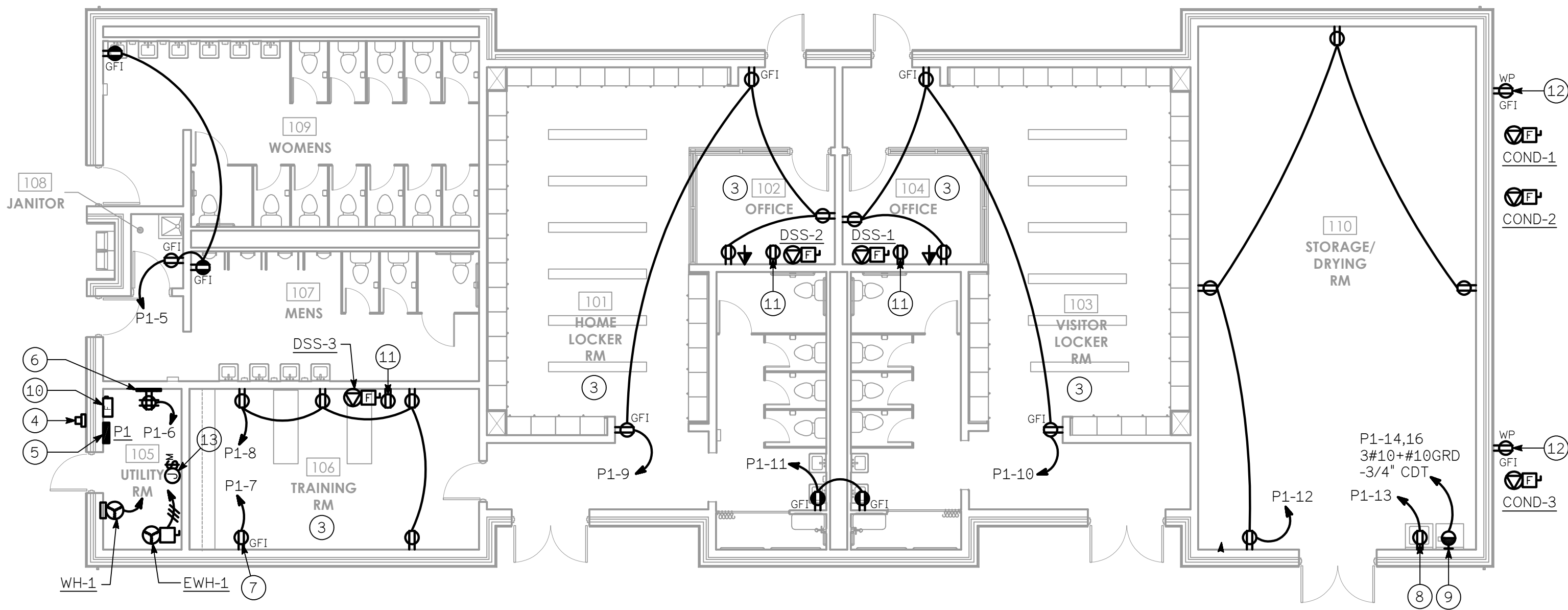
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①② POWER PLAN - ATTIC/MECHANICAL SPACE
SCALE:1/4"=1'-0"



①② POWER PLAN - MAIN LEVEL
SCALE:1/4"=1'-0"

DRAWING NOTES

- COORDINATE EXACT DEVICE LOCATIONS, HEIGHTS, AND REQUIREMENTS WITH OWNER'S REPRESENTATIVE IN THE FIELD.
- PROVIDE CONNECTIONS TO ALL MECHANICAL EQUIPMENT AS INDICATED IN MECHANICAL EQUIPMENT SCHEDULE. COORDINATE EXACT MOUNTING LOCATION WITH MECHANICAL CONTRACTOR IN THE FIELD.
- ALL DEVICES SHALL BE FLUSH MOUNTED WITH-IN CONCRETE BLOCK WALLS. NO DEVICES, CONDUIT, OR WIRING SHALL BE SURFACE MOUNTED IN TEAM ROOM AREAS.
- PROPOSED LOCATION OF NEW UTILITY COMPANY METER SOCKET. COORDINATE EXACT MOUNTING LOCATION IN THE FIELD.
- PROPOSED LOCATION OF NEW PANELBOARD. REFER TO POWER RISER AND PANEL SCHEDULE, SHEET E-4 FOR ADDITIONAL INFORMATION.
- PROVIDE 2'x4'x3/4" THICK PLYWOOD BACKBOARD FOR TELEPHONE EQUIPMENT. COORDINATE EXACT MOUNTING LOCATION IN THE FIELD.
- PROVIDE GFI PROTECTED DUPLEX RECEPTACLE FOR SCHOOL PROVIDED ICE MACHINE. COORDINATE EXACT MOUNTING LOCATION AND CONNECTION REQUIREMENTS WITH SCHOOL REPRESENTATIVE PRIOR TO START OF WORK.
- PROVIDE GFI PROTECTED DUPLEX RECEPTACLE FOR CONNECTION TO SCHOOL PROVIDED WASHING MACHINE. COORDINATE EXACT MOUNTING LOCATION IN THE FIELD.
- PROVIDE NEMA 14-30R RECEPTACLE FOR CONNECTION TO SCHOOL PROVIDED DRYER. COORDINATE EXACT MOUNTING LOCATION IN THE FIELD. PROVIDE WIRING AS INDICATED.
- PROPOSED LOCATION OF 240V RATED, 3 POLE, 200A DISCONNECT SWITCH FUSED @ 200A FOR DUCT HEATER/SERVICE MAIN #2. COORDINATE EXACT MOUNTING LOCATION IN THE FIELD. REFER TO POWER RISER, SHEET E-4 FOR ADDITIONAL INFORMATION.
- PROVIDE DUPLEX RECEPTACLE MOUNTED ADJACENT TO DUCTLESS SPLIT SYSTEM (DSS) INDOOR UNIT FOR CONDENSATE PUMP. COORDINATE EXACT MOUNTING LOCATION IN THE FIELD. CIRCUIT #P1-27
- PROVIDE WEATHERPROOF, GFI PROTECTED DUPLEX RECEPTACLE FOR HVAC EQUIPMENT MAINTENANCE. COORDINATE EXACT MOUNTING LOCATION IN THE FIELD. CIRCUIT #P1-28
- PROVIDE 120V ELECTRICAL CONNECTION TO HOT WATER RECIRCULATING PUMP. COORDINATE CONNECTION LOCATION AND REQUIREMENTS IN THE FIELD. CIRCUIT #P1-29

MECHANICAL UNIT SCHEDULE

UNIT NUMBER	UNIT MCA	UNIT MOCP	UNIT VOLTS/Ø	CONDUCTORS	CIRCUIT NUMBER	NOTES
EDH-1	166.2	200	208/V 3Ø	3#3/0+#6 GRD IN 2" CDT	DISCONNECT	60.0 kW
SF-1	16.0	20	120V 1Ø	2#12+#12 GRD IN 1/2" CDT	P1-17	1.0 HP
EF-1	13.8	20	120V 1Ø	2#12+#12 GRD IN 1/2" CDT	P1-18	3/4 HP
EW-1	66.5	90	208/V 3Ø	3#3+8 GRD IN 1 1/4" CDT	P1-37,39,41	24.0 kW
WH-1	9.6	20	208V 1Ø	2#12+#12 GRD IN 1/2" CDT	P1-19,21	2.0 kW
DSS-1	-	-	208V 1Ø	2#12+#12 GRD IN 1/2" CDT	FROM COND-1	INDOOR
COND-1	6.8	15	208V 1Ø	2#12+#12 GRD IN 1/2" CDT	P1-20,22	OUTDOOR
DSS-2	-	-	208V 1Ø	2#12+#12 GRD IN 1/2" CDT	FROM COND-2	INDOOR
COND-2	6.8	15	208V 1Ø	2#12+#12 GRD IN 1/2" CDT	P1-23,25	OUTDOOR
DSS-3	-	-	208V 1Ø	2#12+#12 GRD IN 1/2" CDT	FROM COND-3	INDOOR
COND-3	6.8	15	208V 1Ø	2#12+#12 GRD IN 1/2" CDT	P1-24,26	OUTDOOR

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POWER PLANS,
SCHEDULE AND NOTES

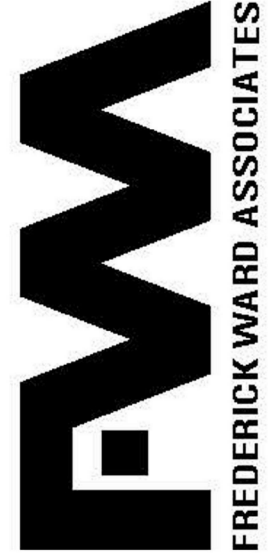
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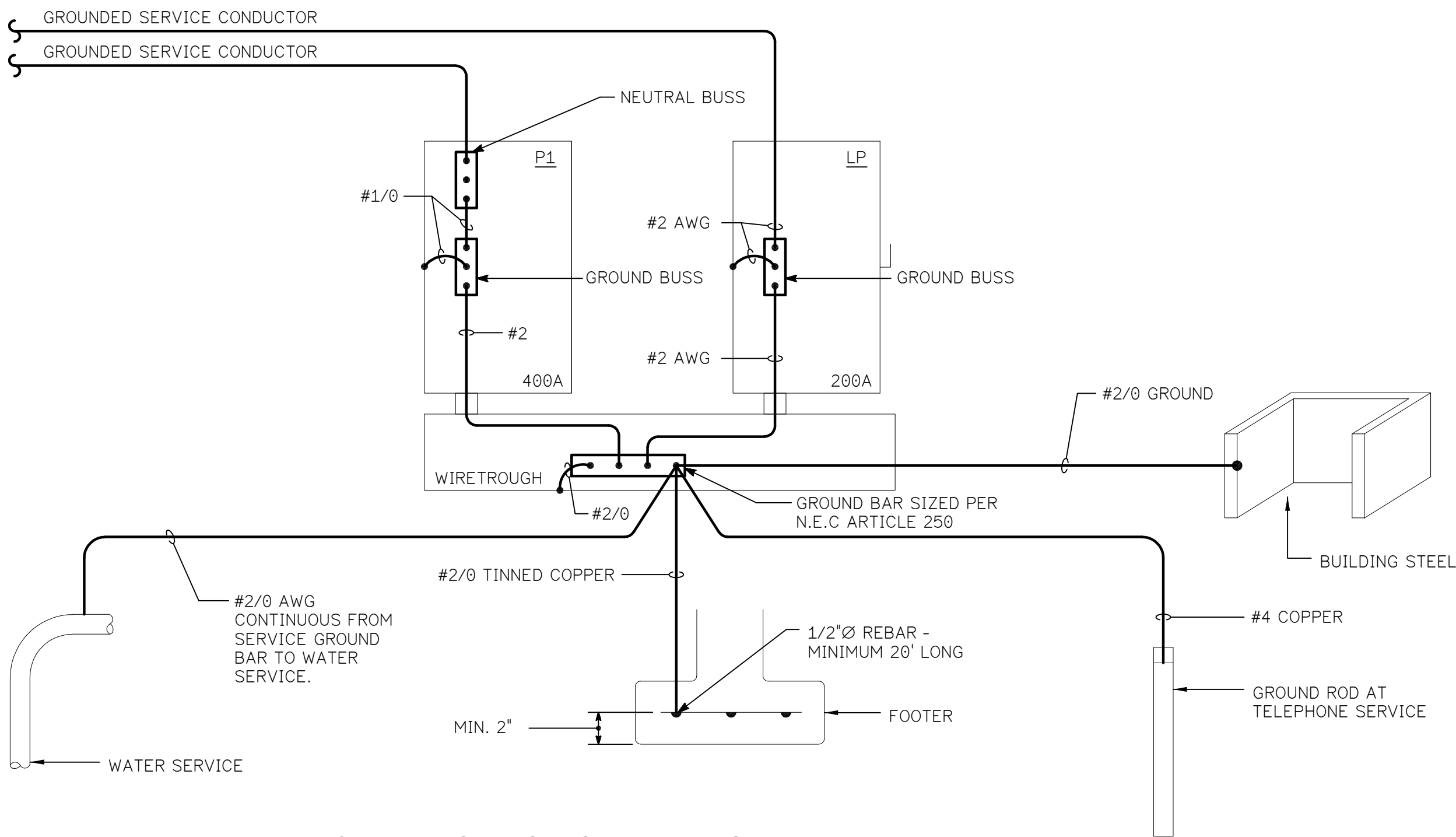
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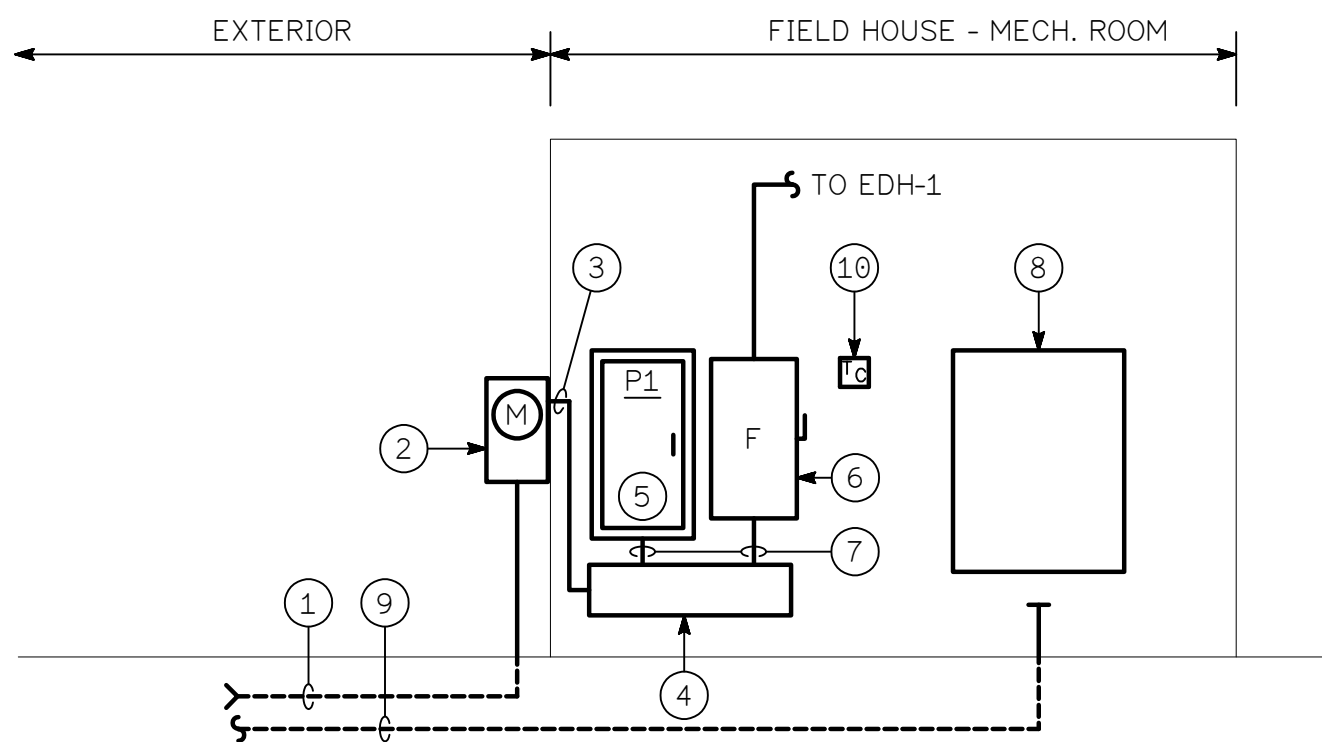
NEW PANEL P1													
MAIN: 200A CIRCUIT BREAKER			VOLTAGE: 120/208		PHASE: 3			WIRE: 4		MOUNTING: SURFACE		AIC: 22K	
CKT #	TRIP POLE	DESCRIPTION	LOAD		PHASE			LOAD		DESCRIPTION	TRIP	POLE	CKT #
			TYPE	KVA	A	B	C	TYPE	KVA				
1	20/1	LOCKER RM. LTS.	L	0.96	2.08			L	1.12	BATH/STORAGE/ATTIC LTS.	20/1		2
3	20/1	EXTERIOR WALL PACKS	L	0.15		0.25		S	0.10	TIME CLOCK	20/1		4
5	20/1	RESTROOM GFI RECEPT.	R	0.54			0.90	R	0.36	TELEPHONE RECEPT.	20/1		6
7	20/1	ICE MAKER	S	1.50	2.22			R	0.72	TRAINING RECEPT.	20/1		8
9	20/1	HOME LOCKER RECEPT.	R	0.72		1.44		R	0.72	AWAY LOCKER RECEPT.	20/1		10
11	20/1	BATH GFI RECEPT.	S	0.36			1.08	R	0.72	STORAGE RECEPT.	20/1		12
13	20/1	WASHER	S	1.00	3.50			S	2.50	DRYER	30/2		14
15	20/1	ATTIC RECEPT.	R	0.72		3.22		S	2.50	-	-		16
17	20/1	SF-1	M	1.92			3.58	M	1.66	EF-1	20/1		18
19	20/2	WH-1	H	1.00	1.70			A	0.70	DSS-1 / COND-1	20/2		20
21	-	-	H	1.00		1.70		A	0.70	-	-		22
23	20/2	DSS-2 / COND-2	A	0.70			1.40	A	0.70	DSS-3 / COND-3	20/2		24
25	-	-	A	0.70	1.40			A	0.70	-	-		26
27	20/1	CONDENSATE PUMPS	S	0.30		0.66		R	0.36	EXTERIOR RECEPT.	20/1		28
29	20/1	HOT WATER RECIRC PUMP	S	0.12			0.12			SPARE	20/1		30
31	20/1	SPARE			0.00					SPARE	20/1		32
33	20/1	SPARE				0.00				SPARE	20/1		34
35	20/1	SPARE					0.00			SPARE	20/1		36
37	90/3	EWB-1	H	8.00	8.00					SPACE	-		38
39	-	-	H	8.00		8.00				SPACE	-		40
41	-	-	H	8.00			8.00			SPACE	-		42
TOTAL LOAD:						18.90	15.27	15.08					
LIGHTING (L):			2.23	LARGEST MOTOR LOAD:				1.92	CONNECTED LOAD (KVA):			49.25	
RECEPTACLE (R):			4.86	REMAINING MOTOR LOAD:				1.66	CONNECTED (AMPS):			136.43	
MOTORS (M)			3.58	INTERMITTENT MOTOR LOAD:				0.00	120/208V, 3 PH				
HVAC (A)			4.20	RECEPTACLE LOAD 1ST 10.0 KVA				4.86					
HEATING (H):			26.00	REMAINING RECEPTACLE LOAD				0.00	DEMAND LOAD (KVA):			56.79	
KITCHEN EQUIP (K)			0.00						DEMAND LOAD (AMPS):			157.31	
MISCELLANEOUS (S):			8.38						120/208V, 3 PH				
DEMAND LOAD INFORMATION:													
LIGHTING LOAD CALCULATED @ 125% PER N.E.C. ARTICLE 220.12													
RECEPTACLE LOAD - 1ST 10.0 KVA @ 100% REMAINING LOAD @ 50% PER N.E.C. ARTICLE 220.44													
LARGEST MOTOR LOAD @ 125% PER N.E.C. ARTICLE 430.22A													
REMAINING MOTOR LOAD @ 100% PER N.E.C. ARTICLE 430.22A													
INTERMITTENT MOTOR LOAD @ 85% PER N.E.C. ARTICLE 430.22E													
HEATING LOAD (CONTINUOUS) @ 125% PER N.E.C. ARTICLE 422.1													
KITCHEN EQUIPMENT - OVER 6 PIECES OF EQUIPMENT LOAD @ 65% PER N.E.C. ARTICLE 220.20													
MISCELLANEOUS LOAD @ 100%													



SERVICE GROUNDING DETAIL
NO SCALE

DRAWING NOTES

- PROPOSED INCOMING UTILITY COMPANY SERVICE WIRING/CONDUIT. COORDINATE REQUIREMENTS, RUN LENGTH, ETC. WITH LOCAL UTILITY COMPANY IN THE FIELD.
- PROVIDE AND INSTALL NEW WEATHERPROOF UTILITY COMPANY METER SOCKET. COORDINATE EXACT MOUNTING LOCATION WITH LOCAL UTILITY COMPANY IN THE FIELD.
- EXTEND 2 SETS (4 #3/0 -2" CDT) FROM METER SOCKET TO NEW SERVICE DISTRIBUTION TROUGH.
- PROVIDE AND INSTALL NEW 8"x8"xLENGTH REQUIRED SEALED SERVICE DISTRIBUTION TROUGH.
- PROVIDE AND INSTALL NEW PANELBOARD AS INDICATED. REFER TO PANEL SCHEDULE, THIS SHEET FOR ADDITIONAL INFORMATION. CONTRACTOR SHALL GROUND PANEL PER N.E.C. ARTICLE 250 REQUIREMENTS. REFER TO DETAIL, THIS SHEET FOR ADDITIONAL INFORMATION.
- PROVIDE 240V RATED, 200A DISCONNECT SWITCH FUSED @ 200A FOR SERVICE DISCONNECTING MEANS #2 FOR SERVICE TO DUCT HEATER (EDH-1). CONTRACTOR SHALL GROUND DISCONNECT SWITCH PER N.E.C. ARTICLE 250 REQUIREMENTS. REFER TO DETAIL, THIS SHEET FOR ADDITIONAL INFORMATION.
- EXTEND 4 #3/0 + #2 GRD - 2" CDT
- PROPOSED 2'x4'x3/4" THICK PLYWOOD BACKBOARD FOR TELEPHONE SERVICE EQUIPMENT. COORDINATE EXACT MOUNTING LOCATION IN THE FIELD.
- EXTEND ONE (1) 2" CONDUIT FROM BACKBOARD LOCATION UNDERGROUND TO EXISTING SCHOOL DEMARK/TELEPHONE CLOSET. COORDINATE EXACT CONDUIT ROUTING AND TERMINATION LOCATION WITH SCHOOL REPRESENTATIVE IN THE FIELD.
- PROVIDE 24 HOUR/DAY, 7 DAY/WEEK, TIME CLOCK FOR CONTROL OF EXTERIOR LIGHTING FIXTURES. COORDINATE EXACT MOUNTING LOCATION IN THE FIELD. CIRCUIT #P1-4



POWER RISER DIAGRAM
NO SCALE

REVISIONS

DESCRIPTION

DATE

REV#

ARCHITECTS
ENGINEERS
PLANNERS
SURVEYORS

410-030-1900
www.fredrickward.com

CECIL COUNTY PUBLIC
SCHOOLS

201 Booth St, Elkton, MD 21921

POWER RISER,
SCHEDULES AND NOTES

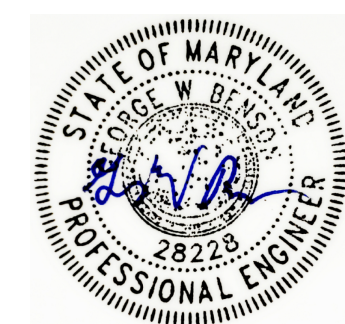
NEW FIELD HOUSE AT STADIUM

1686 Perryville Rd, Perryville, MD 21903

*Professional Certification: I hereby certify that these documents were prepared and/or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No.: 28228, Expiration Date: 01/12/2025



INTEGRATED
DESIGN
CONSULTANTS
139 N. MAIN ST., SUITE 102
BEL AIR, MD 21034 443.787.6264
MECHANICAL • ELECTRICAL • PLUMBING
ENGINEERING SERVICES



DATE:
11/02/2023
SCALE:
AS NOTED
DRAWN BY:
MRB/JAL
CHECKED BY:
EPL/GWB
DRAWING NO:
E4
IDC JOB NUMBER
18-076

[illegible]