

INDOOR FIRING RANGE
ABATEMENT & CLOSURE
AFRC BLDG. 3420
NDNG PROJECT NO. 2610
OWNER: THE ADJUTANT GENERAL, STATE OF ND



MINOT, NORTH DAKOTA

INDEX OF DRAWINGS

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DRAWING SYMBOLS

- Elevations & Sections:
- DRAWING NUMBER
 - SHEET DRAWING IS ON
- Detail Reference:
- DRAWING NUMBER
 - SHEET DRAWING IS ON
- Room:
- ROOM NUMBER
 - ROOM NAME
- Door Type:
- SIDE LIGHT REFERENCE
- Window Type:
- WallType:
 - General Note:
 - Demolition Note:

MATERIAL INDEX

TOPSOIL	ASPHALT	COMP. FILL	GRAN. FILL	E.I.F.S.	CONCRETE	C.M.U.	BRICK
WOOD STUD	MTL. STUD	INSULATION	WD. BLK'G	FIN. WD.	PLYWOOD	RIGID INSUL.	STEEL

CONSULTANTS

- LEGEND TECHNICAL SERVICES : LEAD
- SOLLEN & LARSON ENGINEERING : STRUCTURAL
- MBN ENGINEERING : MECHANICAL
- MBN ENGINEERING : ELECTRICAL

M | B | A |
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I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Architect under the laws of the State of North Dakota.

Date 08-13-2026 Registration No. 944



EACH SET OF DRAWINGS CONTAINS THE ABOVE SHEETS. IF ANY SHEETS ARE OMITTED CONTACT THE OFFICE OF MUTCHLER BARTRAM ARCHITECTS IMMEDIATELY FOR A REPLACEMENT SET OF DRAWINGS.

Date 08-13-2026 MBA Project Number 26006

ACOVER

2 SECOND FLOOR PLAN - REFERENCE ONLY
SCALE: 1" = 30'-0"

NORTH

1 FIRST FLOOR PLAN - REFERENCE ONLY
SCALE: 1" = 30'-0"

NORTH

Design Codes Used:
IBC 2024
ACI Concrete Code
AISC Code-ASD

2. Design Loads:
Roof Snow Load: $P_{fULT} = 56 \text{ PSF}$
 $P_{fASD} = 40 \text{ PSF} + \text{Drift (Balanced)}$
Unbalanced snow load as per ASCE 7-22 Section 7
 $P_{gULT} = 66 \text{ PSF}$
 $C_e = 1.0$
Risk Cat. III (Assume 30 R-value)
 $C_t = 1.1$
Live Load:
Construction 40 PSF
Wind Load: $V_{ULT} = 119 \text{ MPH}$ Basic Wind Speed
Risk Category = Type III
Wind Exposure C
Internal Pressure Coefficient ± 0.18
Note: 1. Original building designed for current UBC when built.
2. All loads indicated on plans to be ASD.

3. Design Stresses Used:
Concrete
- Slabs on Grade 3000 PSI @ 28 days
- Footings & Foundation Walls 3000 PSI @ 28 days
- Exterior Exposed 4500 PSI @ 28 days (air entrained)
- Structural Slabs 4000 PSI @ 28 days
- Masonry Strength $f_m = 1500 \text{ PSI}$
Steel
- W Shapes $F_y = 50 \text{ KSI}$ (ASTM A992)
- Tubes $F_y = 46 \text{ KSI}$ (ASTM A500 Grade B)
- Angles, Channels, Bars $F_y = 36 \text{ KSI}$ (ASTM A36)
 $F_y = 35 \text{ KSI}$ (ASTM A53)
Reinforcing Steel 60 KSI (ASTM A615-60)
Soil Bearing Pressure 1500 PSF (Assumed, Verify w/ Geotechnical Engineer's review of Excavation)

4. CONCRETE COVERAGE for reinforcing shall be as follows:
Footings 3 inches
Columns & Piers 1 1/2 inches
Slabs on Grade midheight for a single layer
Walls 1 1/2 inches @ exterior
3/4 inches @ interior
Structural Slabs 3/4 inch unless noted
PROVIDE BAR SUPPORTS AND SPACERS in accordance with the ACI Detailing Manual.

5. REINFORCING STEEL to be bent and placed in accordance with ACI code. All splices to be 38 db for #6 bar or smaller, 48db for #7 bar and larger.

6. FOOTINGS to rest on undisturbed soil or engineered backfill. It is recommended that the Soils Engineer inspect soil conditions prior to construction. All walls and piers to construct on footing unless otherwise noted. All footing elevations are given to the top of footing.

7. OPENINGS in concrete FOUNDATION WALLS shall be reinforced with 2-#5 bars each side, extending 2'-0" past the face of the opening unless otherwise noted.

8. SHOP DRAWINGS
a. Submit electronic copies of the following shop drawings to the architect/engineer for review prior to fabrication:
1. CONCRETE REINFORCING and mix designs for each class of concrete.
2. STRUCTURAL STEEL

9. PORTLAND CEMENT to be ASTM C150, Type 1 & 1A.

10. CONCRETE to be in accordance with ACI 301. Maximum shale content shall not exceed 0.5% for exposed concrete.

11. CONTROL AND CONSTRUCTION JOINTS to be located as shown on the plan or at contractors option - not to exceed 10'-0" o.c.

12. PROVIDE NON-SHRINK Metallic Grout to Grade Base Plates and Non-Shrink Grout for all Dowels.

13. MASONRY TO CONSIST OF ASTM C90 Hollow Core, Grade N, normal weight, Concrete Masonry Units. Joint reinforcing to be Ladder type formed from cold-drawn steel wire conforming to ASTM 82, consisting of deformed longitudinal rods with cross rods welded at intervals not exceeding 16" o.c.

14. MORTAR: Exterior above grade / Interior bearing walls Type S
Interior partitions Type N or S
Exterior below grade Type S
Masonry grout to be $f'_c = 2000 \text{ PSI}$ Minimum. See ACI308 TABLE 1.2.0.1 for grout space requirements and maximum pour heights.

15. PROVIDE TEMPORARY BRACING during masonry erection. Maintain in place until Building Structure provides permanent bracing.

16. AT MASONRY CONTROL JOINTS do not continue horizontal joint reinforcement across control joints. In Exterior Walls provide vertical open joint at 24 feet on center maximum. In Interior Walls provide vertical open joint at 30 feet on center maximum. Coordinate with Architectural plans.

17. Refer to IBC table for typical nailing not shown. Table 2304.10.2.

18. ALL STRUCTURAL STEEL to be fabricated and erected in accordance with the AISC Code. Connections not detailed are to be designed in accordance with the AISC detailing for steel construction. Shop connections to be welded. Field connections to be double clip angle connection bolted with 3/4" diameter high strength bolts (ASTM A325).
WHEN REACTIONS for structural members are not given on the plan, connections shall be designed by fabricator to support one-half the total uniform load copiously shown in the maximum uniform load tables in the current steel construction manual, for the given beam, span, and grade of steel specified.

19. Cold form steel "C" studs/joints
18 GA. - 20 GA. $F_y = 33 \text{ KSI}$
16 GA. or thicker $F_y = 50 \text{ KSI}$
General Contractor shall provide all lateral roof bracing as required by Field Installation Guide for cold form steel roof trusses by Light Gauge Steel Engineers Association.

20. STEEL LINTELS shall have a minimum end bearing on masonry of 6 inches but not less than 1 inch of bearing for each foot of opening width. For openings not otherwise indicated, provide masonry lintels with 2-#4 reinforcing bars in 8" bond beam. Grout solid to 3 crs. below lintel bearing, with a minimum of 8 inches bearing at each end. Steel lintels shall bear on embedded plate $7 \times 3/8" @ 8" \text{ CMU}$, $9 \times 3/8" @ 10" \text{ CMU}$, $11 \times 3/8" @ 12" \text{ CMU}$ with 2-1/2" stud anchors. Field weld lintel to embed.

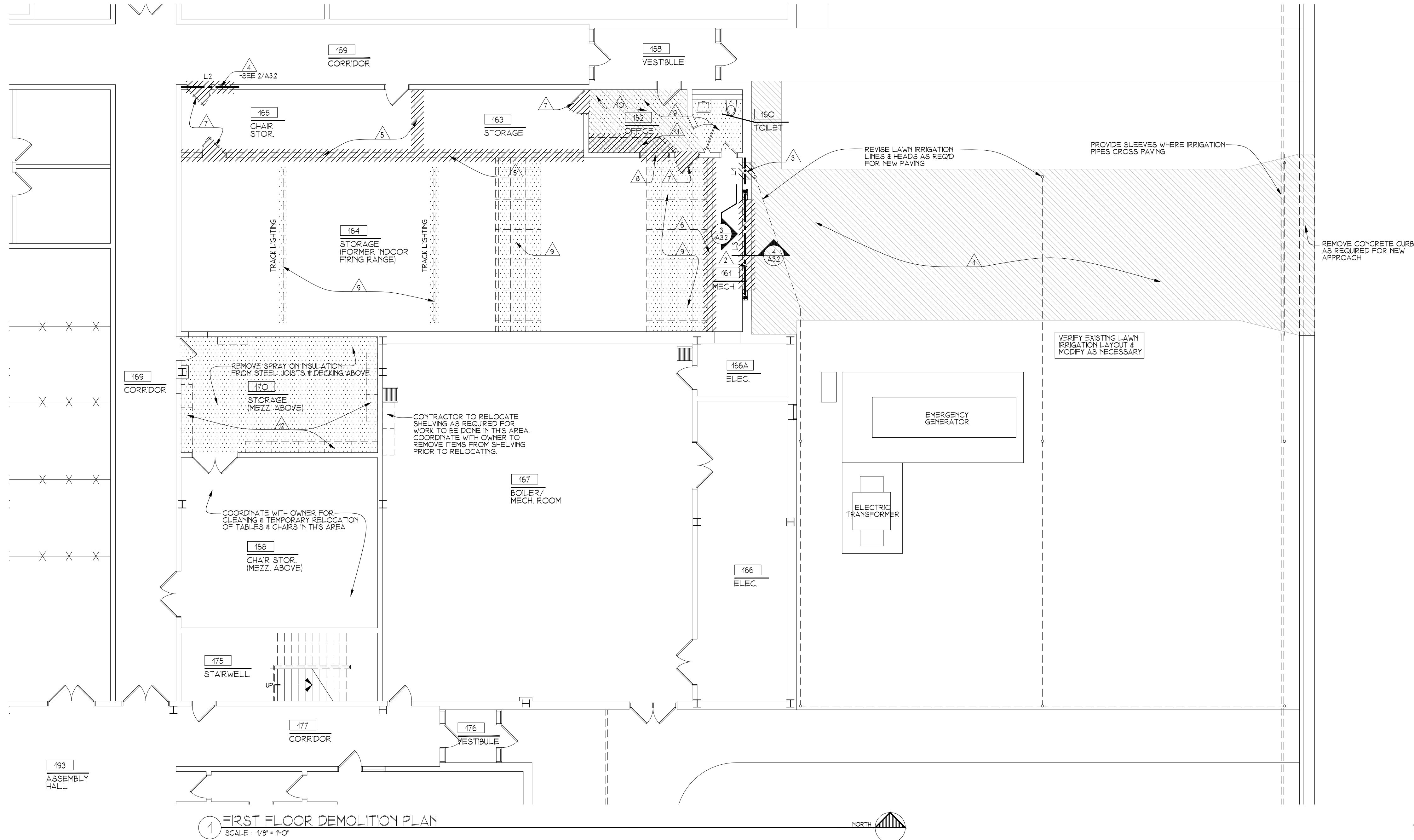
21. Steel Stud Partition Walls & Lintels to be designed by Supplier. If they do not come off of standard charts provide Engineered Calculations and shops.

22. Contractor Field Verify all new lintels in existing walls have the correct plate width.

23. SEE MECHANICAL, ELECTRICAL & ARCHITECTURAL DRAWINGS for all openings and inserts not shown on the plan. All opening sizes and locations to be verified with mechanical and electrical contractors.

24. IF DIMENSIONAL DISCREPANCIES occur between the field and the project dimension, or between the Architectural and Structural plans, verify correct dimensions with the Architect/Engineer before they are used for construction.

25. General Contractor to provide temporary shoring to install new lintels as required.



General Notes:

1. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS & DIMENSIONS.
2. CONTRACTOR SHALL PROTECT EXISTING FINISHES SCHEDULED TO REMAIN.
3. AFTER EACH INSTALLATION OR DAY, CONTRACTOR SHALL CLEAN WORK AREA AND DISPOSE OF ALL DEBRIS.
4. EACH TRADE TO SEAL ALL VERTICAL AND HORIZONTAL OPENINGS AND PENETRATIONS CAUSED BY EACH TRADE'S WORK.
5. APPLY LEAD ENCAPSULATION PAINT AT WALLS, FLOORS, AND JOBS JOINTS AS INDICATED IN THE LEAD ABATEMENT SPECIFICATIONS.

 MATERIAL TO BE REMOVED

 CEILING TO BE REMOVED

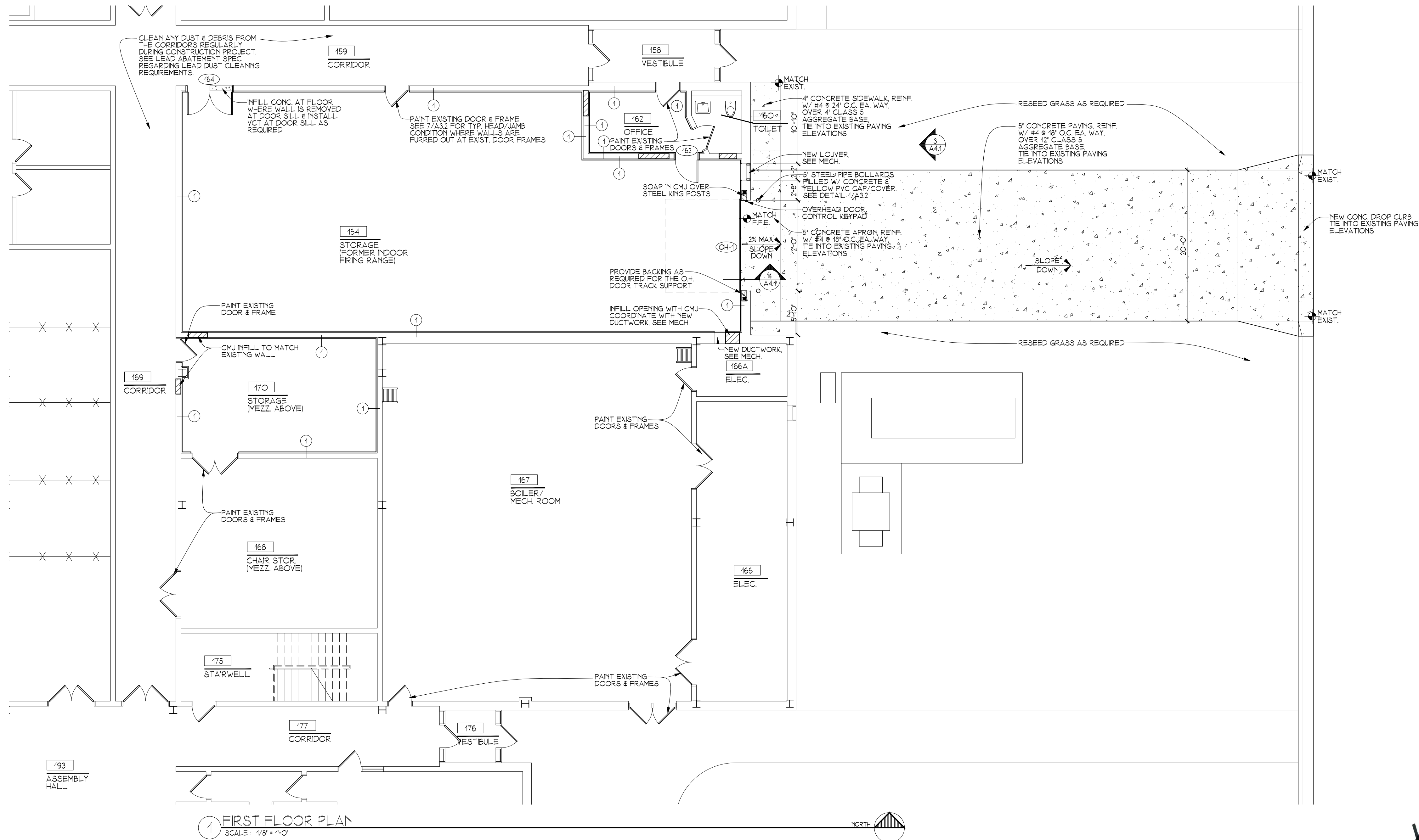
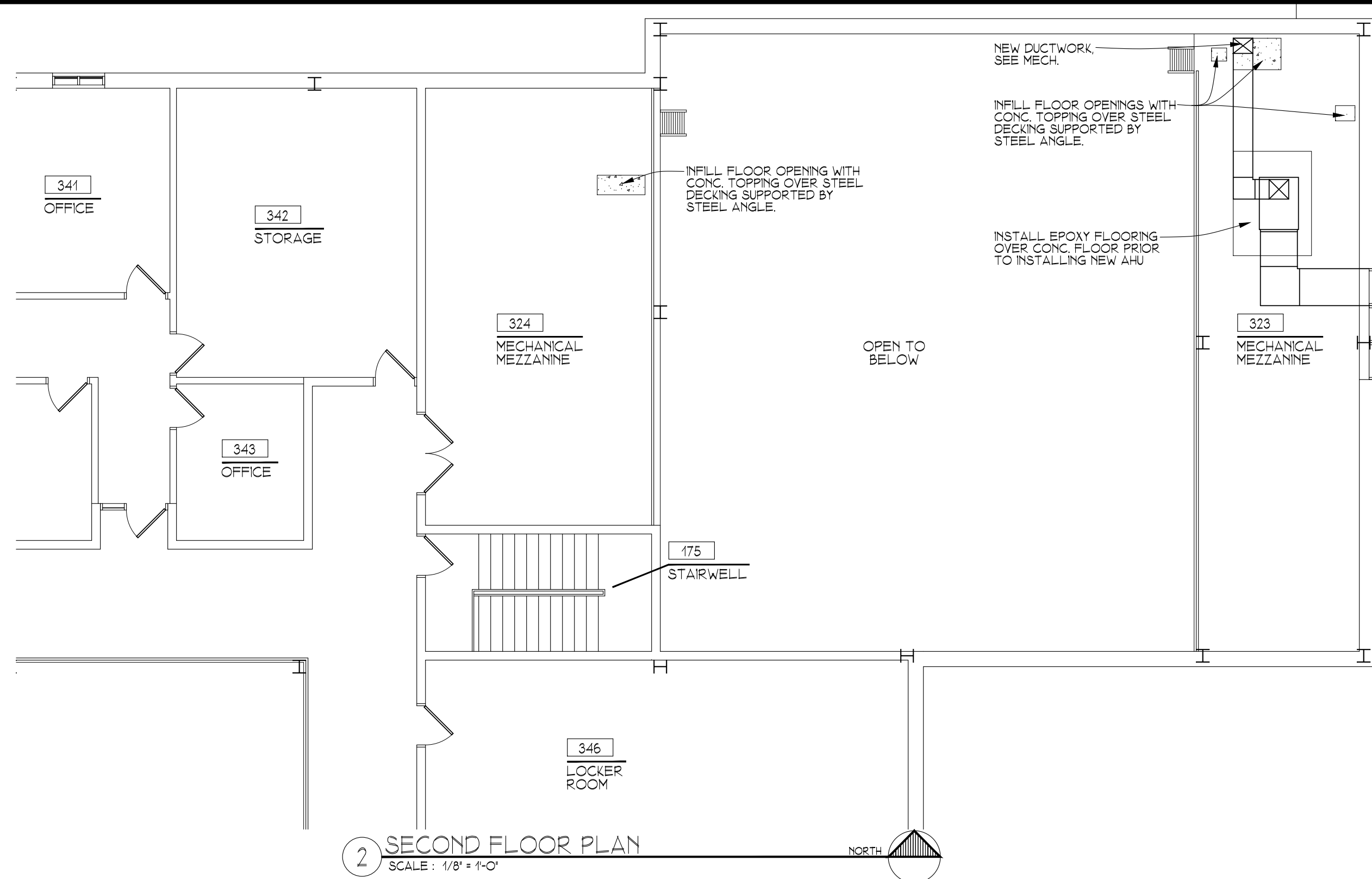
 FLOORING TO BE REMOVED

- ▲ SAW-CUT AND REMOVE CONCRETE CURB AND PREP GRASS AREA FOR NEW PAVING FOR A NEW ENTRANCE DRIVE FOR THE NEW OVERHEAD DOOR.
- ▲ CUT OPENING IN MASONRY WALL FOR NEW 12' WIDE BY 10' HIGH OVERHEAD DOOR. PROVIDE NEW MASONRY Lintel AT OPENING AND STEEL PLATES AROUND THE JAMBS AND HEAD OF THE OPENING. SALVAGE BRICK TO PATCH AROUND MASONRY DOOR JAMBS AS REQUIRED AT NEW DOOR OPENING.
- ▲ CUT OPENING IN MASONRY WALL FOR NEW LOUVER. PROVIDE A NEW Lintel AS REQUIRED. SALVAGE BRICK TO PATCH AROUND MASONRY JAMBS AS REQUIRED AT NEW LOUVER OPENING. COORDINATE LOUVER & HEIGHT W/ MECH.
- ▲ CUT OPENING IN CMU WALL FOR ENLARGED DOOR OPENING. PROVIDE A NEW Lintel AS REQUIRED. PATCH AROUND CMU DOOR JAMBS AS REQUIRED AT ENLARGED DOOR OPENING.
- ▲ REMOVE CMU WALL.
- ▲ REMOVE FRAMED SOFFIT ABOVE.
- ▲ REMOVE HOLLOW METAL DOOR, FRAME AND HARDWARE.
- ▲ SALVAGE DOOR HARDWARE & TURN OVER TO THE OWNER.
- ▲ REMOVE HOLLOW METAL FRAMED WINDOW.
- ▲ REMOVE ACT CEILING & GRID AND LIGHTING & OTHER CEILING MOUNTED EQUIPMENT & DEVICES.
- ▲ REMOVE VCT FLOORING.
- ▲ REMOVE EXISTING BUILT-IN COUNTERTOP.
- ▲ CONTRACTOR TO RELOCATE SHELVING & LOCKERS TO LOCATION AS DIRECTED BY THE OWNER. COORDINATE WITH THE OWNER TO REMOVE ITEMS FROM SHELVING PRIOR TO RELOCATION.
- SEE LEAD ABATEMENT SPECIFICATIONS FOR MORE INFORMATION ON THE LEAD ABATEMENT WORK. PERFORM ALL WORK AS NOTED ON THE LEAD ABATEMENT SPECIFICATIONS INCLUDING WORK NOT SHOWN ON THE DRAWINGS.
- DISPOSE OF ALL MATERIALS CALLED OUT TO BE REMOVED UNLESS THE OWNER WOULD LIKE TO SALVAGE THEM.

M | B | A

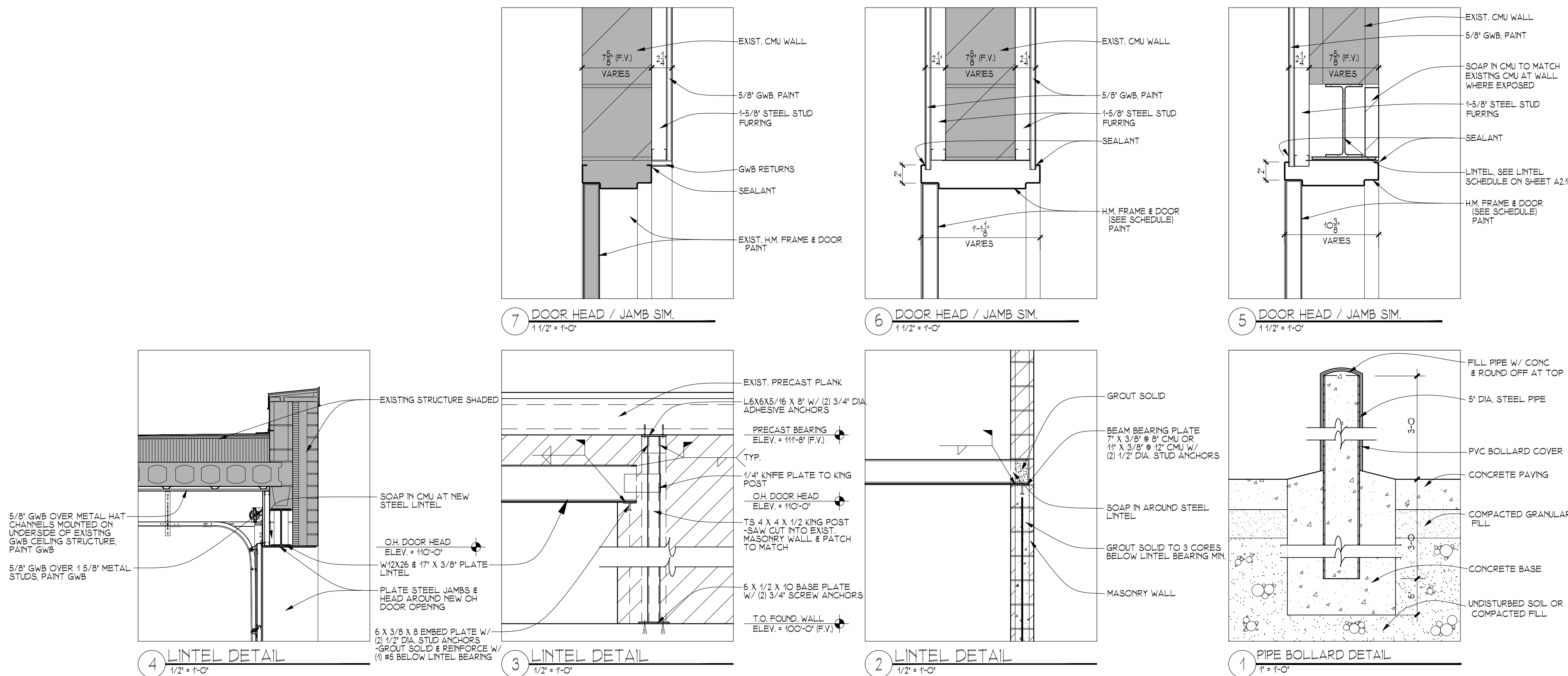
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 MBA Project Number 26006
 Date 08-13-2026
A2.1

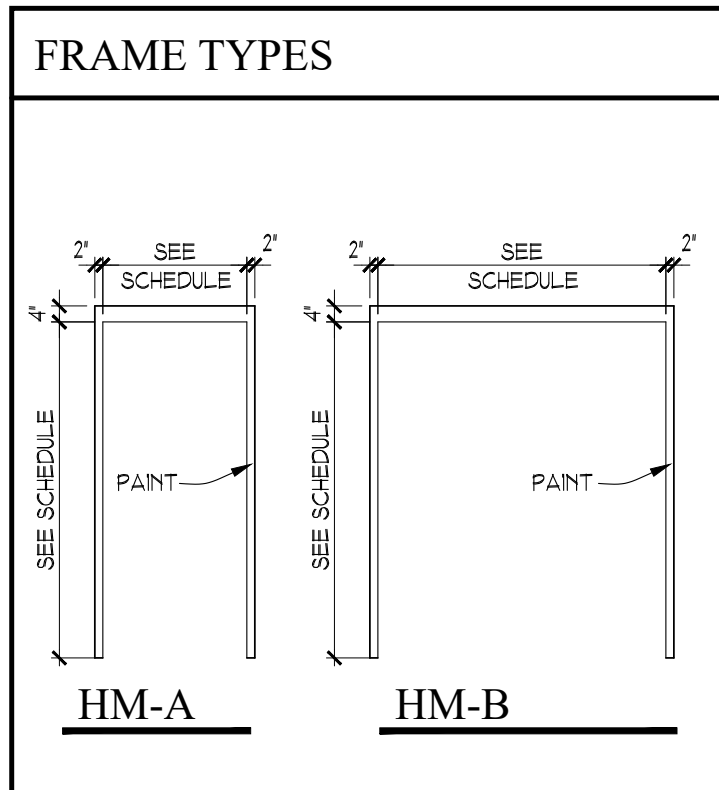
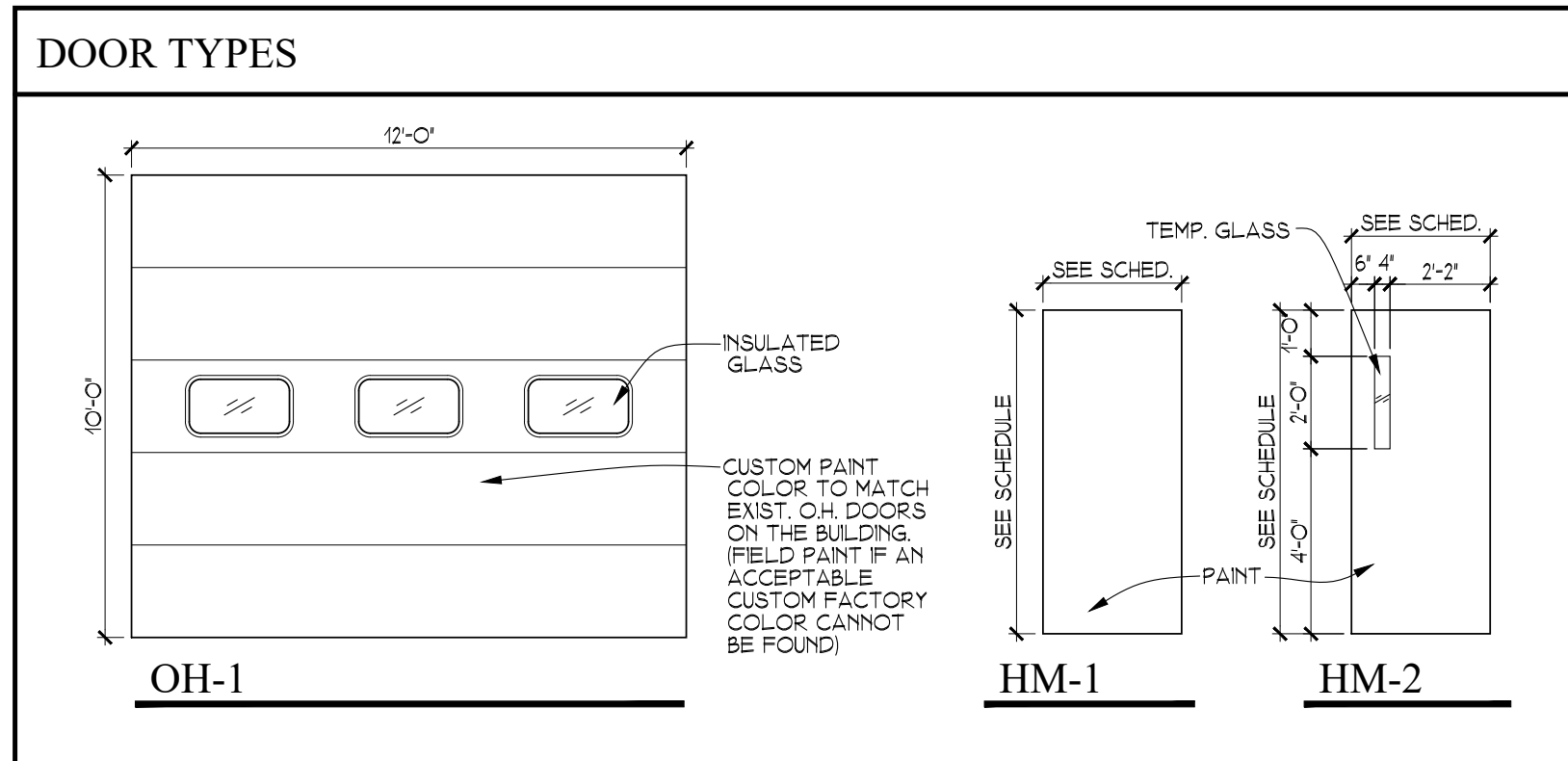


General Notes:

- 1 CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS & DIMENSIONS.
- 2 CONTRACTOR SHALL PROTECT EXISTING FINISHES SCHEDULED TO REMAIN.
- 3 AFTER EACH INSTALLATION OR DAY, CONTRACTOR SHALL CLEAN WORK AREA AND DISPOSE OF ALL DEBRIS.
- 4 EACH TRADE TO SEAL ALL VERTICAL AND HORIZONTAL OPENINGS AND PENETRATIONS CAUSED BY EACH TRADE'S WORK.
- 5 APPLY LEAD ENCAPSULATION PAINT AT WALLS, FLOORS, AND/OR CEILINGS AS INDICATED IN THE LEAD ABATEMENT SPECIFICATIONS.



DOOR SCHEDULE											
DOOR NO.	DOOR				FRAME					HARDWARE SEE SPEC.	REMARKS
	SIZE	TYPE	GLASS	RATING	TYPE	GLASS	HEAD	JAMB	WIDTH		
CH-1	12'-0" X 10'-0"	CH-1	INSUL.	--	--	--	4/A4.1	4/A4.1 SM.	--	HW-1	
162	3'-0" X 7'-0"	HM-2	1/4" TEMP.	--	HM-A	--	6/A3.2	6/A3.2 SM.	13 1/8" F.V.	HW-10	
164	(2) 3'-0" X 7'-0"	HM-1	--	20 MIN.	HM-B	--	5/A3.2	5/A3.2 SM.	10 7/8" F.V.	HW-10P	
NOTES:											

[illegible]

INDOOR FIRING RANGE
ABATEMENT & CLOSURE
AFRC BLDG. 3420
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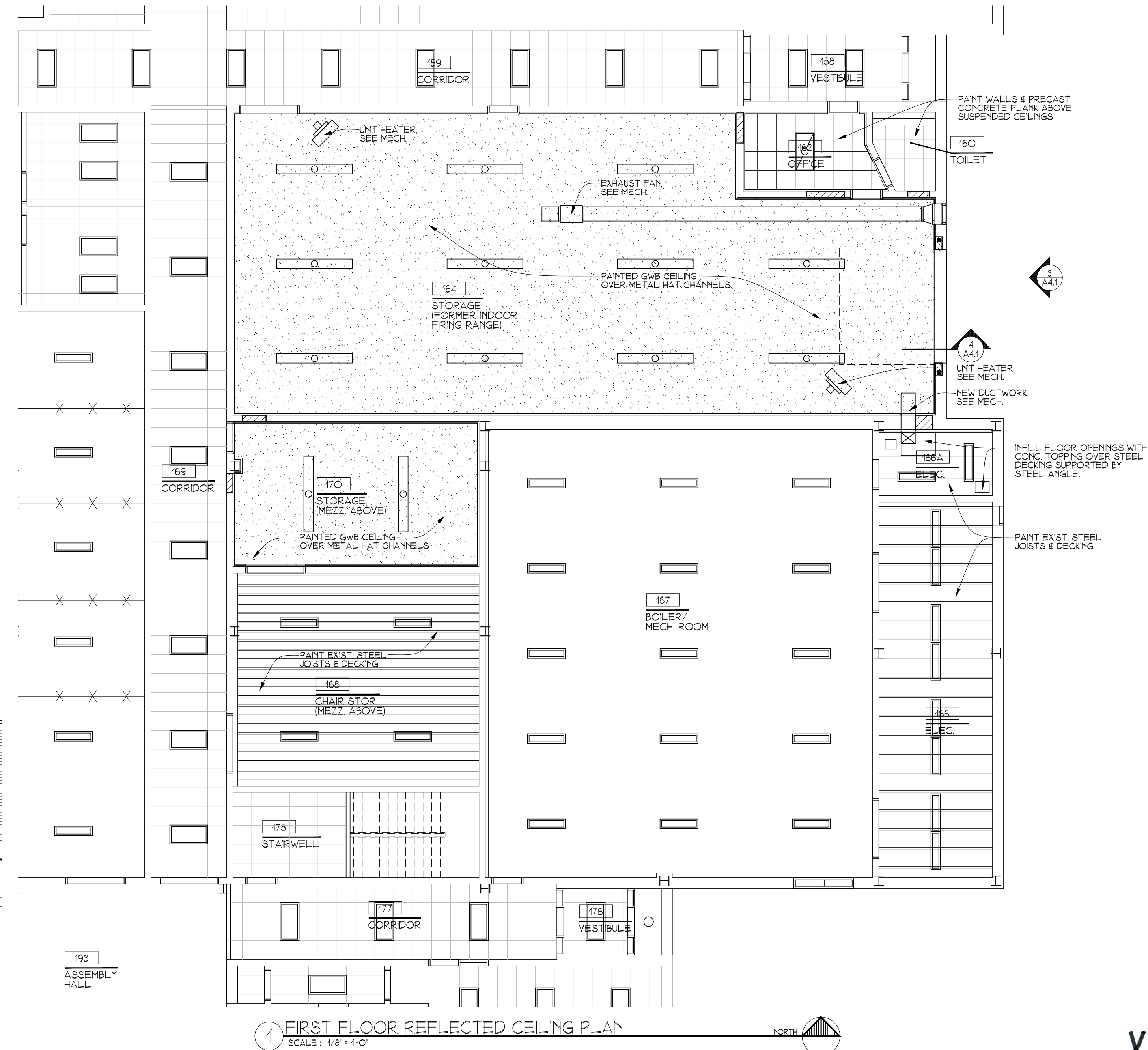
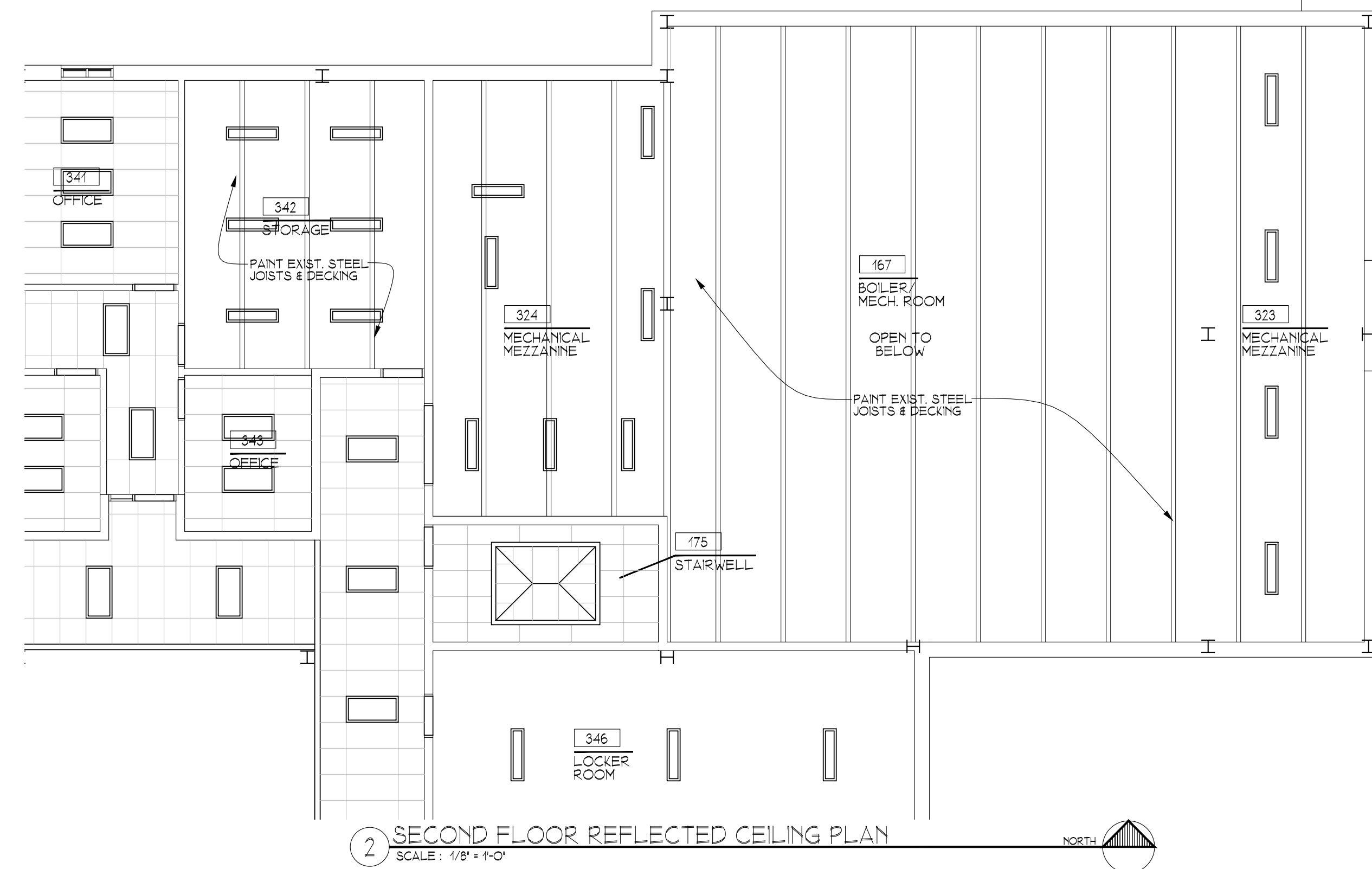
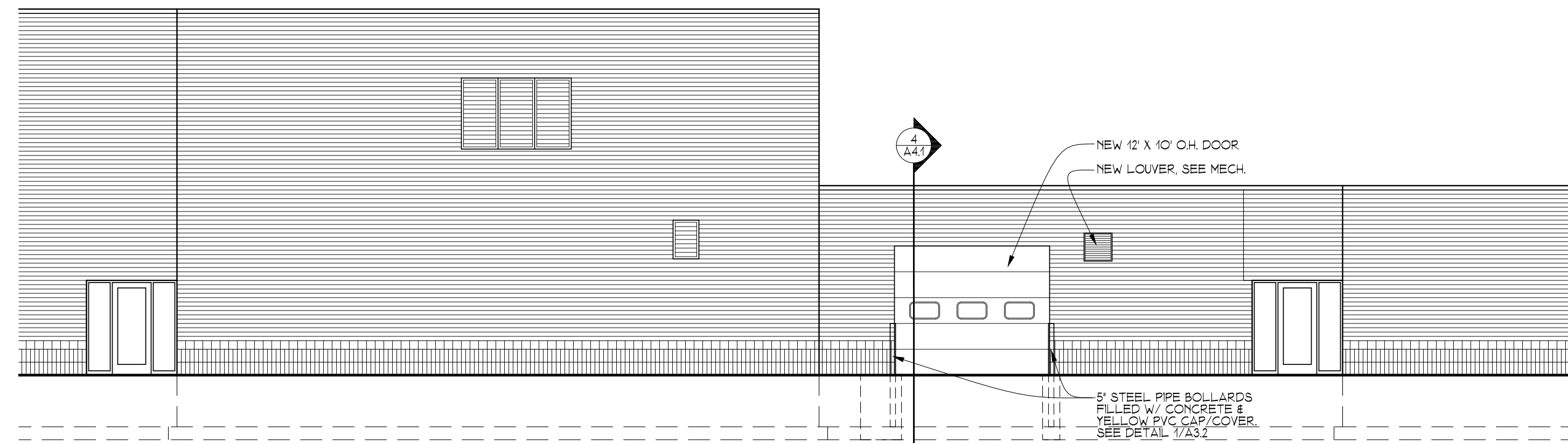
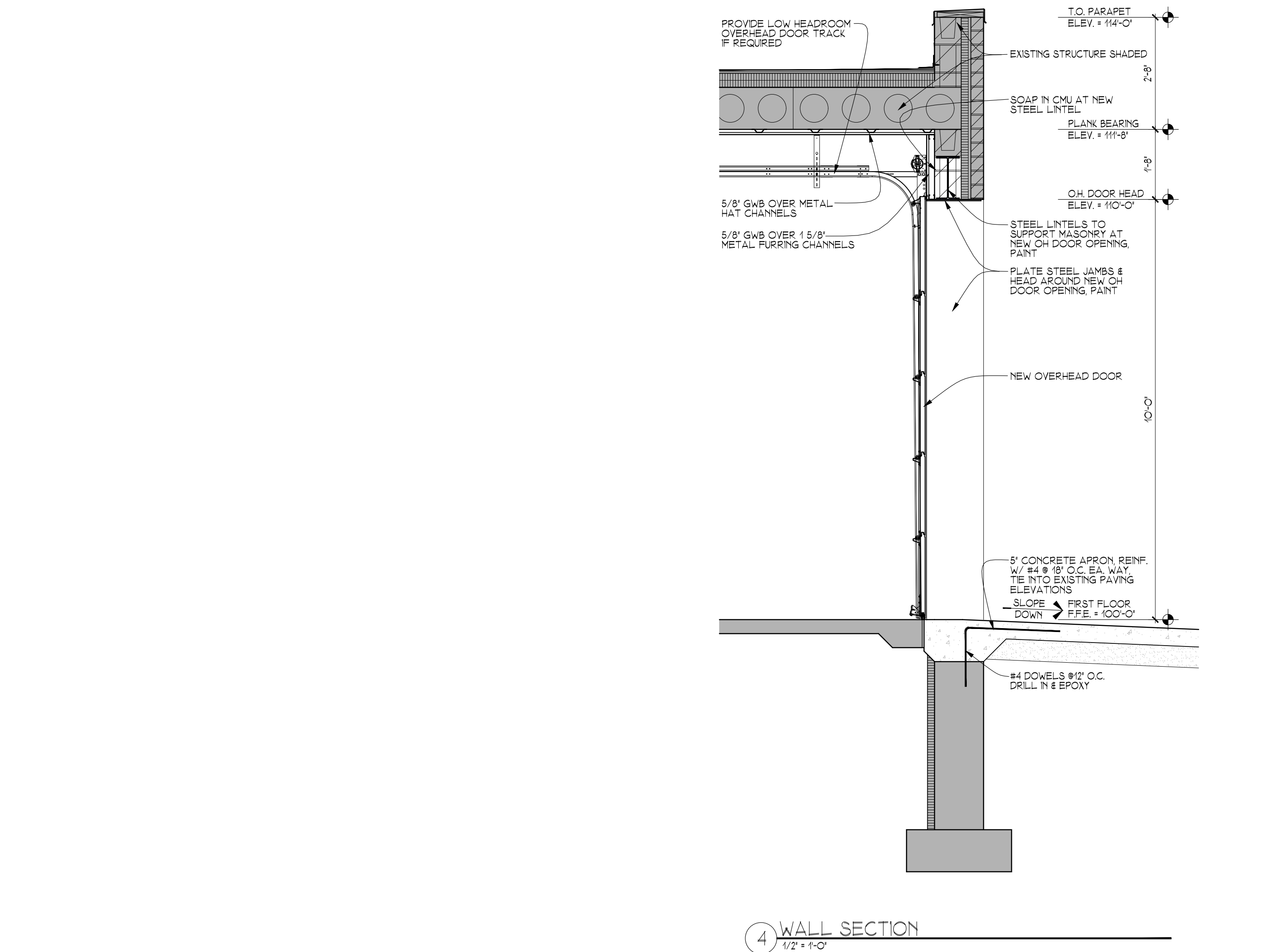
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SCHEDULES & DETAILS


 MBA Project Number 26006
 Date 08-13-2026
A3.2



General Notes:

- 1 CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS & DIMENSIONS.
- 2 CONTRACTOR SHALL PROTECT EXISTING FINISHES SCHEDULED TO REMAIN.
- 3 AFTER EACH INSTALLATION OR DAY, CONTRACTOR SHALL CLEAN WORK AREA AND DISPOSE OF ALL DEBRIS.
- 4 EACH TRADE TO SEAL ALL VERTICAL AND HORIZONTAL OPENINGS AND PENETRATIONS CAUSED BY EACH TRADE'S WORK.

Reflected Ceiling Plan Legend:

- WALL MOUNTED LIGHT FIXTURE
- SUSPENDED LIGHT FIXTURE
- SURFACE LIGHT FIXTURE
- RECESSED LIGHT FIXTURE
- SUPPLY AIR DIFFUSER
- RETURN AIR REGISTER

INDOOR FIRING RANGE ABATEMENT & CLOSURE AFRC BLDG. 3420 NDNG PROJECT NO. 2610 OWNER: THE ADJUTANT GENERAL, STATE OF ND



MINOT, NORTH DAKOTA

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FIRST FLOOR REFLECTED
CEILING PLAN, ELEVATIONS, &
WALL SECTIONS

GENERAL NOTES:

1. MECHANICAL CONTRACTOR SHALL COORDINATE ALL DEMOLITION WORK WITH LEAD ABATEMENT CONTRACTOR. MECHANICAL CONTRACTOR SHALL MEET ON SITE WITH LEAD ABATEMENT CONTRACTOR PRIOR TO START OF ANY WORK FOR COORDINATION. MECHANICAL CONTRACTOR SHALL CAP OFF EXISTING DUCTWORK AND PIPING AS REQUIRED FOR REMOVAL OF ITEMS BY LEAD ABATEMENT CONTRACTOR.

SEQUENCE OF OPERATION

EXHAUST FAN CONTROL: PROVIDE CONTROL AS INDICATED.
EF-20: CONNECT NEW FAN TO THE EXISTING FAN CONTROLS AND VERIFY OPERATION. MONITOR STATUS AND ALARM.

SEQUENCE OF OPERATION MISCELLANEOUS EQUIPMENT:
UNIT HEATERS: CYCLE THE FAN AND CONTROL VALVE TO MAINTAIN ROOM TEMPERATURE SETPOINT. IF THE BOILER IS OFF, THE VALVES SHALL BE OPEN. MONITOR STATUS AND ALARM.

CO/NO2 DETECTION SYSTEM: CONNECT EF-1 & AHU-10 TO THE CO/NO2 DETECTION SYSTEM. PROVIDE OVERRIDE SWITCH AT CO/NO2 TO ALLOW FOR MANUAL OPERATION OF SYSTEM. MONITOR STATUS AND ALARM.

AHU-10: UPON ACTIVATION OF CO/NO2 SYSTEM, OPEN OA DAMPER AND ENABLE SUPPLY FAN. MODULATE HEATING CONTROL VALVE TO MAINTAIN A 70 DEGREE (ADJUSTABLE) DISCHARGE AIR TEMP WHEN OPERATING. PROVIDE FILTER MONITOR. MONITOR STATUS AND ALARM.

EF-1 UPON ACTIVATION OF CO/NO2 SYSTEM, OPEN EA DAMPER AND ENABLE SUPPLY FAN. MONITOR STATUS AND ALARM.

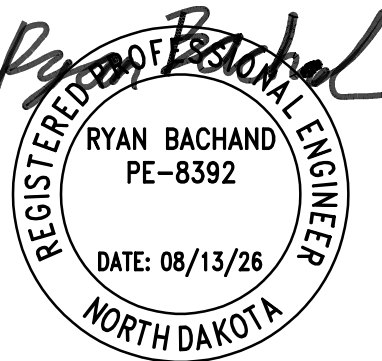
PLUMBING & HVAC SYMBOLS & ABBREVIATIONS LEGEND							
HVAC ABBREVIATIONS		PLUMBING SYSTEMS		HVAC SYSTEMS		HVAC SYSTEMS	
		SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
CFM	ABOVE FINISHED FLOOR	---	CONDENSATE DRAIN	→	RETURN AIR OR EXHAUST AIR INLET	⊠ UP ⊠ DOWN	POSITIVE PRESSURE DUCT
DN	CUBIC FEET PER MINUTE	---	DOMESTIC COLD WATER	→	SUPPLY AIR OUTLET	⊠ UP ⊠ DOWN	NEGATIVE PRESSURE DUCT
EA	DOWN	---	DOMESTIC HOT WATER	⊙	THERMOSTAT	⊠ UP ⊠ DOWN	MOTOR OPERATED DAMPER
EG	EXHAUST AIR	---	DOMESTIC RECIRCULATING HOT WATER	S-1 T20	AIR INLET/OUTLET REFERENCE SYMBOL WITH TYPE AND AIRFLOW SHOWN (TYPE S-1: 150 CFM) - REFER TO SCHEDULE. (E=EXHAUST, R=RETURN, S=SUPPLY, T=TRANSFER, EX=EXISTING)	18x10	RECTANGULAR DUCT, ADJUSTIALLY LINED (INDICATE DIMENSIONS INDICATED)
EGG	EGG CRATE GRILLE	---	DOMESTIC RECIRCULATING HOT WATER	18x10	RECTANGULAR DUCT	18x10	RECTANGULAR DUCT
HW	HOT WATER	---	DOMESTIC RECIRCULATING HOT WATER	18x10	RECTANGULAR DUCT	18x10	RECTANGULAR DUCT
OA	OUTSIDE AIR	---	DOMESTIC RECIRCULATING HOT WATER	18x10	RECTANGULAR DUCT	18x10	RECTANGULAR DUCT
RA	RETURN AIR	---	DOMESTIC RECIRCULATING HOT WATER	18x10	RECTANGULAR DUCT	18x10	RECTANGULAR DUCT
SA	SUPPLY AIR	---	DOMESTIC RECIRCULATING HOT WATER	18x10	RECTANGULAR DUCT	18x10	RECTANGULAR DUCT
CH	COLD WATER	---	DOMESTIC RECIRCULATING HOT WATER	18x10	RECTANGULAR DUCT	18x10	RECTANGULAR DUCT
RHW	RECIRCULATING HOT WATER	---	DOMESTIC RECIRCULATING HOT WATER	18x10	RECTANGULAR DUCT	18x10	RECTANGULAR DUCT
VTR	VENT THROUGH ROOF	---	DOMESTIC RECIRCULATING HOT WATER	18x10	RECTANGULAR DUCT	18x10	RECTANGULAR DUCT
XST	EXISTING	---	DOMESTIC RECIRCULATING HOT WATER	18x10	RECTANGULAR DUCT	18x10	RECTANGULAR DUCT
HVAC EQUIPMENT TAGS		---	DOMESTIC RECIRCULATING HOT WATER	18x10	RECTANGULAR DUCT	18x10	RECTANGULAR DUCT
CC-1	COOLING COIL	---	DOMESTIC RECIRCULATING HOT WATER	18x10	RECTANGULAR DUCT	18x10	RECTANGULAR DUCT
CU-1	CONDENSING UNIT	---	DOMESTIC RECIRCULATING HOT WATER	18x10	RECTANGULAR DUCT	18x10	RECTANGULAR DUCT
EF-1	EXHAUST FAN	---	DOMESTIC RECIRCULATING HOT WATER	18x10	RECTANGULAR DUCT	18x10	RECTANGULAR DUCT
LVR-1	LOUVER	---	DOMESTIC RECIRCULATING HOT WATER	18x10	RECTANGULAR DUCT	18x10	RECTANGULAR DUCT
MAU-1	MAKEUP AIR UNIT	---	DOMESTIC RECIRCULATING HOT WATER	18x10	RECTANGULAR DUCT	18x10	RECTANGULAR DUCT
UH-1	UNIT HEATER	---	DOMESTIC RECIRCULATING HOT WATER	18x10	RECTANGULAR DUCT	18x10	RECTANGULAR DUCT
PLUMBING EQUIPMENT TAGS		---	DOMESTIC RECIRCULATING HOT WATER	18x10	RECTANGULAR DUCT	18x10	RECTANGULAR DUCT
FD-1	FLOOR DRAIN	---	DOMESTIC RECIRCULATING HOT WATER	18x10	RECTANGULAR DUCT	18x10	RECTANGULAR DUCT
HB-1	HOSE BIBB	---	DOMESTIC RECIRCULATING HOT WATER	18x10	RECTANGULAR DUCT	18x10	RECTANGULAR DUCT
L-1	LAVATORY	---	DOMESTIC RECIRCULATING HOT WATER	18x10	RECTANGULAR DUCT	18x10	RECTANGULAR DUCT
MV-1	MIXING VALVE	---	DOMESTIC RECIRCULATING HOT WATER	18x10	RECTANGULAR DUCT	18x10	RECTANGULAR DUCT
MB-1	MOP BASIN	---	DOMESTIC RECIRCULATING HOT WATER	18x10	RECTANGULAR DUCT	18x10	RECTANGULAR DUCT
S-1	SINK	---	DOMESTIC RECIRCULATING HOT WATER	18x10	RECTANGULAR DUCT	18x10	RECTANGULAR DUCT
SH-1	SHOWER	---	DOMESTIC RECIRCULATING HOT WATER	18x10	RECTANGULAR DUCT	18x10	RECTANGULAR DUCT
U-1	URINAL	---	DOMESTIC RECIRCULATING HOT WATER	18x10	RECTANGULAR DUCT	18x10	RECTANGULAR DUCT
WC-1	WATER CLOSET	---	DOMESTIC RECIRCULATING HOT WATER	18x10	RECTANGULAR DUCT	18x10	RECTANGULAR DUCT
WH-1	WATER HEATER	---	DOMESTIC RECIRCULATING HOT WATER	18x10	RECTANGULAR DUCT	18x10	RECTANGULAR DUCT

UNIT HEATER SCHEDULE							
UNIT HEATER ID	CFM	HEAT OUTPUT (MBH)	GPM	HP	VOLTAGE/ PHASE	MANUFACTURER & MODEL	NOTES
UH-1	2900	97.0	7.5	1/4	120/1	RITTLING RH-193	1,2,3
UH-2	2900	97.0	7.5	1/4	120/1	RITTLING RH-193	1,2,3
1) DESIGN ENTERING WATER TEMPERATURE OF 160° F AND 30° F TEMPERATURE DROP. 2) DESIGN ENTERING AIR TEMPERATURE OF 60° F. 3) PROVIDE UNIT MOUNTED DISCONNECT SWITCH.							

LOUVER SCHEDULE									
LOUVER ID	WIDTH (INCH)	HEIGHT (INCH)	DEPTH (INCH)	FRAME TYPE	CFM	FREE AREA (SQ. FT)	MANUFACTURER & MODEL	NOTES	
LVR-1	24	24	4	CHANNEL	1300	1.72	GREENHECK ESJ-401	1,2	
1) DESIGN MAX AIR SIDE PRESSURE DROP TO 0.05 INCH. 2) ARCHITECT SHALL SELECT LOUVER COLOR FROM STANDARD COLOR CHART. SELECTION CAN BE DIFFERENT FOR EACH LOUVER.									

FAN SCHEDULE												
FAN ID	TYPE	CFM	ESP (INCH)	HP	VOLTAGE/ PHASE	DRIVE	SONES	VFD	ECM	MANUFACTURER & MODEL	NOTES	
EF-1	IL	1300	0.5	1/2	120/1	BELT	11.4	Y	Y	GREENHECK SQ-120-VG	1,2,3	
EF-20	CEF	70	0.5	17W	120/1	DIRECT	3	N	Y	GREENHECK SP-A350-VG	4	
1) PROVIDE GRAVITY BACKDRAFT DAMPER. PROVIDE DISCONNECT SWITCH FACTORY MOUNTED AND WIRED. 2) PROVIDE WITH VIBRATION ISOLATORS. 3) PROVIDE WITH ECM MOTOR AND DIAL ADJUSTMENT FOR BALANCING. 4) PLUS TYPE DISCONNECT, GRAVITY BACKDRAFT DAMPER, AND WHITE ALUMINUM GRILLE. IL - IN-LINE CEF - CEILING EXHAUST FAN												

AIR HANDLING UNIT SCHEDULE																			
			HEATING COIL								SUPPLY AIR FAN								
AIR HANDLING UNIT ID	CFM	OUTSIDE AIR CFM	EAT (°F)	LAT (°F)	EWIT (°F)	UNIT CAPACITY (MBH)	GPM	WPD (FT)	FACE VELOCITY (FPM)	ESP (INCH)	HP	ECM	BLOWER SIZE/TYPE SAF	MCA	MOP	VOLTAGE/ PHASE	MANUFACTURER & MODEL	NOTES	
AHU-10	1300	1300	-30	80	160	130	155	15	2	475	1	2.5	Y	14" AIRFOIL	4.1	15	480/3	DAIKIN CAH003	1,2,3,4,5,6,7,8
1) HEATING CAPACITY BASED ON 50% ETHYLENE GLYCOL SOLUTION. 2) MOTOR CONTROLLER BY MECHANICAL. INSTALLED BY ELECTRICAL. 3) DESIGN MAX FACE VELOCITY AT 500 FPM. DESIGN MAX OUTLET VELOCITY AT 2000 FPM. 4) PROVIDE WITH 4" HIGH BASE RAIL UNDER UNIT. 5) PROVIDE WITH 2" MERV 8 FILTERS. 6) PROVIDE WITH MAXIMUM NUMBER OF SHIPPING SPLITS, UNIT NEEDS TO BE INSTALLED THROUGH 3' DOOR. CONTRACTOR TO BREAK DOWN UNIT AND REASSEMBLE AS REQUIRED TO INSTALL THROUGH 3' DOOR. 7) UNIT CONFIGURATION - VERTICAL/STACKED. 8) PROVIDE FLEXIBLE DUCT CONNECTIONS ON OUTLET AND INLET.																			



INDOOR FIRING RANGE
ABATEMENT & CLOSURE
AFRC BLDG. 3420
NDNG PROJECT NO. 2610
OWNER: THE ADJUTANT GENERAL, STATE OF ND



MINOT, NORTH DAKOTA

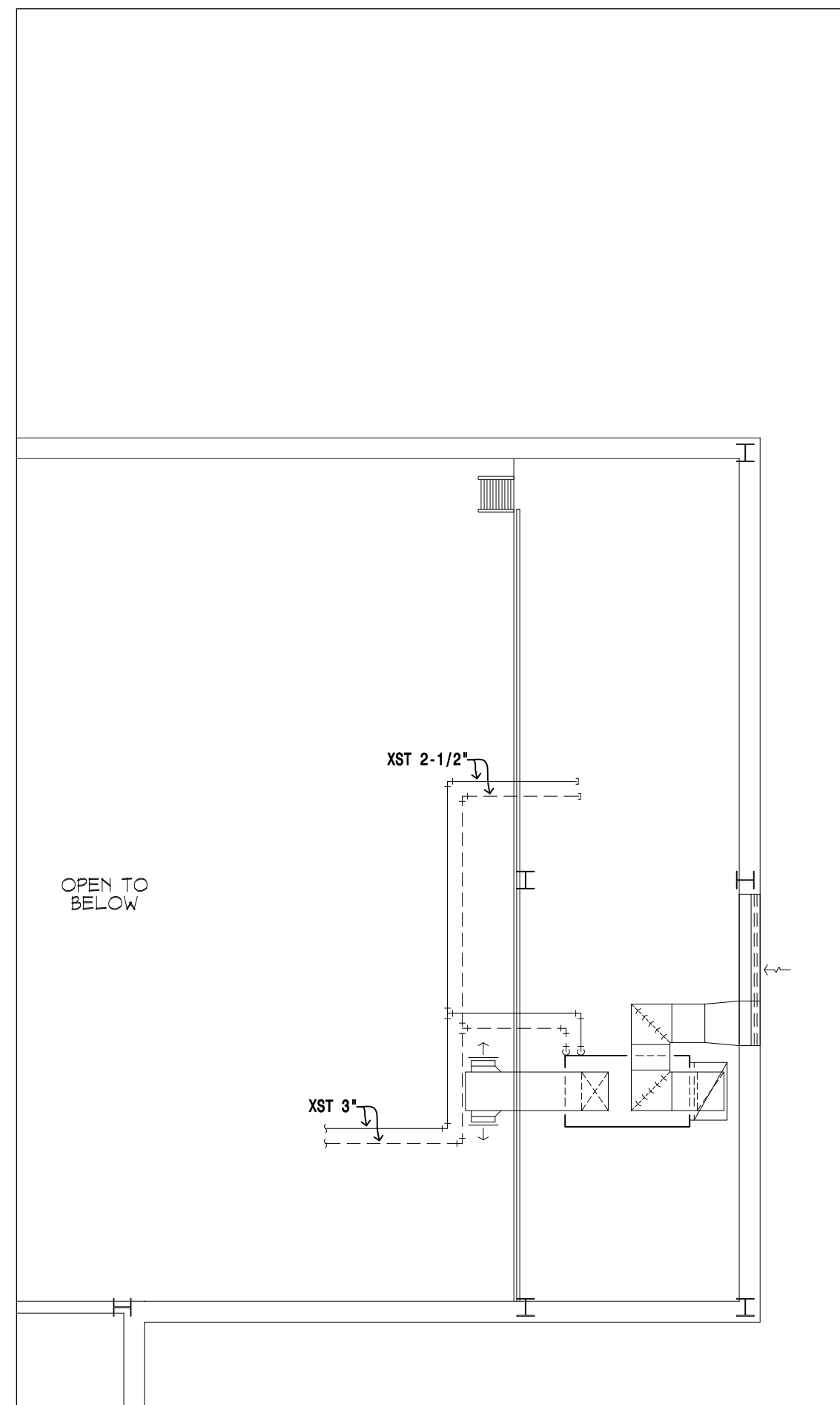
M | B | A

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Phone: 701-235-5563 Fax: 701-235-5435

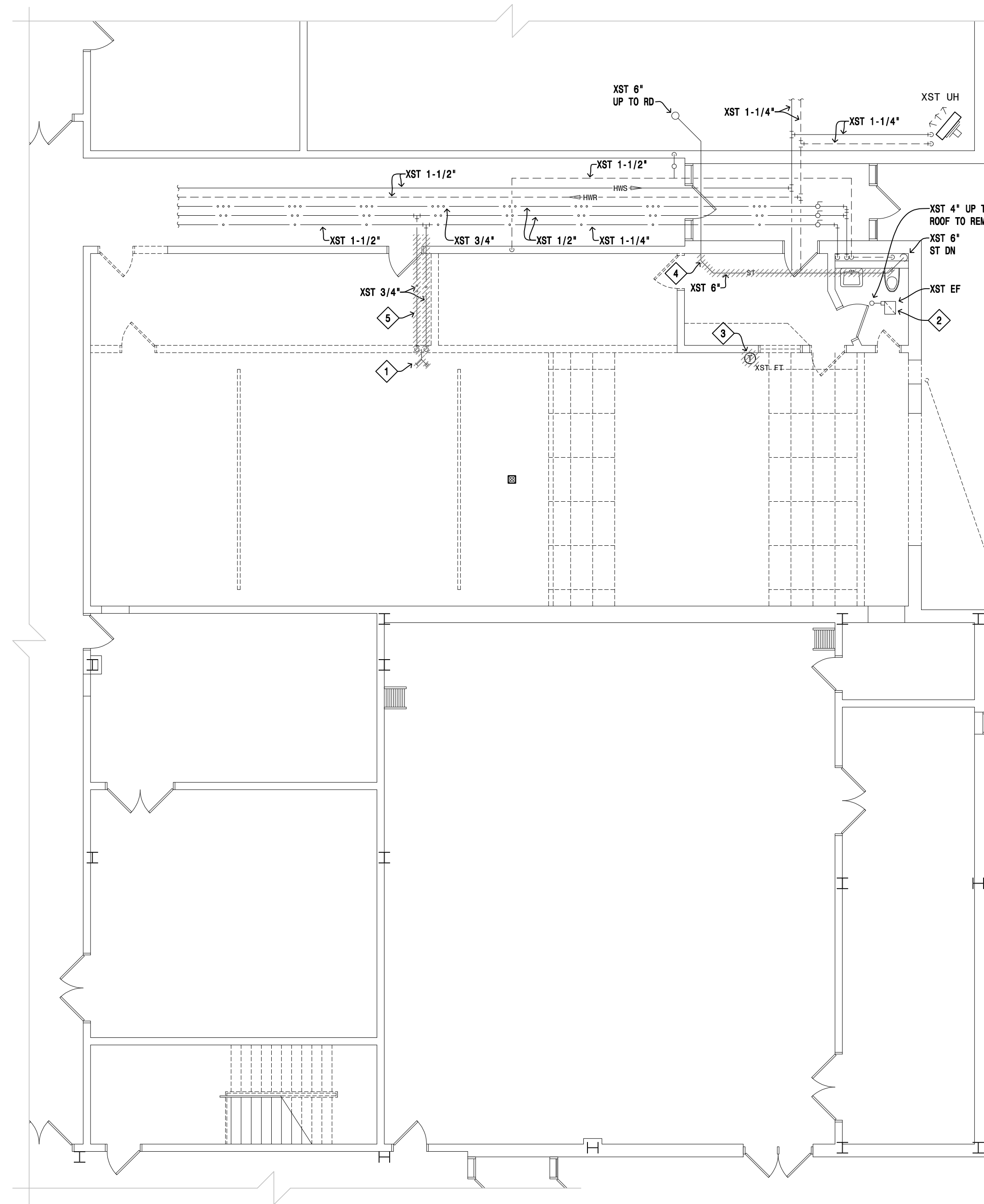
MECHANICAL SCHEDULES,
LEGEND & ABBREVIATIONS

DEMOLITION NOTES:

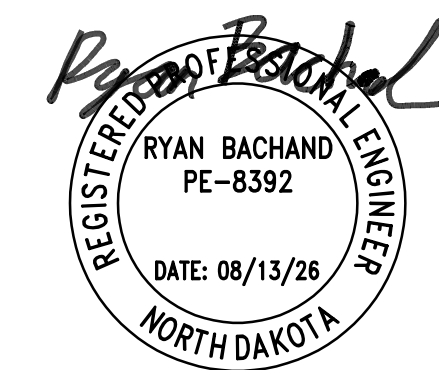
- 1 REMOVE EXISTING HOSE BIBB AND ALL ASSOCIATED PIPING.
- 2 EXISTING EXHAUST FAN SHALL BE REMOVED BY LEAD ABATEMENT CONTRACTOR.
- 3 REMOVE EXISTING THERMOSTAT. PREPARE LOCATION FOR INSTALLATION OF NEW THERMOSTAT.
- 4 REMOVE EXISTING STORM PIPING INSULATION. PIPING TO REMAIN.
- 5 REMOVE EXISTING DOMESTIC WATER PIPING AND ALL ASSOCIATED HANGERS AND SUPPORTS.



2 PARTIAL MEZZANINE 323 PLAN - MECHANICAL DEMOLITION
SCALE : 1/8" = 1'-0" NORTH



1 PARTIAL FIRST FLOOR PLAN - MECHANICAL DEMOLITION
SCALE : 1/8" = 1'-0" NORTH



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PARTIAL FIRST FLOOR PLAN -
MECHANICAL DEMOLITION

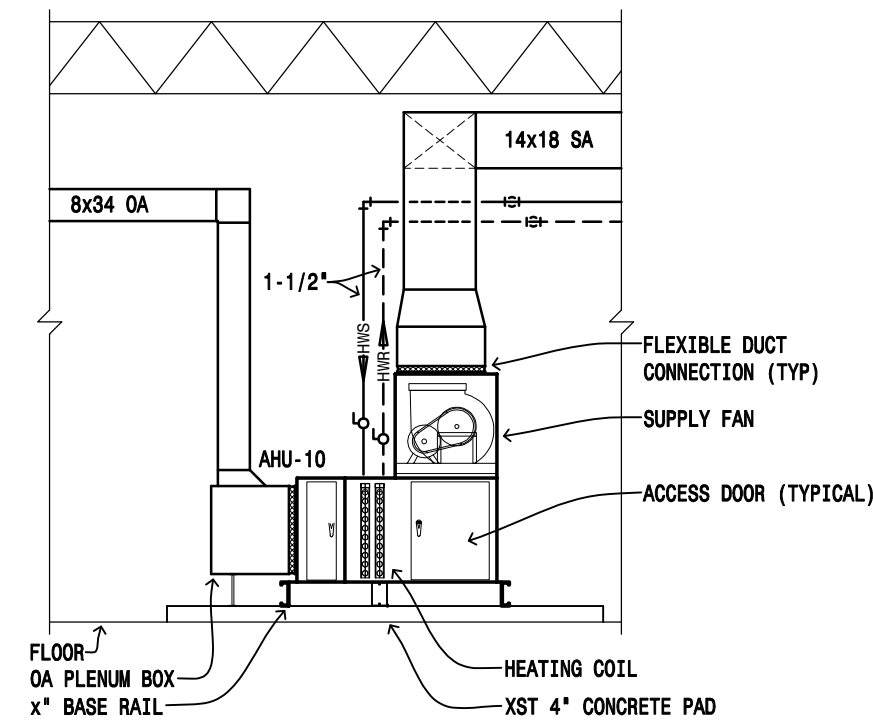
MBA Project Number: 26006

Date: 08-13-2026

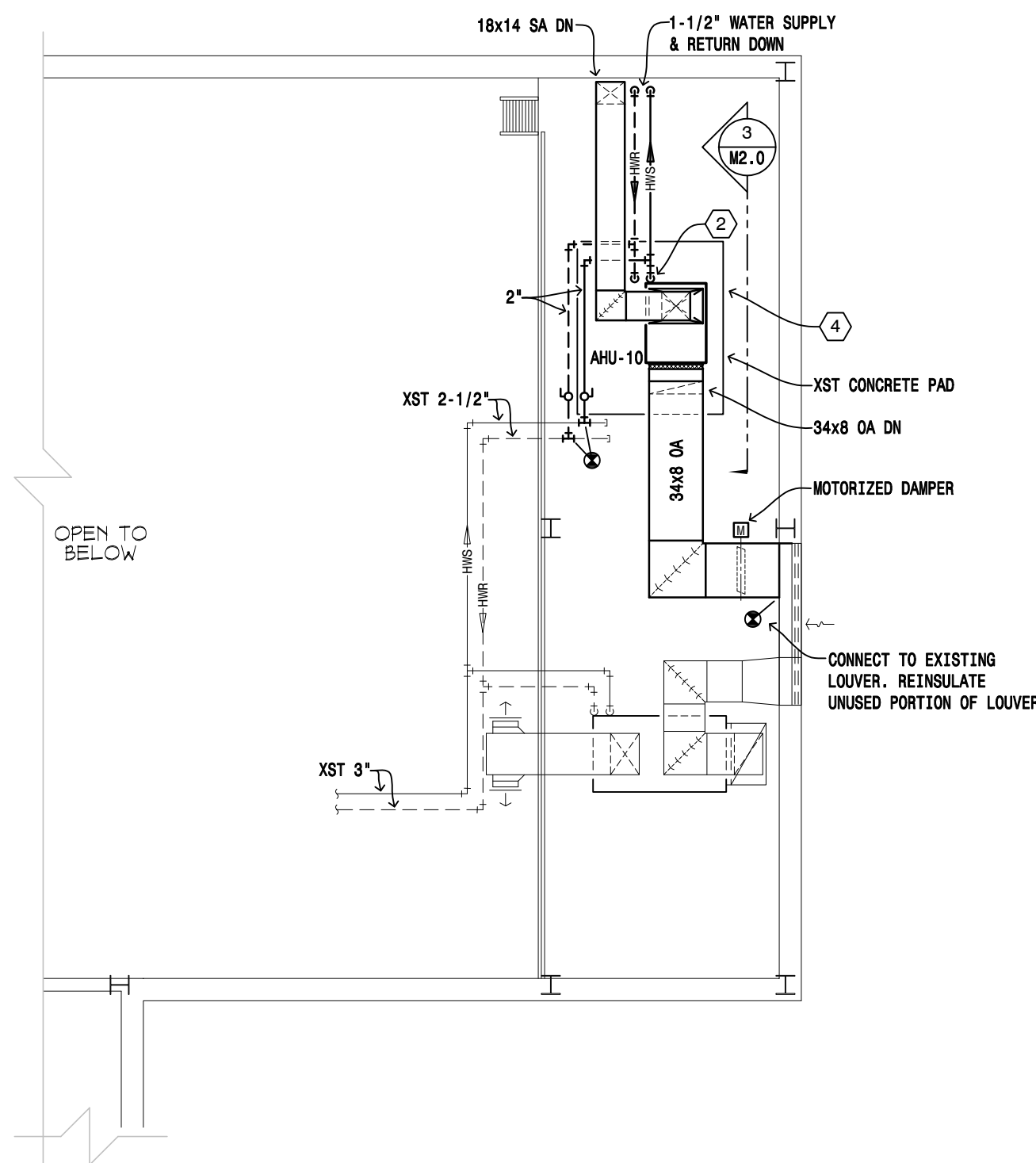
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PLAN NOTES:

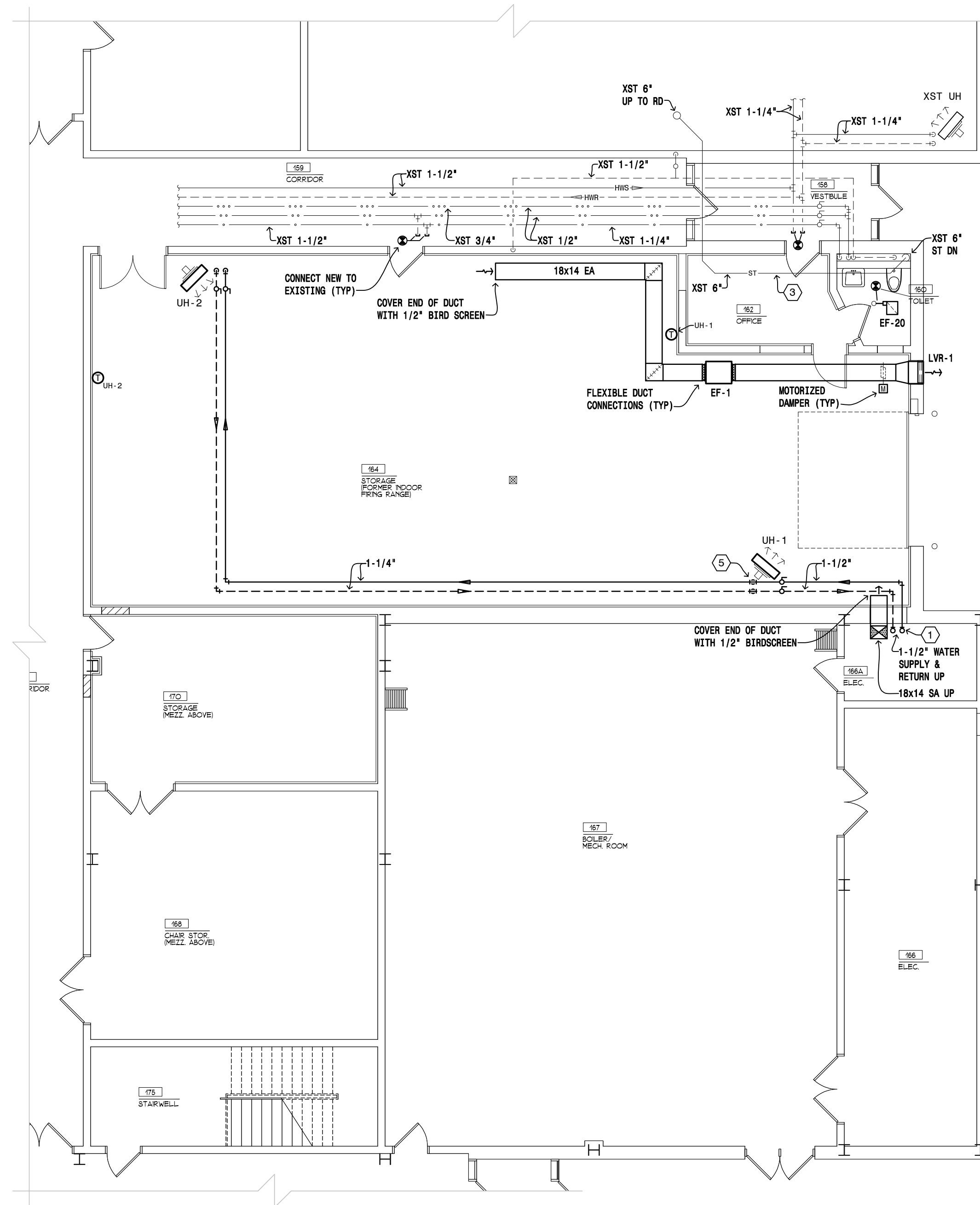
- 1 OFFSEET NEW SUPPLY AIR AND HEATING PIPING UP INTO MEZZANINE LEVEL THROUGH EXISTING OPENING.
- 2 1-1/2" HOT WATER SUPPLY & RETURN DOWN TO AIR HANDLING UNIT.
- 3 RE-INSULATE EXISTING 6" STORM PIPING.
- 4 COORDINATE WITH GENERAL CONTRACTOR FOR EPOXY FLOORING ON EXISTING CONCRETE PAD. FLOORING SHALL BE INSTALLED PRIOR TO INSTALLATION OF NEW AIR HANDLING UNIT.
- 5 1-1/4" HOT WATER SUPPLY & RETURN DOWN TO UNIT HEATER.



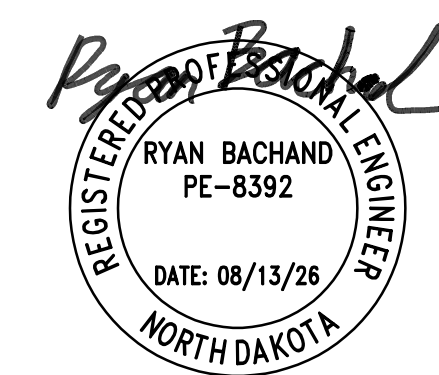
3 AHU-10 SECTION VIEW
SCALE : 1/4" = 1'-0"



2 PARTIAL MEZZANINE PLAN - MECHANICAL
SCALE : 1/8" = 1'-0"



1 PARTIAL FIRST FLOOR PLAN - MECHANICAL
SCALE : 1/8" = 1'-0"



**INDOOR FIRING RANGE
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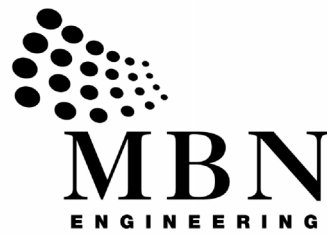
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PARTIAL FIRST FLOOR PLAN -
MECHANICAL

MBA Project Number 26006

Date 08-13-2026

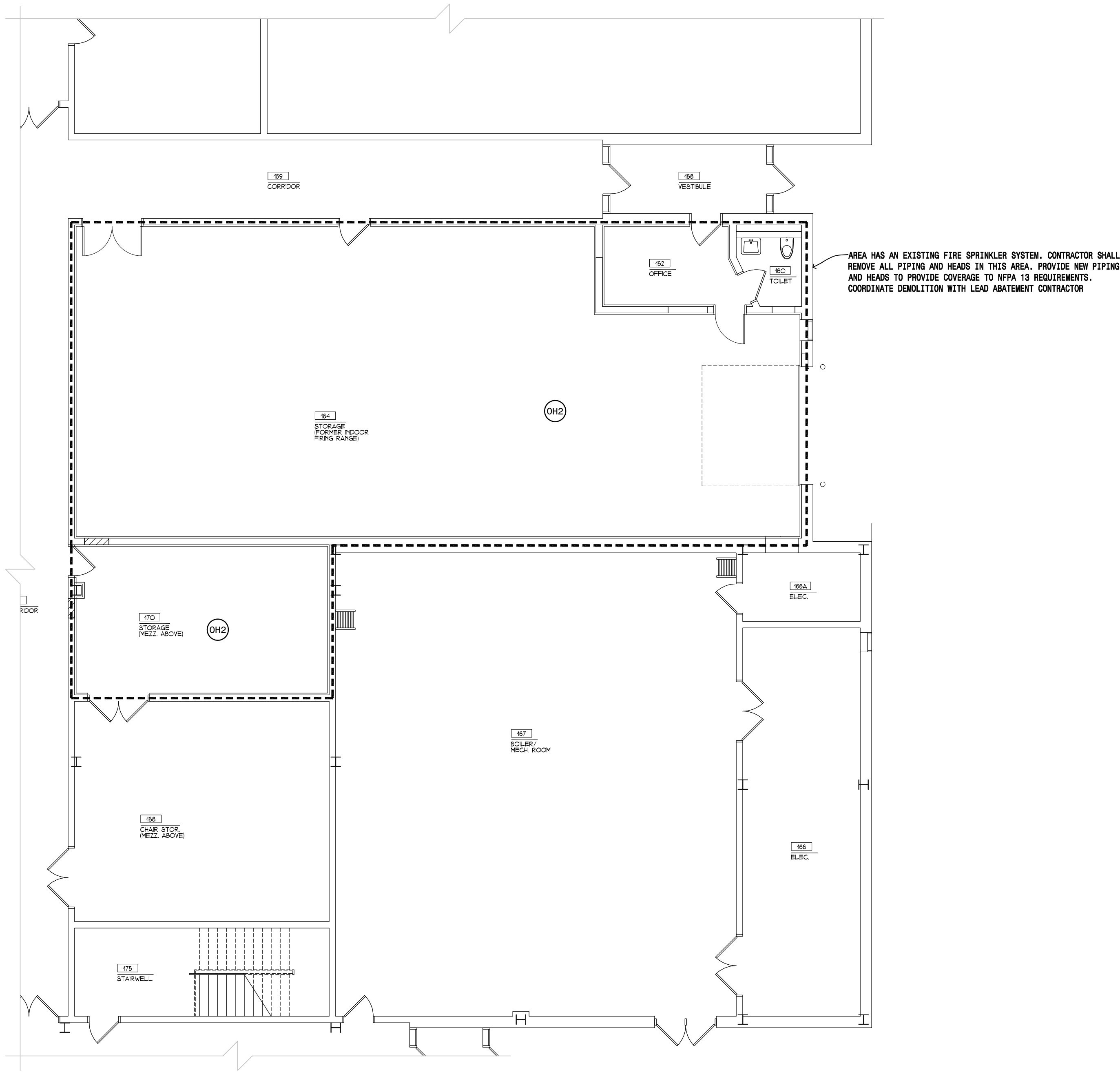
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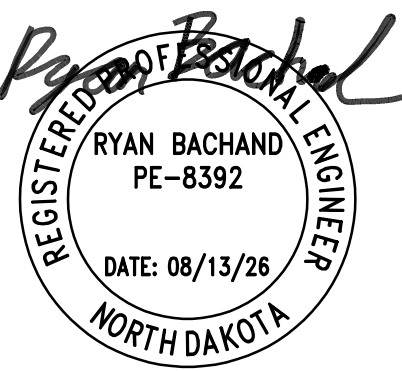
MECHANICAL * ELECTRICAL * CIVIL
701 MAIN AVENUE
FARGO, ND 58103
PHONE: 701.478.6336
FAX: 701.478.6340

FIRE SPRINKLER NOTES:

1. THE ENTIRE BUILDING HAS AN EXISTING FIRE SPRINKLER SYSTEM. MODIFY AND EXTEND EXISTING SYSTEM WHERE SHOWN ON PLANS IN ACCORDANCE WITH NFPA 13.
2. ALL AREAS SHALL BE DESIGNED TO LIGHT HAZARD PARAMETERS UNLESS NOTED OTHERWISE BELOW OR ON PLANS.
3. ALL AREAS WITH THIS SYMBOL: (OH1) SHALL BE DESIGNED TO ORDINARY HAZARD GROUP 1 PARAMETERS AS PER NFPA-13.
4. ALL AREAS WITH THIS SYMBOL: (OH2) SHALL BE DESIGNED TO ORDINARY HAZARD GROUP 2 PARAMETERS AS PER NFPA-13.
5. PROVIDE CAGED HEAD COVERS IN STORAGE ROOM 219.
6. CENTER FIRE SPRINKLER HEADS IN TWO DIRECTIONS IN LAY IN CEILING TILE.
7. PROVIDE SPRINKLER COVERAGE UNDER DUCTWORK OR ANY OTHER OBSTRUCTIONS OVER FOUR FEET IN WIDTH.
8. ARCHITECTURAL BACKGROUNDS ON THESE DRAWINGS ARE FOR REFERENCE ONLY. CONTRACTOR TO VERIFY ALL BACKGROUNDS WITH ARCHITECTURAL SHEETS AND SITE VISITS.
9. COORDINATE PIPING LOCATIONS WITH ALL OTHER TRADES.



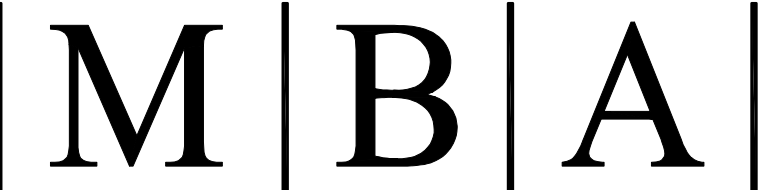
1 PARTIAL FIRST FLOOR PLAN - FIRE SPRINKLER
SCALE : 1/8" = 1'-0"



INDOOR FIRING RANGE
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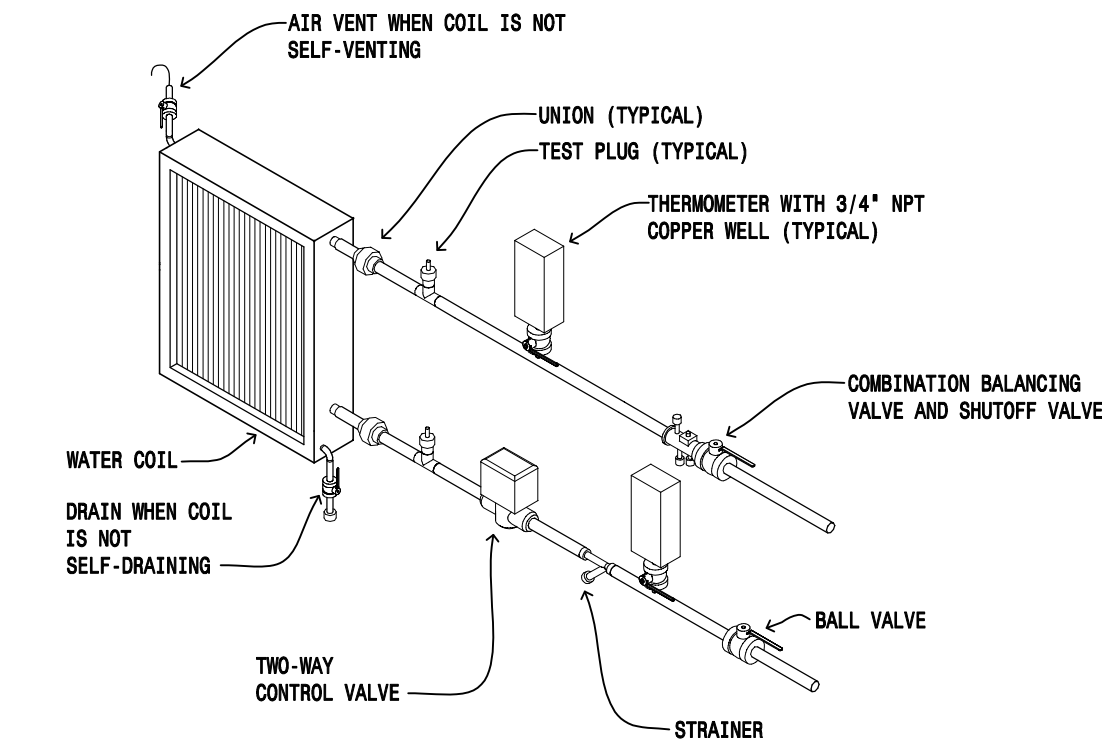
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PARTIAL FIRST FLOOR PLAN -
FIRE SPRINKLER

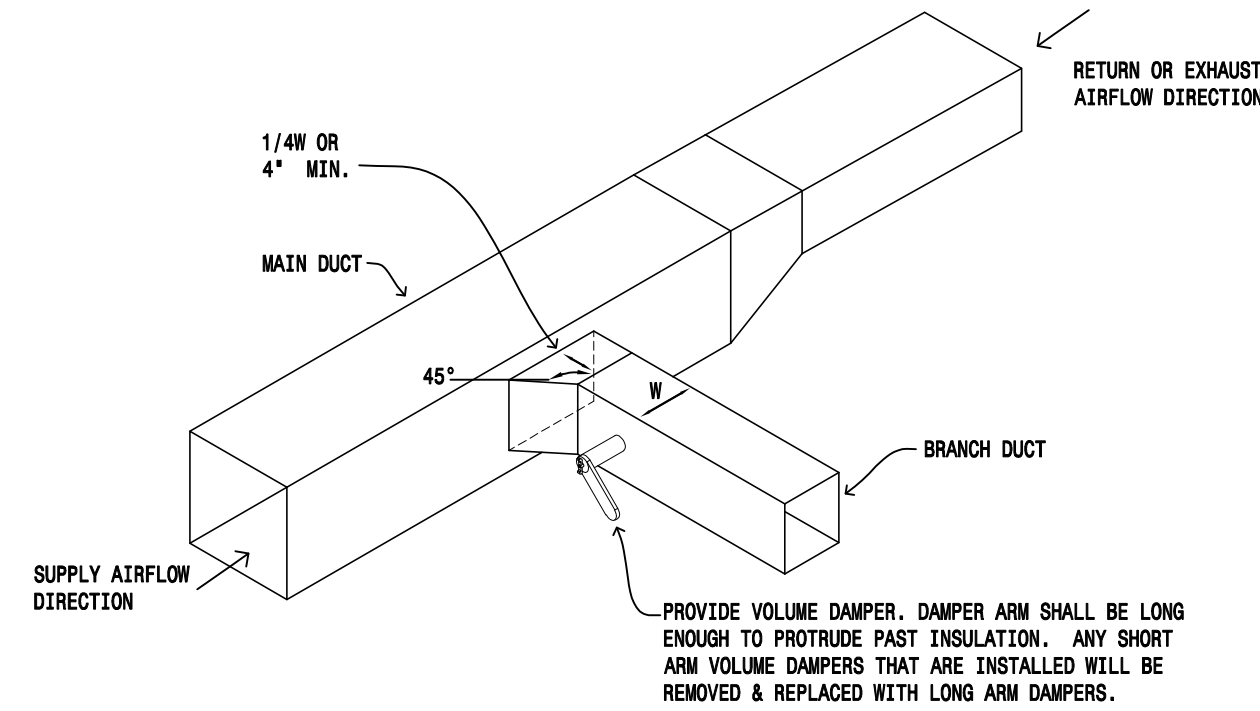
MBA Project Number 26006

Date 08-13-2026

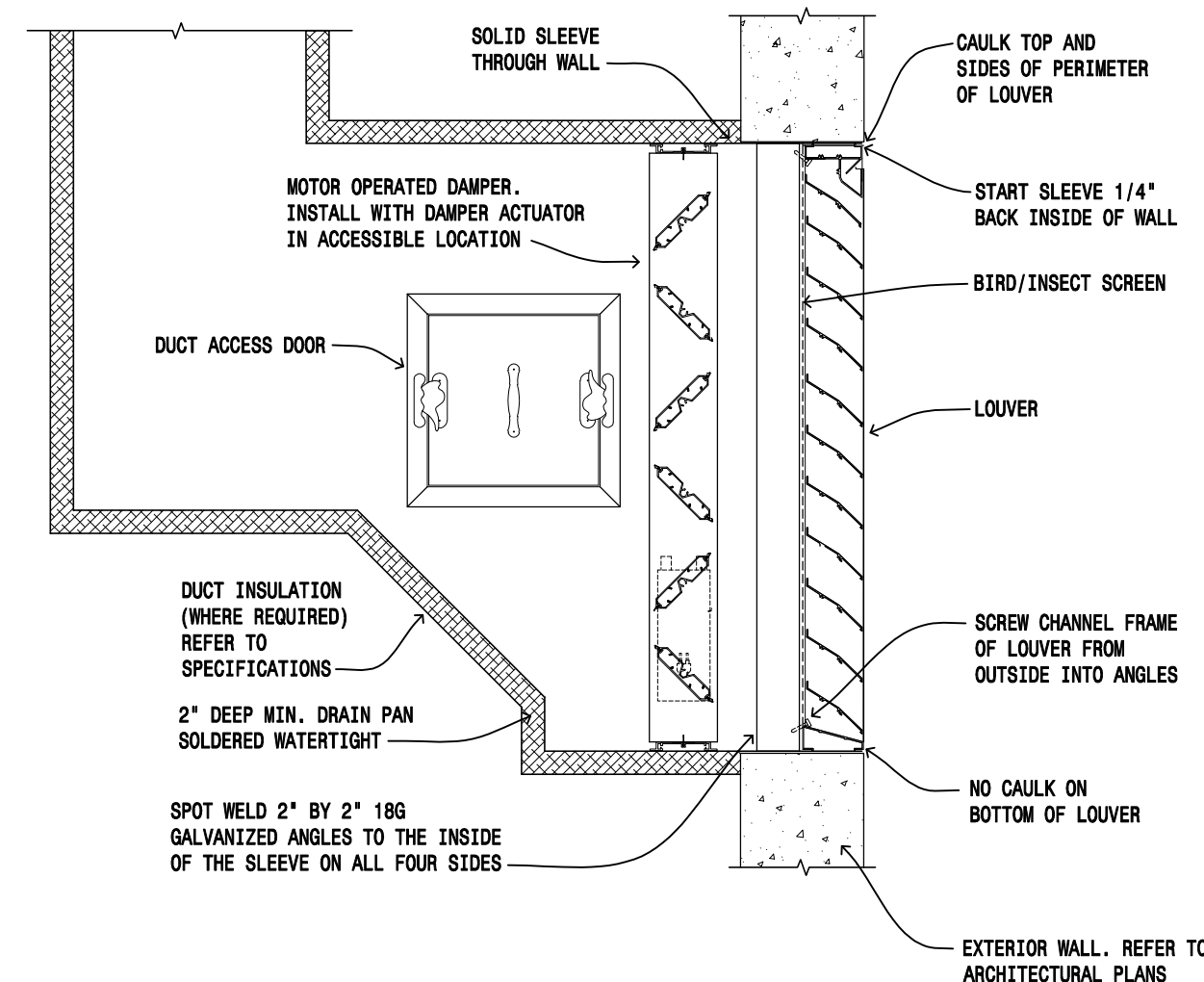
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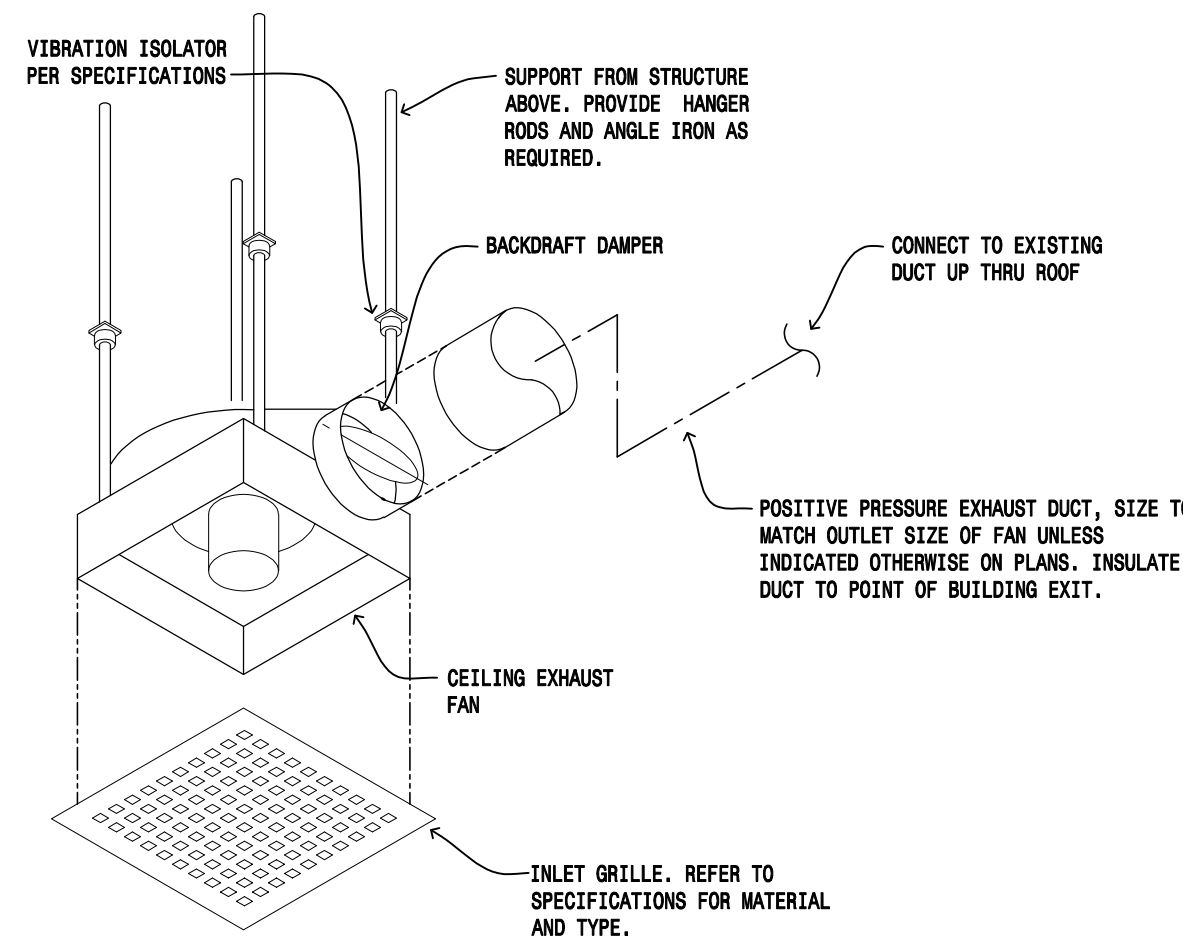
4 TWO-WAY CONNECTION TO COIL DETAIL
SCALE : NOT-TO-SCALE



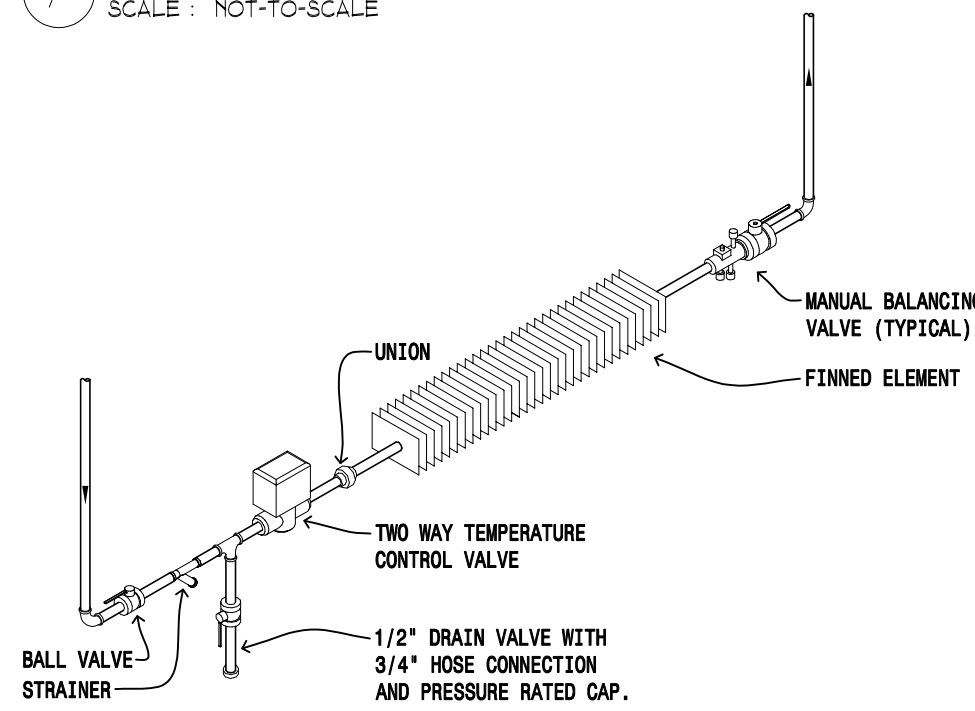
3 BRANCH DUCTWORK DETAIL
SCALE : NOT-TO-SCALE



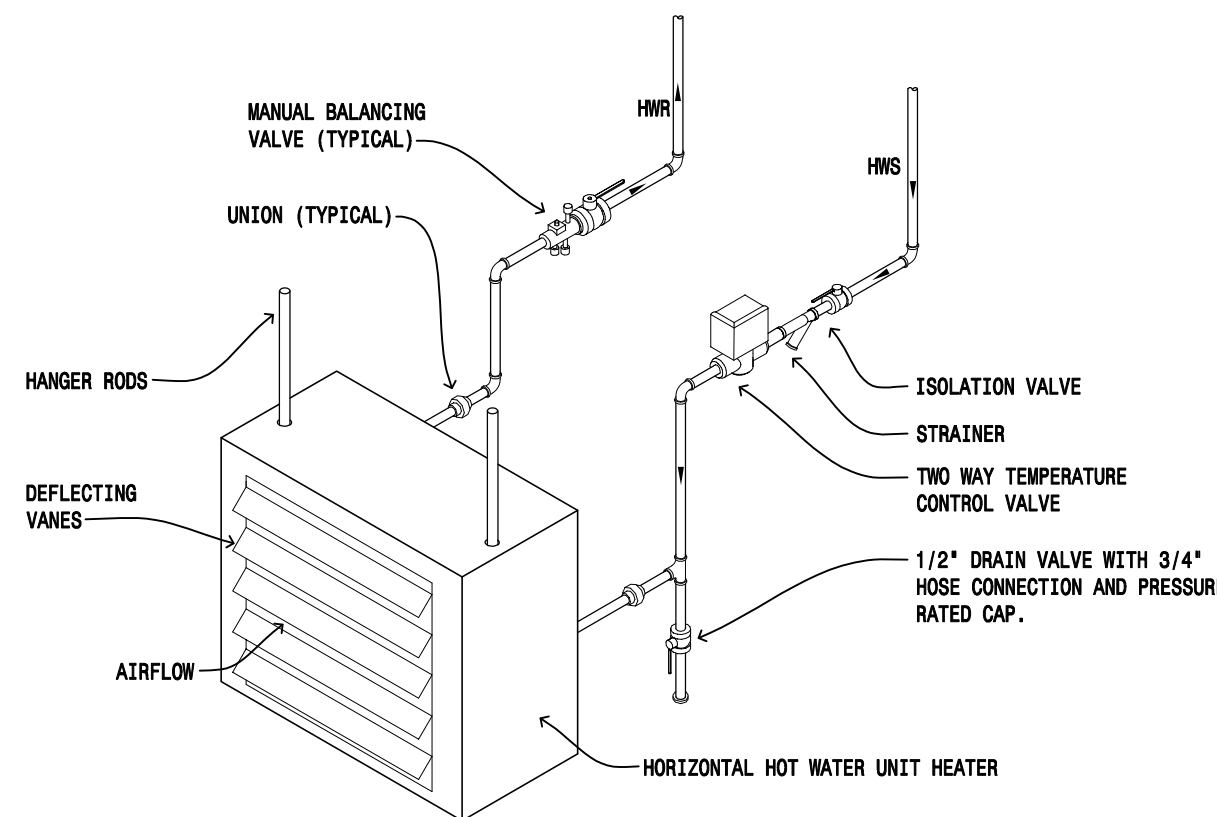
2 LOUVER DETAIL
SCALE : NOT-TO-SCALE



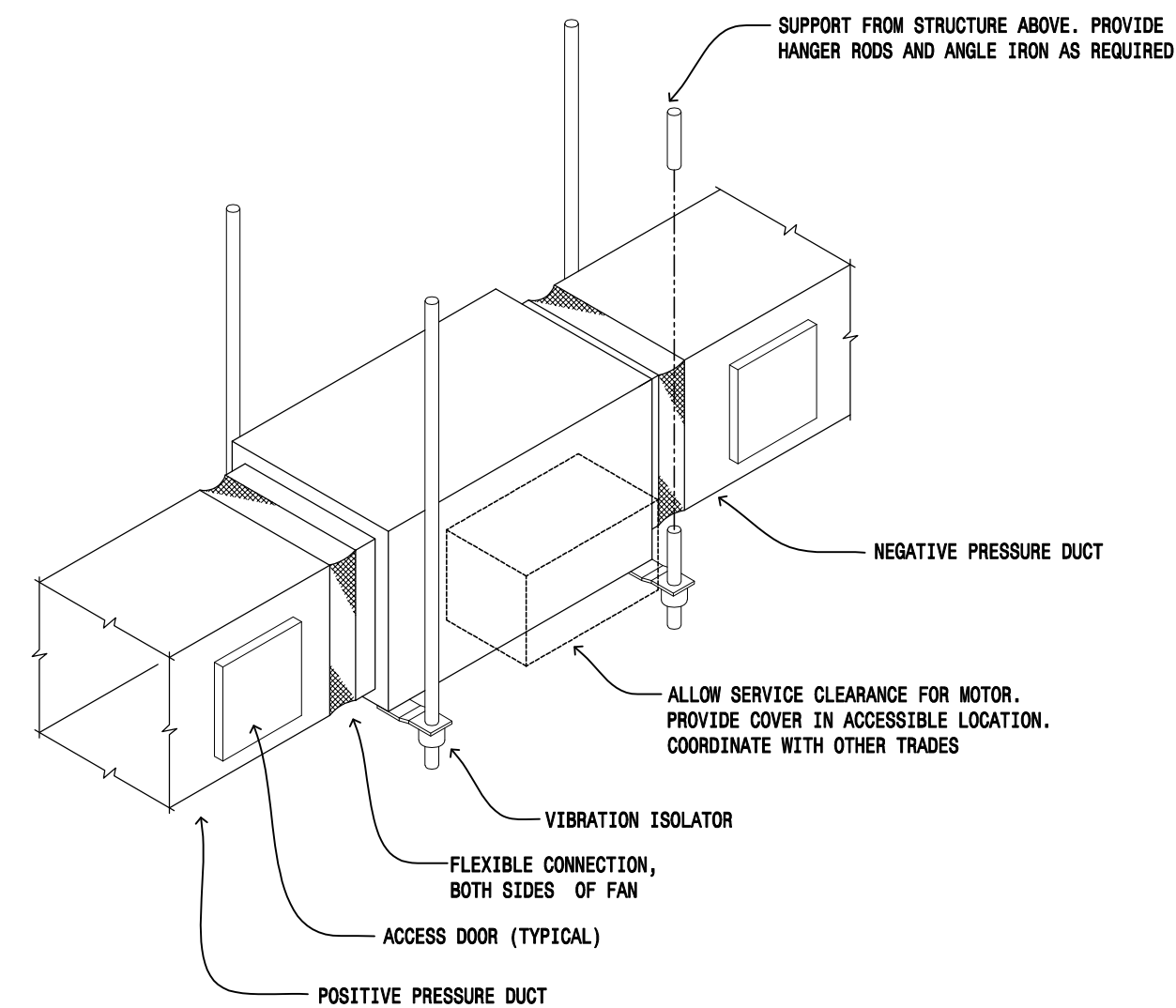
7 CEILING EXHAUST FAN DETAIL
SCALE : NOT-TO-SCALE



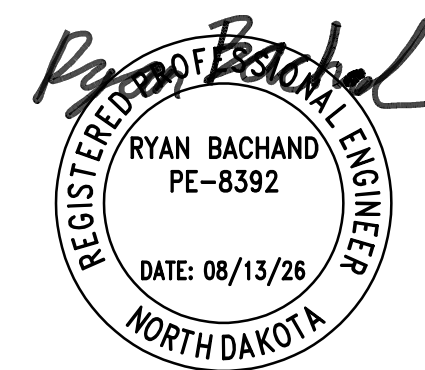
6 DOWNFEED FINNED TUBE RADIATION DETAIL
SCALE : NOT-TO-SCALE



5 HORIZONTAL HOT WATER UNIT HEATER DETAIL
SCALE : NOT-TO-SCALE



1 INLINE CENTRIFUGAL FAN DETAIL
SCALE : NOT-TO-SCALE



**INDOOR FIRING RANGE
ABATEMENT & CLOSURE
AFRC BLDG. 3420
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MINOT, NORTH DAKOTA

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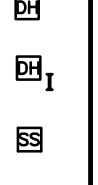
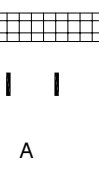
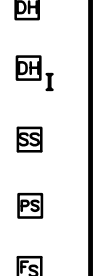
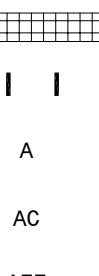
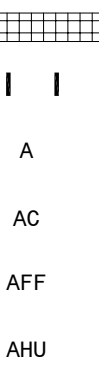
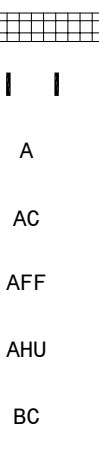
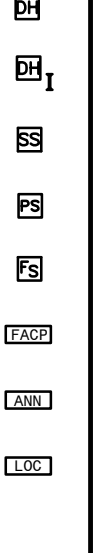
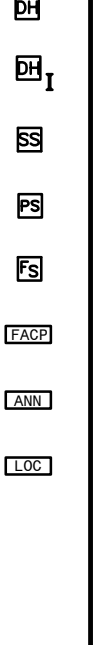
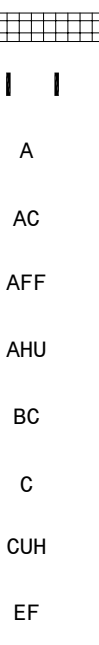
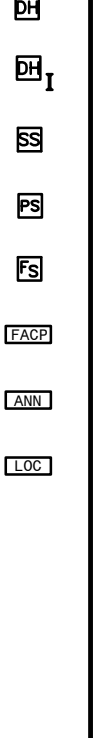
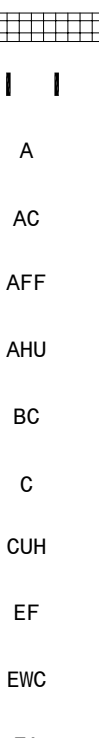
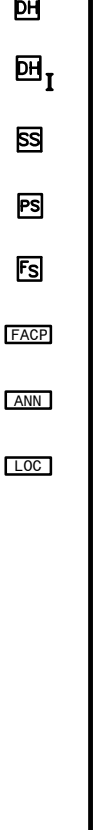
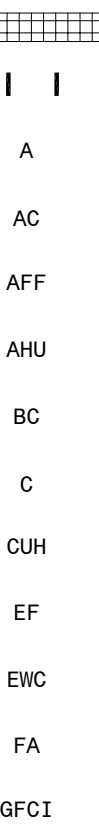
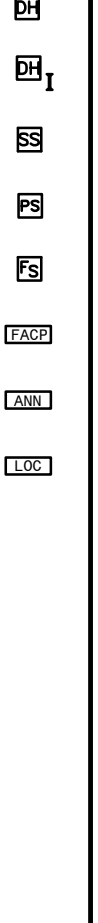
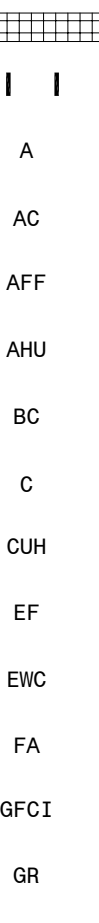
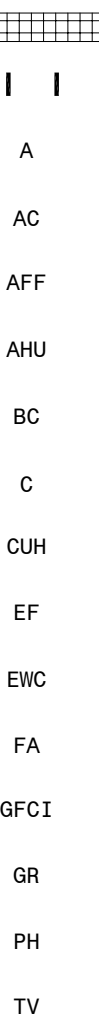
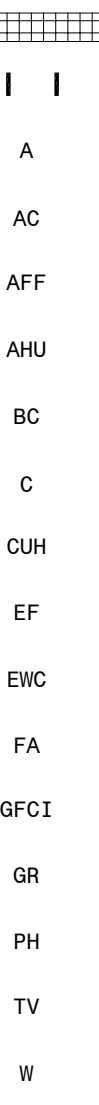
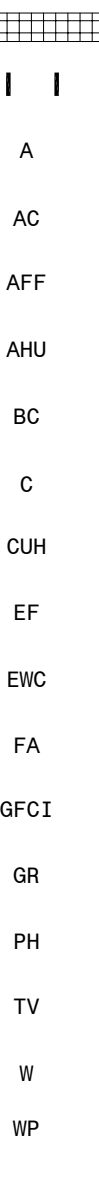
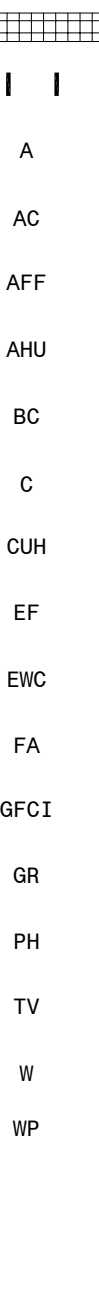
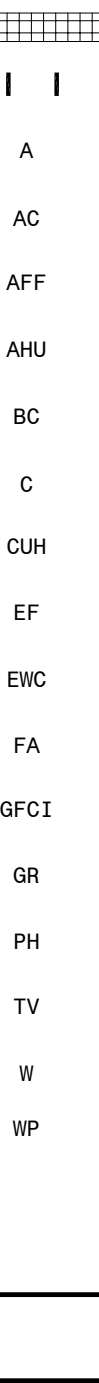
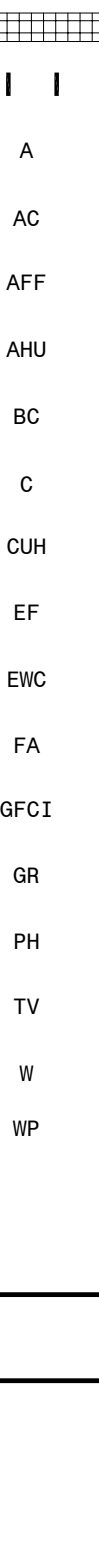
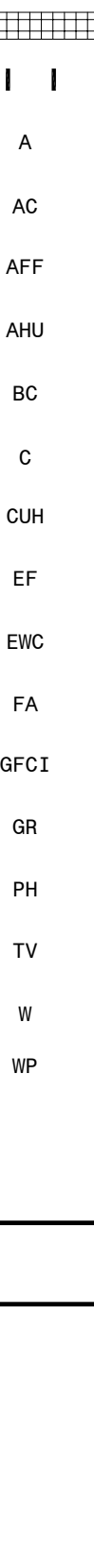
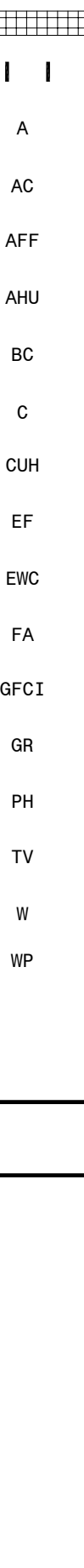
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MECHANICAL DETAILS

MBA Project Number 26006

Date 08-13-2026

M4.0

ELECTRICAL SYMBOLS LEGEND														
LIGHTING			POWER			SYSTEMS			FIRE ALARM			MISCELLANEOUS/ABBREVIATIONS		
SYMBOLS	DESCRIPTION	MOUNTING HEIGHT	SYMBOLS	DESCRIPTION	MOUNTING HEIGHT	SYMBOLS	DESCRIPTION	MOUNTING HEIGHT	SYMBOLS	DESCRIPTION	MOUNTING HEIGHT	SYMBOLS	DESCRIPTION	MOUNTING HEIGHT
	CEILING SURFACE MOUNTED LIGHT FIXTURE, CAPITAL LETTER INDICATES FIXTURE TYPE, SMALL LETTER INDICATES SWITCHING.	8 INCHES ABOVE DOOR FRAME TO BOTTOM		DUPLEX RECEPTACLE ('C' INDICATES EMERGENCY CRITICAL BRANCH POWER)	18 INCHES		CEILING MOUNTED RECESSED SPEAKER			MANUAL STATION	48 INCHES		CEILING-MOUNTED JUNCTION BOX	18 INCHES
	RECESSED CEILING MOUNTED LIGHT FIXTURE			DOUBLE DUPLEX RECEPTACLE ('C' INDICATES EMERGENCY CRITICAL BRANCH POWER)	18 INCHES		PAGING HORN	12' AFF		FIXED TEMPERATURE DETECTOR			WALL JUNCTION BOX	
	WALL MOUNTED LIGHT FIXTURE, SURFACE OR, RECESSED MOUNTED			TYPE 14-30 RECEPTACLE	18 INCHES		WALL MOUNTED SPEAKER	96 INCHES		DUCT PHOTOELECTRIC DETECTOR			DASHED LINES INDICATE EXISTING FIXTURES, DEVICES, OR EQUIPMENT	
	CEILING EXIT SIGN, SHADED SIDE INDICATES LIGHTED FACE, ARROWS INSTALLED AS SHOWN			TYPE 14-50 RECEPTACLE	6 INCHES		CLOCK	90 INCHES TO BOTTOM		PHOTOELECTRIC DETECTOR ('CO' INDICATES WITH CARBON MONOXIDE DETECTION)			HASH MARKS INDICATE ITEM NOTED TO BE REMOVED	
	WALL EXIT SIGN			GFCI TYPE RECEPTACLE	18 INCHES		CLOCK/SPEAKER UNIT	90 INCHES TO BOTTOM		SPEAKER WITH CLEAR STROBE			CONDUIT CONCEALED IN WALL OR CEILING, QUANTITY OF CONDUIT NOT SHOWN, PROVIDE AS REQUIRED FOR DEVICE/CIRCUIT NUMBERS SHOWN.	
	SUSPENDED LIGHT FIXTURE			MULTI-OUTLET ASSEMBLY - M.O.A., PROVIDE DEVICES AS SHOWN ON PLANS	18 INCHES		MICROPHONE OUTLET	18 INCHES		HORN WITH CLEAR STROBE			CONDUIT CONCEALED IN FLOOR	
	SURFACE LIGHT FIXTURE			DUPLEX RECEPTACLE, HALF SWITCHED	18 INCHES		MICROPHONE FLOOR OUTLET			SPEAKER, 'LF' INDICATES LOW FREQUENCY TYPE			UNDERGROUND CONDUIT AT 24 INCHES MINIMUM	
	RECESSED LIGHT FIXTURE			FLOOR OUTLET, 'R' INDICATES RECESSED, 'F' INDICATES FLUSH, 'S' INDICATES SURFACE MOUNT			VOLUME CONTROL	48 INCHES		STROBE LIGHT			HOME RUN TO PANELBOARD, QUANTITY OF CONDUCTORS REQUIRED NOT INDICATED, PROVIDE QUANTITY AS REQUIRED FOR CIRCUIT NUMBERS SHOWN, SWITCHING ARRANGEMENT, OR NUMBER OF HOME RUNS SHOWN. '10' INDICATES WIRE SIZE, NO NUMBERS INDICATES #12, 3/4 INCH CONDUIT MINIMUM.	
	FIXTURE CONNECTED TO EMERGENCY LIFE SAFETY POWER WHEN SHADED			TIME SWITCH			AMPLIFIER CABINET			MASS NOTIFICATION AMBER STROBE			SURFACE CONDUIT OR SURFACE RACEWAY	
	EMERGENCY BATTERY LIGHT	7 FOOT 6 INCHES		DRY TYPE TRANSFORMER			AUXILIARY INPUT OUTLET	18 INCHES		FIRE ALARM MODULE/RELAY			NOTE IDENTIFICATION	
	EMERGENCY REMOTE LAMP	7 FOOT 6 INCHES		PUSH BUTTON			COMBINATION COMPUTER/TELEVISION OUTLET IN SINGLE GANG OPENING	80 INCHES		MAGNETIC DOOR HOLD OPEN			WIRE BASKET TYPE CABLE TRAY	
	PHOTO CELL	9 FOOT		POWER DOOR HANDICAP PUSH PAD	42 INCHES		TELEPHONE OUTLET ('W' INDICATES WALL MOUNTED AT 48 INCHES)	18 INCHES		INTEGRAL MAGNETIC DOOR CLOSER (PROVIDED BY DIVISION 8)			COMMUNICATIONS CABLE SUPPORT HANGER	
	CEILING MOUNTED MOTION SENSOR SWITCH			EMERGENCY BOILER SHUTDOWN PUSH BUTTON	48 INCHES		COMPUTER/TELEPHONE OUTLET, PROVIDE ROUGH-IN AND CONDUIT ONLY	18 INCHES		SUPERVISORY SWITCH (NUMBER INDICATES NUMBER OF DEVICES AT THIS LOCATION)			AMPERE	
	WALL MOUNTED MOTION SENSOR SWITCH	48 INCHES		THERMOSTAT - PROVIDE BY DIVISION 16	48 INCHES		FLOOR MOUNTED COMMUNICATIONS OUTLET			PRESSURE SWITCH			ABOVE COUNTER	
	MOTION SENSOR SWITCH POWER PACK			THERMOSTAT - FURNISHED BY DIVISION 23, INSTALLED BY DIVISION 26	48 INCHES		COMMUNICATIONS FLOOR OUTLET WITH FURNITURE WHIP			FLOW SWITCH			ABOVE FINISHED FLOOR	
	CONTACTOR (NUMBER INDICATES NUMBER OF POLES)			UNIT HEATER	48 INCHES		TELEVISION OUTLET	18 INCHES		FIRE ALARM CONTROL PANEL			AIR HANDLING UNIT	
	SINGLE POLE (HORSEPOWER RATED WHEN USED AS MOTOR DISCONNECT)	48 INCHES		THERMAL SWITCH (MOTOR OVERLOAD TYPE)	48 INCHES		REQUEST TO EXIT DEVICE	3 INCHES ABOVE DOOR FRAME		FIRE ALARM ANNUNCIATOR			BELOW COUNTER	
	DOUBLE POLE	48 INCHES		POWER POLE			DOOR POSITION SWITCH, RECESSED			MASS NOTIFICATION SYSTEM LOCAL OPERATOR CONSOLE			CONDUIT	
	3-WAY	48 INCHES		MOTOR (NUMBER REFERS TO MOTOR AND EQUIPMENT SCHEDULE SEE SCHEDULE FOR WIRING AND CONTROLLER REQUIREMENTS)			DOOR POSITION SWITCH, SURFACE MOUNT						CABINET UNIT HEATER	
	4-WAY	48 INCHES		LIGHTING AND APPLIANCE PANELBOARD			DOOR POSITION SWITCH						EXHAUST FAN	
	OCCUPANCY SENSOR SWITCH	48 INCHES		RECESSED LIGHTING AND APPLIANCE PANELBOARD			CARD READER	48 INCHES					ELECTRIC WATER COOLER	
	KEY OPERATED	48 INCHES		SWITCHBOARD OR MOTOR CONTROL CENTER AS NOTED			ELECTRIC LATCH BY DIV 08, CONNECTIONS BY DIV 26						FIRE ALARM	
	WITH PILOT LIGHT (CAN BE USED WITH OTHER SWITCH TYPES)	48 INCHES		SPECIAL EQUIPMENT CABINET AS NOTED			ELECTRIC STRIKE BY DIV 08, CONNECTIONS BY DIV 26						GROUND FAULT CIRCUIT INTERRUPTER	
	MOMENTARY CONTACT	48 INCHES		ENCLOSED MOLDED CASE CIRCUIT BREAKER			VARIABLE FREQUENCY CONTROLLER WITH CONTROLLER						GROUND	
	DIMMER (600 WATT UNLESS OTHERWISE NOTED)	48 INCHES		NON-FUSED DISCONNECT	48 INCHES		SURVEILLANCE CAMERA						PHASE	
	LIGHTING INTENSITY SELECTOR PANEL	48 INCHES		FUSED DISCONNECT	48 INCHES		AREA OF REFUGE STATION	48 INCHES					TELEVISION	
	LOW VOLTAGE SWITCH	48 INCHES		MAGNETIC STARTER									WIRE	
	ROOM CONTROLLER RELAY			COMBINATION STARTER-DISCONNECT									WEATHERPROOF	

NOTES:
1. THIS IS A COMPREHENSIVE SYMBOL SCHEDULE. NOT ALL SYMBOLS ARE APPLICABLE TO THESE DRAWINGS.
2. MOUNTING HEIGHT IS TO THE CENTER OF DEVICE UNLESS OTHERWISE INDICATED.
3. FOR DEVICES SHOWN AS 48 INCHES MOUNTING HEIGHT, WHEN INSTALLED IN MASONRY BLOCK WALLS, MOUNTING AT 48 INCHES TO THE TOP OF THE OUTLET BOX IS ACCEPTABLE.

LUMINAIRE SCHEDULE								
TYPE	MANUFACTURERS	CATALOG INFORMATION	FIXTURE DESCRIPTION	LED DATA	DRIVER DATA	INPUT WATTS	VOLTAGE	MOUNTING
A1	LITHONIA	BLT SERIES	2 FOOT X 4 FOOT GRID MOUNTED LED, ROUND CENTER ELEMENT, 0-10V DIMMING DRIVER, 80 CRI.	4000K LED 4000 LUMENS	DIMMING LED DRIVER	31	MVOLT	RECESSED
	METALUX	24CZ SERIES						
	COLUMBIA	LCAT SERIES						
F1	LITHONIA	CLX	4 FOOT LINEAR LED WRAP FIXTURE, SURFACE MOUNTED, CURVED ROUND SMOOTH LENS NORMAL DISTRIBUTION, WHITE FINISH, ROUND LENS	4000K LED 5000 LUMENS	LED DRIVER	48	MVOLT	UNIVERSAL
	METALUX	SNX						
	APPROVED EQUAL							
F2	LITHONIA	CLX	8 FOOT LINEAR LED WRAP FIXTURE, SURFACE MOUNTED, CURVED ROUND SMOOTH LENS NORMAL DISTRIBUTION, WHITE FINISH, ROUND LENS	4000K LED 12000 LUMENS	LED DRIVER	70	MVOLT	UNIVERSAL
	METALUX	SNX						
	APPROVED EQUAL							
W1	LITHONIA	TWX2	RECTANGULAR SURFACE MOUNTED WALL PACK WITH INTEGRAL PHOTOCCELL, GLASS FRONT, IP65 RATED, ADJUSTABLE OUTPUT, FINISH BY ARCHITECT	4000K LED 3250 LUMENS	LED DRIVER	23	MVOLT	WALL
	OR							
	APPROVED EQUAL							

MOTOR AND EQUIPMENT SCHEDULE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
MOTOR NO	DESCRIPTION OF MOTOR OR EQUIPMENT	LOCATION (ROOM NO)	LOAD IN HORSEPOWER (HP) OR FULL LOAD AMPS (FLA)	VOLTAGE, PHASE	PANEL AND CIRCUIT NUMBER OR MCC NUMBER	CONDUCTOR SIZE AND QUANTITY	GROUND CONDUCTOR SIZE	CONDUIT SIZE	CONTROLLER				DISCONNECT			CONTROL OR AUXILIARY DEVICE (SEE NOTES)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
									MAGNETIC STARTER/DISCONNECT	STARTER SIZE	VARIABLE FREQUENCY DRIVE	OCC SENSOR	ECM MOTOR	THERMOSTAT	CONTROLLER BY (DIV. NO.)	CONTROLLER LOCATION (ROOM NO.)	DISCONNECT SIZE	FUSIBLE / NON FUSIBLE	NEW RATING	DISCONNECT BY (DIV. NO.)	VFD	OCC SENSOR	TIME SWITCH	THERMOSTAT	SPEED SWITCH	GAS DETECTION	FIRE ALARM CONTROL RELAY	FIRE ALARM DUCT DETECTORS	INTERLOCK WITH																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
1	AHU-10	167 MEZZ	2.5 HP	480, 3	HB-15A/3P	3 #12	#12	1/2"		X																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		

DEMOLITION NOTES:

- 1 REMOVE ALL EXISTING DEVICES, WIRING, AND ELECTRICAL CONDUIT IN THIS ROOM TO ACCOMMODATE ABATEMENT.
- 2 REMOVE EXISTING WALL MOUNTED ELECTRICAL DEVICES TO ACCOMMODATE NEW WALL FURRING. WALL MOUNTED BACKBOXES AND EXISTING RECEPTACLE WIRING MAY REMAIN FOR REINSTALLATION OF NEW DEVICES.
- 3 REMOVE EXISTING LIGHT FIXTURE TO ACCOMMODATE NEW AHU AND DUCTWORK, SALVAGE FIXTURES FOR REINSTALLATION.
- 4 REMOVE ALL SURFACE MOUNTED CONDUIT AND WALL/CEILING MOUNTED DEVICES IN THIS ROOM TO ACCOMMODATE NEW FURRING ON WALLS AND NEW GYP CEILING. PROVIDE NEW CONDUIT AND WIRING AND RECONNECT WALL DEVICES IN SIMILAR LOCATION, SEE SHEET E2.0.
- 5 DISCONNECT EXHAUST FAN AND REMOVE CONDUIT AND WIRING FROM THIS ROOM TO ACCOMMODATE ABATEMENT.
- 6 REMOVE EXISTING FIBER BACKBONE CABLE AND INNERDUCT IN ITS ENTIRETY. CONTRACTOR SHALL INSTALL AND TERMINATE/TEST NEW FIBER BACKBONE PRIOR TO REMOVAL OF EXISTING FIBER, SEE SHEET E2.0 FOR NEW FIBER BACKBONE CABLE ROUTE.
- 7 REMOVE AND REINSTALL EXISTING J-HOOK SUPPORTS FOR DATA CABLES IN THIS ROOM AS REQUIRED TO ACCOMMODATE INSTALLATION OF NEW GYP CEILING.

GENERAL NOTES:

1. HATCHING OVER EXISTING DEVICES INDICATES THE ITEM TO BE REMOVED. REMOVE DEVICE AND ASSOCIATED WIRING AND CONDUIT TO ITS SOURCE UNLESS OTHERWISE NOTED.



**INDOOR FIRING RANGE
ABATEMENT & CLOSURE
AFRC BLDG. 3420
NDNG PROJECT NO. 2610
OWNER: THE ADJUTANT GENERAL, STATE OF ND**



MINOT, NORTH DAKOTA

M | B | A

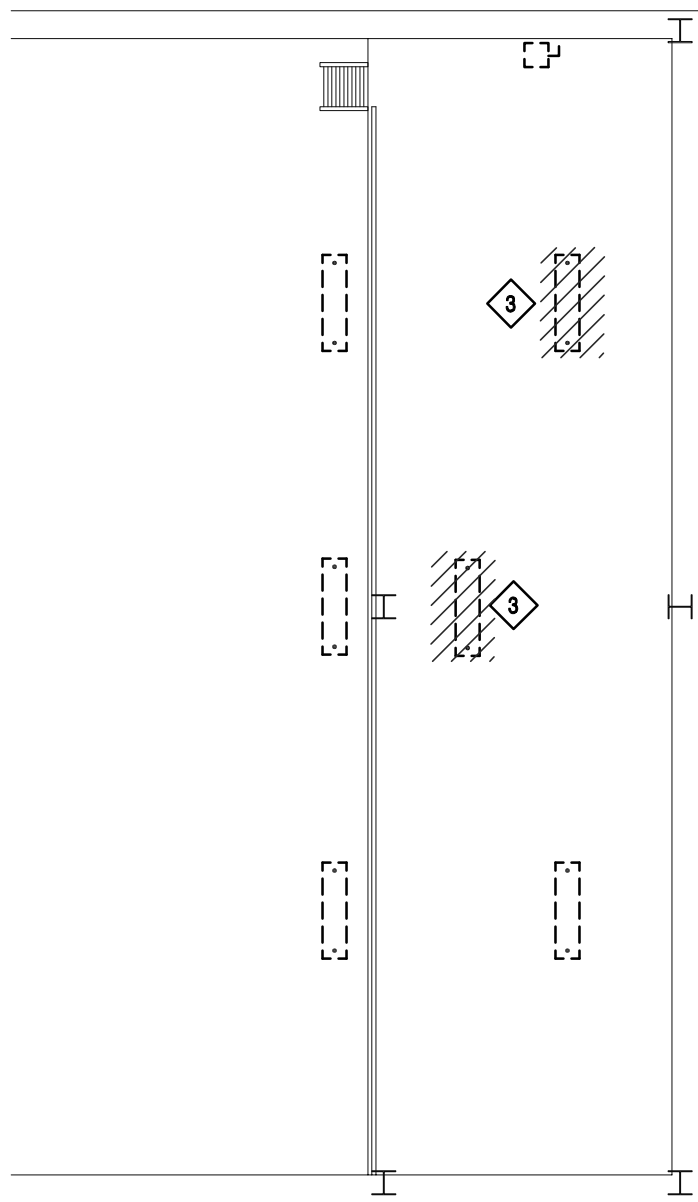
MUTCHLER BARTRAM ARCHITECTS, P.C.
505 N. Broadway, Suite 201, Fargo, North Dakota, 58102
Phone: 701-235-5563 Fax: 701-235-5435

**PARTIAL FIRST & SECOND
FLOOR PLANS - ELECTRICAL
DEMOLITION**

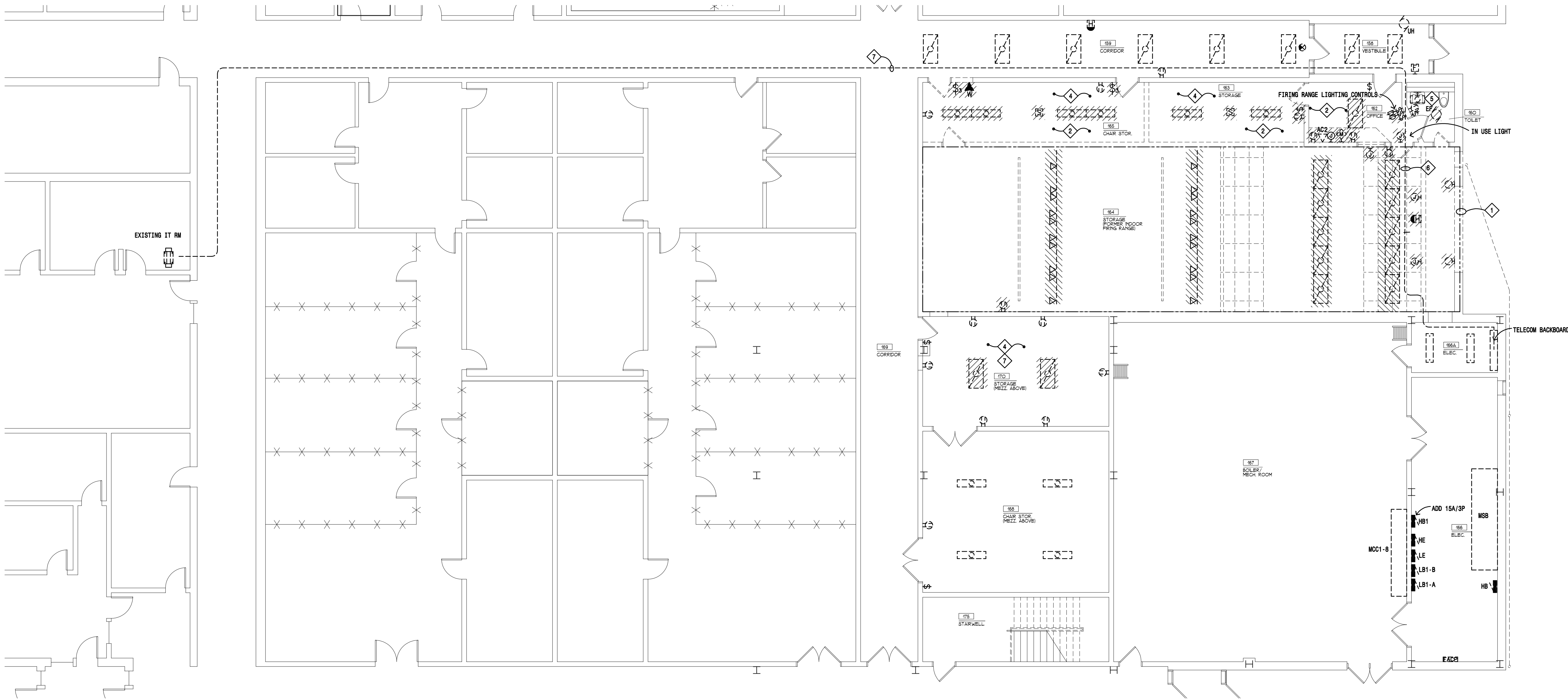
MBA Project Number 26006

Date 08-13-2026

E1.0



2 PARTIAL SECOND FLOOR PLAN - ELECTRICAL DEMOLITION
SCALE: 1/8" = 1'-0"



1 PARTIAL FIRST FLOOR PLAN - ELECTRICAL DEMOLITION
SCALE: 1/8" = 1'-0"



PLAN NOTES:

- 1 SEE DETAIL 1/E0.1 FOR LIGHTING CONTROL REQUIREMENTS IN THIS ROOM.
- 2 CONNECT TO EXISTING CIRCUIT, EXTEND EXISTING WIRING AND CONDUIT AS REQUIRED.
- 3 NEW WALL FURRING BEING ADDED TO THESE ROOMS. EXISTING DEVICES RECEPTACLE LOCATIONS ARE SHOWN, PROVIDE BOX EXTENDERS AND PROVIDE NEW DEVICES AND WALL PLATES AND RECONNECT TO EXISTING CIRCUIT.
- 4 CONNECT TO EXISTING EXTERIOR LIGHTING CIRCUIT.
- 5 PROVIDE 120V CONNECTION TO OVERHEAD DOOR OPERATOR AND ASSOCIATED CONTROLS AND SAFETY DEVICES.
- 6 REINSTALL SALVAGED LIGHT FIXTURE, EXTEND EXISTING CIRCUIT AS REQUIRED.
- 7 CONNECT NEW FAN TO EXISTING 120V CIRCUIT, EXTEND WIRING AND CONDUIT AS NECESSARY.
- 8 CONNECT TO SPARE BREAKER IN EXISTING PANEL.
- 9 ADD 15A/3P BREAKER TO EXISTING SIEMENS P1 SERIES PANELBOARD FOR NEW AHU-10 CONNECTION.
- 10 NEW 12 STRAND SINGLE MODE FIBER. INSTALL PRIOR TO REMOVAL OF THE EXISTING FIBER THAT ROUTES THROUGH THE FIRING RANGE ABATEMENT AREA, SEE SHEET E1.0. TERMINATE IN EXISTING PATCH PANELS AT EACH END.
- 11 SUPPORT FIBER ON WALL WITH J-HOOKS, MAXIMUM SPACING OF 4 FEET ON CENTER.
- 12 DRILL THROUGH EXISTING WALL WITH 2" CONDUIT SLEEVE WITH BUSHED OPENING.
- 13 SUPPORT FIBER ON WALL OR CEILING WITH J-HOOKS, MAXIMUM SPACING OF 4 FEET ON CENTER.
- 14 TERMINATE FIBER IN EXISTING PATCH PANELS, MATCH EXISTING CONNECTOR TYPE.
- 15 ADD 20A/1P BREAKER TO EXISTING SIEMENS SERIES 8 PANEL.



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M | B | A

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**PARTIAL FIRST & SECOND
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E2.0

